



Republika e Kosovës/Republika Kosova/Republic of Kosovo  
*Qeveria - Vlada - Government*  
Zyra e Kryeministrit -Ured Premijera -Office of the Prime Minister  
*Agjencia e Statistikave të Kosovës - Agencija za Statistiku Kosova -*  
*Statistical Agency of Kosovo*

## Series 2: Agriculture and Environment Statistics

# Some facts on Environment 2011



ENTI I STATISTIKËS SË KOSOVËS  
ZAVOD ZA STATISTIKU KOSOVA  
STATISTICAL OFFICE OF KOSOVA





Republika e Kosovës/Republika Kosova/Republic of Kosovo  
*Qeveria - Vlada - Government*  
Zyra e Kryeministrit - Ured Premijera - Office of the Prime Minister  
*Agjencia e Statistikave të Kosovës - Agencija za Statistiku Kosova -*  
*Statistical Agency of Kosovo*

## Series 2: Agriculture and Environment Statistics

# Some facts on Environment 2011



ENTI I STATISTIKËS SË KOSOVËS  
ZAVOD ZA STATISTIKU KOSOVA  
STATISTICAL OFFICE OF KOSOVA

Publisher: Statistical Agency of Kosovo (SAK)  
Date of publication: September 2011  
©: Statistical Agency of Kosovo Reproduction is authorized if the  
source is indicated.  
Printed by K.G.T Pristina, Kosovo

More information is available on the Internet, which can be accessed  
through the SOK website: <http://esk.rks-gov.net/>

## **I n t r o d u c t i o n**

This is the third publication "Facts on the Environment", which aims statistical information of different users on the environmental situation in Kosovo. Publication also aims to contribute to the creation of the database and time series of environmental indicators in the Republic of Kosovo.

Publication is realized by Statistical Agency of Kosovo by using all available sources of data.

This publication is the result of close collaboration of the Statistical Agency of Kosovo with the Ministry of Environment and Spatial Planning and KEPA (as a provider of data).

Special thanks go to Statistics Sweden for providing technical assistance, as well as the Swedish International Development Cooperation Agency (SIDA), and also long-term consultant of Mrs. Milva Economi from Statistics Sweden.

This publication was prepared by staff of the Department of Agriculture and Environmental Statistics in the SOK:

Bajrush Qevani, Director DSB&M

Mr.sc.Haki Kurti, Chief of DSB&M

Arta Salihu, Senior Official of DSB&M

Tel: +381(0) 38 200 31, ext. 120

Web-site: <http://esk.rks-gov.net/>

Interpretations expressed in this publication are entirely those of the authors and should not be attributed in any way to MPA, SAK or any other institution.

Suggestions, proposals and comments regarding this publication are welcome and help us to be more effective for users.

September, 2011

Chief Executive Officer, SOK  
Isa Krasniqi

## **Abbreviations**

HBS	Household Budget Survey (SOK)
AHS	Agricultural Household Survey (SOK)
LFS	Labour Force Survey (SOK)
MLSS	Measurement of Living Standards Survey
EU	European Union
GDP	Gross Domestic Product
SOK	Statistical Office of Kosovo
KEK	Kosovo Electric Corporation
KFOR	Kosovo Forces
MAFRD	Ministry of Agriculture, Forestry and Rural Development
MESP	Ministry of Environment and Spatial Planning
MH	Ministry of Health
NAG	Fertilisers (limestone ammonium nitrate)
NPK	Mineral fertilizers (Nitrogen, Phosphorus, Potassium)
URE	Fertilisers (mineral nitrogen fertilizers)
UNMIK	United Nations Mission in Kosovo
SIDA	Swedish Agency for International Cooperation and Development Cooperation
IUCN	The World Conservation of Nature
MI	Ministry of Infrastructure
Q1	First quarter
GWh	Electric energy measuring unit (Giga watt hours energy)
MWh	Electricity metering unit (Mega watt hours energy) (1GWh = 1000 MWh)
NIPH	National Institute of Public Health

## **Symbols**

-	Zero
:	No data
.	Not applicable
0	The data is less than half the unit used
ha	Hectares
kg	Kilogram
m <sup>3</sup> µg	Microgram m <sup>3</sup>
t	Tonnes
%	Percentage
mg / m <sup>2</sup> . d	Particulate deposited substance

## **Content**

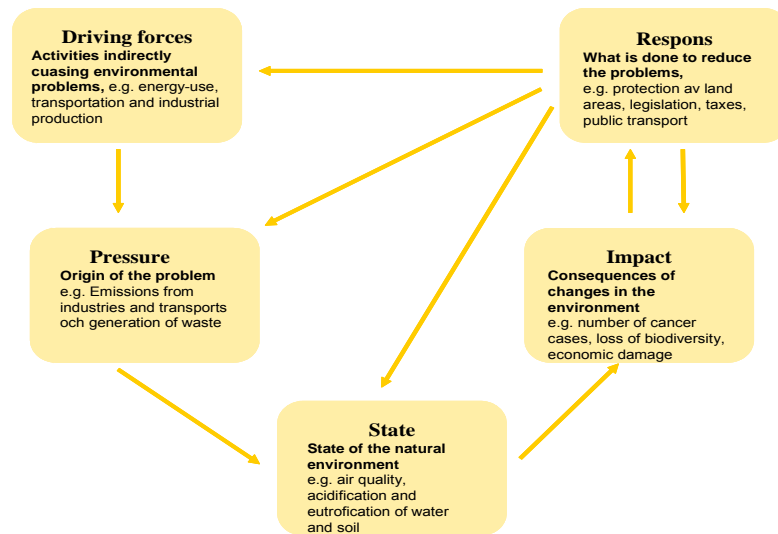
1. General information about Kosovo .....	8
2. Agricultural Land Use .....	18
3. Biodiversity .....	29
4. Waste.....	39
5. Water .....	44
6. Energy.....	47
7. Transportation.....	49
8. Air.....	52





## The overall data

### The DPSIR model



The DPSIR<sup>1</sup> model is an extension of the PSR (Pressure, State, Response) model adopted by the OECDs State of the Environment (SoE) group and by European Environment Agency (EEA), being also used by EUROSTAT for the organization of the environmental statistics. This analytical framework allows the organization of information and integration of socio-economic elements and ecological, addressing the relationship between the five categories of indicators: Driving forces (eg, agricultural practices, industrial manufacturing, technology) and determining pressures (eg , toxic emissions, CO2), which consequently aggravate the environmental situation (eg, concentration of mercury in forest soils, global average temperature) that affect (eg, acidification of forests, the effects endocrine disrupting the mammals), forcing the company to answer (eg, legislative measures, taxes, research programs).

<sup>1</sup> Source: <http://www.esl.jrc.ec.europa.eu>, DPSIR model –Pressure –State –Response

**D Driving force indicators** are not responsible / responsive ("elastic"): the monitored phenomena, for example, road traffic, is driven by powerful economic forces, and therefore can hardly be expected that these trends will vary greatly in the future. For example, politicians can not seriously suggest the destruction/removal of private cars, if they want to stay in office. However, Driving **force indicators** are useful in connection with:

- a) calculation of a variety of pressure indicators, for example, kilometers of cars with specific coefficients as "average CO2 per car and km";
- b) helps decision-makers to plan actions ("responses") needed to avoid problems in the future ("pressure"), for example the capacity of roads;
- c) serve as a basis for scenario development and long term planning.

**P Pressure indicators** directly causes problems. A specific feature of pressure indicators is that they must be responsive, ie, a decision has indeed a chance to reduce indicator (and thus the problem) by launching appropriate action taken. They will also serve as an incentive for rational solutions, since they show the effectiveness of political action early enough in time to hold accountable those who have launched such an action.

**S State indicators**, in contrast, are often too slow. For example, a status indicator that indicates the acidity of forest soils shows emissions of NOx and SO2 in the last ten years; politically responsible persons may be retired during this time. On the other hand, state indicators can be used to make an assessment of the situation (which is the current state of **forestry land**? Where corrective measures should be applied?), and they are appropriate instruments for planning of habitat restoration and similar activity cleaning.

**I Impact indicators** react even more slowly than health indicators. Where impacts are felt, it is often too late for action. Moreover, it is rarely possible to establish a strong statistical link between pressures, state and impacts due to major delays and the influence of non-environmental variables. The main purpose of the indicators of impact is the story of DPSIR models, in particular: cause-effect chains, and to facilitate informed discussions about actions to avoid negative impacts in the

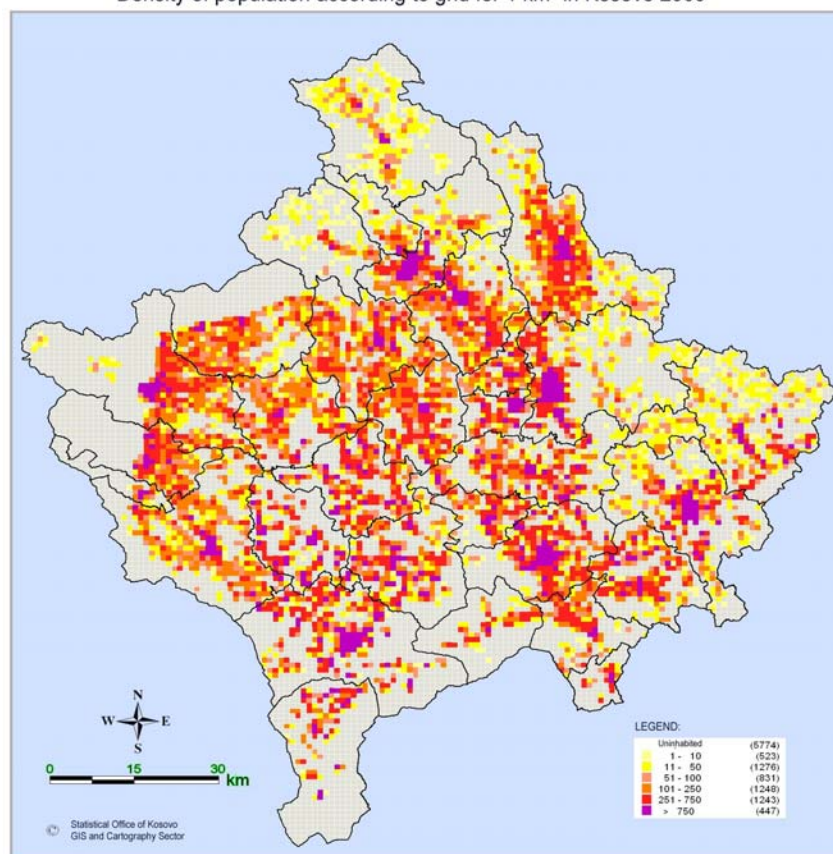
future. In this sense, they are not statistical "indicators", but "scientific models of dispute."

## 1. General information about Kosovo

Kosovo is a territory located in the center of the Balkan Peninsula, landlocked. Kosovo borders Serbia to the Northeast, Macedonia (FYR), Southwest, Albania and Montenegro in the Northwest. Kosovo's territory is 10,908 km<sup>2</sup>. Kosovo is continental climate with warm summers and cold winters. Kosovo is populated by about 175 persons per km<sup>2</sup>. The capital is Pristina.

**Figure 1. 1: Map of density of population in Kosovo**

Density of population according to grid for 1 km<sup>2</sup> in Kosovo 2009



Source: SOK, Cartography

**Table 1. 1: Geographic coordinates**

Coordinate	Scale	Minutes'
Northern latitude	43	16
Southern latitude	41	53
Southern latitude	21	16
Western latitude	19	59

Source: SOK, Cartography

Kosovo lies in southern geographical border of the northern sphere and its climate is mainly continental with some Mediterranean and Alpine impacts. Key local factors that influence climate Kosovo: its landscape, water soil and plants.

In Kosovo are present all forms of atmospheric precipitations. The most important falls i the form of rain in the valleys and precipitation in the form of snow in the mountains. In Kosovo there are on average 160 rainy days per year. Municipality of Pristina is 572 km <sup>2</sup> and lies northwest of Kosovo.

