

Public Financing of Environmental Programmes

Dan - Constantin Dănulețiu, PhD Lecturer, „1 Decembrie 1918” University of Alba Iulia, dan.danuletiu@gmail.com

Abstract: *The paper presents the principles used in public financing of environmental programmes. It also shows levels and trends in environmental expenditure in Romania, the distribution of expenditure by the environmental media, the sources of financing these kinds of expenditures. The importance of environment policy is suggested by environmental expenditure as a share of gross domestic product.*

Public finance plays, especially in the countries less developed, a vital role in providing environmental services that will bring significant public benefits. Also, the public sector is essential to provide public goods and infrastructure in environmentally sensitive sectors.

There is no unified definition of environmental expenditure all over the world. The most common of these definitions suggests that environmental expenditure consists of expenditure on pollution abatement and control¹. Pollution abatement and control are aimed at prevention, reduction and elimination of pollution or nuisances resulting from production processes and consumption of goods and services. On the public sector side, administrative, monitoring, and enforcement expenditures are included. In Romania, it was adopted this definition, but in the state budget we can find the so-called “environmentally-related expenditure”, that includes environmental expenditures and water resource management expenditure.

Environmental expenditure is classified in different environmental domains according to the media or type of pollution/degradation concerned, such as: protection of ambient air and climate; waste water management; waste management; protection and remediation of soil, groundwater and surface water; noise and vibration abatement (excluding workplace protection); protection of biodiversity and landscape; other expenditures that consists in the sum of protection against radiation (excluding external safety), research and development, other environmental protection activities (including general environmental administration and management, education, training and information, invisible expenditure and expenditure unclassified elsewhere).

Environmental expenditures are grouped in two main categories:

- investment expenditures, which are outlays (purchases and own-account production) on land and/or on additions of new durable goods to the stock of fixed assets for pollution abatement and control, nature conservation or sustainable natural resource management;
- current expenditures, which are outlays for in-firm production of environmental services, nature conservation and natural resource protection: wages and salaries, rents, energy, maintenance expenditure and other intermediate inputs and environmental services and specific goods bought from the market.

The necessity of public environmental investment expenditure results because some project benefits are external, generating economic and financial advantages to the wider community. Economic rates of return (ERR) on these projects are usually higher than internal financial rates of return (IRR). The bigger the gap between ERR and IRR, the more the project can't be financially viable in commercial terms because the investors who have to bear all project costs cannot capture all benefits generated by these projects. Because of the scarcity of public resources, governments

¹ Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe, *Trends in environmental expenditure and international commitments for the environment in Eastern Europe, Caucasus and Central Asia, 1996-2001*, Tbilisi, Georgia, 2003, p. 52.

need to create appropriate frameworks for optimising the use of available public environmental expenditure. In this sense, defining environmental priorities and introducing them into priorities supported by general budgets is a necessity.

There could be established some steps to achieve an efficient environmental management system²:

a) define priority environmental objectives. The objectives would be specific, measurable, accepted, realistic and time-bound. (SMART);

b) determine if public expenditures are necessary to achieve these objectives. If not, use of other policy instruments, such as permits or taxes to achieve environmental policy objectives, is saving public money;

c) define sources of funds, the size of financial envelope and an expenditure program. An expenditure program should be an integral part of a larger environmental program aimed at achieving specific priority objectives. It should consist at list of specific objectives, cost estimates, description of eligible project types and beneficiaries, terms of financing, procedures, principles and criteria of project appraisal and selection, procurement rules, time frame, indicators of performance;

d) select the best institutional arrangement for managing the expenditure program;

e) contract and control implementing agency to manage the expenditure program.

The process is illustrated in fig. no. 1.

