



Kosovo Environment and Climate Analysis

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Introduction

This Environment and Climate Change Analysis¹ (ECCA) serves as a point of departure for a discussion on how environment and climate change issues can be integrated in the Swedish cooperation strategy with Kosovo. Environment and Climate is one of three thematic priorities² set by the government of Sweden for its development cooperation, and includes four focus areas: (i) adaptation to climate change; (ii) energy; (iii) environment and security; and (iv) water. In order to address these issues, five main questions will be discussed:

1. Which are the Key Environmental Problems and their Causes?
2. What are the Effects of the Environmental Problems?
3. What are Key Actors doing to manage the Environmental Problems?
4. How and to what extent are the Responses to Environmental Problems and Opportunities implemented and followed-up?
5. What are the implications for Swedish Development Cooperation?

The focus for Swedish development cooperation with Kosovo 2005-2006 was to contribute to the development of peace and stability by strengthening Kosovo in its efforts to achieve closer integration with the rest of Europe. The two principal sectors for the cooperation are democracy and good governance and sustainable economic development.

Kosovo declared its independence as a sovereign state on 17 February 2008. Given the current turbulence, it might look peripheral to support environmental institutions, especially as the country is still vulnerable to political instability and regional conflicts. However, there are important environment and climate change linkages to several of the key sectors for economic development in Kosovo. In addition, environmental pollution and degradation of natural resources affect livelihood opportunities and poverty reduction, and affects public health. Hence, it is important to ask how environmental concerns can be seriously addressed within all the different sectors and various plans for development of the Kosovo society.

Sweden has provided funding to Kosovo for the development of an environmental strategy and an environmental action plan, and the Environmental Economics Help Desk at Göteborg University forwarded comments on these documents in May 2004. Shortly after, Sida presented a strategic environmental analysis (SEA) of Kosovo.³ Beside the documents listed

¹ This Environmental and Climate Change Analysis was written as a desk study, at the request of Sida's office in Pristina (Fatos Mulla) by Antonia Sanchez Hjortberg and Gunilla Ölund Wingqvist, at the Environmental Economics Unit (EEU), Department of Economics, University of Gothenburg, as part of Sida-EEU's institutional collaboration on environmental economics and strategic environmental assessment. Comments can be sent to gunilla.olund-wingqvist@economics.gu.se. The views expressed in this Environmental and Climate Change Analysis are those of the authors and do not necessarily represent the views of Sida.

² The three thematic priorities are: Democracy and Human Rights; Environment and Climate; and Gender equality and the role of women in development.

³ Sida, Olvik, 2004

in the references, the SEA has been the major source for identifying Kosovo's environmental problems. Another important source of information has been the Kosovo Environmental Action Plan, 2006-2010.

1. Key environmental problems and their causes⁴

The key environmental problems in Kosovo include air pollution, water scarcity and pollution, land degradation, and loss of ecosystem services (not in order of priority). Disaster risks and climate variability and change enhance already existing problems or pose new threats to Kosovo.

Air pollution: Due to the decline of industrial activities during the 1990s, direct emissions to the air have declined but it remains a big problem. The largest air-polluting source is the coal-burned power plant in Obiliq. Air pollutants such as CO₂, SO₂, NO_x (contributing to i.a. climate change, acidification, eutrophication and formation of ground-level ozone respectively) and dust, are emitted from the plant and contribute significantly to the bad air-quality in Pristina and the surroundings. Road transport is another major source of air pollution, and the mining industrial complex in the Mitrovica area is another hotspot.⁵ About 80-85 % of all heating in Kosovo comes from firewood.⁶ Burning of firewood and fossil fuels, along with waste set on fire by households or at landfills, also cause a lot of damaging emissions to the air (see section 2.3). Dust in the cities from increased traffic and old vehicles are other more recent concerns.

Water scarcity and pollution: Kosovo has four main river basins and they are all transboundary. Water resources are unevenly distributed in time and space and increasingly scarce. Kosovo is currently facing problems of both inadequate quality and quantity of its water resources. The main causes of water scarcity include, among others, increased consumption (the demand for water in the last century has multiplied 6 times), inefficient use and leakages in badly maintained water pipes⁷, and extended irrigation. Chemical and bacteriological monitoring shows that the majority of rivers in Kosovo are badly polluted.⁸ Major sources of pollution are mines, tailing areas, municipal dumps and sewers from the bigger cities.⁹ The lack of treatment of wastewaters from industries and power plants leads to heavy metal contamination and acidification. Also groundwater and rural wells are badly affected by the lack of sewage and wastewater treatment and by organic contamination.

Land degradation: Kosovo's soils are inherently fertile but has been degraded for reasons like open coal pits, disposal sites for soot, widespread dumping of household waste, etc. Contamination of soil and foodstuff by heavy metals including lead is a serious problem in areas where mines and industrial facilities are located.¹⁰ Hazardous materials and chemicals such as detergents, pesticides, building material, etc. also damage the soil.

