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**ENVIRONMENTAL STRATEGY AND
SUSTAINABLE DEVELOPMENT FOR
KOSOVO
Project**

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CHAPTER I

1. Introduction

Kosovo is passing through an important phase of development in a post conflict period, and similar to the post conflict countries in the region, environment was not considered in the beginning to be one of the priorities.

Kosovo didn't have a long tradition in treating of the environmental problems; there were no respective institutions available (Ministry) for environment or the necessary legislation for environment. All those facts reflect the interest of the previous administrations in Kosovo towards the environment.

First environmental law in Kosovo has been promulgated in 2003 and it obligates the Ministry of Environment and Spatial Planning to prepare a proposal for Environmental and Sustainable Development Strategy for Kosovo.

Ministry of Environment and Spatial Planning is in charge of the project.

Drafting of the Strategy was done in inter-ministerial and inter-institutional cooperation. Therefore, in this aspect, activities during the preparatory phase were concentrated in two levels:

Scientific level– with engagement of the prominent scientific experts in certain fields.

Administrative and managerial level – with engagement of experts from the relevant ministries, and other institutions whose functions are related to environmental issues.

Therefore, we have tried to perform the interlacement of science and management, in order to have a strategy that will be based on science and applicable in management of environmental issues and problems.

Difficulties that we have faced: lack of the Strategy of Economic Development of Kosovo, lack of new environmental studies, as well as lack of monitoring of the present level of pollution in Kosovo.

During the first phase of drafting of the Strategy, we have started with a method of Logical framework. A four-day seminar thanks to KFOS financial aid has been held in Tirana, where more than 30 environmental and other experts were present. During the seminar, we have identified main environmental problems and the establishment of working groups for drafting of the Strategy took place.

The main principle of the work during drafting of the strategy was to start with the following report: state of environment – problems – measures – priorities based of the modern environmental strategies.

After six months of work, a draft was finished and it was discussed at the level of local and international experts. After discussions, it was clear that it is necessary to engage the international expertise in order to have a more acceptable document. With a financial aid of SIDA and technical assistance of REC we have continued the second phase under the leading role of a well-known expert in drafting the environmental policies from Croatia Dr. Viktor Simocic. During this phase, we had two workshops with all working groups and interested parties.

Under the instruction of the international expert, in order to have more acceptable document of Strategy, Kosovo Government has established the Permanent Committee on Environment and Sustainable Development.

List of all experts that were engaged and have given their contribution in the project for the Environmental and Sustainable development Strategy can be found at the end of this document (Annex 1).

2. General state

Basic specifics that are characteristic for Kosovo society in the moment when the fulfilment of the strategy is expected are the following:

- Relatively high birth rate of the population, with major part of young population;
- International Administration of Kosovo and undefined political status of Kosovo;
- Dualism in legislation, governmental and legal between UNMIK and PISG;
- Slow process of integration of Kosovar society after the war;
- Deficit of good professional cadres in central and local institutions;
- Reformation in all level of education;
- High rate of unemployment (about 50%);
- High level of poverty (about 50% in general poverty and 12% in extreme poverty);
- Low level of economic development, stagnation in privatisation process of socially owned enterprises and lack of the vision for economic development;
- Drop of industrial production in former social sector and slow increase of private production enterprises;
- Insufficient supply with electricity for economy and population;
- Crises in agricultural sector;
- Lack of Spatial plan of Kosovo and reduction of the agricultural land;
- Poor transport infrastructure.

3. Main elements for evaluation of success

Fulfilment of the Strategy has an important role for sustainable development of Kosovo. Good implementation of the Strategy brings benefits in many fields. Possible benefits are the following:

- i. Preserving of the health of population;
- ii. Preserving the resources of natural and cultural heritage;
- iii. Increase of the living standard of population;
- iv. Rational use of natural resources;
- v. Easier integration in International Community
- vi. Increase of competitive economy;
- vii. Increase of employment and poverty reduction;
- viii. Modern Technology;
- ix. Ecological products.

Having in mind political, social and economic circumstances that Kosovo is going through, implementation of the Strategy is not going to be the easy one. The success of implementation will depend from the ability of relevant development factors for using of existing potentials in this field. Advantages that we should use during the setting of priorities are:

Enthusiasm of the population for independence;

- a) Large number of youth;
- b) Relatively sufficient natural resources;
- c) Existing professional potential;
- d) Not being overloaded with the past – possibility of acceptance of entire development on new experiences;
- e) Huge market of unemployed persons and cheap labour force.

During setting of environmental priorities, we should have in mind weaknesses that might jeopardize the successful implementation, as well as non-implementation of the Strategy.

Lacks for implementation of the Strategy orientations are:

Long-term isolation;

Lack of administrative isolation;

Lack of possibility for the use of international funds (GEF, conventions);

Low level of economic increase, lack of vision for economic development and poverty;

High density of population;

Lack of cadres and specialized professional institutions for environmental issues;

Lack of economic instruments for environmental protection;

Tolerant attitude of the population towards environmental pollution;

Old technologies and equipments;

Modest municipal infrastructure;

Lack of tradition in spatial planning.

Risks that might occur with non-implementation of the Strategy :

- i. Increase of pollution and worsening of the health of population;
- ii. Irrational use of natural resources;
- iii. Permanent lost of some resources (forest, soil)
- iv. Loss of Biodiversity;
- v. Irreparable damage of natural and cultural heritage;
- vi. Increase of poverty.

4. Legal base

Legal base for drafting of Environmental and Sustainable Development Strategy for Kosovo (hereunder called Strategy) is in Environmental Law.¹

Document of the Strategy should at least include the following:

- a. Policy proposal for use of natural sources;
- b. Analysis of scientific researches of the present situation with natural sources, spatial location, quantity and quality of natural sources in Kosovo;
- c. Proposal of strategic proposal for use of natural sources, including time and spatial location, quantity, quality, renovation and strategic reserves;
- d. Propose conditions for gradual replacement, whenever it is possible, of poor natural sources;
- e. State of biodiversity in Kosovo and protected natural regions;

¹ Environmental Law 2003/9, Chapter II – Documents for Environmental Protection, Article 6.

- f. An analyse of the state of environment, identification of enormous environmental damages and their effect to public health;
- g. Proposal of elements and conditions for environmental protection and environmental improvement;
- h. Longterm prognoses about trends and environmental conditions;
- i. Proposal of aims and realistic methods for facing with trends and environmental conditions;
- j. Realistic evaluation of necessary financial funds for achievement of aims and proposal of such means; and,
- k. Proposal of priorities of tasks and projects as well as proposed authorities that are responsible for their implementation.

Government will draft and forward to the Parliament the project for the Strategy. The Ministry of Environment and Spatial Planning will prepare strategy with coordination of other Ministries and scientific institutions of Kosovo.

Project for Strategy will contain aims and instructions for environmental protection in Kosovo for the period of time of ten years and it is going to be coordinated with a Spatial Plan of Kosovo.

Before the Strategy is forwarded to the Parliament for approval, it is going to be made public through media for at least forty five (45) days, in order to give time to public opinion to express their opinion, suggestions and comments.

5. Main environmental challenges

Environment today is a global problem and it is a mutual problem of rich and poor countries, problem for developed countries and countries in development. In international aspect, today, the main long-term objectives for environmental protection are the following:

a. Improvement of quality of life of people – it is clear that without economic development, we cannot have good environmental care, because environmental protection is expensive.

b. Rational and sustainable use of natural resources – by orientation towards the existing available resources and renewable resources.

c. To avoid harmful effect on environment – by orientation towards economic activities that has less impact on environment.

In this aspect, those objectives for Kosovo will represent big challenges towards sustainable economic development.

6. Objectives

6.1. Long-term objectives for environmental protection

Long-term objectives for clean environment in Kosovo are the following:

- a) Gradual reduction of pollution, degradation and environmental damage and minimization or forbidding of economic aspects and other activities that are dangerous for human health and environment;

- b) Protection of biodiversity and through this preservation of general ecological balance in Kosovo;
- c) Rational and sustainable use of natural resources and agricultural land,
- d) Protection of valuable natural landscapes, in the first place the most representative one and important such as national parks, natural monuments etc.

6.2. Short-term objectives

- a) Security and strict implementation of the existing legislation for environmental protection as well as completing as soon as possible the missing legislation.
- b) Integration of environmental protection in all sectors dealing with environment or those that have to do with environment, so that environmental protection will be part of the policies, plans and programmes of sector development.
- c) Starting in this phase and under this conditions the process of integration in European structures regarding environmental protection.

