

THE SCENARIO METHOD APPLICATION IN TERRITORIAL MANAGEMENT

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Complexity and uncertainty are more characteristic of many situations in territorial management, and so creative processes for anticipating such as scenarios are useful. The paper emphasizes the scenario method and its role in the community management. There are presented the fundamental principles recognized in the scenario method, the characteristics of normative and explorative scenario and also the theoretical aspects of method application territorial population projection.

1. GENERAL ASPECTS CONCERNING THE COMMUNITY STRATEGY AND SCENARIO METHOD

Local development is characterized by management complexity; this is determined on one hand by the net work of involved actors, on the other by the multifaceted character of the programme itself, where various actions pertaining to different sectors have to be designed and implemented in an integrated way.

In these conditions, the decisions taken by the local authorities, the priorities and the plan of action at the level of local community must be in concordance with the strategies established and approved by the local council

A community strategy should identify the key priorities for action in a council's area. It follows that the community strategy must be linked to the day-to-day activity of the council and its partners. It should be central to an authority's planning and resource decisions, ensuring that local priorities and concerns are genuinely reflected in the allocation of resources. In order to meet long term outcomes, community strategy partners will have to establish shorter term priorities for action. The strategy will not specifically cover every local issue, but it should affect the delivery of a wide range of services, including housing, education, transport, environmental, health, economic development, culture, crime prevention.

The strategy should be not only to generate new activity, but also to evaluate the ways in which current activities do contribute to the achievement of the strategy's goals. Local strategy should be a practical tool for councils and their partners' environmental well-being of their area and contribute to the achievement locally and nationally.

The elaboration of the development strategies by the local authorities must be based on the scientific methods.

A number of methods are applied to improve the implementation of development policy, especially in terms of its efficiency and to serve the community at large. One of these methods is scenario method. In a modern literature concerning forecasting, the scenario method is classified as on of methods of forecasting. But, the scenario method is not only a method of forecasting and also highly instrumental in turning decision making and planning into more active and democratic undertakings providing futures related discussions among experts, representatives of interest groups and citizens with a sound scientific basis.

Complexity and uncertainty are more characteristic of many situations in territorial management, and so creative processes for anticipating change such as scenarios are useful.

But, what are scenarios? It does can be more definitions. Scenarios are stories or models used to conceptualize possible future outcomes; they are tools for planning and decision-making that are appropriate for situations where complexity and uncertainty are high [4].

Scenarios can be defined as internal coherent descriptions of alternative images of the future dealing with uncertainties and illustrating major issues to be dealt with.

Scenarios are ordered and concessive description of a possible or desirably predicted future of an investigated object constructed with a logical sequence of events and processes.

Unlike projections scenarios do not necessarily portray what we expect the future to actually look like. Instead scenarios aim to stimulate creative ways of thinking that help people break out of established ways of looking at situations and planning their actions.

Scenarios offer the opportunity to evaluate decision made in a specific area and predict their potential consequences. The use of the scenario method for transition periods and for a fast/changing society is often more justified and appropriate, than the predictions which are based on statistics and so-called hard data.

In territorial management the scenario method offer the opportunity to initiate discussions to involve relevant social groups in creating the future and to increase the probability of materialization of that vision created and ideas that have emerged.

In conclusion, we can say that the reasons [3] which sustain the use of the scenario method in communities' management are:

- the important role in the area of risk management where scenarios enable strategies and decisions to be tested against possible futures;
- to reduce the high degree of uncertainty involved in the future of complex problems and increase knowledge of the future;
- to perceive the consequences of our actions in short and long term perspectives;
- to introduce hypothetical possibilities that stimulate the imagination to overcome existing patterns of through or traditional behavior not adapted to fast changing circumstances;
- to promote interaction between different interest groups.

2. THE PRINCIPLES AND THE TYPES OF SCENARIO METHOD

The appliance of the scenario method need to be respected some rules. The fundamental principles recognized in the scenario method are the following:

- a) there is no single future, but multiple futures; the future is postulated one hand as a number of possible future that are based on knowledge, data and information (Figure 1);
- b) the future is not precisely predictable and what the future will be no one can tell with a sufficient degree of precision;
- c) interdisciplinary nature that is particularly obvious at the methodological level.