Loss of ecosystem services: Kosovo's ecosystem services include inter alia provision of food, water, fuel and energy, timber and non-timber forest products (NTFPs), run-off regulation,

⁴ Sida, Olvik, 2004

⁵ Kosovo Energy Corporation, 2006

⁶ Sida, Nyhetsbrevet Östlövet, February 2007

⁷ Water losses in the network range from 50% to 80%. KSDP, Draft December 2006.

⁸ 88% of the water samples indicate contamination of the water resources. KSDP, Draft December 2006.

⁹ There are virtually no municipal wastewater treatment facilities in Kosovo. KSDP, Draft December 2006.

¹⁰ World Bank, 2005

and recreational benefits. Roughly 40 % of Kosovo's territory is covered by forests. Parts of the forests are in bad condition due to inadequate management and illegal logging. The high demand for wood after the war, for reconstruction and firewood, has put increasing pressure on the forests, leading also to increased soil erosion and landslides. Mature oaks are highly threatened. Only a third of the forest is considered ecologically healthy and economically productive.¹¹

Currently 4.3 % of the Kosovo territory is protected area, including a national park, 11 wild sanctuaries, 37 natural monuments and two protected landscapes. The management and monitoring of protected areas is very weak due to the political instability and lack of financial resources and institutional capacity. There is a rich flora¹² and fauna¹³, but several species of plants are known to be on the verge of extinction¹⁴ - mainly due to human activities. The biodiversity and ecosystems – which are important for resilience to stresses and natural disasters – are threatened by new constructions, illegal deforestation, sand mining, increased water abstraction, illegal exploitation of gravel from the river beds, pollution, etc. Overall demand for food, fibre and water continues to rise. Increasing environmental pollution (leading e.g. to formation of ground-level ozone, acidification, poor water quality, etc.), poor management practices, and climate change impacts will further affect the ecosystem service availability.

Climate variability and change and disaster risks¹⁵: Projections on temperature and precipitation are presently done on a regional level. Changes in hydrological cycles and impacts of climate change are more difficult to predict and are subject to local differences and vast uncertainties. Below, regional information on climate change for Europe/south-eastern Europe (SEE) is used, as specific information for Kosovo is not yet available.

Kosovo's climate is predominantly continental, with warm summers and cold winters with Mediterranean and Alpine influences. Due to unequal elevations, there are regional differences in temperature and rainfall distribution. Climate change is likely to enhance already existing climate variations. Projections for the whole region indicate warmer temperatures and more irregularity in precipitation; however, southern Europe is expected to be more severely affected than northern. Weather patterns are already changing, leading to more frequent droughts, floods, and forest fires in the Balkan. Predicted consequences of climate change are: magnified regional differences of Europe's natural resources and assets; increased water stress in southern Europe, and affected biodiversity and ecosystems. The global warming patterns in SEE may be more connected to higher temperatures on warm days than to a general warming. It is expected that cold extreme events will be less frequent but the region would be exposed to unprecedented high temperatures. Although summer precipitation is expected to decrease, the intensity may well increase. Hence, there is a risk for enhanced occurrences of heat waves, droughts and forest fires, as well as floods. In Kosovo, where safe water is already a scarce resource, adaptation to climate change is likely to become a hot topic.

General political and institutional causes to environmental problems and population pressure: One major cause of environmental and health risks in Kosovo is a weak governance

¹¹ Jonsson, April 2007

¹² More than 2 000 species of vascular flora. Sida, Olvik, 2004

¹³ 46 mammal species and about 225 bird species. Sida, Olvik, 2004

¹⁴ 26 species have been included on the Red List of threatened plants of IUCN. Sida, Olvik, 2004

¹⁵ Adger et al, 2007. IPCC.

structure including weak institutions and lack of clear responsibilities between central and local level authorities, weak environment management systems and weak mechanisms for law enforcement.¹⁶ The damages by the war together with a high population density¹⁷ have increased poverty¹⁸ and the pressure on natural resources. A large share of Kosovo's population is very young - 52 % are under 25 years of age. Unemployment is an important source of income poverty, which disproportionately affect children, elderly, female-headed households, disabled, non-Serb ethnic minorities, unemployed and precarious job holders.¹⁹ Income opportunities are substantially worse among youth²⁰ and women²¹; gender inequity remains widespread, and empowerment is weak, which may enhance vulnerability and contribute to social instability.

2. What are the effects of the environmental problems?

2.1 Impacts on poverty (security, vulnerability, opportunity)

Climate change and environmental degradation, especially access to clean water resources, is generally considered to be two of the greatest environmental security threats today.²² In Kosovo, expected climate change impacts in combination with increasing water demand (due to population- and economic growth) and continued water contamination are likely to lead to increased water scarcity. Water scarcity may lead to conflicts between nations and/or water using sectors, and it *will* lead to increased competition over the water resources. There are presently six water reservoirs in Kosovo²³, of which the largest is situated in the Serb-dominated area around Mitrovica. In case of future ethnic conflict, there is a risk that water supply from the reservoir is cut or restricted, which may affect cooling of the coal power plant; this may negatively affect the already weak energy supply situation and enhance the risk of conflict.