7. Principles of environmental protection

Basic principles for drafting and implementation of Environmental and Sustainable Development Strategy in Kosovo are the following:

a. Sustainable development

Kosovo represents concept of sustainable development, so that economic development of existing generations will take into consideration the fate of future generations based on the principles of Rio Declaration in 1992.

b. Pragmatism

Strategy is based on knowing the general economic and environmental situation in Kosovo, as well as realistic possibilities to do positive changes in such economic situation.

c. Integration

Kosovo is also oriented towards European in the aspect of environmental protection. Sooner we start towards those integration, lower it will be the cost of integration. Although, Kosovo has not solved the final status, Kosovo is involved in a process of stabilization and association (SAP) for membership I EU through mechanisms for follow up of stabilization-association.

d. Globalisation

Kosovo has not signed or rectified any international convention. With solution of status of Kosovo, Kosovo will then take responsibilities in signing and respecting all international conventions on environment. Nevertheless, in present legislation and policies, Kosovo is respecting majority of instructions and principles from international conventions on environment.

e. Applicability

Targets, strategic orientations and their objectives should be realist and applicable having in mind the scale of economic development in Kosovo.

8. Main principles of the S Strategy

i. Environment and development policy

Environmental protection must be part of all development policies in Kosovo, by achieving its integration in all spheres (segments, sectors) that might cause degradation of environment.

ii. Bearers and responsible persons (institutions)

We can work out in environmental protection only if we cooperate with all “players”, so that environmental protection, control and description of the present situation become actual and it will be oriented towards more responsible actions towards its positive change.

iii. Use of instruments

Environmental protection will be oriented towards use of different instrument for protection but it will also approach the increase of awareness for active care for environmental protection.

9. Legal and Executive Institutions in Kosovo

9.1. Present situation

First steps for environmental protection in Kosovo has started in early 70's. In 1974 the *Institute for Nature Protection of Kosovo* becomes independent, while Law on *Institute for Nature Protection* made the Institute in charge of “care and improvement of nature protection, environment and in charge of organizing the maintenance of protected areas of nature”².

Based on the Law 39/88 “Activities for nature and environment protection with interest for Kosovo were performed by the Institute”³.

First Government in Kosovo after the war was UNMIK, which acted based on the Regulation 1999/1 which Regulation gives “all legislative and executive power in Kosovo was transferred to UNMIK”⁴.

In order to enable the functioning, UNMIK has started with establishment of Administrative Departments and has established 20 of them.

In May 2000 it was established the *Department of Environment*⁵.

² Law on Provincial Institute for Nature Protection

³ Law on protection of nature and man made values Official Gazette of Kosovo 39/88.

⁴ UNMIK Regulation 1999/1 on Authorities of Provisional Administration in Kosovo

⁵ Reg. 2000/32 on establishment of Administrative Department for Environmental Protection in charge of leading of general issues related to environmental protection in Kosovo.

Within this Department, were incorporated and were active two existing institutions that although were in charge for environmental protection in Kosovo before the 90's, they were not included anywhere:

Institute for Nature Protection of Kosovo.

*Hydrometeorological Institute of Kosovo*⁶

National Park "Malet e Sharrit (Shar Mountains)" – which for time being is operational in part of Prizren, Suharekë and Kaçanik municipalities, but still out of control are about 30% of the territory of national park in Shtërpçe municipality⁷.

After central elections, the central institutions of Kosovo were established:

Kosovo Parliament as the highest legal authority in Kosovo consisting of 120 MP. Within the Parliament exists the Commission for Environment and Spatial Planning consisting of 11 members.

Kosovo Government consisting of 10 ministries⁸.

MESP among other things is in charge of: "creation of policy, law enforcement and supervision of activities for environmental protection including water resources, air, soil and biodiversity"⁴.

Other ministries that are directly involved in the field of environment are:

Ministry of Health – Pollution impact on health of the population

Ministry of Trade and Industry – Industrial pollution

Ministry of Economy and Finances – Financial implications in reduction of pollution

Ministry of Public Services - Municipal services

Ministry of Agriculture, Forestry and Rural Development - forestry, agriculture, irrigation.

UNMIK Institutions

*Kosovo Trust Agency*⁹

Activities of the MESP are linked with *Kosovo Trust Agency (KTA)*, mainly as far as the public companies for waste and water, as well as public enterprises dealing with use of natural resources.

Board of Mines and Minerals within UNMIK Pillar IV, and they are in charge of licensing the companies for extraction of sand and gravel with a very "light" EIA.

Public Utilities Regulatory Commission in Kosovo (PURCK) that has been already transformed into *Water and Waste Regulatory Office (WWRO)* that is functioning within UNMIK Pillar IV.

⁶ Law on hydrometeorological activities in Kosovo.

⁷ Law on National Park Malet e Sharrit OGK 11/86.

⁸ Reg. 2001/19 on Executive Provisional Institutions of Self-government of Kosovo, with amendment on Reg. 2002/5 on establishment of the Ministry of Environment and Spatial Planning.

⁹ Reg. 2002/12 on establishment of Kosovo Trust Agency.

Municipal Institutions

Municipal structures communicate with central level through regional coordinators of the Ministry in 5 regional canthers.

Only 1 municipality in Kosovo has special Directorate for Environment, in 25 other municipalities, environmental sector is placed within different directorates, while in one municipality, environmental sector is not placed in any municipal directorate.

Only one municipality has municipal regulation on environment, in 15 other municipalities, environment is treated through other regulations, while 11 municipalities have not environmental regulation at all¹⁰.

Professional Institutions

Existing institutions whose activities are closely linked to environmental protections are: *Institute of Public Health of Kosovo (IPH)* in charge of health of the population doing the monitoring of the quality of potable water¹¹.

INKOS Institute of KEK that has a division for Environmental Protection and they are in charge of monitoring the environment within KEK.

Scientific Institutions

Until 80's the following institutions were fully involved in environmental projects: Faculty of Natural – Mathematical Sciences, Faculty of Agriculture, Faculty of Medicine. There was a complete lack of the above-mentioned institutions in the post war period.

9.2. Main Problems

Institutions have come out from a one-decade Serbian occupation when they were completely controlled by Serbs and had no Albanian cadres. It was the last decade of the XX century that was full of environmental developments; therefore, it is easy to understand in what difficult situation they were.

After the war, majority of those institutions were not systemized, in la situation where there were no central institutions. Description of activities and responsibilities of those institutions, based on the applicable legislation that has established them was hard to be implemented in a newly created post war conditions.

At municipal level, still doesn't exist a clear institutional line, there is a lack of competences and responsibilities of municipal officials for environment that brought to an emphasized passivity on environment as far as municipalities are concerned.

Mixing of competences and overlapping them, and on the other hand it is more than evident leaving aside of some important environmental issues.

Central and municipal environmental inspectorate was un-systemized and without necessary legal support. Inspectorate used to function more on the bases of a personal good will and they had no legal space to do something more in this direction.

Financial aspect of institutions was and it is still very weak. From Kosovo consolidated budget, in majority of cases, it was possible to provide only the basic expenditures. Additional funds were provided through few projects.

¹⁰ Questionnaire on Environmental Situation in Kosovo Municipalities, MESP 2002

¹¹ UNMIK/JIAS IA 2/99 on testing and implementation of minimum standards for potable water quality in Kosovo.

New and untrained staff has influence on the work efficiency. Such a new staff faced world-advanced experiences. Moreover, in some environmental fields, there was a lack of specialized cadres. Low incomes are one more obstacle to involve specialized cadres in certain fields.

Lack of central environmental monitoring institution that would collect, process and distribute information and reports regarding the state of environment in Kosovo.

9.3. Orientations

- a) Clear systemization of respective environmental institutions, increase of working capacities for fulfilment of their activities in accordance with their legal obligation for environmental protection.
- b) Clear systematisation of municipal environmental structures and acceptance of responsibilities for management of environmental issues at municipal level based on legal obligations.
- c) Distribution of responsibilities and obligations of environmental problems among main pollutants.

9.4. Priorities

- i. A clear institutional system with competencies, obligations and clear responsibilities, and from the financial aspect, stable finances of institutions in charge of environmental protection. All those institutions should act in coordinated way for fulfilment of their programmed obligations as well as in fulfilment of the Environmental and Sustainable Development Strategy for Kosovo.
- ii. Strengthening of institutions with new specialized cadres, through attractive increase of salaries, trainings abroad etc.
- iii. Full fictionalisation of Kosovo Environmental Protection Agency and equipment for the main laboratory for analyses and increase of environmental monitoring capacities at Kosovo level.

CHAPTER II

STRATEGIC ORIENTATIONS

Part 1. Thematic issues

1.1. Air

1.1.1. Present situation

Due to the lack of laws and standards regarding air emission and air quality, at the moment it is not performed monitoring of emission and air quality, as well as administrative supervision of polluters. Partial air monitoring data for major pollutants in Kosovo for the time period 1986-1998 do exist.