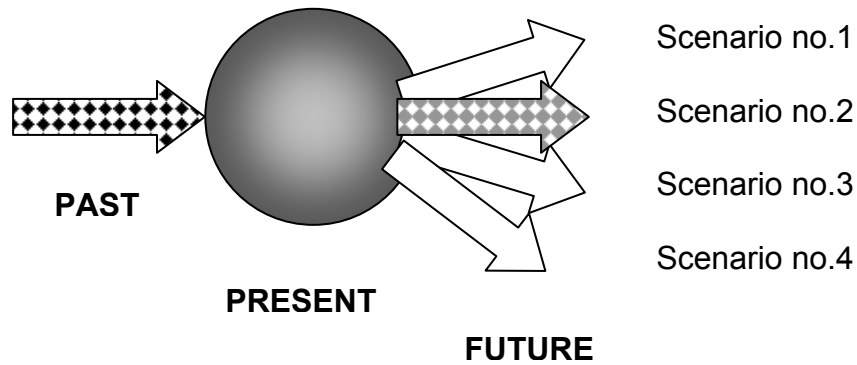


Figure 1 The future as multiple scenarios

Most of specialists in domain part the scenarios in two categories: normative and explorative.

Normative scenarios are formulated with a respect to preferred values; these scenarios are sequences of events or desired images. Sometimes the normative scenarios are meant entirely by scenarios of the desired future (Figure 2).

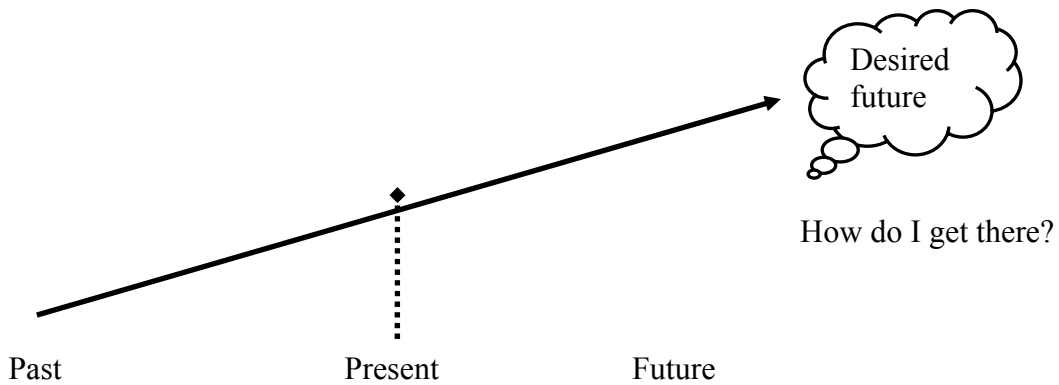


Figure 2 The Normative Future

Explorative scenarios helps to find out what can be the logical sequence of events heading from the initial situation into the future (Figure 3). They pay more attention to the recent observed trends, which will lead to a possible future [1].

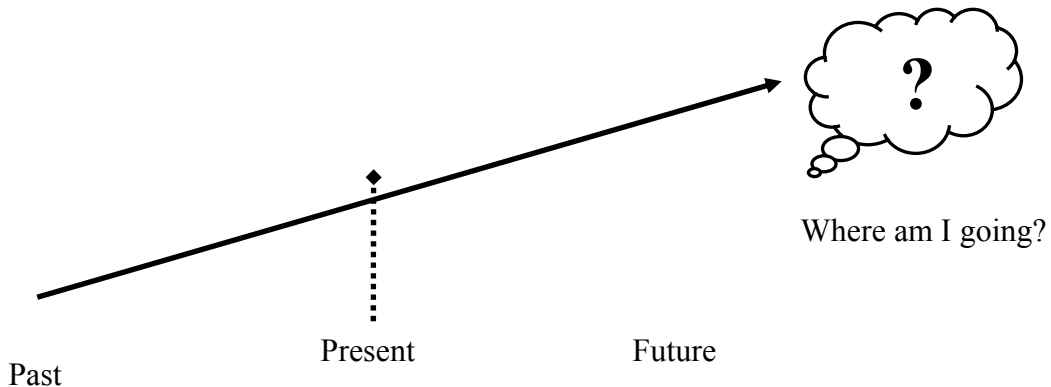


Figure 3 The explorative future

The methodological problem concerns above all the questions of linking these types of scenarios in order to exclude the danger of utilizing only one type; the exploring scenario can easily lead to exclusive extrapolation of current trends, while the normative scenario might run the risk that the desired future is not feasible under certain condition. In these conditions is important to combine the possibilities offered by different types of scenarios, to talk about the desirable future.