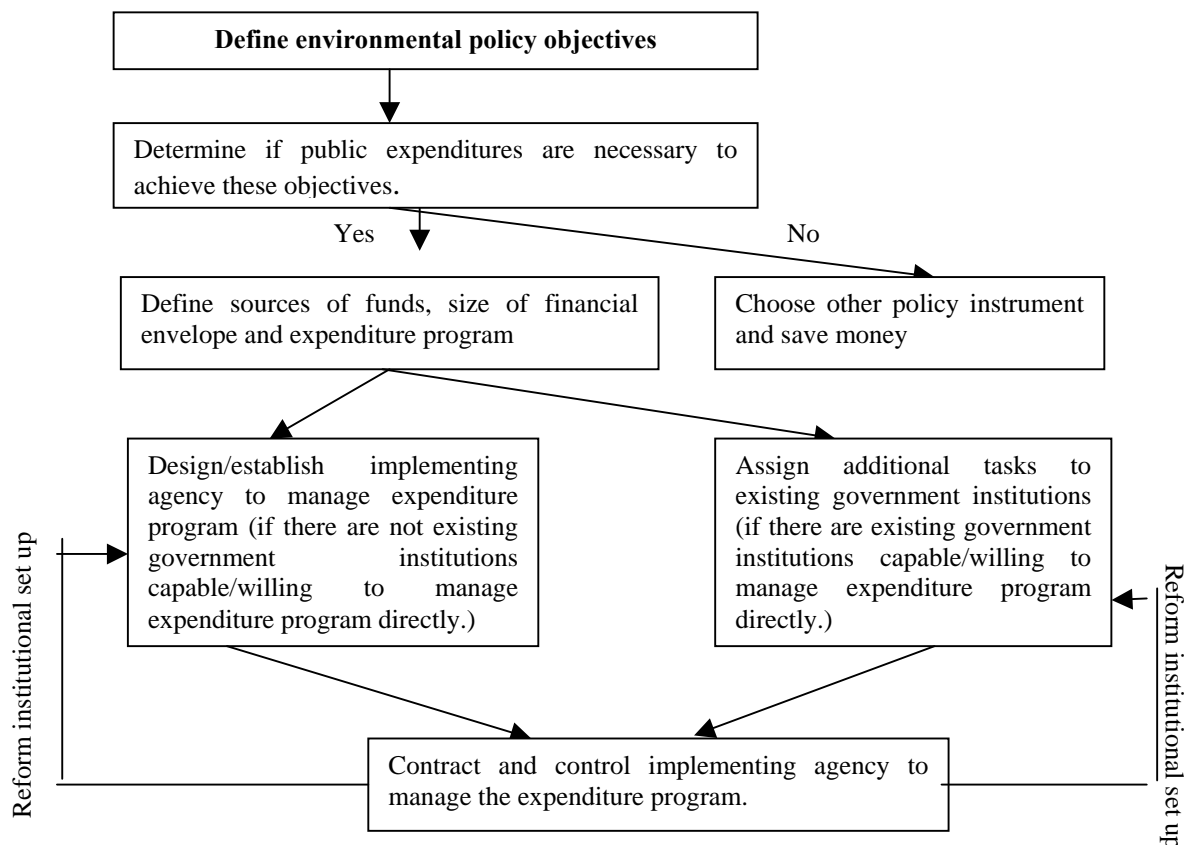


Fig. no. 1 – Developing a sound public environmental expenditure program

An important issue in designing the policy framework for the mobilization of domestic financial resources is the integration of environmental finance into mainstream public finance. Implementing the environmental component of sustainable development goals requires cooperation

² Fifth Ministerial Conference "Environment for Europe", Kiev, Ukraine, 21-23 may 2003, Good practices of public environmental expenditure management in transition economies, p. 12.

between various ministries, in particular the ministries of finance and environment. Cooperation can often become difficult because of conflicts of interests between those ministries³.

The integration of environmental finance into mainstream public finance is made up by Medium Term Expenditure (or Budget) Framework. This is an institutional mechanism that represents a complete logical chain linking policy formulations, planning and budgeting, and complements the short-term perspective of annual budget formulation. It contributes to greater fiscal discipline and efficiency in resource allocation and in operation. It ensures that budget allocations are consistent with government policy and strategic prioritisation, given the availability of resources. It represents a fundamental shift away from ad hoc lists of project ideas towards a model that facilitates realistic and affordable investment programmes supported by strategic targeting of limited public funds.

Through MTEF(or MTBF) is used to achieve the goals of any sound public expenditure management system are: fiscal discipline, efficient allocation of public funds and operational efficiency.

Fiscal discipline means control of total government expenditure, including central and local government budgets, state-owned enterprises and extra-budgetary funds. This condition arises because public financial resources in general have features of "common, open access" resources so as they are susceptible to the "tragedy of the commons". Absence of constraints is likely to result in large, unsustainable deficits and an unstable macroeconomic environment because of the behaviour of "free riders" of claimants of public funds.

