# **"BOTTLENECK" IN THE SYSTEM OF STATE GOVERNANCE THROUGH COMPLEX ECOLOGICAL PROGRAMS REALIZATION IN UKRAINE**

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Realization of sustainable development principles is manifested in planning and linear transfer and rebuild concerning society constituents; it is developed in structured and formalized form – state, regional, territorial or local strategies and programs. That is why economic, social and ecological policy efficiency depends on its development complexity and realization effectiveness. This article deals with ways to evaluate efficiency of complex ecological programs. By using one of them (officially registered) authors conduct analysis of the proper program. "Bottleneck", revealed during analysis on local authorities reporting from 14 of 24 Ukrainian regions, confirm the importance to act further in area to provide state ecological policy realization terms at the local level.

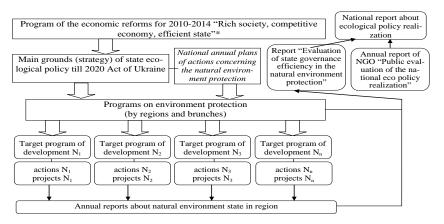
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## INTRODUCTION

Research of the legislative and normative documents, social and economic state and social transformations on the way to achieve sustainable development in the country and to provide its national interests in Ukraine, is possible only in terms of active development strategy investigation and realization and its realization tools on all governance levels.

Seeing of country development in accordance with sustainable development principles is revealed in the proper strategic normative and law documents. However, every investigated strategy, oriented to protect environment and to use rationally natural resources, demands strict consecutive actions and proper administrative and executive space for realization. Absence of the effective strategic planning and governing complicates state authorities work, and also scientific institutions in the part to regulate questions concerning investigation and control of strategies, social and economic, ecological programs realization. That is why one has to examine hierarchic scheme to realize and control the state ecological policy, reflected through the proper normative documents (*see Figure 1*).



\* Program acted till 2014. Now priority document of Ukraine development is Agreement about Association between Ukraine and European Union, on the base of which Sustainable Development Strategy – Ukraine 2020 was confirmed and was realized

Figure 1 – Scheme for consecutive realization of social development ecological and economic balance strategy realization in Ukraine

Figure 1 shows the lack of the communication element, namely, the assessment procedures of the effectiveness of environmental programs. Ukraine has developed a methodological base is not enough to assess the effectiveness neither environmental programs nor general government programs.

Identify solutions to the methodology for assessing the effectiveness of the programs (including environmental) are presented in a variety of researchers' works (Alexey Kuzmin, Rita O'Sullivan & Natalia Kosheleva 2009, Colin Talbot 2010, Katharine Mark & John R. Pfeiffer 2011, Osvaldo Feinstein & Eduardo Zapico-Goni 2010). The importance of evaluating the effectiveness of the government programs implementation can be seen in different countries. In Russia have been approved Guidelines, which include a technique to assess the effectiveness of the programs implementation different directions. In the United States from 2010 is used GPRAMA - system of peer review programs. In Spain there are various methodologies and approaches taking into account the characteristics of the assessment.

# THE RESULTS OF THE STUDY

# 1. Analysis of target complex programs financing sources

Regional aspect to realize social development ecological and economic balance strategy introduced through regional programming mechanism. In this case local authorities play leading role to realize strategies and programs, oriented to protect environment. To analyze the given situation let's define number of active (for 2014) introduced strategies and regional nature protective programs (see Table 1).

Now 18 of 24 complex nature protective programs of the Ukrainian regions, other are investigating or confirming. The total costs, necessary to realize these programs are formed by the following sources: costs from the state budget of Ukraine; costs from state fund of environment protection; costs from the local budget; costs from regional environment protection fund; costs from local budgets (costs from budgets of districts, cities, towns and villages); costs from local nature environment protection funds; other financing sources, including costs of the extra-budgetary funds, grants, personal costs, investments, involved credits and other sources, which are not forbidden by the active legislation.

