

JOHANNESBURG SUMMIT 2002

CROATIA



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: In Croatia, there is so far no institutional mechanism with an official mandate for integrating trade and environment issues, which might include also identification of possible "hot spots". Croatia became a member state to the World Trade Organization (WTO) in November 2000. The Ministry of Economy was in charge of all preparatory activities, including also co-ordination of harmonising the legislation with WTO. Minor adjustments of Croatian environmental-related legislation were made during the accession procedure. The adjustments refer to the regulation on Quality Standards for Liquid Oil Fuels and to the Law on Administrative Fees, which prescribes among others environmental fees for getting approval for import, export and transit of waste. On the other side, there was no change in trade legislation in response to the possible negative impacts of trade on the environment. There was no derogation of any environmental law or regulation due to the above-mentioned reason.

Croatia basis its market policies on both policies and implementation of agreements agreed within the Uruguay Round of General Agreement on Tariffs and Trade (GATT) negotiations. In this connection, the Law on Trade, in force since the beginning of 1996, is implementing market policy measures, particularly concerning antidumping, subsidies and other forms of protection. The main properties of the Law, facilitation and liberalisation of trade, especially foreign trade, helped to the Croatian trade regime to be adjusted to the trade regimes of developed countries. The Law Amending the Law on Trade, which was adopted in June 1999, contains provisions on anti-dumping, countervailing and safeguard measures.

In accordance with the WTO rules, Croatia has also harmonised its Customs Tariff Law and assumed the obligation to gradually reduce the customs protection level. During a five-year transitional period (from 2000 to 2005) Croatia has undertaken the obligation to reduce customs duties of the most sensitive industrial products in equal rate reductions of custom duties each year. The average tariff rate for industrial products in 2002 amounted to 3%.

Upon the accession to the WTO, the averaged customs duties on agricultural products were reduced from 33.7% to 25%. After the period of 7 years of progressive reductions of tariffs, the average customs duties on these products will be 16.4% or 15.5%, if fish and fish products are accounted for. The service market was also liberalised.

Croatia takes an active part in the recently launched WTO negotiations on agriculture and services and voices its standpoints in the Central European Free Trade Agreement (CEFTA) plus group of countries (CEFTA member countries, the Baltic States and Republic of Croatia).

Programmes and Projects: No information available.

Status: Foreign trade activities of the Republic of Croatia in the period 1991-2001 show a relatively low growth rate. Import growth rate for this period amounted to 6.7% whereas export growth rate was 4.4% on the annual average. Total exports increased by 60% and imports by 104%. Concerning the structure of exported goods, in the period from 1996-2001, exports in almost all sectors, according the *Standard International Classification of Trade*, decreased, except in the sector of mineral fuels, machines and transport devices.

From 1994 to 1997, the average economic growth rate in Croatia was just above 6%, whereas in 1998, the growth rate declined to only 2.5%. The growth rates as such were not adequate, along with the relatively modest growth rates of export of goods and service, In the period 1994 1997, the actual turnover in the retail sector annually increased in the range between 3-16 %. In 2001, however, the increase was 6.0% in relation to the same period in 2000, which is an increase of only 68.1% in relation to 1990. The productivity realised in 2001 amounts to 9.6% in relation to 2000, which is the result of the further reduction of the number of the employed. Due to economic retardation, we can conclude that no environmental pressures have been observed during that time. Developments

of the concept of sustainable production and consumption patterns in Croatia are going on slowly. GDP increased by 4.1% in 2001.

In 2001, both imports and exports increased in Croatia, especially imports. In relation to 2000, exports increased by 5.1% and imports by 14.7%. In 2001, Croatia exported the most in machinery and transport equipment sector, but the biggest import was also registered in this sector, even two times larger than exports. In 2001 Italy, Germany and Slovenia were the most important Croatian foreign trade partners both in exports and imports.

Such foreign trade trends in Croatia could not lead to any increase of environmental problems at the local or national level.

In 2000, foreign direct investments continued to increase and became a very important source of financing that continued in 2001. USA, German and Austrian investments constitute 76% of total foreign direct investments. In spite of such trend, the amount of foreign and domestic investments is not satisfactory.

A draft of the study "Croatia: Administrative Barriers to Foreign Investments", financially supported by the Foreign Investment Advisory Service (FIAS) and the United States Agency for International Development (USAID) has been published. The report focuses on the official procedures that a typical investor (foreign or domestic) must go through in order to start a new business, as well as on the routine interactions between businesses and government agencies involved in the process.

The Law on Investment Promotion was adopted in 2000. It regulates the investments by Croatian and foreign physical or legal persons and it provides for a system of measures, tax and tariff concessions as the support elements for new (green field) investments in Croatia, based on new technologies.

Capacity-Building, Education, Training and Awareness-Raising: Representatives of the Ministry of Economy and Ministry of Environment and Physical Planning attended a *WTO regional seminar for transitional countries on trade and environment* in October 1998. The Ministries regularly receives the *WTO Bulletin on Trade and Environment*. Also all information on trade, environment and sustainable development are available through UNEP, OECD and WTO web sites. As Croatia is now a member to the WTO, the Ministry of Environment and Physical Planning will participate in the work of the *WTO Committee on trade and Environment* in the future.

The Investment Info Centre, which provides all necessary information on investment opportunities in Croatia at one place, was opened in the Ministry of Economy on 1st February 2002. The aim of the centre is to enhance cooperation between the government administrations at all levels and private sector.

Information: Information related to trade is available through several sources:

Ministry of Economy www.mingo.hr

Ministry of Finance www.mfin.hr

Ministry of Foreign Affairs www.mvp.hr

Ministry for European Integration www.mei.hr

Croatian National bank www.hnb.hr

Central Bureau of Statistics of the Republic of Croatia www.dzs.hr

Official Gazette www.nn.hr

Investment Info Centre www.investment.hr

Research and Technologies: No information available.

Financing: No information available.

Cooperation: The new government of Croatia is determined to build an open and integrated economy in the European economic structures. More than 80% of the Croatia's overall foreign trade is carried out under free trade

conditions. The Stabilisation and Association Agreement (SAA) between Croatia and the EU was concluded in the end of 2001 and it is applied as from the beginning of 2002. In addition, by the end of 2001 Croatia signed free trade agreements (FTAs) with many countries. Croatia signed FTAs so far with the EU, European Free Trade Association (EFTA) member states, Slovenia, Hungary, Macedonia, Bosnia and Herzegovina, Turkey, Poland, the Czech Republic, Slovakia and Bulgaria. Currently, Croatia is negotiating with Romania, Albania, Lithuania and Yugoslavia.

This is one of the substantial issues for the Croatian economy. Namely, strong and fast economic recovery could only be based on a significant export performance. The economic recovery will also contribute to the increase of environmental investments and improvement of the state of the environment on a long-term basis.

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CHAPTER 3: COMBATING POVERTY

Decision-Making: The basic goal of the Croatian Government's social policy is to improve the position of the most deprived part of its population. Special priority is given to the elimination of and combat against the poverty by creating stimulating conditions for the economic growth and development, active employment policy and human resources development, and by targeting the public expenditure towards the recognised priorities of the deprived social groups in order that these expenditures may cover as many as possible of those who are immediately below the poverty line. For that reason, the Ministry of Labour and Social Welfare has drafted the Proposal of the National Plan Against Poverty and Social Exclusion that is currently in the process of adoption.

The Programme contains an outline of the current situation in the fields or systems which have a significant influence on the fight against poverty and social exclusion, and the activities by which particular state bodies are entrusted with the implementation of measures against poverty. The implementation of the measures would be monitored by a commission composed of representatives of various ministries and other competent bodies, appointed by the Government of the Republic of Croatia, and of employers' association and trade unions represented on the National Economic and Social Council. The commission would operate within the Ministry of Labour and Social Welfare and would, at least once a year, inform the Croatian Government about the results of implementation and propose possible modifications of and supplements to the Programme.

Currently, the fight against poverty is one of the main objectives of the Republic of Croatia. The following institutions are involved in it: the Government of the Republic of Croatia, the Ministry of Labour and Social Welfare, other ministries and competent bodies, such as State Institute for the Protection of Family, Motherhood and Youth, Croatian Employment Service, Central Bureau of Statistics and other bodies which may help solve and alleviate this problem. The most important regulations that contain the measures conducive to the reduction and alleviation of the consequences of poverty include the Employment Act of 1998, the Social Welfare Act of 1997 (applied since 1998), and the Children's Allowance Act of 2000.

In 2001, amendments were made to the Social Welfare Act by which normative preconditions were ensured for a gradual decentralisation of the system, which particularly relates to the homes for the elderly and infirm persons, and centres of social welfare. Namely, the units of local and regional self-government have been taking part in financing the material expenses incurred by the centres of social welfare since 1 July 2001, while service delivery is carried out in accordance with the previously adopted regulations. Since 1 January 2002, foundation rights over the homes for the elderly and infirm persons have been transferred to the units of local and regional self-government.

National and foreign NGOs, such as Association for Social Policy Development and the Croatian Law Centre, take part in solving the problem of poverty in different ways.

Although it may still be said that non-governmental and private initiatives do not participate in the society to a sufficient extent, it must be emphasised that in recent years wider opportunities were provided for private and NGOs' activities. As a result, there are about 21,000 registered associations of citizens that form the civil sector in Croatia. The values and potentials of the assistance provided by NGOs to the government institutions have been recognised. That is evident from the Programme of Cooperation between the Government of the Republic of Croatia and the NGO and Non-profit Sector. The cooperation between NGOs and state bodies has resulted in various programmes and projects that are implemented for the purpose of improvement of services.

Since one of the priority goals of the social assistance and social welfare reform is a more intensive cooperation with the civil sector, it is precisely on such cooperation that the social welfare will in the future much more rely.

Programmes and Projects: One of the important projects containing measures against poverty is the "Strategy of Development of the Republic of Croatia: Croatia in the 21st Century" whose adoption is under way. The Strategy is focused on a more open civil society based on knowledge, individual initiatives and responsibility, rule of law, socially sensible and politically stable state, and accelerated and environmentally sustainable economic growth in

the conditions of global interconnectedness. The basic development document entitled “Principles for Development of the Republic of Croatia”, adopted by the Croatian Government at its session held on 21 June 2001, is a part of the above Strategy. The document “Principles for Development of the Republic of Croatia” outlines an overall development framework for the transformation of Croatia into a civil, economically successful and democratic society. What has largely contributed towards a better understanding of the situation regarding the poverty in Croatia is the “Study on Economic Vulnerability and Welfare” made in 2000 by the Central Bureau of Statistics in cooperation with the World Bank.

Out of about 400,000 poor citizens of the Republic of Croatia, 205,000 are receiving assistance from the state. In the realisation of the financial assistance scheme, accent is laid on a greater involvement of the local and regional government units and on the cooperation with the civil sector.

The programme of employment promotion adopted by the Croatian Government at its session held on 10 January 2002 is one of the most significant programmes for the fight against poverty. That programme defines requirements and criteria for co-financing employment, self-employment and education of unemployed persons with a view to reducing unemployment.

The issues related to housing of the socially deprived population are partly dealt with the social welfare system. In that regard, the benefit called “assistance for covering housing costs” has great relevance. Such assistance is aimed at covering the costs defined by the rent contract (both the rent and the costs related to the living in the flat concerned and to the maintenance of that flat). It does not include the so-called “protected rent”, which is exercised by the tenant under separate regulations. The units of local government are obliged to allocate the funds for this purpose in their budgets.

In addressing the housing problems of the poor population emphasis is often laid on the so-called “social housing”. For that reason, the Draft National Strategy Against Poverty and Social Exclusion provides for a series of measures aimed at the establishment of an integral system of subsidies for housing costs, including the rent and utility costs (water, electricity, gas, etc.).

The social welfare system reform covers the area of fiscal decentralisation, better targeting of social benefits and higher quality of social services, dissemination of information about the rights from the social welfare system, de-institutionalisation, administrative strengthening and strengthening of cooperation with NGOs, and improvement of poverty monitoring. One of the most important results of the adoption of internationally comparable poverty monitoring methodology is expected to be the establishment of the national poverty line, as a parameter that will serve for better planning and implementation of social programmes aimed at combating poverty.

The participants in the preparation of the Strategy of Social Welfare System Reform include the World Bank and the UK Department for International Development (DFID). The consultants’ teams - eight of them - include a large number of foreign and domestic experts from various areas. The consultants’ teams have started their work, and implementation of the reform is scheduled for 2003.

Status: The World Bank study has shown that the rate of absolute poverty in Croatia, with regard to international scale, is relatively low (8.4 %), but what is especially worrying is the high percentage of subjective poverty (80 %) and the gap between the rich and the poor which is in Croatia wider than in other transition countries. Concern is also expressed regarding a high unemployment rate that is at this moment 24 %. Croatia is still removing the consequences of war damage, which includes the care for a large number of returnees and displaced persons.

Socially deprived persons and other person who have no means of subsistence or who have inadequate means of subsistence may claim many types of benefits within the social welfare system. The most important benefit is assistance for maintenance. According to the data obtained from the Ministry of Labour and Social Welfare, on 30 April 2002 there were 24,830 single persons and 27,614 families (including 93,681 family members) or all together 118,691 persons who were in receipt of this benefit. That means that 2.7 % of the population receive assistance for maintenance.

Capacity-Building, Education, Training and Awareness-Raising: The intention of the social welfare system reform is to continue bringing the system in line, in organizational and professional terms, with the criteria existing in the EU member states. In that regard, emphasis is laid on raising the social welfare staff's educational levels, introducing post-graduate studies and permanent education.

Professional staff from social welfare institutions who mostly have higher (two-year post-secondary) and university qualifications are included in various forms of permanent education implemented in cooperation with universities and scientific institutions, as well as NGOs. They are financed either by the Ministry of Labour and Social Welfare or by foreign organizations (UNICEF, etc.).

The Ministry of Labour and Social Welfare is making efforts to improve the work of the social welfare services, both with regard to service delivery and to providing more information to the public about social welfare rights and the manners of their realisation. For that purpose, many workshops, conferences, symposia and other events have in recent years been organized. They covered topical issues in this area, for example, care for the elderly, care for disabled persons, care for children without adequate parental care or for children with behaviour disorders, fight against addiction, etc.

In order to inform the citizens about their rights, the staffs of the Ministry of Labour and Social Welfare, and other institutions provide information to the public, through the newspapers, radio and television. In 2001 the Ministry of Labour and Social Welfare published a booklet entitled "Needs and Protection of Children in Croatia: A Decade Review". That document was prepared for the United Nation General Assembly's Special Session on Children that took place in New York in May 2002. In the year 2002, a booklet "Care for the Elderly Persons in the Republic of Croatia" was published. That booklet deals with the situation and needs of the elderly persons in Croatia and it was prepared for the United Nation's Second World Assembly on Ageing in Madrid.

Information: The Ministry of Labour and Social Welfare offers information about its activities on its website at www.mrss.hr, while information on employment trends may be found on the Croatian Employment Service's website at www.hzz.hr. Many useful scientific and professional articles, translations, reviews and information is contained in the *Journal of Social Policy*, a quarterly published since 1994, with the financial support of the Ministry of Labour and Social Welfare, by the Department of Social Work from Zagreb University's Faculty of Law. The same institution publishes the Yearbook of the Department of Social Work covering the topics related to social work and social work profession.

Research and Technologies: In 2001, a public tender was for the first time published to invite legal and physical persons to give their offers for training and professional development of social welfare system staff. In accordance with the tender, a draft was made of the Study on De-Institutionalisation of Systems of Special Care in the Republic of Croatia whose purpose was to establish the scope and dynamics of the de-institutionalisation process in the forthcoming period. Namely, provision has been made that such form of care, which currently includes only adults with mental retardation, be expanded to include also other socially vulnerable groups of disabled people, children without parents and adequate parental care, and mentally ill adults.

Financing: Social welfare is financed from the State Budget and local and regional self-government budgets. A small part of activities is financed by non-governmental organizations that have various sources of income. In the year 2000, the State Budget financed the social welfare system with 2,046,876 HRK that amounted to 1.31 % of the GDP. According to 1999 data, local and regional self-government units allocated 911 million HRK for social welfare. The programmes of financial assistance in the social welfare system include the benefit called "assistance for maintenance" which is one of the most important benefits intended for the poor people. This benefit is financed from the state budget. The recipients of assistance for maintenance may also be granted other targeted benefits like, for example, assistance for covering housing costs, one-time financial assistance, and other designated benefits, like

for example, assistance in food, assistance for clothes and footwear, covering of funeral costs, and assistance for heating fuel. These benefits are financed from the budgets of regional government units.

Cooperation: Forms and contents of international cooperation are outlined under “**Programmes and Projects**”. In addition to the World Bank and DFID (UK), the Ministry of Labour and Social Welfare also cooperates with UNICEF, International Organization of Red Cross and Red Crescent.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS

Decision-Making: The Parliament of the Republic of Croatia, the Government of the Republic of Croatia, the Ministry for Environmental Protection and Physical Planning, the Ministry of Finance, the Ministry of Economy, other government authorities and the Croatian Chamber of Economy, all have responsibility for this area. With the passing of a Declaration on Environmental Protection in 1992, the Croatian Parliament opted for the sustainable development of the country, based on an economy and industry oriented towards environmentally sound technologies. On the basis of the Law on Environmental Protection, the Environmental Label was created as one of the instruments for achieving a change in consumption patterns. One of the legally set objectives of environmental protection in Croatia is the promotion of the use of environmentally acceptable products and manufacturing procedures, and a harmonised relation between environmental protection and economic development. The Law on Waste has established measures for organized collection, reuse and, finally, minimisation of waste. The New Rule Book on Packaging Waste is in the process of adoption. New measures in handling packaging waste are based on the experience gained through implementation of the previous Rule Book and are in accordance with EU legislation.

The Law on Organic Food Production was adopted in the beginning of 2001 with the aim to promote this type of agriculture. Rule Book on Organic Food Labelling based on the Law on Organic Food Production was adopted in February 2002. The Rule Book sets the procedure for labelling the organically produced food. Labels on organically produced food will provide guidance to consumers.

The draft Consumer Protection Bill is in procedure for adoption. One of components of the definition of a “safe product”, laid down in the Bill, is “impact on the environment”. According to the Bill, manufacturers, retailers, traders, importers and service providers are not allowed to mislead consumers in marketing their products about the environmental impact of their products. In marketing the product, they are obliged to clearly state if their product contains Genetically Modified Organisms (GMOs).

Programmes and Projects: The document, Programme of Environmental Education and Education for Sustainable Development (drafted by the Ministry of Environmental Protection and Physical Planning at the end of year 2000), underlines the need for environmental education in all components of society. Role of public authorities for changing the consumer patterns is seen as very important. The Greening Government project was prepared by the Ministry of Environmental Protection and Physical Planning and all governmental authorities have been invited to cooperate and networking.

In the last few years, many consumer protection organizations have been founded, focusing on a wide scope of interests and promoting the right of consumers on healthy and safe products. One of these organizations, Croatian Association for Consumers Protection, has drafted the Consumer Protection Bill and proposed it to the Ministry of Economy, which submitted it, with necessary revisions, for the enactment procedure.

Status: Through differentiated policy of excise taxes on leaded and unleaded petrol, the State encourages the use of unleaded petrol, which is considered as a positive contribution to the environment. The unleaded petrol tax is 20.8% lower than leaded petrol excise tax, which is a more favourable rate than in other transition countries. Import duty on new motorcars is 2.7% lower than used cars import duty, which is also considered more environmentally friendly.

Organic food production is viewed as an important part of Croatian economy in future. The Law on Organic Food Production is yet to become operational and yet to create well organized organic food market. At the present, organized organic food market is not large. Many activities in this field are conducted by NGOs. There are several dozens of specialised organic food stores, where products are labelled with logos of the NGOs. Outside this small-organized organic food market, there are many misleading non-certified labels on food products. Consumers are not

well informed about the meaning of different labels, and the introduction of the Law on Organic Food Production and Rule-Book on Organic Food Labelling will provide consumers with accurate, non-deceptive and scientifically based information and boost the emergence of a new market for organic food products.

Environmental Label of the Republic of Croatia has been awarded since 1993 to the manufacturers of consumer goods, which in the process of manufacture, marketing, use and disposal, affect the environment in a considerably less harmful manner than other like products. At the moment, Environmental Label can be found on 15 products. Slow growth of eco-labelled products shows that green claims are not yet established and recognized as an important marketing tool by the manufacturers. Consumers in making their choice when purchasing, don't recognise the importance of environmental soundness of a product.

Capacity-Building, Education and Awareness-Raising: The Ministry of Environmental Protection and Physical Planning, Ministry of Tourism, Ministry of Agriculture and Forestry, Ministry of Health organise conferences, panel discussion and round tables on the issues of eco-tourism and sustainable tourism, use of GMOs and labelling of products with various green claims.

With the aim of changing consumption patterns, the Ministry of Environmental Protection and Physical Planning conducts various media campaigns.

Croatian Association for Consumers Protection conducts many activities aimed to awareness-raising of the consumers. Such activities are: releasing the diverse brochures; delivering their views in electronic and printed media on the topic of consumers rights; individual consultation and legal help for consumers; organization of round tables; and lectures.

The Croatian Business Council for Sustainable Development was established in 1997. 24 major companies are now participating in activities of Croatian Business Council for Sustainable Development. Those companies are actively practicing principles of sustainable development.

The Croatian Cleaner Production Centre was established in 2000 and its main activities are: educational and promotional activities for cleaner production (CP); publishing of CP manuals; dissemination of CP achievements; and informing the public on CP, in cooperation with NGOs.

Furthermore the Technical Committee 207 (TC 207) was launched within the State Bureau of Standardization and Metrology. Its domain is environmental management, encompassing a number of ISO 14000 Standards. Following ISO 14000 standards have become Croatian standards: HRN EN ISO 14001:1998 2. (Environmental management systems - Specifications with guidance for use); HRN EN ISO 14010:1998 2. (Guidelines for environmental auditing - General principles); HRN EN ISO 14011:1998 2. (Guidelines for environmental auditing - Audit procedures - Auditing of environmental management systems); HRN EN ISO 14012:1998 2. (Guidelines for environmental auditing - Qualification criteria for environmental auditors); and HRN EN ISO 14020:2000 (Environmental labels and declarations - General principles).

