

ATTITUDES TOWARDS AND READINESS TO INVOLVE IN PROTECTION OF NATURAL RESOURCES: THE CASE OF GAUJA NATIONAL PARK INHABITANTS

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Abstract. The protection of natural resources during an ongoing climate crisis can be viewed not only as a precondition for natural ecosystems but for social and economic ecosystems as well. At the same time, localization of natural resource protection within rural development issues includes the involvement of local inhabitants both in terms of attitude and practical involvement as an important precondition for sustainable regional development. Based on quantitative data gathered from the project "Ready for change? "Sustainable management of common natural resources" this article aims to reveal attitudes towards protection and readiness to involve in the protection of natural resources of Gauja National Park inhabitants. Data from a representative quantitative survey reveal that local inhabitants of Gauja National Park have high expected responsibility from various actors for the preservation and protection of natural resources. Expected responsibility can also be well explained by the concept of shared responsibility. It can also be concluded that there is broad agreement on the representation of interests of local inhabitants in the Nature conservation plan regardless of civic engagement or involvement in the protection of natural resources – either operationalized as involvement intensity in various dimensions of nature protection or in embedded readiness to involve or involvement in nature protection.

Key words: Protection of natural resources; attitudes; local inhabitants; representation; shared responsibility.

JEL code: Q01

Introduction

The ever-rising grave concerns are confirmed in the previous IPCC reports (IPCC 2018, 2019, 2021, 2022). The assessment of the draft report that will be published in 2023 allows us to assume that many climate-related risks are higher than assessed in previous reports. We need to deal with disproportionately high and non-linear long-term risks. As this draft report is not currently available for quoting or citing, the report of 2022 states that the 'rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt [...], the extent and magnitude of climate change impacts are larger than estimated in previous assessments' (IPCC, 2022: 8-9) and 'climate change impacts and risks are becoming increasingly complex and more difficult to manage. Multiple climate hazards will occur simultaneously, and multiple climatic and non-climatic risks will interact, resulting in compounding overall risks and risks cascading across sectors and regions (IPCC, 2022: 19). Compounding or converging risks include further transgression of planetary boundaries (Steffen et al., 2015a), biodiversity loss, resource, and overall environmental degradation (Steffen et al., 2015b; Ripple et al., 2017; Ceballos et al., 2017; IPBES, 2019; Dasgupta, 2021).

The idea of risks cascading across sectors and regions means that the protection of natural resources can be viewed not only as a precondition for natural ecosystems but as such or viewing them as externalities of economic and social processes. Protection of natural resources in a certain way (conservation, preservation, designing protected areas, etc.) is crucial for social and economic ecosystems, and externalities in economic terms need to be internalized in economic models and standard economic models have been criticized for lack of this (Butler & Higgs, 2018; Costanza et al. 1997; Dasgupta, 2007), particularly for vulnerable communities, whose impact on climate change has been lower, but who are affected by that more. Ignorance of the protection of natural resources as a precondition for economies can also be explained by the term social and ecological metabolic rift, suggested by John Bellamy Foster and others (Foster, Clark & York, 2010).

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Protection of natural resources in this article is seen as a wide and inclusive interpretation of the position of modern conservation (Berkes, 2012, p. 247) and various activities that serves nature protection. I need to stress that there is also a problem to look at conservation from an anthropocentric point of view as "externalizing people from nature by fencing off reserves, wilderness zones or national parks" (Brierley, 2020, p. 75). This view of conservation has been shifted from eliminating human impact to regulating human use, thus we talk about the preservation approach to conservation (Bhagwat, 2018, p. 992-994). It should be noted that the question "what to preserve?" (Attfield, 2018, p. 49) is open to debate – either some previous state of things or ecosystems with certain human impact. We can incorporate nature conservation principles and practices into everyday activities, living with adjusting and emergent ecosystems instead (Brierley, 2020, p.75). This implies also combining the so-called Western view on conservation (Redford & Stearman 1993 as cited in Berkes 2012) with indigenous conservation (Alcorn 1993 as cited in Berkes 2012; Roberts et al. 1995 as cited in Berkes 2012). The main point there is an acknowledgment of revising the Western concept of a human-nature dichotomy that further alienates all humans (Berkes, 2012, p.249) as well as the Western view of society-nature separation. There is also a scepticism within Western societies that people are tended to pursue selfish interests, thus the conservation needs to be carried out by professionals that "know" how to do that. It is important to note in this regard that resource-dependent rural communities rely on "characteristics that favor conservation: close personal relationships and inter-dependence, social control of cheating, land use practices informed by many generations of collective experience living within the resources of an area" (Hunn et al., 2003 as cited in Berkes 2012, p.251). Local inter-dependence also implies attitudes and involvement of inhabitants of a certain place – in our case – Gauja National Park (*further in text – GNP*).