There are environmental risks that constitute national security issues in Kosovo: seismic activities put a large part of the population at risk as the housing stock presently does not comply with security codes; the high deforestation rate enhances the risk of landslides, especially in the Bardh and Mirash mining areas; flooding is a potential threat in certain areas, such as flood plains. Increasing flood risk from climate change is related to land use practices; impermeable surface due to urbanisation could increase the flood risk. At the same time, both water run-off and recharge of groundwater reservoirs are likely to be reduced in central and eastern Europe. Environmental degradation can jeopardize the livelihoods of those who rely on natural resources, especially in rural areas, and increase the vulnerability of those living in areas with risk of landslides and floods.²⁴

The Kosovar population is still widely exposed to pollution from industries, coal power plants, road transport, and mining. The situation is aggravated by the lack of efficient

¹⁶ World Bank, 2005; and Sida, Olvik, 2004.

¹⁷ Approximately 200 persons per square km, World Bank, 2005

¹⁸ About 37 % of the population was estimated to live in poverty according to the 2002/03 Household Budget Survey. World Bank, 2005

¹⁹ World Bank, 2005

²⁰ The unemployment rate for youth is 75%, about two times higher as for adults

²¹ The unemployment rate for women is 69%, and for men 37%. KDSP, Draft December 2006.

²² Environmental security, one aspect of human security, aims to protect people from the short- and long-term ravages of nature, man-made threats in nature, and deterioration of the natural environment. UNDP, HDR 1994.

²³ Sida, Olvik, 2004.

²⁴ World Bank, 2005

regulations and control operations. This mismanagement also harms key sources of food production and income opportunities for poor and marginalized people. Landmines and unexploded ordnance is another consequence of the war leading to further marginalization and poverty²⁵, and limiting the land areas available for agricultural expansion and infrastructure development.

The large share of young population in Kosovo creates a vulnerable situation. Many young people emigrate abroad to find jobs, which in the short run reduces the burden of poverty in Kosovo through massive remittances. In the long run, however, it can be detrimental to the building up of public services and institutions. The large share of young population can also create an opportunity to build awareness on the importance of environmental considerations when developing new economic activities. A well-informed and educated young population can put pressure on politicians for an environmentally sustainable development.

2.2 Impacts on economic development

Kosovo's economy is to a large extent based on natural resources and the trade of natural resource based products. Hence, sustainable use of Kosovo's natural resources is of paramount importance for poverty reduction and economic growth. If no adaptation measures are taken, climate change is expected to negatively affect economic sectors such as agriculture²⁶, forestry²⁷, and water resources with negative consequences for economic development, food security, public health and poverty reduction.

Overall economy:²⁸ Before 1999, Kosovo's economy was characterized by the Yugoslav centralized economy with state ownership, and state owned enterprises (SOE) as the drivers of the domestic economy.²⁹ In post war Kosovo, the GDP growth has primarily been driven by foreign aid inflows and remittances. In 2005, remittances accounted for almost half of the GDP (but are declining). The GDP growth was negative (-1.1%) in 2003, but recovered to 3.5% in 2004 and is estimated to be close to 4% in 2006. The level of foreign assistance decreased from 21% of GDP in 2005 to 18% in 2006. Donor consumption decreased in 2005, but private-household consumption increased by 5% in nominal terms. Government wages grew in line with private household consumption. Donor-financed investments declined in 2006 (-15%), but private investments increased by 32% (up from 24% in 2005). The export-import ratio increased but remained very low at 8.5% in 2006. The registered unemployment rate, which was 40% in 2005, increased by 2.4% in 2006, and rose further in 2007. The enterprise structure is dominated by micro-enterprises accounting for 56% of overall employment. Almost half were in retail and wholesale, followed by food processing (9%). The informal economy remains sizeable.

Agriculture contributes to 30% of the GDP and 60% of the population live in rural areas.³⁰ This importance is not reflected in government spending or in the reform efforts in this sector. Although the data on production and employment structure in Kosovo is weak and unreliable, it is possible to analyse trends. According to the EC progress reports on Kosovo, the

²⁵ DFID, 2006

²⁶ Increased frequency of extreme events such as high temperature and drought is expected to increase yield variability.

²⁷ Forest areas are expected to contract in southern Europe and tree vulnerability is expected to increase as a result of climate change.

²⁸ European Commission, Progress Report 2006; and Progress Report 2007.

²⁹ Kosovar Institute for Policy Research and Development, 2005

³⁰ European Commission, Progress Report 2007.

agricultural sector's contribution to the GDP³¹ as well as provision of employment opportunities³² is growing rapidly, which indicates that the rural sector is strategically important for economic growth.

