

NCRR – NEW FORESIGHT RESEARCH METHOD

Danuta Szpilko^{a*}

^aBiałystok University of Technology, Wiejska 45A, 15-351 Białystok, Poland

Abstract

Purpose of the article Foresight constitutes a tool for building the alternative visions of the future of a studied area. The foresight research projects use both the quantitative and qualitative methods. Despite their broad spectrum, they still lack methods focused on identifying the actions designed to achieve the developed vision of development of the research area. The scientific problem is therefore to determine how and with the use of what tools it is possible to identify priority actions ultimately enabling the implementation of scenarios of development of the studied area.

Scientific aim The scientific goal is the development and verification of a new research method allowing for the identification and classification of activities making it possible to achieve the desired visions of the future of the research area. The verification the new method of research will be conducted on the example of the most probable scenario of the development of tourism in the Podlaskie voivodship in the perspective of the year 2030, developed by a wide circle of experts and stakeholders within the framework of the implementation of the research project *Foresight as a tool for improving the management of tourism in the region*.

Methodology/methods The methods used to achieve the scientific objective involve desk research and the method of logic structure and analysis. The pilot study using the new method - NCRR, also used the method of a panel of experts and surveys.

Findings As a result of the undertaken research work, a new research method (NCRR) was developed and characterized. Within the framework of the pilot study, conducted with its use, the experts and stakeholders have designated the catalogue of 21 priority actions enabling the achievement of an established vision of tourism development in the perspective up to the year 2030. These activities are contained in six research areas: innovative tourism products and services; tourist entrepreneurship in the region; cultural and natural heritage; tourist infrastructure of the region; regional tourism policy; science, research and development in the region.

Conclusions The developed NCRR method represents a new tool of qualitative nature, enriching the catalogue of methods used in foresight research. Its use in the foresight research process not only allows to determine the vision of the future as before, but also makes it possible to determine real actions enabling their achievement in a specific period of time.

Keywords: research method, NCRR, foresight, tourism, Poland

JEL Classification: O18, P48

* Corresponding author. Tel.: +48 85 746 98 39.

E-mail address: danutaszpilko@gmail.com

The project was funded by the National Science Centre on the basis of the contract No. DEC-2012/05/N/HS4/02055.

Introduction

The future and its development for centuries has been the subject of interest of many researchers. One of the research tools enabling future prediction is foresight, successfully used around the world since the seventies of the twentieth century. It combines three processes, which include: the strategic planning process, the development of thematic policies (e.g. innovation, technological, scientific, regional), and the development of the future sciences (futures studies), (Szczepiot-Knoblach, 2013). H. Grupp & H. A. Linstone (1999) define foresight as the equivalent of a bundle of systematic efforts of looking into the future and making the most efficient choices. Foresight assumes that there is no one single shape of the future. Depending on the undertaken actions or lack thereof, at present many variations of the future are possible, but only one of them will come to pass.

Foresight is a set of tools facilitating the construction of scenarios of situation development in a relatively distant perspective (usually 10-20 years), as well as when a difficult to predict development of the situation may occur (Kuciński, 2006). It constitutes an attempt at the collective anticipation of important factors and risks that may affect the future of the society (Loveridge and Street, 2005). It is a deliberately organized process combining the expectations of various entities for the purpose of formulating strategies for the future (Webster, 2002). According to J. Cassingena Harper, the foresight process involves intensive, iterative periods of open reflection, networking, consultations and discussions that are meant to lead to the development of a common vision of the future and a sense of ownership of the developed strategies. A similar view is presented by J. Anderson (1997), indicating that foresight applies to shaping the future through concerted actions of self-sustaining networks of stakeholder groups. Ł. Nazarko (2011) notes that this distinguishes foresight research from other approaches focused on the exploration of the future. Foresight should be implemented through iterative, incremental, and even experimental tasks, thanks to which the stakeholders will become more aware of future opportunities, and at the same time, will commit themselves to take actions that reflect their better understanding (Salmenkaita and Salo, 2004).