Local authorities chooses as base source to finance complex ecological programs: regional fund of natural environment protection (Kharkiv – 100%, Vinnitsa – 89%); regional budget (Dnipropetrovsk – 89%, Kirovograd – 40%); state budget (Sumy – 65%, Poltava – 53,4%, Volyn – 81%); costs from enterprises, establishments and organization of the region (Lugansk - 85,9%, Zaporizhya - 73%); other sources (Rivno - 48,6%, Kherson - 51,6%, Odesa - 89,2%, Mykolayiv - 95,6%, Kyiv - 87%); state fund of natural environment protection (Chernivtsy - 60,7%) (Provozin, N., Lukianykhina, O., 2014).

Vinnitsa	Volyn	Dnipropetrovsk	Donetsk	Zhytomyr	Zakarpatya	Zaporizhya	Ivano-Frankivsk	Kyiv	Kirovograd	Lugansk	Lviv	Mykolayiv	Odesa	Poltava	Rivno	Sumy	Ternopil	Kharkiv	Kherson	Khmelnytsky	Cherkasy	Chernivtsy	Chernihiv
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Table 1 – Regional programs targeting on the environmental protection

Notes:\* including the Concept of the State development program of Ukrainian Carpathians (Project) Source: compiled from the Official websites of the Regional State Administrations

### 2. Estimation of the ecological programs realization 2.1 Tools for estimation

One has to consider the methodic tools with help of which it is possible to estimate ecological strategies, programs and projects realization efficiency in Ukraine:

1) Scientific and methodic tools of the investment management. In this case strategy is evaluated by the following factors: net profit, profitability index, project excess present value index, period of the strategy payback, internal rate of return. Nevertheless, these factors use

only from economic point of view may show the strategy efficiency itself and answer the question whether invested costs lived up the result. However results do not always have quantitative metrics. So it complicates the estimation of the strategies efficiency, especially socially and ecologically oriented ones. That is why strategies targets are often compared with expenses incurred.

2) State and brunch typical (standard) methodics, developed due to the concrete brunch, area or duration. The proper Methodic to estimate efficiency of regional nature protective programs and state target ecological programs realization is maintained in Ukraine (Ministry of Ecology and Natural Resources of Ukraine, 2012). It allows to estimate ecologically oriented strategies efficiency at various levels and to evaluate strategies conducting process at all life cycle stages.

3) Individual methodic of efficiency, included into proper strategy or developed due to it in order to control and conduct monitoring of its act.

4) International and native tools to evaluate achievements of ecological security and stability by the country. To determine efficiency of the complex ecological programs realization owing to the given direction is possible only mediately, because results of these tools show the ecological policy total efficiency / inactiveness in the country as a whole or in the region. The most famous are: international – dynamic model MAMS, developed by group from World Bank with purpose to estimate achievements by the country Millennium Development Targets; Index of the Human Potential Development; Index of the Ecological Efficiency; World Index of Happiness; General Index of Progress; Index of the Live Planet; Index of social and natural development etc.; native: System to measure sustainable development, investigated by Applied Systematic Analysis Institute NASU and MESU; Ukrainian regional environment sustainable development index (URESI); and methodic of sustainable development measure (MSM).

5) Real reports from the proper authorities about ecological strategies conduct process. The same reports are generalized and are presented by the authorities who are responsible for them. In Ukraine besides functionaries the public representatives report on ecological policy results in their annual projects.

Thus, various methodics use allows to conduct comparing analysis of the concrete strategies realization process. Owing to the fact that some methods are oriented to define economic efficiency, others – ecological and social with the experts' help. The complex approach to evaluate strategies realization efficiency is not used in Ukraine today.

# 2.2. Particularities of the complex ecological programs realization efficiency estimation in Ukraine

The wide choice of instruments for estimation leads to many problems, i.e. "bottleneck", both in estimation and performance management accordingly. Actions and results of complex ecological programs, oriented to solve ecological problems, and to prevent from their creation in the future, have to be reflected in the proper reports, through which one can evaluate programs conduct efficiency at a whole.