Table 1.2 shows that in 2006 the maximum temperature in July was 27.5°C, in July 2007 was 31.9°C, in August 2008 was 30.1°C, while minimum temperature was in January 2006, -7.5°C, 2007, - 3.6°C, and 2008, - 3.9°C.

**Table 1. 2: The air temperature in Pristina, 2006 – 2008. °C**

Month	2006		2007		2008	
	Max	Min	Max	Min	Max	Min
January	0.6	-7.5	9.6	1.2	4.7	-3.9
February	4.1	-5	9.7	0.8	10.1	-2.7
March	9.8	0.3	13.6	2.3	13.2	1.7
April	17.2	6.9	19.2	3.9	17.2	5.6
May	21.3	9.1	22.8	10.5	28.8	8.7
June	24.9	12	28.2	14.2	26.3	13.1
July	27.5	13.7	31.9	14.5	27.8	14.2
August	27.2	13.5	30.4	15.3	30.1	14.6
September	23.4	10.3	22	8.7	21.6	9.7
October	19.5	6.1	15.5	6	19.6	6.0
November	10.5	1.4	6.4	-0.8	13.3	3.0
December	4.7	2.3	2.7	-3.6	7.1	0.7

Source: KFOR HQ meteorological

Table 1.3: Shows the total number of days with rainfall in 2009 in Pristina, the month with the highest number of days with rainfall in December was 18 days, and in 2010 was the month of December with 20 days. Low temperature in 2009 was - 3.8°C in January, while the highest temperature was 28.6°C in August. In 2010 the highest temperature was 30.4°C in August.

**Table 1. 3: Temperature of air in Pristina, 2009-2010 and Q1 2011, the number of days with rainfall**

Year - Month	Temperature (°C)		Days of rain / snow
	Max	Min	
2009-01	3.3	-3.8	16
2009-02	5.5	-2.3	14
2009-03	10.1	0.6	17
2009-04	18.8	6.4	11
2009-05	23.5	9.7	10
2009-06	24.3	12.7	13
2009-07	28.2	14.3	7
2009-08	28.6	12.8	7
2009-09	24.1	11.2	11
2009-10	16.5	6.1	14
2009-11	13.6	2.4	11
<b>2009-12</b>	<b>7.8</b>	<b>0.7</b>	<b>18</b>
2010-01	4.4	2.5	17
2010-02	7.2	1.1	19
2010-03	11.8	1.3	17
2010-04	16.7	4.1	17
2010-05	21.4	9.8	15
2010-06	25.3	12.9	7
2010-07	28.0	15.0	7
2010-08	30.4	15.0	5
2010-09	23.4	10.0	9
2010-10	14.7	5.5	17
2010-11	15.8	5.1	15
<b>2010-12</b>	<b>6.7</b>	<b>-1.5</b>	<b>20</b>
2011-01	4.3	-4.1	8
2011-02	4.0	-4.1	10
2011-03	11.1	1.0	8

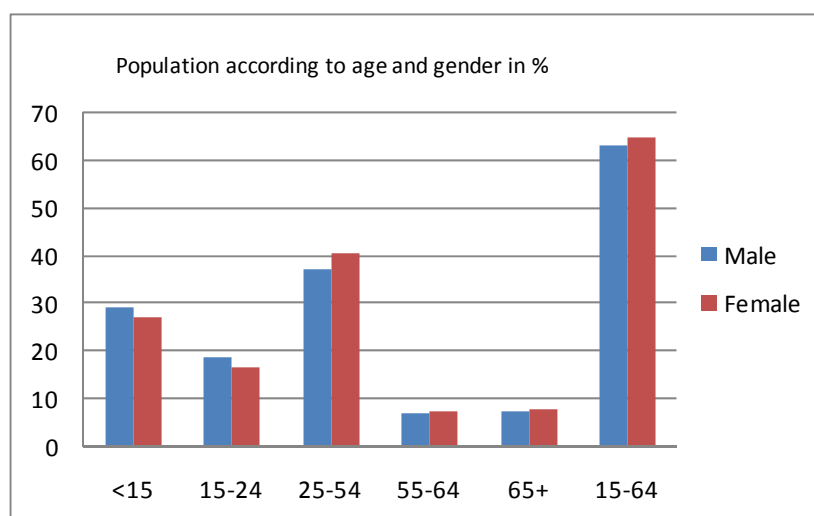
Source: KFOR HQ meteorological

**Table 1.4: Population by age and gender in 2009 in percentage**

According to age	Male	Female
<15	29.2	27.2
15-24	18.8	16.6
25-54	37.3	40.6
55-64	7.2	7.6
65+	7.5	8
15-64	63.3	64.8

Source: SOK, Labour Force Survey, 2009

Kosovo has a population relatively "young", with almost a third of the population under 15 years old and 7.8% of the population over age 65. Such a structure is typical for classic population pyramid. It also becomes apparent if one computes the average size of age groups used in labor market analysis for single years (see Figure 1.2).

**Figure 1.2: Population by age and gender in 2009 in percentage**

Source: SOK, Labour Force Survey, 2009



Employees in agriculture in 2002 reached 10.3% increase in, and in 2004 was 24.7%, but in 2009 there was a decrease to 6.2%. Public Administration Sector was the sector where most people were employed in 2009 compared with 2002.

Also in the health sector there has been an increase in employment from 6.5 percent in 2009, to 7.0 percent in 2009.

**Table 1. 5: Employees by economic activity, in percentage in 2002-2009**

Economic activity	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture	10.3	17.3	24.7	18.8	21.4	14.6	8.0	6.2
Mining	1.6	1.4	1.1	1.6	1.5	1	1.5	1.1
Industry	10.7	10.5	8.6	9.6	7.3	10.4	8.7	9.9
Energy	4.9	3.5	4.3	3.2	3.6	2.7	5.2	4.5
Construction	11.2	11.3	8.0	7.9	8.1	6.6	8.6	7.9
Trade	17.0	13.9	13.9	13.8	16.4	16.9	17.1	17.4
Hotel service	3.9	3.0	3.3	3.5	2.8	3.9	4.5	4.6
Transport	4.1	4.4	4.7	4.2	3.7	4.5	5.6	5.8
Finances	0.8	0.9	1.1	1.1	1.4	1.1	1.8	2.2
Business	0.7	0.8	2.2	2.4	2.1	1.4	2.6	2.9
Public administration	8.7	9.4	6.7	8.2	7.8	9.6	9.7	9.8
Education	11.2	12.0	10.6	10.8	11.7	12.1	13.6	13.4
Health	5.7	5.1	4.6	5.2	5.4	7.0	6.5	7.0
Other	9.2	6.5	6.4	9.7	7.0	8.3	6.7	7.5

Source: SOK, Labour Force Survey, 2009

The largest number of people are employed in Public Administration, in the Education Sector, followed by Health, Order and Public Safety.

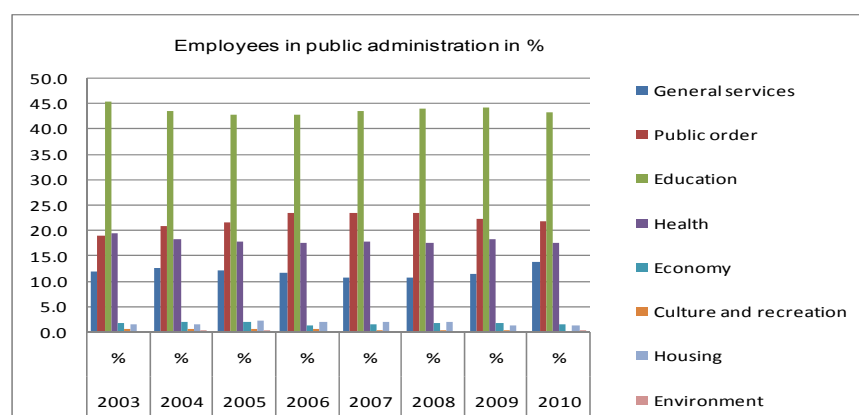
While in the environmental sector is the lowest rate of employment for the years 2006-2009, only 0.3% of the total number of employees who work in this sector (see Table 1.6), while in 2010 there is a slight increase of 0.4 percent.

**Table 1. 6: Total number of employees in Public Administration**

Sector	2003	2004	2005	2006	2007	2008	2009	2010
	%	%	%	%	%	%	%	%
General services	12.0	12.6	12.3	11.8	10.9	10.7	11.4	13.8
Public order	18.9	20.8	21.7	23.4	23.5	23.4	22.3	21.8
Education	45.2	43.4	42.7	42.7	43.4	43.8	44.2	43.2
Health	19.5	18.4	17.9	17.6	17.8	17.6	18.2	17.5
Economy	1.9	2.1	2	1.4	1.7	1.8	1.8	1.7
Culture and recreation	0.6	0.7	0.7	0.6	0.4	0.4	0.4	0.3
Housing	1.6	1.7	2.3	2.1	2.0	2.0	1.5	1.4
Environment	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.4
Total	100	100	100	100	100	100	100	100

Source: MPS, Department of management of payments and payroll

**Graph 1. 3: Total number of employees in public administration in percentage**



Source: SOK, Labour Force Survey, 2009

Table 1.7 shows that GDP in Kosovo for 2004-2009 has increased in figures from 2912.5 million euros in 3912.4 million euros. GDP per capita has increased from 1 427 euros in 2004 to 1 795 in

2009. GDP as final consumption of households has increased by 2 4876 million from 2004 to 3584.3 million euros in 2009.

**Table 1.7: GDP by expenditure reached for 2004-2009, according to current prices (million euros).**

	2004	2005	2006	2007	2008	2009
<b>GDP at current prices</b>	2.912.5	3.002.9	3.120.4	3.393.7	3.851.4	3.912.4
<b>Final consumption expenditure</b>	<b>3.212.7</b>	<b>3.367.6</b>	<b>3.466.2</b>	<b>3.810.6</b>	<b>4.344.6</b>	<b>4.279.9</b>
Final consumption expenditure of households	2.487.6	2.638.4	2.770.8	3.145.9	3.646.7	3.584.3
Final consumption expenditure of government	701.5	705.5	670.6	641.6	674.4	670.5
Government of Kosovo	355.5	329.2	340.8	327.3	372.6	409.7
Donors (salary) *	346.0	376.3	329.8	314.3	301.8	260.8
The foreign employees	247.8	258.4	213.2	196.9	196.9	178.7
The local employees	98.2	117.9	116.6	117.4	104.9	82.1
Final consumption expenditure of IJPSHESH	23.5	23.7	24.8	23.1	23.6	25.0
<b>Gross capital formation</b>	<b>701.2</b>	<b>722.2</b>	<b>798.3</b>	<b>892.5</b>	<b>1.093.9</b>	<b>1.166.5</b>
Gross fixed capital formation	583.6	592.8	657.1	744.3	937.9	1.026.5
Changes in inventories	117.7	129.4	141.2	148.3	156.0	140.0
net Exports	<b>-1.001.4</b>	<b>-1.086.9</b>	<b>-1.144.1</b>	<b>-1.309.4</b>	<b>-1.587.1</b>	<b>-1.534.0</b>
Exports of goods and services	310.6	332.8	441.4	512.2	569.0	611.8
Exports of goods	63.8	67.8	122.5	177.2	217.5	177.2
Exports of services	246.8	265.0	319.0	335.0	351.6	434.6
Imports of goods and services	1.312.0	1.419.7	1.585.5	1.821.7	2.156.1	2.145.8
Imports of goods	1.046.9	1.146.3	1.295.6	1.545.2	1.885.7	1.850.6
Imports of services	265.1	273.3	289.9	276.5	270.5	295.1
<b>Population (000)</b>	2.041	2.070	2.100	2.130	2.153	2.180
<b>GDP per capita (Eur)</b>	<b>1.427</b>	<b>1.451</b>	<b>1.486</b>	<b>1.593</b>	<b>1.789</b>	<b>1.795</b>

Source: SOK, Economic Statistics, GDP 2004-2009

Table 1.8: Indicates that the gross capital formation has contributed with 28.9 percent in GDP in 2009. Government final consumption expenditures in the period 2004-2009 have represented 24.7-17.1 percent of GDP 2009

