



**SEMINAR ON ENVIRONMENTAL SERVICES AND
FINANCING FOR THE PROTECTION AND SUSTAINABLE USE OF ECOSYSTEMS**

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**NATIONAL REPORT ON ENVIRONMENTAL SERVICES AND FINANCING FOR THE
PROTECTION AND SUSTAINABLE USE OF ECOSYSTEMS**

SERBIA AND MONTENEGRO

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I VALUING ECOSYSTEM SERVICES

Ecosystem services as fundamental life-supporting services-seemingly infinite and free that we take for granted, such as, purifying air to breathe, purifying water to drink and providing fertile soil to produce the food we eat. We are even less aware of the other services such is climate stabilization, detoxification, and biodiversity maintenance to name a few. Economic system based upon exploitation of natural resources disregards for true costs – the disruption of natural ecosystem services. Using economic model to describe our natural systems, we might consider air and water as “products”, the processes that replenish and purify them as “services” and the system that provides these as “natural capital”. In Serbia and Montenegro there are only a few fragmented analysis and one comprehensive study on the valuation on ecosystem services from the Institute of Economic Sciences “Economy of Natural Capital – Valuing and Protection of Natural Resources”, Ed. B. Draskovic (Belgrade,1998). Methods of natural capital valuation such are discount rate method, cost-benefit analysis, WTP, hedonic prices, opportunity costs, internalization of externalities and other topics of relevance for the thematic of valuing ecosystem services were covered from the theoretical aspect only. The problematic of shadow prices, need for green accounting and monitoring and valuation of natural capital flows and stocks were recognized as well. The sixteen authors of this study conclude that “further valuation in the monetary form of prices of all forms of use of natural capital, including the indirect use – environment damage should be researched in the future”. However, most current as well as unofficial and a source of controversy - paper done for the purposes of draft of NEAP, using benefit transfer methodology for assessing the environment damages in Serbia therefore, would only be mentioned not to be elaborated further on in this document.

The social and economic aspects are not addressed nor there is an economic assessment of the value of water-related ecosystems in relation to water management and drinking –water supply in Serbia and Montenegro as well as cost-benefit analysis of land use alternative and their impact on ecosystem services is missing thus, hampering the introduction of PES.

II LEGAL AND CONTRACTUAL ASPECTS

Although Serbia and Montenegro is not a member of the EU yet, there is a strong political will and need to harmonize domestic conduct and legislation relating to water with European practices. The current Government of Serbia has followed a structured approach towards European Integration, continuing the work launched under the former administration. A comprehensive strategy for joining the EU is in preparation. A new mechanism, institutionalized in the government Rules of Procedure, stipulates that every proposed bill must be accompanied by a statement on compliance with the EU *acquis*. (Report on the preparedness of Serbia and Montenegro to negotiate a Stabilisation Association Agreement with the European Union, EC, Brussels, 12.04.2005).

Draft Water Law has the fundamental objective the legal regulation of the field of water in a manner that satisfies the human water demand while respecting the restrictions imposed by the need to preserve environment. Based on these principles, it is consistent with international practices and trends in the areas of water use, protection and protection against the adverse effects of water. The draft Law also creates conditions for public involvement, democratic decision-making and the provision of controls in all stages of water-related operations and development: it introduces the concept of valuation of this resource, raises the importance of the scientific, professional and information base and addresses the concept of private property.

The development of the field of water in Serbia would be based on socio-economic trends and be compatible with general economic development, relying on a distinctly defined national strategy in this area. The draft Water Law respects the following basic postulates:

- ⇒ Water is a public resource over which property rights cannot be acquired
- ⇒ Water is a renewable resource and its use should have priority over non-renewable resources
- ⇒ Despite its renewable nature, water is not an inexhaustible resource and requires protection of its quantity and quality
- ⇒ Water is not uniformly distributed over time and space, and the mitigation of adverse consequences of such non-uniformity requires relatively large investment in the balancing of water (river reservoirs and infiltration into aquifers) and the conveyance of water to areas of greater demand (water transfer)
- ⇒ Water planning and management must be integrated at river basin level in order to minimize the unit cost per planned impact and protect the resource from destructive human activity
- ⇒ The use and consumption of available water resources must be reasonable and must rely on ones own efforts to save and protect water and address the interests of all users, where priority is given to municipal water supply and preservation of ecosystems
- ⇒ Water has an economic value which is strongly reflected in the development of all segments of the economy and society. In this regard steps must be taken to provide:
 1. sustainable financing
 2. realistic water prices and water related service fees i.e. user pays principle, to ensure appropriate operation, maintenance and development of works and systems
 3. assistance to low – income individuals provided from special sources of financing
 4. insurance coverage for the use of floodplains according to the risks
 5. polluters pay actual or potential treatment costs i.e. polluter pays principle
 6. state provide concesional funding of projects and systems of national importance in order to ensure more uniform regional and spatial development

