

Principles of sustainable development of the economy within the evaluation of the efficiency of social innovative-and-investment projects

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Abstract. Responsibility and care over the future represents a stubborn problem. But it is unreasonable not to notice it and assume that the asymmetry between us and the future generations will disappear all by itself. The future is our case and if we do not try to do for the sake of it everything that in our forces, life becomes senseless. The generation of the people who succeeded living have a certain moral value. In this article some approaches to the matter of intergenerational justice are considered. The need to follow the principles of sustainable development of the economy and protection of interests of future generations is proved. The mechanism of taking into of the interests of future generations as the result of implementation of social innovative-and-investment projects relying on the principle of unity of assessment for all concerned parties is provided. The author's technique of the efficiency evaluation of social innovative-and-investment projects within which taking into account of interests of the future generations is offered to be carried out by the means of a great number of indicators in the following directions is designated: ecology and environment, biodiversity and renewable resources, communities. Within the developed technique of the evaluation of social innovative-and-investment projects efficiency the mechanism allowing to select social projects to implementation based on the indicators, which include the coefficient of taking into account of interests of future generations, is offered. The technique has a certain benefit before the existing approaches, which consists in aiming on the sustainable development of the economy, the possibility of taking into account of interests of all the stake-holders, including future generations, and thus more objective efficiency evaluation of social projects becomes possible.

1 Introduction

The concept of sustainable development formulated in the report of International commission on the environment and development in 1987 had underlayed the principle of careful attitude to the available natural resources and ecological capacity of our planet. In addition to the implementation of the right to the ecological safety and the favorable habitat, the concept fixes also the fact of responsibility for any activities causing damage to

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the surrounding nature. The need of allocation of this principle is connected with the need to give long-term nature to the sustainable development, regarding care not only of recent people, but also of future generations, without depriving them the opportunity to satisfy the requirements [1].

According to Rupert Read, "people", "nation", "society", "European continent", "Earth population", all these concepts are durable in time. All of them stretch in the past (or more likely from it) and go to the infinite future. Society is the interaction among the dead, living and not born without temporary restrictions [2,3,4].

2 Methods

Attention was paid to the problems of care of future generations long ago. The philosopher Mr. Jonas had formulated the thesis that the possession of force, capable to create threat to someone's existence, automatically strikes responsibility for this existence.

Paul Samuelson considered the idea of taking into account interests of future generations within the model of the blocked generations. F. Ramsey tried to designate the optimum saving ratio in his works, assuming that if any generation did not live by the principle "after me though a flood", then care of early generations would bring great benefit to their descendants. By the way, according to the economist, such care in practice should be shown through normal accumulating, constituting about 60% of the income (however we will notice that F. Ramsey did not consider any public discounting in his calculations, and used just individual discounting).

Some economists conclude that the main approach to the ratio of interests of groups of people or generations, in this or that option, is the utilitarian approach, fixing a thought that well-being of each generation is appreciated equally.

However it is also possible to allocate some other theories of intergeneration of justice. The libertarian point of view which cornerstone is the use of the principles of D. Locke, urges not to restrain possibilities of the use of resources for all the people around and to give equal opportunities at the birth.

According to Communist theories of justice, there may be two options of belonging to the community as well as of cares of it:

- weak option, when interests go beyond life of the future generations: posthumous reputation, desire to finish projects, which have not been finished during lifetime etc. [5].
- strong option or the strict feeling of belonging to future generation and cares of it. Here we can mention the care of the posterity, which is not just a moral duty, but also the strong psychological factor. The representative of modern generation will never choose those rules of conduct, which will lead to any deprivations for his or her children and grandchildren.

Special cases of care of future generations are put into practice by us daily. J. Rolz considers present generations as the representatives "family lines which care, at least, for the direct descendants" that creates some kind of continuous chain of mutual care of generations [6].