\* Includes salaries of resident employees in UNMIK, EULEX (local and foreign staff who stay longer than a year in Kosovo)

**Table 1.8: Structure of GDP by expenditure, 2004 to 2009**

GDP at current prices	2004	2005	2006	2007	2008	2009
	100.0	100.0	100.0	100.0	100.0	100.0
<b>Final consumption expenditure</b>	<b>110.3</b>	<b>112.1</b>	<b>111.1</b>	<b>112.3</b>	<b>112.8</b>	<b>109.4</b>
Final consumption expenditure of households	85.4	87.9	88.8	92.7	94.7	91.6
Final consumption expenditure of government	24.1	23.5	21.5	18.9	17.5	17.1
Government of Kosovo	12.2	11.0	10.9	9.6	9.7	10.5
Donors (salary) *	11.9	12.5	10.6	9.3	7.8	6.7
The foreign employees	8.5	8.6	6.8	5.8	5.1	4.6
The local employees	3.4	3.9	3.7	3.5	2.7	2.1
Final consumption expenditure of IJPSHESH	0.8	0.8	0.8	0.7	0.6	0.6
Gross capital formation	<b>24.1</b>	<b>24.1</b>	<b>25.6</b>	<b>26.3</b>	<b>28.4</b>	<b>29.8</b>
Gross fixed capital formation	20.0	19.7	21.1	21.9	24.4	26.2
Changes in inventories	4.0	4.3	4.5	4.4	4.1	3.6
net Exports	<b>-34.4</b>	<b>-36.2</b>	<b>-36.7</b>	<b>-38.6</b>	<b>-41.2</b>	<b>-39.2</b>
Exports of goods and services	10.7	11.1	14.1	15.1	14.8	15.6
Exports of goods	2.2	2.3	3.9	5.2	5.6	4.5
Exports of services	8.5	8.8	10.2	9.9	9.1	11.1
Imports of goods and services	45.0	47.3	50.8	53.7	56.0	54.8
Imports of goods	35.9	38.2	41.5	45.5	49.0	47.3
Imports of services	9.1	9.1	9.3	8.1	7.0	7.5

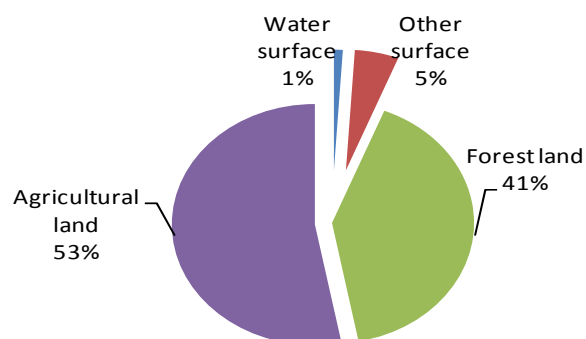
Source: SOK, Economic Statistics, GDP 2004-2009

## 2. Agricultural Land Use

Total land in Kosovo of approximately 1.1 million acres consisting of 570 000 hectares of agricultural land, of which approximately 300 000 hectares of arable land. Other agricultural lands are primarily pasture (165 000 hectares) and meadows (90 000 hectares). The forest area is about 450 000 hectares.

Recording of more detailed land use can be found in the cadastre.

**Figure 2.1: Use of agricultural land in Kosovo under the Cadastral Register, 2002, acres**



Source: The Kosovo Cadastral Agency

According to the AHS 2008, the bulk of agricultural land, 39.9 percent, is fields and gardens; the second largest category consists of meadows and pastures 29.3 percent. According to the survey, 5 percent of agricultural land is left fallow.

Agricultural land owned or used by households, accounts for about 75.7% of the total area of agricultural households. The remainder is in forest, yards and other. (see Table 2.1).

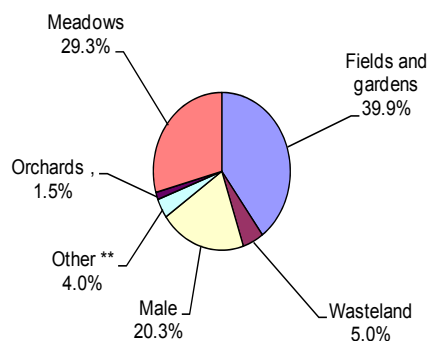
Agricultural land includes: fields, gardens, orchards, vineyards, meadows, pastures and fallow land (gardens are assembled in the category of land and fields and gardens for simplification of data collection).

**Table 2. 1: The total land use within the sector of agricultural households 2008, the percentage ha**

Total Land Use	Surf. (ha)	%
Fields and gardens	138813	39.9
Orchards	4207	1,2
Vineyards	1173	0,3
Serra	255	0,1
Meadows	98369	28,2
<b>Total cultivated land</b>	<b>242817</b>	
Grasses	3894	1,1
Wasteland	17454	5,0
Total agricultural land	21348	
Male	70922	20,3
House yards	12423	3,6
Other **	1479	4.0
<b>Total</b>	<b>348989</b>	<b>100,0</b>

Source: SOK, Agriculture Household Survey, 2008

**Graph 2. 2: Use of agricultural land, 2008**



Source: SOK, Agriculture Household Survey, 2008

Table 2.2 shows the data of land use by municipalities in Kosovo. Prizren has owned most of the land with 63 569 ha. Roughly the same area has also Podujeva with 63 333 ha, 60 363 ha Peja, Prishtina and Gjakova have roughly the same area, 57 264 to 58 830 ha.

---

\*\* Other, land use for infrastructure



**Table 2.2: Land use in Kosovo under the Cadastral Registry (ha) by municipality**

Municipality	Agriculture land	Agriculture forestry	Irrigate land	Other land	Total area
Deçan	15.860	19.028	341	1.991	<b>37.220</b>
Gjakove	23.296	26.753	896	7.885	<b>58.830</b>
Glogovc	15.512	10.474	142	1.469	<b>27.597</b>
Gjilan	24.843	24.237	491	1.988	<b>51.559</b>
Dragash	34.430	6.434	201	1.578	<b>42.643</b>
Istog	23.233	20.692	324	1.191	<b>45.440</b>
Kaçanik	10.497	17.293	315	1.351	<b>29.456</b>
Kline	17.767	11.566	377	1.231	<b>30.941</b>
Fushe Kosove	7.128	1.382	100	929	<b>9.539</b>
Kamenice	29.006	20.395	1.030	1.894	<b>52.325</b>
Mitrovica	16.894	14.354	461	1.950	<b>33.659</b>
Leposaviç	23.273	27.512	521	2.664	<b>53.970</b>
Lipljan	24.686	12.962	326	2.198	<b>40.172</b>
Novoborde	4.998	2.781	47	308	<b>8.134</b>
Obiliç	8.575	1.153	132	634	<b>10.494</b>
Rahovec	18.344	7.610	492	1.195	<b>27.641</b>
Peje	31.274	25.715	841	2.533	<b>60.363</b>
Podujeve	34.193	25.968	617	2.555	<b>63.333</b>
Prishtine	25.259	28.359	378	3.268	<b>57.264</b>
Prizren	34.574	24.800	784	3.411	<b>63.569</b>
Skenderaj	20.553	15.224	247	1.465	<b>37.489</b>
Shtime	6.449	6.377	106	525	<b>13.457</b>
Shterpce	13.651	10.332	201	608	<b>24.792</b>
Suha Reke	19.373	15.070	444	1.255	<b>36.142</b>
Ferizaj	19.769	12.824	176	1.743	<b>34.512</b>
Viti	17.854	9.937	310	1.271	<b>29.372</b>
Vushtrri	21.756	10.431	718	1.618	<b>34.523</b>
Zubin Potok	10.133	20.773	1.037	1.434	<b>33.377</b>
Zveçan	5.379	5.970	129	837	<b>12.315</b>
Malisheve	15.672	13.842	159	1.004	<b>30.677</b>
<b>Total</b>	<b>574.231</b>	<b>450.249</b>	<b>12.344</b>	<b>53.979</b>	<b>1.090.803</b>

Source: The Kosovo Cadastral Agency, 2002

Table 2.3 shows the distribution of farms by size. Farms are classified into 11 groups based on their area of agricultural land. Very fragmented structure hinders the development of commercial agriculture farm and leads to non-commercial production.

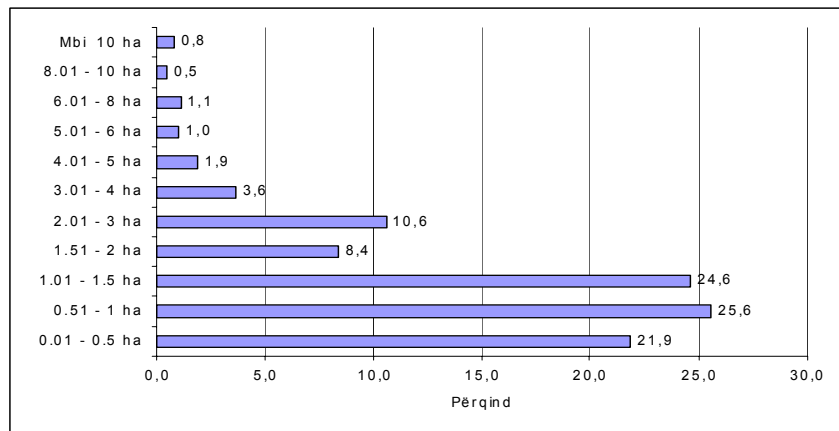
**Table 2. 3: Agricultural land according to farm size and structure, 2008**

Farm size	Small farm			Large and specialised farms			Total		
	No. of farms	Surf.(ha)	% of farms	No. of farms	Surf. (ha)	% of farms	No. of farms	Surf.(ha)	% of farms
0.01-0.5ha	38 635	11 064	21,9	11	3	4,5	38 646	11 067	21,9
0.51-1ha	45 084	33 812	25,5	19	15	7,7	45 103	33 827	25,6
1.01-1.5ha	43 531	52 749	24,7	13	16	5,3	43 544	52 765	24,6
1.51-2ha	14 836	25 684	8,4	15	28	6,1	14 851	25 712	8,4
2.01-3ha	18 702	45 626	10,6	27	67	10,9	18 729	45 693	10,6
3.01-4ha	6 353	21 674	3,6	15	52	6,1	6 368	21 726	3,6
4.01-5ha	3 401	15 062	1,9	16	72	6,5	3 417	15 134	1,9
5.01-6ha	1 710	9 243	1,0	10	54	4,0	1 720	9 297	1,0
6.01-8ha	1 926	13 145	1,1	18	127	7,3	1 944	13 272	1,1
8.01-10ha	903	8 000	0,5	22	195	8,9	925	8 195	0,5
Mbi 10 ha	1 374	24 140	0,8	81	3 337	32,7	1 455	27 477	0,8
<b>Total</b>	<b>176 455</b>	<b>260199</b>	<b>100,0</b>	<b>247</b>	<b>3966</b>	<b>100,0</b>	<b>176702</b>	<b>264165</b>	<b>100,0</b>

Source: SOK, Agriculture Household Survey, 2008

Taking into account all the farms together, Graph 2.3 shows that 47.5 percent of agricultural land is under farms between 0.01 - 1 ha. Very fragmented structure hinders the development of commercial agriculture farm and leads to non-commercial production.

**Graph 2. 3: Distribution of agricultural land in different size groups of farms**



Source: SOK, Agriculture Household Survey, 2008

Number of animals shown in table 2.4 are from November 2008. Cattle are the most important domestic animals, of which 56 percent are dairy cows.

Households have a small number of buffalo, about 412, which are included in the total number of cattle.

The average number of agricultural households is 1.07.