Foresight is implemented using a variety of tools and methods both strictly scientific, as well as heuristic, based on expert intuition (Magruk and Jańczuk, 2009). Specialist literature concerning foresight research, contains a description of more than one hundred sixteen methods. Among them, however, there are no methods focused on the identification and classification of activities. Many foresight projects implemented so far focused on the development of visions of future development, however they did not translate into specific actions aiming to enable the achievement thereof. This represents a weakness of foresight, taking into account that it is perceived as a process aimed at decision-making and taking action (Gavigan et al, 2001; Miles et al, 2008).

1 Characteristics of the NCRR method

The analysis of 116 foresight methods identified by A. Kononiuk and A. Magruk (2008) proves that despite their wide spectrum, there is still the lack of methods focused on the identification of actions enabling the achievement of the designed visions of development of the research area. In addition, the analysis of 55 Polish and 89 foreign reports on the implementation of foresight projects indicates that many of them result merely in analytical studies or the designation of scenarios for the development of the research area. Unfortunately, the problem is the fact that, in regard to them, the research teams do not seek to designate a set of concrete priority actions, the consistent implementation of which would make it possible to achieve the future specified in the scenarios. The scientific problem is therefore to determine how and with the use of what tools it is possible to identify priority actions ultimately enabling the implementation of scenarios of development of the studied area.

In response to the identified problems the author has attempted to develop a method, named NCRR, focused on the identification of actions. The abbreviation NCRR means: N - new, C - continued, R - restored, R - redundant. The purpose of the NCRR method is to identify a set of priority actions enabling the achievement of a particular vision of the future. In the opinion of the author, the NCRR method should be classified as belonging to the group of qualitative expert methods.

The NCRR method should be implemented in two stages. In the first stage, a particular group of experts and stakeholders in the development of the research area, within the framework of an expert panel, should identify the greatest possible number of activities (affecting the development of the studied area) divided into four categories:

- new activities, not yet undertaken (N - new);
- activities carried out to date (including the ones resulting from the existing strategic documents), which should be continued (C - continued);

- activities carried out to date (including the ones resulting from the existing strategic documents), the implementation of which should cease (R - redundant);
- activities, which were carried out in the past, and the realization of which should be restored (R - restored).

With this approach, the analysis will cover all the current activities, future activities, as well as the ones implemented in the past. The identified activities, depending on the needs, may be assigned to narrower subject areas, such as "regional policy", "infrastructure", "society". This procedure will greatly facilitate both the work of experts and stakeholders, as well as will increase the clarity of the generated results. Depending on its size, a group of experts and stakeholders can be divided into smaller working groups, bearing in mind that each of them should include representatives of various professional spheres from the studied area. After the completion of the work, the results should be discussed in the course of a structured discussion aimed at achieving a consensus on the results obtained. The result of the work of the expert panel should be wide list of activities, which will serve as the starting material for the second stage of the study.

The second phase of the study should involve a wide circle of stakeholders in the development of the research area. For its use, a questionnaire should be prepared (in paper or electronic form), which will contain a description of the vision of the future (most likely or a few alternative ones) and a list of activities identified in first phase (divided into four categories, as well as if needed, into thematic areas). The task of the stakeholders will be the indication of a specific number (e.g. three) of the most important in their opinion activities that will enable the achievement of the present vision of the future. It should be noted that the redundant activities, the realization of which should cease (redundant), should also be included in the form, in order to be verified by a wide circle of stakeholders, whether they have been correctly assigned to this category. This means that the respondents will also be able identify the action that was identified by experts and stakeholders in the first phase as redundant, the execution of which should cease to be the one of greatest importance. The NCRR method, as a result, should enable the emergence of a set of priority actions, whose implementation in the prescribed term will result in the achievement of the specified vision of the future.