The Ministry of Environmental Protection and Physical Planning (MEPPP) together with UNIDO and Agency for Special Waste established the Refrigerants Management Plan, promoting the use of recycled ozone depleting substances (e.g., freons).

Information: No information available.

Research and Technologies: A great part of eco-efficiency and enhancing corporate productivity are promoted through special courses at the Centre for Technology transfer.

Financing: Various NGO projects are financed via the Croatian Governmental Office for Cooperation with NGOs. The Croatian Association for Consumers Protection received financial support for several projects in period 1998-2001 in total amount of 250,000.00 HRK (in year 2001 this amount was of 48.000,00 HRK) (EUR 1 = HRK 7.2470) via Croatian Governmental Office for Cooperation with NGOs (financial means from the state budget). Environmental Fund Bill is in procedure of adoption. When operational, the Fund will enable financing of various programmes and projects designed for environment and nature protection, including consumer protection projects.

Cooperation: The Ministry of Environmental Protection and Physical Planning, Ministry of Agriculture and Forestry and Ministry of Tourism have founded an expert group with task to develop projects for sustainable development of rural areas. Eco-tourism and sustainable tourism are seen as important parts of rural development and much more attention will be paid to that field in future with aim to change consumption pattern toward eco-tourism and sustainable tourism.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS – ENERGY

Decision-Making: The Ministry of Economy is co-ordinating government body for the energy sector in the whole State territory and it is undertaking the related legislative tasks and responsibilities. In its co-ordinating activities, it cooperates with local government and self-government. Other institutions/agencies involved in policy implementation are: the Ministry of Environment and Physical Planning; the Ministry of Finance; the Ministry of Science and Technology; the Energy Institute “Hrvoje Pož ar” – Zagreb.

Institute “Hrvoje Pož ar” unites and co-ordinates scientific works in the energy sector through close cooperation with the Croatian Academy of Sciences and Art - Scientific Council for Energy, Universities and faculties. Scientists participate in the adoption of decisions in the energy sector both indirectly, through their participation in the elaboration of scientific bases for the adoption of decisions, and directly through expert debates.

As the energy sector in the Republic of Croatia is in the majority ownership of the state (companies INA d.d./ production and supply of oil and gas and HEP d.d./ production and supply of electric energy are 100% in the state ownership, or are very close to the privatisation process), the influence of the management of these companies in decision-making is significant and direct. Narrowly oriented NGOs in the energy sector are not registered or active in the Republic of Croatia.

In the Republic of Croatia, environmental protection policy falls within the competence of the Ministry of Environmental Protection and Physical Planning. The State Directorate for Water is in charge of water conservation. The current body of legislation on environmental protection consists of acts, by-laws and rulebooks. Regarding environmental protection policy, the most important legislation is the following: The Environmental Protection Act, the Air Quality Protection Act, the Ordinance on Hazardous Emissions from Stationary Combustion Sources, the Waste Act, the By-law on Handling Hazardous Waste and the By-law on Environmental Impact Assessment. The Environmental Protection Strategy, with a National Environmental Action Plan (NEAP), is currently in the final stage of development.

National document, *Strategy for the Development of the Energy Sector in the Republic of Croatia*, adopted in March 2002, which also includes the changes related to consumption patterns, is a very important part of the general economic development strategy of the Republic of Croatia. In the past eleven years, the energy sector has seen changes involving key market, economic, legal and institutional aspects of its operations. Solutions for the reform of the energy sector are the result of combining final strategic, political, economic and energy-related objectives of the Republic of Croatia. The energy reform will have the significant influence regarding the change in consumption patterns. The Strategy sets out the level of state energy planning, through the respect of all available resources, including energy consumption, renewable resources and environment (so-called Integrated Resource Planning - IRP). The IRP concept is applicable to the overall energy system and its individual subsystems (electric energy, gas and district heating). The Strategy for the Development of the Energy Sector defines the obligation of the local self-government units and the regional self-government units to elaborate, within the newly established Energy Offices, development documents containing plans for the needs and supply of energy, the implementation of these plans and their integral harmonisation in relation to activity programmes at the state level.

The main objectives of the Croatian government in this respect are:

- Enhance Croatia's economic competitiveness;
- Facilitate Croatia's accession to the EU;
- Secure investment for the further development of the energy sector, improve energy efficiency and ensure security of supply.

Given the fact that the general objective of Croatia is the integration into EU, the energy sector reform is carried out in conformity with the actual processes of EU market development, and in a way that enables the meeting of all safety conditions. Pending the changes in the energy sector it is crucial to take into account the following:

- Reconstruction of existing companies pursuant to the EU standards, taking into account already established rules (Electric Energy and Gas Directives) and programmes of other developed European countries;
- Energy sector privatisation achieved pursuant to the chosen market concepts;
- Initiating market de-monopolisation pursuant to capacities and dynamics of changes on the energy market.

At its July 2001 session, the *Croatian Parliament* passed the following laws (OG, 68/01): Law on Energy; Law on Energy Activity Regulation; Law on Electricity Market; Law on Gas Market; and Law on Oil and Oil Derivatives. The new legal framework for the energy sector regarding the opening of the energy market, network access and consumer protection, as the most important step in the Croatian energy sector reform, consists of these five laws.

Programmes and Projects: The Croatian energy sector is characterised by majority state ownership, except for natural gas distribution, which is mainly owned by local communities, and retail sales of petroleum products which is partially in private hands, as well as LPG distribution. The two largest companies in the energy sector - INA (Oil and gas) and Hrvatska elektroprivreda (HEP - electricity) - are companies that are 100 % state owned. Separate laws on the privatisation of HEP and INA elaborate the main restructuring and privatisation rules and methods for these companies. Some of the basic characteristics of the Croatian energy sector restructuring are:

- introduction of competition on the level of energy production and supply; liberalised selection of own supplier; public function of transmission network/transport system under state control;
- public function of the distribution network/system under control or in ownership of state or local community with equal, non-discriminatory access;
- introduction of an independent national body for regulation of energy activities;
- sustainable development.

A part of the National Energy Programmes is the MIEE Programme - development of industrial energy efficiency network whose aim is the promotion and organized activities in the increase of energy efficiency in industry, service and public sector in the Republic of Croatia. The basis for the functioning of the Network, following the Norwegian model and Canadian idea, is to establish efficient connections between large consumers, producers of energy, consultants and experts.

Some of the energy efficiency programmes developed within the Energy Institute "Hrvoje Požar" are as follows: CROTOK (Island Energy Development Programme); TRANCRO (Programme of Energy Efficiency in Transport); KOGEN (Cogeneration Programme); MIEE (Industrial Energy Efficiency Network); MAHE (Small Power-Plant Construction Programme); SUNEN (Solar Energy Programme); BIOEN (Biomass and Waste Energy Recovery Programme), ENWIND (Wind Energy Programme); GEOEN (Geothermal Energy Programme); KUEN_{zgrada} (Programme of Energy Efficiency in Buildings); and KUEN_{cts} (Centralized Heating Systems Energy Efficiency Programme). Each of these programmes promotes and sets framework for using renewable sources of energy.

The National Energy Programme, BIOEN, is a programme for energy recovery from biomass and waste. According to the Biomass Energy Utilization Strategy 1998-2002, BIOEN should create conditions for increased use and recovery of energy from biomass, initiate research in this area, develop technologies for collection, transformation and utilization of biomass and waste and enable effective exchange of information and scientific knowledge.

Status: Energy generation and consumption are significant producers of global and local pollution. The future development of the energy sector in Croatia should be based on generation and consumption of energy in accordance with the requirements of protection of human health, protection of biological and surrounding

diversity, and local, regional and global environmental quality. The major part of the Croatian energy sector is organized in two capital-intensive companies:

- INA - Oil industry for the exploration, transmission and wholesale of gas, oil production and processing, and oil products trade;
- HEP - Croatian Electricity - Supply Company for the production, transmission, system management and distribution of electricity.

The Croatian energy sector also includes:

- An oil transportation company - Adriatic pipeline (JANAF);
- Distribution and sale of gas (32 public municipal companies).

Primary Energy Production

	1996		1997		1998		1999		2000		2000/99
	PJ	%	PJ	%	PJ	%	PJ	%	PJ	%	%
<i>Coal</i>	1,64	0,8	1,22	0,6	1,28	0,7	0,37	0,2	0,00	0,0	-100,0
<i>Fuel Wood</i>	16,14	7,6	16,70	8,6	15,63	8,5	13,92	7,5	15,64	8,5	12,3
<i>Crude Oil</i>	61,51	28,8	62,64	32,3	58,17	31,7	54,68	29,3	51,35	28,0	-6,1
<i>Natural Gas</i>	63,72	29,9	61,40	31,7	55,77	30,3	55,62	29,8	59,40	32,4	6,8
<i>Hydro Power</i>	70,33	33,0	51,71	26,7	52,91	28,8	61,86	33,2	56,93	31,1	-8,0
TOTAL	213,34	100,0	193,66	100,0	183,75	100,0	186,46	100,0	183,32	100,0	-1,7

Total Primary Energy Supply

	1996		1997		1998		1999		2000		2000/99
	PJ	%	PJ	%	PJ	%	PJ	%	PJ	%	%
<i>Coal</i>	6,19	1,8	9,78	2,8	9,26	2,6	8,04	2,2	17,15	4,8	113,2
<i>Fuel Wood</i>	16,14	4,6	16,70	4,8	15,63	4,4	13,92	3,8	15,64	4,3	12,3
<i>Liquid Fuels</i>	153,92	44,2	159,05	45,7	171,78	48,5	183,40	49,6	160,52	44,6	-12,5
<i>Natural Gas</i>	93,23	26,8	96,53	27,7	92,29	26,1	94,05	25,4	94,98	26,4	1,0
<i>Hydro Power</i>	70,33	20,2	51,71	14,9	52,91	14,9	61,86	16,7	56,93	15,8	-8,0
<i>Electricity</i>	8,39	2,4	14,21	4,1	12,08	3,4	8,55	2,3	14,40	4,0	68,4
TOTAL	348,19	100,0	347,98	100,0	353,94	100,0	369,83	100,0	359,62	100,0	-2,8

Final Energy Demand by Fuels

	1996		1997		1998		1999		2000		2000/99
	PJ	%	PJ	%	PJ	%	PJ	%	PJ	%	%
<i>Coal</i>	3,32	1,6	3,32	1,6	3,69	1,7	3,21	1,4	3,17	1,4	-1,3
<i>Fuel Wood</i>	13,68	6,8	13,55	6,4	12,63	5,9	11,66	5,3	13,41	6,1	15,1
<i>Liquid Fuels</i>	91,87	45,6	96,53	45,9	99,92	46,6	105,70	47,7	107,21	48,5	1,4
<i>Gaseous Fuels</i>	32,87	16,3	34,65	16,5	36,06	16,8	36,85	16,6	33,82	15,3	-8,2
<i>Electricity</i>	37,10	18,4	39,74	18,9	39,97	18,6	42,17	19,0	42,57	19,2	0,9
<i>Steam and Hot Water</i>	22,81	11,3	22,64	10,8	22,10	10,3	22,01	9,9	21,04	9,5	-4,4
TOTAL	201,65	100,0	210,42	100,0	214,37	100,0	221,60	100,0	221,21	100,0	-0,2

Capacity-Building, Education, Training and Awareness-Raising: The main task is to promote the efficient use of energy as the important element for sustainable development. Energy efficiency is basically promoted through Croatian National Energy Programmes (NEPs), those being:

- MIEE, development of industrial energy efficiency network;
- KUEN_{zgrada}, promotion of energy efficiency in buildings;
- KUEN_{cts}, development and promotion of district heating;
- KOGEN, promotion of cogeneration;
- TRANCRO, energy efficiency in transport;
- CROTOK, sustainable and energy efficient development of the islands.

The “Hrvoje Pož ar” Energy Institute is appointed by the Government and Ministry of Economy as the national agency for carrying through of the NEPs. Ministry of Economy is main support to those activities, for elaborating the legislative solutions, and other. Ministry of Environmental Protection and Physical Planning, together with some other institutes, is giving support to activities where energy efficiency and environmental protection are regarded jointly. Croatian Chamber of Economy is supporting the promotion of energy efficiency in industry. Universities are included in those activities by specific projects.

Regarding improvement of the National Energy Efficiency Programme the next steps are being taken:

- constant re-evaluation of the programmes and strategic guidelines by the central energy sector research and planning institution, the Energy Institute “Hrvoje Pozar”;
- inclusion of the findings and recommendations into reports to relevant ministries and the government;
- development of financial mechanisms;
- development of energy centres;
- education and public awareness building through domestic and international projects;
- development of energy service companies;
- energy modelling and planning.

Information: The media (television, radio, newspapers and periodicals, information bulletins, web sites), which are easily accessible to the public, are carrying out the promotional activities on the increase of the energy efficiency in the economy in general and in the everyday life, usage of renewable resources, the advantages of the usage of natural gas, impact of the energy sector on the environment, etc.

All measures and steps regarding the changing consumption patterns and generally connected with energy can be viewed on Internet on the next addresses:

- www.mingo.hr
- www.hrvatska21.hr
- www.eihp.hr

Research and Technologies: No information available.

Financing: The financial sources are different bilateral and multilateral agreements and newly established *Fund for Environmental Protection and Energy Efficiency*. Establishment of the *Fund* would overall contribute to the goals defined in the *National Environmental Strategy*, *Energy Development Strategy* and *National Energy Programmes*. Purpose of the *Fund* is ensuring permanent and stable additional financial resources, primarily in the form of favourable loans. This way, the *Fund* would be a mechanism for increasing investment of predominantly economic entities, as well as units of local and regional self-government into environmental, energy efficiency and renewable energy projects, thus advancing general environmental protection objectives and changing consumption patterns in the reform of the energy sector. Very important project, “Removing Barriers to Improving Energy Efficiency of the Residential and Service Sectors”, is financed by Croatian Government and GEF implement agency together. The project is to remove the key barriers to the implementation of selected, economically feasible energy efficiency

technologies and measures in the residential and the service sectors in Croatia, thereby reducing their energy consumption and the associated greenhouse gas emissions.

Draft Bill on Environmental Protection and Energy Efficiency Fund, currently in adoption process at the Parliament, envisages introduction, among others, of new economic instruments (charges) paid for goods containing harmful substances or goods which might incur significant load on environment.

Cooperation: International cooperation in this area is primarily with EU in the frame of some projects, such as Community Assistance for Reconstruction, Democratisation and Stabilisation (CARDS), United Nations Economic Commission for Europe (UNECE), Southeast European Cooperative Initiative (SECI), the World Bank and as part of bilateral agreements of the Republic of Croatia with certain countries.

The Republic of Croatia became a party to the United Nations Framework Convention on Climate Change (UNFCCC) in 1996, by Parliamentary Decree on Ratification (Official Gazette, 55/1996). Pursuant to this Decree, the Republic of Croatia has - under Article 22 of the Convention - undertaken the commitments outlined in Annex I as a country undergoing the transitional process to a market economy. Croatia has thus committed itself to maintain emissions of greenhouse gases at their 1990 levels. The Republic of Croatia is also a signatory of the Kyoto Protocol. Upon its entering into force and its ratification by Parliament, Croatia shall commit to reduce its emissions of greenhouse gases by 5 % in relation to the reference year, over the commitment period from 2008 to 2012.

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CHAPTER 4: CHANGING CONSUMPTION PATTERNS -TRANSPORT

Decision-Making: The First National Communication of the Republic of Croatia to the UN Framework Convention on Climate Change and the National Environmental Action Plan are the main documents providing measures for the change in consumption patterns in transport.

Programmes and Projects: Important national energy programmes in this field are TRANSCRO and BIOEN, aiming to introduce the use of bio-diesel and hydrogen fuels. Gradual introduction of bio-diesel and hydrogen fuel is expected to begin in 2005, for contributing to reduction of CO₂ emission.

Status: In the beginning of 1990s, consumption of transport fuels declined. In the period 1991-1995, during the war, the Republic of Croatia suffered severe human casualties and devastation of settlements and economic facilities. In the period 1993-1997, the annual rate of the transport fuel consumption was 8 %, the annual increase rate for registered motor vehicles was 10 % and unleaded fuel accounted for 5% of the total fuel consumption. In 1998, unleaded fuel shared in fuel consumption increased to 49.8 %. It is estimated that, in 2001, there was 40% of motor vehicles with built-in catalysers. The average age of passenger motor vehicle in Croatia is eleven years.

Capacity-Building, Education, Training and Awareness-Raising: In the year 2000, several towns in Croatia organized various activities on the occasion of the European Car Free Day (22 September) for the first time. Those activities were aimed to promote the use of bicycles, public transportation, car sharing and car-pooling in cities and towns. The state-owned company Croatian Railways conducts media campaigns and promotes travelling by rail as environmentally friendly and rather cheap mode of travelling.

Information: No information available.

Research and Technologies: In May 2001, a feasibility study regarding the launching of production of bio-diesel fuel in the Republic of Croatia was completed.

Financing: The Ministry of Environmental Protection and Physical Planning earmarked in its 2002 budget, the amount of 100,00.00 HRK for testing the possibility of using bio-diesel to the public transport system in the city of Zagreb.

Cooperation: No information available.

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CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

Decision-Making: Responsible for decision-making are the Parliament of the Republic of Croatia and the Government of the Republic of Croatia. The Ministry of Public Work, Reconstruction and Construction and the Ministry of Labour and Social are primarily concerned with demographic issues, but the Ministry of Health and Ministry of Interior (Migration Department) are also involved in decision-making in this area.

The Government is promoting policies to encourage population growth. For example, a three-year maternity leave for parents for every third and subsequent child has been adopted (*The Law on Maternity Leave*). The law guarantees equal treatment as regard maternity leave to parents that perform an independent activity relative to employed parents that have right according to the Labour Act. The system of children's allowance has recently been changed. The Government's platform in this field is directed to sustain the current population estimates, to complete the return of displaced persons and refugees, to an active population redistribution policy in the revitalization of areas affected by depopulation, aging or extinction and to stop the drain of the younger and able-bodied population.

Programmes and Projects: A strategic development document, the National Programme for Demographic Development was passed by the Croatian Parliament in 1996.

Status: Croatia belongs to the group of countries that are concerned with population decrease and its consequence for long-term human and socio-economic development. The present demographic situation is the result of a steady decline of fertility and a low natural increase, a negative migration balance, the consequence of the two World Wars, and of the recent war. Total fertility rate has been below replacement level since the end of 1960s and in 1999 it was 1.38. The fertility trend has been aggravated by long-lasting emigration. In the first half of the 1990s, the war deteriorated all population components and structure, and created a great number of displaced persons and refugees, some of whose fate are unfortunately not yet fully resolved.

In the past decade, population growth in Croatia turned to absolute decrease. According to the first results of the Population census 2001, the total population in Croatia is 4.38 million inhabitants (2.6% less than in 1991). With average population density of 78 inhabitants per square km, Croatia is among medium populated countries. In terms of spatial distribution, urban agglomeration presents another significant problem in the country. Entire regions have been affected by depopulation, whereby population is concentrated in and around a small number of urban areas. According to the 1999 mid-year estimate, the population of Croatia consisted of 48.1% males and 51.9% females. The main characteristic of the age structure of the population is the decrease of young people, the increase in working age population and especially the increase of the elderly. Croatia is one of the countries where has experienced large number of the aged population.

The reproductive environment is still fairly stabile. About 90% of children are born in wedlock. The infant mortality rate and rate of perinatal mortality are in steep decline. In the overall policy special attention has been devoted to the reproductive health care of women and adolescents.

The life expectancy at birth is significantly increased in the second half of 20th century and in 1995-2000 it was at 68.8 years for men and 76.5 for women. The aging process will have a long-term impact on future demographic, economic and social development.

Capacity-Building, Education, Training and Awareness-Raising: In 1997, the State Institute for the Protection of Family, Maternity and Youth was established by a decision of the Government with scope to educate and improve the quality of life for families and other social groups. The main activity of the Institute is to prepare the legal framework, which would provide for benefits to families in need and improve the social status of women, youth and children. The Institute conducts research to establish the facts related to social and health problems of

certain social groups. For example, the targets of research are system of values, youth behaviour, sexually transmitted diseases etc.

Information: Data on population and households are collected by censuses carried out every ten years using uniform methodology for the whole country. Data on births, deaths and marriages are taken from the respective registers, on divorce from municipality courts register and documents, and on population migration from the Registration department of the Ministry of Interior.

The last nation-wide census was conducted in the first half of April 2001 covering population household and housing conditions the first one in the independent Croatia. This census was carried out in accordance with “The Recommendations for the 2000 Census on Population and Housing in the ECE Region”, jointly defined by the UN and the Statistical Office of the European Communities (EUROSTAT). The most significant change in the Census 2001 as compared to the Census 1991 refer to the definition of the place of usual residence, which effects the change in the definition of the total population of the Republic of Croatia.

The Census is the most complete source of socio-demographic data that are collected for the whole country with the situation on so called “Census day” (31 March 2001), which facilitates comparison and shows differences between different areas of the Republic of Croatia more accurately.

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

Information: No information available.

Research and Technologies: No information available.

Financing: Funding is provided by the state budget, budgets of units of local government and self-government.

Cooperation: International cooperation in this area is primarily with UNICEF and UNHCR.

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CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

Decision-Making: Ministry of Health is the coordinating body on health in Croatia. The health system is designed in such a way as to ensure state involvement in all its structures, i.e. at the state level, at the county level (21 in all), and at the level of local units of government and self-government. The so-called Administrative Councils are in charge of health care, while the institutional management executes their decisions. The Administrative Council is also the strongest public insurance institution, covering mandatory health insurance. Additional health insurance is available as well. Legislation promotes universality of access, health promotion, and primary health care. The new health system also foresees integration with the issues of the entire physical, chemical, biological, and social environment, according to not only the provisions of Alma Ata (Declaration on Primary Health Care, 1978), but of Agenda 21 as well. Health policy has been formulated in the new edition of the Croatian policy and strategy as "Health for Everyone by the Year 2005", confirming the existence of a long-term health policy expanding into the next century.