**Table 2. 4: Number of domestic animals (cattle), 2008**

Type of animal	Number of animals (total)
Cattle	<b>341608</b>
Calves younger than 6 months	75476
Heifers and bulls 6 months to 1 years old	50206
Bulls and heifers 1 to 2 years old	17720
Bulls and heifers more than 2 years old	5199
Dairy cows	191529
Dogs	1066
Buffaloes	412
Pigs	26770
Piglets up to 6 months	17874
Sows for insemination	7312
Arches for reproduction	1584
Sheep and Goats	180128
Lambs	27552
Sheep for insemination	124129
Rams for breeding	9672
Goats	8918
Dairy goats	9857
Horses and donkeys	5301
Horses	4973
Donkeys	328
Poultry	2213406
Chicken	2046925
Other poultry	166481
Bee (Hive)	43297

Source: SOK, Agriculture Household Survey, 2008

Table 2.5. presents the use of different types of fertilizers and Table 2.12 presents the use of manure. Fertilizers are used by most farmers. NPK, often used for basic fertilizer at planting, is the most exploited of all inorganic fertilizers. Most of the rest are NAG and URE, which are mainly used after crop germination.

The average amount of fertilizer used is 346 kg / ha. While the average amount of manure used is 2845 kg / ha.

**Table 2. 5: Use of fertilizers to agricultural crops, 2008**

Group of crops	Mineral fertilizer									
	Surface ha	NPK	NPK	NAG	NAG	URE	URE	Other	Other	Total (NPK,NAGU RE other)
		kg	kg/ha	kg	kg/ha	kg	kg/ha	kg	kg/ha	kg/ha
Cereals	98 543	27883029	283	12803314	130	12319135	125	329763	3	541
Vegetables	11 613	4180194	360	2480189	214	991366	85	96437	8	667
Tree	5096	1274441	250	268272	53	188080	37	35903	7	347
Forage plants	104763	6354116	61	2842600	27	3934648	38	130552	1	127
Other	319	50038	157	28440	89	4420	14	1572	5	165
Total	220334	39741818	180	18422815	84	17437649	79	594227	3	346

Source: SOK, Agriculture Household Survey, 2008

**Table 2. 6: Use of manure as agricultural culture group, 2008**

Group of crops	Manure		
	Surface (ha)	ton	kg/ha
Cereals	98543	284281	2885
Vegetables	11613	98686	8498
Tree	5096	21367	4193
Forage plants	104763	221203	2111
Other	319	1346	4219
<b>Total</b>	<b>220334</b>	<b>626883</b>	<b>2845</b>

Source: SOK, Agriculture Household Survey, 2008

Table 2.7. shows the total area of irrigated land in hectares presented by region and Table 2.9 presents the same indicators by municipality. Irrigation, as reported by farmers, is used in about 42,226 ha. For the region, most of the irrigated land is in Peja and Gjakova.

By municipalities, most of the irrigated area is in Peja, Decani, Rahoveci, Gjakova and Istog.

**Table 2. 7: Irrigation of cultivated land by region, 2008**

Region	Irrigated area (ha)	Non-irrigated area (ha)	Total area (ha)
<b>Kosovo</b>	<b>42226</b>	<b>195575</b>	<b>237801</b>
Pristina	3741	51624	55365
Mitrovica	2861	37047	39908
Peja	13915	17848	31763
Gjakova	13311	17313	30624
Prizreni	3784	22190	25974
Ferizaj	2833	18680	21513
Gjilani	1781	30873	32654

Source: SOK, Agriculture Household Survey, 2008

Table 2.8. Shows irrigation of cultivated land by municipality.  
As reported by farmers (AHS 2007), irrigation was used in about 39 369 ha. For the region, most of the irrigated land is in Peja and Gjakova.

By municipalities, most of the irrigated area is in Peja, Decani, Rahoveci, Gjakova and Istog.

Irrigation agriculture is an investment with high costs and some farmers do not have conditions to make it. During the year many farmers are forced to wait for the atmospheric precipitation solve their problems.

**Table 2. 8: Irrigation of cultivated land by municipality, 2008**

Region	Irrigated area (ha)	Non irrigated area (ha)	Total
			Surface (ha)
<b>Kosova</b>	<b>42226</b>	<b>195575</b>	<b>237801</b>
Deqani	5144	4423	9567
Gjakova	3626	7333	10959
Glllogoci	108	4202	4310
Gjilani	285	8953	9238
Dragashi	496	4174	4670
Istogu	3831	6849	10680
Kaqaniku	293	3019	3312
Klina	2418	5623	8041
F.Kosova	202	5817	6019
Kamenica	509	8779	9288
Mitrovica	790	4661	5451
Leposaviqi	33	369	402
Lipjani	1170	16570	17740
Novoberda	36	1574	1610
Obiliqi	416	3211	3627
Rahoveci	4541	5556	10097
Peja	7666	5376	13042
Podujeva	1163	11743	12906
Prishtina	647	8508	9155
Prizreni	1739	5722	7461
Skenderaj	497	20433	20930
Shtimja	576	3847	4423
Shtërpca	1274	471	1745
Suhareka	1167	5592	6759
Ferizaji	688	11343	12031
Vitja	987	13141	14128
Vushtria	1210	9880	11090
Z.Potoki	202	1261	1463
Zveqani	129	444	573
Malisheva	383	6701	7084

Source: SOK, Agriculture Household Survey, 2008



### 3. Biodiversity

#### 3.1. Protected areas

Kosovo is known for its rich biodiversity. Position and geographical factors, pedological, hydrographical, landscapes and climate are factors that have made Kosovo a biological diversity, landscapes, floristic diversity, vegetation and fauna.

In the territory of Kosovo protected natural values constitute an area of 46 437 ha (4.25 percent of the territory of Kosovo). So far 75 are under the area of nature protection and other 195 are proposed. Protected areas include: 1 National Park (Sharr Mountains), 11 of the Nature Reserves (Bifurgacioni Nerodime River, Arnenit Reserve, Ropsit Peak, Rusenica etc.), 59 Natural Monuments (Source of the White Drin, Cave Gadime, Rugova Gorge, Sacred Bridge, Old Trunks, etc.), two Regional Nature parks (Germia and Mirusha), and two forest parks – pines of Decani and Ravana.

**Table 3. 1: Nature Protected Areas according to category**

Name	No. of area	Areas/ha
<b>Nature Reserves</b>	<b>11</b>	<b>847</b>
Plant	7	
Animal	2	
Special	2	
National Park	<b>1</b>	<b>39</b>
Monument	<b>59</b>	<b>4 874</b>
Spelologic	4	
Hydrological	10	
Geomorphological	5	
Botanic	36	
Memorial	3	
Crystals Museum in Stranërg	1	
Regional Park	<b>2</b>	<b>1 681</b>
Forest Park	<b>2</b>	<b>35</b>
<b>Total</b>	<b>75</b>	<b>46 437</b>

Source: AKMM

**Table 3. 2: Nature reserves by municipality, area and year of establishment**

Name	Municipality	Surface in hectares	Year of establishment
Peak of Ropsit	Pejë	20	1955
Gubavci	Prizren	38	1959
Popovo prase	Prizren	30	1960
Gazimenstan	Prishtinë	12	1953
Kozhnjeri	Deçan	15	1955
Oshljaku	Prizren	20	1960
Mountains of Prilep	Deçan	1	1963
Rusenica	Suharekë	300	1955
Bifurcation of the river Nerodime	Ferizaj	13	1979
Golem bor	Prizren	35	1960
Kamilja	Leposaviq		1988

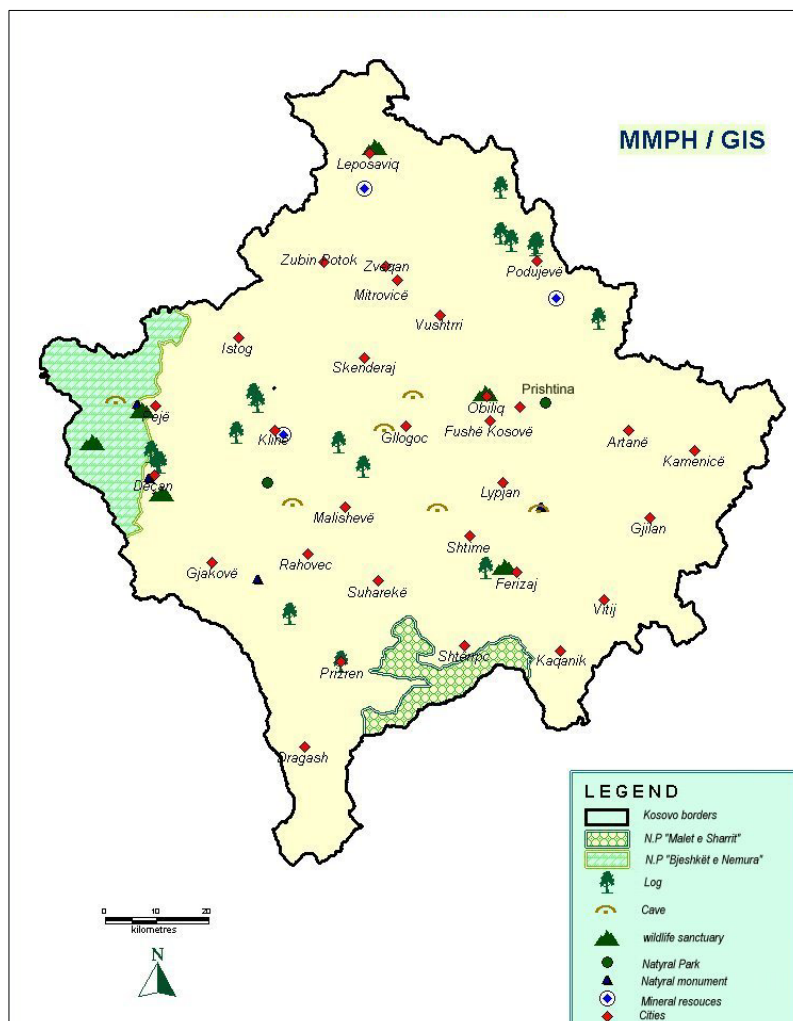
Source: MMPH, IMN

**Table 3. 3: Protected areas in Kosovo and their classification according to IUCN**

Types of areas	IUCN rank	No. areas	Surface (ha)	%
Natural areas	I	11	698	2
National park	II	1	39000	85
Natural landmarks	III	35	4867	11
Protected areas	IV	2	1681	3
<b>Total</b>		<b>49</b>	<b>46 246</b>	<b>100</b>

Source: MMPH, IMN (2005)