For example, we evaluated efficiency of Environment protection complex program realization efficiency in Sumy according to the official (state) methodic to estimate state target ecological programs realization efficiency of Ministry of ecology and natural resources (*see results in Table 2*).

Calculation was conducted by the following formulas:

$$R^{y} = I^{y}_{ecol} \cdot I^{y}_{ecom}, \qquad (1)$$

where  $R^{y}$  - integrated index, characterizing efficiency of fulfillment;  $I_{ecol}^{y}$  - integrated index of the ecological effect realization fulfillment efficiency estimation;  $I_{ecom}^{y}$  - integrated index of the economic effect realization fulfillment estimation;

$$I_{ecol}^{y} = I_{Z}^{y} \cdot I_{Q}^{y}$$
<sup>(2)</sup>

where  $I_Z^y$  - integrated index of the ecological factors fulfillment by the program per year;  $I_Q^y$  - integrated index of the program fulfillment quantitative quality per year;

$$I_{Z}^{y} = \frac{1}{p} \sum_{p=1}^{n} \frac{Z_{pl}^{y}}{Z_{pl}^{y}},$$
(3)

where  $Z_f^y$ ,  $Z_{pl}^y$  - real and planning value of the ecological index by the proper action and task per year; p - number of program tasks;

$$I_{Q}^{y} = \sum_{i=1}^{n} w_{Q}^{y} \cdot I_{QZ}^{y},$$
(4)

where  ${}^{W_Q^y}$  - weighted coefficients;  $I_{QZ}^{y}$  - ratio between real and planning quantitative quality value by the proper action and task per year;

$$I_{ecom}^{y} = K^{y} \cdot I_{E}, \tag{5}$$

where  $K^{y}$  - integrated index of the program financing;  $I_{E}$  - integrated index of the economic effect estimation from environment-oriented actions and tasks;

$$K^{y} = h \cdot \frac{C_{f}^{t}}{C_{pl}^{t}} + q \cdot \frac{V_{f}^{t}}{V_{pl}^{t}}, q > h$$

$$, \qquad (6)$$

where  $C_f^t$ ,  $C_{pl}^t$  - accordingly real and planning (due to accepted program) amounts of program financing using budget funds in t-year of program fulfillment;  $V_f^t$ ,  $V_{pl}^t$  -

accordingly real and planning (due to the accepted program) amounts of program financing by means of other sources in t-year.

*Table 2 – Calculation of the Environment protection complex program realization efficiency in Sumy city* 