Approach of the society towards protection of air quality until now was ignorant, marginalizing of the problem lead to accumulation of the problem. Common use of the old technology that is not friendly towards environment and ecological efficiency.

Actually, the major air pollutants are: sector for energy production out of non-renewable sources (coal and oil derivatives) and sector for transport (old engines and mainly without catalyst).

After the war in 1999, air emissions have been increased due to the following:

- Intensive increase of vehicles (old and without catalyst).
- Increase of heavy construction equipments (economy and KFOR)
- Increase of economic activities of small size enterprises.
- Reorientation of the population towards heating from electrical heating to wood, coal and gas heating (due to the everyday power restriction).
- Gradual increase of the agriculture, as a source of emission of ammonium into the air.

Based on occasional appearance of the smog during winter and summer in urban areas, it is supposed that during this period of time, the air quality drops (II category, sometimes even III category).

Another environmental problem is low level of awareness of entrepreneurs, consumers and public opinion regarding the air quality. Kosovo hasn't rectified any international convention regarding air protection.

It is expected that in the future, the following sectors will be the major air pollutants:

- Energy production and industry with emissions of SO₂, VOC¹² and NO_x, and dust.
- Transport, responsible for emission of CO, NO_x, VOC, lead, certain amount of SO₂, and dust.
- Increase of the agricultural activities that are going to cause the ammonium emissions (NH₃).

1.1.2. Orientations

¹² VOC – volatile organic compounds

- i. Harmonization of economic development with gradual acceptance of EU standards.
- ii. Application of efficient system for management of air quality, that means:
 - Establishment of monitoring system and
 - Building of information system for monitoring of emission and air quality according to EU standards and methodology (CORINEAIR and in harmony with IPCC report) and
- iii. Establishment of efficient economic instruments for stimulation and enforcement of air protection, as well an application of environmental management system (EMS) and ISO 14001².
- iv. Reduction of polluting emission in air from energy, industry and transport.
- v. Creation of financial conditions for use of renewable sources of energy (biomass, waste, solar energy, wind power, hydropower etc);
- vi. Gradual harmonization of the legislation with IPPC 96/61 EU Directive (especially while importing new technologies) in order to use the latest possible technology.

1.1.3. Priorities

- Completing of legal legislation for better management of air quality, in harmony with EU Directives.

- Establishment of monitoring system for air quality management.
- Establishment of information system for air quality.
- Reduction of emissions of hazardous particles in the air that has impact on regional and global pollution (gases that causes “green house” effect, emissions that causes acidification, damages the ozone layer and persistent organic polluters);
- Increase of awareness and knowledge on air quality among entrepreneurs and citizens.
- Reduction of methane emission in landfills.

1.2. Water

1.2.1. Present situation

Kosovo is divided in 4 water basins (catchments): White Drin water basin (with capacity of 60 m³/s) Iber water basin (with capacity of 33 m³/s), Morava e Bincës water basin (with capacity of 7 m³/s) and Lepenc water basin (with capacity of 8 m³/s.¹³).

Main Rivers are 2 and 3 category of pollution.

44 % of population, mainly in urban areas has access to water supply system. In rural areas, the percentage of people connected to the water supply system is very low (less than 9%), while the main water supply is from wells or village water supply. Those water sources are not checked and maintained. Use of these wells is closely linked to health hazards.

¹³ Report on environmental situation in Kosovo 2003

32 municipal and regional water companies do water supply¹⁴.

Only 28 % of population has access to sewage system, and mainly in urban areas. Wastewater treatment facilities do not exist, while some facilities for treatment of industrial waters do exist, but they are out of order.

Kosovo is a region with limited water resources, respectively 1600m³/ per capita. The entire network starting from water protection until the use and protection of water from pollution is not organized in a necessary level.

Problems with potable water supply in urban areas are the following: old water supply network, lost water in a network, misuse of potable water and illegal connections, non-payment of water bills and low level of awareness of citizens. There are no substantial programmes for management of water resources.

Kosovo doesn't have system for flood protection. Part of protection from flood that was built in the past is not maintained.

1.2.2. Orientations

- a) Drafting of plans for management of water resources based on the principle of water basin (Framework Water Directive EU) by sharing the responsibilities among all levels of participants.
- b) Providing with potable water for all citizens.
- c) Long term protection and preservation of water resources as a national treasure and their use based on the principles of sustainable development.

1.2.3. Priorities

- i. Approval of laws and regulations for water users and suppliers in harmony with EU laws and regulations.
- ii. Monitoring of water quality and quantity.
- iii. Drafting of plans for management of water basins (integral water management).
- iv. Protection from pollution of surface and ground waters.
- v. Approval of strategic planes in emergency cases.
- vi. Spreading of the water supply network and improvement of water supply for citizens.
- vii. Spreading of sewage system in urban and rural areas.
- viii. Drafting of National Plan for construction of wastewater and industrial water treatment plants, and to create suitable models for treatment of polluted waters in urban and rural areas.
- ix. Public awareness and education of population for rational use of water resources.

¹⁴ Source KTA - in charge of management of public enterprises

1.3. Soil

1.3.1. Present situation

Soil surface in Kosovo is about 1.1 million ha. Out of this, 53% is agricultural land, 41% is forest and forest land, and 6 % other land. 51 % of agricultural land is used for wheat, 45 % are used for pastures and meadows, 3 % vineyard, and 1% others¹⁵.

About 88 % of the agricultural lands are private properties, while the rests are socially owned and public property. About 51,000 ha (less than 10 % of agricultural land) are irrigated¹⁶.

Main environmental problem regarding land in Kosovo is related to the following:

- Large annual percentage of permanently or temporary lost of the agricultural land¹⁷, destroyed by illegal constructions, industry, transport, erosions, landfill constructions and other factors.
- Incomplete legislation and inefficient implementation of the existing legislation.
- Lack of the management strategy for sustainable use of natural resources.
- Lack of monitoring of the quality of land and legal punishment of degraders of the agricultural soil and riverbeds from extraction of sand and gravel.

1.3.2. Orientations

- a) Completing of legal cadres to protect the land, rational use of fertilizers and pesticides,
- b) Creation of agricultural area and maps, with the aim of regrouping of agricultural lands and to stop further fragmentation of agricultural land;
- c) Stopping of further soil degradation from polluters and erosion.

1.3.3. Priorities

- i. Drafting of land cadastre;
- ii. Rising of awareness among the population about the importance of land protection and adequate action of civil society on this issue;
- iii. Establishment of good land monitoring and spatial and environmental monitoring system;
- iv. Re-cultivation and adequate use of agricultural land;
- v. Establishment and enforcement of strict fines for non-compliance with legal regulations for land protection etc.

¹⁵ Agricultural statistics in Kosovo FAO 2000

¹⁶ Data from the Ministry of Agriculture, Forestry and Rural Development in Kosovo

¹⁷ Statistics shows that every year in Kosovo is lost 1. 000 ha of good quality soil.

1.4. Natural heritage

1.4.1. Present situation

Kosovo is characterized with biodiversity and rich natural heritage. Actually, about 4.27 %¹⁸ of the area is under legal protection, major part of it being under National Park “Malet e Sharrit”¹⁹.

Area	IUCN Category	Number of areas	Size in /ha	%
Natural reserves	I	11	698.4	1.52
National parks ²⁰	II	2	39 000	84.55
Natural monuments	III	38	4 867.9	10.55
Protected landscapes	V	2	1 681	3.17
Total			46 247.3	100

Previous applicable legislation on nature protection was incomplete and not harmonized with international standards on protection. It is evident the lack and inefficiency of management authorities that should have effectively protected those areas in accordance with international and local legal criteria. Out of this we have as a result: illegal woodcutting and degradation, destroying of main values, garbage in the most representative natural areas etc. Until today, the spatial plan was not drafted for the only existing national park, and that is the legal obligation of the authorities in charge of the national park management.

Lack of investment on protection, popularity and improvement of protected areas is evident.

Low level of awareness of population for protection of protected areas and their transformation into possible economic source for reduction of poverty. Management of the areas was seen only in a context of stopping and limitations having in mind their experience from the previous authorities in the name of protection. NGO sector in this field is in the first phase of activities and projects.

1.4.2. Orientations

- a) Completing of legal regulations for protection of nature and enforcement of existing legislation for protection of those areas.
- b) Sound management of protected areas.
- c) Establishment of the cooperation with scientific cadres of Prishtina University with the aim of challenging the scientific researches within areas with large natural values.
- d) Drafting of protection programs, popularity and improvement of protected areas and working with the population for increase of awareness.

¹⁸ The area of National Park Bjeshkët e Nemuna (about 60 000 ha) are not included.