Programmes and Projects: At this moment Republic of Croatia is conducting Health Care System Reform Project. The objectives of the reform are to improve the quality and contain costs of the health care. The reformed Croatian health system should ensure optimal and cost-efficient care, and should contribute to improve health of every individual and the population as a whole through the measures of health promotion and protection, prevention of diseases and illnesses, and treatment and rehabilitation of the ill. The system should be accessible to all users on the fair and equal basis and should protect from unbearable financial risk.

The Croatian government has adopted a new health policy that has three strategic objectives:

1. To prolong life expectancy;
2. To improve health-related quality of life;
3. To reduce inequalities in health and inequalities in access to needed health care services.

The holder of the reform is the Ministry of Health. The reform would impact main elements of the health system: organization of health administration, financing system, payment of health care, and service provider system. The operational goals of the reform are:

1. financial stabilization of the system;
2. cost containment defined as limitation of the growth on the health care costs;
3. introduction of planning and management into the administration of the health care system;
4. reorganization of financing and reimbursement system of health care;
5. improvement of efficiency and quality in the provision of the health care services;
6. strengthening of preventive services and of primary health care.

The reform is based on improvement of the health system efficiency through re-determination of priorities and improvement in the accessibility and quality of health services. Universal access to health care represents an important tradition and society value in Croatia. This value has been maintained in the health system reform. Access to the necessary health services is assured to all citizens and is financed through the national health insurance founded on the principle of the financial solidarity. The National Insurance Scheme operates as a public non-for-profit fund and will cover a defined set of health benefits. In addition to the national health insurance fund supplementary private insurance schemes will be introduced. The supplementary insurance will be offered for the benefits not covered by the National Insurance. Services would be provided through a mixed system of public and private providers. The network of the providers is subject to capacity planning. The objective of capacity planning is to provide equal access to the needed health services to all users and to avoid unnecessary duplication of capacities and induction of provider driven demand. In capacity planning a special attention is paid to integration of health care delivery through vertical and horizontal integration of provider capacities. Accessibility of services would be improved in several ways. Physical accessibility would be improved through planning of a network of hospitals and other health institutions, in accordance with the needs of the population in particular areas of the

country. Changes in the health care financing system will reduce the financial barriers to service access. Organizational changes and improved management would shorten the waiting lists for elective medical procedures. Cost-containment and improved effectiveness are planned to be achieved through changed incentives for providers, such as introduction of the prospective payment system for inpatient hospital care and financial incentives for programmes in primary health care. Financial incentives, organizational changes and changes, introduction of evidence-based medicine will improve cost-effectiveness of service delivery. These and other interventions in the system will reduce unnecessary services. Quality of care would be enhanced by wide introduction of clinical guidelines, followed by appropriate monitoring systems for provider compliance and the system of financial incentives to support delivery of good quality care.

As a reform is a long-term process, it will be conducted in several phases: The first phase of the reform is being conducted through the following projects:

- institutional reform;
- promotion of health care structural organization – “New Direction” project;
- reorganization of health care financing system;
- definition of a basic package of health services;
- improvement of the reimbursement system in health care;
- provider capacity planning;
- state hospitals reform;
- introduction of clinical guidelines;
- improvement of preventive health care services;
- national drug policy project;
- health information system project;
- strengthening of international cooperation;
- human rights and ethics in the health care system;
- research and development;
- policy of professional development in medicine and health system reform.

The reform plan and processes will be modified and supplemented based on the results achieved (e.g. in the pilot project “The New Direction”. This project is financed from the World Bank (<http://www.worldbank.org>) loan (IBRD 4513-0 HR) and Ministry of Health budget. The pilot project took place at the Koprivnica-Krizevci County.

The project components are:

A. HEALTH CARE DELIVERY COMPONENT

1. National Health Care Programme
 - 1.1. Hospital Emergency Medicine Subcomponent
 - 1.2. Pre-hospital Emergency Medicine Subcomponent
 - 1.3. Heart Disease Prevention Project
2. Primary health care project

B. PUBLIC HEALTH

1. Chronic Non-Communicable Diseases Subcomponent
2. Cardio-Vascular Diseases Prevention Subcomponent
3. Communicable Diseases Prevention Subcomponent

C. PHARMACEUTICAL WASTE DISPOSAL

D. SYSTEM-WIDE INITIATIVES

1. Pharmaceutical Sector Reform Project
2. Quality Assurance Project

3. Public Campaign Project

4. Inequalities in the access to health services – Research Project: The objective of this study is to evaluate inequalities in utilization of inpatient services in Croatia. This is joint Project of the Ministry of Health of the Republic of Croatia and Norwegian Institute for Public Health.
5. National Programme of Rational Organization of Transfusiology Service: Commission for Advancement of the Quality and Organization of Transfusiology Service in health care institutions (analysis of the service state-of-the art, possibilities of better rationalization) has been appointed.
6. National Organ Transplantation Programme: “Croatransplant” Collaboration was established with the Council of Europe. Continuation of the programme for organ explantation was defined.
7. Implementation of Programme for Drug Abuse Control: Implementation of the programme of mandatory education of health care workers was approved with the purpose of realization of health education in all counties and the municipality of Zagreb.
8. Programme of Improved Provision of Emergency Medical Help during Tourist Season: Mobile emergency teams were established in Delnice, Graèac, Plitvice, Turèin, and have been on duty on state road sections during the tourist season. Emergency helicopter transport of injured/diseased persons from Croatian islands and littoral has been organized during the tourist season.
9. National Programme for Children's Health Improvement: Expert committee for preparation of the complete prevention programme in dental health care has prepared a programme for implementation of preventive activities for preschool children population. The national programme to promote breastfeeding entitled "Happy baby" is currently being implemented.
10. Mental Health Care System Reorganization Project: State committees were appointed for the programme of improved health care of persons with mental disturbances and compulsory hospitalisation.
11. Programme of Collaboration with Non-Governmental Associations: Based on open competition for life quality improvement and health protection, financial support was approved and disbursed to 37 non-governmental associations.

Status: Before the 1991 war the infant mortality rate was 10.7. During the war period, it was 11.1 and 11.6 in 1991 and 1992 respectively. In 1995, it was reduced to 8.7 per 1000 live births. An increase was also noted in the at-birth life expectancy indicator from 72.5 years in 1990 to 73.3 years in 1995. This was followed by a decline to 72.83 in 1999. The indicator of maternal deaths (10.83/100 000 in 1990) dropped to 10.3 in 1994 rose to 11.7 in 1999. The number of deaths attributed to cardiovascular diseases amounted to 551.7/100 000, 504.6 and 582.3 in 1990, 1994 and 1999, respectively.

Capacity-Building, Education, Training and Awareness-Raising: Examples of educational and promotional activities include:

Smoking control programme: The world non-smoking day was marked by a thematic conference, advertising material and promotion of healthy way of life. Croatian Committee on the Prevention of Smoking has organized various programmes on promotions of health and healthy way of living without smoking. It has organized courses on how to quit smoking and published brochures on the topic. Campaign “Say No to Smoking” has been conducted as well. With the Campaign the free “Call Centre” for the information on problems connected with the quitting of smoking has been established.

“Motioning towards the Health”: “Motioning towards the Health” was a slogan of the Croatian campaign on the World Health Day. The walk to that message was addressed to the Croatian population as a consequence of the increased number of illness that occur due to the unhealthy way of living.

AIDS infection prevention programme: Financial support has been allocated to NGOs, i.e. the Croatian Red Cross and the “Help Split” organization, and used to distribute needles, syringes and condoms to drug addicts and to conduct surveys in schools on the awareness of problems with AIDS and other addictions. Prevention of AIDS is a national programme from 1993. The Association of the HIV-Positive Persons was established in the year 1999.

Prevention of Sexually Transmitted Diseases (STDs): Lectures in schools on the awareness of problems with STDs are conducted on the regular basis.

Other educational and promotional activities: A contract with the “B1 Plakati” company was signed on joint educational promotional actions with the purpose to promote health, health culture, and disease prevention.

Behavioural Approach in Treatment of Obesity: The special courses on the obesity have been organized by the Clinical for Diabetes - Vuk Vrhovec.

Information: Information on the health care in Croatia can be found on the official site of the Croatian Ministry of Health: www.miz.hr

Research and Technologies: The researches in the field of medical sciences are being conducted at the Medical Faculties and in the State Institutes supported by the Ministry of Science and Technology.

Financing: Financing is provided by the state budgets, the units of local government and self-government.

Cooperation: Regional and international cooperation, particularly with the World Bank and WHO, is very prominent in all aspects of Croatian health policy enforcement.

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CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

Decision-Making: Ministry of Environmental Protection and Physical Planning is undertaking the tasks and responsibilities related to physical planning, site-permits, building permits and operation permits, spatial planning and building inspection, and the corresponding legal and administrative matters. Under the competence of the Ministry of Public Works, Reconstruction and Construction is organization of strategic infrastructure projects regarding traffic and waters; return of the displaced persons and post-war reconstruction; residential construction; construction and habitation; communal economy, regional development and development of islands. The ministries administer and direct state level documents and policy implementation, involving representative bodies of local authorities and coordinate other ministries, state directorates and public companies within their competencies. The Institute of Physical Planning is a part of the Ministry of Environmental Protection and Physical Planning and in cooperation with other institutions, prepares documents on the physical reconstruction of settlements and acts as an intersectoral coordinator. The National Physical Planning Strategy and Programme set the position for the further regional development in the entire territory of the Republic of Croatia. Those documents are the basic documents encompassing integral development and physical planning issues and therefore, the issues of sustainable settlement as well. The County Development Plans stipulate the objectives of the spatial planning and regional planning for the specific county region, according to guidelines set up in a National Physical Planning Strategy (Croatia is administratively divided in 20 counties and the metropolitan region of the city of Zagreb). Single documents for particularly relevant and endangered areas, and those for large urban agglomerations, are to follow. Local institutions develop their own plans and programmes, to be adopted by the representative bodies of the local authorities.

Programmes and Projects: Socially Stimulated Residential Construction: Currently Programme on Socially Stimulated Residential Housing, drawn by the Ministry of Public Works, Reconstruction and Construction started its implementation in ten Croatian cities, thus construction of almost 400 apartments is expected. Programme of Housing of Homeland war affected persons: The Law on Rights of Croatian Homeland War Veterans and Their Family Members, stipulates that all Homeland War affected persons should be housed in a certain period of time, concluded by the year 2001. The Ministry of Public Works, Reconstruction and Construction has the obligation to take over the organization, construction and financing of housing of the Homeland War affected persons.

Status: The development of cities and other settlements so far is marked by underdeveloped infrastructure, the need for transformation of the economy, and for the improvement of environmental status. There is a trend of depopulation of rural areas and smaller settlements, while on the contrary urban population is constantly increasing, especially in bigger cities and cities along the coastline. Efforts are being made to prepare physical plans for cities and other settlements, aiming towards a more humane spatial arrangement and a more efficient functioning of urban systems.

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

Information: No information available.

Research and Technologies: No information available.

Financing: Financing is provided by the state budget and the budgets of the units of local government and self-government.

Cooperation: No information available.

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CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING

Decision-Making: The Ministry of Environmental Protection and Physical Planning is in charge of the activities related to general environmental policy within the context of sustainable development. The Ministry of Economy, Ministry of Foreign Affairs, Ministry of Public Works, Reconstruction and Construction, Ministry of Science and Technology, Ministry of Culture, Ministry of Agriculture and Forestry, Ministry of Labour and Social Welfare, State Water Directorate, and State Bureau of Statistics, within their respective domains, are also involved in these issues.

The environmental impact assessment (EIA) has been implemented in Croatia since 1984 and is consistent with the Law on Environmental Protection (1994). The EIA process involves both an assessment of environmental impact and a public hearing in the area to be affected for purposes of evaluation.

The Ministry of Environmental Protection and Physical Planning has drafted, in cooperation with the World Bank that provided technical and financial assistance, the National Environmental Action Plan (NEAP), in accordance with sustainable development principles. All stakeholders (business, NGOs, industry, etc.) on different levels (national, regional and local) were involved in drafting of this document. The NEAP was adopted by the Government in November 2001. In January 2002, the Parliament adopted the National Environmental Strategy that was developed by the Strategic Planning Office of the Republic of Croatia. The Ministry of Environmental Protection and Physical Planning seeks to ensure that all the strategies and documents that are being in the process of adoption by the Government are in compliance with the principles of integration and sustainable development. Within the constitutionally guaranteed right to local government and self-government, citizens decide on local needs and interests, especially concerning physical and urban planning, settlements planning and housing, municipal activities, and protection and improvement of the natural environment. The units of the local self-government are cities and municipalities, i.e. counties.

With reference to Local Agenda 21, the municipality of Omišalj on the island of Krk, had signed in April 1998 the Aalborg Charter, thus initiating the process of developing its own local Agenda 21. During 2000, another fifteen towns and municipalities joined the initiative.

Programmes and Projects: “Development Guidelines of the Republic of Croatia” is an essential document for the development of Croatia and a part of the Development Strategy of the Republic of Croatia entitled “Croatia in the Twenty First Century” (www.hrvatska21.hr), adopted by the Government in June 2001. The Strategy encompasses nineteen separately elaborated and interrelated sectors (tourism, maritime affairs, energy, economy, environment, social welfare, science, transport, information and communication technology, etc), covering the current state and development goals and proposed measures for their achievement. The Strategy defines the sustainable development concept as a key development principle.

The list of priority projects, i.e. the Priority Action Plan has been elaborated within the NEAP and comprises a large group of projects aimed at regulating the waste and water management, air quality, industry and mining, energy, agriculture and forestry, tourism, transport, noise protection, biological and landscape diversity and coastal and island management, as well as projects aimed at institutional strengthening and capacity building of the Ministry.

Status: No information available.

Capacity-building, Education, Training and Awareness-Raising: With the view of capacity-building, the Ministry has prepared the project proposal “Strategy for EU Environmental Law Approximation” which has been proposed by the Ministry of Environmental Protection and Physical Planning for financing under EU programme CARDS 2002. This strategy is necessary in order to initiate harmonization of Croatian environmental legislation with *acquis*, as one of the precondition for the EU association process. The Strategy is intended to be a document

with an integrated and comprehensive approach to the association process that would include objectives, measures and obligations of the Ministry in the process. It is expected to result, in a shortest possible time, in a significant degree of harmonization with the EU in the environmental legislation sector.

Information: The Ministry of Environmental Protection and Physical Planning (issues a monthly bulletin “Okoliš” (The Environment), covering a wide range of environmental issues. The Ministry’s spokesperson is responsible for dissemination of information on environmental issues. The Ministry’s web site (www.mzopu.hr) also provides various information on environmental issues. Also, there are numerous NGOs (around 230) active in environmental protection issues, thus significantly contributing to awareness-raising of general public.

Research and Technologies: No information available.

Financing: Financial means for the environment are earmarked in the State Budget as well as local budgets for this purpose. Companies also provide certain financing since they are required, under the law, to make investments into environmental protection. Different international organizations provide financing for the projects submitted by the state bodies, private companies and NGOs.

Cooperation: Efforts in this area are furthered by international and regional cooperation, particularly in the context of the "Environment for Europe" Process, the Environmental Action Programme for Central and Eastern Europe Danube River Basin Environment Programme, the Mediterranean Action Plan, and numerous conventions, protocols and agreements to which Croatia is a party. The Ministry of Environmental Protection and Physical Planning also participates in different EU programmes and initiatives, such as LIFE – Third Countries Programme, CARDS, Stability Pact /REReP, and Adriatic-Ionian Initiative.

The Ministry has also initiated a project within the EU Stability Pact/ Regional Environmental Reconstruction Programme for South-Eastern Europe titled the Establishment of Environmental and Energy Efficiency Fund, with the objective to integrate environmental protection and economic goals. This project was drafted in cooperation with the Ministry of Economy, while the technical assistance has been provided by the German Agency for Technical Assistance (GTZ). The Law on Establishment of the Fund has been drafted and is presently in the Parliamentary procedure. The Fund will provide loans to public and private companies for the projects in the field of environmental protection and energy efficiency.

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CHAPTER 9: PROTECTION OF THE ATMOSPHERE

Decision-Making: The Croatian Parliament, the Croatian Government, the Ministry for Environmental Protection and Physical Planning, the Ministry of Health, the Ministry of Economy, Ministry of Science, Croatian Academy of Science and Art (HAZU), experts, Croatian Economy Chamber (HGK), the State Bureau for Standardization and Metrology, the Meteorological and Hydrological Service, NGOs and the units of local government and self-government all have decision-making responsibilities in this area.

The Law on Air Quality Protection has been in force since 1995 and forms the basic legislative framework for the implementation of the policy of air quality protection and improvement in Croatia. The Law regulates the establishment of national and local air quality monitoring networks, the mode of area classification with regard to air quality, the need for developing programmes for endangered areas, as well as the stationary sources of air pollution. It also introduces the obligation to keep records of the sources of emissions and monitor stationary source emissions, and to supply the units of local self-government with relevant data. Also important in this context are the By-law on Recommended and Limit Values of Ambient Air Quality (1996), By-law on Limit Values of Emission Pollutants from Stationary Sources into the Air (1997), By-law on Quality Standards for Liquid Oil Fuels (1997), By-law on National Air Quality Monitoring Network (2002) and By-law on Substance that Deplete the Ozone Layer (1999).

Programmes and Projects: With professional and financial support of UNEP, the Ministry prepared a Country Programme for Phasing Out Substances that Deplete the Ozone Layer. This Programme provides assistance in identifying substitutes for substances that deplete the ozone layer and establishes a process to regulate importation and consumption of these substances and of those products containing these substances. On the basis of the Country programme, the Montreal Protocol Multilateral Fund has approved implementation of five ODS phase out projects: Phasing out CFCs at Pliva Co., Phasing out CFC-11 at Oriolik Co., Methyl Bromide Phase Out Demonstration Project, Methyl Bromide Phase Out Project, and Refrigerant Management Plan. The Institutional Strengthening project was also approved, providing necessary logistic assistance for the implementation of the mentioned projects. Also, the National Environment Strategy (2002) includes ODS phase-out issue.

With the aim to enhance its capability to meet the obligation for UNFCCC, Croatia is carrying out the following projects:

- GEF PDF-B Project "Capacity Building for Improving National Greenhouse Gas Inventories" (Global Programme, Focusing on Europe and the Commonwealth of Independent States);
- United Nations Institute for Training and Research (UNITAR), Institutional building to facilitate the Implementation of the Kyoto Protocol in the "Central Group 11" countries;
- UNCTAD, Supporting GHG markets in "Central Group 11" countries;
- LIFE (Financial Instrument for the Environment /EU) Third "Reconstruction of National Emission Inventory System and enforcement of its implementation;
- two pilot-projects to survey the consequences of global climate change in the Adriatic area, in the Cres-Losinj Archipelago and in the Bay of Kastela.

Status: With the purpose of implementing the Montreal Protocol in the Republic of Croatia, a National Programme Body has been set up by the Government, consisting of experts with extensive experience and knowledge that contribute to the harmonization of Croatian interests with the requirements of the Montreal Protocol. The Ministry of Environmental Protection and Physical Planning is authorized to enforce the provisions of the Montreal Protocol, in conjunction with the National Programme Body.

Capacity-Building, Education, Training and Awareness-Raising: Through its competent authorities, the Republic of Croatia is systematically educating employees, by organizing seminars and courses within and outside educational institutions, to work with the substances that deplete the ozone layer. Permanent promotional activities

in mass media are helping to raise the awareness of co-responsibility for the environment, thus preparing the public for the benefits that will inevitably arise in the course of withdrawal of these substances from use.

Information: Croatia can provide accurate air quality indicators for the past few years except for certain industrial zones burdened by out-of-date technology. Annual reports on air pollutant emissions have been prepared in Croatia since 1993. These reports include the following substances: SO₂, NO_x, N₂O, CH₄, CO, CO₂, NH₃, NMVOC and heavy metals (Pb, Cd and Hg). Croatia participates in the Global Environmental Monitoring System (GEMS) with its three local air quality-monitoring stations, two tropospheric ozone-monitoring stations within EUROTRAC (European Experiment on Transport and Transformation of Environmentally Relevant Trace Constituents in the Troposphere over Europe) Monitoring Network, and two-background air pollution monitoring stations within the EMEP (Co-operative Programme for Monitoring and Evaluation of the Long-Range Transmission of Air Pollutants in Europe) Protocol. Croatia has the Cadastre of Emission in Environment (KEO) established in the year 1996, which is register of all air pollutant point sources. It also covers the emission to water and waste disposal data. The KEO system includes the data about entity, technologies, fuel used, production and emissions. The system is now under the reconstruction to better suit domestic purposes needs, as well as growing needs under Convention on Long-Range Transboundary Air Pollution (LRTAP) and UNFCCC Convention.

Research and Technologies: No information available.

Financing: The state budget provides financing for the national air quality-monitoring network. Budgets of local government and self-government units are source of financing for local air quality monitoring networks. The polluter, the owner and/or the user are responsible for the financing of measures to reduce air pollution caused by stationary sources. An Environmental Protection and Energy Efficiency Fund is being established in Croatia, for the purpose of financing projects and programmes in the field of preservation, sustainable use, protection and improvement of environment, energy efficiency and the use of renewable energy sources.