Index	Calculation by 2011	Calculation by 2012	Calculation by 2013
Integrated index, characterizing	$R^{2011} = I_{ecol}^{2011} \cdot I_{ecom}^{2011} =$	$R^{2012} = I_{ecol}^{2012} \cdot I_{ecom}^{2012} =$	$R^{2013} = I_{ecol}^{2013} \cdot I_{ecom}^{2013} =$
fulfillment efficiency ( $R^{\mathcal{Y}}$ )	$= 0,067 \cdot 0,615 = 0,041$	$= 0,035 \cdot 0,4996 = 0,018$	= 0,022 · 0,157 = 0,0035
Intergal index to estimate ecological effect fulfillment realization	$I_{ecol}^{2011} = I_Z^{2011} \cdot I_Q^{2011} =$ = 0.655 \cdot 0.103 = 0.067	$I_{ecol}^{2012} = I_Z^{2012} \cdot I_Q^{2012} =$	$I_{ecol}^{2013} = I_Z^{2013} \cdot I_Q^{2013} =$
$efficiency (I_{ecol}^{y})$	- 0,003 • 0,103 - 0,007	$= 0.467 \cdot 0.074 = 0.035$	$= 0,431 \cdot 0,052 = 0,022$
Integrated index of ecological factors fulfillment by the program per year ( $I_Z^y$ )	$I_Z^{2011} = \frac{1}{6} \sum_{p=1}^{6} \frac{Z_f^{2011}}{Z_{pl}^{2011}} = 0,655$	$I_Z^{2012} = \frac{1}{6} \sum_{p=1}^{6} \frac{Z_f^{2012}}{Z_{pl}^{2012}} = 0,467$	$I_Z^{2013} = \frac{1}{6} \sum_{p=1}^{6} \frac{Z_f^{2013}}{Z_{pl}^{2013}} = 0,431$
Integrated index of program fulfillment quantitative quality per year ( $I_Q^y$ )	$I_Q^{2011} = \sum_{i=1}^{42} w_Q^{2011} \cdot I_{QZ}^{2011} = 0,103$	$I_Q^{2012} = \sum_{i=1}^{42} w_Q^{2012} \cdot I_{QZ}^{2012} = 0,074$	$I_Q^{2013} = \sum_{i=1}^{26} w_Q^{2013} \cdot I_{QZ}^{2013} = 0,052$
Integral index of the fulfillment realization economic effect estimation ( $I_{ecom}^y$ )	$I_{ecom}^{2011} = K^{2011} \cdot I_E =$ = 0,615 \cdot 1 = 0,615	$I_{ecom}^{2012} = K^{2012} \cdot I_E =$ = 0,4996 \cdot 1 = 0,4996	$I_{ecom}^{2013} = K^{2013} \cdot I_E =$ = 0,157 \cdot 1 = 0,157
Integral index of the programs financing ( $K^y$ )	$K^{2011} = 0,615$	$K^{2012} = 0,4996$	$K^{2013} = 0,157$

Source: based on Sumy City Council website information

The *Table 2* shows the fact that during 2011, 2012 and 2013 it is insufficiently to realize program. The reasons are:

1. Impossibility to conduct full estimation, owing to the ambiguity of indexes under estimation (absence of planning and real ecological indexes concerning program fulfillment);

2. Report on the Complex program fulfillment has more financial character (oriented to demonstrate costs spending, given for the action, but not for effect which caused its fulfillment);

3. Methodic incompleteness (estimation substitution of ecological factors by economic ones).

Particularities of the reporting about complex ecological programs realization in Ukraine are demonstrated in the *Table 3*.

*Table 3 – Resolved characteristic of reporting by self-governing authorities about complex ecological programs performance process* 