Therefore, implementing constraints on the aggregate level of spending and deficits over the medium-term becomes the overriding objective of all public expenditure management systems. This control over total public sector expenditure translates into constraints imposed on sectoral financial envelopes. The fiscal consequences of public environmental expenditure (including central and local government budgets, state owned enterprises and extra-budgetary funds) must be subject to the same scrutiny as all other expenditure sectors.

Fiscal discipline requires control on the explicit expenditures and commitments, but also of other explicit or implicit commitments that can have an immediate or future fiscal impact..

In most countries budgeting decisions focus on direct expenditure programmes and on multi-year explicit legal commitments such as debt servicing. Less attention is usually paid to implicit or contingent liabilities. Sound budgeting and policy formulation require a wider and more courageous approach, covering more effectively and directly the fiscal risks faced by governments in the short term as well as in the long term. For example, obligations arising from current or new environmental expenditure programmes and policy measures must be assessed realistically, whatever their nature — implicit or explicit, direct or contingent.

Allocative efficiency means ensuring the best outcome by prioritising competing claims for different social objectives on scarce public funds (within aggregate fiscal discipline).

In democratic countries, the budgetary process is the preferred mechanism which societies use to ensure the best use of public resources. Within the framework of aggregate fiscal discipline, the challenge is to prioritise competing claims of different social objectives on scarce public resources. Difficult choices must be made between the marginal social benefits of expenditures on education, health service or environmental infrastructure. Ultimately the aggregate expenditure outcome is achieved through political bargaining. Ideally, the expenditure outcome is based on consensus, and bargaining is supported by adequate information being provided to all parties about trade-offs that are being made, including what everyone is having to give up and gain, together with future benefits that will derive from current sacrifices.

³ United Nations, Commission on Sustainable Development, *Financial resources and mechanisms*, Report of the Secretary-General, 2000, p. 10

Impersonal rules for evaluating the relative importance of programmes and projects improve the quality of the prioritisation process. Since impersonal rules apply equally to every programme and project, the government cannot be as easily accused of favouritism and thus is better able to defend itself against criticism. Economic cost-benefit analysis and incidence analysis are examples of such rules. The first can provide information on the net social gain, while the second can potentially make transparent who gains and who loses.

Moreover, methodological and informational problems can create significant uncertainties and grounds for legitimate differences in interpretation. Because line ministers, (including the minister of the environment) have comparative advantage (such as information) in programming and allocating resources within their respective responsibility areas, the new challenge to the budgeting process for the government is to develop mechanisms to avoid sectoral spending decisions that undermine the objectives of other sectors' expenditure programmes.

Within sectors, a rational process of setting priorities is also needed to ensure allocative efficiency. Hard budget constraints from the top are necessary, although not sufficient, conditions to create incentives for sectoral ministers to prioritise expenditures and to seek efficiency.

Cost effectiveness implies achieving objectives at minimum cost. Cost effectiveness is considered not to be an issue in the private sector, where the incentive structure on competitive, private markets forces all economic agents to continuously search for cost minimizing opportunities. Such incentives do not exist automatically in the public sector, where the opportunity cost of money is not a painful constraint (due to plentiful opportunities for rent-seeking and free lunches). The necessary conditions for such incentives to be created include a hard budget constraint, explicit legal requirements supported by the rule of law, managerial autonomy deep-seated in accountability and transparency mechanisms, predictability of resource needs and availability, a compensation system rewarding cost savings and high technical competence. Cost-effectiveness tests are best applied when benefits are difficult to measure and value or when objectives have already been chosen.

The achievement of the objectives of public expenditure management rests on several pillars, namely: transparency, accountability, budget comprehensiveness, participation, consistency, equity, additionality and non-intrusiveness.

The first three seem to be the necessary conditions for good public expenditure management.

Transparency entails low-cost access to relevant information. Transparency of fiscal and financial information is a must for an informed executive, legislature and the public at large. Some authors stated that there is never a good reason for secrecy concerning revenues and rarely a good reason for secrecy concerning expenditures⁴. It is essential that information be relevant and in understandable form. In order to do so, all public expenditure programmes, including the environmental one, should use acknowledged international standards of accounting and disclosure of fiscal and financial information to controlling bodies and to the public. Also, transparency requires independent assurance of the integrity of financial reports through external audits and a mechanism to ensure that external audit findings are reported to the controlling bodies and that remedial action is taken.