Respecting the fundamental elements of environmental conservation, water management and water land management, the Water Law is based on the following principles of relevance for the theme

- ⇒ The principle of irreplaceability of water as a resource and prerequisite for existence, meaning that water as a natural public resource may be used only in a manner that does not compromise its substance and does not preclude its natural role
- ⇒ The principle of wholeness, respecting natural processes in which water is an important component, and the interaction and interdependence of aquatic and terrestrial ecosystems
- ⇒ The principle of a singular water system, resulting in the need for integrated water management consistent with the development of the state and the society, duly addressing the interests and requirements of other countries in the river basin in line with the 2000 EU WFD.
- ⇒ The principle of sustainable development, meaning that meeting the demand of the present generation will not compromise the ability of future generations to meet their demands
- ⇒ The principle of long term protection of water quality and effective use of available water sources
- ⇒ The principle of the right to protection against the harmful effects of water, particularly the need to protect the population and its property while respecting natural processes, preserving the value of natural resources, and addressing the economic viability of such protection
- ⇒ The principle of economic valuation of water, including the assuming of costs associated with the provision and preparation of water for various users and the costs of water protection and regulation, based on the “user / polluter pays principles”
- ⇒ The principle of permanent management and public participation and
- ⇒ The principle of recognizing best technologies and scientific advances relating to the environment preservation

Financing water services would be defined by a special law on water financing while draft Law only addresses the basic principles and the setting up of a water budget. Sustainable financing including mechanisms for ensuring the collection of revenues, realistic i.e. prices of water and water-related services fees, which would cover the costs involved in the provision of water for users, protection against the adverse effects of water and water protection i.e. the “user pays” principle, the costs of wastewater management i.e. “polluter pays” principle and the position that the state, aiming at the more uniform district development, would be responsible for encouragement funding of operations and systems relevant to the country, would constitute the basic principles of financing in the field of water. The Government would be responsible for setting up of a water budget, pursuant to the law governing the budgetary system, which would be managed by the Ministry.

According to the Water Master Plan of Serbia (Feb.2002, valid till 2012) maintenance and development of water regime securing best technical, economical and environmental solution for integral water management, water protection, flood protection and water use are the main strategic objectives of water management in Serbia. As a part of above mentioned basic goal, following sub objective of importance for selected theme are following:

- ⇒ Securing protection and improvement of water quality up to the level of undisturbed water use planned purposes, as well as protection and improvement of environment and quality of life as well, in the complex of integral water use, water protection and protection from flood,
- ⇒ Improvement of neighborhood countries cooperation in domain of work in every area i.e. water quality protection, water division, flood prevention etc.

In general, the price policy for drinking water and water treatment facilities falls within the competence of municipalities. In most cases, water services charges are collected by municipal service companies together with other municipal service charges, such as those for solid waste,

