## MODERN SOCIO-ECONOMIC METHODS OF REVEALING INDIVIDUALS' PERCEPTIONS REGARDING THE ENVIRONMENT

A. Belyakova

In the transitive economics conditions the most significant role have such decisions that have an evident influence on quality of the environment, because the market prices do not reflect real values and originality of natural resources. Decisions concerning their management play a very important role, because natural systems are inert, their influence on the environment is significant and public preferences often stay unrevealed because of the absence of market of nature systems' services.

For the well-grounded decision making it is necessary to use value assessment. Methods that can help to determine an economic value of natural resources do not take into consideration all elements of economic value or they have another essential methodology disadvantages. There is no universal method for determining the total economic value.

Methods of revealed preferences evaluate use value and do not take into consideration existence value. Methods of stated preferences embrace existence value, but they have restriction concerning adequacy and interpretation of the results.

These methods are widely used and effective as well. But they do not pay enough attention to the individuals' behaviour features and to the subjectivity of their responses to certain questions. In the contrary, Q-method, which was was invented in 1935 by British physicist-psychologist William Stephenson (1953). Q-method combines the strength of both qualitative and quantitative research methods.

Q-method is often associated with quantitative analysis due to its involvement with factor analysis. Stephenson was interested in providing was a way to reveal the subjectivity involved in any situation. Q methodology allows researchers to examine the subjective perceptions of individuals on any number of topics. It also helps to identify commonalities and differences in subjective perceptions across a sample group.

Q methodology is a research technique that allows a researcher to 1) identify, understand, and categorize individual perceptions and opinions, and 2) cluster groups based on their perceptions.

Він  $\epsilon$  основою для системного вивчення суб'єктивності і дає змогу дослідникам перевірити суб'єктивні уподобання індивідуумів у будь-якій галузі знань. Крім того, він уможливлює визначення загальних рис в уподобаннях груп та відмінності між уподобаннями цих груп.

The real utility of Q methodology lies in uncovering these opinion/perception clusters. Once identified, they can be targeted for follow-up activities such as further research or programmatic activities. It is the combination of qualitative and quantitative research techniques that allows researchers to identify individuals who share common opinions. Q methodology is often used for the following:

- identifying important internal and external constituencies
- defining participant viewpoints and perceptions
- providing sharper insight into preferred management directions
- identifying criteria that are important to clusters of individuals
- examining areas of friction, consensus, and conflict
- isolating gaps in shared understanding

The qualitative aspect of Q methodology is grounded in its ability to emphasize the how and why people think the way they do. The primary goal is to uncover different patterns of thought—not to count how many people think the way they do. The quantitative aspect involves using factor analytic techniques (specifically, principle components analysis [PCA]) as a means for grouping like-minded individuals.

Q-methodology uncovers and identifies the range of opinions regarding a specific topic under investigation. The methodology involves three stages:

- 1) Developing a set of statements to be sorted;
- 2) Participants are to sort the statements along a continuum of preference;
- 3) Analysys the data are and its interpret.

Q methodology, like many research methods, can be used to observe perceptions from the context of an individual or from the context of a group of individuals. In Q methodology, intrasubjective studies gather data from an individual on multiple issues of interest. The individual's opinions are then clustered based on similarity of opinion. The purpose is to determine whether the various opinions of the individual give rise to a greater thematic understanding of the issues at hand. Typically, an individual may be asked to reveal his/her perceptions on a variety of different constructs. When examined in total, the findings may reveal similarity patterns. For example, a programmer may be studied to determine his/her preferences for different software programming methodologies under various conditions. In this case, the study is intrasubjective because the researcher is studying a single individual to determine if preferences cluster around one or more common themes.

Conversely, intersubjective studies focus on how perceptions of groups of people cluster on one issue or more. The issue may be single or multidimensional. The point being, if one was only concerned about how various traits clustered together, they would be employing traditional factor analysis methods. Alternatively, Q methodology is concerned with clustering like-minded perceptions. It is a means for identifying the presence of patterns of opinions. Whether it is single dimensional or multidimensional, the study is always framed around finding patterns of subjective perceptions.