



Albania - Environment and Climate Change Policy Brief

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1. Introduction

This policy brief has been written by Olof Drakenberg at Sida's Helpdesk for Environment and climate change at the request of Tomas Andersson, Sida and comments of the draft have been received from Robert Nygård and Thomas Nyström, Sida. The document is a desk study that feeds into the Poverty Development Analysis and the preparations for a new cooperation strategy for Albania.

The overarching goal of Swedish cooperation in Albania 2009-2012 is a stronger democratic state, long-term sustainable development, and improved opportunities for achieving EU membership.

2. Country environment and climate change context

Albania has applied for membership of the European Union. Compliance with EU's environmental requirements for accession countries is the most important driver for sustainable management of Albania's environment and natural resources.

The key environmental problems are water pollution, air pollution, land degradation/soil erosion, and biodiversity losses (not in order of priority). Disaster risks and climate variability and change pose other threats to Albania. In a regional context Albania is particularly sensitive to climate change with modified rain patterns and extreme weather events due to its high reliance on hydropower and large population in sensitive low lying areas.

Investment in water, sewage and waste infrastructure has not kept pace with rural to urban migration, household demand, industry and tourism development thus leading to environmental degradation. Recent years has seen an increased economic activity, for instance the number of passenger cars per person rose by 41% between 2005 and 2009¹, tourism arrivals doubled between 2006-2009 and land under cultivation increased by 10% between 2005 to 2010. However, energy efficiency per GDP has increased with about one third during the same period which means that relatively less energy is needed per unit of produced goods. Official statistics do not indicate higher pollution levels in the atmosphere or in monitored rivers. Emissions of greenhouse gases and waste generation are on the rise although from low levels with European standards.

Unclear property rights, weak administrative capacity, corruption and poverty are other causes of overexploitation and unsustainable management of soils, forests, water and pastures. Finally, resource efficiency is particularly low in electricity and water. Caused include charges that do not allow for cost recovery, a significant share of illegal connections and poor maintenance. ²

¹ Albania in figures 2010 and World development indicators

² Electric power transmission and distribution losses (% of output) has grown from 42 % in 2000 to 51% in 2008.(WDI, 2011)

Box 1 gives a short description of environmental problems in Albania

Box 1 Key environmental challenges in Albania

Water pollution: Albania is a mountainous country, blessed with abundant water resources. Water pollution, particularly in the low lying areas, poses a severe problem; the quality of drinking water does not, in many cases, comply with the European standards. The contamination of surface water is serious, especially close to cities and industrial sites. The period 2006-2009 show a negative trend in water quality in certain rivers that are being highly impacted by domestic and commercial wastewater discharges. Coastal bathing water quality is medium to low.

Waste: Household waste has increased with about 40% between 2005-2009. Urban population generates about twice as much waste as the rural population per capita, see Annex 2. Only 10% of collected waste is recycled and the rest is discarded in dump sites that do not comply with environmental standards (OP Waste, 2011). Most waste, particularly in rural areas is either burnt or dumped in uncontrolled dumps. Work on toxic hotspots is improving but the needs are large.

Air pollution: Especially in the urban areas and the surroundings of Tirana and Elbasan, the air quality is poor and exceeds national and EU standards on particulate matter, see Annex 3. In other areas and for other emissions, levels are typically below limit values. Major sources of air pollution include (road) transport, industry, energy production (oil and gas extraction and refining) and rapid urban development.

Land degradation: Soil erosion is a major concern, mainly caused by unsustainable forestry, agricultural and pastoral practices. Particularly in the basins of Tomorrica, Zhullima and Petza the intensity of erosion is high. Reported forest outtake were stable but with greater outtake from the privately managed forests. Since 2005 communal and participatory forest and pasture management plans have been introduced in 240 communes involving 744,434 ha or approximately 60% of total forest area. At national level there is a net uptake of carbon from Albanian forests.

Biodiversity losses: Land conversion for commercial, touristic or residential purposes is the single most important cause of biodiversity loss. Other causes include deforestation, water pollution, tourism and unsustainable hunting and fishing. Protected areas have extended from 9 to 13 % between 2007 and 2010. Recently the first marine protected area was established.

Regional issues: About 35 % of water in Albania comes from neighbouring countries and 50% of the country is included in transboundary river basins. Cooperation with Montenegro to protect Shkoder Lake is ongoing. Coastal fisheries are suffering from overharvesting of fish in the Adriatic Sea due to insufficient regulation and control. The Governments of Albania, of FYR of Macedonia, and of Greece are working together to protect globally significant biodiversity in the Prespa Lakes Basin.

Climate change: Albania is considered as one of the most vulnerable countries in East Europe and Central Asia due to high exposure to extreme weather (drought, heat spell, flooding), high sensitivity (great reliance on hydropower, irrigation and large share of population living in low elevation coastal zones) combined with low adaptive capacity (income inequality, GDP per capita and institutional capacity). Impacts on the agricultural sector are expected to be mixed with increases production in wheat and alfalfa and reduction in grapes and olives and livestock.

Sources: Ministry of Environment, forestry and water administration, (2007, 2011), World Bank (2011), Regional Environmental Center (2011)

3. Key development-environment linkages

For a country like Albania there are close connections between social exclusion and environment. Lack of access to clean water, air and soils cause diseases and reduce opportunities to participate in education and economic activities. Poverty can also be a cause of environmental degradation when lack of alternative income generating activities lead to overuse and depletion of productive resources such as pastures, fish stocks or forests. For the rural population, environmental problems is primarily about declining quality of productive assets such as forests, pastures, fish stocks or irrigation infrastructure which has a direct impact on household income. For the urban population, environmental problems are primarily linked to health outcomes through exposure to polluted water, air and soils.

Efforts to counter social exclusion and poverty are necessary to achieve long term sustainable development and for achieving EU membership.

Examples of poverty environment linkages in Albania are presented in Box 2.

Box 2 Examples of environment and poverty linkages in Albania

Environmental degradation, for instance deforestation and soil erosion contributes to lower forestry and agricultural yields and is a cause for poverty and migration. Tenure insecurity reduces willingness and ability to invest and favour short sighted management techniques and overexploitation of soils, forests, pastures etc.

Environmental degradation, for instance soil erosion has downstream impacts on sedimentation and thus hydropower generation capacity and maintenance costs for irrigation infrastructure. Furthermore it can increase the severity of landslides and vulnerability to extreme weather such as the flood in December 2010 affecting 14 000 people.

Underinvestment in water, sanitation and waste management is a cause of bad health hurting poor people most due to higher exposure to polluted water, soils and air and lower capacity to access health care. Urban poor living in unplanned settlements or sites previously used for chemical activities are particularly at risk.