## Map of protected areas in the territory of Kosovo



Source: MESP, INP and GIS

Table 3.5: Areas proposed for protection 2002-2007

Area name	Municipality
<b>Gurbadh</b> - Oak tree	<b>Malishevë</b>
<b>Burim</b> - Tree of Frasheri	<b>Malishevë</b>
<b>Turjak</b> - Oak tree 2	<b>Malishevë</b>
<b>Panorc</b> - Shpella e Filladit (Cave of fillad)	<b>Malishevë</b>
<b>Drenovc</b> - Trees in the cemetery of the village	<b>Malishevë</b>
<b>Drenovc</b> - Cave of Bozhuri	<b>Malishevë</b>
<b>Budavec</b> - Forest of Vakaf	<b>Malishevë</b>
<b>Vermicë</b> - Neighbourhood Limanajev	<b>Malishevë</b>
<b>Balincë</b> - Forest of Vakaf	<b>Malishevë</b>
<b>Marali</b> - Stone of Marali	<b>Malishevë</b>
<b>Marali</b> - Oak trees	<b>Malishevë</b>
<b>Pagarush</b> - Oak trees	<b>Malishevë</b>
<b>Gurisht</b> - Source of Water	<b>Malishevë</b>
<b>Pidiq</b> - Thermo-mineral source	<b>Gjilan</b>
<b>Nasalë</b> - Mineral resource	<b>Gjilan</b>
<b>Gumnishtë</b> - Mineral resource	<b>Gjilan</b>
<b>Llashticë</b> - Oak tree	<b>Gjilan</b>
<b>Lipovicë</b> - Two trunks of pear	<b>Gjilan</b>
<b>Buricë</b> - Two oak trees	<b>Gjilan</b>
<b>Uglarë</b> - Source of thermal water	<b>Gjilan</b>
<b>Lovcë</b> - Oak tree	<b>Gjilan</b>
<b>Walley of Llapushnik river</b>	<b>Gjilan</b>
<b>Kmetovc</b> - Thermo-mineral source	<b>Gjilan</b>
<b>Brisallc</b> - Cave	<b>Gjilan</b>
<b>Perplenic</b> - Lake of Perplnica	<b>Gjilan</b>
<b>Regional park</b> "Pashtriku "	<b>Gjakovë</b>
<b>Nountain park</b> " Maja e Gllavës "	<b>Gjakovë</b>
<b>Black Swimming Pool Complex in Shkukëz</b>	<b>Gjakovë</b>
<b>Herreq</b> - Lime tree	<b>Gjakovë</b>
<b>Stubullë</b> - Lime tree	<b>Gjakovë</b>
<b>Berijah</b> - Lime tree	<b>Gjakovë</b>
<b>Dobrosh</b> - Oak tree	<b>Gjakovë</b>
<b>Rracaj</b> - Lime tree	<b>Gjakovë</b>
<b>Vogovë</b> - Oak tree	<b>Gjakovë</b>
<b>Mulliç</b> - Source of Water	<b>Gjakovë</b>
<b>Source of river Deshica</b> " Gurra e Demjanit "	<b>Gjakovë</b>
<b>Kusar</b> - Source of water	<b>Gjakovë</b>
<b>Potok</b> - Source of water	<b>Gjakovë</b>
<b>Cave of Qiriu</b>	<b>Gjakovë</b>
<b>Cave of Pirates</b>	<b>Gjakovë</b>
<b>Compound of Community of Brukës</b>	<b>Gjakovë</b>
<b>Locality of Byjger and Dioskorea</b>	<b>Gjakovë</b>
<b>Locality of Bozhuri flower in Pashtrik</b>	<b>Gjakovë</b>
<b>Tree of Tisi</b>	<b>Gjakovë</b>
<b>Compound of Boshtra and Gështenja</b>	<b>Gjakovë</b>
<b>Shqiponjë</b> - Coppice of Gojani	<b>Gjakovë</b>

Table 3.5: Areas proposed for protection 2002-2007 (continuation)

<b>Greqinë</b> - Oak tree	<b>Gjakovë</b>
<b>Molliq</b> - Oak trees	<b>Gjakovë</b>
<b>Madanaj</b> - Oak tree	<b>Gjakovë</b>
<b>Bec</b> - The oak tree	<b>Gjakovë</b>
<b>Zhabel</b> - Oak trees	<b>Gjakovë</b>
<b>Gergoc</b> - Oak trees	<b>Gjakovë</b>
<b>Potok (2)</b> - Water resource 2	<b>Gjakovë</b>
<b>Ujmirë</b> - Oak tree	<b>Klinë</b>
<b>Deiq</b> - Oak tree	<b>Klinë</b>
<b>Negllavk</b> - Oak tree	<b>Klinë</b>
<b>Gllarevë</b> -The oak tree	<b>Klinë</b>
<b>Dresnik</b> - Banja e Dresnikut	<b>Klinë</b>
<b>Sibovcë</b> - Oak trees	<b>Kastriot</b>
<b>Sibovc</b> - Lime tree	<b>Kastriot</b>
<b>Mazkit</b> - Tree of Mani	<b>Kastriot</b>
<b>Grabovc</b> - Source of Mineral Water	<b>Kastriot</b>
<b>Grabovc</b> - Oak and hornbeam trees	<b>Kastriot</b>
<b>Breznicë</b> - Complex of Resources	<b>Kastriot</b>
<b>Cerrë</b> - Tree of Mani	<b>Istog</b>
<b>Lubozhdë</b> - Lime tree	<b>Istog</b>
<b>Vrellë</b> - Source of Water	<b>Istog</b>
<b>Istogu i Poshtëm</b> - Lime tree	<b>Istog</b>
<b>Shushic e Epërme</b> - Lime tree	<b>Istog</b>
<b>Istog</b> - Source of Water	<b>Istog</b>
<b>Zhakovë</b> - Oak tree	<b>Istog</b>
<b>Uqë</b> - Oak tree	<b>Istog</b>
<b>Cërkolez</b> - Complex of oak trees	<b>Istog</b>
<b>Kaliqan</b> - Lime tree	<b>Istog</b>
<b>Baicë</b> - Lime tree	<b>Istog</b>
<b>Banjë</b> -Source of Thermo-mineral water	<b>Istog</b>
<b>Lubovë</b> - Lime tree	<b>Istog</b>
<b>Zallq</b> - Oak tree	<b>Istog</b>
<b>Zabllaq</b> - Oak tree	<b>Istog</b>
<b>Turbuhovc</b> - Oak tree	<b>Istog</b>
<b>Saradran</b> - Oak tree	<b>Istog</b>
<b>Gjelbishtë</b> - Mineral water	<b>Vushtrri</b>
<b>Bajë</b> - Toak tree	<b>Vushtrri</b>
<b>Bajë</b> - Thermal water tree 1	<b>Vushtrri</b>
<b>Bajë</b> - Thermal Water Source (Q. e zotnisë ) 2	<b>Vushtrri</b>
<b>Karaqë</b> - Natural Water Source	<b>Vushtrri</b>
<b>Skrom</b> - Natural Water Source	<b>Vushtrri</b>
<b>Koderflamur</b> - Complex of Beech trees	<b>Vushtrri</b>
<b>Shtruerë</b> - Oak tree	<b>Vushtrri</b>
<b>Ashlan</b> - Oak tree	<b>Vushtrri</b>
<b>Cecel</b> - Oak tree	<b>Vushtrri</b>
<b>Lumkuq</b> - Park of squirrel	<b>Vushtrri</b>
<b>Krasniqe e mesme</b> - Oak tree	<b>Vushtrri</b>
<b>Galic</b> - Complex of trees	<b>Vushtrri</b>
<b>Brusnik</b> - Oak tree	<b>Vushtrri</b>
<b>Rreznik</b> - Oak tree	<b>Vushtrri</b>
<b>Druar</b> - Oak tree	<b>Vushtrri</b>

Table 3.5: Areas proposed for protection 2002-2007 (continuation)

<b>Trimor</b> - Oak trees	<b>Vushtrri</b>
Lugina dhe qafa e Kaqanollit	<b>Podujevë</b>
<b>Popovë</b> - "Ushton Reka" -	<b>Podujevë</b>
<b>Orllan</b> - Lake Batllava	<b>Podujevë</b>
<b>Dobratin</b> - Water Source and Oak	<b>Podujevë</b>
<b>Murgallë</b> - Poplar tree	<b>Podujevë</b>
<b>Llapashticë e Epërme</b> - Oak trees (cemetery)	<b>Podujevë</b>
<b>Dyzë</b> - Oak tree	<b>Podujevë</b>
<b>Orllan</b> - Poplar tree	<b>Podujevë</b>
<b>Gërdoc</b> - Poplar tree	<b>Podujevë</b>
<b>Braboniq</b> - Mineral Water Source	<b>Mitrovicë</b>
<b>Mazhiq</b> - Mineral Water Source	<b>Mitrovicë</b>
<b>Braboniq</b> - Oak tree	<b>Mitrovicë</b>
<b>Zasellë</b> - hestnut tree	<b>Mitrovicë</b>
<b>Zabergjë</b> - The oak tree	<b>Mitrovicë</b>
<b>Vllahi</b> - The oak tree	<b>Mitrovicë</b>
<b>Bare</b> - Beech trees	<b>Mitrovicë</b>
<b>Rahovë</b> - Icy fountain	<b>Mitrovicë</b>
<b>Vidimiriq</b> - Tree of Voja	<b>Mitrovicë</b>
<b>Rahovë</b> - The Chestnut trees	<b>Mitrovicë</b>
<b>Lugu i Bares</b> - Source of Water	<b>Mitrovicë</b>
<b>Meinicë</b> - Waterfall of Trepqalivë	<b>Mitrovicë</b>
<b>Vinarc i Epërm</b> - Kreckes trunk	<b>Mitrovicë</b>
<b>Ovqar</b> - Beech tree and Source of Water	<b>Mitrovicë</b>
<b>Bistric e Shalës</b> - Poplar tree	<b>Albanik</b>
<b>Boletin</b> - Chestnut tree	<b>Zveqan</b>
<b>Kelmend</b> - Long Stone and Sharp Stone	<b>Zveqan</b>
<b>Viti</b> - Oak poplar	<b>Viti</b>
<b>Kllokot</b> - Source of Mineral Water	<b>Viti</b>
<b>Zhiti</b> - Oak tree	<b>Viti</b>
<b>Ballanc</b> - Complex trees	<b>Viti</b>
<b>Zhiti</b> - Source of Mineral Water	<b>Viti</b>
<b>Binq</b> - Complex oak trees	<b>Viti</b>
<b>Samakov</b> - Source of Water	<b>Viti</b>
<b>Samakov</b> - Hydrological monument	<b>Viti</b>
<b>Debeldeh</b> - Natural landscape	<b>Viti</b>
<b>Gërmovë</b> - Oak tree	<b>Viti</b>
<b>Sllatin e Eperme</b> - Landscape	<b>Viti</b>
<b>Sllatin e Poshtme</b> - Complex of trees	<b>Viti</b>
<b>Vërnekollë</b> - River of Vernezi	<b>Viti</b>
<b>Ballanc</b> - Source of Mineral Water	<b>Viti</b>
<b>Gjylekar</b> - Lime stone	<b>Viti</b>
<b>Breshanc</b> - Oak trees	<b>Therandë</b>
<b>Savrovë</b> - Kompleksi i Trungjeve të Dushkut	<b>Therandë</b>
<b>Delloç</b> - Trunqu i Pishës (Pinus sp.)	<b>Therandë</b>
<b>Grikoc</b> - Trunget e Dushkut (Quercus sp.)	<b>Therandë</b>
<b>Reqan</b> - Trunqu i Plepit (Populus sp.)	<b>Therandë</b>
<b>Muhlan</b> - Kompleksi i Trungjeve të Dushkut	<b>Therandë</b>
<b>Biraqë</b> - Lokaliteti i Bujgarit	<b>Therandë</b>
<b>Reqan</b> - Source of Water	<b>Therandë</b>
<b>Papaz</b> - Complex trees	<b>Therandë</b>

Table 3.5: Areas proposed for protection 2002-2007 (continuation)