¹⁹ Law on National Park Malet e Sharrit OGK. Flora of Malet e Sharrit makes about 25 % of Balkan Flora and 18 % of European Flora

²⁰ National Park Bjeshkët e Nemuna is in a procedure of declaration.

1.4.3. Priorities

- i. Drafting of the law for nature protection in harmony with modern international standards for nature protection.
- ii. Strengthening of existing management authorities for protected areas and their establishment in areas where they don't exist.
- iii. Increase of capacities of the Institute for Nature Protection for monitoring and efficient management and protection of protected areas.
- iv. Preparation and update of the register of protected areas.
- v. Intensification of work and activities in awareness of population living within protected areas.

1.5. Biodiversity

1.5.1. Present situation

Based on the up-to-date researches in Kosovo are inventoried about 1,800 types of flora, but there are suppositions that their number might be about 2,500. What makes Kosovo flora and fauna important and attractive is huge number of endemic, endemic-relict and sub endemic variety. Especially important is a local endemic group of 13 types, while their spreading is limited; they are spread only in some Kosovo mountains.

Vegetation of Kosovo is classified in 139 associations, 63 alliances, 35 orders and 20 classes.

Kosovo has about 230 species of wild vertebral, while invertebrate species were studied very little and from this group we have data that there are about 150 types of butterflies and about 400 types of water macrobenthos.

The richest areas with fauna in Kosovo are in Malet e Sharrit and Bjeshkët e Nemuna where it is estimated that there are: 8 kinds of fish, 13 terraqueos, 12 kinds of elusory, 154 kinds of birds, 37 kinds of mammals and 147 kinds of daily butterflies.

Kosovo doesn't have the inventory of biodiversity. Legal mechanisms didn't treat in the past protection of biodiversity that lead to uncontrolled loss of curative species etc. Because of the lack of good project, no red list or red book has been drafted. Enormous destruction of the forest is inevitably reflecting to the loss of biodiversity.

1.5.2. Orientations

- a) Integral protection of nature, protection of species and their habitat, protected areas and control of actions that might risk natural resources.
- b) To complete the legal cadres for nature and biodiversity protection.
- c) Protection of rare flora and fauna species and endangered species, especially endemic, endemic-relict and sub endemic ones as well as genetic fond of flora and fauna.
- d) Protection and efficient management of protected areas rich in biodiversity (strict reserves, national parks).
- e) Research and inventory of biodiversity.

1.5.3. Priorities

- i. Research and inventory of biodiversity for drafting of the Red Book of species in Kosovo.
- ii. Proceeding with establishment of National Park Malet e Sharrit as a reservation of biosphere within UNESCO program.
- iii. Protection of Sharr and Bjeshkëve të Nemuna as an ornithology-reserves (IBA –Regions) in accordance with international documents on protection of birds.
- iv. Use of natural resources, spatial planning and development programs must be in harmony with the legislation and strategy.
- v. Education and increase of the awareness must constantly improve in all society levels and to influence on preservation of biodiversity.

1.6. Waste

1.6.1. Present situation

About 90% of urban population in Kosovo has access to public services for collection and waste disposal, while included rural areas are 10%. Generation of domestic waste, based on the recent data, is 1.2-kg/per capita/day. Tax for waste is 3 Euro/per family and collection of bills is about 30-40%. Out of total 30 municipal landfills, 26 are rehabilitated with a help of donors and 7 of those rehabilitated ones were closed. With a help of European Agency for Reconstruction and other donors at the moment are under construction 9 regional landfills. Classification and recycling of waste, is not done in Kosovo, yet. Hazardous waste is mainly connected with huge industrial complexes and main “hot spots” are: Trepca, KEK and Battery factory in Gjilan²¹.

Main problems for waste management in Kosovo are: lack of waste management policy, services (collection, transport, information content, analytic services).

1.6.2. Orientations

- a. Establishment of the infrastructure for waste management.
- b. Gradual reduction of waste at the source before disposal and energetic uses of the waste or reuse.
- c. Gradual reduction of waste hazard.
- d. Gradual increase of inclusion of the population in the waste treatment system.

1.6.3. Priorities

- i. Completing of legal norms for waste management based on EU Directives.
- ii. Establishment of infrastructure for waste management.
- iii. Establishment of central database and information on state of waste management.

²¹ Situation with hazardous waste in Kosovo REReP 1.10. REC 2002.

- iv. Drafting of programs for construction of infrastructure premises in harmony with spatial plans.
- v. Arrangement and closing of old landfills.
- vi. Use of existing industrial capacities for treatment of hazardous waste.

1.7. Climate changes

A climate change caused by the negligence of man towards nature has globally endangered the environment. Being aware of this fact, World, with Rio Declaration (1992) and with an obligation on development based on the concept of sustainable development and Convention on climate changes, has taken the responsibility for reduction of emission of gas that cause the “green house” effect, while Kyoto protocol represents a very important step for limitation of emissions²²

1.7.1. Present situation

Little data of climate changes in Kosovo and their contribution to wide impact on climate changes are available. The only available data that might do a rough estimation on climate changes are dated from 1985-1989. After this period of time, there are no available relevant measurements. Kosovo has a low level of economic development and it belongs to the group of countries under development⁴. Having in mind that the main energy resource in Kosovo is coal, with economic expansion, it is expected to have general increase of emission of gases with “green house” effect on the air.

1.7.2. Orientations

- a) Gradual reduction of climate changes in harmony with general principles of framework Convention (Rio 92) and accepted obligations, side by side with realistic economic development in a concept of sustainable development;
- b) Establishment of the system for setting, evaluation and solution of suitable measures for reduction of gas emissions in the air, “green house” effect;
- c) Building of institutional capacities for systematic solution of climate changes issue;

1.7.3. Priorities

- i. Establishment of Coordination body that will deal with problems of climate changes, in conformity with Kyoto Protocol dispositions and their mechanisms.
- ii. Drafting the register and cadastre of emissions based on the sources of “green house” effect gases²³.

²² CO₂, CH₄, N₂O, HFC, SF₆.

²³ Kosovo should send regular annual reports for calculation of emissions in the air of polluting particles to the Secretariat of Convention in harmony with CORINAIR methodology, and to be involved in interdisciplinary project “ calculation and cartography of critic pollutions in Kosovo ”. Therefore, we should start preparations for drafting of the first national report for UNFCCC for climate changes.

- iii. Inclusion of Kosovo in International discussions for climate changes;
- iv. Realistic evaluation of polluting emissions in the air for the period 1985-1990, in accordance with Kyoto Protocol requests, based on the IPCC methodology for 6 economic sectors.
- v. Use of financial possibilities of clearly defined rules for trading with dangerous gases between North and South²⁴.
- vi. Providing of data according to IPCC methodology, for sources of gas emissions of “green house” effect from 6 economic sectors²⁵.

1.8. Acidification

1.8.1. Present situation

Problem of acidification is regulated with Geneva Convention Protocols for air pollution above allowed limits from distance (LRTAP 1979), and especially with Protocol on further reduction of sulphur.

No attention so far was paid to this problem in Kosovo.

Economic production structure in Kosovo is based on extensive use of natural resources, and in the future it has represent a huge anthropogenic source of emission of “acid gases” (SO₂, NO_x, CO₂, VOC and NH₃). With their dry or wet sedimentation was caused the soil and water acidification, and with that degradation of water ecosystem, forest and it is damaged the cultural and architectural treasure. Main emitters of those gases are (Ores and Metallurgy Complex “Trepça”, “Feronikeli” etc.) are not working and therefore the emission of polluting gases in the air has been reduced. Although emission of SO₂ remains too high. Full engagement of the industry will multiply the pressure into environment.

Kosovo at the moment doesn't have the system for monitoring of acidification, etherification and formation of troposphere ozone²⁶, no preparations for application of LRTAP²⁷ Protocol took place. Expert potentials are limited to monitor this problematic.

1.8.2. Orientations

²⁴ South (New Delhi), i.e. possibility of investment in undeveloped countries, to protect the climate, in this case it is calculated their contribution for limitation of damaging gases in the air.

²⁵ Here are included: fuel expenditures, data on import of fuel oil and gases, data on some industrial productions, data on different live stock and land surface with different crops, data on forestry surface, data on municipal waste etc.

²⁶ Formation of troposphere ozone is a global problem, because it penetrates in complication of photochemical reactions that takes a long time to happen, so that they might occur far away from the real source of pollution. Increase of NO₂ and VOC emission can be a cause for increase of landed ozone. Air pollution causes formation of winter smog (SO₂ dust particles and CO), as well as summer smog NO_x and VOC.