Contractual theories assume the observance of the contract of the parties setting responsibility of present generations to future. The main problem consists in the fact that nominally the future generations do not exist yet, and, therefore, the dependence between generations has unilateral character. With respect thereto, in modern philosophy there are some arguments against the idea of taking into account interests of future generations:

1. People of future generations are "uncertain" and only "possible persons".
2. People of future generations do not exist currently, so, currently they have no rights and they can't delegate them to anybody.

3. The rights of future generations cannot be violated as it is impossible to identify the damage caused to them [7].

At the same time, it is necessary to agree with some economists' arguments about the need to care for the rights of future generations. E. Partridge has drawn an analogy to a situation of the tourist who has to clear the parking lot of garbage though he does not know the person who will come to that place, even does not know whether somebody will come here surely. The possibility of somebody's arrival generates both a moral duty and corresponding right [8].

It is possible to simplify essentially the methodology of reasons for the degree of responsibility of the present generations to the future ones thanks to the principle of the equal and the impartial attitude to all the representatives of the human race. Systematically this strategy was used B. Berri and E. B. Weis. From the point of view of B. Berri, justice acts as the standard and practical specification of intuitively, the obvious idea of fundamental ethical equality between people. In the most common view the requirement of stability, according to B. Berri, consists of recent "shall not work so that their heirs got rather smaller quantity of those benefits which they use themselves" [9].

E. B. Weis reproduce the similar thought. She believes that the generations of people following one after another are connected among themselves by the means of the use of Earth as general inheritance. In the relation to this inheritance each of generations borrows identical (or equal) provision, being, at the same time, a user and the manager by proxy that conducts to an identification of the fair attitude towards future generations with ensuring sustainable development [10].

The discussion concerning the correctness of theories of intergenerational justice does not cease to our days. Economists pay more attention to the matter of optimum interaction of people from the point of view of the long-term period. In the modern world individual action becomes essential: the consequences of our movements can be pernicious not only for the current generation (recent, children and grandchildren), but also for all the mankind. Therefore, we agree that it is necessary to take interests of future generations into account, at least for the reason that we should not doom them to poverty, without some essential resources.

According to the beliefs that it is necessary to protect the rights of future generations a number of the phenomena of modern social-and-political practice appeared. For example, there exist German "Fund of the rights of future generations" initiating the bill on future generations in the Bundestag, the Hungarian citizens' initiative on entering of a post of the ombudsman for future generations, the Commission on affairs of future generations of the Israeli Knesset, the Finnish Committee of the future.

Though in the last three decades the matter of reasons for obligations before the subsequent generations came out, the Russian experience of protection of interests of future generations is not so crucial, and more is even fragmentary. The concept of the state policy of Russia in the sphere of the order resources, consumer protection, evaluation of efficiency of ecological-and-economic projects establishes the principle of responsibility to future generations. However all these moments don't create the practical mechanism of the problem solution of taking the interests of future generations into account as well as degree of responsibility to them recent [23].

In practice any modern person do not refuses doesn't refuse the use of resources which can be required by people of the future, also as he does not refuse attempts to influence those phenomena which will become the basis of existence of mankind at any moment of his history. It leads us to the conclusion that the present generation is in great need in the transparent and obvious rules allowing to correlate our own interests and interests of the subsequent generations in various spheres of human activity [27,28].

3 Results

Within the development of the technique of the evaluation efficiency of social innovative-and-and investment projects (SIIP) we realized the attempt to consider interests of future generations in practice.

Based on the provisions pledged in the Methodical recommendations on the evaluation efficiency of social innovative-and-and investment projects in Russia as one of the fundamental principles of a method of calculation of efficiency of SIIP the taking into account the principle of all most substantial effects of the project in the form interests of concerned parties is underlain, including also such specific stakeholder as future generations.

Relying on the optimality criterion of V. Pareto, we consider that as a result of determination of efficiency of social projects interests of stock-holders shall be considered equally.

The theory of social system according to which the interests and requirements of one of stake-holders can get a response and support from other interested persons of network also speaks about it.