<b>Budakovë</b> - Trungu i Vodhës	<b>Therandë</b>
<b>Luzhnic</b> - Kompleksi i Trungjeve	<b>Therandë</b>
<b>Bllicë</b> - Oak tree	<b>Therandë</b>
<b>Bllicë</b> - Dy Trungjet e Bungut	<b>Therandë</b>
<b>Vraniq</b> - Trungu i Qarrit (Quercus sp.)	<b>Therandë</b>
<b>Nagavc</b> - Trungu i Qarrit (Trunk of Qarr)	<b>Rahovec</b>
<b>Drenovc</b> - Oak trees	<b>Rahovec</b>
<b>Vranjak</b> - Vidhit trunks	<b>Rahovec</b>
<b>Koznik</b> - Oak trees	<b>Rahovec</b>
<b>Dabidol</b> - Oak trees	<b>Rahovec</b>
<b>Potoqan i ulët</b> - Oak trees	<b>Rahovec</b>
<b>Brestovc</b> - Oak tree (oak of Bajraktari)	<b>Rahovec</b>
<b>Petrovë</b> - Black Vrella	<b>Shtime</b>
<b>Devetak</b> - Cave Devetaku	<b>Shtime</b>
<b>Mollopolc</b> - Oak trees (old cemetery)	<b>Shtime</b>
<b>Godancë i Eperm</b> - Oak tree (cemetery)	<b>Shtime</b>
<b>Godanc i Poshtëm</b> - Oak tree (Taravillaz)	<b>Shtime</b>
<b>Rashnic</b> - Oak tree	<b>Shtime</b>
<b>Karaqic</b> -Complex trees	<b>Shtime</b>
<b>Karaqic</b> - Stone of the mosque	<b>Shtime</b>
<b>Pjetreshticë</b> - Cave	<b>Shtime</b>
<b>Shtime</b> -Compound Pine	<b>shtime</b>
<b>Silovi</b> - Trees of Qarr	<b>Lipjan</b>
<b>Silovi</b> - Complex oak trees	<b>Lipjan</b>
<b>Smallush</b> - Three Oak trees by the school	<b>Lipjan</b>
<b>Smallush</b> - Oak trees	<b>Lipjan</b>
<b>Bregu i Zi</b> -Oak Forest in the Old Cemetery	<b>Lipjan</b>
<b>Poturovc</b> - Oak tree	<b>Lipjan</b>
<b>Baicë</b> - Water Resources (on hurdhën of fish)	<b>Lipjan</b>
<b>Baicë</b> - Oak tree - by the school	<b>Lipjan</b>
<b>Baicë</b> - Oak tree in the cemetery	<b>Lipjan</b>
<b>Baicë</b> - Thermal Source	<b>Lipjan</b>
<b>Krojmir</b> - Stone fountain	<b>Lipjan</b>
<b>Shalë</b> - Perforated stone	<b>Lipjan</b>
<b>Shalë</b> - Oak tree (the well of Aziz)	<b>Lipjan</b>
<b>Vrellë</b> - Source of Water	<b>Lipjan</b>
<b>Vershec</b> - Oak trunks (trees)	<b>Lipjan</b>
<b>Compound Blinaja</b>	<b>Lipjan</b>
<b>Qylagë</b> -Oak tree (by the school)	<b>Lipjan</b>
<b>Torinë</b> - Oak Forest	<b>Lipjan</b>
<b>Bregu i Zi</b> - Oak trunk (near the road)	<b>Lipjan</b>
<b>Bujanë</b> - Oak forest in the cemetery	<b>Lipjan</b>
<b>Gadime</b> - Marble Cave (by the mosque)	<b>Lipjan</b>
<b>Gadime</b> - Forest on the Hill on Mosque	<b>Lipjan</b>
<b>Gadime e Epërme</b> - Trungjet e Dushkut në Varreza	<b>Lipjan</b>
<b>Golesh</b> - Endemic species habitat, Fotsythia europea (boshtra)	<b>Fushë Kosovë</b>

Source: MESP KEPA, Nature status report 2006-2007

**Table 3.6: Medicinal plants in Kosovo with economic potential**

Family	Scientific name	Albanian	English	Type of plant
Non-flowering plants				
Cupressaceae	<b>Juniperus communis</b>	Dëllinja e zezë	common juniper	Wood
	Juniperus oxycedrus	Dëllinja e kuqe	juniper	Wood
Equisetaceae	<b>Equisetum arvense</b>	Këputja e arës	horsetail	Herbaceous
Pinaceae	<b>Pinus nigra</b>	Pisha e zezë	Austrian pine	Wood
	<b>Pinus sylvestris</b>	Pisha e bardhë	scotch pine	Wood
	<b>Thuja occidentalis</b>	Tuja perëndimore	cedar	Wood
	Bimët e lulëzuara			
<b>Acoraceae</b>	<b>Acorus calamus</b>	Kashtefryza	calamus	Herbaceous
<b>Asteraceae</b>	<b>Achillea millefolium</b>	Barpezmi	common yarroë	Herbaceous
	<b>cichorium intybus</b>	Bresa	chicory	Herbaceous
	<b>Matricaria chamomilla</b>	Kamomili	German chamomile	Herbaceous
	<b>Taraxacum officinale</b>	Lule shrudha mjekësore	common dandelion	Herbaceous
	<b>Tussilago farfara</b>	Thunder mushke	coltsfoot	Herbaceous
	<b>Urtica dioica</b>	Hithra	stingin nettle	Herbaceous
	<b>Arctium lappa</b>	Rrodhja	greater	Herbaceous
	<b>Artemisia absinthium</b>	Pelini	absinthium	Herbaceous
	<b>Arnica montana</b>	Arnika	mountain arnica	Herbaceous
	<b>Calendula officinalis</b>	Kalendula mjekësor	pot marigold	Herbaceous
<b>Betulaceae</b>	<b>Betula pendula</b>	Meshtekna	Europen ëhite birch	Wood
<b>Boraginaceae</b>	<b>Symphytum officinale</b>	Kufelma mjeksore	common comfrey	Herbaceous
<b>Caprifoliaceae</b>	<b>Sambucus nigra</b>	Shtogu	Eu.black elderberry	Wood
<b>Caryophyllaceae</b>	<b>Saponaria officinalis</b>	Saponika	bouncingbet	Herbaceous
<b>Cornaceae</b>	<b>Cornus mas</b>	Thana	Cornelian cherry	Wood
Cruciferae- <b>Brassicaceae</b>	<b>Capsella bursa-pastoris</b>	Medicula-shtraper	shepherd's purse	Herbaceous
<b>Fagaceae</b>	<b>Castanea sativa</b>	Gështenja	European chestnut	Wood
<b>Ericaceae</b>	<b>Arctostaphylos uva-ursi</b>	Rrush arusha		Herbaceous



Table 3.6: Medicinal plants in Kosovo with economic potential

	<b>Vaccinium myrtillus</b>	Boronica	Bilberry	Herbaceous
<b>Gentianaceae</b>	<b>Centaurium erythraea</b>	Bar ethesh		Herbaceous
	<b>Gentiana lutea</b>	Sanza	yelloë gentian	Herbaceous
<b>Hypericaceae</b>	<b>Hypericum perforatum</b>	Lulja e ballsamit të shpuar	St.Johnsëort	Herbaceous
<b>Lamiaceae</b>	<b>Melissa officinalis</b>	Melisa	common balm	Herbaceous
	<b>Origanum vulgare</b>	Rigoni i zakonshem	oregano	Herbaceous
	<b>Prunella vulgaris</b>	Prunella	common selfheal	Herbaceous
	<b>Salvia officinalis</b>	Sherbela	kitchen sage	Herbaceous
	<b>Teucrium chamaedrys</b>	Arresi dushkvogel		Herbaceous
	<b>Thymus serpyllum=</b>		lemon thyme	Herbaceous
	<b>Thymus pulegioides</b>	Krasta		
	<b>Satureja hortensis</b>	Thrumbisht	summer savory	Herbaceous
	<b>Stachys officinalis</b>	Sarusha mjeksore	common hedgenettle	Herbaceous
<b>Leguminosae-Fabaceae</b>	<b>Medicago sativa</b>	Terfoja	alfalfa	Herbaceous
	<b>Ononidis spinosa</b>	Therra e lepurit		Herbaceous
	<b>Phaseolus vulgaris</b>	Fasulja	kidney bean	Herbaceous
	<b>Galega officinalis</b>	Qerbashi	professor-ëeed	Herbaceous
<b>Liliaceae</b>	<b>Colchicum autumnale</b>	Xherrokulli	autumn crocus	Herbaceous
<b>Malvaceae</b>	<b>Malva sylvestris</b>	Mellaga pyjore	high malloë	Herbaceous
	<b>Althaea officinalis</b>	Mullanjadhja	common marshmalloë	Herbaceous
<b>Papaveraceae</b>	<b>Chelidonium majus</b>	Latrapeci	celandine	Herbaceous
	<b>Papaver rhoeas</b>	Lulkuqu	corn poppy	Herbaceous
<b>Plantaginaceae</b>	<b>Plantago lanceolte</b>	Gjethdelli heshtor	narroëleaf plantain	Herbaceous
<b>Primulaceae</b>	<b>Primula veris</b>	Agulicja	coëslip primrose	Herbaceous
<b>Ranunculaceae</b>	<b>Paeonia officinalis</b>	Bozhure mjeksore	common peony	Herbaceous
	<b>Paeonia decorah</b>			
	<b>Paeonia carolina</b>			
<b>Rosaceae</b>	<b>Crateagus monogyna</b>	Murrizi njeberthamor		Herbaceous
	<b>Rosa canina</b>	Trendafilii eger	dog rose	Herbaceous
	<b>Agrimonia eupatoria</b>	Agriomoni	churchsteeples	Herbaceous
	<b>Alchemilla vulgaris</b>	Virak		Herbaceous
<b>Rubiaceae</b>	<b>Galium verum</b>	Ngjitesja e vertet	yelloë Spring bedstraë	Herbaceous
<b>Rutaceae</b>	<b>Dictamnus albus</b>	Bari i uzos	gasplant	Herbaceous

Table 3.6: Medicinal plants in Kosovo with economic potential

<b>Sapindaceae</b>	<b>Aesculus hippocastanum</b>	Gështënja e egër	horse chestnut	Wood
<b>Scrophulariaceae</b>	<b>Verbascum sp.</b>	?		Wood
	<b>Digitalis lanata</b>	Luletogeza leshtake	Grecian foxglove	Wood
	<b>Digitalis purpurea</b>	Luletogezi i purepurte	purple foxglove	Wood
<b>Solanaceae</b>	<b>Atropa belladonna</b>	Helmarina	belladonna	Wood
	<b>Capsicum annum</b>		cayenne pepper	Wood
<b>Tiliaceae-Malvaceae</b>	<b>Tilia cordata</b>	Bliri gjethvogel	littleleaf linden	Wood
<b>Umbelliferae - Apiaceae</b>	<b>Daucus carota</b>	Karota	Queen Anne's lace	Wood
	<b>Pimpinella anisum</b>	Anason	anise burnet saxifrage	Wood
	<b>Angelica archangelica</b>	Angjelika	angelica	Wood
	<b>Foeniculum vulgare</b>	Marac	sëet fennel	Wood
<b>Valerianaceae</b>	<b>Valeriana officinalis</b>	Haraqina mjekësore	garden valerian	Wood
<b>Verbenaceae</b>	<b>Verbena officinalis</b>	Sporisi mjekësor	herb of the cros	Wood

Source: MESP KEPA, Nature status report 2006-2007

## **4. Waste**

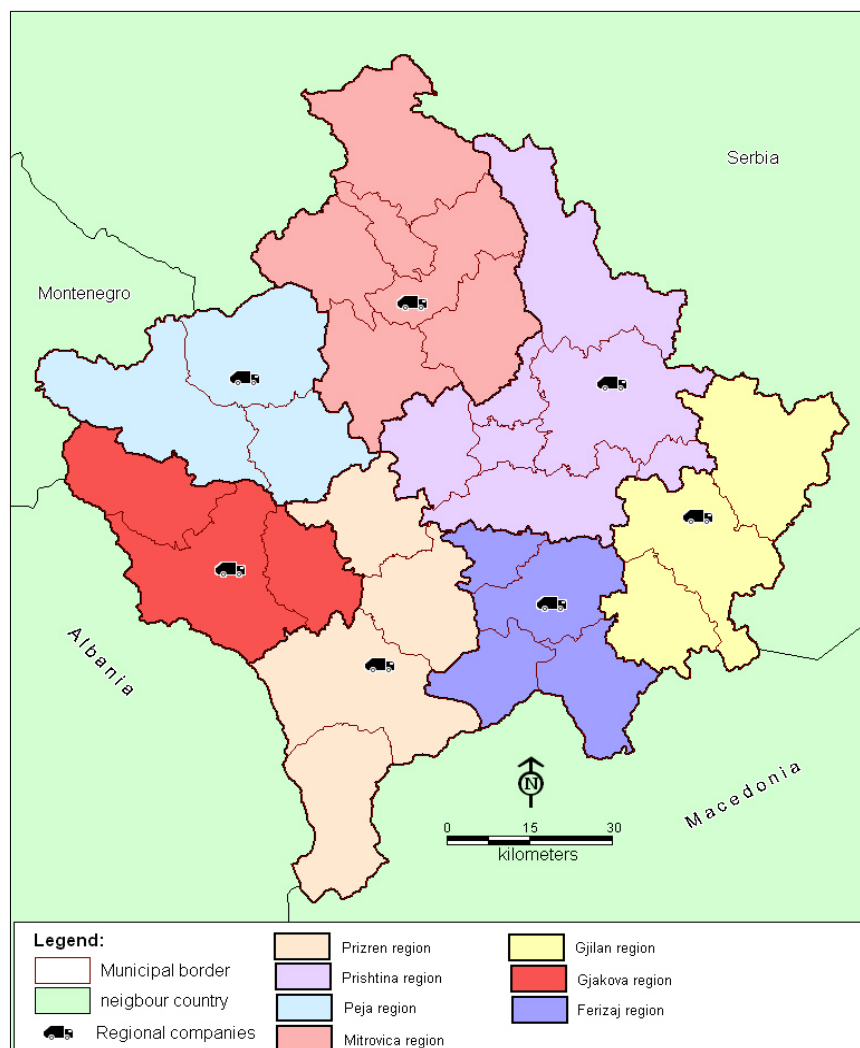
Waste includes all items that can not be used by humans, or that they intend to discard, or have already done so. Furthermore, such residues are things that are required for people to throw, for example due to their hazardous characteristics. Many items can be considered as waste eg household rubbish, sewage sludge, waste from manufacturing activities, packaging items, refuse vehicles, old televisions, garden waste, old paint holders, etc.. So all our daily activities can pose a variety of different waste from different sources.