Agriculture is concentrated to eastern and western Kosovo, and is dependent on irrigation. Today the quality of agricultural products is low and the fragmented processing has an over capacity. Agricultural land areas in Kosovo face several challenges; each year around 1 000 ha are transformed into built areas causing losses of farm land, and industrial pollution as well as landfills, situated near farming areas, cause a lot of damage to the soil and water resources.³³ After the conflict, most farmers returned, rebuilt their houses and began operating their farms. 86% of the land is privately owned, the rest being under the ownership of Cooperatives (1%) and SOEs (13%), with land ranging from between 500-1,500 ha. Livestock and pasture, crop production and forestry are the major rural activities.³⁴

Forestry is representing a huge potential for economic development.³⁵ However, as one third of the forest resources are considered unhealthy there is a need for better management practices. About 56% of Kosovo is arable land. Agriculture and forestry are expected to play a key role in Kosovo's economic development providing income opportunities for the rural population.³⁶ However, bad management practices and climate change impacts in combination with continued bad air quality places a severe threat to forests and vegetation.

The **energy** sector is central to Kosovo's economic development, and clearly linked to the degradation of environment. Kosovo is very dependent on lignite for electricity production. Due to the instability of electricity supply after the war, a major part of the households use firewood for cooking and heating. This has led to an increased pressure on forest resources. Weak public infrastructure impedes economic performance, particularly the electricity supply, which is unstable with frequent blackouts. The distribution network is in a poor state due to underinvestment and lack of maintenance. Mining of coal, the dominant fuel, also suffers from under-investment. Many customers do not pay for their electricity use. Once payments will be enforced it is likely that the use of firewood and coal will increase even further. Little progress has been made on promoting energy efficiency and renewable energies, although discussions related to exploring the potential for hydro-electric power and solar energy has commenced.

Water availability is a prerequisite for development of other sectors and may be the limiting factor for economic development in the future.³⁷ However, billing and collections rates³⁸, as well as quality and efficiency, are low in the water sector.

The administration of **other** (mainly underground) **natural resources** is assumed to become a substantial question in relation to the future status of Kosovo. Kosovo has valuable and

³¹ Agriculture and fisheries were assessed to contribute with 9% of the GDP in the EC progress report for 2006, and 30% of the GDP in EC Progress report 2007.

³² Agriculture, fishing and forestry accounted for 6% of the share of the total employment in 2001 and roughly 20-25% during the last years. European Commission, Progress Report, 2006

³³ World Bank, 2005, referring to the agricultural and rural development plan for 2007-2013 (RDP)

³⁴ Ministry of Agriculture, Forestry and Rural Development, First Draft Of RDP 2007-2013

³⁵ Jonsson, April 2007

³⁶ Kosovo Development Strategy, Draft 1+1, December 2006.

³⁷ KDSP, Draft Dec. 2006.

³⁸ In 2005 only 42% of the water users were billed and the average revenue collection of the regional water companies were 56%.

unexploited underground resources such as coal, lignite, lead and zinc. Improved technologies and infrastructure may turn these resources into important income opportunities. It could also balance the energy shortages in Kosovo.³⁹

Climate change variability and change: The climate will change over the next few decades, whatever the world manages to achieve on the mitigation side. But the costs of climate change adaptation will rise exponentially if efforts to mitigate emissions are not successful. According to the Stern review⁴⁰, much of the adaptation will have to be autonomous, driven by market forces and by the needs and devices of households and firms. Governments should assist in this process. The first and best way for Kosovo's government to accelerate adaptation is to promote sustainable development successfully. Second, improving disaster preparedness and management saves lives and is cost effective. Inaction will be far more costly than adaptation. However, as financial resources are scarce, adaptation should not only focus on expensive, supply-side infrastructure investments, but rather on increasing efficiency of already existing facilities, awareness raising and empowerment.

2.3 Impacts on public health

The overall health status of the population in Kosovo is poor and probably among the worst in SEE.⁴¹ Roughly 60% of the population lack access to improved water supply systems and around 70% lack access to sewage systems.⁴² In rural areas, the share of people connected to water supply systems is very low (less than 10%), while freshwater is mainly provided from wells or village water supplies. Those water sources are not checked or maintained, and use of these wells is closely linked to health hazards. The Kosovo population, and especially poor and marginalized groups in rural areas, is still to a great extent lacking access to basic public services such as piped drinking water, sewage and sanitation facilities.

Many people in Kosovo are exposed to health risks resulting from environmental pollution. Infections and particularly respiratory infections are the primary cause of hospital admission and infant mortality. Contamination of soil and food by heavy metal and lead is a serious problem in areas where the mines and industrial facilities are located, areas where marginalized people and internally displaced persons (IDP) tend to live. Studies conducted in the early 1990's found evidence of lead poisoning in children from northern Kosovo, with blood lead concentration at birth in Mitrovica two times above the internationally accepted level.⁴³ The World Health Organisation stated in 2005 that the area still constitutes a health emergency and the IDPs in three camps in affected areas should be evacuated.⁴⁴ Water contamination, (urban) air pollution, poor housing conditions, and poor quality of basic infrastructure constitute major health risks. Low access to good quality services affects the most vulnerable people and increases non-income generating household activities, especially for women.