Target complex	Form of reporting and "bottleneck" in reporting					
program						
Regional program of	Vinnytsya region Title of the reporting document: "Fulfillment of the regional program on the nature environment					
the natural	protection and natural resources rational use during 2013-2018"					
environment protection	Strong points: existing regional center of environment monitoring; the expecting results after each action					
and natural resources	are pointed; general complex document about development programs realization; Reports about the					
use in 2013-2018	natural environment (NE) in region are formed.					
	Weak points: information about programs fulfillment process in report is generalized. It makes impossible					
	to evaluate efficiency by the concrete program (subprogram) or action; there is no detailed information					
	about program actions run; there are no explanations concerning program realization mechanism, control					
	and its efficiency estimation in the program; the existing postpone in time of both reports representing					
	about NE in region (July – August next year) and report about program fulfillment (end of February next year); report form about progress in implementing has reporting character concerning wasted costs, it is					
	not mentioned which effects – ecological, social or economic were achieved.					
	Volyn region					
Regional ecological	Title of the report document: "List of nature protective actions (including capital building objects) in					
program "Ecology	Volyn region, held in January – December 2013 according to Regional ecological program "Ecology					
2011-2015 and	2011-2015 and forecast till 2020"					
forecast till 2020"	Strong points: expecting results after each action are mentioned; Reports about NE in region are formed;					
	the distinguish between allocated and wasted and spent funds to perform action is determined.					
	Weak points: regional program has no criteria and factors, which could provide the monitoring conduct,					
	its realization efficiency estimation; expected results are compared only with costs amount, allocated for action; existing postpone in time representing reports about NE; report form about progress in					
	implementing has reporting character concerning wasted costs, it is not mentioned which effects –					
	ecological, social or economic were achieved.					
	Dnipropetrovsk region					
Program of natural	Weak points: not enough grounded factors concerning expected results, which make impossible to					
environment protection	estimate program realization efficiency by these factors; the nature protective events are not fully					
in Dnipropetrovsk	reflected; existing postpone in time representing reports about NE					
region in 2005-2015						
	Donetsk region					
	Weak points: there is no complex program on environment protection; actions in this direction are shown in strategies, programs and plans of regional development; it is difficult to estimate actions data impact					
	on the environment; existing postpone in time representing reports about NE					
Regional complex	<i>Weak points:</i> regional complex program of the environment protection in Zhytomyr region for 2014-2017					
program of the	was approved 20.11.2014; existing postpone in time representing reports about NE					
environment protection	Strong points: tried and tasted instruments concerning regional development strategies realization					
in Zytomyr region in	mechanism, correspondent monitoring bodies concerning environment state; reports about some regional					
2014-2017	programs performance are demonstrated on the official site; by decisions of the regional council from					
	09.11.06 № 97-1 form "State regional administration report of about regional programs fulfillment,					
	approved by the regional council in 2002-2006" was accepted Zakarpatya region					
	Weak points: there is no complex program of nature environment protection; annual programs to realize					
	environment-oriented actions have only events, responsible persons for their performance and allocated					
	funds; existing postpone in time representing reports about NE					
	Zaporizhya region					
Regional complex	Weak points: it's impossible to evaluate efficiency of programs fulfillment; the program is new, course					
program of the	and accessibility of reports about progress in implementing is not known; existing postpone in time					
environment	representing reports about NE state					
protection, natural	Strong points: established controlling bodies on environment state; existing control factors of result, by					
resources rational use and ecological security	which we may estimate program realization efficiency and improve environment condition; reports about realization results of some regional programs are revealed on the official site					
providing	realization results of some regional programs are revealed on the orneral site					
providing	Ivano-Frankivsk region					
Program of the natural	Weak points: there are no control factors to fulfill program and to prognosticate program actions results					
environment protection	Strong points: existing (however methodologically it is not grounded) tool to evaluate actions fulfillment;					
in Ivano-Frankivsk	the list of the responsible people for report preparation concerning program fulfillment is defined					
region till 2015						
	Kyiv region					