Accountability means the capacity to hold public officials liable for their actions. Effective accountability has two components: responsibility and consequences. The first component can be understood as the requirement for government officials and public sector personnel to respond periodically to questions concerning where the money has gone and what has been achieved with it and the second can be seen as a need for predictable and meaningful consequences of good and bad performance with respect to one's line of responsibility.

⁴ S. Schiavo-Campo, D. Tommasi, *Managing Government Expenditure*, Asian Development Bank, Manila, 1999, p. 13

Comprehensiveness of the budget means that all public sector revenues should be pooled together in a general fund, and the legislature, guided by the executive body, should allocate these common resources to public expenditure programs, so as to equalise the marginal social benefit for each program.

This is contrary to the experience of Central and Eastern European Countries of financing environmental programmes through the environmental funds, which are institutions designed to channel public revenues earmarked for environmental protection purposes⁵. Environmental funds were created in order to boost public environmental expenditures and to shield them against myopic fluctuations and budgetary cuts inevitable in the heat of fiscal consolidation⁶.

Because environmental policy is only one of several state sectoral policies, environmental protection is in continuous competition with other state tasks such as health, education or economic growth. The balance between these and all state policies must be defined and decided by society, represented by the government and/or the parliament. Environmental policy priorities are usually low in the overall policy agenda of developing countries so that the establishment of an environmental fund was necessary in order to finance the environmental programmes.

The revenue sources of environmental funds are often earmarked taxes. Earmarking is a practice of assigning revenue from specific taxes or group of taxes to finance specific government services⁷. Earmarked revenues have considerable independence from the yearly budget in terms of revenue sources, management and use of money. Consequently, the funds can be used in a more flexible way and potentially a more transparent decision-making process may be devised. The challenge is to design rules and procedures to ensure accountability in order to encourage efficient use of fund resources.

The economists invoked many arguments in favour of and against earmarking, which are presented in table no. 1.

Table no. 1

Arguments in favour and against earmarking

Arguments in favour of earmarking	Arguments against earmarking
Embodies benefit principle of taxation	Undermines allocation efficiency
Bypassing inflexible budgetary procedures: operational efficiency, cost-effectiveness	Spillovers to other sectors leading to budget fragmentation and disability to manage the economy
Bypassing salary ceilings to attract technically competent individuals	Segments some public expenditure outside the discipline of the budget and the jurisdiction of the legislature
Protecting priority expenditures and vulnerable groups from budget cuts	Uncertainty of estimates of public sector expenditures, macroeconomic programming difficult
Increasing acceptability of taxes	Breeds vested interests, increases the risk of corruption and waste
Something is better than nothing	Once created, difficult to phase out
Enhancing environmental effects	

Source: G. Peszko, Integrating public environmental expenditure management and public finance in transition economies, pag. 62-63, in *Finance for sustainable development. Testing New Policy Approaches*, United Nations, New York, 2002

The environmental funds are important instruments in the transition process and they are jointly responsible for environmental improvements in CEE countries via the provision of funds for environmental investments. Attempts should always be made to finance environmental investment

⁵ Stefan Speck, Jim McNicholas and Marina Markovic(editors), *Environmental Funds in the Candidate Countries*, Szetendre, Hungary, 2001, p.19.

⁶ Peszo, Integrating Public Environmental Expenditure Management and public finance in transition economies, in volume *Finance for sustainable development. Testing New Policy Approaches*, United Nations, New York, 2002, p.45.

⁷ idem, p. 57.

from general revenues, but when earmarking is used in order to achieve certain environmental goals it should be carefully justified, for example by using the proceeds of environmental taxation to mitigate the prior environmental damage that prompted the tax in the first place.

In Romania, public resources for environmental purposes are allocated to: functioning of public administration, pollution abatement and control, biosphere and environment protection (air quality protection; water quality protection; waste management; soil and ground water quality protection; noise and vibration reduction), natural habitat preservation (species protection; protected areas; ecological rehabilitation and reconstruction; aquatic medium regeneration; prevention of dangerous natural phenomena), European directives implementation, other activities (research – development; general management for environment; protection against radiation; education, training, informing).