Sustainable management of forest resources can strengthen adaptive capacity, reduce vulnerability to climate change, increase productivity and incomes, attract carbon finance and possibly other payments for ecosystem services.

Protection of national parks and investments in waste water treatment and waste management can improve opportunities for tourist development and employment both in mountainous regions and along the coast.

3.1 Who are the poor?

Poverty is most severe in the rural areas, particularly in hilly and mountainous areas and in the north east. Between 2005-2008 the number of poor people decreased with 200 000 persons to 375 000 persons. Interestingly rural poverty in coastal and central areas has declined significantly faster than urban poverty. The exception is in the mountainous areas where rural poverty almost stayed the same between 2005-2008. Poverty dimensions include relatively

³ INSTAT et al. 2009

low income, higher incidence of health risks, underdeveloped medical services, and limited opportunities for good schooling and insufficient access to public services.

Social exclusion is higher in groups for which agriculture is the main source of income. Hence environmental degradation and climate change disproportionally affect the poorest, who are relying on water and forest resources, agriculture and pasture for their livelihoods. Unemployment is higher among women than men. Employment in agriculture was 44 % in 2009 compared with 58 % in 2005. Agricultural poverty is partly linked to insecure property rights and small land holdings which is the result of the restitution process since the communist rule. Conflicts over land represent about two thirds of civil courts cases. Insecure tenure deters sustainable management practices and investments and thus productivity gains that can help reduce poverty. Other causes of low agricultural productivity include old equipment and production techniques and poorly maintained irrigation systems.

Poverty in urban areas is relatively lower than rural poverty. Illegal construction and lack of land planning is common which means that many Albanians lack access to a safe and healthy environment. Particularly vulnerable are migrants living in informal settlements⁵ where under investments in urban infrastructure such as sewage, clean water and waste management increase health risks and exposure to natural hazards such as flooding. Climate variability and change is expected to increase the frequency of extreme weather events. Chemical contamination of land poses risks to urban residents who are occupying areas on former industrial land. Given that out of pocket payment for health care is common, vulnerable men and women are at disadvantage.⁶

3.2 Disadvantaged groups and access to natural resources and ecosystem services

To many of the poor people in the Western Balkans, natural resources are important for their livelihoods. Land and water, for instance, constitute important assets for agriculture, which make up a large share of household incomes. Lack of access to natural resources may therefore be a key constraint to improved livelihood opportunities and increase vulnerability due to reduced access to important resource-based safety nets.

The majority or Albania's socially excluded are reliant on natural resources and ecosystems such as agricultural lands, forests, pastures, water or fishery for their incomes. Forests provide fuel wood for both rural and urban households. In the Korca region, approved cutting of forest account for only 10% of woodfuel needs causing illegal cutting and corrupt activities.

Table 1 shows access to water, sanitation and wastewater treatment in 2010 and projections for the future. Urban access is significantly better than rural access to water and sanitation. Wastewater treatment is extremely low and large investments are needed to reach the

⁴ Researchers note that numerous small parcels can create production inefficiencies and discourage investment, although multiple plots can also allow farmers the opportunity to develop different crops and spread the risk of environmental shocks (Frangakis et al. 2008; World Bank 2006c; World Bank 2007d; Kola 2007; Hristov 2009) from USAID, 2010.

⁵ About 25% of urban population live in informal settlements USAID, 2010

⁶ Almost 60% of payments for health care are paid by the individual with a high level of informal payment. World Bank, 2010.

⁷ Most of the wood material is used for heating and cooking MEFWA, sector program, 2007

⁸ According to the 2005 LSMS, some 70 percent of rural households used some firewood for heating or lighting, while only 30 percent of urban residents used firewood. Iimi, 2011,EU CARD, 2011.

governments objectives. Access to water does not mean that water is accessible without disruption; only two water utilities can provide 24 hours access to water supply throughout the year and on average water is accessible 11 hrs per day.

Table 1 Current and projected access to water, sewerage and wastewater treatment

Delieu Ohioatius	Ind. Fact	Plan for Year-End	
Policy Objectives	2010	2011	2015
Expand and improve the quality of water supply and sewerage services.			
Water Coverage for the urban area.	90.7%	91%	95%
Water Coverage for the rural area.	57.0%	60%	79%
Sewerage Coverage for the urban area.	83.0%	83%	86%
Sewerage Coverage for the rural area.	10.9%	11%	25%
Continuity of Service for Water Supply (hrs)	11 .1	12	16
Sewer Treatment Coverage from treatment plants.	4.0%	7%	30%

Source: Ministry of Public Works and Transport

In addition to customers low ability to pay, low tariffs and low collection of tariffs for electricity and water further deters operators to expand connections to poor communities. Access to electricity is practically universal but the quality of supply is problematic. High levels of electricity transmission and distribution losses contribute to power outages and low reliability of energy access. Of all transition countries only Moldova has larger problem of transmission and distribution than Albania despite recent improvements. Electricity generation capacity is very vulnerable to climate variability. Hydropower output was 45 % lower in the first 6 months of 2011 compared with 2010. 10

Access to natural resources may be limited due to different reasons, may it be low availability, unequal distribution, or due to a lack of power to access these resources. Poverty as lack of power can *inter alia* be linked to insecure natural resource tenure, limited access to or capacity to process information, or limited ability to take part in decision-making over local resources. Vested economic interests may be strong related to high-value natural resources and difficult to overcome.

Access to land, information and justice are important elements for sustainable development. . Tenure insecurity is large in Albania and a considerable barrier for development as it reduces the willingness to undertake productive investments and promotes short sightedness and often unsustainable management practices. Public participation in decision-making with impacts on the environment as well as access to environmental information is limited but improving. Women in rural and mountainous areas, children and the Roma community are particularly vulnerable groups that disproportionally lack power and knowledge to demand their rights. ¹¹

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⁹ For example, more than 60% of water delivery in 2010 was not billed. Main causes are significant unregistered connections and distribution losses due to poor maintenance (Draft National Water strategy, Ministry of Public Works and Transport 2011)

¹⁰ Balkan insight, 2011

¹¹ World Bank, 2011

About 80 % of agricultural land is privately owned. In the 1990ies the initial land distribution system did not recognize pre 1945 owners and favoured cooperative members, workers and urban residents. Later, pre-1945 owners were given right to their property or compensation which led to many disputes and legal processes over ownership rights. Without a registered title residents cannot use the property as collateral and they may have difficulties to get access to utilities. In 2009 the average size of household farms was1,14 hectares distributed over several parcels. Average farm size in Central and Eastern European countries is 5 ha and 27 ha in Western Europe. ¹²

Almost all of Albania's forests, pasturelands and protected areas are state-owned. User rights can be leased to individuals or communities. Local governments have use and management rights to about 40% of the state forests. More than 10 % of land is either disputed or lack documented ownership ¹³. Under formal law women have equal rights, however women tend to be discriminated against in areas where customary laws are practiced. Land is commonly passed to male inheritants and men often make decisions regarding land use. ¹⁴

Foreign direct investments are important for the Albanian economy.. Recent examples include mobile telephones, banks, energy distribution, cement industry and privatization of oil refinery complex ARMO. Industry and services sectors dominated foreign direct investments in 2006-2008. The state owns all minerals and hydrocarbon reserves (oil) and may grant concessions for exploration and mining. 31 mining companies reported to EITI. A Canadian company operates the biggest oilfield. Foreign investors in the mining sector include Turkey, China and Australia.