Target complex program	Form of reporting and "bottleneck" in reporting
Environment protection and rational use of the natural resources in Kyiv region till 2016	Title of the report document: "Note explaining" Strong points: the indicators categories concerning program realization control are set; Weak points: it's difficult to estimate the fulfillment of some actions, because the result has descriptive character; reporting document concerning program fulfillment has no results due to the established indicators in the program; documents is like financial reporting; there is postpone in time as reports about NE
	Kirovograd region
Complex program of the natural environment protection in Kirovograd region in 2013-2015 Regional program of the natural	Title of the report document: "Report about fulfillment of the Nature environment protection complex program actions in 2013 (2014) in Kirovograd region for 2013-2015" Weak points: it is difficult to estimate the fulfillment by some actions, because the expecting result has descriptive character and has no quantitative values, which help to follow action performance efficiency; document carries financial reporting tinge; existing postpone in time of NE state report presentation <i>Strong points:</i> determined course of reporting about program fulfillment process. Weak points: there are no data concerning program fulfillment report; it's difficult to estimate the fulfillment by some actions, because result has descriptive character and has no quantitative value, which
environment protection in 2011-2015	may help to follow the event performance efficiency; there is postpone in time as reports about NE <i>Strong points:</i> the prognosticated expecting results of program fulfillment are established by some directions
	Lviv region
	Weak points: there is no complex program of the nature environment protection; the existing postpone in time existing postpone in time of NE state report presentation Strong points: adjusted mechanism of reports formation and representation concerning regional target programs performance and possibility of their review Mykolaviv region
Program of the	<i>Title of the report document:</i> "Annual report about progress in implementing 2011 (2012-2014) of
Program of the environment protection and natural resources rational use in Mykolaiv region in 2009 – 2015	I the of the report document: "Annual report about progress in implementing 2011 (2012-2014) of Environment protection and natural resources rational use Program in Mykolaiv region in 2011- 2015" Weak points: there are no prognosticated factors of events financing during 2012 – 2015 in the program, at this stage every year proper costs amount is mentioned in the regional budget for the program; the report doesn't point out the changes in the environment, achieved after the conducted events; the report document concerning program fulfillment has no results due to the set indicators in the program; existing postpone in time of NE state report presentation <i>Strong points:</i> indicators of program acts conduct evaluating are mentioned; the existing (however methodologically isn't grounded) tool to evaluate events performance; the report demonstrates not only financial side of the program realization, but also qualitative factors concerning program conduct; authorities' timeliness forming the report about the program; three categories of indicators concerning program realization control are established; there is scale to define qualitative factors of the program fulfillment
	Odesa region
Complex program of the environment protection, natural resources rational use and ecological security providing in Odesa region in 2014-2019	Weak points: to evaluate impact from these events on the environment is complicated, because there are no expected results values; order and form of reports about progress in implementing are not mentioned; there is postpone in time as reports about NE <i>Strong points:</i> Reports about regional NE are formed
	Ternopil region
	Weak points: complex program on the nature environment protection is absent; existing postpone in time of NE report presentation <i>Strong points:</i> there is possibility to review some reports about target programs implementation in region and to estimate their fulfillment efficiency not only by the financial factors
Regional program of the environment protection, natural resources rational use and ecological security providing considering regional priorities in	Title of the report document: "Report Environment-2015. Explanations" Weak points: estimation of the program conduct efficiency comes to the comparison between real spent costs and planning costs; document gets financial reporting form; there are no control factors of the program fulfillment and prognosticated events results factors; there is postpone in time as reports about NE Strong point: regular and timely order to present reports about natural environment in the region; authorities' timeliness forming the report about program fulfillment; the program shows its connection
Poltava region in 2012 - 2015 (Environment - 2015)	with other state target programs and other regional ecological programs
Alta and the state	Rivno region
About the regional program of natural environment in 2012- 2016	Title of the report document: "Information about the progress in regional program of the environment protection realization in 2012-2016 in 2012 (2013-2014)" Weak points: there are no control factors of the program conduct and prognosticated factors of the program events results; report in the descriptive style points what was done during the year, without mentioning even the financial constituent concerning actions fulfillment; there is postpone in time as reports about NE. Strong points: Reports about NE state in region are formed; even little information is formed about program fulfillment Sumy region
Complex program of	<i>Form of the report:</i> is absent, the program realization process is shown in the annual reports about nature
environment protection in Sumy region till 2015	Weak points: information about program conduct process is shown in the damata reports about nature environment in region Weak points: information about program conduct process in report has generalized character, which makes impossible to estimate efficiency by the concrete program (subprogram) or event; the program has no criteria and factors, which would provide monitoring, its realization efficiency estimation; expected results are compared only with allocated costs for the event; a few establishments necessary for monitoring by NE state in the whole regional territory; existing postpone in time <i>Strong points</i> : there is Complex program of nature environment protection till 2015 in Sumy, local authorities give report about its fulfillment in the determined time ( <b>Decision of the city council "Complex</b>