²⁷ During the time when Kosovo was an integral part of Former Yugoslavia, Yugoslavia has rectified only part of (EMEP) out of 7 protocols of LRTA Convention. On behalf of environmental impact and through “responsibilities towards the nature that developed countries has” based on the data for emission of pollution in air, Kosovo can receive favourable investments for reduction of emission of pollution.

- a) Inclusion of Kosovo and full implementation in “Cooperation program for monitoring and evaluation of above limits air pollution from distant areas in Europe–EMEP” based on SO₂ monitoring and similar matters.
- b) Drafting of the plan for respect of Geneva Convention and its 7 protocols.
- c) Reduction of emissions that are causing the acidification.

1.8.3. Priorities

- i. Establishment of monitoring system.
- ii. Training of cadres for using of this system.
- iii. Establishment of national body for coordination of activities in regard with Geneva Convention.

1.9. Protection of ozone

1.9.1. Present situation

Kosovo economy is not producing any of the chemical elements mentioned in annex A, B, C and E of Montreal Protocol²⁸ for protection of ozone, but it is the importer of products that contains some of the mentioned chemicals (mainly cooling devices and equipments used in households and for commercial needs). The major importer of those chemicals is sector for production and maintenance of cooling devices.

1.9.2. Orientations

- a) Gradual elimination of matters that are destroying the ozone layer.
- b) Respect for International Conventions and Protocols for protection of ozone layer.

1.9.3. Priorities

- i. Drafting of the registry of users of matters that destroys the ozone.
- ii. Drafting of the national program for gradual elimination of matters that destroys the ozone.
- iii. Cooperation with Agency for Implementation of Montreal Protocol, with UN Environmental Protection Program (industry and environment – UNEPIE),
- iv. Awareness about the importance of protection of ozone layer.

1.10. Management of risks and accidents

Chemical industry in mainly not functioning since 1989. In Kosovo was still not applied system for management of risks and accidents. It was not implemented supervision of import and use of hazardous chemical elements. Competences for this are divided in the following ministries: Ministry of Environment and Spatial Planning Ministry of Health,

²⁸ Kosovo is not direct signatory of any Conventions or Protocols for protection of ozone. During the time when Kosovo was constitutional element of Former Yugoslavia, SFRY has rectified Vienna Convention and Montreal Protocol, but didn't sign the amendments of that protocol (London, Copenhagen, Montreal and Beijing)

Ministry of Labour and Ministry of Public Services. Based on our evidence, out of general number of accidents, the major number is in the industrial sector (Trepça, KEK, Balkan etc.); second place belongs to road transport of hazardous materials.

1.10.1. Exposure to chemical actions and protection

Kosovo for production of food spent up to 15 times less mineral fertilizer and pesticides compared with western countries, but it has the problem with unprofessional use that results with high level of concentration of chemicals in food and water compared to the quantity of used chemicals. Monitoring system and exchange of data among of different governmental bodies is not developed as well as public information system. There is the lack of education system of individual producers for use of chemicals. Kosovo is not yet included in International Program for Chemical Safety (IFCS).

1.10.1.1. Orientations

- a) Drafting of laws in harmony with EU and other compulsory International Instruments (implementation of EU Directives “Seveso” I and II)
- b) Initiation of procedures for signing of Stockholm Convention (POP), and Rotterdam Convention (PIC).

1.10.1.2. Priorities

- i. Drafting of the register for forbidden and restricted chemicals,
- ii. Implementation of application of health security and environmental protection (HSE program and to evaluate the level of risk of used chemicals),
- iii. Establishment of the data exchange system for chemicals,
- iv. Starting of procedure for drafting of law on chemicals,
- v. Public information and possibility of participation in prevention and readiness for action in case industrial accident.

1.10.2. Biological security

1.10.2.1. Present situation

There are no activities in Kosovo regarding genetic changes of plants and their production for commercial purposes.

It is not implemented the monitoring system of Genetically Modified Products (GMO) and it exist the possibility of uncontrolled import of GMO from the neighbouring countries.

1.10.2.2. Orientations

- a) Creation of conditions for controlling of possible GMO in Kosovo.

1.10.2.3. Priorities

- i. Increases of capacities do deal with GMO problem.
- ii. Kosovo legislation for use of GMO as a country that is awaiting for the process of joining the European Union, should be harmonized with EU directives: Directive 90/219/EEC, 90/220/EEC, 94/211/EEC with additional amendments.

1.10.3. Radiation

1.10.3.1. Present situation

Kosovo, according to International Atomic Energy Agency (IAEA), do not belong to the countries that are using the sources of ionised radiation in medicine, industry and research. Kosovo doesn't have nuclear facilities and nuclear program, nor nuclear materials neither considerable amount of nuclear waste. Radioactive material and radiation sources are used only in medicine (radiotherapy) in very small amount due to the fact that the medical equipment is not installed.

It exist a landfill of radioactive waste in Obilic.

Problem in Kosovo is caused by the so-called lost sources of radiation²⁹, soil contamination with depleted uranium (DU) during the war³⁰, and ashes from the power plants.

Monitoring of radioactivity in landfills doesn't exists, nor researches of their impact to human health in surrounding area. There are no data of impact in flora, fauna, soil, air, surface and ground waters.

In Kosovo it doesn't exist the recording system of ionising and non-ionising sources of radiation. Law does not regulate protection from this radiation and there are no plans and measures for reduction of exposure to this kind of radiation.

1.10.3.2. Orientations

- a) Harmonization of laws for nuclear safety and protection from the radiation according to EU and International safety standards for protection from ionising radiation and security of the radiation sources.

1.10.3.2. Priorities

- i. Establishment of necessary capacities for monitoring of ionising and non-ionising radiation sources.
- ii. Border control and preventing of unauthorized transport of radioactive material.
- iii. Setting of legal limits for placement of BST sources by the operators.

²⁹ Lost sources of radiation are: fire alarms, radioactive lightning-rods, used medical and industrial equipment that are lost during the bombardment of premises during the war or after destruction of those premises after the war that means that they do present a potential risk for every person whom might be in contact with them without knowing and recognizing the risk.

³⁰ Depleted Uranium in Kosovo – UNEP 1999, report in which DU was detected in 112 measuring points in Kosovo. UV content is considered to be 9.3 t, out of 31. 000 shells used by NATO in Kosovo.

- iv. Identification of electromagnetic sources and their supervision (to apply the register of ionising and non-ionising sources of radiation).

1.10.4. Civil protection

1.10.4.1. Present situation

Aim of the civil protection is to protect the population, material good and environment from risk.

Ministry of Public Services, through Directorate for Civil Protection is in charge of civil protection and its fulfilment. Responsibility for civil protection lies within: owners, users of flats and commercial facilities as well as territorial competent authorities for civil protection (municipalities and regions).

1.10.4.2. Orientations

- a) Long term protection of eco-system and in cases of accidents,
- b) Establishment of the system for care, organizing the preventive, readiness and removal of eco-accidents in local level using the APELL (Awareness and Preparedness for at Local Level).

1.10.4.3. Priorities

- i. Inclusion of civil protection in drafting the cadastre of polluters and registry of hazardous materials in order to know the locations where dangerous activities that produce, use, dispose or transport poisons and hazardous materials were identified.
- ii. Inclusion of civil protection in drafting of spatial and urban plans.
- iii. Participation of civil protection in drafting of investment projects that have to deal with protection and security of people, material goods and environment.
- iv. Education, education of population and legal entities.
- v. Performance of measures and activities for protection and rescue in critical cases.

Part 2. Environmental sectors

2.1. Energy

2.1.1. Present situation

Energy in Kosovo relies mainly in electricity production and it represents one of the most important sectors of Kosovo economy. Resource for obtaining the primary energy is very high³¹, but in aspect of impact on environment is very unfavourable, because it mainly consists on huge lignite reserves. Actually, out of total annual electric energy

³¹ The largest coal reserves are concentrated in three main coal basins: Kosovo basin with geological reserves above 11 billion tons, Dukagjini coal basin with geological reserves above 2,5 billion tons and Drenica coal basin with geological reserves more than 100 million tons.

produced in Kosovo, about 97% is provide through burning of coal in power plants, while hydropower provides only about 3% of annually produced electric energy. Main sources of electricity production are still the existing lignite resources and better use of hydropower. Solar, thermal, wind and biomass energy is not used at all.

Installed power of power plants is about 1.478 MW, while coal supply is done from the open pit mines in Mirash and Bardh, with projected capacities of 16 million tons/year. Actual level of power plant production capacities is very low – it is only about 30% of installed capacity. Kosovo doesn't have its source of liquid and gas carburant; therefore, supply with those carburant is mainly done through import. In general, efficiency of energy use is very low.