Cooperation: The Republic of Croatia is a Party to the following international treaties: The Montreal Protocol on Substances Depleting the Ozone Layer (1991) and its London Amendments (1993) and Copenhagen Amendments (1996); the Montreal Amendment (2000) and the Beijing Amendment (2002), the latest report to the Montreal Protocol Secretariat was submitted in 2002. / The United Nations Framework Convention on Climate Change (1996); the report was submitted in the year 2002; / The Kyoto Protocol to the Convention on Climate Change was signed in 1999. / The Vienna Convention on the Protection of Ozone Layer (1991); / Conventions on the Long-range Trans-boundary Air Pollution (1991); / The Protocol to the Convention on Long-range Trans-boundary Air Pollution on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range; / Transmission of Air Pollutants in Europe (EMEP Protocol 1991); and The Protocol to the Convention on Long-range Trans-boundary Air Pollution on Further Reduction of Sulphur Emissions (1994); The latest report to the Executive Body of Convention was submitted in 2001.

With regard to the Framework UN Convention on Climate Change (1997), the Ministry of Environmental Protection and Physical Planning prepared the First National Communication on Climate Change and submitted it to the UNFCCC Secretariat in February 2002. This should assist in the drafting and implementation of the climate programme and meeting the obligations ensuing from the UN Framework Convention on Climate Change and the Kyoto Protocol when it enters in force for the Republic of Croatia. The National Environment Strategy (2002) also includes this issue.

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

Decision-Making: The Institute for Physical Planning of the Ministry of Environmental Protection and Physical Planning is responsible for the spatial planning policy of the Republic of Croatia. The Institute sets guidelines for the spatial development and co-ordinates different sectoral interests. It also documents changes and processes in physical environment and presents them in regular reports and programmes for the improvement of physical environment. The Institute also monitors implementation of the Strategy and Programme for Spatial Development and co-ordinates elaboration of spatial plans for the nature protected areas. The Ministry of Public Works, Reconstruction and Construction is in charge of national programmes for areas of special state concern and programmes for sustainable development of islands.

In principle, there is a tendency to reconcile the conflicts arising from different land use claims during the planning process, i.e. during the preparation of spatial plans. However, in the implementation, i.e., direct land management, each competent body operates autonomously - e.g. the Public Enterprise *Croatian Forests* is in charge of forest management, the Ministry of Agriculture and Forestry is in charge of agricultural land, while the local self-government bodies take care of providing building land with the necessary infrastructure, etc. At the local level, County Institutes for Physical Planning (in the City of Zagreb it is the Town Institute for Physical Planning) elaborate and propose physical planning documents, to be adopted by the counties' (i.e. the City of Zagreb) representative bodies. Municipalities and cities, in cooperation with authorized planning companies, develop plans that are then adopted by their representative bodies. The majority of the county physical plans, which are the basic physical plans on the local level, have been enacted, whilst 6 out of 21 are in the final stage of adoption.

The Law on Physical Planning passed in 1994 and amended subsequently in 1998 and 2000, established an integrated approach to planning through the elaboration of physical plans and other similar documents.

The Republic of Croatia is currently establishing a new physical planning system based on its relatively recently changed geo-political status and territorial organization in 1990. Some physical plans created before the establishment of the sovereign and independent Republic of Croatia are still in use.

The Physical Planning Strategy of the Republic of Croatia was elaborated in 1997 as a basic document for an integrated approach to planning. Based on the Strategy and the Law on Physical Planning, the Ministry of Physical Planning prepared the Physical Planning Programme that was enacted by the Croatian Parliament in May 1999. The Programme defines measures and activities for the implementation of the Strategy and sets priorities for the spatial development.

Regarding the major groups participation in decision-making, within the land use planning procedure the public in general, including major social groups, is involved in the process of adopting spatial plans through public debates which are a compulsory part of the plan enactment procedure. Both individual natural persons and all citizens' groups and associations have equal rights of participation in public debates. Depending on the party responsible for the preparation of the spatial plan, the same participants may also participate with their proposals in the previous debate on the plan proposal. Besides through public debates, citizens can influence the enactment of plans also through their representatives in local bodies that adopt the plans (town or municipal councils and county assemblies).

Programmes and Projects: The Ministry is taking part in developing a project titled Regional Development Institutions, Policies and Planning, submitted for financing under EU programme CARDS 2002. The goal of the project is to elaborate a national strategy for regional development according to the sustainability principle and definition of institutional and legal structure for the planning and implementation of regional policy.

Status: No information available.

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

Information: Pursuant to the Law on Physical Planning, the Institute for Physical Planning within the Ministry of Environmental Protection and Physical Planning is the central body responsible for the establishment of an information system and database for the management and administration of the space of the Republic of Croatia. For purposes of information system establishment, the preparation of a general concept and establishment of a database, the definition of basic standards for the collection, processing, maintenance, administration and distribution of information, and their transformation from the analogue into the digital, a geo-code (GIS) format is underway.

Research and Technologies: No information available.

Financing: The state budget, budgets of the units of local government and self-government, public companies development funds provide support to the programmes in this area. A number of local projects are financed by EU and other foreign donors.

Cooperation: Cooperation takes place within the following associations: the Alps-Adriatic, the Danube Region Community Programme, UNEP Sea and Coastal Areas Programme Centre, intergovernmental commissions and task forces, HABITAT, and other UN agencies, INTERREG (cross-border cooperation between regions) and other EU initiatives.

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CHAPTER 11: COMBATING DEFORESTATION

Decision-Making: The Ministry of Agriculture and Forestry is responsible for the implementation of the international and Croatian regulations in the area of forestry and hunting. Partly, it is related to the responsibilities of the state administration bodies in the respect of natural resources exploitation: water management and environmental protection and physical planning.

Main objectives of the sustainable forest management are defined through the Law on Forests (1999) and Law on Nature Protection (1994). In the Government Procedure is the new/revised Law on Forests that would ensure the compatibility of forest protection with the EU standards.

Monitoring of the forest state in the Republic of Croatia is not compulsory based only on the Convention on the Long-range Transboundary Air Pollution (1979), but by other international agreements such as Convention on Biological Diversity (1992) and Resolution of the Pan-European Union on the Protection of Forests in Europe (Strasbourg 1990, Helsinki 1993 and Lisbon 1998). Broad participatory process is ensured for various stakeholders (e.g. individuals, private forest owners, trained foresters, environmental NGOs, scientists, government and local authorities).

Programmes and Projects: The Ministry of Agriculture and Forestry is involved in the implementation of:

1. Coastal Forest Reconstruction and Protection Project
The main objective: restoring and protecting forestland in the coastal zone of Croatia in order to enhance landscape and recreation values of the region;
2. Project: National Forest Policy and Strategy
The main objective: identifying the development of the forestry sector in the next decade, taking into the account basic criteria for sustainable management and preservation of forest and its biological diversity resources;
3. The Restructuring Study for the Strategic Development of “Hrvatske šume”
The main objective: preparation of a detailed plan to restructure the state company Hrvatske šume which is responsible for the 80% of the total forest area in the Republic of Croatia;
4. Project: Development of National Forest Certification Standard in Croatia
The main objective: developing and testing a national standard for sustainable forest management that would be the basis for certification standards in Croatia.

Status: Croatia has a large forest resource base, of just over 2.4 million hectares or 43.5 % of the total land area. The soil and climatic conditions especially in the inland part of the country are favourable for sustainable forest management. That can be a strong asset for both economic development and environmental protection. However, the actual status of the forestry sector calls for restructuring of the system and further privatisation of non-profitable forest operations. The initiated process of the Hrvatske šume restructuring has been followed by the National Initiative development and preparation of National standards for forest certification. The national forestry policy is in the process as a precondition for the association into the European economic.

Monitoring of the state of forests in the Republic of Croatia has been conducted since 1987 in the framework of the International Cooperative Programme on Assessment and Monitoring of Air Pollution Effects on Forests. In 2001 the results have shown that the trend of the tree crown damage has decreased in all species. The most endangered ones are the silver European fir (*Abies alba*) with 70.4% damage (crown transparency higher than 25%) and common penduculate oak (*Quercus robur*) with 30.2%. Compared with the conditions of European forests (according to the 1996 report covering 32 countries), based on the degree of damage, Croatia falls under the category of countries above the European average damage level.

Capacity-Building, Education, Training and Awareness-Raising: So far, the Faculty of Forestry at the University of Zagreb is the only institution providing forestry education and training for graduate and postgraduate studies. During the academic year 2002/2001 the Forestry Department of the Faculty of Forestry had 602 students in total. In February 2001, there were 102 unemployed graduated forestry engineers in Croatia. In the Study on Hrvatske šume Restructuring Strategic Development, it is stated that there are 9.500 employees in the company. Among other activities, international projects have incorporated stakeholder education. Awareness-raising is carried out through public discussions, advertising, television/radio programmes etc.

Information: The web page of the Ministry of Agriculture and Forestry has been created (www.mps.hr).

Research and Technologies: Forest ecosystems are a part of the research programmes of the Faculty of Forestry at the University of Zagreb, Institute for Forestry Jastrebarsko, Institute for Adriatic Culture in Split etc.

Financing: Financial resources are provided through the state budget, while extensive projects are financed through international grants. World Bank has provided the 42 million USD loan for the Reconstruction and Coastal Forests Preservation Project.

Cooperation: In October 2001, cooperation with the Bavarian State Ministry of Agriculture and Forestry has been initiated through the project National Inventory of the Forest Resources in Croatia.

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CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

Decision-Making: The main governmental body responsible for coordinating issues related to droughts is the Ministry of Environmental Protection and Physical Planning.

Programmes and Projects: A National Action Programme to combat desertification has not been prepared yet. Measures from Agenda 21 and the Convention have been incorporated in the Environmental Strategies and NEAP, which are currently in preparation, and in sectoral sustainable development programmes, particularly concerning the Adriatic coast and islands. Presently, several projects are in progress in Croatia and these are related to the stationary measurements or mapping studies of soil erosion, such as the: “Stationary multi-annual analysis of different methods of soil cultivation with regard to soil erosion by water on pseudogley of Central Croatia” (running since 1994). Hydrological investigation and updating of hydrological interpretation of the Butoniga storage reservoir, and investigations of erosion on farm and forest land since 1995 have been carried out within the scope of project “Protection of soil and water from erosion in Istria”. Similar research on farm and forest land for the purpose of obtaining more reliable data on various phenomena of the erosion processes on marl and soft limestone has been conducted within the scope of project “Investigation of soil erosion by water in part of the Bednja and Plitvice catchment area”. On the national level, the assessment of risk of soil erosion by water according to the Coordination of Information on the Environment (CORINE) procedure is being carried out. The analysis is carried out within the scope of the scientific research project “Elaboration of maps with potential and actual risk of soil erosion by water in the Republic of Croatia” at the scale of 1:300.000.

Status: Climate change, primarily changes in temperature and rainfall, is one of the reasons of soil erosion. Like many Mediterranean countries, Croatia is facing great problems related to soil erosion by water. According to some estimates, about 90 percent of the area of Croatia is exposed to erosion from weak to strong intensity, while other assessments point out that it has not yet reached alarming proportion on 70 percent of the land. 42.3% over the total area of Croatian regions has low potential risk, 24.1% moderate and 31.8% high potential soil erosion risk. Except for that, 53.4% of the area has low, 31.7% moderate and 13.2% high actual soil erosion risk. Special attention is being given to activities and measures for sustainable land management, soil conservation against erosion, agricultural activities, conservation of biological diversity, protection against forest fires, afforestation, protection and management of water resources, and island settlements, among others.

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 International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa was signed in 1994, and it has been ratified in 2001.

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CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

Decision-making: Responsibility in this area is shared by various governmental bodies and local authorities in their respective domains, including the Ministry of Environmental Protection and Physical Planning. A specific coordinating body for the development of mountainous regions has not been established.

A number of species of flora and fauna, and several national protected areas in the mountainous areas have been placed under protection of the Law on Nature Protection.

Many strategic documents foresee the mountainous area of Croatia as a focus for considerable planning. The Physical Planning Strategy, for example, in the Chapter "Measures requested to amend the physical planning system" indicates the necessity of the elaboration of a National Programme for Mountainous Areas. This Programme would incorporate sustainable agriculture and tourism development and the revitalization of the natural and cultural heritage.

Programmes and Projects: The Ministry of Agriculture and Forestry is already applying the Stimulative Financial Measures Programme to small agricultural farms development, which includes the development of farms in mountainous areas.

Status: Forests and the central mountainous region are severely endangered by transboundary air pollution. The health condition of fir tree and sessile oak is the worst. The mountainous region of Dinarids, which is a highly sensitive karst region and is characterised by a complex regime of peculiar karst water circulation, as well as by over 8,000 known underground caverns, is only partially explored. The biodiversity of habitats, genetic richness with endemic and relict plants, arthropods, freshwater fish and reptiles make the Dinaric Karst Region one of the richest endemic centres of European flora and fauna.

Capacity-building, Education, Training and Awareness-Raising: A number of local/national NGOs (*Zelena akcija*, *Kap ž ivota*, International Anthropology Centre Motovun, etc.) are engaged in projects on sustainable tourism and agriculture including cooperation with local communities.

Information: Public institutions for nature protection (National parks Risnjak, Plitvice, Northern Velebit and Paklenica), as well as Nature Park Velebit, inform the public about their activities via web sites, mass media, brochures, posters and other publications.

Research and Technologies: Some forest ecosystems and species of flora and fauna of the mountainous region are part of regular research programmes of Forest Research Institute, Faculty of Forestry and Faculty of Natural Sciences at the University of Zagreb, and Croatian Natural History Museum.

Financing: No information available.

Cooperation: The zone of central mountainous region is part of the Karst Ecosystem Conservation Project coordinated by the Ministry of Environmental Protection and Physical Planning, and supported by the World Bank and other donors.

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CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

Decision-making: The Agricultural Policy and Rural Development Department and the Agriculture and Land Use Management Department within the Ministry of Agriculture and Forestry are the competent governmental body. In order to achieve sustainability, however, cooperation takes place among a number of governmental bodies, including the Ministry of Environmental Protection and Physical Planning, the State Water Directorate and the Ministry of Economy.

The Law on Agriculture defined the goals and measures of agricultural policy, definition of family farms, institutional support, administration and management in agriculture.

In accordance with the Law on Agricultural Land, conversion of a fertile agricultural land for non-agricultural purposes is prohibited unless it is carried out in line with physical planning documents and other corresponding regulations.

The general objective of agricultural policy is to ensure the food security of the population to the greatest possible extent by providing competitive domestic agricultural products, to promote efficient production and marketing in order to strengthen the competitiveness of producers on the markets world-wide, to enable an appropriate standard of living of the agricultural population and contribute to the stability of agricultural income, to provide consumer access to a suitable and constant supply of food in accordance with consumer demands, especially regarding prices, food quality and food safety, to conserve natural resources through the promotion of sustainable agriculture, and to preserve and advancing village regions and rural values.

The actions for promoting sustainable agriculture and rural development (SARD) described in Agenda 21 are included in the Strategy of Sustainable Agricultural Development in the Republic of Croatia, prepared by the Ministry of Agriculture and Forestry with assistance of UN Food and Agriculture Organization (FAO). The Croatian Strategy of Sustainable Agricultural Development was adopted in 1995. A new Strategy for Agriculture and Fishery is being prepared.

The aspects of sustainable agricultural development are contained in a number of documents and regulations, such as the National Biodiversity Plan; the recently approved Law on Ecological Farming of Agricultural and Food Products (February 2001); the decision on the establishment of a Multi-Disciplinary Bioethical Commission for Genetically Modified Organisms; and the National Island Development Programme.

The Republic of Croatia is committed to the aims and objectives of the Convention on Biological Diversity and other relevant international treaties to which it is a Party. The document "An overview of land state of biological and landscape diversity of Croatia" places a special emphasis on family farms that are the basis of Croatia's agriculture. It needs to be stressed that there are areas of Croatia with unpolluted soil, which enables the production of organic fruits and vegetables. The idea is to put a stop to the degradation of smallholdings and depopulation of valuable agrarian areas, and encourage the extension of real property. It is also necessary to support selectively specific productions and development of agriculture in certain regions.

In Croatia there are a large number of active NGOs whose representatives are actively involved in decision-making at all levels. Thus, for example, scientists who are members of such associations have given their active contributions to the development of Croatian Strategy of Sustainable Agricultural Development. Further, representatives of agricultural producers account for over fifty percent in the work of the Agricultural Research Council (ARC).

Programmes and Projects: The main activities in Croatia are orientated towards the following areas: to improve agrarian structure, to enhance rural financing, to upgrade market organization and distribution channels, to foster rural development and environmental protection, to encourage cooperatives and associations in agriculture, to

enable food safety, to provide institutional support. Several large fruit-growing plantations have introduced an Integrated Pest Management (IPM).

Status: The Republic of Croatia gained its independence in 1991, thus starting its transition to market economy. Approximately 400 businesses of agriculture, former strongholds of planned agricultural production have undergone a privatisation process. Furthermore, numerous international conventions have been signed, new legislation enacted, procedure for entering GATT/WTO started, and in 1995, in cooperation with FAO experts, the Croatian Strategy of Sustainable Agricultural Development was prepared. The position of Croatia is such that the influences of several types of climate meet and mingle, and therefore natural vegetation is highly diverse. Similarly, Croatia contains a natural compendium of soil types. Agro-ecological conditions in Croatia have production potentials for far larger quantities of foodstuffs than the present needs are. Production self-sufficiency is therefore possible for a number of crops.

The level of pollution from agricultural production is moderate. In fact, there are certain Croatian regions where have initiated the production of organic food. On the other hand, some areas still contain higher rates of pesticide and mineral fertilizer use but are now being oriented towards the implementation of sustainable agricultural production.

Capacity-Building, Education, Training and Awareness-Raising: In all Croatian counties, the Agriculture Extension Services, the Veterinary Services and the Livestock Breeding Services were established to advise and help farmers. In this regard, the Ministry of Agriculture and Forestry has started Farmer Support Service Project (FSSP) to facilitate the transition of the agriculture sector by providing technology-related support services that are relevant to private farmers. The majority of activities are carried out through the Agriculture Extension Service either independently or in cooperation with other governmental authorities and NGOs, and organizes lectures, prints publications etc. There are special education programmes for rural regions, implemented through the Environmental Planning Programme, and by improving the living conditions for youth and women in rural areas. The programme includes a number of small projects, such as the one on developing authentic national agricultural products, etc. The media involvement is all the more present, and NGOs receive a certain amount of earmarked funding. The Agriculture Research Council (ARC) was established in the framework of FSSP financing applied on farm research based on competitive grant selection. The ARC is financing 140 applied research projects through 12 Croatian institutions across Croatia. Intensive educational programme and technical assistance programme for agriculture related institutions staff has been carried out in the course of project life. The Ministry of Environmental Protection and Physical Planning provides financial support to numerous sustainable agriculture projects through NGOs.

Information: A National Report containing national policy guidelines was finalized in February 1997 and in 1998 the policy review was undertaken, in line with the action plan for Croatia. National information on sustainable agriculture is provided at the Ministry of Agriculture and Forestry website: www.mps.hr and at the Ministry of Environmental Protection and Physical Planning website: www.mzopu.hr.

In 1997, the Ministry of Agriculture and Forestry established a Market Information System, as a centralized system for regular collection and processing of data on marketing of agricultural products. The system will also be used for distribution of relevant marketing data and reports.

Research and Technologies: Several large fruit-growing plantations have introduced IPM successfully, with the result of 50 % reduction of sprayings. Some IPM elements have also been partially introduced in farming practices. At the end of 2001, the reconstruction and building of educational research Pasture Centre on the Medvednica Mountain was completed. In addition to educational and research work, the Centre will concentrate on developing and improving the system of natural pasture use for livestock production. The Centre is completely equipped with computing, laboratory and audio-visual equipment and is also fully staffed.

Financing: In 1996, a Special Account for Agricultural Reconstruction and Development Loans was opened with the Ministry of Agriculture and Development. In 2001, the Government of the Republic of Croatia secured US \$ 18,8 million from the state budget for this account. This provided resources for agricultural development programmes for different social groups of agriculture producers.

In 1996, Croatia entered into the Loan Contract for the Farmer Support Services Project (FSSP) with the International Bank of Reconstruction and Development (IBRD). The total project value was US \$ 30 million, out of which the loan accounts for US \$ 17 million, whereas the remaining US \$ 13 million would be earmarked from the State Budget in the period until the end of June 2001. The project implementation is extended until December 2002 (see: www.mps.hr/fssp). A new financing and agricultural development system is under consideration by the Parliament. The Fund will be based on taxes, land leases and credits.

Cooperation: Croatia became a full member of WTO in November 2000 that marked the beginning of a greater liberalisation of the agricultural market. The provisions of the Free Trade Agreements with 27 countries (Slovenia, Macedonia, Bosnia and Herzegovina, Hungary, Czech Republic, Slovak Republic, Poland, Bulgaria, EFTA member states and EU member states) are presently being implemented. In 2001, the Stabilisation and Association Agreement between the Republic of Croatia and EU was signed. As of 2002, about 80% of the Croatian foreign trade will be conducted under the conditions of free trade. The process of liberalisation will encourage trade and provide new export possibilities for Croatian producers. Regional cooperation is undertaken through the Alps-Adriatic Community, Central European Initiative and Danube Regional Community Programme. International cooperation takes place with the FAO, the World Bank, the EBRD (European Bank for Reconstruction and Development) and several bilateral projects with neighbouring countries.

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CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

Decision-Making: The national body that co-ordinates the biodiversity matters is the Ministry of Environmental Protection and Physical Planning, Nature Protection Division, Department for Biodiversity Protection (a part of these activities is implemented by other state administration bodies that are also responsible for the use of natural resources: forestry, hunting, water management, agriculture). Republic of Croatia is a party to nine conventions and their protocols and agreements, which meets the international criteria for pre-accession EU member states.