Target complex program	Form of reporting and "bottleneck" in reporting
program	program of the nature environment protection implementation process in Sumy in 2011 – 2015 for
	2012), by data of which one is able to estimate this program efficiency according to the methodic,
	approved by Ministry of ecology and natural resources
Complex program of	Kharkiv region Title of the report document: "Information about implementation of the nature environment
the natural	protection complex program in 2014 in Kharkiv region for 2009-2013 and perspective till 2020"
environment protection	Strong points: reporting about fulfillment process, access to its content, however there are no regular
in Kharkiv region in	reports;
2009-2013 and perspective till 2020	Weak points: because of the little program financing, report has only the information about those actions for which costs were given; the generalized picture about program implementation process is impossible to estimate; constant changes for program, considering its approving date, more and more complicates the process of its realization; existing postpone in time of NE report presentation
Program of the natural	Title of the report document: "Information about program of the environment ecological state
environment protection ecological state and	stabilization and increase of the social-economic development level in Kherson region "Ecology – 2015"
social-economic development increase level in Kherson region	Strong points: report about fulfillment process, access to its content; information in report is structured due to the events fulfillment in districts of region; each event provides descriptive information concerning its fulfillment state; reasons of the unfulfilled events are mentioned;
("Ecology – 2015")	<i>Weak points:</i> quantitative estimation of the program efficiency is impossible to conduct; there are no
	control factors of the program implementation and prognosticated factors of the program events results;
	not all responsible implementers give information about program fulfillment; possessing wide information about program implementation than other regions, it's impossible to estimate efficiency through established methodic; existing postpone in time of NE report presentation
	Khmelnytsky region
Complex program of	Title of the report document: "Information about fulfillment process of the Complex program on the
the natural environment protection	nature environment protection in Khmelnytsky region in 2011-2015" Weak points: existing postpone in time of NE report presentation and program fulfillment report; report
in Khmelnivsky region	form about implementing process has reporting character about spent costs, one doesn't mention which
in 2011-2015	ecological, social or economic effects were achieved; it's impossible to get acquainted with complex
	program content
	Strong points: Reports about NE state in region are formed; even little information is collected about program conduct
	Cherkassy region
Complex program of the natural	- (under study)
environment protection	
in Cherkassy region till 2016	Strong points: Reports about HIIC state in region are formed;
Program of the natural	Chernigiv region Weak points: the program has no criteria and factors, which could provide monitoring, its realization
environment protection	efficiency estimation; not fully grounded (not mentioned) mechanism of the program realization; it's
in Chernigov region in 2014 – 2020	impossible to evaluate program fulfillment efficiency; the program is new, order and access of reports concerning fulfillment is not known; there is postpone in time as reports about NE
	Strong points: the report about other target programs in region is conducted, access to its content is given, although there are no regular reports
Complex program of	Title of the report document: "Information about Complex program of the environment protection
the environment	and natural resources rational use 'Ecology" in Chernivtsi region in 2011-2015 for 2013"
protection and natural resources rational use	Strong points: control factors of the program fulfillment and prognosticated factors of the program events result; information about program fulfillment is open for public on site in form of the local council session
"Ecology" in	decision;
Chernivtsi region in 2011-2015	Weak points: the unperfected mechanism of the powers and responsibility division leads to that fact that Ecology Department at the state administration gives proposals to allocate costs to conduct program
	events, moreover it does not control their target use; the realization of program is demonstrated in the
	annual reports about nature environment state in region; information about program fulfillment in the report is generalized, that makes impossible to estimate efficiency by the concrete program (subprogram)
	or action; report form about fulfillment process has reporting character about spent costs, and it is not
	mentioned which ecological, social and economic effects were achieved; estimation of the realization
	efficiency is conducted in directions and at a whole by the program, based on correlation between really
Source: compiled	spent money and planning ones; there is postpone in time as reports about NE
source: complied	by the authors

# CONCLUSIONS

We define the following "bottleneck" analyzing the received scientific results:

1) scientific and methodic: the existing subjective character of the efficiency estimation (expert method in Methodic); methodic approach of estimation in reports is mostly oriented to control financial resources use; Methodic has generalized character, that makes impossible to use it to evaluate complex programs with various structure of document; in most cases complex programs are not divided concerning methodology of their realization efficiency estimation; unconformity of the expected factors concerning program realization efficient to the ecological factors.