The NCRR method combines the knowledge and opinions of experts and stakeholders. The group of study participants should include individuals with expertise in the area of research, who are future-oriented and broad-minded. The group should be diverse in terms of the represented professional sphere, education, gender, and age, which will allow for the indication of a large number of different activities in the course of the research process. The involvement of stakeholders from various spheres of the research area, in the longer perspective will have positive impact on the regional development (Nazarko, 2012, 2013; Ejdys, 2013; Dębkowska, 2013), development of innovative products and services (Szymańska, 2013; Panfiluk, 2013) and the construction of social networks, including the virtual ones (Stapaniuk, 2014, 2015).

2 The results of the pilot study, using the NCRR method

The pilot studies using the NCRR method were conducted within the framework of the implementation of the research project *Foresight as a tool for improving tourism management in the region*¹, financed by the National Science Centre. The research problem of the project has been defined in the form of a question: Whether and how to improve the process of managing the development of tourism in the region, with the use of research foresight? As part of the realisation of the research project, a methodology for the incorporation of foresight studies into the creation of a tourism development strategy in the region has been designed, using the methodology for the design of hybrid systems A. Magruk (2012). The construction of the hybrid method was performed in the context of its three key areas: foresight process stages, research context, and the classification of methods. For the purpose of the methodology of incorporation of the foresight research in the process of developing strategies of tourism development in the region, the author has chosen 10 methods: desk research, STEEPVL analysis, structural analysis, Delphi method, surveys, conferences, expert panels, brainstorming, voting, scenario method. Because of the identified research problem concerning the lack of translating the developed scenarios into a set of priority actions, the author has proposed a new method – NCRR.

As part of the realisation of the various stages of the project, experts and stakeholders of tourism development in the region have developed four scenarios of development:

- Scenario 1 – Inno-Eco-Cul Podlaskie (Innovative-Ecological-Cultural Podlaskie) – is based on the assumption of a high capacity to create innovative tourism products and services assuming the

¹ Detailed test results obtained within the framework of the implemented project have been presented in (Szpilko, 2015).

favorably evolving regional tourism policy. The probability of implementation in the perspective of the year 2030: 39.51%.

- Scenario 2 – Underappreciated Innovator – assumes a high level of ability to create innovative tourism products and services, despite the unfavourable regional tourism policy. The probability of implementation in the perspective of the year 2030: 29.39%.
- Scenario 3 – Flightless – is based on the low capacity to create innovative products and services in the region and simultaneous unfavourable regional tourism policy. The probability of implementation in the perspective of the year 2030: 10.49%.
- Scenario 4 – Idle Bison – assumes a low level of capability to create innovative tourism products and services in the region, despite the favourable regional tourism policy. The probability of realization in perspective of the year 2030: 20.61%.

In relation to the developed scenarios of development of tourism in the Podlaskie Voivodship in perspective of the year 2030, using the NCRR method in the next stage of research activities, the experts and stakeholders have identified the priority actions allowing the implementation of the scenario with the highest probability, that is "Inno-Eco-Cul Podlaskie".

A team of experts and stakeholders in the first stage of the NCRR method study consisted of 7 representatives from the sphere of science, business, government, and NGOs. As part of the expert panel, activities related to the development of tourism in the Podlaskie voivodship have been identified, divided into four categories:

- new activities, not yet undertaken (N - new);
- activities carried out to date including in Tourism and Tourism Infrastructure Development Programme in Podlaskie province in 2010-2015, which should be continued (C - continued);
- activities carried out to date including in Tourism and Tourism Infrastructure Development Programme in Podlaskie province in 2010-2015, the implementation of which should cease (R - redundant);
- activities, which were carried out in the past, and the realization of which should be restored (R - restored).

The actions have been identified, divided into the following research areas: RA1: Innovative products and tourism services, RA 2: Tourist entrepreneurship in the region, RA3: Cultural and natural heritage, RA4: Tourist infrastructure of the region, RA5: Regional tourism policy, RA6: Science, research and development in the region. The catalogue of the identified activities is presented in Table 1.