The Constitution of the Republic of Croatia (1992) provides the basis for a number of legal acts on nature protection. Nature Protection Act (1994) regulates the basic issues on protected areas, parts of nature, plants and animals species. Such a classic concept of nature protection had been common in most countries before the Convention on Biological Diversity entered into force. Following its obligations as a party, the Republic of Croatia developed a Strategy and Action Plan for the Protection of Biological and Landscape Diversity of the Republic of Croatia (NSAP) (adopted by the Parliament in June 1999, Official Gazette No. 81/99 dated 3 August 1999). This has transformed the classic approach in nature conservation protection into the preservation of overall biological and landscape diversity. The new Nature Protection Act, which is already in the official procedure, will ensure compliance of nature protection with the EU standards that have been drafted. This Act will provide the basis for unified and comprehensive nature protection which is a prerequisite for integration of measures of nature protection and its sustainable use into all relevant sectoral and intersectoral legislation, management plans and programmes.

Croatian National Parliament adopted the National Biodiversity Strategy Plan (NSAP) in June 1999 (Official Gazette No. 81/99 dated 3 August 1999). It is the first document where the Republic of Croatia makes an attempt to systematically chart and comprehensively plan its nature protection activities. NSAP defines the nature as an overall biological and landscape diversity that is protected on 100% of the territory of the Republic of Croatia – both in the areas of the conserved and "wild" nature and in the built-up and economically used areas. Action Plans are being implemented according to priorities and depending on availability of human and financial resources.

Until now business and industry have been not involved in the decision-making process as separate stakeholder experts, but only as a part of public opinion. There is very good cooperation between the Ministry of Environmental Protection and Physical Planning and scientists from different institutions, who play an important in decision-making process. The police and legislative in biodiversity issues seek scientific opinion from our relevant scientists and scientific institutions, and/or they get included in different advisory committees. Cooperation between NGOs is realised in various forms: celebrations of certain dates related to environmental protection, joint implementation of action plans of NSAP, biodiversity data collecting, cooperation in publishing, providing space for work, securing finances for individual projects, involving representatives of organizations in activities of individual government bodies, information exchange, etc. At present the cooperation between NGOs and government bodies and local government and self-government units in the field of protection of biological and landscape diversity in Croatia is not an explicit legal obligation. Public participation is provided through the process of public hearing and evaluation of environmental impact studies related to activities which require EIA, as well as in the procedure of making decisions and assorting plans, programmes and certain administrative documents. The mode of cooperation between organizations and government units is to be determined in detail by laws and regulations. This particularly applies to the method of financing projects through public tenders. It is in interest of the state to encourage and motivate NGOs to deal in various ways with the issues of the protection of biological and landscape diversity and to encourage partnership of organizations with local governments and institutions.

Status: About 7.5% of the state territory is protected. Eight protection categories have been defined by Nature Protection Act: national parks, nature parks, strict reserves, special reserves, protected landscapes, park forests, nature monuments and park architecture monuments. Most of the protected areas are in national parks and nature parks (8.7%). Currently there are eight national parks and ten natural parks. There are three national parks (Brijuni, Kornati and Mljet) that include islands and surrounding sea. The basic features of two national parks (Plitvice

Lakes and River Krka) have karst hydrography and morphology. There are also three typical mountainous regions with diverse vegetation and relief (Paklenica, Risnjak and Northern Velebit).

Among nature parks, six are typical mountainous areas (Biokovo, Medvednica, Papuk, Uèka, Velebit, and Žumberak), two are the representatives of the biological wealth of the lowland flood areas (Kopački rit and Lonjsko polje), one is on Dugi Otok island (Telašëica) and one covers the greatest natural lake in Croatia (Vransko Lake). Several protected parts of nature have been listed among internationally valuable areas. Plitvice Lakes are included in the UNESCO World Natural Heritage List, Velebit mountain is on the UNESCO Biosphere Reservations List. Also, four areas are included in the Ramsar List (Kopački rit, Lonjsko polje, the lower Neretva and Crna Mlaka).

Programmes and Projects: Ministry of Environmental Protection and Physical Planning has started the following projects:

- Habitat Mapping (Corine) (started in 2000);
- Emerald Network (started in 2001 on the basis of the Agreement with the European Council);
- Transboundary Management Plan of Lower Neretva Valley (completed in 2002);
- Karst Ecosystem Conservation project (supported by the World Bank and other donors);
- Wolf and Lynx Management Plans (ongoing projects in cooperation with Veterinary Faculty).

In addition to protected nature areas, the individual plants, fungi and animal species are also protected under the Nature Protection Act. They are primarily those that are threatened or rare in Croatia, but there are also others, for example those threatened on a global scale, which we are obliged to protect according to various international conventions, or those that are hardly distinguishable from threatened species due to similar appearance.

On the basis of new data on species and their threats, which were collected during the preparation of NSAP, the inventory of protected species is currently undergoing a revision.

The legislative protection of taxa is only a precondition for practical protection based on the protection of habitats and on species action plans. This segment of protection in this country is at an early stage. New Nature Protection Act, which is already in the official procedure for enacting, foresees two categories of protected species (following the model of the Bern Convention lists): strictly protected species and species that, by control and prescribed protection measures, may be economically used.

Capacity-Building, Education, Training and Awareness-Raising: There are still no organized training seminars or courses for biodiversity issues outside the education system. The unsatisfactory state of natural sciences in primary and secondary education is a result of an equally poor state of natural sciences, particularly of zoology and botany at universities, institutes and museums of natural sciences. This applies to the presence of specialists, the insufficient number of high-quality scientists in individual disciplines, lack of sound scientific criticism, financial constraints in zoology and botany, lack or absence of cooperation between institutions of natural sciences, etc.

As far as university education in this field is concerned, there is shortage of high quality modern textbooks, even the translated ones, which results in the unsatisfactory level of knowledge of students of whom the most would become teachers of biology in primary and secondary schools.

The development of public awareness of importance and preservation of nature in the Republic of Croatia is evident from increasingly frequent associations of citizens in their concern for nature and environment at various levels, with the aim to solve some general and specific problems. The Republic of Croatia has signed the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters.

Information: Species Inventory Data: no national programme of inventorying Croatia's biological diversity is available yet, but the Ministry of Environmental Protection and Physical Planning has begun with the Habitat Mapping project and started to finance the preparation of red lists of threatened plants and animals species. All

biodiversity indicators of the state of ecosystem, vegetation, flora and fauna will be integrated into the environment protection information system that will be established by the Ministry.

The development of the National Ecological Network will include the preparation of the database that will be used for the Emerald Network, Natura 2000, Med Wet Wetland Inventory, Special Protected Areas of Mediterranean Importance (SPAMI), and biotope database according to European programmes.

The problem lies with the insufficient number of scientists-taxonomists that could “cover” individual groups of taxa. There are no key-science handbooks for identification of species, even the translations of similar handbooks that apply to the entire Europe. There is a lack of systematic study and monitoring of biological diversity, but there are plans to organise a biodiversity monitoring system where, besides scientists, experts and NGOs, schools and students would take part as well.

Research and Technologies: The Government of Republic of Croatia established in 1998 the Institute for Seed and Seedlings, which is responsible for variety registration, protection of new varieties of plants, seed testing, seed and seedlings certification. The Institute for Seed and Seedlings is preparing the establishment of a Croatian Gene Bank that will be an independent institution and a state bank that would enable to preserve valuable national and foreign genotypes, as well as the possibility of exchange with other countries.

Financing: The Government of the Republic of Croatia, as well as certain sectoral ministries and local government and self-government units have all allocated a portion of their budgets for projects and activities carried out by such organizations. Unfortunately, these funds are in general comparatively limited.

Cooperation: Multilateral Assistance for Protection/Conservation of Biodiversity: After the adoption of NSAP there is active international and bilateral cooperation on the implementation of its action plans. The Law on the Ratification of the Protocol on Biological Safety (Kartagena Protocol) to the Convention on Biological Diversity is in the procedure of enactment. With the enactment, the Republic of Croatia will start to implement the signed obligations undertaken, and aiming at, among other things, the overall protection of consumers.

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

Decision-Making:

Technology: The introduction of ESTs is under the responsibility of the Ministry of Science and Technology (MOST). The National Science and Research Programme acts as the official framework for creating and practicing technology policy. According to the National Science and Research Programme, MOST is implementing a National Network of Technology Centres made up of a range of institutions directed towards the development, transfer, introduction and financing of new technologies. The Centre for Technology Transfer at the Faculty of Mechanical Engineering and Naval Architecture in Zagreb has recently been established.

Biotechnology: Decision-making for biotechnology is undertaken by several governmental bodies within their respective domains, including the Ministries of: Economy; Health; Science and Technology; Economy; Agriculture and Forestry; Environmental Protection and Physical Planning; and the Directorate for the Protection of Cultural and Natural Heritage under the Ministry of Culture. Some of the legally active regulatory mechanisms governing the production and the use of living, genetically modified organisms require that their production be reported to the competent authorities. However, no control or monitoring system concerning the release of genetically modified organisms into the environment has been established.

Programmes and Projects:

Technology: MOST supports a number of national research projects, international cooperative projects, and more than 30 environmental protection study programmes at universities.

Biotechnology: The Centre for Life Studies is to be established in Split with the support of the European Molecular Biology Organization (EMBO).

Status:

Technology: Technological modernization and support of technology-based small and medium-sized enterprises (SMEs) is recognized as a significant factor of the technological and economic competitiveness of Croatia.

Biotechnology: Croatian pharmaceutical and food industries, as well as scientific institutions, use biotechnological methods in the research and production of pharmaceuticals and food. Genetic manipulations on living organisms are also performed within those procedures.

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

Technology: A special graduate study programme for environmental protection at the Faculty of Chemical Engineering in Split supported by the MOST was established at the beginning of 1982. The Ministry of Science and Technology is promoting an "eco-climate" in Croatia. A substantial part of eco-efficiency, like Total Quality Management (TQM) and enhancing corporate productivity, are promoted through special courses at universities and recently, at the newly established Centre for Technology Transfer.

Biotechnology: The University of Zagreb offers various graduate programmes in this field.

Information:

Technology: Croatia's scientific community is completely integrated into the international informational network through CARNet as the Croatian part of Internet. In addition, MOST has taken a part in the creation of a Programme of Development of Information Infrastructure for Environmental Management in cooperation with a number of governmental and public bodies.

Biotechnology: A network of Centres of Excellence will be established within the framework of UNIADRON, a part of the Adriatic and Ionian Initiative, and the European Research Area (ERA).

Financing:

Technology: Under the MOST programme, a special Fund for supporting technology-based business will be created in the framework of a project under the name “Business-Innovation Centre - Croatia”.

Biotechnology: One to two million EUR per year have been allocated for the Centre for Life Studies in Split.

Cooperation:

Technology: Croatian scientists already cooperate in several projects related to environmental protection in the framework of COST Programme Mediterranean Action Plan and other bilateral and multilateral programmes (e.g., EUROTRAC and CITAIR).

Biotechnology: EUREKA is an umbrella project for EUROENVIRON that deals with environmental protection technology. EUROTRAC and EUROTRAC II are EUREKA projects in the area of air monitoring across Europe. There is also a new project: Molecular Tests for Poultry Industry. Fifth Framework Programme (FP 5): main activities: energy, environment, sustainable development.

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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: Integration of the environmental protection activities in general is the responsibility of the Ministry of Environmental Protection and Physical Planning. Other related governmental bodies are: the Ministry of Maritime Affairs, Transport and Communications, the Ministry of Agriculture and Forestry (the Marine Fisheries Directorate), the State Water Directorate and the Parliamentary Board for Physical Planning and Environmental Protection. Legislation and policy instruments are as follows: the Law on Environmental Protection, the Rule Book on Environmental Impact Assessments, the Law on Physical Planning and the National Plan on Water Protection. The legal instruments include: the Maritime Code, the Law on Water; the Decree on Sea Water Quality for Beaches, the Law on Marine Fishery, the Contingency Plan for Accidental Marine Pollution, the Croatian National Environmental Strategy and, the National Environmental Action Plan. Major groups are involved in national decision-making through the process of public hearing in the EIA procedure. Local Authorities are involved in decision-making through development programmes for local physical plans and direct contacts with relevant governmental bodies. In most cases, scientific and technological community is also involved.

Programmes and Projects: The marine environmental protection from land-based activities includes a number of plans and programmes for construction of sewage systems and treatment plants for municipal and industrial wastewaters. It also includes studies and programmes for municipal and hazardous waste management in the coastal area and islands.

Status: The current major uses of sea and coastal areas are: fishing, mariculture, tourism (especially nautical), maritime transport, ports, shipbuilding (new ships and repair shipyards), oil refinery, oil terminal, gas exploration, petrochemical industry, cement works and aluminium industry. The main impact of coastal and marine-based industries is wastewater discharge without prior treatment as well as inadequate disposal of solid waste in porous karst terrain. The primary sources of land-based pollution are wastewater from settlements, oil pollution from oil refineries and other industries located in the coastal area. Ships are the main source of sea pollution.

Capacity-Building, Education, Training and Awareness-Raising: International training courses for management of sustainable development in coastal zones are organized within the United Nations Environmental Programme Mediterranean Action Programme (UNEP/MAP) Priority Actions Programme/ Regional Activity Centre (PAP/RAC) Split. The Ministry of Environmental Protection and Physical Planning also organises training courses on specific relevant topics. Local authorities, in association with NGOs and specialised cleaning companies, often organise cleaning of beaches before the tourist season. Training courses regarding accidental sea pollution are also organized.

Information: At the national level, information is provided by national research institutes and organizations (national reports on the state of the sea). Climate change studies have been prepared for the Cres-Lošinj archipelago and the Kaštela Bay within the framework of the UNEP/MAP, as well as the First National Communication of the Republic of Croatia to UNFCCC. Also, the National Environmental Health Action Plan (NEHAP) and the National Monitoring of the Quality of Marine Environment have been developed. A national monitoring programme, within the Programme for the Assessment and Control of Pollution in the Mediterranean Region, is developed on a yearly basis.

Other relevant information is available at the web site of the Ministry of the Environmental Protection and Physical Planning at: www.mzopu.hr.

Research and Technologies: The Croatian national monitoring programme “Systematic Research of the Adriatic Sea as a Basis for Sustainable Development of the Republic of Croatia” has been developed and is expected to

provide a necessary scientific support for the implementation of a national strategy for the environmental protection and sustainable development of Croatian parts of the Adriatic Sea and its coastal areas.

Also, supply of natural gas from the Adriatic is expected to start by 2003, thus partly replacing heavy fuel oil used for heating and industry.

Cooperation: Croatia is a party to several international treaties and agreements directly related to the coastal region where the Barcelona Convention and its six protocols have a special importance. This includes cooperation with UNEP/MAP and its Regional Activity Centres: Priority Actions Programme (PAP) in Split, Specially Protected Areas (SPA) in Tunisia, Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) in Malta, Blue Plan (BP) in Sophia Antipolis, Cleaner Production Centre (CPC) in Barcelona, Environment Remote Sensing Centre (ERS) in Palermo, and the Programme for the Protection of Coastal Historic Sites (100 HS).

Croatia is also participating in the Mediterranean Environmental Technical Assistance Programme (METAP) and this cooperation has resulted in successful projects and pilot studies oriented towards sustainable development of the coastal areas.

The initiative for the protection of the Adriatic Sea has been established through cooperation within the Mixed Croatian-Italian-Slovene Commission for the Protection of the Adriatic Seawaters and Coastal Areas against Pollution and recently within the Adriatic-Ionian initiative within the Stability Pact.

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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 State Water Directorate is a governmental body responsible for administrative and other issues related to integrated management of water resources and water-management systems and adopting the water management development with the needs of economic development. In relation to pollution control and reduction, the State Water Directorate is responsible for protection of water from pollution and protection of the sea from land-based sources, planning and harmonizing the development and construction of water supply and waste water systems of national importance, and for water management inspection. The State Water Directorate is a leading body in Croatia for integrated water management. *Hrvatske Vode* (Croatian Waters) is an institution constituted in accordance with the water act for the purpose of performing the activities related to the management of national and local waters. The duty of Croatian Waters is to perform public services and other tasks accomplishing the management of water, to the extent determined by the accepted plans and in accordance with the funds provided for such purposes on the basis of laws and legal regulations. Supervision under the work of Croatian Waters is responsibility of State Water Directorate.

These two institutions are directly responsible for integrated water management in Croatia. As for responsible ministries, these are: Ministry of Environmental Protection and Physical Planning – responsible for issues related to general environmental policy. This ministry is also responsible for correlation of water issues with other environmental issues and for harmonizing the regional physical development and planning; Ministry of Agriculture and Forestry is responsible for agriculture, food and tobacco industry, dealing with producing, market and use of the products for agricultural production (fertilizers, pesticides, etc); Ministry of Health is responsible for the public health institutes that are mainly responsible for monitoring and control of waters and waste waters; Ministry for Public Works, Reconstruction and Construction is responsible for development of strategic infrastructure projects and investment programmes of particular interest for the republic of Croatia. These ministries/institutions have to be included in any discussion related to integrated water management. Also the Ministry of Economy, Ministry of Tourism, and Ministry of Finance provide an important contribution to the issue. On the local level, the important subjects in the decision-making process are local governments (counties and cities), especially in the implementation of infrastructure projects (water supply and sewerage/waste water treatment systems directly depend on the local government decisions). Also included in the decision-making process are other stakeholders, such as Croatian Chamber of Economy, Association of Municipalities, NGOs, etc.

National legislation on water management consists of two laws (The Water Act and The Water Management Financing Act) and 36 regulations and secondary legislation (status April 4, 2001). It has to be stressed that not all of secondary legislation foreseen by the two main laws has been prepared and enacted and this is especially the case with the legislation whose preparation and enactment is responsibility of the local government. The Water Act regulates the legal status of water and water estate, the methods and conditions of water management (water use, water protection, regulation of water courses and other water bodies, and protection from adverse effects of water), the method, organization and performance of water management tasks and functions, basic conditions for carrying out water management activities, powers and duties of Government administration and other Government bodies, local authorities and other legal subjects, as well as other issues of importance for the water management. The Water Management Financing Act defines funds for financing of the water management tasks.

The water protection is carried out in accordance with the State Water Protection Plan. The protection of waters against pollution is achieved through a control of the water quality status and pollution sources, through prevention, limitation and prohibition of actions that might have adverse effects on water quality. According to the Water Act, the planning basis for the water management is the Water Management Master Plan of Croatia and the water management plans and schemes for catchment areas. The Water Management Master plan of Croatia is a long-term planning document defining the base of the water management, water balance and improvement of water system, ensuring an integrated and coordinated water regime in the Republic of Croatia and in each water basin (integrated

water regime). The Water Management Master Plan of Croatia determines, in particular, the distribution, supply and properties of water, water requirements in all segments of life, and the method of providing sufficient water quantity of water adequate for such purposes. It provides for water protection from pollution, determines optimum technical and other solutions for watercourse regulation, protection from floods and other adverse effects of water and ensures an integrated water regime. The first phase of its preparation is underway.

Programmes and Projects: Regarding the groundwater pollution prevention, there is a joint Croatian-Slovenian Project on Protection of Groundwater in bordering Carstic Area.

The objectives of a JICA project “The Study for Water Pollution Reduction on the Sava River Basin in the Republic of Croatia” are to formulate a master plan for water management of the Sava River basin including pollution loading reduction up to target year 2015, conduct a feasibility study on the waste water treatment plant (WWTP) of selected five towns and to pursue technology transfer on planning methods and skills to counterpart personnel in the course of the Study.

The objective of a reconstruction project for Eastern Slavonia, Baranja and Western Srijem is to repair and rebuild war-damaged infrastructure (including the clearing of land mines). The project components are flood control and drainage, wastewater, clearing of land mines, and nature protection.

The Sava river flood control project: the basic idea of the project is to store floodwater in natural inundation areas. The project also fulfils international criteria for the management of catchment areas.

The objective of the Adriatic Municipal Water Pollution Control Project is to develop a sewerage network and WWTPs for 44 cities in the coastal area of Croatia.

Status: The water management system in Croatia includes flood protection on 472,000 ha. Erosion control works are required on 320,000 ha. There are over 460 torrents that are, or should be, regulated. Surface drainage system drains about 1,100,000 ha of land, and further drainage works are required on approximately 670,000 ha. The subsoil drainage systems drain about 160,000 ha, and subsoil drainage is still required on about 660,000 ha. The total length of drainage canals is 26,400 km, and on the canals there are 23,000 different structures and 82 pumping stations with the total capacity of 325km³/s.

About 7,800 ha of agricultural land are irrigated. Some 73% of the population of Croatia is water supplied from public water supply systems. Out of the total wastewater – municipal and industrial – only 20% is treated before being discharged into watercourses. For power generation, water is used in 17 hydropower plants of the total power of 2,030 MW, and the production is 6.6tWh (1tWh = 1 billion kWh). The water requirements for production of this power are, on average, 18.2 billion m³ of water per annum. The Croatian water management system provides cooling water for six thermal power plants (total power 1,240 MW). River transport is undeveloped. The Government of the Republic of Croatia has made the decision on construction of a multipurpose Danube – Sava Canal. During the war, 15 to 20 % of the facilities of the water management system in Croatia were damaged or destroyed.

Capacity-Building, Education, Training and Awareness-Raising: State Water Directorate and Croatian Waters continuously work on capacity building, education, training and awareness-raising. The programmes related to this issue (postgraduate studies, training, etc.) are financed from the Croatian Waters’ budget or international cooperation programmes and carried out in cooperation with specific organizations (Croatian and other universities, UNDP/GEF, JICA, etc.), and countries (Germany, Netherlands, Japan, Denmark, etc.). Related to awareness - raising, the State Water Directorate and Croatian Waters have published two bulletins but there are few programmes related to this issue. There is a need to increase this activity on the national level.

Information: Information related to water management in Croatia is available at the State Water Directorate and Croatian Waters.

Research and Technologies: The State Water Directorate and Croatian Waters continuously work on research and technologies projects and these projects are financed mainly from the state budget and budget of Croatian Waters. There is a need to increase this activity on the national level.

Financing: The Water Management Financing Act defines sources for performing water management activities on national level as follows: state budget, water use charge, water protection charge, sand and gravel exploitation charge, local water charge, budgets of local governments units and other sources (international loans, donations, etc.).