3. Environment and the institutional context

On the 17th of February 2008, Kosovo declared its independence. Prior to that, Kosovo has commenced building up new institutions. Since the beginning of the 2000's, power has

³⁹ Danish Institute for International Studies, 2005

⁴⁰ Stern Review, 2006.

⁴¹ World Bank, 2005

⁴² Kosovo National Environment Strategy, 2003

⁴³ World Bank, 2005

⁴⁴ Refugees International, <http://www.refugeesinternational.org/content/article/detail/6063>

gradually been transferred from UNMIK⁴⁵ to the PISG⁴⁶. After independence, UNMIK will transfer its responsibilities to the Kosovo government. EU will monitor and assist the Justice and Police, as well as the implementation of the ‘Ahtisarii package’ for Kosovo.

3.1 Key environment actors

The Ministry of Environment and Spatial Planning (MESP) and the Kosovo Environmental Protection Agency (KEPA) are responsible for environmental protection. MESP is responsible for preparing environmental legislation, and policy and strategy formulation. KEPA is in charge of pollution control and monitoring, EIA review, environmental information management and research. MESP is continuously holding a dialogue with EC regarding the implementation of the *Acquis Communautaire* on environment.

Integrating environment and climate change in key sectors is central to the long-term sustainability of economic development. The PISG institutions with direct relevance to the environment, besides the MESP and KEPA, are the Ministry of Trade and Industry, the Ministry of Health, the Ministry of Transport and Communication, and the Ministry of Agriculture, Forestry and Rural Development. During the Yugoslav era the concept of Public Owned Enterprises (POE) and State Owned Enterprises (SOE) was formed. UNMIK still has the formal ownership of the POEs, which provide public services such as electricity, heating, water, waste collection and railway transports. The mainstreaming of environment and climate change issues into some sector policies, such as energy and agriculture, has started. Some progress has been made in the field of environmental legislation but implementation and enforcement is still very weak.⁴⁷

3.2 Strategies, sector policies, and mainstreaming across sectors

Kosovo Development Strategy and Plan: Kosovo is in the process of developing its development strategy (KDSP) for the period 2007-2013.⁴⁸ The KDSP highlights the need to create a *sustainable employment-generating growth* in a consolidated EU integration process. The objective is related to efforts in three pillars: 1) building good governance and capacity, 2) private sector development, and 3) human resources development. Sectors that are emphasised as important to contribute to economic growth include energy and mining. Agriculture, including forestry, is expected to play a key role in providing income opportunities in rural areas. Infrastructure development priorities include efforts in transport and telecommunications, environment, and water. Water is highlighted as crucial to economic and social development in Kosovo.

Legislation and public awareness: The Environmental Law was promulgated in 2003. The work with secondary laws and regulations is on-going. MESP has launched an information campaign on environmental protection addressed to the citizens, and environment has been introduced as a subject in schools, and more than 1 000 teachers have been trained in environment issues. However, the population’s environmental awareness remains very poor.⁴⁹

Environmental regulation: Sida supported the development of *Kosovo’s Environmental Strategy*, which was adopted in 2004. The long-term goals are: improvement of quality of life for people; rational and sustainable use of natural resources; and avoid harmful effect on the

⁴⁵ United Nations Mission in Kosovo

⁴⁶ Provisional Institutions of Self-Government

⁴⁷ European Commission, Progress Report, 2007.

⁴⁸ The KDSP is still in a draft version. Kosovo/a Development Strategy (KDSP), Draft 1+1, December 2006.

⁴⁹ European Commission, Progress Report, 2006; and Progress Report, 2007

environment. The KES has seven strategic areas: 1) air (including climate change and acidification); 2) water; 3) soil; 4) natural heritage; 5) biodiversity; 6) waste; and 7) risk and disaster management. Related to climate change some of the priorities are to establish a coordinating body, monitor emissions of greenhouse gases, and being active in international discussions on climate change. Climate change is thus mentioned in terms of mitigation rather than adaptation. The same is valid for the *Kosovo Environmental Action Plan (KEAP)*, which was launched by MESP in May 2006 and approved by PISG in January 2007. It highlights that KEAP should assist in strengthening the future process of Kosovo's accession into the EU. KEAP covers the current status of environment, legislative framework, problem identification, and priority measures and activities for 16 strategic sectors. It is an open document, which will be subject to updating and revision during the implementation process. Implementation will require commitment from all stakeholders; presently the budget for only one project has been approved due to financial constraints. Regarding the legal approximation in waste management, water quality, and nature protection, some progress is reported by the EC. Regarding air quality, however, there has been no progress. Legislation in the field of chemicals is under preparation.