Table 1 Activities in the field of tourism development in the Podlaskie voivodship, classified into groups according to the NCRR method

Category	Activities in research areas
Research area 1: Innovative products and tourism services	
N (new)	<ul style="list-style-type: none"> – creating innovative supra-regional products, covering with their range a minimum of 2-3 voivodeships (including the Podlaskie Voivodeship) – creating opportunities to build personalized (individual) tourist packages based on the online platform for the potential tourists – creating products under the MICE tourism development (meetings, incentive events, conferences, exhibitions) with supra-regional scope – construction of a product - creative tourism – creation of specialized agrotourist products – creation of qualified tourism products - horse riding and canoeing – creating innovative cross-border (Lithuania, Belarus) tourist packages based on natural and cultural regions
C (continued)	<ul style="list-style-type: none"> – routes of water tourism - a coherent tourist offer for the entire Podlaskie voivodeship – construction of the tourist offer directed to children and young people as well as families with children – construction of the product - tourism of interests – action for the development of active and recreational tourism based on a well-developed network of hiking and biking trails – enriching the offer of the Podlaskie Voivodeship in the field of conference tourism – development of congress activities
R (redundant)	<ul style="list-style-type: none"> – expansion of the tourist offer of the region based on winter sports – development of the Podlaska Book of Tourist Products
R (restored)	<ul style="list-style-type: none"> – development of branded products – construction of products using military facilities

21st International Scientific Conference Economics and Management

- expansion of the existing and development of new products in health tourism
- expansion of the existing and development of new products in nature tourism

Research area 2: Tourist entrepreneurship in the region

- | | |
|---------------|--|
| N (new) | <ul style="list-style-type: none"> – establishment of a regional programme in the field of preferential conditions and support for the newly emerging tourism enterprises – support under the public-private partnership of key tourist investments with supra-regional scope in the areas adjacent to environmentally valuable areas – directing the functioning of the East Poland Tourist Brand Cluster to support the development of entrepreneurship in the tourism sector – gaining support from foreign investors for the implementation of key tourist investments with supra-regional scope – organizing ventures for the dissemination of public-private partnership – undertaking actions aimed at promoting the offer of regional tourism enterprises at international fairs – support for enterprises in the tourism sector in the implementation of CSR (corporate social responsibility) – organizing competitions for the best projects in the tourism sector undertaken in the region |
| C (continued) | <ul style="list-style-type: none"> – promotion of projects and investment plans based on public-private partnership, enhancing the tourist offer of the Podlaskie voivodeship – formation of tourist staff for the needs of the local labour market |
| R (redundant) | <ul style="list-style-type: none"> – support of activities aimed at the development of local associations working in the tourism sector – creation of tourism clusters in separate areas of the Podlasie tourism industry – creation of an advisory program for SMEs operating in the tourism sector – supporting the tourism industry in the implementation of standardized quality management systems |
| R (restored) | <ul style="list-style-type: none"> – undertaking inter-municipal cooperation for the development of local entrepreneurship |
-

Research area 3: Cultural and natural heritage

- | | |
|---------------|---|
| N (new) | <ul style="list-style-type: none"> – promotion of natural and cultural heritage of the region on domestic and foreign markets – establishing a system of discriminants (also architectural) allowing the identification of individual local cultures, based on local cultural heritage – creation and implementation of tourism projects of supralocal, and even supra-regional significance based on the unique natural and cultural heritage of North-Eastern Poland – integration of local communities around the traditions and customs with an attempt to recreate and digitize cultural resources, tangible and intangible assets |
| C (continued) | <ul style="list-style-type: none"> – revitalization of separated urban complexes of historic parts of towns and cities, of the Podlaskie voivodeship – organization of cultural events of high artistic value, of national and international importance, based on existing products and tourist attractions of the region – raising the competitiveness of the region through the development and strengthening of tourism products functioning within the framework of cultural and religious tourism |
| R (redundant) | <ul style="list-style-type: none"> – creation of a Network of Cultural Parks |
| R (restored) | <ul style="list-style-type: none"> – expansion of cultural and national diversity |
-