heating and electricity. In many cases (but not all) revenues are then arbitrarily distributed among the different services, without any relation to the amounts actually billed. Water companies have little control over bills paid by domestic consumers and are unable to use proper commercial practices. Revenues are also normally complemented with direct transfers from municipal budgets. Drinking water prices differ from city to city according to the consumer category and households pay less than industries. Currently, the revenues of the water utilities do not even cover operating costs. Utilities are not able to properly maintain or upgrade their facilities so that water and wastewater services are deteriorating. In order to cover the operating and investment costs incurred by the service companies, the price of drinking water and sewage should be much higher. Although prices were increased recently, they are still not sufficient to cover the full cost of the services. Sewerage tariffs differs. In addition to the sewage charges, waste-water charges were introduced through the Decree on Tariffs for Water Consumption and Tariffs for the Protection of Water. The waste-water charges are paid by enterprises and the tariffs depend on the category of the polluter. Rates are decreased if the waste water has been treated before it is discharged. Enterprises that have wastewater treatment facilities are exempted from these charges if the quality of the water is adequate. Revenues are used for water protection and wastewater treatment. Revenues are collected by the Ministry of Agriculture and Water Management, Directorate for Water. According to the Decree on Tariffs for Water Consumption and Tariffs for the Protection of Water, tariffs are laid down for extracting surface water and groundwater for industrial purposes, for agricultural purposes and for drinking water supply (effective from 1997). There are separate charges for discharging treated and non-treated waste water into man-made channels. These charges are collected by the Public Water Management Enterprise ("Srbijavode") and are used for the maintenance of canals and related facilities. The charges are paid according to the quantity of the discharged water, i.e. the amount of pollution, based on a scheme defined by the Decree on Tariffs for Water Consumption and Tariffs for the Protection of Water.

Environment Protection Law recognizes following types of economic instruments of environment protection relevance

⇒ Charges for Use of Natural Resources

The user of the natural values shall pay a charge for the utilization of natural values and bear the cost of rehabilitation and recultivation of degraded area, in compliance with special law.

⇒ Environmental Pollution Charges

The polluter is obliged to pay a charge for environmental pollution. The criteria for determination of the charge are following:

- 1) Type, quantity or characteristics of the emission from certain sources;
- 2) Type, quantity or characteristics of the emissions of produced or disposed waste;
- 3) Contents of matters which are harmful to the environment within the raw material, semi product and final product.

The obligor for charges shall be any person causing environmental pollution by emission, namely waste or who shall produce, operate or market raw material, semi finished or final products containing environmentally harmful substances. The Government determines the type of pollution, the criteria for charge calculation and obligors to pay, the amount and method of calculation, assessment and collection of charges. 40% of the means obtained from the charges shall be allocated to the Central budget, and 60% of the means shall go into the budget of the local self governance unit. The funds shall be used for protection and improvement of the environment according to programmes, namely action and rehabilitation plans made in compliance with this and special laws.

⇒ Refund, Relief or Reduction of Environmental Charges

The obligor shall be entitled to get the refund, relief or reduction of the paid environmental charge if the funds are used for the implementation of measures for harmonization with prescribed limit values or if other measures are being implemented in contribution to reduction of environmental pollution to the level below prescribed limits. The Government determines criteria and conditions for refund, exemption or reduction of charges

⇒ Charges of the Local Self-governance Unit

The unit of local self-governance may, within the framework of its rights and liabilities, impose the charge for environmental protection and improvement in line with its needs and specificities. Exceptionally, the self-governance unit with the status of endangered environment may impose a charge for the protection and enhancement of environment also for the owners of freight vehicles, namely legal and private entity involved in transport and carriage of oil and oil derivatives, as well as raw material, products and semi finished products of chemicals and other hazardous matters from or for the industry located in its territory. The amount of the charge, the manner of payment as well as relief for certain categories of obligors shall be prescribed by local self-governance unit. The means obtained from charges must be earmarked into environmental protection and improvement.

⇒ Budgetary and International Financial Assistance Funds

Budgetary financing and international financial assistance funding shall be carried out within the activities of the Fund for environmental protection in accordance with Law

⇒ Fund for Environmental Protection

In order to provide financial means to enhance and advance environment protection in the Republic, the Fund for environmental protection is established. The Fund carry out activities in relation to financing the preparation of implementation and development of programmes, projects and other activities in the area of preservation, sustainable use, protection and advancement of the environment, as well as in the area of energy efficiency and use of renewable energy sources, and in particular: professional and other activities in relation to acquisition, management and utilization of Fund's means; mediation concerning financing of the environmental protection and energy efficiency from the funds of foreign countries, international organizations, financial institutions and bodies, as well as of domestic and foreign legal and private entities; keeping database on programmes, projects and other activities in the area of environmental protection and energy efficiency, as well as on necessary and available financial means for their realization; encouragement, establishment and realization of co-operation with international and domestic financial institutions and other legal and private entities in order to finance environmental protection and energy efficiency in accordance with the National programme and other strategic plans and programmes and concluded international agreements for the purposes determined by this Law.