Cooperation: The following conventions significant to water management were ratified in 1996: the Convention on Cooperation in the Protection and Sustainable Use of the Danube River Basin, and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes. Bilateral treaties on the regulation of water management relations have been signed with the neighbouring states of Hungary, Bosnia and Herzegovina and Slovenia. Also, in water management Croatia has a special agreement on water management cooperation with Bavaria (Germany) and Netherlands.

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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 environmentally sound management of chemicals is in the competence of sixteen administrative bodies. These are the Ministries of: Environmental Protection and Physical Planning; Science and Technology; Education and Sports; Public Works, Reconstruction and Construction; Economy; Maritime Affairs, Transportation and Communications; Finance; Interior; Defence; Labour and Social Welfare; Health, and the State Bureau of Standardization and Metrology, and the State Bureau of Statistics. Along with these sixteen administrative bodies, another thirteen institutions, four NGOs and ten of the largest (out of the total of 275) companies are responsible for the safe management of chemicals. In 1996, the Croatian Government established a National Authority for Safe Management of Chemicals.

The establishment of an integrated system of management of chemicals (harmonization of legislation, institutional coordination, collection and distribution of information, risk assessment, risk management, emergency assistance, education and information programmes, capacity-building for emergency response and rehabilitation) is perceived as priority. Harmonization of legislation and the establishment of institutional linkages, as well as implementation of emergency plans in cases of uncontrolled and accidental leaks of hazardous substances into the environment, are expected to provide instruments and measures based on international regulations, which will ensure fulfilment of the objectives and tasks that have been set.

Safer use of hazardous chemicals is based on Agenda 21, Chapter 19, Directive 67/548/EEC, Directive 88/379/EEC and Directive 78/7 I/EEC. Prevention and mitigation of consequences of major industrial accidents, and prevention and mitigation of trans-boundary impacts of industrial accidents are based on: Directive 96/82/EC, the Convention on Trans-Boundary Effects of Industrial Accidents (UN, Helsinki 1992, 'Official Gazette', International Treaties No.7/99), Awareness and Preparedness for Emergencies at a Local Level (APELL/UNEP) process and the Environmental Emergency Plan ('Official Gazette' No.82/99).

Consideration of the problem of accidental leaks of hazardous substances into the environment is clearly visible in a number of domestic regulations, as well as international agreements and directives which were incorporated into the legal system of the Republic of Croatia, for example: the Law on Environmental Protection, 'Official Gazette' No.82/94, Water Act, 'Official Gazette' No.1 07/95, the Law on Carriage of Hazardous Goods, 'Official Gazette' No.97/93, the Law on Poisons, 'Official Gazette' No.26/99, the National Water Protection Plan, 'Official Gazette' No.26/99, the Contingency Plan for Accidental Marine Pollution in the Republic of Croatia, 'Official Gazette' No.8/97, the Environmental Emergency Plan, 'Official Gazette' No.82/99, the Convention on Trans-boundary Effects of Industrial Accidents (UN, Helsinki 1992, 'Official Gazette'-International Treaties No.7/99), the European Agreement on International Carriage of Dangerous Goods by Road (ADR) and Rail (RrD), United Nations Economic Commission for Europe (UN/ECE), Geneva, 1998/19, MARS (Major Accident Reporting System, EU, 1987), etc.

In the field of legislative structure, a law on hazardous substances is to be enacted, integrating the issues related to hazardous substances and all hazardous chemicals that have not been included in the Law on Poisons. This would also include the necessary modifications and harmonization of the above-mentioned laws and the Law on Carriage of Hazardous Goods.

Since the competence of governmental authorities and the respective legislation have not yet been redefined, the issue of hazardous substances is not yet solved in a consistent and integrated manner. Specific segments are regulated by the following institutions: the Ministry of Interior covers hazardous substances in relation to their flammability, explosiveness and transport by road; the Ministry of Maritime Affairs, Transportation and Communications covers other means of their transportation; the Ministry of Health covers the problems of their

toxicity and radioactivity; the Ministry of Economy covers their import/export issues, while the Ministry of Environmental Protection and Physical Planning deals with environmental protection. It is important to note that last year the Ministry of Economy was designated by the Government as the responsible body for safe management of chemicals.

Programmes and Projects: The Republic of Croatia participates in the following programmes: the Contingency Plan for Accidental Marine Pollution in the Republic of Croatia, 'Official Gazette' No.8/97 and the Environmental Emergency Plan, 'Official Gazette' No.82/99.

Status: The data provided by the Ministry of Environmental Protection and Physical Planning and other relevant governmental authorities and expert institutions, on accidental and uncontrolled discharge of hazardous substances into the air, soil, inland waters and sea, and threats to human life, plants, animals, natural and cultural heritage, from stationary and mobile sources, all points to the need for systematic prevention and mitigation of consequences of possible environmental accidents. According to the survey carried out by the competent ministry back in 1998 and the State Directorate for Environment, about 40 locations were registered in chemical industry for storing, manufacturing, and treating hazardous substances, while in recent years, an average of 100 accidents involving hazardous substances have been recorded annually. Import, export and transit of dangerous substances through the Republic of Croatia present additional burden and risk for environment.

The following objectives and tasks lie ahead: ensuring safe production, storage, use and transport of hazardous substances; preventing and mitigating consequences of major industrial accidents; preventing and mitigating trans-boundary impacts of industrial accidents; developing operational environmental emergency plans for legal and natural persons; developing environmental emergency plans for counties and towns following the APELL methodology, which is of assistance in preparation of coordinated and integrated plans at local level.

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

Information: No information available.

Research and Technologies: No information available.

Financing: The budget of the RC and financial resources of international organizations.

Cooperation: Extensive cooperation is undertaken in this area, through, for example, different international centres, such as UNEP/RPTC, WHO, ILO, YFCS, FAO, and OECD.

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

Decision-Making:

Hazardous waste: The Basel Convention on the Control of Trans-boundary Movements of Hazardous Wastes and their Disposal, was signed in 1989 and ratified in 1994. The latest information was forwarded to the Basel Convention Secretariat in 2001. The Ministry of Environmental Protection and Physical Planning is the responsible authority and the Focal Point for this area, according to the Article 5 of the Basel Convention. Along with other responsibilities, it provides advisory services on the waste management legislation to all interested parties. The main legislation which governs hazardous waste management includes: the Law on Waste (1995); the Rule-Book on Waste Types (1996), the List of Legalized Professional Institutions with Authority for Certifying Physical and Chemical Properties of Wastes (1996), and the Ordinance on Requirements for Handling Hazardous Waste (1998). Croatia does not have a co-ordinating body responsible for decision-making in the field of hazardous waste management. A Government Commission for co-ordination of activities for the development of a management system of animal-based waste exists. Decisions on hazardous waste management are reached by the Parliament, the Government, the Ministry of Environmental Protection and Physical Planning, counties, the industrial sector, the institutions and companies authorised for hazardous waste management, as well as non-governmental organizations. These are the core social groups that are included in hazardous waste management. Preparations are underway for the development of a hazardous waste management strategy, which will encompass a programme for hazardous waste disposal. A strategy for environmental protection, which contains basic problems and goals related to the hazardous waste management, was developed within the framework of the strategy of development of the Republic of Croatia, entitled "Croatia in the 21st Century".

Solid waste: The main legislation which governs solid waste management includes: The Law on Waste (1995), the Rule-Book on Waste Types (1996), the Rule-Book on Packaging Waste (1996), the List of Legalised Professional Institutions for Certifying Physical and Chemical Properties of Waste (1996) and the Rule-Book on Requirements for Handling Waste (1997). No coordinating body for solid waste management exists in Croatia.

Decisions on solid waste management are reached by the Parliament, the Government, the Ministry of Environmental Protection and Physical Planning, counties, the units of local self-government, the industrial sector, the institutions and companies authorised for non-hazardous waste management, as well as non-governmental organizations. These are the core social groups that are included in hazardous waste management.

Radioactive waste: The Hazardous Waste Management Agency (APO) was founded by a Government decision pertaining to the handling of radioactive waste. As a newly created state in transition, the Republic of Croatia still does not possess an adequate legislative framework and regulatory system needed for supporting an efficient radioactive waste management system, although this could be achieved with the existing resources (human and technical capacities).

Programmes and Projects:

Hazardous waste: A National Action Programme for environmental protection was developed, under which activities for improving the hazardous waste management system were established. The implementation of the Programme of the technical and technological system for the handling of animal – based waste is underway.

Solid waste: The development of a National Programme for Solid Waste Management is planned. A strategy for environmental protection, which contains basic problems and goals related to waste management, was developed within the framework of the strategy of development of the Republic of Croatia, entitled "Croatia in the 21st Century". A National Action Programme for Environmental Protection was developed, under which activities for improving the non-hazardous waste management system were established. Implementation of a non-governmental programme for the development of a system of recycling and reusing packaging waste is underway, and is being carried out by interested producers, collectors and processors of this type of waste. The Programme of Recycling

and Reducing Solid Waste is an integral part of the Programme for Introducing Cleaner Production that is carried out by the Croatian Centre for Cleaner Production. A certain number of projects targeting improvements of solid waste management system are being carried out.

Radioactive waste: No information available.

Status:

Hazardous waste: Approximately 130 types of hazardous waste are generated in Croatia. Official data show that 34 746-58 456 tonnes of various types of waste are generated per year. The average amount of hazardous waste exported amounts to 16,000 tonnes per year. The average amount of hazardous waste treated in Croatia totals 17,500 tonnes per year. There is no data on annual expenditure for hazardous waste collection and treatment, nor for the hazardous waste reduction rate per unit of GDP (t/year). The generator is obliged to classify, separately collect and store in the place of generation the hazardous waste before its final disposal, in line with the prescribed conditions. The law forbids imports of hazardous waste into Croatia. Permission of the Ministry of Environmental Protection and Planning of Croatia is necessary for the export and transit of hazardous waste across the Croatian territory. The system of trans-boundary waste movement control, before the issuing of permits, has been established and includes information exchange between the exporter of hazardous waste and the Departments in the Ministry of Environmental Protection and Physical Planning responsible for atmosphere protection and waste management, and the inspection of environmental protection, as well as with the Customs Offices at entry and exit points of the Republic of Croatia. It is allowed to export only those types of waste that cannot be stored and treated in Croatia.

Solid waste: According to the official data from the year 2000, 1 326 870 tonnes of non-hazardous waste were generated in Croatia, but it was judged through commissioned analyses that the actual amount was six times higher. Based on the commissioned expert analyses, the structure of the non-hazardous waste is as follows: 76% is technological waste (agriculture, forestry, mining and industry), 13% is municipal waste, and 11% is waste separated for recovery or recycling. There are no data on expenditure for the solid waste collection and treatment (expressed in \$US), rates of solid waste recycling (%), municipal waste disposal (t/capita) or waste reduction rate per unit of GDP (t/year). The solid waste generator must take into account the material or energy reuse of his waste, through recovery or recycling in licensed facilities in Croatia or other countries. Companies which collect, store, treat or deposit non-hazardous waste must have the permission of the appropriate County authority. A system of monitoring exports, imports and transit of non-hazardous waste has been introduced. Ministry of Environmental Protection and Physical Planning must issue permissions for the exports, imports or transit of non-hazardous waste. Imports of non-hazardous waste for the purpose of its disposal or use for energy purposes are forbidden.

Radioactive waste: According to IAEA, the Republic of Croatia is a B type country (wide use of radiation sources in industry, medicine and research, but without operational use of research or commercial nuclear reactors). The types and quantities of radionuclides used are consistent with the level of industrial development of Croatia. Industrial usage comprises several hundred different gauges and measurement systems for gamma radiography with sealed radiation sources; in medicine, sealed and open sources are used for diagnostic purposes, as well as in radiotherapy. In several institutes, radionuclides are used for research purposes. Several tens of thousands of radioactive smoke detectors and several hundred of radioactive lightening rods have been installed in facilities throughout the country. Most of the activities using radionuclides generate radioactive waste. Spent sealed sources of radiation are considered a problem that requires special attention. There is no radioactive waste disposal site in Croatia. Presently, radioactive waste is collected and deposited at two national storage facilities run by research institutes.

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

Hazardous waste: A technical and technological basis was created for handling hazardous waste. 26 companies have been licensed for waste collection, 35 companies for storage and 29 companies for treatment and depositing of hazardous waste. There are 5,458 m³ of storage capacities for hazardous waste collection, 13,305 tonnes of storehouse capacities and 3,499 tonnes/day capacities for treatment and depositing. Capacities have been built in

Croatia for collection of 69 hazardous waste types, storage of 84 hazardous waste types, and treatment and depositing of 73 hazardous waste types. Incineration is the main treating operation for hazardous waste. The existing capacities for treating hazardous waste do not cover the existing needs in Croatia. One of ten priority tasks in waste management in Croatia is the construction of the necessary technical and technological capacities for the collection, storage and treatment/depositing of hazardous waste.

Education, training and raising of awareness is undertaken through the official newsletter of the Ministry "Okoliš" (Environment), professional journal "Economy and the Environment", other domestic and foreign professional journals and literature, written explanations for the implementation of the prescribed conditions for hazardous waste management, the carrying out of cross-border waste transport, domestic and international workshops and other expert gatherings.

Solid waste: A technical and technological basis was created for the collection and disposal of municipal waste, as well as a technical and technological basis for handling non-hazardous technological waste. There are 106 companies licensed for the collection, treatment (recycling or recovery) and disposal of non-hazardous waste in Croatia. The main method of disposal of municipal waste is landfill, for which there are 120 official disposal sites. The technical and technological basis for handling municipal waste should be improved in a way that would improve the classification and separate gathering of those types of municipal waste which can be materially or energetically utilized, and in a way which would improve the enforcement of technical and safety standards at sites of disposal of municipal waste. An analysis is being undertaken to identify the necessary capacities for handling the municipal and non-hazardous technological waste. One of ten priority tasks in solid waste management in Croatia is the improvement and reinforcement of technical and technological capacities for the collection, disposal and treatment of technological waste.

Education, training and raising of awareness is undertaken through the official newsletter of the Ministry "Okoliš" (Environment), professional journal "Economy and the Environment", other domestic and foreign professional journals and literature, written explanations for the implementation of the prescribed conditions for hazardous waste management, the carrying out of cross-border waste transport, domestic and international workshops and other expert gatherings. A programme for raising awareness, through the media and popular literature, about recycling this type of waste was developed as a part of the programme for the development of a system of packaging waste recycling.

Radioactive waste: No information available.

Information:

Hazardous waste: A national electronic register of hazardous waste is in function. A Cadastre of hazardous waste has been established, in which all of official data is stored about the generated, collected, treated and disposed types and yearly amounts of hazardous waste. The data is sorted according to the generator, collector, and treater of hazardous waste at the level of municipalities, cities and counties. The Department for European Integration, strategic planning and International Projects of the Ministry of Environmental Protection and Physical Planning is responsible for the exchange of information stored in the Cadastre. The Ministry has data about the exports and imports of hazardous waste, as well as data about companies that deal with the collection, storage and treatment of hazardous waste. The Department for Atmosphere Protection, Waste Handling and Soil Protection of the Ministry of Environmental Protection and Physical Planning is responsible for the exchange of information about cross-border traffic of hazardous waste, and the information about the companies that deal with the collection, storage and treatment of hazardous waste.

Solid waste: A national electronic register of non-hazardous waste is in function. A Cadastre of municipal waste and the Cadastre of non-hazardous solid waste have been established. These contain official data about yearly amounts of the collected and disposed municipal waste, as well as data about the generated, collected, treated and disposed types and yearly amounts of non-hazardous solid waste. The data is sorted according to the collector and the disposal site of municipal waste, and according to the generator, collector, treater and disposer of non-hazardous waste at the level of municipalities, cities or counties. The Department for European Integration, strategic planning

and International Projects of the Ministry of Environmental Protection and Physical Planning is responsible for the exchange of information stored in the Cadastre of municipal waste and the Cadastre of non-hazardous solid waste. A study on waste management in the Kvarner-Istria area has been developed within the Mediterranean Environmental Technical Assistance Programme (METAP) and with financial assistance of the European Investment Bank. A pre-investment study on wastewater discharge and solid waste management for the wider area of Krka National Park has also been developed.

Radioactive waste: No information available.

Research and Technologies: No information is available

Financing:

Hazardous waste: The technical and technological system for hazardous waste management is being built on the basis of economic and ecological principles. The producer of hazardous waste covers the costs of hazardous waste management. Monitoring of the implementation of regulations that govern hazardous waste management is being financed from administrative fees, monetary penalties, and the state budget. No data exists pertaining to the expenditure on hazardous waste treatment.

Solid waste: The technical and technological system for municipal waste management is being financed from municipal fees. The cost of municipal waste management is borne by households and other generators of municipal waste. Municipal fee is being established according to the floor area of the living or office space.

The technical and technological system for non-hazardous solid waste management is being built on the basis of economic and ecological principles. The cost of non-hazardous waste management is borne by generators of such waste. The cost of packaging waste management is borne by the generator of the packaging waste, i.e. the company that is responsible for packaging of the product, imports the product in a packaging, and distributes it.

Monitoring of the implementation of regulations that govern non-hazardous waste management is being financed from administrative fees, monetary penalties, and County budgets. No data exists pertaining to the expenditure on solid waste treatment.

Radioactive waste: No information available.

Cooperation:

Hazardous and Solid waste : Cooperation has been established with Bosnia and Herzegovina, and Macedonia on the issue of improvement of control of cross-border hazardous waste transport. Cooperation with Southeast Europe (SEE) countries is being established in order to develop a regional strategy of hazardous waste management.

Radioactive waste: No information available.

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CHAPTER 24 TO 32: STRENGTHENING THE ROLE OF MAJOR GROUPS

Women: Decision-Making: The Government of the Republic of Croatia founded the Government's Commission for Equality in May 1996, with the objective of creating a general National Policy for the Improvement of the Status of Women in 1996. In 1991, the Convention on the Elimination of All Forms of Discrimination Against Women was ratified. The National Policy for the Promotion of the Equality of Women was adopted in December 2001. In the preparation phase of the National Policy, the Commission has co-operated with NGOs, public institutions, and experts and has also received full assistance from the European Council. The Policy is consistent with the guidelines created by the Action Platform of the Fourth World Conference on Women. It examines the position of the women in relation to all major areas of life, (e.g., education system, health care, governance, environment etc.) and defines the guidelines and concrete measures for improving the status and role of women in modern Croatian society. Programmes and Projects: After the adoption of the National Policy for the Promotion of the Equality of Women by Croatian Parliament, the Commission for Equality in association with other governmental bodies and NGOs proceeded towards developing programmes envisaged by National Policy into more specific projects. Status: The Government of the Republic of Croatia has one female Vice President, and two female ministers. Since 1994 there have been no changes in the gender composition of the Government, but the percentage of women in the Parliament has slightly increased to 5.1% in the Chamber of Representatives and 2.2% in the Chamber of Counties. There is no data on the percentage of women at the decision-making level in counties or districts. Clearly one of the main tasks in the Republic of Croatia is increasing the number of women participating in political life. Another great challenge is in putting the National Policy into the practice and establishing the mechanisms for monitoring and evaluation of the progress. Financing: So far, the work of the Commission for Equality has been financed exclusively from the state budget. Cooperation: The Commission cooperates with NGOs, and also receives full assistance from the European Council.

Children and Youth: Decision-Making: The National Programme of Action for Children was adopted in October 1998 that involves all state administrations. In order to ensure a greater efficiency in taking joint actions and permanent monitoring of the Programme of Action for Children, the Government of the Republic of Croatia established the Council for Children as a national co-ordinating body. The Constitution of the Republic of Croatia and the provisions of the Constitutional Act on Human Rights and Freedoms and on the Rights of Ethnic and National Communities or Minorities in the Republic of Croatia represent a legal basis for the development of education of children who are members of minorities which takes into account their cultural, linguistic and religious particularities. Programmes and Projects: Apart from general measures, the primary health care and public health systems provide also for a series of specific health care measures intended for pre-school and school children and for youth, on the basis of separate programmes (e.g. Programme of Mandatory Vaccination against Infectious Diseases and Programme of Preventive and Educational Measures in the Health Care of School-Going Children and Youth). The National Programme for Prevention of the Spread of AIDS has been implemented under the guidance of the Ministry of Health's Referral Centre for AIDS. Three years ago the Office for National Minorities has launched a special programme for the inclusion of Roma children in the regular education system in the Republic of Croatia. Its measures were directed not only towards pre-school education and upbringing of children, but also towards creating preconditions for their regular school attendance. Within that programme, safe drinking water has been put in one Roma settlement, electrification and urbanisation were carried out in several Roma settlements, with roughly equal financial assistance from the State Budget and the county budgets. Besides, the construction of one kindergarten was partly financed. This year, the programme's implementation continued by provision of financing for improvement of Roma settlements in four counties; funds have also been allocated for drawing up of the project for development of the Roma settlement in the City of Zagreb. For improvement of one Roma settlement with 250 children in the Varaždin County 300,000.00 Kunas have been allocated, and the Ministry of Labour and Social Welfare has acquired a container to be placed in the settlement in order to organize the work of a kindergarten and "little school" for Roma children. The Office for National Minorities has, together with the competent state bodies and members of 17 Roma associations registered at the national level, initiated the preparation of a national programme for the Roma to build an integral system of measures for finding solutions to

the problems of the Roma population, and particularly Roma children. The said programme would encompass the issues of improvement of Roma settlements, employment, education of Roma children (their inclusion in the system of regular education, education in mother tongue, provision of scholarships, their familiarisation with the traditional Roma culture and customs), health care and health education. In order to implement that national programme, it will be necessary to make amendments to the existing regulations. In that connection, the Government of the Republic of Croatia will make special efforts in order to strive for balance between the effective criminal-law and family-law protection of the Roma children and the preservation of particularities of the Roma culture and tradition. Status: In the Republic of Croatia every child (i.e. person under 18 years of age) has the status of a health-insured person. In the field of promoting of breastfeeding (activities carried out in cooperation with UNICEF), Croatia achieved, by the end of 1998, internationally respectable results. In the beginning of 1997, the Government of the Republic of Croatia established the State Institute for Protection of Motherhood, Family and Youth in order to create a professional and administrative framework for the protection of youth, and coordination of programmes and project on the national, regional, and local levels that should ensure systematic solutions to the problems of youth, enhance the quality of life, and incite development of youth and youth-related associations. The State Institute for Protection of Motherhood, Family and Youth coordinates programmes and project from different area (education, health, leisure time) with almost all ministries and NGOs dealing with the youth. In Croatia, there are approximately 300 registered NGOs dealing with children and youth issues. Capacity-Building, Education, Training and Awareness-Raising: Pre-school and school education in minority language have been organized for members of Italian, Czech, Hungarian, Serbian national community or minority (religious instruction organized as well), as well as for the national community or minority of Germans and Austrians. Instruction of mother tongue, national history and culture in primary schools has been organized for the Slovak national community and minority. For the Ruthenian and Ukrainian national community or minority the school education in minority language is organized, while for the Jewish national community or minority pre-school education and religious instruction are organized within the Jewish Community. The School of Public Health "Andrija Štampar" issued a Croatian version of the "Facts for Life" including an annex on the protection of children from abuse and neglect. The objective of the manual is to ensure a public health education. The Office for National Minorities has financed several seminars at which Roma people were trained to perform jobs of external associates of the staff from centres of social welfare. Moreover, additional two seminars organized within the Ministry of Education and Sports were financed. The objective of these seminars was to train the Roma persons as teaching support staff in primary schools. Cooperation: The State Institute for Protection of Motherhood, Family and Youth cooperates with almost all ministries in the Republic of Croatia and NGOs. The Convention of the Rights of the Child was ratified in October 1992 by notification of succession from former Socialist Federal Republic of Yugoslavia (SFRY). In March 1999 Croatia signed the European Convention on the Exercise of Children's Rights that is now in the ratification process. In cooperation with UNICEF, Croatia implements a number of programmes in which different ministries take part. One of the most important programmes is the mine awareness campaign.