Research area 4: Tourist infrastructure of the region

- | | |
|---------------|--|
| N (new) | <ul style="list-style-type: none"> – investments in road infrastructure, increasing the accessibility of the Podlaskie voivodeship – development of infrastructure near bodies of water – creation of gastronomic facilities serving regional cuisine – construction of four and five star hotels – implementation of the technology of the virtual tour of the region, including in real time, for people with sight and hearing impairments |
| C (continued) | <ul style="list-style-type: none"> – construction of a large-amusement park – revitalization and creation of new complexes of health resort areas – creation of and implementation of projects regarding the construction and expansion of the technical infrastructure to increase the availability of the greatest tourist attractions – creation of tourist routes |
| R (redundant) | <ul style="list-style-type: none"> – development of the system of off-road tourist signs and a network of self-service tourist information – construction of facilities of collective accommodation, including hotel facilities of various standards - also within the framework of PPP – creation of projects and undertakings enabling the development of recreational areas and of areas of particular importance for the development of summer and winter sports, based on the unique natural resources, numerous water reservoirs and natural terrain – expansion of a Network of Tourist Information – creation of investment projects in the tourism sector at the local government level based on the revised principles of public-private partnership – promoting the formation of multi-purpose, generally available Recreational Centres based on the natural resources of the individual areas of the region |
| R (restored) | <ul style="list-style-type: none"> – construction of a regional airport – construction of a high-speed rail to Warsaw – creation of small infrastructure in forest areas |
-

21st International Scientific Conference Economics and Management

Research area 5: Regional tourism policy

N (new)	<ul style="list-style-type: none"> – development of spatial plans for the voivodship, taking into account the tourist function – creating a coherent vision for the development of tourism in different parts of the voivodeship, taking into account the cultural and natural diversity – development of a new strategy for the development of tourism (tourism products) in the Podlaskie voivodship, in the perspective up to the year 2030 – development of a system of visitor management in the areas of outstanding natural beauty – promoting intermodal cooperation between own producers of regional and traditional products – streamlining of visa procedures with Belarus – construction of virtual tourist communities related to the Podlaskie Voivodeship for the effective construction of the image of the area
C (continued)	<ul style="list-style-type: none"> – development and adoption of planning documents at the level of each of the municipalities of the Podlaskie Voivodeship, providing basis for making location decisions in the new areas of the region, with special emphasis on attractive tourist sites and areas adjacent thereto – diverse, promotional activities targeted at the external and the internal market – establishing greater cooperation with the neighbouring regions of Poland, Lithuania and Belarus in order to exchange experiences and mutually promote tourist products – cooperation with the tourist companies for the promotion of their offers – creation of a system of tourist quality labels – professional development of information, cultural, and economic staff, as well as public services, including the police and the units of municipal police
R (redundant)	<ul style="list-style-type: none"> – improvement of the competitiveness of the region through organized activities of supralocal nature, supporting the development of agrotourism
R (restored)	<ul style="list-style-type: none"> – appointment of the Podlaskie Tourist Forum – organization of the Podlasie Tourism Fair – more extensive inclusion of tourism in the regional strategy

Research area 6: Science, research and development in the region

N (new)	<ul style="list-style-type: none"> – development of various forms of cooperation (not necessarily formalized) between the tourism business, administration, and science – development of research on the regional tourism market within the framework of cooperation between scientific institutions (educating tourist staff in the region) and other stakeholders (including national and landscape parks) – increasing the competencies of tourist staff through the organization of conferences, training, seminars, workshops – improving and extending the scope of cooperation between different social and economic environments within the field of tourism
C (continued)	<ul style="list-style-type: none"> – monitoring of the effectiveness of promotional activities undertaken on the local and regional level – conducting qualitative research regarding inbound tourism in the area of the Podlaskie voivodeship – conducting qualitative research on the size and structure of the incoming tourist traffic – development of monitoring tools of the tourism economy, taking into account the modern research methods – monitoring of the inbound tourism offer in the tourist areas of the Podlaskie voivodeship in the context of market needs – monitoring of the needs on Podlaskie labour market regarding the tourist and tourist-related services
R (redundant)	<ul style="list-style-type: none"> – valorisation of the tourist areas of the region in terms of the attractiveness regarding tourist traffic – monitoring of the competition - good and bad practices
R (restored)	<ul style="list-style-type: none"> – systematic conducting of qualitative research on the needs of tourists