3.3 Poverty as lack of choice

Limited income opportunities in rural mountainous areas, poverty, tenure insecurity and weak institutional capacity contribute to overuse of certain natural resources such as pastures and forests and infringements in protected areas. ¹⁶ Land degradation in coastal areas and river beds bring erosion and sedimentation. As a consequence the values of these assets, and the ecosystem services they provide in terms of energy, food and building material, recreation, flood control, are reduced. Opportunities to significantly reduce exposure to environmental health risks such as water and air pollution are often out of reach for socially excluded and vulnerable groups.

Agriculture employs almost 40 % of the population and particularly poor men and women. Productivity is low. In remote locations where alternative income generating activities are few and where the tenure situation is unclear natural resources are often used unsustainably. Lack of access to modern heating and reliance on fuelwood increases exposure to air pollution. Urban air quality problems are affecting both rich and poor although poorer segments of the population that use mopeds, public transportation or old cars are typically more exposed to health risks. About 5100 deaths per year are attributed to air and water pollution and environmentally related disease account for about 18% of the burden of disease in Albania. ¹⁷

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¹² RECC, 2011

¹³ USAID 2010

¹⁴ USAID, 2011

¹⁵ UN, 2010, Foreign Direct Investment Report Albania 2010

¹⁶ Illegal logging activities are closely linked to extreme poverty in rural area in the vicintity of the forest, shortages in fuel and weakness in law enforcement. (EU CARDS, 2011)

¹⁷ WHO, 2009

4. Key environmental challenges and opportunities for development

4.1 Key environmental challenges and opportunities

Albania is relatively well endowed with natural resources and abundant rainfall. About 36% of Albania is covered by forest, 24% is arable and 15 % is meadows and pastures. Albania mineral resources include chrome, nickel, copper, bauxite and smaller quantities of oil and coal. Hydropower contributes with more than 90% of electricity and much of the hydropower potential is untapped. The potential for tourism is large given Albania's coast, beaches, mountains, cultural heritage etc. Albania ranks among countries with the largest water potentials in Europe, and has great potential for water use in agriculture. ¹⁸ Fishery resources including aquaculture are relatively small but locally important.

The informal economy is large. According to official statistics the main economic sectors are other services 30 %, agriculture 19 %, construction 14%, industry 9 % and transport 5%. ¹⁹ The mineral extraction industry accounted for about 1 % of GDP and natural resources rents to 1,75% of GDP (mining excluded). 20 The direct and indirect contribution of the tourist sector to GDP shows an increase from about 20% of GDP in 2005 to 25% in 2010. Agriculture remains the largest sector with about 44 % of the total labour force in 2009 and within this group we find a large portion of the poorer segments. Tourism had by 2010 grown to about 20% of the labour force. Beyond being a prerequisite for membership in the European Union, sound management of renewable and non renewable natural capital, has a substantial impact on Albanian prospects for economic development and poverty reduction.

Key opportunities include:

- -Improved management of Albania's water resources for hydropower, agriculture, industries and households.
- -Improving agricultural productivity through improved tenure security, modernization and more sustainable management techniques, including rehabilitation of irrigation infrastructure.
- -Reducing environmental health costs from air and water pollution by improved urban planning, investments in water, sanitation, waste management and electricity infrastructure and management.
- Fossil fuel subsidies are economically inefficient and lead to higher consumption and thus emissions. Energy subsidies for fossil fuels are in the order of 6-7 % of GDP according to a recent survey.²¹ Reduction of subsidies for fossil fuels, better pricing of electricity to allow

¹⁸ PEM Consult, 2011

¹⁹ Figures are from 2009.

²⁰ Total natural resources rents are the sum of oil rents, natural gas rents, coal rents, and forest rents. Rents are the difference the value f production at world prices and the total cost of production. Except for these about 96% of the rents come from oil, 3 % from forests whereas coal and natural gas contribute for about 0,5% each. World Development Indicators. No data are available for minerals.

²¹ Results of the fossil fuel subsidy study in Western Balkans• WB-OECD-IEA methodology (Seoul, 2010 G-20 Report) Based on data for the period 2005 -2010 for Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Kosovo/1244, Montenegro and Serbia; Covers fossil fuel-based thermal power generation & district heating, lignite for power generation, lignite/coal for the retail market, crude oil & petroleum products, & natural gas; • Includes indirect support and net effects of cross-subsidies; • Excludes state aid and loan guarantees.

cost recovery and new investments in the sector can create space for better targeted government spending. Such spending could include compensation to poor segments, efforts to improve energy efficiency, reliability and access to energy services.

- -Albanian private sector efforts to align with standards such as UN Global Compact (environment-social-anti corruption) can i) complement and reinforce the government's efforts to strengthen the rule of law and ii) contribute to increase the attractiveness of Albania's industry as a supplier of goods and iii) improve working conditions and reduce environmental externalities.
- -Anti corruption measures and targeted programs to reduce poverty in rural mountainous areas can reduce illegal logging, increase collection of resource rents and strengthen government revenues. Continued efforts on transparency in the extractive sector through the Extractive Industries Transparency Initiative can empower civil society and increase demands for accountability of both business and government.
- -Ecotourism and organic farming remain marginal activities and Albania is one of few European countries without FSC certified forests¹. However these niche markets offer opportunities to increase incomes in areas where poverty is particularly high.
- -Albania can further develop its capacity to attract carbon finance including improving forest incomes by carbon storage on degraded and non-degraded lands. ²² Greater emphasis on marketing of wood and non-wood forest products can also increase the revenues from forest resources.

Key challenges include tenure insecurity, weak government capacity, substantial subsidization of fossil fuels, corruption, inadequate investments and low awareness of the impacts of environmental degradation and climate change on development. Furthermore, Albania is particularly vulnerable to climate change including risks of electricity shortages. In 2006 power shortages cost Albania 1 % of GDP according to Ministry of Finance.²³

4.2 External and internal factors influencing environmentally sustainable development External factors influencing environmentally sustainable development in Albania can both facilitate the transition, make a transition more difficult or both. The most important external enabling factor is EU accession. Other factors include global investments in green technologies (energy, transportation, buildings, energy efficiency etc) that will become accessible in Albania, and growing market demand for ecotourism, organic farming, certified forests and carbon finance. Priority areas for CDM in Albania include renewable energy, energy efficiency in industries and commercial buildings, solid waste management, afforestation and reforestation. Other types of payments for ecosystem services already exist and can be developed.