Indigenous People: No information available.

Non-Governmental Organizations: Decision-Making: The Law on Environmental Protection (1994) anticipates framework for increased public involvement in environmental affairs. This law determines different principles. Integrity Principle (Article 14) is: (1) When passing Environmental Protection Strategy, programmes, emergency plans and regulations; issuing permits and approvals, or implementing financial policy, control or other environmental measures, cooperation between and joint actions of governmental authorities and units of local government and self-government are essential. (2) The bodies as referred to in paragraph 1 of the present Article ensure the manner and conditions of joint activity by citizens and institutions with the purpose of an integrated and even achievement of environmental protection objectives. According to the Law on Environmental Protection (Article 44) Ministry of Environmental Protection and Physical Planning assigns on the yearly basis acknowledgements and awards for contributions on the part of expert and other societies, associations and NGOs for the environmental protection development and advancement. According to certain existing regulations, the public is supposed to be involved in some decision-making processes (the Law on Environmental Protection, By-law on Environmental Impact Assessment). Currently the Draft Law on Nature Protection is in the enactment

procedure. This Draft Law (Article 198-201) proposes participation of NGOs in nature protection. Status: In the Republic of Croatia, there are 230 NGOs engaged in environmental and nature protection. Since 1997 NGOs are being registered according to the Law on Associations. In the year 2001 the new Law on Associations was adopted. Capacity-Building, Education, Training and Awareness-Raising: Ministry of Environmental Protection and Physical Planning organizes trainings and seminars for NGOs. NGOs are regularly invited to give their opinion on drafts laws and other documents of national importance. Financing: Environmental projects of NGOs are financed via the Croatian Governmental Office for Cooperation with NGOs. In 2001, 34 NGO programmes are financed via Croatian Governmental Office for Cooperation with NGOs (financial means from the State Budget) in the total amount of HRK 1,427,120 (EUR 1 = HRK 7.2470), which was 7% of the total amount allocated to Croatian NGO financial support in the 2001 State Budget. In the year 2002 the Croatian Governmental Office granted some 26 annual NGO projects as well as three annual NGO programmes for cooperation with NGOs with the total amount of 1.215.650,00 HRK (EUR 1 = HRK 7.2470). Cooperation: There is no legislative obligation for the cooperation of governmental and non-governmental organizations or for the participation of NGOs in decision-making. However, there is cooperation in the environmental sphere, mostly limited to individual cases, and non-institutionalised.

Local Authorities: No information available.

Workers and Trade Unions: Decision-Making: Social Economic Council is being established at the national level as a tripartite body. In addition, the Republic of Croatia has amended all of its labour legislation, increasing the role of employees. Cooperation: Croatia has ratified fifty-six conventions of ILO.

Business and industry: Decision-Making: During the year 1997, the Croatian Business Council for Sustainable Development was established. 24 major companies are now participating in activities of Croatian Business Council for Sustainable Development. Those companies are actively practicing principles of sustainable development. Status: Following ISO 14000 standard have become Croatian standards: HRN EN ISO 14001:1998 2. (Environmental management systems - Specifications with guidance for use), HRN EN ISO 14010:1998 2. (Guidelines for environmental auditing - General principles), HRN EN ISO 14011:1998 2. (Guidelines for environmental auditing - Audit procedures - Auditing of environmental management systems), and HRN EN ISO 14012:1998 2. (Guidelines for environmental auditing - Qualification criteria for environmental auditors). TC 146 was launched within the State Bureau of Standardization and Metrology. Its domain is Air quality, encompassing a number of ISO standards. Capacity-Building, Education, Training and Awareness-Raising: Along with other companies the Business Council, accept the principles of the Business Charter on Sustainable Development and are gradually building them into their dealings. Some major companies have published their Environmental Performance Reviews. Furthermore, the Technical Committee (TC) 207 was launched within the State Bureau of Standardization and Metrology. Its domain is environmental management, encompassing a number of ISO 14000 standards. The leading Croatian organizations and degree-granting educational institutions are involved as well. Waste exchange activities within the Croatian Chamber of Economy are underway. The number of Croatian organizations partaking in waste exchange activities is continually increasing. 10 national programmes were set up to promote and set framework for using renewable sources of energy. The number of products with an Environmentally friendly label has increased. Several consumer protection organizations were set up with one of the goals to change consumption patterns in favour of environment. Furthermore, a range of education and public awareness activities have been organized by Croatian and international institutions. Research and Technologies: Also, the Cleaner Technology Centre and the Centre for Transfer of Technologies carry out various activities. The Cleaner Technology Centre, in cooperation with Osijek-Baranja County, the Croatian Chamber of Economy – Osijek branch, USAID and Dekont Umwelttechnik (the Czech Republic) has developed project “Cleaner Technologies in County Osijek-Baranja”. The main idea behind the project was to pass the knowledge about cleaner technology, environment managing system and sustainable development for implementing Local Agenda 21 to local authorities, NGO, schools, faculties and representatives of local industry through an eight-week training. Representatives of industry have implemented their gained knowledge of cleaner technologies in their own companies. In 6 companies in the Osijek region, 8 projects of cleaner technologies were implemented. The results

are waste reduction, air pollution reduction, water consumption reduction, and field gas consumption reduction, reduction of consumption of natural resources.

Scientific and Technological Community: No information available.

Farmers: Decision-Making: The Law on Ecological Farming and Agriculture Food Production (February 2001) is the first among legislative documents regulating this area. Status: In the Republic of Croatia there are 20 NGOs engaged in the production of organic food. During the year 2000, one of the biggest NGOs, Eko-Liburnia (Rijeka), has taken over the chairmanship of the Regional Board of International Federation of Organic Agriculture Movements (IFOAM), Mediterranean Regional Group (BioAgriMediterraneo) for the next two-year period and therefore Croatia became the NGO ecological farming headquarters. Capacity-Building, Education, Training and Awareness-Raising: Croatian Agricultural Extension Institute has been organising support for NGOs involved in ecological farming. Financing: The Croatian Agricultural Extension Institute offers financial support to programmes for ecological farming. NGOs, dealing with ecological farming, are also financed by the Croatian Governmental Office for Cooperation with NGOs.

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CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Decision-Making: Article 60 of the Law on Environmental Protection defines basic financing issues related to environmental protection. The resources for financing programmes of environmental protection are earmarked in the State Budget, budgets of local and regional units of self-government and from other sources, as stipulated by law. Other sources for financing environmental protection are designated charges, which are paid because of environmental pollution, or because of use of public goods based on specific acts (acts in the area of management of water, forests, mineral raw materials, etc.), the price of certain communal services, own resources of entrepreneurs, grants, loans from international and domestic sources, etc.

Within the framework of other sources for financing environmental protection, designated charges should be specially mentioned, such as the charge for water protection and charge for the use of generally useful functions of forests, which are directed to the extra-budgetary fund operated by the Public Water Management Enterprise 'Hrvatske vode'. While the revenues generated by the charges for water protection are entirely earmarked for water protection, the charges for use of forests are multi-purpose in character, including the protection and the improvement of the state of environment. In the year 2000, the revenue incurred from water protection charges amounted to 156 million HRK, while the revenue from the charge for use of forests amounted to 180 million HRK. As opposed to the water and forests, for whose protection financial resources are being raised primarily through legally stipulated charges, no regular sources of financial resources exist for the protection of air, land, the handling of dangerous waste, and the preservation of plant and animal species.

The existing acts on taxation and customs in the Republic of Croatia do not contain reprieves and exemptions for investments into the environmental protection. The conditions for awarding loans for such investment in domestic commercial banks, especially for entrepreneurs are not stimulating enough, although these conditions are improving lately. The system of taxation and customs of the Republic of Croatia makes a distinction between special taxes on leaded and unleaded gasoline, where the latter are higher, and thus beneficial for the environment. Also, the customs duty for the imports of used automobiles and other motor vehicles that are greater polluters of the environment is higher than the customs duty for the imports of new vehicles.

The 1999 Law on Financial Incentives and Charges in Agriculture and Fisheries abolished subsidies for the production of complete mineral fertilizers, which subsequently had positive impacts on soil protection and the environment.

The process of creating linkage between public and private capital, which should ensure a larger amount of resources and the stability of investment in the field of environmental protection, is in initial stage. Pursuant to the Law on Public Utility Management, the foreign and domestic investor may act as a minor stockholder in the enterprise, while the unit of local self-government remains the major stockholder. As opposed to this form of investment, it is more common in Croatia to witness investment on the basis of concession agreements, which the units of local self-government can enter into for the purpose of performing certain municipal services in the field of environmental protection (collection, removal and depositing of waste, purification of waste waters, etc.).

Programmes and Projects: During the last two years, the Ministry of Environmental Protection and Physical Planning has drafted a number of important documents, such as: the Environmental Strategy and National Environmental Action Plan (adopted by the Croatian Parliament in January 2002), drafts of the Environmental and Energy Efficiency Fund Act, Law on Nature Conservation, Law on Waste, and the Rule-Book on Container Waste Management. The Environmental Strategy was drafted in cooperation with, and was financially supported by the World Bank. The adoption of changes to the Environmental and Energy Efficiency Fund Act, which is currently in the parliamentary procedure, and the establishment of the Fund is another important task. The Strategy considers the establishment of the Environmental and Energy Efficiency Fund as one of the priority economic measures, which would primarily contribute to the implementation of a great number of financially demanding investment

projects and programmes in the fields of environmental protection, energy efficiency, and the use of renewable energy sources.

Related to the issue of water protection, several important projects are underway: City of Zagreb Wastewater Treatment Plant, Kaštela Bay Project (in cooperation with the IBRD), and Kopački Rit Wetlands Management Project (in cooperation with the IBRD), etc.

Plans in the area of waste management include several major investment projects, such recovery and reconstruction of existing and construction of new disposal sites of municipal waste, on regional basis. Activities have begun for the set-up of municipal waste incineration plant in the City of Zagreb. In the field of energy and oil industry, large investments are foreseen, which will contribute to the improvement of air quality and the protection of the ozone layer. The Public Forest Management Enterprise 'Hrvatske šume' is conducting a permanent karst deforestation and reforestation programme.

Status: It is difficult to estimate the structure and the entirety of revenues and expenditures (investments and current expenditures) for environmental protection in the Republic of Croatia, primarily because of dispersion and unclarity of various sources of resources, as well as because of the absence of an integrated environmental information system. For the moment, only the investments into long-term property (i.e. infrastructure for environmental protection) and current expenditures towards the areas and sub-areas of the National classification of activities are being statistically processed. According to the statistical yearbook for 2001, the investments into environmental protection in Croatia for the year 2000 amounted to 53 million € or 0,25% GDP.

According to the opinion of the experts of the UN Commission for Europe and the Committee for environmental protection, which visited Croatia in 1999 in order to assess the implementation of environmental protection, it would be satisfactory for Croatia to achieve a yearly level of environmental protection investment of 1% of GDP. Based on the GDP level for 2001, which is estimated at 169 billion Kn, as well as on the assumption of yearly allocation of 1% of GDP, the overall amount of investment should amount to 1.690 million Kn per year, which is much higher than the present level of environmental protection investment (282 million Kn in 1997).

The need for investments in environmental protection is enormous. According to the costs estimate prepared for the implementation of programmes presented in the Strategy for only three segments (for the field of protection of water, air and waste management), for a ten-year period, a total of 8,82 billion € or 882 million € per annum (waste management 2,5 million USD, water protection 5,68 billion €, and air quality control 0,64 billion €). This accounts for 4,2% of GDP for the year 2000. The above estimates do not include costs incurred in the process of harmonization of Croatian legislation with that of EU. Rough estimates indicate that the total environmental investment related to the *rapprochement* to the EU, i.e. reaching of the average EU standards in the three indicated sectors (water, air, waste management) will amount to a minimum of 1,500-2,000 € per capita. Rough estimates of the division between these costs indicates that 40-45% of total costs pertains to legal harmonization in the field of water protection, 35-40% to the field of waste management, 8-10% to the field of air protection, while the remaining costs pertain to legal harmonization in the field of nature protection (4-5%) and other areas. According to the above estimates, the environmental investments in the coming years will significantly exceed the investments in earlier years.

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

Information: All laws, by-laws and other legal regulations that prescribe charges, levies and excises in case of environmental pollution and the use of natural resources, as well as excise taxes on oil derivatives, passenger cars, aircraft and vessels, and tobacco products (products which pollute the environment), are published in the Official Gazette of the Republic of Croatia (www.nn.hr). Each year, the last issue of the Official Gazette published in December contains an overview of the Central Government Budget Revenues and Expenditures for the next year. This overview includes data on the environmental and nature protection expenditures and revenues.

Statistical Yearbooks, published by the Central Bureau of Statistics of the Republic of Croatia, contain data on gross fixed capital formation (gross investment) in new fixed assets, including investments in environment protection (waste disposal, water and air protection, etc.) according to the NCEA.

The Ministry of Environmental Protection and Physical Planning (formerly the State Directorate for the Protection of Nature and Environment) submitted in 1998 the National Report on Environmental Economic Instruments to the Regional Environmental Centre for Central and Eastern Europe /REC/ in Hungary. The Report contains a part of the 1997-98 Work Programme of the Sofia Initiative on Economic Instruments (SIEI), which was approved by the 1995 Environment for Europe Ministerial Conference in Sofia, and supported by the 1998 Ministerial Conference in Aarhus. The Report as well as the new database of the Environmental Economic Instruments in the Republic of Croatia can be found on the web site: www.rec.org.

The data on economic instruments and investments in the environmental protection, as well as the recommendations for improvement of financing in Croatia can also be found in the *Environmental Performance Review: Croatia*, published by the UN Economic Commission for Europe/Committee on Environmental Policy in 1999. (www.unec.org/env/epr/countriesreviewed.htm).

Research and Technologies: No information available.

Cooperation: Within the REReP, Croatia is also involved in regional projects in the field of environmental protection, such as “Assistance for the development and implementation of priority investment programmes in environmental protection”, “Assistance for drafting laws in the field of environmental protection in SEE”, “Institutional capacity building in the field of strategic impact on environment in SEE”, “The Network of financial experts in the field of environmental protection in SEE”, “Capacity building of national Environmental protection Agencies and their inspectorates, BERCEN network”, “Development of national information systems for environmental protection”, “Institutional capacity building for legal harmonisation with the legislation of the EU”, “Regional strategy of dangerous waste management”, “Adoption and implementation of multilateral agreements in the field of environmental protection in SEE”, “Support for cross-border cooperation among the countries of SEE within the framework of REReP implementation”, and “Promotion of cooperation and exchange of experiences among the countries of SEE”.

Priorities of environmental protection have also been included in the Multi-annual Indicative Programme of EU for the period 2002-2004 (CARDS programme). Within the CARDS programme, technical assistance (consultants and training) has been approved for developing a methodology for creating a Study of cost assessment as a part of the Strategy of EU *rapprochement* in the field of environment. Technical assistance has also been planned for consistent application of environmental impact studies, financial and technical assistance has been approved to the Ministry of Environmental Protection and Physical Planning for the establishment of cooperation with the European Environmental Agency pertaining to the environmental status monitoring, technical assistance is to be given for preparing investment projects in the field of air protection, waste management and water protection, as well as to assist NGOs which are active in the field of environmental protection.

The means for financing the activities of the Environmental and Energy Efficiency Fund will be collected from permanent sources, which will first and foremost be composed of charges for environment polluters, interest charged for loans awarded, and also from the money received through international multilateral and bilateral cooperation, the state budget and the budgets of the units of local self-government, financial gifts, and other sources. The Agency for Technical Cooperation (GTZ) of the German Federal Ministry for Technical Cooperation and Development provides technical assistance for the implementation of this project on a bilateral basis, within the framework of the Regional European Reconstruction Programme (REReP) under the auspices of the Stability Pact. Croatia has also submitted projects to EU from the field of environmental protection, to be financed through the LIFE Third Countries programme. Resources for financing three projects in 2001 were already approved within this programme.

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CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

Decision-Making: No information available.

Programmes and Projects: Complex biochemical methods and specific monitoring programmes are required for the detection and estimation of organophosphorus and organochlorine compounds entering the environment as pesticides or industrial discharges (PBs, dioxins). These programmes have been aimed at monitoring persistent compounds in surface and ground waters, rain and snow, as well as critical biological fluids: human milk, serum, and urine.

Status: No information available.

Capacity-Building, Education, Training and Awareness-Raising: The Rudjer Boskovich Institute and its laboratories in Zagreb and Rovinj are national centres licensed to monitor the radioactivity of water, soil and biota. The Zagreb laboratory is the main national centre for using radionuclides in tracing the underground movement of water and serves as the national focal point to monitor radioactivity in accidental situations. In 1996 the number of scientists, engineers and technicians engaged in environmental scientific projects was 70 and total expenditures for environmental scientific projects were 300,000,00 USD.

Information: No information available.

Research and Technologies: The National Science and Research programme has set up the environmental protection and research of the Adriatic Sea and other natural resources as the research priorities of national significance within a list of 13 research fields. Research connected to these priorities is principally oriented toward the protection of Croatia's natural resources, primarily of the Adriatic Sea and its coastal areas, as well as towards water and air pollution, ecosystem and biodiversity research, and falls, thus, into the following categories: marine research; monitoring the quality of surface and underground water; monitoring the radioactivity of waters, soil and air; monitoring ground air quality; developing technological principles for water purification processes; organizing data banks and developing computer models for pollutant cycles and dispersion; modelling of absorption processes and the distribution of micro-elements at the solid/liquid interfaces, and; transport of atmospheric pollutants and smog formation. Environmental research is also being pursued through the study of atmospheric reactions including ozone initiated smog formulation, a field of chemical kinetics in the gaseous phase, and part of the EUROTRAC Programme. Monitoring of atmospheric pollutants for various microenvironments and human populations to assess levels of exposure has taken place. Research in this field involves atmospheric gaseous and particulate pollutants, indoor and outdoor sampling, frequencies and seasonal variations in concentrations, with the aim to introduce, regulate and enforce preventive and prophylactic measures. Field research is followed by the development of mathematical models for the dispersion of pollutants in surface and groundwater, particularly with respect to the supply of drinking water from underground reservoirs in urban areas. A corollary activity, using the same advanced computer systems, is the systematic storage and retrieval system for environmental data.

Wastewater purification technologies in Croatia are partly domestically designed and partly imported. The evaluation of chemical engineering principles and the appropriate technologies for water purification and wastewater treatment are part of a permanent project. The approach is based on analytical techniques and studies of chemical reactions forming the basis for chemical water conditioning. Finally, the least developed research field is the one connected to ESTs because of the lack of financing and human resources. Therefore, the Government of Croatia believes that this segment should be developed mostly by the business sector and industry, based on the economic and financial consequences of introducing eco-efficiency.

Financing: No information available.

Cooperation: No information available.

CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

Decision-Making: The former State Directorate for the Protection of Nature and Environment (SDPNE), now Ministry of Environmental Protection and Physical Planning (MEPPP), cooperates with the Ministry of Education and Sport through the Environmental Education Training Team, with the primary objective of making environmental education an integral part of standard education in elementary and secondary schools and also to establish different methods of education according to the principles of sustainability. Specialised meetings, workshops and training of teachers for environmental education are organized by this Team.

Business community is organized around discussions and round tables on issues of environmental protection and sustainable development, focusing on urgent problems of enforcement of environmental regulations. Through workshops aimed at verifying enforcement of regulations before their actual coming into force, the Croatian Business Council for Sustainable Development (HR PSOR) has, in cooperation with the MEPPP, inaugurated the practice of developing implementation scenarios for different economic subjects.