Resources allocated to pollution abatement and control are aimed mainly to cover the financial national contribution to the European Union's programmes and to the programmes financed through international resources.

The funds for environment protection are allocating through the budget of the line Ministry, but also through the state aid channel and through the Environmental Fund. In the report entitled "Romanian environment status 2005", the Environment Protection Agency determined the total environment expenditure in years 2000-2003 and types of them. The data shows that investment expenses were in 2003 about 32,88% of total expenses and current expenses cover 67,03% of the total, which reflects the tendency of use of existing fittings.

Public institution with tasks in environment protection domain is Ministry of Environment and Water Management.

As regards the section of "environmental and water expenditures" of the Ministry's budget for the years 2000-2006, this is shown in table no. 2.

Table no. 2

***Environmental and water expenditures
of the Ministry of Environment and Water Management in 2000-2005***

mil. new lei (RON)

Indicator		Year					
		2000	2001	2002	2003	2004	2005
Environmental and water expenditures	value	81.64	147.98	222.64	224.13	269.59	364.2
	% of TBE	0.55	0.80	0.98	0.80	0.79	0.94
a) development of water sources, hydro technical accumulation and equipment	value	52.56	112.53	162.01	167.91	188.48	243.4
	% of TBE	0.35	0.61	0.71	0.60	0.55	0.63
b) environment protection, pollution abatement and control	value	26.98	26.7	51.55	45.51	68.75	94.8
	% of TBE	0.18	0.15	0.23	0.16	0.20	0.24
c) other expenditures (including central public administration)	value	2.1	8.75	9.08	10.71	12.36	26.0
	% of TBE	0.015	0.048	0.04	0.038	0.037	0.067
Total budget expenditures (TBE)		14916.78	18401.21	22682.36	28145.07	34073.5	38782.4

Source: Execution account of state budget 2000-20005.

The data from table no. 2 suggest that environmental related expenditures had a reduced, but growing importance in the years 2000-2005. The increase of the expenditures is related by the necessity to adopt and implement the European acquis in the environment domain. However, environment protection expenditures counted only maximum 0,24% of the total budget expenditures (in 2005) and maximum 0,11% of GDP (in 2002) in this period. As the data from table

no. 3 show, the percentage of the environment protection expenditures is almost constant during 2003-2005, meaning 0,08% of GDP.

Table no. 3

Environmental expenditures of the Ministry of Environment and Water Management, as percent of GDP (2000-2005)

Indicator	Year					
	2000	2001	2002	2003	2004	2005
Environment protection, pollution abatement and control expenditures(mil. new lei)	26.98	26.7	51.55	45.51	68.75	94.8
GDP (mil. new lei)	80377.3	116768.7	151475.1	197564.8	246468.8	288047.8
Percent of environmental expenditures in GDP - %	0.07	0.10	0.11	0.08	0.08	0.08

Source: Execution account of state budget 2000-20005 and Statistical yearbook of Romania, 2001-2006.

Expenditures of the Ministry of Environment and Water Management for the years 2006-2010 are financed from three sources: state budget, external borrowing and external grants. Table no. 4 indicates the expenditures approved for 2006 and 2007, and the expenditures planned to be done in 2008-2010 period.

Table no.4

Sources of financing Ministry of Environment and Water Management's programmes

Mil. new lei

	2006	2007	2008	2009	2010
Total budget	1289,498	2338,070	2966,252	2910,678	2460,695
State budget	1071,310	1675,591	2387,594	2468,446	2178,209
External borrowing	103,760	527,554	526,432	420,168	263,365
External grants	114,428	134,925	52,226	22,064	19,121

Source: Ministry of Environment and Water Management, Budget for year 2007, www.mmediu.ro

From the data of the table no. 4 we conclude that the main source of financing Ministry's programmes is the state budget (over 80% of the total expenditures, excepting 2007). It has to be noted that the financing through external grants registers a decrease not only in relative measures, but also in absolute terms. The destinations of the funds allocating in 2006-2007 through the budget of the Ministry of Environment and Water Management and the perspectives of these allocations in 2008-2010 are shown in table no. 5.