Source: own

During the second stage of the study the identified catalogue of activities, divided into six research areas in the form of a CAWI questionnaire was sent to 42 experts and stakeholders in tourism development of the Podlaskie voivodeship. It should be noted that the redundant activities, the realization of which should cease (redundant), were also included on the form for the purpose of their verification, whether they had been correctly assigned to that group of activities. Each of the respondents was supposed to precisely indicate three most important, according to him, activities in each of the research areas that affect the implementation of scenario 1, with the highest probability of its implementation - Inno-Eko-Kul Podlaskie. This scenario is based on the assumption of high capacity to create innovative tourism products and services with the favourably evolving regional tourism policy. The development of tourism in the region is stimulated by the development-oriented entrepreneurial behaviour of the local population as well as agile and effective actions of the local and regional authorities.

As a result of the conducted study, a set of 21 priority activities was obtained, which according to the respondents should be undertaken in the perspective up to the year 2030 in each of the six research areas that in order for the Inno-Eko-Kul Podlaskie scenario to be carried out. The set of priority activities is presented in Table 2.

Table 2 Priority activities for the development of tourism in the Podlaskie voivodeship in the perspective up to the year 2030

Research area 1: Innovative products and tourism services	
1.	Creating innovative cross-border (Lithuania, Belarus) tourist packages based on natural and cultural assets of the regions
2.	Development of the existing and the construction of new spa tourism products
3.	Creating opportunities to build personalized (individual) tourist packages based on the online platform for the potential tourists
Research area 2: Tourist entrepreneurship in the region	
1.	The creation of a regional programme in the field of preferential conditions and support for the newly emerging tourism enterprises
2.	Support under the framework of the public-private partnership of key tourist investments with supra-regional scope in the areas adjacent to environmentally valuable areas
3.	Formation of tourist staff for the needs of the local labour market
Research area 3: Cultural and natural heritage	
1.	The organization of cultural events of high artistic value, of national and international significance, based on the existing products and tourist attractions of the region
2.	Creation and implementation of tourist projects of supralocal, and even supra-regional significance, based on the unique natural and cultural heritage of the North-Eastern Poland
3.	Promotion of natural and cultural heritage of the region on domestic and foreign markets
Research area 4: Tourist infrastructure of the region	
1.	Revitalization and creation of new complexes of health resort areas
2.	Investments in the road infrastructure, increasing the accessibility of the Podlaskie voivodeship
3.	Construction of a regional airport
Research area 5: Regional tourism policy	
1.	Broader inclusion of tourism in the regional strategy
2.	Development of a new strategy for the development of tourism (tourism products) in the Podlaskie voivodeship in the perspective up to the year 2030
3.	Streamlining of visa procedures with Belarus
Research area 6: Science, research and development in the region	
1.	Development of various forms of cooperation (not necessarily formalized) between business tourism, administration, and science
2.	Conducting research regarding inbound tourism in the area of the Podlaskie voivodeship
3.	Monitoring of the effectiveness of promotional activities undertaken on the local and regional level