Energy sector in Kosovo is an enormous polluter, especially in a wide region of Prishtina. Gas emissions from power plants do have a high level of dioxide, sulphur, nitrogen oxides and dust. Due to the lack of treatment of industrial waters, power plants cause water pollution. Additional problems are ash hills that have more than 40 million tons of ash and are taking about 150 ha of agricultural land, as well as craters created during the coal exploitation in lignite open pit mines.

2.1.2. Orientations

- a) Reduction of emission in air, water and soil from the energy sector;
- b) Increase of energy efficiency in all production spheres and energy use;
- c) Use of extraction and production methods that will enable sustainable use of natural resources (raw material and water) in this sector;
- d) Use of renewable and alternative energy resources;
- e) Applying of friendly environmental technologies for energy production;
- f) Establishment of monitoring system and electronic database.

2.1.3. Priorities

- i. Completing of legal regulations and its harmonization with EU standards;
- ii. Setting of time limit framework for reduction of emissions in air, water and soil;
- iii. Reduction of energy loss in all fields of production and distribution;
- iv. Economic growth should not be conditioned with exclusive use of energy resources;
- v. Replacement of old equipment in energy sector;
- vi. Encourage the use of combined heating;
- vii. Drafting of operative plans in cases of ecological accidents;
- viii. Control of burning fuel quality and imported liquid and gas carburant;
- ix. Removal and reuse of existing ash landfills of power plants, rehabilitation and re-cultivation of craters created during the open pit mines lignite exploitations.

2.2. Industry and mining

2.2.1. Present situation

Until the end of 80's, industry and mining were participating in gross domestic production with about 50%, and was mainly based on rich natural resources (coal, ores etc.)³². After the end of war, the major part of industrial and mining activities has been stopped (metal and non-metal ore mines and respective metallurgic complexes) due to the delays in process of privatisation of socially owned enterprises. Private sector of production activities has started to develop during the last decade, but without sound concept.

Due to the drastic reduction of production, level of pollution from the industry and mining has been reduced, but some of the environmental problems from the past are still present: old technology and equipment, huge amounts of mining and metallurgy waste from the past, continues to be a permanent source of environmental pollution³³. Power plants mines in Kosovo still continue to dispose their solid waste without caring for environment. Due to the lack of completed legal framework and its enforcement, private production sector, although in its development phase, do represent a source of environmental pollution.

2.2.2. Orientations

- a) Reduction of emission in air, water and soil in accordance with UE principles;
- b) Increase of eco efficiency in industry;
- c) Transfer of environmental friendly technologies;
- d) Promotion of methods and techniques of extraction and production that provides sustainable use of raw material, energy, water and other resources;
- e) Involvement of the industry as a partner for solving of environmental problems;
- f) Establishment of the system for systematic monitoring of air pollution.

2.2.3. Priorities

- i. Completing of the legal cadre for environmental protection from production processes, industrial products and its harmonization with International and EU norms;
- ii. Gradual elimination of existing old technologies that jeopardize the nature degradation, environmental pollution and endanger health of population;
- iii. Institutional support to projects that are based on clean technologies, ecologic enterprises and renewable resources;
- iv. Drafting of plans for industrial zones and business parks, with special emphasize in locating the polluting sectors far away inhabited areas;
- v. Reduction of the quantity of industrial waste, with special emphasize on hazardous waste and maintenance of the landfills;

³² After the 80's, the significant drop in industry and mining occurred. Until the year 1988 industry and mining made 47,4% of gross country production, in 1994 this percentage dropped to 21,1%³². Source: Economic activities and democratic development of Kosovo, RINVEST, 1998.

³³ The largest quantities are from "Trepça", and they are in millions of tons. Waste and garbage from the past is placed near other mines in Kosovo, and in metallurgic complex of Ferro-nickel in Gllgoc.

- vi. Support for scientific researches that do contribute to environmental protection in industry and mining;
- vii. Establishment of the centre for clean production;
- viii. Gradual harmonization of legislation with EU Directive 96/61 regarding the best available production technology (BAT).

2.3. Transport

2.3.1. Present situation

Transport in Kosovo is mainly based on road transport. Railway is not in full function after the war. Kosovo has totally 1.925 km of main and regional roads that with all investments are still in bad shape. After the end of war, an enormous increase of vehicles occurred; actually there are about 215.000 registered vehicles³⁴ and considerable number of KFOR and UNMIK vehicles³⁵. Participation of public transport in general transportation is low.

The largest numbers of vehicles in Kosovo are old, made in 80's and beginning of 90's, and technically out of order. With use of bad quality fuel and without catalyst³⁶. Therefore, they do present a source of air, water and soil pollution, and they do also cause a noise above the allowed limits. Environmental pollution is caused through uncontrolled used oil spillin g and old vehicles.

2.3.2. Orientations

- a) Reduction of emission of polluting gases from vehicles;
- b) Noise reduction from vehicles;
- c) Development of road infrastructure that will be acceptable for environment;
- d) Development of more efficient and ecologically cleaner forms of transport;
- e) Regional cooperation on transport.

2.3.3. Priorities

- i. Completing of legislation for environmental protection from transport and its harmonization with International and EU norms;
- ii. Support for use of better quality fuel;
- iii. Use of alternative transport that will cause less environmental pollution (railways, transport means that runs on electricity, etc.);
- iv. Time limit for use of old vehicles and without catalyst;
- v. Enforcement of allowed noise level from the vehicles;
- vi. Full rehabilitation of existing road infrastructure;

³⁴ Ministry of Transport and Communications.

³⁵ It is evaluated that their number makes about 15-20% of total number of registered vehicles.

³⁶ Fuel and oils are fully imported. According to Custom data, during the year 2002 were imported 29.663.234 L diesel and 24.550.368 L petrol, and nobody controls their quality.

- vii. Solving of the problem of abandoned old vehicles.

2.4. Agriculture

2.4.1. Present situation and problems

Agriculture situation in Kosovo is in a very difficult position. Many farms are abandoned, while the infrastructure is partly damaged and in some cases it is fully damaged³⁷.

Agriculture as a sector contributes with about 30% in Kosovo GDP, while together with the forestry it makes about 35 %.

Kosovo do not fulfil needs of the population with its own agricultural products, therefore 80% of agricultural products are imported. The quality of those products is very suspicious and is not controlled in competent manner.

Import and use of fertilizers and pesticide is done without control and monitoring.

Main problems in agricultural sector are the following:

- Lack of legal infrastructure in agriculture,
- Extensive production,
- Weak control of agricultural locally produced and imported products,
- Inadequate use of fertilizers and pesticides.
- Pollution from slaughtered and dead animals, and from the forestry.
- Lack of treatment of fertilizers from large and medium sized agricultural farms.
- Lack of ecological funds for agriculture.

2.4.2. Strategic orientations

- a) Completing of legislation regarding the destination of land.
- b) Protection and use of agricultural land for agricultural production.
- c) Orientation towards organic agricultural products.
- d) Sound management and use of fertilizers and pesticides.

2.4.3. Priorities

- i. Strict implementation of the law.
- ii. Increase of awareness among the population about the importance for protection of agricultural land and risks for using of pesticides and fertilizers.
- iii. Applying of alternative methods of agricultural products and compost.

2.5. Forestry

2.5.1. Present situation and problems

³⁷ MAFRD, Green Book of Kosovo, Prishtina 2003, page 9

Kosovo has about 455 000 ha of forest, out of that 54 % are state owned property, and 46 % are privately owned property. In the year 2002, for technical needs and heating were cut 185 890 m³ of wood³⁸. Only about 2000 ha were reforested.

The main identified problems in forest management are the following:

- Poor forest management;
- Illegal woodcutting and undefined clear legal measures for sanction of illegal woodcutting;
- Poor monitoring and control of the forest;
- Limited investment possibilities.

2.5.2. Strategic orientations

- a) Preventive protection of forest from degradation;
- b) Increase of the quality of crops in a function of sustainable management of forest according to the principle:
 - Prevention;
 - Conservation of biologic diversity;
 - Inter-age equality of forest;

2.5.3. Priorities

- i. Monitoring of the forest in terms of illegal woodcutting.
- ii. Stopping of cutting, damages, usurpation and other illegal activities.
- iii. Drafting of the plans for prevention and protection from fire and forest erosion.
- iv. Control of cutting places, trading, storages, warehouses and other locations.
- v. Increase of awareness of population for protection of forest.
- vi. Sustainable use of forest.
- vii. Production of nursery and forest cultivation.

³⁸ Data from MAFRD, without including illegal woodcutting.

CHAPTER III: IMPLEMENTATION OF THE STRATEGY

1. Environments and Spatial Planning

1.1. Present situation

Actually Kosovo has no spatial plan, due to the fact that the old spatial plan has expired in 2000. Drafting of new plan is in initial phase after the approval of Law on Spatial Planning³⁹.