Localizing natural resource protection within rural development issues, it is important to note that "spaces for postproductivism and rural development are being defined and defended in the public interest and public good terms but where there are few opportunities to question the enforced segregation and commodification of rural space and environmental provision that this implies" (Potter & Tilzey, 2005). Various focus can be seen in the literature regarding the cases of implementation of a National Park Plans – from discussions of Weberian concept of authority (Blackstock, Dinnie & Dilley, 2017) to National Parks as critical sites of struggle, where meanings of nature, landscape, and nature-society relations are debated (Walsh, 2021). In the case of GNP, the certain role of local municipalities is important in the deliberation of National park plans. The legitimacy of territorial local authorities has been debated in the context of governance environment (Welch, 2002), and legitimacy appropriate to representative democratic government (Connelly et al., 2006).

Focusing on various stakeholders' role in the management of natural resources, Robins and Southern identifies problems of state or corporative management and conclude that they are not designed to fit the goals of sustainable development (2018, p.422). They offer the idea of ecological localism as a concept to describe that the action and making choices for nature is made in the places, that reflect overlapping natural systems (Robins & Southern, 2018, p.432). Place-based attitudes and involvement thus are conceptually reasonable focus. Baker & Durance indicate the importance of resilient social systems and various orders of influence (2018, 366-367). Baker & Durance also emphasize that ecosystems and society are inextricably linked, and thus local communities' perceptions of natural resources and resource management regimes are also important for conservation planning. At the same time, socio-ecological projects for developing responsibility towards nature might be achieved by sharing responsibility for the natural world in certain places (FitzSimmons 2004 as cited in Jones, 2006, p.193-194). Those ideas allow operationalizing various levels of influence from the viewpoint of local inhabitants, where their attitudes of

responsibility of actors (me myself, local community, volunteers, NGO's, municipality, state institutions) for the preservation of natural and cultural heritage values in the place they live is an important indicator for give an account of action.

We can focus on the important implications of applying the term co-production in rural areas, where different positions and roles that take local inhabitants might bring interests and views (van der Ploeg, 2018, p.1438). And the same person might relate in more than one way to rural nature (ibid). Multi-relation implies a possible variety of readiness to involve or involvement in the protection of natural resources. It is also the question of representation of interests in democratic societies (Woods, 2006, p.468) and a crisis of representation already starting in the 21st century (Bonanno, 2000).

Territorial features are also important, because "the specific ecosystem, the landscape, biodiversity, and natural resources, and it critically depends on the many interrelations between these elements – relations that are shaped and reshaped within and through co-production" (van der Ploeg, 2018, p.1438). We can also apply the idea of milieu, where a particular combination of cultural values and practices, beliefs, identity, social relations, collective knowledge, and shared social and economic history constitute a particular locality and consciousness (Malecki, 1994 as cited in Lewis et al., 2002)". All these features are visible in the case of this article - inhabitants of GNP region. Distinct configurations for GNP inhabitants might include practices (actual or potential involvement in activities) as well as the identity of this territory and involvement in civic activities as a sign of social relations. Shared social history might differ in various age groups. This also reflects a "sense of place" as suggested by Robins and Southern (2018, p.426-428) that connects the people and communities that live, work, and interact.

In summary, based on case of GNP inhabitants this article aims to reveal attitudes toward protection and readiness to involve in the protection of natural resources of GNP inhabitants.

Attitudes as cultural stances and they imply experience and certain firmness of interest and value (Tuan, 1990), but combine both instrumental and intrinsic values of nature for people and despite people (Curry, 2011). Attitudes towards the protection of natural resources need to be also combined with a readiness to involve or involvement in the protection of natural resources, because studies have shown discrepancies between attitudes and behaviour, and attitudes may not overcome barriers to change (Harper, 2017, p.156).