External factors that creates both risks and opportunities for a transition to environmentally sustainable development include higher demand for Albania's mineral resources, growth in international tourism global demand and failure to solve the weak functioning of the fishing regime in the Adriatic sea. With strong institutions these assets can be managed sustainably

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²² World Bank, GEF, and Sida Biocarbon

²³ Balkan Insight, 2011

²⁴ Ministry of Environment, Forestry and Water Administration, 2009

and benefits can be shared. Climate change is an external factor expected to have substantial negative impacts Albania and bring increased frequency of extreme weather conditions such as heat waves and rains affecting hydropower, crops, public health etc.

Another external factor is the political and economic development in the region. The region has been characterized by conflicts and the status of one Albania's neighbor, Kosovo is still disputed. The current financial crisis has hit neighboring countries like Italy and Greece particularly hard. This has a direct impact on remittances from the Albanian Diaspora that plays an important role in the domestic economy ²⁵. Regional investments in infrastructure will increase transportation and thus emissions. It can also increase access to national and international markets benefiting economic activity in previously inaccessible parts of the country. RENA, the Regional Environmental Network for Accession, funded by the EU, is an important enabling factor to facilitate exchange and work collectively with environmental issues in the Balkan region.

Internal factors can either enable or constrain a transition to environmentally sustainable development. Constraining factors include insecure tenure, subsidies for fossil fuels, weak institutional capacity for environmental management at national and local level, corruption (e.g. logging, fisheries, and in general, insufficient implementation of policies. Efforts to remove subsidies typically face strong opposition from car owners, industry etc. Well targeted compensation schemes to vulnerable groups can increase the political acceptability of such proposals. Environmental issues are low on the political agenda and awareness of the linkages between environmental degradation. Albania has been slow in developing capacity to benefit from Clean Development Mechanism projects and other types of carbon finance. Enabling factors include large hydropower potential and water resources, opportunities for rehabilitation of irrigation infrastructure, access to natural resources and a broad commitment to implement the EU aquis.

Migration, both from rural areas to urban areas and to foreign countries has been a strong feature of the Albania's development since 1991. The environmental impacts of migration are mixed. On the one hand it often reduces pressure on natural resources in rural areas, such as fuel wood for heating; on the other hand it may lead to conversion of land and increased pollution in urban areas unless municipalities make sufficient investments in waste management, public transportation, waste water treatment etc.

5. The government's environmental commitments and actions

5.1 Environment in the national strategy for development/growth

EU membership is one of the government's key objectives as manifested in the overarching program National strategy for development and integration 2007-2013 (NSDI). EU accession is the main driver for improving environmental performance.

Environment is both a specific policy area but also a cross cutting issue where success is directly linked to other policy areas such as agriculture, transportation and energy. The Environmental Sector and cross cutting strategy adopted in 2007 outlines the government

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²⁵ Remittances fell about 14% between the 2008 and 2010 (World Bank, 2011)

policy and has fed into the NSDI and strategic documents.²⁶ "Government priorities relate to adopting gradually EU standards, increasing investments especially in solid waste, air quality, sewage treatment, hotspot remediation, implementing and enforcing of environmental legislation, raising communication and awareness of environment and improving and strengthening the environmental monitoring systems."²⁷

Albania has introduced new legislation and improved the capacity to address environmental challenges in recent years but implementation is weak. There are also gaps between the NSDI and the Medium Term Budget Program and between the Medium Term Expenditure program and the annual budget.

Public expenditure on environmental protection has increased 500% since 2005 but only to a level of about one pro mille of government expenditures in 2011 which is very low in a international comparison. However, comparisons are difficult since many expenditures of high relevance for environment and natural resources management are not included in this figure.

The overall assessment is that environment and natural resources management are reasonably well integrated into the NSDI. The question is to what extent environmental priorities will be acted on and whether legislation will be enforced. According to the 2010 EU progress report, environment is the one policy area where progress is particularly weak and that "very significant efforts will be needed to align with the EU aquis and to implement it effectively." The 2011 EU progress report records small improvement such as the adoption of Environmental Impact Assessment Law, the Law on Environmental Protection and a National Strategy for waste. However, no progress was noted for air quality, water quality and implementation and enforcement need to improve across all sectors. ²⁹

Areas of particular concern include institutional capacity building and definition of roles, enforcement of legislation, monitoring and investments. Annex I is an excerpt of the EU progress report 2011 and provides an overview of progress towards the EU aquis for the areas air quality, waste management, water quality, nature protection, industrial pollution and risk management and climate change.

There are ongoing activities supported by the UN to improve the integration of environment in other sectoral policies and increase participation of public participation through the use of environmental impact assessments and strategic environmental assessments. Albania needs to improve its legislation on strategic environmental assessment where activities are in a very preliminary stage. ³⁰

Existing institutions for environmental management, the Ministry of the Environment, Forests and Water administration, regional environmental agencies and the Environmental inspectorate are not fully operational. There are also gaps in responsibilities, particularly in the waste and water sectors. Particular needs include improved cooperation between environmental inspectors and other supervisory authorities and improving systems for reporting and evaluating the inspectorates' work. The forest sector development is constrained

²⁷ Republic of Albania, 2011

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²⁶ UNDP, 2010

²⁸ Ministry of Finance, 2011

²⁹ European Commission, 2011

³⁰ UNDP, 2010

by lack of clarity on the legal conditions of land transferred to communes and a revision of the forest law is needed.³¹ Lack of awareness in government, business and society at large, insufficient human and financial resources and a weak judicial system are other causes for low implementation and enforcement levels.

5.2 Economic policy and environment

The NSDI is a very broad reform agenda with implications for environmental management and climate risks and opportunities. In the NSDI, economic growth is stimulated by reforms to improve the business environment, improve tenure security, investments in infrastructure, health care, education and the overall EU alignment process. The NSDI also highlights development of information services, incentives for industrial development and better use of Albania's mineral resources as a way to stimulate economic development.

Increased industrial activities, improved business environment and extraction of mineral resources are likely to increase the pressure on ecosystems. Efforts to improve the business environment can put pressure on authorities to speed up the process for environmental impacts assessments or permitting beyond what is reasonable or to bypass environmental legislation. Therefore it is important that such growth oriented reforms are accompanied with improved institutional capacity to ensure respect for the rule of law in general, but also environmental laws and regulations. The government's anti corruption reforms are likely to contribute to better management of natural resources including transparent allocation of concessions, and better collection of natural resource rents which can reduce overuse and unsustainable management of the resources. Albania's commitment to the Extractive Industries Transparency Initiative is promising. The first assessment report in 2011 has increased the transparency of resource rents from mining and oil companies which make it easier for civil society to hold government and companies accountable.