Source: own

3 Discussion

The results obtained in the course of the realisation of the research project, with the use of the NCRR method, are of a pilot nature, since the purpose of the conducted research process was primarily to verify the applicability of the proposed method. Due to the pilot nature of the research, a conscious decision was made to refrain from interfering in the work of the experts and stakeholders and from substantive justification of and commenting on the obtained results, which in some ways may seem inconsistent or unclear. This action was intended and aimed to visualize the weaknesses and imperfections of the developed method. Thanks to this operation it is possible to clearly state that in the course the work of expert groups and stakeholders with the use of the NCRR method, the presence of a moderator is necessary. His tasks should include structuring and directing the works and striving to achieve a consensus in the first stage of the research. An important issue, that should be dealt with in the course of applying the NCRR method is the substantive quality of the content and the variety of process participants in terms of the represented professional sphere, education, gender and age. The involvement of incompetent, homogeneous groups of experts and stakeholders in the research process can constitute a significant disadvantage of the NCRR method, especially when the participants attempt to identify the priority actions from the standpoint of their performed professions or conducted businesses, and not those that are most relevant for the development of the research area.

In the course of the conducted research process also the disadvantages of using the NCRR method have been highlighted. Among the disadvantages, it is particularly important to indicate the lack of the possibility of a direct exchange of views among the participants in the second stage of the study and the need to involve a relatively large and broad in terms of the professional sphere represented group of the participants of the study. Major defects in the context of the need to involve many participants, could also affect the duration of the study and its costs. In particular, when the participants receive remuneration for participating in the study.

Conclusion

The NCRR method developed and characterized in this article represents a new instrument enriching the catalogue of methods used in foresight. Its advantage is the focus on the identification and classification of activities enabling the achievement of specific visions of future of a given research area. The NCRR method may in particular be used as a complementary option to the scenario method. It can be used both to identify actions that will have an impact on the implementation of the scenario with the highest probability of its occurrence in a certain time perspective, as well as to determine the activities for alternative scenarios. At the same time, it can constitute a response to the disadvantage of the scenario method, namely the difficulty in translating the developed scenarios to specific decisions and actions.

Based on the conducted pilot study, it can also be determined that the NCRR method can constitute a useful tool in the process of strategic management of tourism in the regions. As is clear from the analyses conducted so far, within the framework of the process of formulation of regional tourism development strategies, a significant number of objectives and strategic actions is determined. Their variety and a broad spectrum makes it difficult to identify which ones are priority, thanks to which tourism would have a chance for dynamic development in a given region (Ejdys and Szpilko, 2013). Thanks to the use of the NCRR method, with wide public participation, it will be possible to identify a set of priority activities that will enable the achievement of the assumed vision of the future development of tourism in the region. Through its use, an additional effect can also be obtained, in the form of a sense of responsibility of the study participants (at least in part) for the implementation of activities, which they are co-creators of.

Acknowledgment

The project was funded by the National Science Centre on the basis of the contract No. DEC-2012/05/N/HS4/02055.

References

- Anderson, J. (1997). Technology foresight for competitive advantage. *Long Range Planning*, 30(5), 665-677.
- Dębkowska, K. (2013). *Regionalny foresight gospodarczy. Scenariusze wzrostu gospodarczego województwa mazowieckiego*. Warszawa: Związek Pracodawców Warszawy i Mazowsza.
- Ejdys, J. (2013). *Regionalny foresight gospodarczy: scenariusze rozwoju lokalnego województwa mazowieckiego*. Warszawa: Związek Pracodawców Warszawy i Mazowsza.
- Ejdys, J., & Szpilko, D. (2013). Problems of the strategic tourism management in the regions of Poland. *Actual Problems of Economics*, 8(1), 284-294.
- Gavigan, J.P., Scapolo, F., Keenan, M., Miles, I., Farhi, F., Lecoq, D., Capriati, M., & Di Bartolomeo, T. (2001). *A Practical Guide to Regional Foresight*. Report EUR 20128 EN, Foresight for Regional Development Network (FOREN), European Communities.
- Georgiou, L. (1996). The UK Technology Foresight Programme. *Futures*, 28(4), 359-377.
- Grupp, H., & Linstone, H. A. (1999). National Technology Foresight Activities Around the Globe: Resurrection and New Paradigms. *Technological Forecasting and Social Change*, 60(1), 85-94.
- Kononiuk, A., & Magruk, A. (2008). Przegląd metod i technik badawczych stosowanych w programach foresight. *Nauka i Szkolnictwo Wyższe*, 2(32), 28-40.
- Kuciński, J. (2006). *Organizacja i prowadzenie projektów foresight w świetle doświadczeń międzynarodowych*. Warszawa: Instytut Podstawowych Problemów Techniki PAN.
- Loveridge, D., & Street, P. (2005). Inclusive foresight. *Foresight*, 7(3), 31-47.
- Magruk, A. (2012). *Hybrydowa metoda badawcza foresightu technologicznego*, paper doctoral dissertation. Białystok: Politechnika Białostocka.
- Magruk, A., & Jańczuk, E. (2009). Typologia i klasyfikacja metod badawczych foresightu technologicznego. In J. Czech-Rogosz (Ed.), *Koniunktura gospodarcza a reakcje podmiotów gospodarujących* (pp. 381-389). Katowice: Wydawnictwo Akademii Ekonomicznej.