The revenues of the Fund are from following sources: earmarked funds of the Republic budget realized on the basis of charges; funds realized on the basis of changes in ownership of the companies in privatization process; revenues realized on the basis of international bilateral and multilateral co-operation on programmes, projects and other activities in the area of environmental protection and energy efficiency; revenues and receipts from the management of liquid money assets of the Fund; contributions, donations, grants, and assistance; other sources in compliance with law.

The amount of the means realized on the basis of change in ownership of companies in privatization process is determined in compliance with Law on privatization. In the process of its work, and specially in planning and utilization of the finances, the Fund shall applies the principles of

objectiveness and responsibility, internationally recognized standards of good practice and public in its work and decision making.

The Fund's finances shall be used for financing action and rehabilitation plans in accordance with the National programme, and in particular for: protection, preservation and improvement of the quality of air, water, soil and forests, mitigation of climate changes and ozone layer protection; rehabilitation of waste landfills, encouragement of reduction of waste creation, recycling and waste re-use; incentives for cleaner production and application of best available techniques for operation of facilities and activities performance technology and products which shall reduce burden and pollution of the environment; biodiversity protection and preservation; incentives for sustainable use of protected natural values; incentives for sustainable development of rural areas; incentives for use of renewable energy sources and increased energy efficiency; incentives for cleaner transport; incentives for sustainable economy activities, namely sustainable economy development; development of the system of information about environmental status, monitoring and evaluation of environmental status, as well as introduction of the system of environmental management; incentives for educational, research and developing studies, programmes, projects and other activities, including demonstration activities; co-financing preventive and intervention measures in emergency environmental pollution and training for reacting in case of accidents; co-financing the obligations of the Republic in relation to subsidiary measures.

The Fund may participate in co-financing of the programmes, projects and other activities if organized and financed by international organizations, financial institutions and bodies or other foreign legal entities. The assets of the Fund shall be granted to legal and private entities, users of the means through loans, guarantees and other forms of collateral, subsidies, assistance and donations on the basis of public advertisement published by the Fund. The Fund shall not publish public initiation if, as a contracting party, directly finances and participate in realization of programmes, projects and other activities in accordance with this Law. General act of the Fund shall determine the conditions which are to be fulfilled by the users of the Fund's assets, conditions and manner of drawing on its funds, appraisal criteria for project proposals evaluation, namely requirements for credit applications, manner of monitoring the earmarked use of the funds and contracted rights and duties. The autonomous province, local self governance unit, namely two or more self-governance units may establish the fund for environmental protection to be financed out of the revenues obtained at their territory.

⇒ Types of Economic Incentives

For the legal and private entities applying technologies, produce and place on the market the products environmentally more friendly than others, namely use renewable energy sources (energy of the Sun, wind parks, biogas, etc.) plant and equipment directly protecting the environment, may have taxation, customs and other relief or exemption provided under the terms and conditions of special law. For the consumers who return used and non used devices and parts thereof, products or their wrappings in an organized manner, the producers who provide for their recycling or elimination, namely reduction of negative impact of their activity on the environment in another organized manner, may get special incentives such as subsidies, deposit refunds under the terms and conditions stipulated in the special law.

⇒ Liabilities of Legal and Private Entities

Legal and private entity shall be obliged to ensure environmental protection while performing their activity, through:

- 1) Applying and implementing regulations on environmental protection;
- 2) Sustainable use of natural resources, goods and energy;

- 3) Introducing energy efficient technologies and use of renewable natural resources;
- 4) Using products, processes, technologies and practice less harmful to the environment;
- 5) Undertaking preventive measures or eliminating the consequences of threat and damage to the environment;
- 6) Keeping records in a prescribed way on raw materials and energy consumption, polluting matters and energy release, classification, characteristics and quantities of waste, as well as on other data and their submission to competent authorities;
- 7) Controlling the activities and operation of plants that may represent risk or that may cause danger towards human health and environment;
- 8) Other measures in compliance with law.

Legal and private entity shall implement measures of environmental protection from paragraph 1 of this Article on their own or via authorized organization.

⇒ Liability for Pollution

Polluter causing environmental pollution shall be responsible for the occurred damage under the principle of objective responsibility. Legal and private entity that through their illegal or inadequate acting has enabled or allowed environmental pollution shall also be responsible.