Materials and methods

A series of representative quantitative surveys and focus-group discussions have been carried out within the research project "Ready for change? "Sustainable management of common natural resources"". In this paper particularly, quantitative data from representative telephone-interview survey from GNP inhabitants (N=202) have been analysed to reach the aim of article. Survey have been conducted from a random digit sample of inhabitants and have been gathered by the social research agency Latvijas Fakti in April 2022. Thus, the approach provides representativity of inhabitants in rather small community like GNP region, where general population estimates are around 45 thousand inhabitants living in region. Questions in a survey have been either adapted from other surveys (identity of the territory, belonging to territory) or adjusted from conceptualization for this article.

Two hypothetical interconnections conceptualizing dimensions of actors' contribution and embedded return to actors for the local common good are proposed to test in this article. These dimensions reflect combinations of attitudes and involvement (or readiness to involve) in the protection of natural resources, where actors' contributions to the common good (1st dimension in Table 1) and embedded return to actors from the common good (2nd dimension in Table 1) have been distinguished.

Attitudes towards the protection of natural resources are operationalized by a few dimensions:

1) Attitudes of responsibility of actors for the preservation of natural and cultural heritage values in the place they live (attitudes of responsibility of actors).

Internal consistency for attitudes scale (attitudes of responsibility of actors for the preservation of natural and cultural heritage) to test the homogeneity of the items in this scale (as suggested by Abrami, Cholmsky & Gordon, 2001, p.44) have been measured by Cronbach's Alpha coefficient and Cronbach's Alpha if Item Deleted coefficients.

2) Agreement with statements related to the Nature conservation plan of GNP:

- a. My municipality must be involved in the development of the Nature conservation plan;
- b. Citizens' opinions are taken into account during the development of the Nature conservation plan;
- c. I believe that my municipality ensures the protection of natural resources.

Table 1

Conceptualization and operationalization of attitudes towards and readiness to involve in protection of natural resources

| Dimensions | Conceptualization | Research question |
|------------|---|---|
| 1 | Shared or combined responsibility of actors and readiness to involve or involvement in the protection of natural resources in indexed dimensions | How involvement intensity in various dimensions is related to views on shared responsibility? |
| 2 | View on the representation of interests in Nature conservation plan and embedded readiness to involve or involvement in the protection of natural resources | How a variety of embedded readiness to involve or involvement in the protection of natural resources is related to view on representation? Does civic involvement in environmental activities particularly related to the Nature conservation plan of GNP have an impact on views on representation of people's interests in the deliberation of the Nature conservation plan? |

Source: author's scheme

Readiness to involve or involvement in the protection of natural resources is operationalized by:

- 1) Actual or potential involvement in environmental activities in the place they live (answer scale – would not be ready / would be ready / already involved):
 - a. Travel by non-motorized vehicles as much as possible;
 - b. Sorting all kinds of waste;
 - c. Regularly participate in clean-ups, and nature clean-up activities;
 - d. Donate to organizations that care about the protection of natural resources;
 - e. Get involved in NGO/volunteer work focused on the protection of natural resources of the GNP;
 - f. Participation in a clean-up organized by someone else (binary scale yes/no);
 - g. Participation in clean-up on their initiative (binary scale yes/no).

Outcome: Index of actual or potential involvement in activities. Index has been computed on a scale from -5 to +7, where the sum of answers is computed from types of activities and where "would not be ready" coded by -1, "would be ready" 0, but "already involved" + 1. Binary participation in clean-ups has been additionally summed up.

2) Involvement in civic activities includes involvement in such activities during last year as involvement (operationalized by yes/no): a. in non-governmental organizations; b. in voluntary work; c. in a political party; d. in civic activities (protests, marches, clean-ups, donations to charities, etc.).

Outcome: Index of civic activities, based on the sum of involvement in civic activities, adjusted to outliers (sum ≥ 3).

3) Variables that characterise the identity of GNP territory – agreement or disagreement with the following statements: *I am proud to be a resident of GNP; Life in GNP is better than anywhere else; I want to live most of my life in GNP.*

Outcome: Average identity, based on average rate of identity of GNP territory.