5.3 PFM-system

Albania has made significant progress in aligning legislation to the EU acquis and is expected to comply with financial and budgetary provisions, taxation etc in the medium term although the country faces major challenges in implementing and enforcing legislation including in the area of allocation of concessions.³² A new operational plan for the environment sector has been finalized with costs, objectives and resources from various sources³³. Many resources are provided from outside of the Ministry of Environment Forestry and Water Administration (MoEFWA), including other ministries and donors. The MoEFWA is highly dependent on international funding. The EU progress report 2010 suggests that priority is given to increase environmental spending from national resources and welcomes the government's commitment to set up an environmental fund. Significant funding and greater collaboration between MoEFWA and the MoFinance is needed for the operational plan to be implemented.³⁴ Experiences from other countries suggest that Environmental ministries need to strengthen their capacity to negotiate with and get funding through the Ministry of Finance. 35

³³ The Operational Plan for the Environment Sector in Albania is complete, including all defined programs in the Chapter 27 of the Acquis, with most objectives measurable, with costed activities to live up to the Aquis, with all external resources identified and with examples of scenarios calculated at different levels of budget resources, i.e. answering to the question: What is possible to accomplish at different levels of budget resources? Operational plan, 2011

³¹ Ljungman, 2010 ³² EU, 2010

³⁵ OECD, 2009

5.4 International environmental obligations

Albania is party to and has ratified a number of international environmental agreements including Air Pollution, Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Species, Hazardous Wastes, Law of the Sea, Ozone Layer Protection, Wetlands, Transboundary waters. In 2009 Albania submitted the second communication on Climate change and the third communication on Biodiversity. See also Annex I with examples of progress and remaining challenges.

5.5 Corruption linked to environment

Corruption typically leads to overexploitation of natural resources and weak implementation of environmental legislation which leads to pollution and degradation of ecosystems. Examples can extending from tourist development to mineral exploitation. Corruption also puts non corrupt business at disadvantage and reduces government revenues. Albania's rank on Transparency International corruption perception index has significantly improved from 126 in 2005 to 87 in 2010 and the score from 2.4 to 3.3. Official statistics claim illegal logging in Albania has declined since its peak in 1997. A 2005 World Bank study estimated that unrecorded, illegal logging in Albania exceeded the legal harvest by a factor of ten. The same study said most of the timber logged illegally in Albania is exported as firewood or raw material for industry.³⁶ A recent study in the Korca region show that although monitoring has improved it is extremely rare that fines for reported cases are collected.³⁷ The prevalence of corruption is also a significant barrier to the establishment of carbon markets and Albanian access to international carbon finance on a larger scale. Albania is an Extractive Industries Transparency Initiative (EITI) candidate country. EITI is an international monitoring system aimed at promoting transparency for revenues earned from the extraction of natural resources and thereby preventing funds from being underreported and diverted. Albania published its first EITI report in April 2011 and is due to complete a validation process in November 2011.

6. Other actors and aid effectiveness³⁸

Albania has met the targets for 5 out 15 indicators on aid effectiveness with progress in ownership, management for results and mutual accountability. An integrated planning system is used for planning and monitoring purposes. Most funds are allocated to Energy and Transport sectors whereas; the environment sector receives about 5% of total funds. In 2011 the largest donors in falling order are; Germany, EBRD, Italy, EIB, World Bank and with Sweden in eight place. Sweden is the donor lead for the sector working group on environment, organized under the strategic priority division "infrastructure". Figure 3 illustrate the respective size of the different subsectors within the Environment sector and compares commitments with disbursements. Low levels of disbursements in the subsector environmental protection indicating low capacity to use the funds.

³⁶ http://www.illegal-logging.info/item_single.php?it_id=4010&it=news accessed Aug 17 authorities. In 2007, the officially recorded volume of illegal logging was about 10,064 m3, which represents 7 percent of the total officialwood volume (2008 data from INSTAT). The actual volume of illegal logging is likely to be at least 10 times higher than the official figures, due to the discrepancy between the official data on roundwood supply and actual consumption. REC p 90 Monitoring system in Albania

³⁷ Of more than 2100 reported cases, fees were only collected twice. (EU CARD, 2011)

³⁸ This section builds on the report External assistance in Albania – progress report 2009-2010 by Council of Ministers, 2011

³⁹ Department for strategy and donor coordination, Donor database

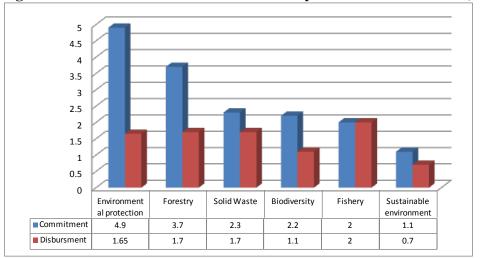


Figure 3 Commitments and disbursements by sub-sector 2009-2010 (€million)

Source: Donor Database 2011

During 2009-2010, leading donors in this sector have been EC (€4 million), Germany (€2 million), followed by Sweden, UN, Italy, Czech Republic, SNV and Netherlands. Projects financed by EC and Sweden are the best performing in terms of disbursement rates for the period 2009-2010(Republic of Albania, 2011). See also Annex II for more information about environmental sector working group.

Future priorities for the environmental sector include

- -Institutional strengthening and capacity building: to improve environmental policy making and enforcement, together with inter-institutional cooperation and coordination;
- -Further adoption of EU legal standards and enforcement;
- -Solid and waste management and construction of landfills;
- -Improvement of environment monitoring and evaluation system;
- -Investment on wastewater treatment (particularly in tourism zones), collection, recycling and disposal (landfill and incineration) of solid waste, rehabilitation of contaminated land and sources of pollution, technological improvement of state owned industries;
- -Support Albanian fishery industry moving closer to EU standards.

Examples of future priorities in other sectors

- -Orientation of water utilities toward principles of cost control and full cost recovery, as well as further development of corporate governance
- -Improvement in the protective infrastructure of the agricultural land and populated areas in the view of the flood emergencies from rivers and seas
- -Completion of the regions land registry documentation, the preparation of multiple land books and maps, the scanning and digitalization of the Agricultural Land registry;
- -Increase production, especially through renewable energy production as that of derived from wind, sun and water resources. Pilot projects have to be undertaken to create the basis for attracting significant investment in the future;
- -Establishment of an effective institutional and regulatory energy framework

7. Risks

Given the low institutional capacity the risks associated with current policies and practices is poorly controlled urban development, mineral- and tourist development and hydropower expansion in combination with climate related natural hazards. Albania's interest in EU accession may be a strong counter balance that helps reduce the non climate related risks. Climate related shocks such as droughts, floodings and heat spells can potentially create macro economic shocks and threaten livelihoods for small scale farmers and other vulnerable groups.