**Municipal waste** are called waste collected and treated by municipal companies. This includes waste from households, includes heavy waste, similar waste from commerce, buildings, institutions and small businesses, yard and garden waste, street trash and debris from the contents of waste containers and waste markets. Network also includes waste from municipal sewage and processing, also construction of municipal buildings and construction demolition debris.

**Waste Collection of Collective Housing (CH):** Operation of the work carried out by public enterprises, in order to collect the municipal waste in the place designated for this purpose (near collective housing).

**Door to door collection (DDC):** It is work which is carried out by companies operating under the plan in order to collect the waste generated by individual households.

## Regional Companies for management of Municipal Waste in Kosovo



Source: SOK

Total amount of municipal waste in Kosovo in 2009 appears to be little more than 400 000 tonnes.

In Kosovo waste collection door to door is 57 percent, while in collective housing was 43 percent.

In Pristina and its region waste collection door to door was 55 percent, while in collective housing was 45 percent.

In other regions in Kosovo door to door collection has been 59 percent, while the collective housing was 41 percent

**Table 4.1: Quantity of municipal waste collected in Kosovo from 2007 to 2009**

Collection place	2007			2008			2009		
	Collective housing	Door to door	Total	Collective housing	Door to door	Total	Collective housing	Door to door	Total
Unit	1000/ ton			1000/ton			1000/ton		
Pristina and its region	88	94	182	82	116	198	98	120	218
Other regions in Kosovo	56	92	148	45	108	153	76	111	187
Kosovo total	144	186	330	127	224	351	174	231	405

Source: SOK, Municipal Waste Survey 2009

In 2009 in Pristina and the region in total amount of municipal waste collected increased 10 percent, also in other regions in Kosovo the amount of waste collected has increased by 22 percent.

Based on a comparison of data for 2007-2009 it is noted that in Kosovo has improved the collection of municipal waste and that there is an increase of 23 percent.

In 2009 the collection of municipal waste in Kosovo has increased by 15 percent compared with 2008.

In 2008 the amount of municipal waste collected by local companies has increased by 6.4 percent.

Also the collection efficiency was better in Pristina and its region than in other areas in Kosovo.

Companies of Pristina and its region managed to collect 8.8 per cent more waste in 2008 than in 2007.

In other regions the waste collection has increased to 3.4 percent.

**Table 4.2: Quantity of municipal waste collected per person in Kosovo 2007-2009**

Collection place	Collected quantity	Population	Waste	Waste/ person/ day	Collected quantity	Waste	Waste/ person/ day	Collected quantity	Waste	Waste/ person/ day
Unit	1000/ ton		kg/ inhabitant	kg/ inhabitant	1000/ ton	kg/ inhabitant	kg/ inhabitant	1000/ ton	kg/ inhabitant	kg/ inhabitant
Pristina and its region	182	500.000	332	0.9	198	396	1.1	218	436	1.2
Other regions in Kosovo	148	1.600.000	95	0.3	153	92	0.3	187	117	0.3
Kosovo total	330	2.100.000	157	0.4	351	167	0.5	405	193	0.5

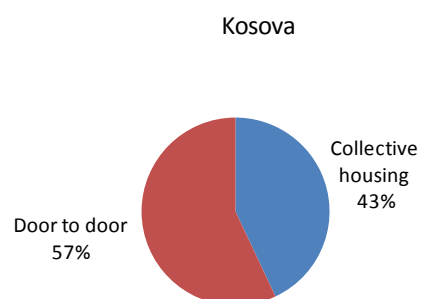
Source: SOK, Municipal Waste Survey 2009

Table 4.2. presents data on municipal waste from 2007-2009. Collection of municipal waste per person in 2007 was 157 kg, in 2008 was 167 kg, in 2009 was 193 kg as annual average in Kosovo. .

In 2007 the data indicate that a region in Pristina and its collection of waste per capita per day was 0.9 kg (Table 4.2). The data for 2007-2009 for other regions in Kosovo and Kosovo total results show approximately the same figures.

In Kosovo waste collection door to door was 57% and 43% in collective dwellings (see Figure 4.1).

**Figure 4.1: Structure of the waste collected in 2009**



Source: SOK, Municipal Waste Survey 2009

## 5. Water

### 5.1 Water resources

In Kosovo the water reserves are limited and not well distributed throughout the territory. The country has four major deadlocks called the White Drin, Ibri, Morava and Lepeneci Binçës. Ground water is located mainly in the western part of Kosovo. Also there is a limited number of natural lakes and over the years some artificial lakes were established to assist in irrigation of land and to manage the industrial production continuation.

In Kosovo, the water reserves are estimated at 1600 m<sup>3</sup>/water per second.

From table 5.1 it is note that the largest amount of water is used by surface accumulations or expressed in percentage 58.44%

**Table 5.1. Sources of water supply and the daily quantity in m<sup>3</sup>**

Water-receiving place	The amount of water used in [m <sup>3</sup> / per day]	The amount of water used in [m <sup>3</sup> / per year]	Percentage [ %]
Natural resources	153,264	55.941.360	32,10
Reservoir	7,749	2.828.385	1,62
River	11,191	4.084.715	2,34
Lake (representing accumulation)	279,26	101.929.900	58,44
Wells	26,34	9.614.100	5,51
<b>Total</b>	<b>477,804</b>	<b>174.398.460</b>	<b>100</b>

Source: KEPA (State of Environment Report 2006-2007)



**Table 5. 2: Surface and flow of artificial lakes in Kosovo**

Lake	Surface	Stream/flow
Lake Radoniq	130 km	16 m <sup>3</sup> / sec
Lake Batllava	226 km	16 m <sup>3</sup> / sec
Lake Ujmani (Gazidoves)	1060 km	13.5m <sup>3</sup> / sec
Lake Badovci	103 km	105 m <sup>3</sup> / sec

Source: KEPA (State of Environment Report 2006-2007)

**Table 5.3: The main accumulation, surface, water flow and volume of the accumulation**

River	Name of accumulation	Amount of water in m <sup>3</sup>	Percentage (%)
Ibër	Gazidov	390.000.000	68,45
Përrue	Radoniq	113.000.000	19,98
Graçanka	Badovci	31.000.000	5,44
Batllava	Batllavë	30.000.000	5,26
Përlepnicë	Përlepnicë	4.200.000	0,73
Livoç	Livoç	1.000.000	0,17
Ibër	Pridvorcë	490000	0,08
<b>Total</b>		<b>569.690.000</b>	<b>100</b>

Source: KEPA (State of Environment Report 2006-2007)

Table 5.4 presents the data for some underground accumulation for the basin of the White Drini. Currently the use of underground water in Kosovo is through wells and sources.

**Table 5.4: Underground water accumulator**

Accumulation of underground	Basin (km <sup>2</sup> )	Useful volume (m <sup>3</sup> )	Capacity assessment	
			m <sup>3</sup> /sec	Total (m <sup>3</sup> )
Istogu	76	12x10 <sup>6</sup>	2,8	89x10 <sup>6</sup>
Vrellë	28	14x10 <sup>6</sup>	0,600	19x10 <sup>6</sup>
Drini i Bardhë	90	14x10 <sup>6</sup>	3,23	102x10 <sup>6</sup>
Lubizhdë	42	45x10 <sup>6</sup>	4,2(150)	55x10 <sup>6</sup>
Pejë	300	37,5x10 <sup>6</sup>	4,0(150)	52x10 <sup>6</sup>
Deçan	144	33x10 <sup>6</sup>	3,5(150)	45x10 <sup>6</sup>
Lloqan	39	12x10 <sup>6</sup>	1,2(150)	15x10 <sup>6</sup>
Krk Bunar	81	10x10 <sup>6</sup>	1,6	50x10 <sup>6</sup>
Korishë	18	3,6x10 <sup>6</sup>	0,38	12x10 <sup>6</sup>
Field of Theranda	50	75x10 <sup>6</sup>	2	63x10 <sup>6</sup>
Total	868	271x10 <sup>6</sup>		511x10 <sup>6</sup>

Source: KEPA (Report of the Water Situation in Kosovo, 2010)

## 6. Energy

In Kosovo in 2010 are produced about 8 million tons of coal or 1.1% more than in 2009.

Table 6.1 shows that the consumption of coal in 2010 was 8.4 million tons. In relation to the year 2009 there is an increase in the amount of consumption to 5.1%. In Kosovo in 2010 are produced about 5 596.4 GWh of electricity which 97.9% is produced in PP and 2.1% HP. Compared to 2009 we have an increase by 4.6% more. In 2011 were imported 818.4 GWh of electricity or 6.6% more than in 2009.

**Table 6. 1: Production of coal and electricity, imports, exports and consumption of electricity, 2009-2010**

Year, Month	Coal Production (million tons)	Electricity			Consumption				
		Gross production	Imports	Exports	Household	Commercial	Industry	Public light, and other	Consumers 220110kV
2009-01	633.071	541.015	118.051	17.670	163.971	47.084	22.290	11.632	32.063
2009-02	777.997	476.299	95.920	210	168.213	50.108	24.355	11.317	35.454
2009-03	741.535	540.036	53.910	6.672	155.781	44.056	20.541	11.680	39.489
2009-04	532.564	347.892	85.985	4.870	143.946	39.856	17.633	9.724	39.412
2009-05	481.520	462.908	4.100	66.737	132.585	37.608	16.726	10.248	39.491
2009-06	452.244	365.515	23.965	29.223	134.913	41.225	17.693	10.234	38.522
2009-07	557.580	369.224	34.495	26.147	117.603	37.511	15.684	10.166	41.494
2009-08	603.161	378.160	37.884	21.272	127.525	42.135	18.969	10.156	51.191
2009-09	727.414	405.383	30.610	39.202	134.652	43.316	16.376	10.707	49.275
2009-10	734.289	444.664	79.940	27.865	138.908	41.039	16.553	11.893	62.543
2009-11	711.730	476.118	100.242	14.565	175.527	53.079	19.251	11.864	60.892
2009-12	917.622	541.404	102.440	19.582	175.101	50.894	21.407	12.900	54.216
<b>2009</b>	<b>7.870.727</b>	<b>5.348.620</b>	<b>767.542</b>	<b>274.015</b>	<b>1.768.724</b>	<b>527.910</b>	<b>227.478</b>	<b>132.521</b>	<b>544.041</b>
2010-01	526.378	495.460	151.860	0	168.641	47.034	18.221	9.900	55.580
2010-02	612.803	476.594	108.475	2.180	171.897	47.741	19.234	9.855	52.625
2010-03	708.582	554.781	51.060	16.655	171.925	47.870	19.639	11.414	62.287
2010-04	752.645	417.759	81.099	22.015	147.091	42.276	17.473	10.649	58.757
2010-05	641.211	454.873	18.905	43.227	140.492	43.992	16.834	10.379	65.802
2010-06	646.465	519.295	8.260	116.492	141.763	46.200	17.864	6.005	59.766
2010-07	646.456	281.038	120.910	10.158	141.279	46.610	18.978	9.060	49.034
2010-08	764.221	389.669	58.995	18.754	140.841	49.346	19.442	7.353	63.599
2010-09	576.066	468.843	6.620	65.490	141.155	42.678	18.110	9.377	53.984
2010-10	760.559	503.203	54.253	44.628	156.406	48.951	19.560	10.573	63.869
2010-11	608.810	448.784	96.615	9.770	162.780	49.903	20.231	7.279	61.294
2010-12	746.835	586.115	61.335	3.102	188.939	57.353	21.013	8.066	54.021
<b>2010</b>	<b>7.991.031</b>	<b>5.596.415</b>	<b>818.387</b>	<b>352.471</b>	<b>1.873.209</b>	<b>569.955</b>	<b>226.599</b>	<b>109.911</b>	<b>700.618</b>

Source: SOK, Economic Statistics (Balance of Energy in Kosovo, Q1-2011)

**Table 6. 2: Production of coal and electricity, imports, exports and consumption of electricity, 2006-2010**

Year	Production of coal (tons)	Electricity (KWh)			Consumption (KWh)	
		Production	Imports	Exports	Household	Commercial
2006	6 532 348	3 970 602	537 816	253 297	1 458 606	696 511
2007	6 715 352	4 309 399	623 389	359 908	1 503 530	887 869
2008	7 842 037	4 505 692	647 475	234 976	1 666 940	1 273 998
2009	7 870 727	5 348 620	767 542	274 015	1 768 724	527 910
2010	7 991 031	5 596 415	818 387	352 471	1 873 209	569 955

Source: SOK, Economic Statistics (Balance of Energy in Kosovo, Q1-2011)

## 7. Transportation

Transportation has a great impact on the environment in general, but particularly in urban areas, it comes mainly for the fact that motor vehicles utilize with fuel oil and its derivatives which directly affect the environmental pollution.