4) Involvement intensity in the nature protection plan of GNP during last year, including such activities as (operationalized by yes/no):

- a. Participated in the informational meeting of the nature protection plan;
- b. Attended the event "Nature with an expert";
- c. Contacted the developers of the GNP nature protection plan;
- d. Proposed proposals to optimize the preservation of natural or landscape values.

Outcome: Index of involvement intensity in nature protection plan of GNP, based on the sum of involvement in activities, adjusted to outliers (sum ≥ 2).

All outcomes can be considered as operationalized involvement intensity in various dimensions. **Embedded readiness** to involve or involvement in the protection of natural resources has been done by hierarchical and two-step cluster analysis (Bickman & Rog, 2009, p.452-453; Uprichard, 2009), where local inhabitants have been grouped by their actual or potential involvement in environmental activities - involvement intensity in various dimensions and age in interval scale.

The range of nonparametric statistics (Spearman rank correlation) (Brase & Brase, 2009) and multidimensional analysis methods, including regression models for ordinal and nominal outcomes (Long, 2015), logistic regression (Best & Wolf, 2015), principal component analysis (Mertler & Vannatta, 2017, p.247-278; Agresti & Finlay, 2009, p.532-536) and cluster analysis (Hair et al., 2014) have been applied in this paper. Ordinal and logistic regression models were applied mainly due to outcome variables (in our case representation of citizens' interests in the Nature conservation plan) is not measured as a continuous or quantitative variable, but in categorical (degrees of agreement in forced Likert type scale) or as discrete variables (agree/disagree with statement).

Research results and discussion for readiness to involve or involvement in protection of natural resources

The highest average rate for responsibility was for personal, state institutions, and local community responsibility (3.7), with slightly lower averages for municipalities' responsibility (3.6) and volunteer or NGO responsibility (3.3). Nonetheless, predominantly high responsibility has been expected from various actors (more than 48% of respondents on each actor's responsibility agrees with that fully), especially personal responsibility that local inhabitants put on themselves (fully agree 72% of respondents).

There is a moderate, but statistically significant association among all actors regarding respondents' attitudes towards their responsibility, ranging from Spearman's rho coefficient 0.29 ($p < .01$) (between state and NGO's) to 0.57 ($p < .01$) (local community and NGO's). Also scale reliability tests suggest that the responsibility of various actors can be treated as one dimension of **shared responsibility**

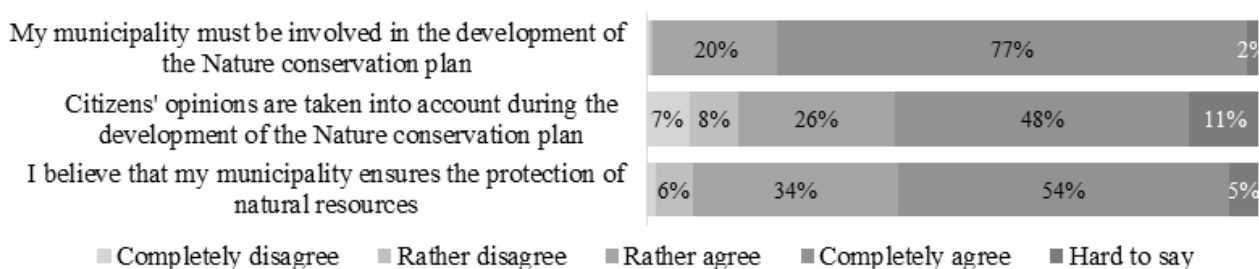
(Cronbach's Alpha coefficient 0.70 and Cronbach's Alpha if Item Deleted coefficients are lower, suggesting that exclusion of any of the variables would improve scale).

Reducing shared responsibility on most influential principal components (applying Principal Component Analysis as a type of explorative factor analysis), we can see that one component describes 46% of solutions, where one dimension of shared responsibility can be extracted. Among the impact of attitude on particular actors' responsibilities, factor loadings for the local community is the highest (0.79), for volunteers, NGO's 0.69, myself 0.67, but formal institutions – the municipality and state institutions – are lower (0.63 and 0.60 respectively).

