Contribution of Serbian local self-governments toward Environmental protection effectiveness and efficiency, based on the programme budgeting

Nedeljko Ćurić,

Standing Conference of Towns and Municipalities, Begrade, Serbia e-mail: nedeljko.curic@gmail.com

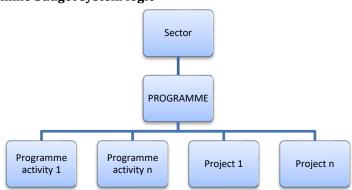
Abstract: This work represents possible methodology for environmental protection contribution of Environmental protection contribution of Serbian local self-government effectiveness and efficiency based on the programme budgeting. Considering that the programme budgeting system of local sel-governments was obligatory for Serbian local self-governments as well as for the Ministries and national bodies, it provides sufficient data for the effectiveness and efficiency of programme activities and projects measurement, including the environment protection as separate programme. Although the reporting system has not been defined, yet, as the first programme budgets Serbian local self-governments prepared for the 2015. Year, it is still possible to measure effectiveness and efficiency of public money usage

Key words: programme budgeting, effectiveness and efficiency, the risk management

INTRODUCTION

Thy programme budgeting system but at the local and national level in Serbia is in the phase of introducing. The system was obligatory to be implemented by public bodies starting for 2015. Year. Local self-governments and Ministries in Serbia ale obliged to plan their budget following the logic:

Picture 1. The programme budget system logic



In the program budgeting the focus is on the achievement of financed measures of Budget users, as well as relevant ministry in charge of financing, The Government (national and local) will use information of the goals' achievement in order to evaluate efficiency and effectiveness budget consumption and expenditure's' prioritization

At the moment, the following programmes (with number of programme activities) are defined¹:

Programme 1: Housing, Urban and Spatial Planning (5)

Programme 2: Communal Service (8)

Programme 3: Local Economic Development (3)

Programme 4: Tourism Development (2)

Programme 5: Agriculture and Rural Development (2)

Programme 6: Environmental Protection (6)

¹ The list of Programmes with recommended goals and indicators are available for local self-government at http://www.skgo.org/reports/details/1886

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Programme 7: Traffic Organization and Traffic Infrastructure (2)

Programme 8: Preschool Education (1)

Programme 9: Primary Education (1)

Programme 10: Secondary Education (1)

Programme 11: Social and Child Care (8)

Programme 12: Health Care (3)

Programme 13: Culture Development and Information (6)

Programme 14: Sport and Youth Development (4)

Programme 15: Local Self Government Public Service (12)

Programme 16: Local Self Government Political System (3)

Programme 17: Energy Efficiency and Renewable Energy Sources (1)

MATERIAL AND METHODS

The programme budgeting is based on the following logic:

- Two levels: Programme and Programme activity and projects
- Programme presents the set of measures budget users carry out in accordance its key responsibilities, permanently
- Programme consists of maximum tree program activity and independent number of projects.
- Programme activity presents budget users' set of on going rensponsibillities, realization which the contribute to its and programme goals acchievement. It is defined in the statute of ghe budget users and can refer to the public serrvice providing, preparation and adoption o normative and strategic document, inspection department operation, the measured of public policy realization, administrative activities. Program activitiy has to be part of the Program, carried out by only one budget user and it is not time limited.
- The project is time limited achievement of the budget user, realization which the contribute to the goals of the Program
- The programme, programme activity and project is defined in ghe programe budget by the following data: The name, The purpose, relevance, person in charge and maximum three goals, and maximum three indicators per goal.
- There are two types of indicators: outputs/efficiency indicators (Programme activity and project level) and result indicators (Programme level / effectivens measure)
- For each of the program, program activity the set of goals and indicators has been prepared by the Standing Conference of Towns and Municipalites (http://www.skgo.org/reports/details/1542)

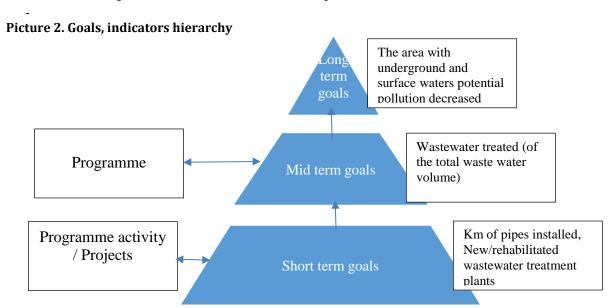


Table 1 Efficiency and Effectiveness ²

	Resources consumption								
		HIGH	LOW						
achievement	HIGH	Effective but not efficient (some of resources has been waisted i.e. used more then normal/requested)	Effective and effficient (the goals acchieved and the factors/resources well/optimally used. The area of hith productiviey)						
Goals a	LOW	Not effective and not efficient (the goals not achieved and resources wasted/not well used)	Efficient but not effective (resources have not been unused, but goals have not been achieved)						