Water: The *Water Department* of MESP has the responsibility for the management, control and development of water resources, but it lacks resources and experience to properly carry out these functions.⁵⁰ The *Water Law* was promulgated in 2004 and it has been guided by European Directives, which requires the establishment of River Basin Authorities. In Kosovo two River Basin Management Authorities are to be established and they will be responsible for the water resource management and development within their defined river catchment areas (Iber-Lepenc unit and Drini i Bardhe unit). Although the watercourses are shared with neighbouring countries, the river basin authorities will not have a transboundary focus. The Water Department shall provide technical support to the authorities and financial means will be provided by the Swiss government and European Agency for Reconstruction (EAR). Today water abstraction is not regulated and discharge of effluent to watercourses is not yet managed satisfactorily.

Agriculture: The *Agriculture and Rural Development Plan (RDP)* for 2007-2013, which was prepared by the Ministry of Agriculture, Forestry and Rural development with EC assistance, was approved in early 2007. Strategic environmental orientations of the RDP are to complete legislation on land rights, protection of land, orientation towards organic production, and sound management and use of fertilizers and pesticides. RDP emphasizes the need to make structural changes to create employment and increase incomes in rural areas, to expand import substitution and exports in the food sector and to enhance EU compatibility. The RDP has been incorporated into the overall Kosovo Development Strategy and Plan.⁵¹

Forestry: The Ministry of Agriculture, Forestry and Rural Development (MAFRD) has two forestry bodies; the *Kosovo Forest Agency (KFA)* and the *Department of Forestry (DOF)*. KFA administers the forest estates, provides services and supervises forest operations on public and private estates. A key function is the issuing of harvesting rights. KFA is in the process of establishing local offices, which are to take over the forest administration from the SOEs. There are roughly 120 KFA forest guards who are responsible for patrolling the forests on a local level. The DOF is responsible for developing policy and regulatory framework and to control/inspect forest operations leading to enforcement of the Forest Law (adopted in

⁵⁰ EC, Fiche 3.4 to Kosovo Annual Action Programme, 2006

⁵¹ World Bank, 2005

2003).⁵² Sweden has via FAO provided support to institutional development of the forestry sector between 1999 and 2006. This has among others contributed to the elaboration of a legal framework, the development of sector organizations (public and private), the initiation of privatization and forestry education & training programs.

Energy and mining: A strategy on energy was approved in 2005, and an implementing program for 2006-2008 has been established, aiming at rational and sustainable use of natural resources, economic and social development and environmental protection.⁵³ The energy regulatory office, which became operational in September 2005, has issued implementing legislation including tariffs, dispute settlement, licensing and a code of conduct. Nevertheless, Kosovo's electricity supply remains limited and insufficient.

The Ministry of Energy and Mining (MEM) organized an International Investors Conference in Pristina in late September, 2006, to attract major investors to ensure an effective exploitation of Kosovo's vast lignite resources and the construction of a new power generation facility to service both domestic and international markets. EC has funded a study to assess the options for private investment in existing generation units, new coal mines and a new power plant in order to support MEM's work on a *Kosovo Energy Strategy* and the World Bank's *Lignite Power Development Project* (LPDP). The MEM has acknowledged that environmental impacts from mining and power generation were neglected in the past. Consequently, a small environmental department was established in 2005, with the overall objective to ensure environmentally sustainable production in existing and new mining activities.⁵⁴

3.3 International cooperation

There are around 40 donors present in Kosovo. The support is shifting from humanitarian assistance towards long-term development assistance. Donor funding to Kosovo is decreasing but still constitutes around 34% of the GDP. In 2006, Sweden was the third largest bilateral donor committing 10.8% of the total assistance, which is assessed to be around Euro 200 million. Other important international donors are the UN, EC, WB, USA, and Norway. Donor coordination is weak will little coherence and little consideration taken to the MDGs. The Paris Declaration on aid effectiveness has had little impact in Kosovo. Donor assistance is mostly done on project basis, and only 16% of the development cooperation support is on budget, which makes it difficult for the PISG to oversee and manage the funds. Support through NGO's are not always reported to the PISG. In 2006, the Prime Minister's Office established a donor coordination office and is now taking a lead role on these issues. The preparation of the Medium Term Expenditure Framework is a major step forward in the direction of the PISG taking leadership.⁵⁵

The sixth ministerial conference "Environment for Europe" in Belgrade (10-12 October 2007)⁵⁶, decided to enhance sub-regional cooperation in the field of climate change, an area considered to be of increasing importance. The Ministerial Declaration, which was adopted by acclamation, recognises the need (for interested countries in SEE) to develop a Climate

⁵² Jonsson, April 2007

⁵³ European Commission, Progress Report 2006

⁵⁴ EC Quarterly Report to the European Parliament, Oct-Dec 2006

⁵⁵ Ramboll, 2008

⁵⁶ Ministers and high-level officials from 51 UNECE member states and other international stakeholders discussed progress achieved in the implementation of environmental policies since the Kiev Conference in 2003, capacity building and partnerships as well as the future of the "Environment for Europe" process.