Due to relatively high correlations among various actors' responsibility assessments, a simple rate of combined responsibility can be calculated by a simple average of answers. Whereas the rate of combined responsibility can be combined as a weighted average using factor loadings from Table 2 as weights. **The rate of shared responsibility and the rate of combined responsibility** has been normalized on a 0 to 100 scale, where 0 means "not responsible at all" for none of the actors, but 100 – "fully responsible" for all of the actors. The highest actual value of the rate of shared responsibility is relatively the highest share of full responsibility, although the sum of answers multiplied by factor loadings in Table 1 cannot reach the maximum as it is in the rate of combined responsibility. Additionally, for both scales, the lower bound has not been normalized to 0 as there are no respondents, which have an absolute feeling of "not responsible at all" towards most of the actors.

As both rates of responsibilities have the same distribution of values (identical covariations), we can use the rate that has the more nuanced distribution of particular responsibility assessments (that is higher standard deviation). The rate of shared responsibility can be considered as more nuanced measure of attitudes due to measures of value distribution.

Local inhabitants predominantly agree with the municipality's obligation to be involved in the development of the Nature conservation plan. Most local inhabitants also agree on the representation of opinions during the development of the Nature conservation plan (83% of exact answers) and agree that the municipality ensures the conservation of natural resources (even 92% of exact answers) (Figure 1).



Source: RfC survey data. For further figures and tables – inhabitants of GNP. Weighted data. Base: n=202 (exact answers depicted, year 2022)

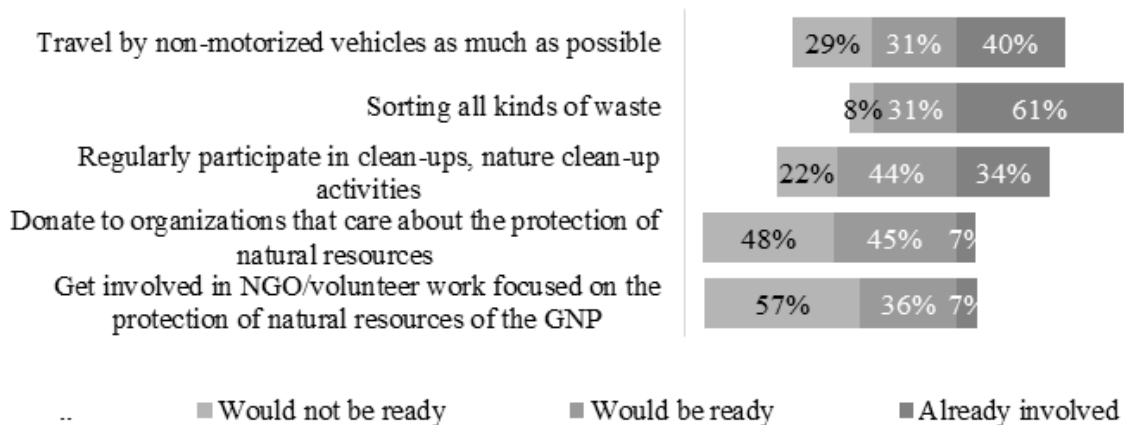
Fig. 1. Agreement with statements related to the Nature conservation plan of GNP

We can conclude that there is already broad agreement on the representation of interests of local inhabitants in the Nature conservation plan and continue with testing factors that have a significant impact on the agreement or disagreement with the statement "Citizens' opinions are taken into account during the development of the Nature conservation plan".

There is an even higher level of reliance on the municipality's role in the protection of natural resources (92% of exact answers, with a majority of those, who completely agree with the statement).

Although the majority of GNP inhabitants claim that they are already sorting waste (61%) and many inhabitants claim that they travel by non-motorized vehicles as much as possible (40%) and regularly

participate in clean-ups, nature clean-up activities (34%), only 7% are involved in NGO's or donate to protection of natural resources. More than 1/3 of inhabitants, who are not already involved, would be ready to involve, particularly – 45% would be ready to donate (Figure 2).



Source: RfC survey data, 2022

Fig. 2. Actual or potential involvement in environmental activities

The structure of actual or potential involvement in environmental activities suggests that status "already involved" rather involves more than one type of activity, the same applies to readiness to involve and unreadiness to involve, where unreadiness to involve applies to few of activities.