8. Conclusions

After this brief review it appears that there is a general agreement in available studies on Albania's environmental challenges and opportunities, priority areas, and the environment-poverty linkages.

The impacts of degraded ecosystems through overexploitation, pollution and under-investment, are a reduction of the country's natural capital, lower productivity in agriculture and forestry, and an increased burden of disease affecting both households and businesses. Vulnerable groups, such as small scale farmers, rural communities and urban residents without secure tenure, are particularly affected.

The main environmental challenges in Albania are:

- to make environmentally sustainable use of its natural resources (forests, water, soils, pastures, coast etc) for economic development
- to correct market failures by ensuring tenure security and proper pricing of fossil fuels, electricity and water resources (including billing and collection of tariffs)
- to invest in low carbon energy and transportation systems, water and waste water treatment and waste management infrastructure and management

Problems of weak institutional capacity, corruption, poverty and vulnerability to climate change further add to the list of challenges. The EU progress report 2010 notes that Environment is the one policy area where Albania is particularly far from fulfilling the EU acquis and little improvement was noted in the progess report for 2011. Political attention to environmental issues per se is relatively low, therefore the EU accession process appears to be the most important driver for environmental sustainability in the short term.

The most important opportunities for improved management of natural resources and transition towards a green economy are:

- Improved and integrated management of Albania's water resources, including allocation between water-using sectors like hydropower, agriculture, industry and households; and disaster risk reduction measures
- Improving productivity in agriculture and forestry in rural areas through improved tenure security, modernization and more sustainable management techniques, including rehabilitation of irrigation infrastructure, market development and opportunities for payment for ecosystem services;
- Reducing environmental health costs from air and water pollution by improved urban planning, investments in water, waste water treatment, waste management and electricity infrastructure and management;

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- Elimination of subsidies for fossil fuels and better pricing of electricity to allow cost recovery and new investments in the sector. Subsidy reform needs to include compensation to vulnerable groups;
- Improving the rule of law and broad strengthening of the institutional capacity across ministries and at both national and local levels.

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Annex I Progress in different environmental areas according to the EU⁴⁰

4.27. Chapter 27: Environment

As regards environment, there has been some progress in the area of horizontal legislation. The Law on Environmental Protection and the new Environmental Impact Assessment Law have been adopted. The Law on Environmental Permitting was also adopted, but the referral to some provisions under the National Licensing Centre raises concern as to the conformity to European Standards. Transposition of the legislation on strategic environmental assessment has not progressed. There was no progress in the areas of access to justice and facilitation of public participation, which remains rather weak. There has been en no progress as regards *air quality*. Air quality is monitored in all main cities, ethods and equipment do not provide consistent data. A new Tirana air management plan has been prepared with the help of an EU project for the Ministry of Environment, but has not yet been adopted by the Municipality of Tirana.

Some progress was made on *waste management*. A National Waste Strategy was adopted. However, the Law on Waste Management is not yet adopted. There is no procedure in place for the management and control of landfills and uncontrolled dumpsites remain the main place for waste disposal. The implementation of the decision to allow the import of waste for recyling purposes will have to be carefully monitored by the authorities.

There has been no progress in the area of *water quality*. Transposition and implementation of key EU water legislation is at an early stage. The National Strategy for Water Supply and Sewage and the Water Law has not yet been adopted. Centralised wastewater collection only exists in bigger cities. There are only two operational wastewater treatment plants in the country at the moment. Four new plants have been completed, but are not yet operational. There is still no plan to identify sensitive areas and assess their water quality, including the quality of waste water discharged by industrial plants.

A modest progress can be reported in the field of *nature protection*. Two new protected areas were established in 2010, increasing the proportion of total national territory covered by protected areas from 12.57% to 13.17%. No new developments however can be reported on transposition and implementation of the EU nature legislation and on preparations for the establishment of the NATURA 2000 network.

There was some progress in the area of *industrial pollution control and risk management*. The transposition of the Integrated Pollution Prevention Control and the Large Combustion Plants Directive progressed with the new Law on Environmental Protection. There is no progress to report as regards *environmental noise* policies.

There has been some progress regarding *civil protection*, where Albania is working with the support of a number of donors on the introduction of a central emergency call number, as well as on flood prevention and control measures. Regarding **climate change**, Albania made limited progress on general policy development. Albania does not have a National Climate Change Strategy to address mitigation and adaptation challenges. Climate awareness at all levels is poor.

At the international level, Albania has aligned with the Copenhagen Accord but did not formulated pledges for greenhouse gases (GHG) emissions' reduction. Albania is preparing its third National Communication to UNFCCC. The country did not associate with the EU position at the 16th session of the Ad-Hoc Working Group on Further Commitments under the Kyoto Protocol and the 14th session of the Ad-hoc working group on Long Term Cooperative Action under the UNFCCC. Albania is continuing to implement the Montreal Protocol on ozone-depleting substances, although further steps to align with the EU legislation are still required. The country has actively participated in the climate work under the Regional Environmental Network for Accession.

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⁴⁰ The text below is an excerpt from the EU progress report 2011

As regards the preparation and adoption of the climate change *acquis*, Albania is at a very early stage and the government is currently conducting a gap analysis. There have been no concrete steps to gradually take a GHG reduction/limitation target with a view to implementing the *acquis*, especially the EU Emissions Trading Scheme, and to joining the EU Effort-Sharing. Furthermore, efforts are required towards convergence with the EU Monitoring Mechanism Decision.

As regards **administrative capacity**, the Air, Water and Climate Change Sector was set up within the Ministry of Environment, with one staff member covering climate change issues. A system of environmental permitting and inspection is in place. However, the system does not yet meet the requirements of the *acquis*. Administrative capacity, as well as technical and financial resources for aligning with and implementing EU environment and climate change policy and legislation policy and legislation, are poor.

Conclusion

Overall, there has been little progress in legislative developments and alignment with the environment *acquis*. Implementation and enforcement need to improve across all sectors. As regards climate change there was no progress on alignment and further efforts are required to strengthen administrative capacity. Lack of public awareness and proper consultation on legislative initiatives hampers transparency and enforcement. Inter-institutional cooperation on environmental protection and climate change issues remains poor. The more systematic integration of environmental aspects into other sectors, including through a process of sound environmental assessments at the strategic and project level, remains poor. Preparations in the area of environment are still at an early stage whereas preparations in the area of climate change are at a very early stage.