This type of pollution is referred to us as "black carbon" pollution. Emissions from fuels and automotive industry are the main source of air pollution.

### Rail transportation

Table 7.1 shows that the length of the rail network is 333 km, also in this network are 23 tunnels and 115 bridges.

**Table 7.1: Rail network in the Republic of Kosovo, 2011**

Name	Length in Km/m
Open segment of rail line	333
Rail lines in stations	106
Total	438
Tunels	23/9020 m
Bridges	115/2988 m

Source: Ministry of Infrastructure 2011

**Table 7.2: History of construction of the first railway lines in Kosovo, 2011**

Railway lines - routes	Year of construction
Hani i Elezit- Mitrovicë	1874
Mitrovicë-Leshak	1931
Fushë Kosovë-Prishtinë	1934
Prishtinë-Livadhi (Podujevë)	1949
Klinë-Prizren	1963

Source: Ministry of Infrastructure 2011

**Table 7. 3: Motor vehicles registered for 2006-2008**

Year	Car	Jeep	Buses	Van	Truck	Motorcycle	Trailer	Other	Total
2006	120 931	5 136	817	14 851	7 561	934	1 110	6 399	15 7729
2007	144 610	6 466	1 063	17 017	9 412	1 307	1 539	6 710	188 124
2008	159 522	7 346	1 242	19 329	10 630	2 817	3 344	7 071	211 301

Source: MPS (Vehicle Registration Office, more than 3.5 t)

**Table 7.4: Length and condition of the road network by category of road 2011**

Type	Paved	%	Not paved	%	Total in Km
MTPT	1772	94.1	111	5.9	1883
National	599	99.3	4	0.7	603
Regional	1173	91.6	107	8.3	1280
Municipal					5034*
Local					4463*
Urban					571*
Total					6917

\* assessment

Source: Ministry of Infrastructure 2011

Table 7.5: shows that in 2010 were imported 533, 9 million tonnes of oil and petroleum expressed in percentage or 1.7 percent more than in 2009.

Also in 2010, 43.4 million tons of gas were imported or 5.4% more than in 2009

**Table 7.5: Imports of petroleum and gas, from 2004 to 2010, in million**

Period	Imports of petroleum in tons	Imports of gas in tons
2004	363.5	9.1
2005	352.9	13.7
2006	357.5	19.4
2007	371	25.2
2008	422.5	31.6
2009	525.2	41.2
2010	539.9	43.4

Source: SOK, *Economic Statistics (Balance of Energy in Kosovo, Q1-2011)*

## **8. Air**

Air supplies us with oxygen which is essential for our bodies to live. Air is 99.9% nitrogen, oxygen, water vapor and inert gases. Human activities will emit substances into the air, some of which may cause problems for people, plants, and animals.

There are several types of pollutants which are known by their contamination effects which are in constant discussion. These include dust, smoke, rain, acid, greenhouse effect, and "holes" in the ozone layer. Each of these problems has serious implications for our health and the environment in general.

**The main environmental indicators of air can be divided into three main categories:**

1. Emissions (pressing indicators)
2. Air quality (condition indicators)
3. The measures taken and their efficiency (charge indicator)

### **Air emissions:**

The main sources of emissions of air pollutants are:

- 1 stationary industrial sources, usually concentrated in areas densely populated industrial
- 2 traffic
- 3 areas of construction, quarries, cement plants.
- 4 large combustion sources.

The main polluting emissions are: NO<sub>x</sub>, CO<sub>2</sub>, CO, O<sub>3</sub>, SO<sub>2</sub>, soot, dust and smoke. Monitoring of these polluting emissions is necessary to know their value and to determine the maximum value in the environment (MVE).



## Monitoring of air quality

Air quality monitoring in Kosovo is made by government (hydro and NIPH) and the economic operators which have an impact on air quality (KEK, Sharrcem and Feronikeli NewCo).

The data in Table 8.1 show the average annual values of PTD, according to on-site-sampling which in 2005 were 205,601, while in 2009 was a decrease in value 197,816. Maximum amount of PTD was registered in 2007, on-site sampling ""Trepca Industrial Park".

**Table 8.1: Annual average values (PTD) of the total deposited dust (aerosediment) in mg / m<sup>2</sup>. d<sup>2</sup>**

Point-sampling	2009	2008	2007	2006	2005
IHMK	197.816	195.871	155.587	207.932	205.601
School "Bedri Gjinaj"	177.626	249.755	1248.054	130.225	120.345
School "Migjeni"	111.013	134.812	127.907	103.712	125.542
Alba Park Shupkovic	222.723	328.78	213.197	273.773	301.23
Vëllezërit Kuqi (Kuqi Brothers)			120.471	183.117	129.512
School "Elena Gjika	162.808	210.489	119.914	137.65	159.18
Industrial park	187.515	1030.792	2898.926	125.336	142.021
Trepça					
OSBE	180.882	769.76	2263.313	107.422	106.238
Tobacco factory	88.637	78.559	1336.365	102.135	121.012
Water plant	66.468	104.272	79.21	97.682	132.279

Source: MMPH-AKMM 2010

From Table 8.2 it is noted that in 2009 out of 9 monitoring points, just two points have exceeded the WHO standard and the parameter of aerosediment (total dust deposited).

In monitoring point number 01 in 2009 the average value was 347 mg/m<sup>2</sup>/day, while monitoring point number 05 in average annual value in 2009 was 308 mg/m<sup>2</sup>/day.

In 2010 at 01 monitoring point we had 403 mg/m<sup>2</sup>/day. Admissible value on the basis of WHO is 300 mg/m<sup>2</sup>/ day.

**Table 8.2: Average values for aerosediment and heavy metals for 2009 and 2010, New Complex Feronikeli**

As_mes mg/m <sup>2</sup> /day		Fe_mes (mg/l)		Ni_mes(mg/l)		Co_mes (md/l)		Cr_mes (mg/l)	
2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
347	403	0.025	0.024	0.014	0.015	0.018	0.015	0.02	0.021
265	299	0.023	0.023	0.014	0.016	0.018	0.016	0.025	0.024
262	292	0.027	0.022	0.016	0.016	0.022	0.018	0.023	0.023
234	233	0.022	0.023	0.02	0.016	0.022	0.017	0.021	0.023
308	259	0.019	0.023	0.018	0.012	0.02	0.018	0.022	0.022
147	204	0.026	0.021	0.02	0.015	0.018	0.017	0.018	0.02
114	176	0.021	0.02	0.017	0.015	0.019	0.016	0.02	0.019
144	147	0.022	0.026	0.022	0.015	0.016	0.016	0.023	0.024
144	158	0.02	0.023	0.019	0.015	0.017	0.016	0.021	0.025

Source: MMPH-AKMM 2010

Table 8.3. shows that by 5541 water samples taken from throughout Kosovo, 326 samples resulting in a poor condition.

Also Table 8.4. presents data from water tests conducted in water facilities in the Pristina region, which are total 1561 samples of physico-chemical analysis, while 109 resulted in a poor condition, and microbiological analysis of total 2810 samples 171 are presented in poor condition.

**Table 8.3: Analysis of water in the NIPH, January-December 2009**

Content	Water		Wells		Waters of accumulative		Swimming pools		Bottled water		Other water		Total		% not okay
	Total	Not okay	Total	Not okay	Total	Not okay	Total	Not okay	Total	Not okay	Total	Not okay	Total	Not okay	
1	2	3	4	5	6	7	8	9	10	11	8	9	10	11	12
Basic analysis	5504	321	1052	628	185	86	9		156	62	446	48	7352	1145	15.6
Periodic analysis	37	5	50	12	:	:	:	:	:	:	3	:	92	17	18.5
Radioactivity	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Total Kosovo	5541	326	1102	640	185	86	9	:	158	62	449	48	7444	1162	15.6

Source: IKSHIP, 2010

**Table 8.4: Quality of drinking water in the Pristina region 2010**

Basic / Physical - Chemical Analysis					Microbiological analysis				Periodic analysis			
Water object	Number of samples				Number of samples				Number of samples			
	Total	Bad	%	Isolated	Total	Bad	%	Isolated	Total	Bad	%	Isolated
Water	863	5	0.57	Turbiditet	1881	60	3.18	E.coli, Bakteret coliforme, Streptococcus faecalis	15	1	22.72	NO3, Turbiditet
Wells	122	47	38.52	NO3, Turbiditet	68	32	47.05	E.coli, Bakteret coliforme, Streptococcus faecalis	30	9	30.00	Fe, Turbiditet, NH4, Mn, NO3, NO2
Swimming pools	6	0	0.00	:	0	0	0.00	:	0	0	0.00	:
Bottled	478	57	11.92	Fe, Turbiditet, NH4, Mn	560	1	0.17	:	17	1	5.88	:
Other	92	0	0.00	:	301	78	25.91	E.coli, Bakteret coliforme, Streptococcus faecalis	7	4	57.14	NO3, Turbiditet
Total	1561	109	6.98	Fe, Turbiditet, NH4, Mn, NO3	2810	171	4.48	E.coli, Bakteret coliforme, Streptococcus faecalis	69	15	21.73	Fe, Turbiditet, NH4, Mn, NO3, NO2

Source: NIPH, 2010



## **Statistical Agency of Kosovo, a brief description**

**Statistical Agency of Kosovo (SAK)** is a professional office operating since 1948. The SOK passed through some of the historic phases and it has been structured by the state rule of that time. SOK restarted its work on August 2, 1999, as an independent and professional office working in the frames of the Ministry of Public Administration (MPA). Since 12.12.2011 the Agency operates in the frames of the Prime Minister's Office. SOK is financed by the Kosovo Consolidated Budget and by donors for the various projects.

**Statistical Agency of Kosovo** acts according to the Law No. 04/L-036 which entered into force on 12.12.2011. A medium-term Master Plan is being developed for the statistical system of Kosovo compatible with the European Statistics.

**SAK Mission** is to fulfill the needs of the users with the reliable statistical data and with regular analyses in order to support and provide government departments with the proper information for decision-making process including other users as well.

**Address: Statistical Agency of Kosovo,  
Str. Zenel Salihu, No. 4, Pristina**

**Telephones:**

**Head-Quarters: +381 200 31 143**

**Director: +381 (0) 38 200 31 132**

**Fax: +381 (0) 38 235 033**

**E-mail: [agriculture@ks-gov.net](mailto:agriculture@ks-gov.net)**

**Web-site: <http://esk.rks-gov.net/>**