Vision scenarios, is the simplest of four types; this method serves to help communities to imagine an ideal future, become aware of that future reflect on whether it is possible to achieve that future, share unified vision of that future.

Projection scenarios are very similar to vision scenarios, with one important exception: they show a simple snapshots image of future according to people's expectations rather than their desires. The method shows what people think are the consequences of their current situation. The purpose of Projection scenarios method is to help community members to develop scenario based on expectations of resulting from different trends and identify gaps in understanding of weaknesses in capacities.

Pathway scenarios are used to compare a desirable future to the present, and define strategies for reaching future condition. The purpose of Pathway scenarios method is to help participants determine how they can get from the present to a desired condition. The method combines elements of vision and projection scenarios.

Alternative scenarios, show a range of possible change in the future to help people frame uncertainty. The method help participants to cope with uncertainty, not by eliminating it, but rather by framing it and understanding the range of associated implications.

Depending on needs, one or a combination of these methods may be used.

3. THE PHASES OF SCENARIO METHOD APPLIED IN TERRITORIAL STRATEGIES

The scenarios method is a multistep generalizing procedure making management of systematic studies about the future of local territories possible. It does so mainly by constructing credible and concise images of the future states and situations as well as sequences of events leading to such states. In general the most important phases of scenario method applied in territorial management are:

- structural and subject analysis of a given territorial system, interconnected with a diagnosis and its surrounding with principals actions: choice of variables, defining the relations between them, systematization of variables, identification of the key variables, determination of a subjects' strengths and hypotheses of their strategies and predictable model by variants, determination of the regulating rules between subjects;

- making the assumption: describe the character of scenarios, hypotheses according to the variables, assumptions connected to same dependent variables;

- construction of scenarios: a construction of scenarios for surroundings, construction of sequences of events recorded in general synthetic manner using a small number of key variables, verification of different scenarios and choose of full scenarios;

- analysis, comparative opinion and scenario verification, analyse the impacts and implications of the scenarios on the key concerns with which the process began, make decisions based on the scenarios and the options.

The construction of scenario is not very difficult. For example, let us suppose that the foresight question is population of community.

We can use for population projection the component method; as a matter of fact the calculation of the expected size of the population is done by carrying the initial data forward in time age by age. The number of man and women of each age at the beginning f

the projection period is multiplied by the life table survival ratio corresponding to this age and sex. So, it gives the number of people a year older on the beginning of the following calendar year.

The number of children born every year is determined by multiplication the midyear number of women in each age with the range of each age the corresponding fertility rate, taken from the fertility table.

The net migration of the persons of the given age and sex for a year is added to the calculated number of people.

The result- of these three steps- is the number of men and women of each age at the beginning of the next year; for each of the following calendar year of the projection period, all operations are repeated.

We can see that the principal problem in the population projection is the fertility, the mortality and the net migration expected.

The scenario approach for the determination of possible variants of change in fertility (question x), mortality (question y) and net migration (question z) seems to be more justified.

Each of these question raises possible responses in the time frame selected (figure 4).