Programmes and Projects: In 2000, the MEPPP elaborated the Programme of Environmental Education and Education for Sustainable Development. The programme, among other things recommends extensive environmental protection promotion and education through the publishing activities, and coordinated environmental education networking among all stakeholders: authorities, formal education, scientific community, civil society, business and industry. The Project for Improvement of Environmental Education, in line with the experiences and recommendations of international institutions: UNESCO, Council of Europe, International Union for the Conservation of Nature and Natural Resources (IUCN), was also prepared. For several years now, many schools in Croatia have been implementing, in the first place in the segment of extracurricular activities, international, national, regional or their own school projects and programmes for environmental education and education for sustainable development. This refers to the GLOBE Programme (at present there are 84 registered GLOBE schools in Croatia), the UNESCO/SEMPEP (the South Eastern Mediterranean Environmental Project) Programme and Health-Promoting Schools, the European Project of Eco-Schools, the programmes of the Croatian Society of Natural Sciences - Young Nature Keepers Section, and the eco-quiz of NGOs Friends of Nature Movement "*Our beautiful homeland*".

The "Greening Government" project was prepared by MEPPP and all governmental authorities have been invited to cooperation and networking. The Ministry of Education and Sport's project of Eco-Centres Networks was adopted within the Adriatic-Ionian Initiative, along with the proposal for revitalisation of abandoned school-buildings on islands and along the coast in order to launch various youth programmes.

Status: the Ministry of Education and Sport and the Ministry of Science and Technology have endorsed The Programme of Environmental Education and Education for Sustainable Development. Implementation will involve: detailed screening of the current situation; publication of thematic brochures focusing on various environmental aspects and intended for various audiences; establishment of a centralised reference and information centre on the environment; etc., and should involve all the stakeholders in the society.

In Croatia, the fulfilment of the tasks of environmental education and of education for sustainable development mostly depends on the preparedness, sensitisation and creativity of teachers.

It has to be pointed out that by the indicated programmes and forms of work only a smaller part of the total youth population are included, which is not sufficient for achieving the purpose of environmental education and education for sustainable development.

Capacity-Building, Education, Training and Awareness-Raising: In cooperation with the Ministry of Education and Sport, the First Croatian Congress on Environmental Education was organized in April 1996, and the Second - in October 2000. The same Ministry assists in the introduction and implementation of the GLOBE Programme in Croatian schools. Goals and tasks of environmental education in all the fields of a child's development were

integrated into educational programmes of preschool children (Programmatic Orientation for the Education of Preschool Children, 1997). Nursery schools are very successful in carrying out various projects and events based on the principles of sustainable development, and they successfully involve parents and the immediate social environment. On the bases of environmental education for the preschool age, environmental education and education for sustainable development is continued in elementary and secondary school. All subjects and teaching matter shall aim at the development of the pupils' ecological awareness and at carrying out environmental education.

The leading subjects with regard to the possibilities for carrying out environmental educations in elementary schools are: nature and society (class 1 - 4), nature (class 5), biology, geography, chemistry, physics, Croatian language. In the latest edition of the Programme of instruction for elementary schools, which is the basic document for educational work at schools, environmental education has been pointed out as compulsory cross-curricular theme.

In general-programme secondary schools, in terms of contents, the framework, primarily for carrying out environmental education, is provided by the programmes of instruction for biology, geography, chemistry and sociology, politics and economy, and the optional subject ethics. Many vocational schools, particularly those of three years' duration, have no appropriate programmes in biology, chemistry and sociology. Some possibilities for carrying out environmental education and education for sustainable development are provided by the form-master's classes.

In school year 1999/2000 the profession of "ecological technician" was introduced in the system of secondary education, within the teaching area of chemical technology.

Since 1993, annual prizes and awards for achievements in environmental protection are being given as an incentive for valuable contributions in this area. The Ministry awards the prizes on the 5th of June, the World Environment Day. For 2001, awards and prizes were awarded for the conservation of biological and landscape diversity, protection of freshwater and saltwater, tourism, agriculture and forestry, industry and energy, waste management, environmental education, environmental information, local government contribution, special individual contribution, and special NGO contribution.

In the field of tertiary education, the only specialised graduate study is *Ecology*, held at the Faculty of Science of the Zagreb University. There are numerous graduate courses, addressing topics such as Karst geology and geochemistry, Wastewater treatment technology, Ecotoxicology, Soil protection and improvement, Social ecology, Environmental Law, Environment in culture and tourism, and require additional conceptualisation. As concerns postgraduate education, *Oceanology* is the study closest to what is understood under the term *Environmental Sciences*.

Information: The MEPPP is working on the development of an information system for raising public awareness and knowledge on the environment, and on MEPPP activities in that area. During the past seven years, the MEPPP has issued a monthly "Environment" magazine, intended for a broad audience, ranging from elementary school students, NGOs and governmental bodies, to journalists, business, R & D institutes and environmental experts. It provides various environmental information, gives recommendations and advice from the environmental area and offers reviews of important environmental events in Croatia and abroad. Communication with readers is established through polls and correspondence.

The MEPPP posts all relevant information on its activities and initiatives, as well as on the state of the environment, on the Internet (<http://www.mzopu.hr>). Cooperation with the media, through regular weekly press conferences, and replying to all sorts of environmental queries, satisfy to the great extent the need for environmental information of the general public.

The MEPPP regularly issues translations of brochures, supporting the active contribution of NGOs. Publications are distributed to schools, interested individuals and organizations upon request, free of charge. Educational and promotional video-clips (e.g. ozone layer, climate change) are broadcast regularly on the national and local television stations. MEPPP organises or supports various meetings, events and Programmes, and is hosted on numerous radio stations, in live interviews on environmental topics.

Research and Technologies: The Ministry of Science and Technology supports a number of national research projects, international cooperative projects, and numerous study programmes of environmental protection at universities. Through its support to research projects and study programmes at faculties which are in close connection with eco-efficiency topics and clean production processes, the Ministry of Science and Technology is forcing an “eco-climate” in Croatia. One of the priorities of the National Scientific Research Programme for the period 1996-2000 was the topic *Environmental Protection and Improvement*. The Ministry of Science and Technology has thus financially and organizationally supported several permanent programmes carried out in R & D institutes (Institute *Ruđer Bošković*, Institute of Oceanography and Fisheries, Institute of Medical Research and Occupational Medicine, Forestry Institute, Veterinary Institute, Institute of Anthropology, Institute of Tourism, International Relations Institute, etc.). The same Ministry also finances individual environmental and sustainable development projects carried out in institutions of higher education. A substantial part of eco-efficiency and enhancing corporate productivity are promoted through special courses at the Centre for Technology Transfer.

Financing: Environmental education and awareness-raising activities are primarily financed through the State Budget, but also from various international foundations and grants (e.g. Regional Environmental Centre (REC) for Central and Eastern Europe; World Bank - financing Karst Environmental Conservation Project has an important component dealing with environmental education and information of the local population).

Cooperation: Apart from cooperation with the governmental authorities (primarily with the Ministry of Education and Sport and Ministry of Science and Technology), MEPPP has developed strong cooperation with business and industry - through Croatian Business Council for Sustainable Development (HR PSOR), with the REC, civil society - NGOs, R&D institutes and many other stakeholders.

The MEPPP has started a project “Assistance to Croatia in implementation of the UN/ECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters” (the Aarhus Convention). The project is supported by Danish Environmental Protection Agency with the aim to facilitate the ratification process of the Aarhus Convention in Croatia. The project started in October 2001 and has a scheduled duration of 10 months.

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

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

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CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Decision-Making: According to the International Treaties Act of the Republic of Croatia (1996), the President of the Republic and, in cases defined by the law, the Government have the treaty making power. The Parliament adopts the treaties, while the Ratification Instrument can be signed only by the President of the RC or, with his proxy, by the Prime Minister or the Foreign Minister.

Programmes and Projects: No information available.

Status: In October 2001, Croatia signed the Stabilization and Association Agreement with the EU. The accession process is a strategic goal of the Croatian Government, which also implies that there is an urgent need for harmonization of Croatian legislation with the EU legislation.

Capacity-Building, Education, Training and Awareness- Raising: The Ministry for European Integration has been regularly organizing seminars and lectures on EU related matters.

Research and Technologies: No information available.

Information: Web sites of the Foreign Ministry (www.mvp.hr), Ministry for European Integration (www.mei.hr) and the Ministry of Environmental Protection and Physical Planning (www.mzopu.hr).

Financing: State budget and funds provided by international financial and other institutions.

Cooperation: Croatia is a member of numerous international organizations such as CE, IMF, UN, UNESCO, OSCE, WB, WHO, WTO, etc (www.mvp.hr). Croatia is a member of ECOSOC and as of 2002 Croatian Permanent Representative to the UN has been presiding it. Croatia has also been elected a member to the UN Commission on Sustainable Development.

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CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Decision-Making: No information available.

Programmes and Projects: No information available.

Status: International Legal Instruments are covered under the relevant sectoral chapters. This is a list of major agreements and conventions entered into by Croatia and of relevance to Agenda 21:

Air/Atmosphere

Convention on Long-range Transboundary Air Pollution (Geneva, 1979) / Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Long-term Financing of the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) (Geneva, 1984) / Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Further Reduction of Sulphur Emissions (Oslo 1994) / Vienna Convention for the Protection of the Ozone Layer (Vienna, 1985) / Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal, 1987) / Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (London, 1990) / Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer (Copenhagen, 1992) Amendment to the Montreal Protocol Adopted by the Ninth Meeting of the Parties (Montreal 1997) / United Nations Framework Convention on Climate Change (Rio de Janeiro, 1992)

Nature/Biodiversity

International Convention for the Protection of Birds (Paris, 1950) / Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar, 1971) / Convention Concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972) Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973) Convention on the Conservation of European Wildlife and Natural Habitats (Bern, 1979) Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 1979) / International Plant Protection Convention (Rome, 1951) / Convention on Biological Diversity (Rio de Janeiro, 1992) Agreement on the Conservation of African-Eurasian Migratory Waterbirds, Agreement on the Conservation of Bats in the Europe (London, 1991) Agreement / on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (Monaco, 1992) United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (Paris, 1994)

Waste Hazardous Substances

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel, 1989) / European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) (Geneva, 1956) / International Convention for Safe Containers, 1972 and Changes of 1981, 1983, 1991 / Prevention and help in case of accidents Convention on Environmental Impact Assessment in a Transboundary Context (Espoo, 1991) Convention on Transboundary Effects of Industrial Accidents (Helsinki, 1992)

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Vienna, 1986) / Convention on Early Notification of a Nuclear Accident (Vienna, 1986) / Cooperation Agreement on the Forecast, Prevention and Mitigation of Natural and Technological Disasters Among the Government of the Republic of Austria, the Government of the Republic of Croatia, the Government of the Republic of Hungary, the Government of the Republic of Italy, the Government of the Republic of Poland, and the Government of the Republic of Slovenia (Vienna 1992) Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management (Vienna, 1997)

Civil Liability

International Convention on Civil Liability for Oil Pollution Damage (Brussels, 1969) / International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (Brussels, 1971) / Convention on Civil Liability for Nuclear Damage (Vienna, 1963)

Sea

Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona, 1976)/ Changes to Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona, 1995), Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircrafts (Barcelona, 1976) / Changes to Protocol for the Prevention of Pollution of the Mediterranean Sea by Dumping from Ships and Aircrafts (Barcelona, 1995) / Protocol Concerning Cooperation in Combating Pollution of the Mediterranean Sea by Oil and other Harmful Substances in cases of Emergency (Barcelona, 1976) / Protocol for the Protection of the Mediterranean Sea Against Pollution from Land-based sources (Athens, 1980) / Protocol Concerning the Mediterranean Specially Protected Areas (Geneva, 1982)/ Protocol Concerning the Mediterranean Specially Protected Areas and Biodiversity (Barcelona, 1995)/ Protocol for the Protection of the Mediterranean Sea Against Pollution Resulting from Exploration and Exploitation of the Continental Shelf and the Sea-bed and its Sub-soil (Madrid, 1994) / International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (Brussels, 1969) / International Convention for Prevention of Pollution from Ships (Marpol Convention) 1973 with Annexes I, II, III, IV, V with Changes of 1984, 1985, 1987, 1989, 1990 / Protocol of 1978 Relating to the International Convention for the Prevention of Pollution from Ships (London, 1978) / Convention on the Prevention of Marine Pollution by Dumping of Waste and Other Matters (1972) / United Nations Convention on the Law of the Sea (1982) / Protocol Relating to Intervention on the High Seas in cases of Pollution by Substances Other than Oil (London, 1993)

Waters

Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 1992) / Convention on Cooperation for the Protection and Sustainable Use of the Danube River (Sofija, 1994)

Bilateral treaties in the area of environmental protection

Agreement on Water Management Relations between the Government of the Republic of Croatia and the Government of the Republic of Hungary (Pecuh, 1994) / Agreement on Water Relations Management between the Government of the Republic of Croatia and the Government of Bosnia and Herzegovina (Dubrovnik, 1996) / Yugoslavian-Italian Agreement on Cooperation in the Protection of Adriatic Sea Water and Coastal Areas from Pollution (Succession) (1974) / Agreement on Water Relations Management between the Government of the Republic of Croatia and Government of the Republic of Slovenia (Zagreb, 1996) / Memorandum of Cooperation in Integral Water Management and Related Environmental Issues (Zagreb, 2001)/ Agreement between the Government of the Republic of Croatia and the Government of the Republic of Macedonia on Cooperation in Environmental Management and Nature Protection (Zagreb, 2002).

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

Information: No information is available

Research and Technologies: No information available.

Financing: No information is available

Cooperation: For information on cooperation please see under **Status**.

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CHAPTER 40: INFORMATION FOR DECISION-MAKING

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

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CHAPTER: INDUSTRY

Decision-Making: The Croatian Business Council for Sustainable Development was established in 1996 by a group of nineteen of Croatia's leading firms and companies. Various industrial and service areas are represented in the Council. The founding companies, along with other companies, accept the principles of the *Business Charter on Sustainable Development* and are gradually building them into their business operations. The *Environmental label* was created as one of the instruments for achieving a change in consumption patterns. It has been awarded since 1993 to the manufacturers of consumer goods that, in the process of manufacture, marketing, use and disposal, affect the environment in a considerably less harmful way than other uniform products (Rule Book on Environment Label, 1996, as one of a number of regulations adopted on the basis of the umbrella *Law on Environment Protection*, 1994). The *Environmental Label* has a commercial character, with the aim of changing patterns of production and behaviour of buyers of consumer goods.

Measures for organized collecting and re-use of waste have been established (The Law on Waste, 1995) with a view of reducing waste. Manufacturers' responsibility for the collection and recycling of packaging waste has been separately regulated (Rule Book on Packaging Waste, 1996). The Law anticipates incentive measures for the use of manufacturing procedures, manufacture and transport of the most environmentally acceptable products, and for the reclaim and re-use of products and packaging, together with tax, custom and other public duties exemptions. The responsibilities of producers for collecting and recycling of packing waste is regulated separately (Rule Book on Packaging Waste, 1996).

Programmes and Projects: The State Bureau of Standardisation and Metrology launched the Technical Committee 207 (TC). Its domain is environmental management, encompassing a number of ISO 14000 standards, a large number of companies have to implement the determined activities for the adoption of the standard (on 15 April 2001, there were 9 companies with ISO 14000 standard, while there are 303 companies registered for ISO 9000). The representatives of some leading Croatian organization partake in the work of the TC. Ten companies have started the preliminary activities for the implementation of an environmental management system, and some have already obtained pre-certification according to ISO 14000.

Industrial companies take part in numerous projects, mostly of the regional character. These projects develop their technical and technological capacities with the aim to adjust faster and better to the global and European standards of environment protection and to remain competitive in the same time. Expert assistances from UNEP and UNIDO as well as from the Croatian experts, additionally educated through "Train the trainers" programmes, are used for the implementation of the projects. Financial resources are mainly our own, from international institutions (GEF, WB and European Bank for Reconstruction and Development (EBRD)), from donors (Japan, Kingdom of Norway, Czech Republic, etc.) and a symbolic financing from the budget of the Republic of Croatia.

Status: In the first years of the independence (1990-1996), a lot of industrial capacities were destroyed in the Republic of Croatia. The Croatian Government in its directly enforceable decisions, primarily for the ecological reasons, closed down large industrial plants located along the Adriatic coast (KOKSARA, coke production, Bakar and TEF- ferroalloys production, Šibenik; in 1994). During 1996, the first year of peace in Croatia, some important initiatives were set in motion towards more intensive participation of the economic public sector in the area of sustainable development.

The steps towards eco-efficiency in Croatia, as well as in other countries, start from an inherited economic system that did not take into account the sustainable development. Therefore, to make university studies, training courses and achievements in EST viable and efficient, a break with the usual business mentality is needed, as well as tight industrial policy regarding eco- efficiency.

Capacity-Building, Education, Training and Awareness-Raising: A range of education and public awareness activities have to be organized by the Croatian and numerous international institutions, such as workshops, seminars, symposiums on environmental management systems, seminars and projects in Cleaner Production, eco-efficiency implementation in business, and implementation of legal regulations. In addition, many industries inform their worker on environmental and sustainable development topics through their in-house journals. A sustainable part of eco-efficiency, like *Total Quality Management* (TQM) and enhancing corporate productivity are promoted through special courses at universities and at the newly established *Centre for Technology Transfer*.

The activities of the Croatian Cleaner Production Centre, an (non-profit) NGO founded in 2000, are directed primarily towards the creation of a “critical mass” of specifically educated experts, who will accept, implement and further spread the idea of *Cleaner Production*, as an important connection between economic growth and strengthening of economic competition with the reduction of negative impacts on the environment at the same time. 28 industrial companies have been included in the Cleaner Production training programmes so far and 34 projects (within UNIDO capacity building project; UNIDO-TEST Project, Eco-Links Programme and Cleaner Production Project in Osijek-Baranja County) were launched. In 2002, a new project in 17 companies (3 refineries and 2 electric plants, among others) for 46 participants, are being implemented.

Information:

Publications include: EGE-ENERGY, ECONOMY, ECOLOGY, ETHICS and CHEMISTRY IN INDUSTRY.

Research and Technologies: The *Croatian Cleaner Production Centre*, connected to the UNIDO International network of centres and the *Centre for the Transfer of Technologies*, among others, were established. The leading Croatian organizations and degree-granting educational institutions are involved here as well.

Financing: Mixed Croatian and foreign sources, with the symbolic support from the budget of the Republic of Croatia

Cooperation: Parliamentary Committees, Government line ministries and institutions, Croatian Academy of Sciences and Art, Universities and faculties, business associations and institutions (Croatian Chamber of Commerce, Employers’ Association, Croatian Business Council for Sustainable Development) specialised associations and institutions, NGOs.

UNEP International Declaration for Cleaner Production was signed in the end of 2001 by 16 representatives/directors/managers or their authorised persons, as follows: 9 production firms, Ministry of Economy, Ministry of Environment Protection and Physical Planning, Croatian Chamber of Commerce, Regional Environmental Centre, Croatian Cleaner Production Centre, Faculty of Chemical Engineering and Technology, Croatian Business Council for Sustainable Development and Agency for Special Waste.

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CHAPTER: SUSTAINABLE TOURISM

Decision-Making: At the national level, the Ministry of Tourism is in close cooperation with the Ministry of Environmental Protection and Physical Planning to create conditions for sustainable tourism. At the local level, counties, municipalities and cities implement sustainable development. The Ministry of Environmental Protection and Physical Planning is responsible in preparing laws and other relevant legislation regarding environmental protection while the Government and the Parliament enact them. Procedures based on laws of the Republic of Croatia enable the independent implementation of laws related to sustainable tourism. Besides, the concept of sustainable tourism is implemented in development documents and physical plans. Croatia has a strategy on Tourism Development, which includes sustainable development in tourism. Eco-tourism and nature-based tourism is an integral part of the National Strategy on Sustainable Tourism. Based on the strategy of tourism development, local communities, municipalities and cities, plan the development of eco-tourism. Public hearings are conducted prior to the passing of physical plans. Furthermore, in the process of preparing EIA studies, a public hearing is conducted.

Status: Croatia is traditionally a tourist country. The growth of the Croatian tourism sector was interrupted by the war in 1990. Until then, the tourism sector constituted 12% of the Croatian GDP with around 180,000 employees. Today, those figures are reduced to a half. The growth of the tourism sector is expected to reach 1990 levels in the next few years.

Programmes and Projects: Major programmes in effect to promote sustainable tourism are: the programme for stimulating the development of rural tourism; the programme for the development of Croatian islands and coastal areas and the programme of developing strategic marketing plans for the counties.

Changing consumer patterns in tourism industry toward eco-tourism and sustainable tourism are seen as very important. programmes for promoting eco-tourism are conducted by County Tourist Associations and various NGOs.

Capacity-Building, Education, Training and Awareness-Raising: The Croatian education system (universities and various workshops) provides specific programmes to educate policy makers in the concept and policy design of sustainable tourism. Regional Activity Centre of the Priority Actions Programme within the UNEP. Mediterranean Action Plan in Split has developed a carrying capacity programme for the island of Vis as a pilot project. A similar project has also been developed for the island of Cres. The marketing of tourism products is specifically geared toward attracting environmental-conscious tourists. Environmental management systems are applied in some hotels.

Information: The national information available to assist both decision-makers and the tourist industry in promoting sustainable tourism relates to: air pollution registry; information on marginal emission values; and information on seawater quality for bathing and recreation. The mapping and inventorying of natural resources is currently being planned. The relevant information on sustainable tourism in Croatia can be accessed via the press and the Croatian Tourism Boards. Activities to develop sustainable development indicators related to sustainable tourism are currently being planned.

Research and Technologies: Technology-related issues to sustainable tourism in Croatia are solid waste disposal, wastewater treatment, and water supply, for which existing technologies could be used. The biggest problem for their realization is the lack of financial resources.

Financing: Activities in the area of sustainable tourism are financed out of the national budget or by local government, economic sector, and the Croatian Tourism.

Cooperation: The island of Vis can be considered as a sustainable tourism destination model in Croatia. In Agreements on Tourist Cooperation (with some countries) there is an Article covering environmental protection (e.g., the Agreement on Tourist Cooperation between the Republic of Croatia and the Republic of Austria). The Agreement between the Croatian Tourism Board and the German Automobile Agency ADAC is to regularly

provide information on seawater quality on beaches through the Ministry of Environmental Protection and Physical Planning.

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