Table no. 5

Destinations of the Ministry of Environment and Water Management budget (2006, 2007) and foreseeing for 2008-2010

mil. new lei

Expenditure programme	2006	2007	2008	2009	2010
I. Global policy of environment protection management, nature and biological diversity preservation, air quality protection, climatic changes management and waste management	435,961	724,526	1007,017	849,656	531,681
II. Water resources management	773,265	1520,476	1895,949	1991,706	1853,594
III. Policy in weather activity	80,272	93,068	63,286	69,316	75,420
Total expenditure	1289,498	2338,070	2966,252	2910,678	2460,695

Source: Ministry of Environment and Water Management, Budget for year 2007, www.mmediu.ro

Analysis of the data reflects the importance of the expenditures for the protection against the floods, which covers more than 50% of the total expenditures in 2006 and over 40% in all the other years. Another important expenditure is that for environment protection management, which

represents almost 20% of the total expenditures in all the studied years. The other expenditures are in all the years below 10% of the total expenditures.

Local public administration's budgets are another sources of financing environmental public expenditures, as it shows data from Table no. 6.

Table no. 6

***Environment protection expenses of local public administration
on types of expenses***

	mil. new lei					
	2000	2001	2002	2003	2004	2005
Investments in environmental protection	38,7	34,6	42,80	69,2	288,9	298,3
a) prevention and control of pollution	36,7	32,1	38,99	54,3	260,8	292,5
b) natural resources protection and biodiversity preservation	0,03	0,2	0,85	5,5	8,6	1,1
c) other activities	1,97	2,3	2,96	0,9	19,5	4,7
Internal current expenditure for environment protection	46,7	100,4	193,28	n.a.	162,4	201,1

Source: Yearly Statistical Annular 2001, ..., 2006, www.mmediu.ro

In the years 2000-2002, the share of current expenses is greater in the total expenses, a fact explained by the preoccupation in exploiting the existing installation for environment protection and by the minor interest to investments in environmental protection as a result of the fact that these expenses doesn't produce quantifiable benefits. In the years 2004-2005, the share of investments in environmental protection was greater than that of current expenses, which can be explained by the nearest integration of Romania in European Union and the necessity to eliminate the gaps between our country and the other member states, by the rise of public financial resources as a result of economic growth of Romania and by the necessity to eliminate the effects of natural catastrophes produced in that period.

In order to analyse the financial structure of public financing we have to look at the state aid for environment. Table no. 7, based on the data from State aid from Romania in period 2003-2005 Report, reflects the structure of these kind of state aid in years 2001-2005. It could be observed that the main category of state aid for environment is that consisting in subsidies, allocations, premiums, any other unrepayable sums. These sums cover more than 50% of the total state aid for environment and register a growing trend. Another important category of state aid for environment is that of capital involvement of the state, which account for 23,28 % - 46,82 % in period 2001 - 2005. It has to be underlies that exemptions, decreases and deferred payments to increased delays and of penalties registered in 2003 a percentage of 13% of the total state aid for the environment. It was granted no other exemptions, decreases and deferred payments to increased delays and of penalties since then.

Table no.7

The structure of state aid for environment

Indicator	Year	Mil. new lei (RON), %				
		2001	2002	2003	2004	2005
Total state aid for environment	value	30,253	44,121	40,869	43,771	28,583
A1(subsidies, allocations, premiums, any other unreimbursable sums)	value	15,567	26,525	26,021	25,187	18,780
	% in total	51,46	60,12	63,67	57,54	65,70
A2(decreases and/or exemptions to taxes or duties)	value	0	0,010	16,57	0	0,00013
	% in total	0,00	0,02	0,04	0,00	0,00
B1(capital involvement of the state)	value	14,165	14,997	9,516	18,584	9,802
	% in total	46,82	33,99	23,28	42,46	34,30
C2(exemptions, decreases, deferred payments to increased delays and of penalties)	value	0,520	2,589	5,315	0	0
	% in total	1,72	5,87	13,00	0,00	0,00

Source: Competition Council, Report of State aid from Romania in period 2003-2005

Data from table no. 8 indicates the small importance of state aid for environment. This kind of state aid accounted for 0,029% of GDP in 2002, but it has a decreasing trend, the main cause of this evolution being adoption of European acquis in state aid domain.