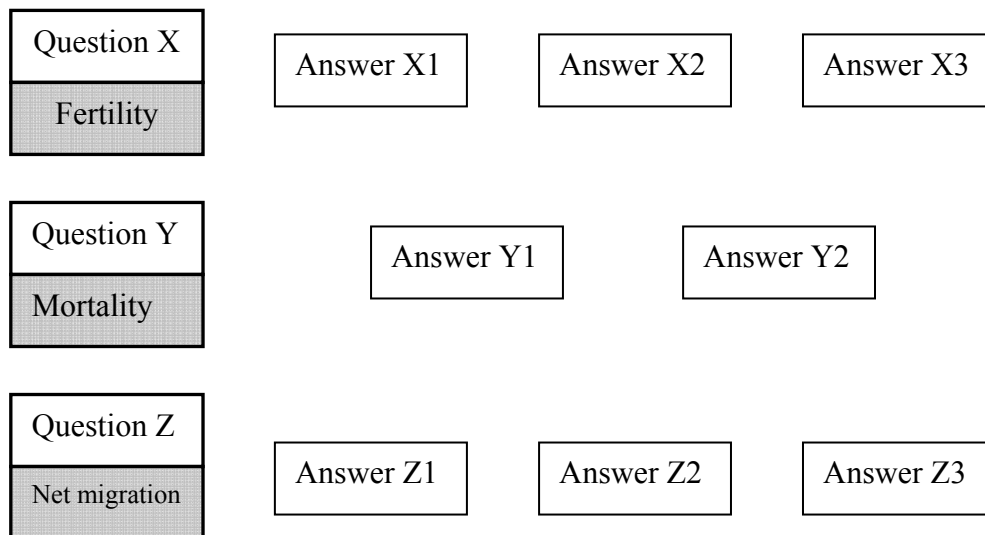


Figure 4 The scenarios method applied in population projection

The responses to these questions are:

- X1- constant fertility;
- X2- slow increase fertility;
- X3- strong increase fertility;
- Y1- constant mortality;
- Y2- slow decrease mortality;
- Z1- constant net migration;
- Z2-slow increase net migration(negative)
- Z3-strong increase net migration(negative)

As we mentioned before, a scenario method is a combination of these response to each question selected [2]; it is actually possible to construct $3 \times 2 \times 3 = 12$ scenarios, but not all are probable or coherent.

Let suppose that the responses could be guided in three scenario variants:

-scenario 1: X1,Y2,Z1;

-scenario 2: X2,Y1,Z1;

-scenario 3: X2,Y2,Z2.

Among these three scenarios, we may chose- on the basis of the information - one of them, most probable, for example scenario 2 (figure 5).

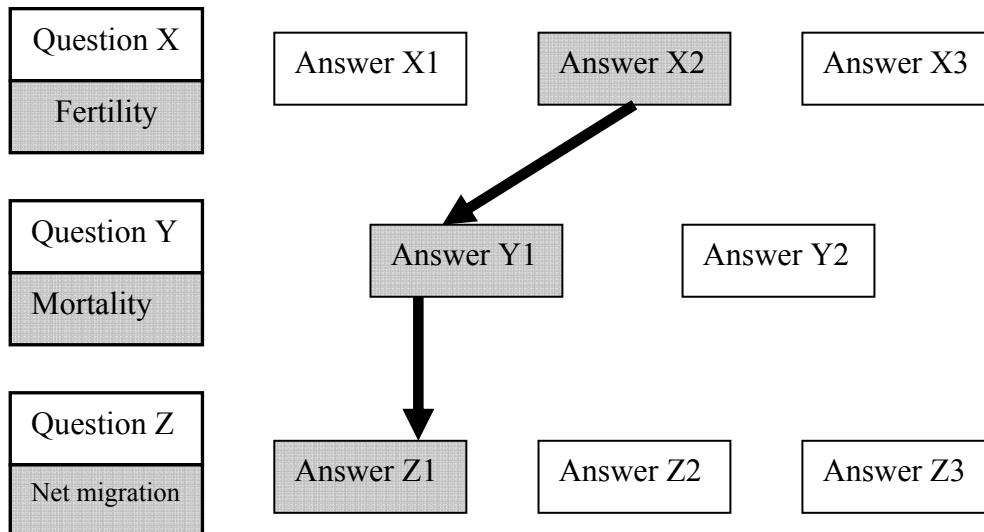


Figure 5 The scenario selected

CONCLUSIONS

Scenarios are tools for planning and decision making that is appropriate for situations where complexity and uncertainty are high. In community management the scenario method offer the opportunity to initiate discussions to involve relevant social groups in creating the future and to increase the probability of that vision created and ideas that have emerged. Scenario planning is most useful if it is used to develop and implement strategy for the organization to achieve its mission. When we use scenarios method is very important, firstly to combine the possibilities offered by different types of scenario – normative or explorative - and to talk about the desirable future vision of the future. Secondly, using of scenario method must respect the principles and the phases recognized by the specialists.

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