The scheme of the evaluation efficiency of social innovative-and-and investment projects is provided in Figure 1 [11].

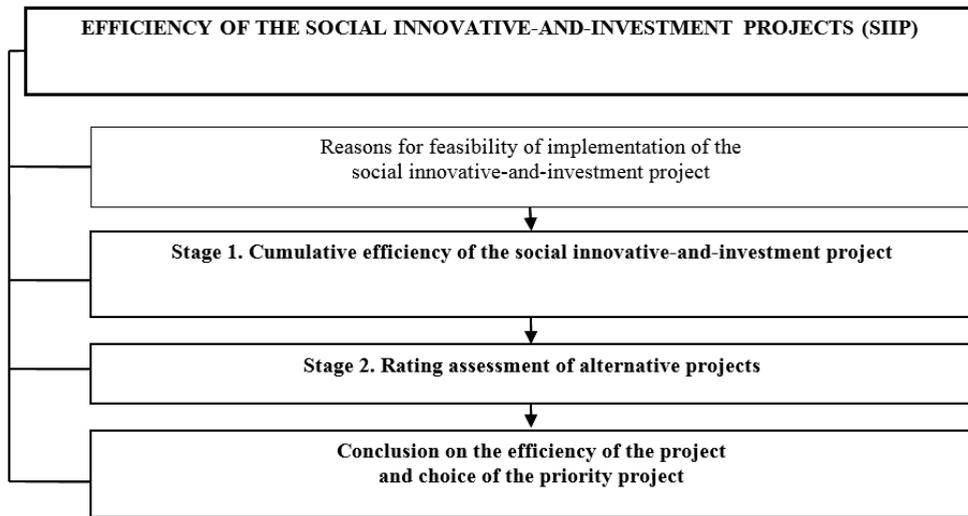


Fig. 1. Scheme of evaluation of efficiency of social innovative-and-investment projects.

The method of determination of the efficiency of social innovative-and-investment projects is intended for evaluating and selection of SIIP, realized in the social sphere in the following directions: health care, education, transport, housing-and-communal services, culture, physical culture and sports (Table 1):

Table 1. Summarizing table of indicators of assessment of the efficiency of SIIP.

##	Indicator	Unit	Explanations
1.	Indicator of the significance value of the project	coefficient	Calculation is conducted according to the level of the innovation novelty
2.	Indicator of effectiveness of the project	coefficient	Calculation is conducted on the achievement of the social standard rates characterizing the scope the project deliverables, influence of the

			project implementation on amount and service quality, cost value and cost of services, provision with financing, and also the influence of implementation of the social project on business
3.	Budgetary effect of the project implementation		Calculation is conducted by the means of comparison of the income and expenses of the relevant budget from the project implementation
4.	Indicators of social efficiency from the project implementation		
4.1.	Population which life quality improves as the result of the project implementation	persons	Calculation is conducted for the population which life quality improves due to provision of greater amount of services, the increase in availability of services or improvement of servicing according to the project
4.2.	Creation of additional jobs as the result of the project implementation	job	Calculation is conducted by summation of all again created jobs as the result of the project implementation, including in the accompanying branches and spheres in which the increment of quantity of jobs connected with the project implementation
4.3.	Social effect of the project implementation	coefficient	For each of the directions (health care, culture, transport, education, physical culture and sport, housing and communal services) calculation is completed according to the proceeding from change of i-go of an indicator in the presented directions. In case of change of an indicator to the best - accepts value 1, in the absence of a gain of an indicator or his change for the worse, the value equal 0 is appropriated to the indicator
5.	Coefficient of the accounting of interests of future generations during the project implementation	coefficient	The calculation is completed by summation of values of the indicators corresponding to change to the best of the indicators presented in the technique

Taking into of interests of future generations in case of implementation of social innovative-and-investment projects is provided with the observance of the following directions:

- resource consumption minimization;
- minimization of production of waste;
- recycling and reuse of waste;
- exception or minimization of pollution;
- the exception of former pollution and earlier done harm;
- prevention of harming nature;
- management of energy, decrease in consumption;
- support of the woods, forest plantation and biological diversity;
- ensuring fundamental human rights;
- eradication of discrimination and poverty [11].