Due to the nature of the dataset and what is already known about the inter-structure of the cases themselves (Uprichard, 2009, p.136-137) index of actual or potential **involvement in environmental activities** is computed from actual or potential involvement in environmental activities, where mean value is 0.64 with rather high standard deviation (2.27) in the scale from -5 to +7 (see the methodology of computing the index). The average value in the index of **civic activities** is 0.99, where 34% of respondents have not participated in any of them during last year, but 42% - in 1 of 4. **Average identity** for GNP territory – very high – 3.43 on a scale from 1 to 4. The index of **involvement intensity in the nature protection plan** of GNP is rather low as involvement in four separate activities has been no higher than 10%, but combined – 19% of inhabitants took part in at least one of the four activities (see the methodology of computing the index).

We can see involvement intensity in various dimensions and try to answer to 1st research question: *how involvement intensity in various dimensions is related to views on shared responsibility?*

One way to answer is by applying a linear regression model. The parameters of the linear regression model suggest that the link is not linear. Only an index of actual or potential involvement in environmental activities increases the sense of shared responsibility or combined responsibility. For both models, they are statistically significant, but with low R squared values, thus beta coefficients for the exact impact are not important. Intercepts (when independent variables are 0) are already 76 of 100 for both types of responsibility.

Another way to answer is to apply Pearson's' correlation as variables are measured in interval scales. Index of actual or potential involvement in environmental activities and average identity correlate with views on shared and combined responsibilities. High actual involvement is weakly related to high shared responsibility. Also, high agreement with statements for locally embedded identity is related to high shared responsibility (Table 2).

We can conclude involvement intensity in various dimensions of nature protection, environmental activities, and civic engagement does not significantly increase the already high sense of shared

responsibility. At the same time, high personal involvement in environmental activities in everyday life and a sense of belonging to the place reflect higher expectations for responsibilities regarding nature protection.

Table 2

Involvement intensity and rates of responsibilities

| | | Index of actual or potential involvement in environmental activities | Index of civic activities | Average identity | Index of involvement intensity in nature protection plan of GNP |
|--|---------------------|---|----------------------------------|-------------------------|--|
| Rate of combined responsibility | Pearson Correlation | .242** | .000 | .184* | .092 |
| | N | 194 | 194 | 191 | 194 |
| Rate of shared responsibility | Pearson Correlation | .243** | .001 | .178* | .094 |
| | N | 194 | 194 | 191 | 194 |
| ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed). | | | | | |

Source: RfC survey data, 2022

At first embedded readiness to involve have been clustered to answer to 2nd research question in the article - - *how the variety of embedded readiness to involve or involvement in the protection of natural resources is related to the view on representation?*

Similar solutions have been acquired, applying hierarchical and two-step cluster analysis. Log-likelihood method for variables has been applied in two-step cluster analysis, but the Ward method by squared Euclidean distance measure for standardized variables by z-scores has been applied in hierarchical cluster analysis. 84% of cluster solutions are overlapping (the same cluster membership), thus it is possible to choose those solutions, where a more distinct description is apparent. The decision was for the results from hierarchical cluster analysis, where four cluster solutions for embedded readiness to involve or involvement in the protection of natural resources can be extracted (Table 3). Four clusters form two distinct clusters, where 1st and 3rd clusters combine members with all rates below average – actual or potential involvement in environmental activities, civic activities, the identity of place and age as well, but 2nd and 4th – members with rates above average. We can call members of 1st cluster less active local inhabitants, but 2nd – more active local inhabitants.

Table 3

Four cluster solution for embedded readiness to involve or involvement in protection of natural resources

| | Cluster name | Detailed description of cluster profiles | N | % of respondents |
|----------|---|--|----------|-------------------------|
| 1 | Younger civically inactive with solid local identity | Civic inactive, young age, medium high identity, average environmental activities (wider range) | 69 | 35% |
| 2 | Older with high local identity and moderate civic and environmental involvement | Rather inactive, old age, high identity, medium environmental activities (consistently few) | 72 | 36% |
| 3 | Civically rather active with lower local identity and environmental involvement | Rather active, average age (wider range), low identity (very wide range), below average environmental activities | 32 | 16% |
| 4 | Civically active environmental localists | Civic active, average age, high identity (close range), very high environmental activities | 25 | 13% |

Source: RfC survey data, 2022

Nonparametric tests such as Mann–Whitney U test can be applied to answer 2nd research question in the article.