Annex II Environment Sector overview, excerpt from the External Assistance Progress Report 2009-2010

- Sector overview⁴¹

The Environmental Cross-Cutting Strategy, approved in late 2007, is the basic document that outlines the government policy in the field of environment protection. In accordance with it, the Governments' priorities relate to adopting gradually the EU standards, increasing investments especially in solid waste, air quality, sewage treatment, hotspot remediation, implementing and enforcing of environmental legislation, raising communication and awareness on environment and improving and strengthening the environmental monitoring system. An Operational Plan for Environment is finalized in May 2011, which will be a useful planning instrument for Medium Term Budget Programme and donors interested to support environment sector, especially for future IPA Programmes.

Improving solid waste management is a high priority and an inter-ministerial working group has been established for this purpose. A national solid waste strategy and an associated action plan have been developed with EC assistance. This sets the scene for dialogue between the GoA and donors towards implementing a wider Programme Based Approach for the subsector of solid waste management. Sweden, Austria and Germany (KfW) have recently expressed interest in supporting the sub-sector, while USAID is partly active in solid waste management in municipalities through their support to the ARD Local Governance Program in Albania.

World Bank, through the Integrated Coastal Zone Management and Clean-up Program is assisting developing tourism in the Southern Albanian Coast by improving critical public environmental infrastructure and municipal services, remediating and containing pollution hazards, improving community infrastructure, and enhancing architectural and cultural resources. An important contribution from WB is also provided through the Natural Resources Development aiming to maintain sustainable, community-based natural resource management, leading to enhanced productivity and incomes derived from reduced soil degradation, improved water management, conservation of biodiversity, and strengthened public sector management.

Environment is one of five pillars (outcomes) of the One UN Programme 2006-2010, with UNEP being the lead agency for "Environmentally sustainable development" pillar. The UN agencies (UNWTO, UNEP, UNIDO, UNDP, WHO) have undertaken a number of activities to support sustainable environmental governance in the thematic issues of global climate change, biodiversity, land degradation, persistent organic pollutants and promoting nature based tourism development. In 2009, MoEFWA with support from UN and Austria released two national reports: 'The Second National Communication of Albania to the United Nations Framework Convention on Climate Change' and 'Albanian Policy Paper for Carbon Finance', that provide an assessment of Albania's present situation with regard to climate change.

- Overall Assistance in 2009-2010

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Environmental projects overlap with several sectors, such as infrastructure, energy, civil emergency, agriculture, and rural development. Therefore, the number of donors involved and contributions provided for this sector may be greater than described in this section of the report.

Donor commitments to this sector (for the projects starting from January 2009) amounted to € 16.2 million in grants. Total disbursments in 2009-2010 for all ongoing projects, amount to € 27 million (€15 million in 2009 and €12 million in 2010). Environmental protection subsector has received the main share of support €4.9 million, followed by solid waste €2.3 million. Fishery and biodiversity are the best performing sub-sectors in terms of disbursement rates for the period 2009-2010.

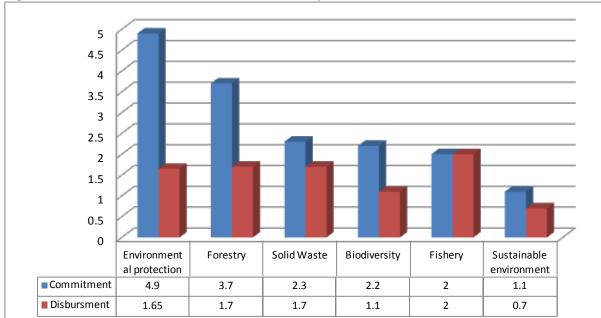


Figure 4.4 Commitments and disbursements by sub-sector 2009-2010 (€million)

Source: Donor Database 2011

During 2009-2010, leading donors in this sector have been EC (€4 million), Germany (€2 million), followed by Sweden, UN, Italy, Czech Republic, SNV and Netherlands. Projects financed by EC and Sweden are the best performing in terms of disbursement rates for the period 2009-2010.

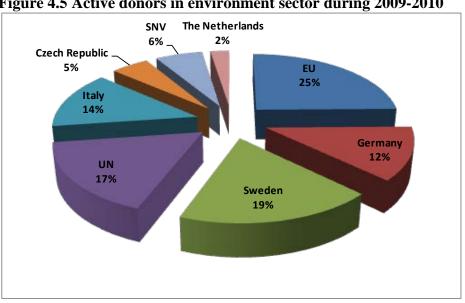


Figure 4.5 Active donors in environment sector during 2009-2010

Source: Donor Database 2011

- New Donor Initiatives

Around €16.36 million are planed for this sector. Germany/KfW will support the second phase of "Establishment of a cross-municipal urban solid waste management system in the Korca region" with €9.8 million in form of loans. EC through IPA 2010, plans to finance €4 million for capacity building to the Ministry of Environment, and €1.1 million for a feasibility study for regional landfill. Sweden, under the Waste Management Phase II Project, will finance €1.4 million for technical assistance to govern waste management planning and implementation and subsequently provision of support to a selected region in terms of capacity building, waste area planning and support to financial arrangements. The Albanian Government and UN Agencies are working together for the formulation of the next One UN Programme 2012-2016, which is expected to incorporate an important environment component.

- Future priorities

- Institutional strengthening and capacity building: to improve environmental policy making and enforcement, together with inter-institutional cooperation and coordination;
- Further adoption of EU legal standards and enforcement of environmental legislation;
- ➤ Solid and waste management and construction of landfills according to EU standards:
- > Improvement of environment monitoring and evaluation system;
- ➤ Investment on wastewater treatment (particularly in tourism zones), collection, recycling and disposal (landfill and incineration) of solid waste, rehabilitation of contaminated land and sources of pollution, technological improvement of state owned industries;
- > Support Albanian fishery industry moving closer to EU standards.

Donor co-ordination

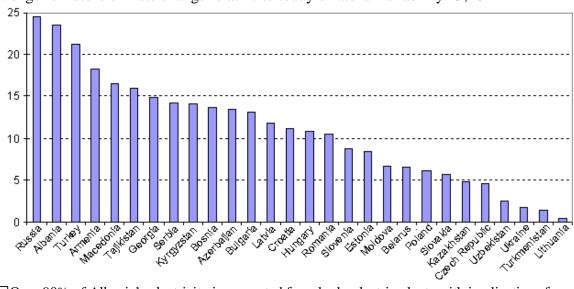
The co-ordination in this sector is done through the SWG on environment for which The Netherlands has been the donor focal point until May 2010, replaced by Sweden. The other participating donors are The Netherlands, World Bank, Italy, EU Delegation, UNDP, Germany, Denmark, Japan, EBRD, Czech Republic, OSCE, France, Austria, and USAID.

In the framework of FTI DoL, Sweden acts as the Lead Donor in environment sector, while EC, Austria, and Italy are Active Donors, and Germany acts as Background Donor. The SWG on environment has met twice during 2009 and three times in 2010, to discuss the progress on environmental legislation during 2010, overview of project development during 2010, and the preparation of the operational program for 2011-2013.