Change Framework Action Plan (CCFAP), to establish a sub-regional virtual climate change centre in Belgrade, and to develop partnerships with regional and international organisations and conventions. The CCFAP would support implementation of the United Nations Framework Convention on Climate Change (UNFCCC), particularly its Nairobi Work Programme.

3.4 Capacity development

Kosovo is building up new institutions. The handing over of power from UNMIK (via PISG) to Kosovo authorities is an on-going process, but as Kosovo's status has been unclear and the PISG did not have the formal right to control services, the driving force within the institutions to implement environmentally related actions has remained weak. The administrative capacity and financial resources within the national and provisional institutions are limited, which hampers the process of self-governance. It is assessed that there will be an increasing need for both short-term and long-term institutional capacity development. This need is found both at central and local level, and supporting the construction of law-based institutions and supervisory bodies will be particularly important.⁵⁷

When attempting to measure the qualitative MDG target on environmental sustainability – “integrate principles of sustainable development into country policies and programs” – Kosovo is weaker than most other countries in Eastern Europe/Central Asia. Kosovo is rated especially low on “Public information and participation” and “Quality of environmental assessment” and somewhat higher on “Adequacy of prioritization” (medium ranking, on par with Moldova).⁵⁸

The capacity for climate change adaptation in Kosovo is weak and the adaptation work has not started yet. At the “Environment for Europe” conference, the participating countries claimed that harmonization of national legislations with EU would demand an overall strengthening of environmental management systems as well as the strengthening of capacity building at all levels of administration.⁵⁹ A majority of the SEE countries stated that, related to climate change challenges, they are faced with insufficient institutional framework, limited human resource capacities and scarce financial resources, and that – without assistance – they will not be able to meet the requirements for appropriate implementation of the UNFCCC when it comes to climate change adaptation measures.

4. How and to what extent are the responses to environmental problems implemented and followed up?

In the light of the last years' unclear political status, Kosovo has not ratified any multi-lateral conventions, protocols or agreements related to the environment including climate change; and there is no information available on Kosovo's future plans to sign/ratify international conventions.⁶⁰ If Kosovo had been a signatory of the UNFCCC, it would have been expected to monitor and report to the UNFCCC on climate change related issues including information on both mitigation and adaptation through submission of a national communication.⁶¹ The initial communication shall be submitted within three years of the entry into force of the

⁵⁷ Sida, Strategy for development cooperation with Kosovo 2005-2006

⁵⁸ Country Environmental Performance Indicators for 2004. UNECE, 2007, p 58

⁵⁹ ECE/Belgrade. Conf/2007/9, Chair's summary.

⁶⁰ National Environment Strategy, 2003; Information confirmed by MESP at a meeting with Fatos Mulla, Sida liaison office in Pristina, 10 March 2008.

⁶¹ UNFCCC website <http://unfccc.int/>

Convention for that party. National communications usually contain information on national circumstances, vulnerability assessment, financial resources and transfer of technology, and education, training and public awareness.

Kosovo is, as has been mentioned above, presently building up its institutions and adapting national legislation towards EU requirements. There is some progress related to the legal environmental framework. However, implementation and enforcement is still very weak. Donor financed projects are followed-up by donors and the national ownership is not always there.

5. Implications for Sida

Many of Kosovo's environmental problems are related to the legacy of the former centralized system. The war activities and political instability have exacerbated the degradation of environment and increased poverty. Many poor people are exposed to health risks resulting from environmental contamination of land, air and water resources. The main activities leading to environmental degradation are for instance industry, mining, power plants, uncontrolled waste dumping, increased traffic, firewood heating and construction activities. New governing institutions are being constructed both at central and local levels, but they are lacking competent human resources as well as financial means to implement and monitor environmental legislation. Kosovo will continue to be extremely dependent on external assistance and the EU. *Hence, the way EU, including Sweden, shape its support has profound impacts on the direction of Kosovo's development.* All project support should be subject to an EIA in order to investigate how it is affecting and affected by the environment, natural resources availability and quality, and ecosystem services. It is of increasing importance to also take into account possible impacts due to climate change.

Considering the potential of the rural sector to contribute to economic development and income opportunities for the poor segments of society, and the importance given to water for overall economic development and conflict prevention, it would be good to, in a dialogue with Kosovo and other donors, consider further support to sustainable and integrated water and land resources management, possibly in a transboundary perspective.

Environmental problems are already significantly affecting the Kosovar population and their possibilities to enhance their own quality of life, and it is getting worse. Therefore, it is crucial to improve – not only the legislation (which is ongoing) - but also implementation, monitoring and enforcement. This will require capacity development support on institutional, organisational and individual levels. Sweden could play a role here. In a globalised world it could also be beneficial for Kosovo, as a newly independent state, to participate in regional and international forums and networks. Some of the natural resources are transboundary; some of the environmental problems are shared; and some of the solutions could be taken with joint efforts. Regional cooperation is especially important from a conflict-prevention perspective for international watercourses, as water scarcity is likely to become more frequent.