1.2. Orientations

- a) Inclusion of environmental issues is drafting of spatial and urban plans.
- b) Preservation of cultural and natural heritage with respect to UNESCO and other International standards.
- c) Cultivation of natural and cultural heritage in function of stimulation of eco tourism.

1.3. Priorities

- i. Identification of areas with special destinations in Spatial Plan of Kosovo: national parks, industrial areas.
- ii. Coordinated cooperation among central level and local level institutions and planning for environmental and cultural heritage protection⁴⁰.
- iii. Drafting of spatial plans for areas with special destination.

2. Education

2.1. Present situation

Education plan and programmes and education in different school levels are in drafting procedure. It is foreseen the incorporation of environmental problems and sustainable development. Education out of schools, especially education of interested groups (farmers, consumers, housewife's etc.) almost it doesn't exist.

Education plan and programmes are not enough to deal with environmental problems in a needed and critical manner.

Environmental NGOs has small efficiency due to the lack of experience and financial funds.

Public information media do not closely follow up environmental problems. They quite often approach environmental problems in a sensational way, while education and information about environment through public and local radio and television is not satisfactory.

³⁹ Law on Spatial Planning 2003/30 was approved in April 2003 and signed in September 2003.

⁴⁰ Conclusions of High level International Conference on Spatial Planning held in Prishtina in July 2003

2.2. Orientations

- a) Integration of environmental issues in all levels of education plans and programs.
- b) Institutional and financial support for increase of the information level and education of population regarding environmental issues.

2.3. Priorities

- i. Inclusion of environmental issues and sustainable development in education programs.
- ii. Increase of inter-ministerial cooperation in joint environmental programs.
- iii. Support of environmental NGO's regarding education and awareness of population for environmental issues.
- iv. Creation of conditions for overall and quality media information of population for environmental issues.

3. Science and development

3.1. Present situation

In Kosovo do not exist institutions that would be deal with scientific problems in environmental protection field.

Is evident the lack of scientific institutions, scientific-research projects and scientifically specialised cadre for environment. Scientific institutions during the last decade of the XX century has stagnated due to the fact that they were prevented to participate in world science trends, that was caused by the political circumstances created at that time in Kosovo.

Few researches that were done in that time and now after the war, regarding environmental problems were mainly individual one and quite often were not directly related to the needs for environmental protection.

Undefined status of Kosovo didn't enable inclusion in mechanisms, agendas and international scientific researches in the field of environment.

3.2. Orientations

- a) Increase of institutional and expert capacities that are working in research of environmental problems.
- b) Structural cooperation of scientific institutions in different economical sectors in Kosovo.
- c) Cooperation of scientific institutions with international institutions on scientific projects.

3.3. Priorities

- i. Increase of specialized scientific institutions.

- ii. Financial support of scientific institutions and professional training of new cadres.
- iii. Increase of scientific capacities for transfer of clean technology, finding of new energy sources and friendly environmental raw materials.
- iv. Scientific researches in this field must rely on objectives of Environmental and Sustainable Development Strategy.

3. Environmental monitoring and information

Kosovo lack's environmental database due to the lack of monitoring for more than a decade. Monitoring is expensive and from this point of view it is a challenge for this phase of development to enable environmental monitoring. Nevertheless, without monitoring, it is difficult to find the sources and level of pollution, endangered areas, direct and indirect pollution effects etc, on which would have been drafted programs and project for environmental protection.

4.1. Orientations

- a) Complete institutional functioning of monitoring mechanisms, increase of human capacity and supply with monitoring equipment.
- b) Organisation, design and establishment of monitoring network at local level for monitoring of: water, air, soil and biodiversity.
- c) Drafting of approach in international monitoring projects and programs in order to learn from their experience and possibilities that they offer.

4.2. Priorities

- i. Complete functioning of KEPA⁴¹ including: completing the staff with qualified cadres, supply with funds and necessary monitoring equipment.
- ii. Establishment of Information System for Environmental Monitoring with modern software programs, cooperation and reporting in EEA (European Environment Agency) and EIONET.
- iii. Establishment of environmental monitoring system by major polluters in sectors that have potential impact on environment.
- iv. Defining of monitoring structure and responsibilities of all legal participants in monitoring.

5. Inspection

5.1. Present situation

Environmental inspectorate performs supervision of legal provisions for environmental protection⁴². In majority of municipalities, neither legislation nor environmental

⁴¹ Environmental Law 2003/9, article 36 on monitoring of discharge, spreading and data registration

⁴² Environmental Law 2003/9 article 43 on inspectorate. Kosovo Government Administrative Instruction 2004/2 clearly defines duties and responsibilities of environmental inspectors.

inspectorates are functioning due to the lack of environmental directorate in those municipalities. Problems that inspection is facing is related to the following

- a. Un-harmonized activities of different inspectorates (sanitary, construction, spatial planning) as well as central and local level inspectors.
- b. Lack of inspectors for protection of nature.
- c. Lack of experience and adequate equipment for fast and efficient reaction regarding the violation of environmental rules.

5.2. Priorities

- i. Completing of legislation on responsibilities, authorisation and competences of environmental inspectorate for systematic and efficient implementation of control of environment and nature protection.
- ii. Structuring of Inspectorate within the Ministry, increase of professional capacity of inspectors and supply with equipment.
- iii. Regulation of functions and responsibilities, and clear division of role for municipal environmental inspectors.
- iv. Cooperation and harmonization of environmental inspectorate function with other inspectorates (sanitary, construction, water, natural resources) within their fields of activities etc.
- v. Speeding up the court processes and efficiency in regard to cases (files) reported by the environmental inspectorate.

6. Economic instruments

6.1. Present situation

In Kosovo for time being are not implemented the economic instruments for drafting of efficient policies for environmental protection. There is no system of mechanisms for financing, i.e. it doesn't exist stable financial source for financing of environmental protection activities.

Due to the lack of relevant and adequate monitoring of polluters, it is going to be very hard to implement efficient economic instruments in Kosovo. Additional obstacle is going to be unskilled administration that should efficiently implement and supervise application of economic instruments. Ecological awareness of businessmen is still very low.

EU policy clearly defines implementation of economic instruments as better way of economic and environmental integration.

Legislation is not offering enough challenge to economical entrepreneurs to pay more attention to environmental protection during their activities, especially regarding the use of clean technologies or better control of existing technologies in regard to prevention of pollution.

6.2. Orientations

Basic orientation of the Strategy will be support in establishment of economic instruments by preserving the economic sustainability of business.

6.2.1. Aims of economic instruments

Economic instruments are placed with the following aim:

- To stop or reduce emission of polluters through additional financial taxes.
- To provide funds for environmental protection projects and removal of the caused environmental damages.
- To promote acceptable ecological behaviour in all levels: from production to consume, from individual to a whole society.

6.2.2. Advantageous of economic instruments

Application of economic and fiscal instruments, carefully selected, in report with all other instruments has the following advantageous:

1. It enables the implementation of the principle “polluter pays” and “userpays”,
2. It encourage saving of resources (material and energy),
3. Supports implementation of new environmentally acceptable technologies and products.
4. Promotes development of new reports in market, competition and employment,
5. Stimulates reduction of emission and pollution under the limits of pollution regulated by law.
6. Influence in changing of habits of producers and consumers.

6.2.3. Evaluation of efficiency of economic instruments

During formation of instruments for environmental protection, their efficiency should be evaluated based on the following:

1. Efficiency on environmental protection,
2. Equal report of all players (interested parties) towards whom the instruments will be applied.
3. Administrative acceptance (integration in existing system and implementation reality).
4. Financial endurance of entrepreneurs (enduring expenditures).

6.3. Priorities

- i. Establishment of fund for environmental protection⁴³ (Eco-fund).
- ii. Drafting the register of measures for successful implementation of economic instruments.
- iii. Studying of possible effects of political packages, especially bill of expenses for reduction of pollution in each sector, consequences and legislation;
- iv. Thorough consultations with interested parties and their opinion for the sake of increase of ecological awareness and business ethic.

⁴³ Fund will not be used for financial support or loans to any public institution or enterprise. Fund will be used for legal requirements of public financing for management of standards and accounting. Any buying of goods, services or business with money from the fund. Strictly will be observed legal regulations and additional sub-legal acts for public supply and they should be directly linked with goals mentioned in provision 2 of this article.

7. Economic instruments in priority sectors

7.1. Energy

Sector of energy is a sector where many priority topics meet: creation of technological waste, emission of pollution, use of un-renewable energy and resources.