The indicator allowing to consider interests of future generations and compliance of SIIP to the principles of sustainable development of economy is the coefficient of accounting of interests of future generations (Kbp). Manifestation of positive consequences from implementation of SIIP is estimated according to the experts estimation due to the following indicators. (Table 2):

Table 2. Indicators and indicator values for calculation of coefficient of accounting of interests of future generations in efficiency the technique of evaluation social innovative-and-investment projects.

##	Indicator	Value of the indicator at the change of the indicator to the best
Environment (wastes)		
1.	The changes of property and quality of water balk which are the result of the project implementation	0.1
2.	The changes of quality of air in the region which are the result of the project implementation	0.1
3.	Possibility of utilization and reuse of waste as a result of the project implementation	0.1
Biodiversity and resources		
4.	The changes of concentration of pollutants in the live organisms which are the result of the project implementation	0.1
5.	Impact of implementation of the project on the protected and vulnerable territories	0.1
6.	The changes of quality and quantity of natural resources which are the result of the project implementation	0.1
Communities		
7.	Taking into account of the needs of representatives of the indigenous and small peoples to the project implementation	0.1
8.	Impacts on the communities in the territories affected as the result of the project implementation (in the form of eradication of discrimination, illiteracy and poverty)	0.1
9.	Impact of the project on safety of the human (radiation, genetically modified organisms)	0.1
10.	Impact on the culture monuments mentioned as the result of implementation of the project (increase in their safety)	0.1

The coefficient of taking into account of interests of future generations is calculated by summing of the indicator values corresponding to change to the best of indicators provided in the Table 2. In case of lack of influence of the indicator or its change for the worse, to the indicator the value equal 0 is appropriated.

According to the technique, the social innovative-and-investment project is considered to be socially effective and should be accepted to the implementation in case of achievement of a set of indicators, among which the coefficient of taking into account the of interests of future generations is obligatory. In case of accounting of interests of future generations in case of implementation of social innovative-and-investment project the value of the corresponding coefficient will be at least 0,1 that corresponds to improvement at least on one of 10 indicators (Table 2).

The availability of positive or negative change of indicators for the calculation of coefficient of accounting of interests of future generations is estimated by commission of experts on the project. For the decrease in subjectivity in decision making it is recommended to calculate the coefficients of coordination of opinion of experts, for example, of concordance coefficient. The decision is deemed to be accepted if the

coefficient of the concordance makes more than 0.5. Otherwise, the discussion of dynamics of indicators is carried out to the commissions, refill of forms by experts and calculation of coefficient of coordination of opinions of experts. If the coefficient of concordance does not reach required value, some additional information on the project is requested, and in case of its absence or weakness - the project is being rejected [12].

4 Conclusion

Approbation of the technique of the evaluation of efficiency of social innovative-and-investment projects proved that it can be put into practice: with its help it is possible to estimate the efficiency of SIIP taking into account of interests of future generations and the principles of the sustainable development of the economy. Initially the technique is developed for determination of the efficiency of the social innovative-and-investment projects, financed with budget funds. However it is possible to borrow the offered method of taking into account of interests of future generations in case of implementation of SIIP for the assessment of consequences for this stake-holder during implementation of any investment project, both of social and commercial nature (within assessment of social efficiency of the project), and also without any financing source (budgetary funds or the private organizations funds).

Thus, within the developed technique of the evaluation of the efficiency of social innovative-and-investment projects there suggested the mechanism allowing to select social projects to implementation based on the indicators including the coefficient of taking into account of interests of future generations. The technique has such an advantage before the existing approaches that it aims on the sustainable development of the economy, the possibility of taking into account of interests of all stake-holders, including future generations, and it also ensures more objective evaluation of the efficiency of social projects.

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