As impacts of climate change are still subject to vast uncertainties, adaptation should mainly be seen as a social process rather than focusing on physical investments alone (see section 2.2). Adequate monitoring of climate change related occurrences and impacts (for example precipitation and run-off/ground-water discharge, forest contraction, agricultural yields, etc) will help focusing on relevant measures to take. Related to international development cooperation projects, there are at least three ways in which adaptation to climate change is

relevant: (i) the risk of climate change to the project and its deliverables; (ii) the vulnerability to climate change of the community or ecosystem that is intended to benefit from the project; and (iii) the possible effects of the project on the vulnerability of communities and ecosystems to climate change.⁶²

Enhancing aid effectiveness through local ownership, alignment, and donor coordination or harmonisation, takes a lot of effort, manpower, and time, but it is likely the most efficient way in the long run. If Kosovo is able to make its own priorities, in a dialogue with and supported by the cooperating partners, the development is more likely sustainable.

Issues for Sida to consider

- **Capacity development of environmental institutions**

In the current cooperation strategy, Sida points at the importance of supporting the construction of law-based institutions and supervisory bodies. In order to exercise real power to supervise and impose controversial but much needed environmental legislation, it is vital to develop the democratic system and procedures. It will be important to promote systematic ways of communicating environmental issues with the local communities, stakeholders and civil society. The Kosovo Environmental Protection Agency (KEPA) is ambitious and supposed to be the main institution to monitor, implement and enforce environmental laws. Therefore it could be valuable to give institutional support to KEPA in an initial phase. Sweden may build on its good traditions and experiences of environmental management both at central and local levels.

- **Sustainable integrated natural resource management for employment and economic growth**

Kosovo has great potential for forestry and rich underground natural resources, but faces water scarcity, unstable distribution of electricity and in-efficient use of its resources – all which affect the economic development negatively. Abundance in resources which are of high economic value at the international market can lead to unsustainable exploitation patterns, increased environmental pollution, aggravated poverty, economic and political instability, and (armed) conflicts over resource allocation and property rights. It is thus of utmost importance that policies and development assistance is geared towards an integrated, equitable, sustainable and efficient use of Kosovo's high-value natural resources, in order to prevent the effects seen in many other parts of the world. Safeguarding environmental concerns in the strategic planning processes for development of the mining, energy and forestry sectors, while utilising the available transboundary water resources efficiently, will thus be particularly important.

- **Environmental management for enhanced public health**

Sound environmental management is crucial to enhance public health. Investments in eco-friendly techniques, stimulation towards recycling practices, eco-labelling and environment incentive pricing mechanisms (pollution fees, taxes, abatement subsidies) are all measures to combat the underlying causes of environment-related health problems. Other methods include increasing awareness and introduce public disclosure practices regarding environmental health issues. The potential gains are particularly important for poor and marginalized people, who are more vulnerable to the cumulative effects of environmental pollution and who often

⁶² Klein et al, 2006

reside close to environmental hot spots. The poor often lack the financial means to seek medical care or to take preventive actions. Many poor people in Kosovo make their living from recycling and selling of metal scrap or waste material. These materials are sometimes connected to health hazards. Since environmental management may also be a cost-effective instrument to enhance public health, Sida may wish to consider how best to utilize this dual potential in the formulation of support to public health and/or environmental management.

- **Adaptation to climate variability and change**

It is important for Kosovo to start the process of developing its adaptation capacity to climate change. Adaptation to climate variability and change is a social process, which requires an assessment and response to impacts, and to formulate plans and policies in ways, which reduce the risk of adverse outcomes in the future. This is an area of increasing importance, and where the need to develop knowledge and awareness is great. Sida, which has a long history of supporting participatory development processes, would be well suited to support this area. Although climate change is mentioned separately here, it could be good to bear in mind that climate adaptation (and mitigation) preferably should not be an add-on, but mainstreamed throughout all development cooperation support, possibly integrated under the environmental sector.

- **Environmental education and awareness**

Kosovo has a large young population. This gives a good opportunity to initiate and develop environmental education and awareness building among the youth and to learn from mistakes in the past. Education on environment, climate variability and change, and natural resources should be integrated in all of Sida's activities, and certainly within environmental institutions and among personnel in other sectors or official bodies.

- **Participating in regional and international forums and networks**

While building up new institutions, regulations and practices, Kosovo might be able to benefit from environment and climate change related regional and international cooperation.

Examples could be transboundary cooperation over shared resources, or climate change adaptation.⁶³

⁶³ One issue to consider is whether Kosovo could take an active part of the new regional climate change initiative in the western Balkan, initiated at the 'Environment for Europe' conference. The NGO Regional Environmental Centre (REC) is another actor working with climate change adaptation in the region.

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