Table no.8

***State aid for environment, as percent of GDP
in 2001-2005***

Indicator \ Year	2001	2002	2003	2004	2005
Total state aid for environment - %	0,026	0,029	0,021	0,018	0,010
A1(subsidies, allocations, premiums, any other unreimbursable sums) - %	0,013	0,018	0,013	0,010	0,007
A2(decreases and/or exemptions to taxes or duties) - %	0	irrelevant	irrelevant	irrelevant	irrelevant
B1(capital involvement of the state) - %	0,012	0,010	0,005	0,008	0,003
C2(exemptions, decreases, deferred payments to increased delays and of penalties) - %	0,000	0,002	0,003	0,000	0,000
GDP (mil. new lei)	116768,7	151475,1	197564,8	246468,8	288047,8

Source: Competition Council, Report of State aid from Romania in period 2003-2005 and Statistical yearbook of Romania, 2001-2006.

The Environmental Fund is an economic - financial instrument specific to transition, used to rehabilitate the environment deteriorated by its irrational use during the Communist period and used to partially reduce the high costs on the recovery of natural capital. The environmental Fund is a public one, extra-budgetary, and its incomes are public, being a part of the general consolidated budget.

Law no. 73/2000 created the Environmental Fund, but this became functional only in June 2002. It is an instrument that applies the „Polluter Pay Principle” and “Responsibility of Producer Principle”.

According to the Report concerning Environmental Fund 2006, the sums raised was growing all over the period, but mostly in the year 2005. At the end of November 2006 the sums raised in this fund amounted 193.375,7 thousands lei, being with 29,57 % bigger than in 2005, with 124,58% bigger than in 2004 and with 187,45% bigger than in 2003. The sums raised at the Environmental Fund and the dynamics of these are reflected in table no.9.

Table no. 9

The situation of Environment Fund tax collection

- (mil new lei - RON) -

Year	Total tax collection	% compared to :	
		Previous year	Year 2003
2002	19,026	-	-
2003	68,935	362,33%	-
2004	90,604	131,43%	131,43%
2005	149,241	164,72%	216,49%
2006	193,376	129,57%	280,52%
Total	521,182		

Source: EFA, Reports on Environment Fund management for 2004-2006

The annual budgetary plans and the payments made by the Environment Fund between 2004 and 2006 are presented in table no. 5.

Table no. 10

The annual budgetary plans and the payments made by the Environment Fund between 2004 and 2006

- (mil new lei - RON) -

Year	Budgetary plans for projects support	Payments	Payments / Budgetary plans
2004	206,477	3,606	1,75%
2005	283,797	66,864	24%
2006	390,695	100,323	25,68%

Source: EFA, Reports on Environment Fund management for 2004-2006

As we can see, the minor share of total resources that was used reduces the importance of the Environmental Fund in financing environmental protection. This reduced use of resources collected at the Fund can be explained by the necessity to define a program to be financed, by the disqualification of beneficiaries to draft a plan to be financed, by the insufficient popularisation of the Fund.

Because of the different sources of financing environmental expenditures, we consider that defining priorities in this policy, integrating environmental programmes in a medium term expenditure framework and an efficient system of control of the use of resources allocated for this programmes represents the best solution for achieving environmental objectives in conditions of scarcity of resources.

References

1. Peszo, G., *Integrating Public Environmental Expenditure Management and public finance in transition economies, in volume Finance for sustainable development. Testing New Policy Approaches*, United Nations, New York, 2002
2. Schiavo-Campo, S., Tommasi, D., *Managing Government Expenditure*, Asian Development Bank, Manila, 1999
3. Speck, S., McNicholas, J., Markovic, M. (editors), *Environmental Funds in the Candidate Countries*, Szetendre, Hungary, 2001
4. ***, *Trends in environmental expenditure and international commitments for the environment in Eastern Europe, Caucasus and Central Asia, 1996-2001*, Task Force for the Implementation of the Environmental Action Programme for Central and Eastern Europe, Tbilisi, Georgia, 2003
5. ***, *Good practices of public environmental expenditure management in transition economies*, Fifth Ministerial Conference "Environment for Europe", Kiev, Ukraine, 21-23 may 2003
6. ***, *Financial resources and mechanisms*, Report of the Secretary-General, United Nations, Commission on Sustainable Development, 2000