- Miles, I., Cassingena, Harper J., Georghiou, L., Keenan, M., & Popper, R. (2008). The Many Faces of Foresight. In L. Georghiou, J. Cassingena Harper, M. Keenan, I. Miles, & R. Popper (Eds.), *The Handbook of Technology Foresight: Concepts and Practice* (pp. 3-23). Cheltenham, Northampton: Prime Series on Research and Innovation Policy, Edward Elgar.
- Ministerstwo Nauki i Szkolnictwa Wyższego. (2012, November 29). Program Foresight. Retrieved from <http://www.nauka.gov.pl/nauka/polityka-naukowa-panstwa/program-foresight/definicja/>
- Nazarko, J. (2013). *Regionalny foresight gospodarczy. Metodologia i instrumentarium badawcze*. Warszawa: Związek Pracodawców Warszawy i Mazowsza.
- Nazarko, J. (ed.), (2012). *Badanie ewaluacyjne projektów foresight realizowanych w Polsce*. Warszawa: Ministerstwo Nauki i Szkolnictwa Wyższego.
- Nazarko, Ł. (2011). Istota foresightu i jego percepcja w Polsce. *Optimum. Studia Ekonomiczne*, 4(52), 224-233.
- Panfiluk, E. (2013). *Zaangażowanie sektora zarządzającego w działania na rzecz rozwoju turystyki. Analiza jednostek obszaru metropolitalnego Białegostoku*. *Studia i Materiały Miscellanea Oeconomicae*, 17(1), 147-160.
- Salmenkaita, J.P., & Salo, A. (2004). Emergent foresight processes: industrial activities in wireless communications. *Technological Forecasting and Social Change*, 71(9), 897-912.
- Stepaniuk, K. (2014). User generated content in the assessment of the perception of the tourism entity image. *Economics and Management*, 19(3), 267-273. doi: 10.5755/j01.em.19.3.8127
- Stepaniuk, K. (2015). The relation between destination image and social media user engagement - theoretical approach. *Procedia - Social and Behavioral Sciences* 213, 616-621. doi: 10.1016/j.sbspro.2015.11.459
- Szcebiot-Knoblach, L. (2013). Instrumenty wykorzystywane do realizacji polityki naukowo-technicznej. In L. Szcebiot-Knoblach & W. Lizińska (Eds.), *Polityka naukowo-techniczna* (pp. 49-69). Olsztyn: Uniwersytet Warmińsko-Mazurski w Olsztynie.
- Szpilko, D. (2015). *Foresight jako narzędzie doskonalenia zarządzania turystyką w regionie*, doctoral dissertation. Wrocław: Uniwersytet Ekonomiczny we Wrocławiu.
- Szymańska, E. (2013). *Procesy innowacyjne przedsiębiorstw świadczących usługi w zakresie organizacji imprez turystycznych*. Białystok: Oficyna Wydawnicza Politechniki Białostockiej.
- Webster, A. (2002). *Foresight as a tool for the management of knowledge flows*, proceedings of the strata consolidating workshop. Brussels.