7.1.1. Priorities

- i. Joint financing of projects for increase of energy efficiency of existing facilities;
- ii. Reduction of general expenditures, in limited time, for entrepreneurs who on their expenses have improved the energy efficiency;
- iii. Stimulation for use of renewable energy sources;
- iv. Subventions in price for gas and “green petrol”;
- v. Application of extra taxes for use of fossils carburant;
- vi. Application of additional taxes for production of allowed carburant, that damages the quality of environment;
- vii. Clear differentiation of energy prices;
- viii. Different tax for emission of CO₂;
- ix. Application of taxes for emission of CO₂;
- x. Remissions for production energy saving household equipments.

7.2. Transport

Transport, especially road transport belongs to the group of biggest environmental polluters, mainly through release of polluting gases from vehicles. Transport pressure towards environment is increasing with very high intensity.

7.2.1. Priorities

- i. Subvention of railway transport (transport of passengers by railway,
- ii. Subvention of public transport, especially in cities so that people will use public transportation instead of their private vehicles.
- iii. Different taxes and custom taxes for import of vehicles (personal and transport vehicles), having in mind their age, fuel consumption, do they have catalyst etc?
- iv. Increase of taxes for use of engine vehicles,
- v. Increase of taxes for lead fuel,
- vi. Setting of taxes for removal of old vehicles and tires, in harmony with EU directive.

7.3. Industry

Industrial impact – for using the environment, polluting emissions in air, water and soil as well as generation of waste – must be controlled with additional “hard” measures.

7.3.1. Priorities

- i. Drafting of programs for favourable loans for industry that decides to perform technological changes (regarding the process, energy saving, new products, waste reduction, use of recycled products) that are suitable for environment,
- ii. Waive part of custom clearance for import of equipments that directly or indirectly are used for reduction impact on environment,
- iii. Implementation of custom remissions on environmental acceptable products,
- iv. Reduction of VAT, under preconditioning that it will be used for environmental protection projects,
- v. Reduction of taxes for allowed limits of environmental pollution (polluted waters, emission of pollution in the air, handling of waste etc.) in equivalent amount that polluter spent for solving of those problems,
- vi. Increase of existing taxes and applying of additional taxes for products that have impact on environment,
- vii. Increase of taxes for disposal of industrial waste,
- viii. Application of high custom taxes on products that have impact on environment,
- ix. Application of severe fines for those who DO NOT respect environmental law.

7.4. Tourism

The only tourism variants that are expected in Kosovo are the following: village tourism, winter tourism and hiking.

7.4.1. Orientations

- i. Stimulation for construction of hotels with solar collectors,
- ii. Preconditioning of hotel construction with entire solution for infrastructure,
- iii. Providing of favourable loans for investments on premises that expand their offer but do not damage the environment.

7.5. Agriculture

Realistic option in Kosovo is development of ecological agriculture. Having in mind-undefined orientation, general level of agricultural products, level of used fertilizers (up to 7 times less than average of EU), in future, we should research economical instruments that offer best results.

7.5.1. Priorities

- i. Providing of loans for ecological agricultural farms,
- ii. Providing of remission for import of inputs for ecologic agriculture and selling of ecological food products.
- iii. Subvention of productions that support biological diversity of agricultural system, that is not economically attractive.

8. Partners in fulfilment of the strategy

8.1. Central and local level

Sustainable development cannot be implemented if all partners are not involved. It is important that leading role of administration is the one that should provide conditions for other partners and to mobilize all capacities in all sector policies and different administrative levels.

Kosovo, more that other societies in transition, is facing problems of inefficient administration, including environmental protection that was not adequately regulated until now. Furthermore, it is necessary to establish the cooperation of administration with other groups and other countries.

In central level, first of all it has to do with involvement of cooperation principles for protection of environment in all spheres that are covered through the governmental policy that directly or indirectly has impact on sustainable development. Close cooperation among different levels of administration is necessary.

It is necessary to clearly define division authorities and responsibilities.

It is very important to provide equal cooperation among small communities (smaller administrative units) with large communities, based on territorial principles or principles of interest.

It is not possible to achieve sustainable development in global level if that is not done first at local level.

Local level is the level where the major environmental protection concerns were identified in which general opinion has major impact in solving them.

Local level, in fact is a crucial factor in process of creation of conditions for changes in behaviour, production, consumption and territory use.

Therefore, it is very important, as soon as possible, to provide legal measures for division of competences between two levels towards bringing them into one level.

8.2. Public and private companies

Every economic activity exploits natural resources and causes environmental pollution. Conditions for approval of economic activities must be clearly specified and all companies should undergo the same market conditions.

There should not exist difference between public and private company in imposing of those conditions. Business community should be an active partner in implementation of environmental protection policy.

8.3. Individuals, groups, public opinion

It is very important to increase public awareness about the fact that sustainable development requires contribution of all participants (where someone should get rid of something, in another words "loose") in order to provide beneficent for entire society, that will ultimately bring better beneficent for all.

Regarding to this, individual as a member of the society must have in mind the following important roles:

1. As a person with responsibility in a position with political influence and decision-making process.
2. As a direct polluter and household waste generator, as employer and employee, as a resident of suburb and person in fulfilment of his own interests;
3. As user of good and services, having in mind that causes and solutions of environmental problems, quite often functions with consumers solution.

Active involvement of NGO's on environmental issues and protection of consumer, trading unions and professional associations can be a key factor in joint process for increase of awareness, motivation and involvement of individuals/general public in the process of sustainable development and representation of public interest and care for environment. NGO's are the most important partner in providing of sustainable development in general.

State should create conditions in free access to information, involvement in decision-making and implementation process and financial conditions for individual or group activities.

Development of programme and implementation must involve formal groups in more intensive way, due to the fact that those groups didn't play the role that they might have played. In first place, this has to do with trading unions, business associations and interested groups, entrepreneurs, farmers, children, youth, females, citizen's association, organizations/scientific and professional associations etc.

9. Environmental priorities in Kosovo

Main environmental priorities for period of 2005-2015 will be:

- i. Completing of the legislation for environmental protection, in harmony with existing conditions in Kosovo, gradual fulfilment of EU standards and efficient implementation of existing one.
- ii. Establishment of competent capable institutions completed with human capacities and equipped with equipment for implementation of environmental policies. The following institutions in the first place:
 - Decision making institutions
 - Monitoring institutions
 - Supervision and inspection institutions.
- iii. Gradual increase of access to clean potable water for population, sewage system, waste treatment system and support to programs for recycling of black waters and waste;
- iv. Rational use of natural resources: soil, water, minerals, forest etc. Paying attention in the use of endangered kinds and orientation towards renewable resources.

- v. Expand the area and protection of natural heritage areas and those with special natural value together with increase of capacities for their efficient management in accordance with Rio Declaration.
- vi. Establishment and functioning of environmental monitoring network in whole Kosovo with priority to major industrial pollutants “hot spots” in Kosovo.
- vii. Provision of necessary financial and economic instruments, for environmental protection in harmony with economic development. Fast establishment of eco-fund.
- viii. Development of long term education programs, public awareness campaigns and support for environmentally focused scientific projects.
- ix. Support the concept of import of clean technologies in Kosovo in starting phase of new industries and restarting of existing industry.
- x. Application of the concept of energy efficiency in all sectors of energy users.

Vocabulary

1. *LRTAP- Convention on Long-Range Trans boundary Air Pollution – Geneva, 1979.*
2. *EMEP Protocol (Geneva 1984) Protocol for financing of long-term programme for cooperation, monitoring and transborder evaluation of transmission of polluting particles in air in long distances in Europe.*
3. *Convention for the protection of the Ozone Layer, Vienna 1985.*
4. *Convention on Climate Change, United Nations Framework Rio 1992.*
5. *Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal, Basel 1989.*
6. BAT- (Best available technology).
7. BATNEEC - Best Available Technology Not Entailing Excessive Costs.
8. CORINEAIR methodology – EU used methodology for monitoring of emission in the air
9. Stockholm Convention POPs - *Permanent Organic Pollutants.*
10. *Convention on Prior Informed Consent (PIC) Rotterdam 1998.*
11. Aarhus Convention – right on information, public participation in refusal and right on ecologic questions.
12. *APELL- Awareness and Preparedness for Emergencies at Local Level.*
13. GEF- *Global Environment Fund.*
14. *IPPC Industrial Pollution, Prevention and Control Directive EC 96/61.*
15. SAP- Stabilization and Association Process.
16. WWRO- Water and Waste Regulatory Office.
17. UNMIK- United Nations Mission of Implementation in Kosovo.
18. KFOR- Kosovo Force.
19. EMS- Environmental Management System.
20. IBA Regions- Important Birdlike Areas.
21. REReP- Regional Environmental Reconstruction Programme
22. IAEA- International Atomic Energy Agency .
23. UNEP- United Nations Environment Programme.

ANNEX

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