Table 2 Monitoring and evaluation

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	Monitoring and	Evaluation	Audit
	regular review		
Who?	Internal management	Usually incoprorates	Incorporates external
	rensponsibility – all	external inputs	inputs
	levels	(objectivity)	•
When?	Ongoing	Periodic – mid-term	Ex-ante (systematic
		completion, Ex-post	reviws), ongoing and
			upon completion
Why?	Check progress, take	Learn broad lessons	Provide assurance and
	remadial action,	applicable to other	accountability to
	update plans	programmes/programme	stakeholders
		activities / projects and	Provide
		as an input to policy	recommendation for
		review	improvement of
		Provide accountability	current and future
		j	activities
Link to goals/inputs	Inputs, activities,	Results, purpose, overall	Inputs, activities and
hierarch	results	objective and link back	results
		to relevance	

Table 3 Needs for the investments per sector³

Environmental protection sector	investment costs € million	Operational costs	Administrative costs	Total
	e million			
Drinking water	3.505	1.901	146	5.552
Communal Solid Waste	555	2.071	171	2.796
vvaste				
Industrial Pollution and Noise	1.101	344	93	1540
Nature protection	56	73	10	139

² N. Ćurić, Borislav O., "Efikasnost i efektivnost regionalnog društveno-ekonomskog razvoja" NAUČNO-stručni skup "Menadžment, inovacije i razvoj", (Vrnjačka Banja; 2008)

³ National Approximation Strategy for Environmental Protection, Official Gazette R.SR. 55/05, 101/07, 65/08 and 16/11)

Air Quality and climate changes	214	145	93	452
Chemicals and GMF	59	23	23	105
Total	5.490	4.558	536	10.584

The risks

The risks represent the outside of the parties' involvement into the activity (project) influence and will event, which can cause damage. It is obvious that in the process of programme/programme activities and projects (budget consumptions) planning the risk identification is part as well, as it was written in the Guidelines for programme budget preparation⁴

Considering that in the Environmental protection Programme the number of projects will be expected in the programme budget, the kay risks by the type of the projects, can be identified as follows⁵:

- Water distribution: Land purchase and site risk, maintenance risk, Strategic risk, force majeure risk, exchange and interest rate risk, insurance risk, political risk, regulatory (change in the law risk), inflation risk, disruptive technology risk, early termination (including any compensation risk),
- Solid waste collection, disposal, landfill and recycling risks: Land purchase and site risk, envirovnemntal and social risk, design risk, construction risk, completition (including delay in cost overrun) risk, performance/price risk, resource or input risk, demand risk, maintenance risk, force majeure risk, exchange and interest rate risk, insurance risk, political risk, regulatory/change in law risk, inflation ris, strategic risk, disruptive technology risk, early termination (including any compensation risk),

Valid risk identification and its involvement into the monitoring and evaluation can provide transparent basis for private public project (PPP) in the future.

For the budget 2017, year the Ministry of finance has prepared the reporting system contain information shown on the table 4, omitting information about the risks.

RESULTS AND DISCUSSION

Considering the definition of effectiveness and efficiency and information on identification, and measurement of the risks' influence of programme goals achievement, the additional data of the Ministry's reporting system is suggested to be included into the monitoring and evaluation of programme budgets, including Environmental protection programme, as well:

⁴ The Guidelines for programme budget preparation, Ministry of Finance the Government of the Republic of Serbia, February 2014.

⁵ Global infrastructure Hub Ltd, Allocation Risks in Public-Private Partnership Contracts, 2016 (The Global Infrastructure Hub Ltd (GI Hub) has a G20 mandate to grow the global pipeline of quality, bankable infrastructure projects.

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Table 4 Additional data on goals achievement (mark with pink color)

	Goal	Indicat or name	Baselin e	Target in the (next year). CV	Data source	The risk	The impac t of the risk occur (estim ation 0.01-1.00)	achiev ed OV	The differ ence OV - CV	The risks occur (mark X)	% of achieve ment WITH the risks OR=OV/CV	% of achieveme nt without risk OR * ZR	Corr ecti ve mea sure	Perso n rensp onsibl e	The type fo indic ator (IR / R)6	% fo Goal achieve ment
1																
								UIR-R	UIR-BR		I	1				
											UR-R	UR-BR				OC ⁷

 $^{^{6}}$ IR – Indicator of the output R – result indicator

⁷ Calculates as average for all Goals of the Programme Activity Level

Additional data on resource used

- (1) Self-resources / Budget consumption (RBS)
- (2) Other resources consumption (RSOD)
- (3) The difference between planned and consumed self-sources budget (RBS-BS)
- (4) The difference between planned and consumed other resources (RSOD-SOD)
- (5) The total difference between planned and consumed resources = (3) + (4)
- (6) The sum of % of budget consumed (PPB)

Efficiency analyses in correlation with the risks

	With the risk	Without the risk
Efficiency	(UIR-R)/PPB	(UIR-BR)/PPB
Effectiveness	(UR-R)/OC	(UR-BR)/OC

CONCLUSION

Considering that programme budgeting implementation in Serbia is part of the whither public finances management reform, emphasizing the prioritization and optimization of public budget consumption in order to economy growth boost and effective and efficient public service to the citizen increasing, it is justified that based on the information on budget planning, to expand data as it was described. This is especially considered that 60% of legislative in the environmental protection sector is implementing on the local level.

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