Annex III Albania and climate change, excerpts from World Bank Country Assistance Strategy 2010

The dominant challenge for Albania related to climate change today is "Adaptation" to already on-going climate change and the impacts this is likely to pose on the Albanian economy and livelihoods.

According to the 2009 Europe and Central Asia World Bank flagship report "Managing Uncertainty: Adapting to Climate Change in Europe and Central Asia" – Albania is ranked second among ECA countries in terms of the impact index which captures the relative strength of future climate change relative to today's natural variability.19,20



Over 90% of Albania's electricity is generated from hydroelectric plants with implications for energy security;

The incidence and impact of natural disasters over the last few decades (in terms of the percentage population affected);

Over 10% of the population lives in low level and exposed coastal zone areas; which are prone to the effects of sea level rise, storm surges, saltwater infiltration into aquifers, floods, or droughts (in the North):

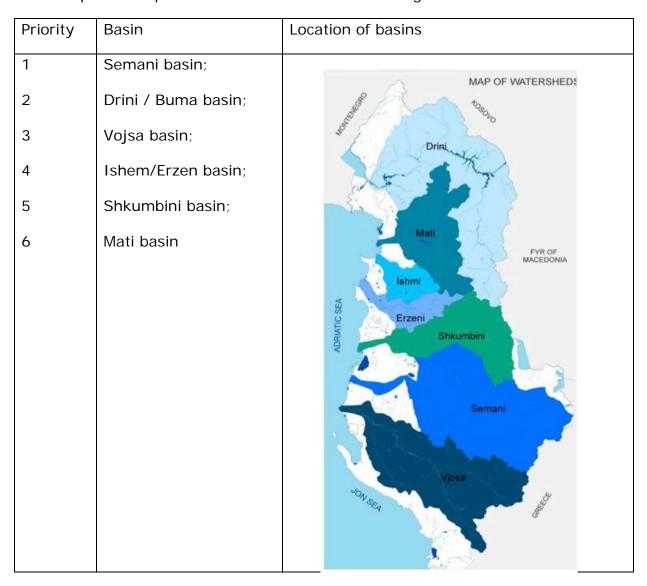
A decline in mean precipitation of 8%; a decline in annual water availability for crops (runoff) by 28%; thus irrigated small-holder farms may be hard hit by droughts and heat waves (50% of all crops are irrigated);

Although climate change mitigation measures are also important for Albania, the carbon intensity of the existing economy is not as high as other ECA countries as measured by indicators in the following tables and graphs:

Notes: The index combines the number of additional hot, dry and wet years; hot, dry and wet summers; and hot, dry and wet winters projected over the 2070–2100 period relative to the 1961–1990 period. As such, countries already experiencing substantial variability and extremes are less likely to rank highly on this index (e.g., India and the Czech Republic have about the same score). Our vulnerability index combines three sub-indices capturing a country's exposure, sensitivity, and adaptive capacity. The first, exposure, is based on an index measuring the strength of future climate change relative to today's natural variability (Baettig et al. 2007). The index is available on a country basis and includes both annual and seasonal temperature and precipitation indicators. It combines the number of additional hot, dry and wet years; hot, dry and wet summers; and hot, dry and wet winters projected over the 2070–2100 period relative to the 1961–1990 period. This suggests that the countries most exposed to future climatic change are Russia, Albania, Turkey, Armenia and, to a lesser extent, Macedonia and Tajikistan.

Excerpt from MEFWA, Draft IWRM Position Paper March 2011

There are six river basins in Albania, the following is the priority of these basin with respect to importance of Water Resources Management:



Seman and Drini / Buna Basins are given priority because they have high potential in agriculture, hydropower, and large demand for domestic water supply to main urban centres. In addition to this, Drini / Buna is often severely affected by flooding.

EM DAT The international disaster database country profile Albania

Disaster	Date	No Total Affected
Drought	1989	3,200,000
Storm	23-Jan-2005	400,000
Storm	8-Jan-2002	125,000
Flood	21-Sep-2002	66,884
Flood	17-Nov-1992	35,000
Flood	3-Dec-2010	14,000
Flood	20-Dec-1997	8,000
Extreme temperature	6-Mar-1985	7,085
Flood	27-Dec-2009	6,600
Earthquake (seismic activity)	16-Nov-1982	5,005

 $\underline{http://www.emdat.be/result-country-profile}$

Albania

Population 3.1 mio
GNVcapita 6 580US\$
% urbanization 45%
% people living in cities greater than 100 000 inhabitants
Population below the poverty line (national) 25% (2002)
Population below the poverty line (international, <\$1/day) <2% (2002)

Under age 5 mortality rate 17/1000 live births (2006) Life expectancy 71 years (2006)

Environmental burden of disease	for selected risk factors, per year
	and MODO accorded brought attribution const.

Estimates based on national exposure and WHO country health statistics 2004

Risk factor	Exposure		Deaths /year	DALYS/ 1000 cap /year
Water, sanitation and hygiene	Improved water:	96%	100	1.6
(diarrhoea only)	Improved sanitation:	91%		
Indoor air	SFU% households:	50%	<100	0.3
Outdoor air	Mean urban PM10: 58	ug/m3	200	0.4
Main malaria vectors	No transmission			
Main other vectors	None			

Environmental burden of disease (preliminary), per year

Estimates based on Comparative Risk Assessment, evidence synthesis and expert evaluation for regional exposure and WHO country health statistics 2004

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T	0ALYs/1000 cap	(World - lowest: 13, highest: 289)	29
	Deaths		5 100
9	% of total burden		18%
Ŧ	nvironmental burden by diseas	e category [DALYs/1000 capita], per year	

Environmental burden by diseas		rs/1000 capitaj, per	•
Disease group	World's lowest country rate	Country rate	World's highest country rate
Diarrhoea	0.2	1.7	107
Respiratory infections	0.1	1.1	71
Malaria	0.0		34
Other vector-borne diseases	0.0	0.0	4.9
Lung cancer	0.0	1.2	2.6
Other cancers	0.3	2.3	4.1
Neuropsychiatric disorders	1.4	2.2	3.0
Cardiovascular disease	1.4	5.9	14
COPD	0.0	0.4	4.6
Asthma	0.3	0.6	2.8
Musculoskeletal diseases	0.5	1.2	1.5
Road traffic injuries	0.3	1.4	15
Other unintentional injuries	0.6	6.1	30
Intentional injuries	0.0	0.8	7.5

Other Indicators	•	•
Use of leaded gasoline	No	(2008)
Overcrowding	NA	
Malnutrition (% stunting)	27%	(2005)



Public Health and the Environment Geneva 2009