More active local inhabitants are more demanding for the involvement of local municipality regarding the development of the Nature conservation plan (statistically higher agreement with the statement "My municipality must be involved in the development of the Nature conservation plan", moderate effect $r = -0.17$). But there is no statistically significant correlation between the activities of local inhabitants (more active or less active) and agreement with statements about the representation of interests. Other factors have an impact on the representation of interests in the case of GNP inhabitants. Neither there are statistically significant correlations among GNP inhabitants in the four cluster solution.

We can also analyse does civic involvement in environmental activities particularly related to the Nature conservation plan of GNP has an impact on views on the representation of people's interests in the deliberation of the Nature conservation plan.

Ordinal regression results suggest that neither the fact nor the amount of civic involvement in environmental activities related to the Nature conservation plan of GNP (from 0 – none to all 4 activities) does not increase already broad agreement on the representation of interests of local inhabitants in the Nature conservation plan. No other involvement status of nature protection activities in GNP increases the level of agreement on the representation of interests of local inhabitants in the Nature conservation plan. Involvement in civic activities also does not increase this level.

Logistic regression results of the impact on the status of with statement on the representation of interests of local inhabitants in the Nature conservation plan shows that it is not affected by the fact of widespread involvement in clean-ups or the fact of civic involvement in environmental activities related to Nature conservation plan of GNP. Involvement in civic activities also is not related to the status of the agreement with that statement.

Conclusions, proposals, recommendations

The protection of natural resources in a certain way (conservation, preservation, designing protected areas, etc.) is crucial for social and economic ecosystems. Nature conservation principles and practices could be incorporated into everyday activities, living with adjusting and emergent ecosystems. Nature conservation as a precondition for social and economic ecosystems implies certain local and territorial embeddedness, particularly in resource-dependent rural communities or communities living in a certain regime of natural resource protection. That is the case of this article - inhabitants of GNP and their attitudes towards and involvement in the protection of natural resources.

Local communities' perceptions of natural resources and resource management regimes are also important features of conservation planning. Those perceptions also include views on the responsibility of various actors for the natural world in certain places, particularly in GNP.

Actors' contribution to the local common good from one side and embedded return to actors for the local common good from the other side reflect combinations of attitudes and involvement (or readiness to involve) in the protection of natural resources.

Data from a representative quantitative survey allows us to conclude and propose a certain thesis:

- inhabitants of GNP have high expected responsibility from various actors for the preservation of natural and cultural heritage values;
- those expectations of responsibility from various actors for the preservation of natural and cultural heritage values also can be combined and described as a shared responsibility;

- agreement with a representation of the interests of local inhabitants in the Nature conservation plan regardless of civic engagement is already widespread;
- civic involvement in environmental activities related to the Nature conservation plan of GNP does not have an impact on supporting the representation of the interests of local inhabitants in the Nature conservation plan.

Further, the concept of shared responsibility can be linked also to involvement intensity in various dimensions, which allows us to conclude that:

- actual or potential involvement in environmental activities varies depending on a particular activity, but combined as an index allows one to conclude that current involvement in one of the activities is related to involvement in another;
- the average identity for GNP territory is high - people are proud to be residents, agree that life in GNP is better, and want to live there.

Involvement intensity in various dimensions can also be conceptualized as embedded readiness to involve or involvement itself in the protection of natural resources. Cluster analysis offers four groups of embedded involvement of GNP inhabitants/

Answering the research questions, the authors came to the following conclusions.

- 1) High personal involvement in environmental activities in everyday life and a sense of belonging to the place reflect higher expectations for responsibilities regarding nature protection. But in the case of GNP inhabitants, there is also a high sense of shared responsibility disregarding the involvement intensity in various dimensions of nature protection.
- 2) More active local inhabitants are more demanding of the involvement of local municipality regarding the development of the Nature conservation plan and we can say that there is a need for further studies for other factors that have an impact on the representation of interests in certain local communities.

Acknowledgements

This research is funded by the Latvian Council of Science, project "Ready for change? Sustainable management of common natural resources (RfC)", project No. Izp-2019/1-0319.

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