2) *informational and analytical*: impossibility for scientific society and public to get acquainted with some target programs; there is a problem to get proper data necessary for calculations.

3) organizational and managerial: choice of objectives by strategies/programs investigators, which are not measured, and that's why can't estimate their fulfillment; there are no mechanisms of program participants' interconnection and monitoring structures with their results; great number of strategies/programs, which often duplicate actions, which disable estimation process; difficulties to determine real impact of events on the achieved result.

4) *functional and performing*: there are no proper documents (reports) about most complex programs fulfillment; there are no full reports about realization process, providing of the generalized results concerning complex ecological programs events fulfillment in Reports about environment state in the region; "backlog" of the official documents proclamation, considering their fulfillment control; constant changes in sphere of programs financing, which are hardly to follow and consider while conducting estimation.

Conformity of the costs for the complex ecological program realization is followed in the proper reports, responsible for it bodies. However here we meet next obstacles for research, because reports form is often like comparison between financial resources planning values, which are necessary to conduct some events of the program, and really allocated costs without giving reasons of their nonfulfillment.

Thus, to our minds, orientation of reports about these programs' fulfillment process to the applied financial resources is not reasonable. In this case, main criteria of the complex ecological program's fulfillment estimation have to be:

- improvement of the environment by all or some directions,

– more rational use of the natural resources,

- achievement of sustainable development in the region.

According to the mentioned above, one should pay attention to the improvement of tools to estimate target ecological programs fulfillment efficiency, which will strengthen control function to control and doers' responsibility for the final result. Moreover they will give possibilities to transfer from the estimation "planning costs – really spent costs" to "planning ecological factors – real ecological factors".

#### REFERENCES

1. Alexey Kuzmin, Rita O'Sullivan and Natalia Kosheleva (2009), Program Evaluation: Methods and Practice, Moscow, Publisher "Presto-RK"

2. Colin Talbot (2010), Performance in Government. The Evolving System of Performance and Evaluation Measurement, Monitoring, and Management in the United Kingdom, No.24, November.

3. Katharine Mark and John R. Pfeiffer (2011), Monitoring and Evaluation in the United States Government – An Overview, No.26, October.

4. Ministry of Ecology and Natural Resources of Ukraine (2012), On approval of the Methodic to estimate efficiency of regional nature protective programs and state target ecological programs realization. (Order of the Ministry) Ukraine: registered in the Ministry of Justice of Ukraine on 25 of December 2012, № 2146/22458.

5. Osvaldo Feinstein, Eduardo Zapico-Goni (2010), Evaluation of Government Performance and Public Policies in Spain, No.22, May.

6. Provozin, N. & Lukianykhina, O. (2014), Regional Aspects of National Environmental Policy Through Strategic Documents In: Illyashenko, S.M., Bozhkova, V.V., Gerasymchuk, V.G., Zhyhor, O.B. (eds.) Marketing aspects of innovative development: Sumy LLC "Printing House" Papyrus " pp. 417-428.

7. Sumy City Council (2012) Complex program of the nature environment protection implementation process in Sumy in 2011 – 2015 for 2011. (Decision of the City Council) Sumy: registered in the Sumy City Council on 29 of February 2012 № 1247.

8. Sumy City Council (2013) Complex program of the nature environment protection implementation process in Sumy in 2011 – 2015 for 2012. (Decision of the City Council) Sumy: registered in the Sumy City Council on 27 of February 2013 № 2146.

9. Sumy City Council (2013) On the new edition of the Complex program of the natural environment protection in Sumy in 2011 – 2015. (Decision of the City Council) Sumy: registered in the Sumy City Council on 29 of May 2013 № 2382.

10. Sumy City Council (2014) Complex program of the nature environment protection implementation process in Sumy in 2011 - 2015 for 2013. (Decision of the City Council) Sumy: registered in the Sumy City Council on 29 of May 2014  $N_{2}$  3305.