⇒ Polluters' Obligation

Polluter causing environmental pollution by its acting or non-acting shall be obliged to, without any delay, undertake measures determined by rehabilitation and plan of protection from accident, namely to undertake necessary measures in order to reduce damage in the environment or eliminate further risks, hazard or rehabilitation of the damage in the environment. If the damage made to the environment cannot be rehabilitated through adequate measures, the person that has caused it shall be responsible to pay charge equivalent to the value of the destroyed good.

⇒ Liability for Damage

Polluter shall be liable for the damage made to the environment and space and shall cover expenditures for the evaluation of damage and elimination thereof, and in particular:

- 1) Costs of urgent interventions undertaken at the moment of the damage occurrence which are necessary for organizing and preventing the effects of damage towards the environment, space and human health;
- 2) Direct and indirect costs of rehabilitation, establishment of new or recovery of the previous environmental and spatial status, as well as monitoring of rehabilitation and environmental damage effects;
- 3) Costs for prevention of the occurrence of the same or similar damage towards the environment and space;
- 4) Charge costs which are to be paid to persons directly threatened by environmental and spatial damage.

The polluter is obliged to ensure financial or other warranties in order to ensure the payment of the charge from paragraph 1 of this Article, during and after performance of the activity. The

Government shall prescribe type of warranty, the amount of the means and validity period of the warranty supplied by the polluters.

⇒ Insurance

Polluter whose plant or activity represents threat towards human health and environment shall be obliged to insure themselves against liability for possible damage made to third party in an accident.

⇒ Reimbursement of Damage

Every person affected by damage has right to reimbursement. The request for reimbursement may be submitted directly to the polluter or insurer, namely to the financial guarantee of the polluter where the accident happened, if such insurer, namely financial guarantee exists. If several polluters are responsible for the environmental damage, and if it is not possible to determine share of certain polluters, the costs shall be borne jointly and individually. The procedure for reimbursement shall be out-of-date in three years period since the damaged party found out about the damage and damage maker. However, this claim shall be out-of-date in 20 (twenty) years after the occurrence of the damage. Court procedure for reimbursement shall be urgent. The Republic shall keep the right to reimburse the means if there are no other persons with such right.

Environment Impact Assessment i.e. EIA is required by the Environment Protection Law.

Assessment of environmental impacts is stipulated and includes water-related projects. Also of importance in the above mentioned context is the most recent IPPC and SEIA regulation in Serbia.

III. CHALLENGES FOR IMPLEMENTATION

The degree of awareness on the opportunities of payment for ecosystem services needs to be improved in order to challenge the dissemination of best practice. Therefore a challenges for research and capacity building initiatives with developing specific research programmes on this specific issues as well as putting in place some forms of capacity building would adrees the challenges regarding the payment for ecosystem services in Serbia and Montenegro.

Considering the economic advantages water-related ecosystems can provide, their protection, sustainable use and restoration can prove to be a cost-effective alternative to infrastructure development the follow up of these activities could prove beneficial for our country. Current system in country is more of command and control than proclaimed mixed approach with effective economic instrument on environment scene. Thus, enrichment of the current practice with the possible development of payment for ecosystem services could contribute to the protection and restoration of ecosystems.

Information sharing and dissemination of good practices at local, national and international levels among relevant authorities and institutions are essential to: enable better cooperation and integration of policies; facilitate regional and international initiatives; disseminate technical knowledge and experience; and strengthen political support. In particular the management of transboundary water resources and water-related ecosystems requires such an exchange, which not only benefits the knowledge base but also the transboundary cooperation in general. This stands also for protection and maintenance of ecosystem services provided by forests, wetlands and soils to ensure sustainable water management and supply of good quality water through the use of economic instruments, such as payments for ecosystem services (PES). Providing background information and examples of current practice in environmental services and financing for the protection and sustainable use of ecosystems would be of interest for the country.

Sharing knowledge on experience and good practices from Europe to neighborhood countries, drawing lessons from existing applications and providing guidance on future policy development

and implementation would contribute to stopping the degradation of ecosystems together with their services for getting significantly worse further on.

“Thus the new European model of the reformed welfare state has three major elements: social and environmental responsibility, openness and technology promotion.” (Economic Survey of Europe, 2005).