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## Methodical issues of the ethnopolitical and ethnosocial processes' empirical researches in the regions of the Russian Arctic \*

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**Abstract.** The article considers the methodic aspects of empirical ethnopolitical and ethno-social research in the regions of the modern Russia. It is demonstrated that the tools for quantitative sociological research of interethnic and interdenominational relations should be adapted for large-scale cultural-historical groups of the regions. E.g., in the case of the Russian Arctic, the indigenous small-numbered peoples are an important subject of the ethnic policy, which requires the use of additional indicators that represent their cultural development and participation in ethnopolitical relations. The toolkit of empirical cross-regional studies usually includes the measurement of individual variables. The article proposes a more complex and systematic methodology based on the idea of constructing integral indices, aggregating the values of a set of related indicators. To analyze the dynamics of the ethnic components of the region's social system, a set of categories is proposed, through which it is possible to describe the configuration of the main ethnic actors and the state of political and cultural institutions. The categories were operationalized for the political, societal and socio-cultural subsystems of the region, resulting in a system of indicators for monitoring ethnopolitical and ethno-social processes. The article shows an example of the procedure for constructing an integral index of the ethnic policy' quality (nationalities policy index) based on indicators proposed by the authors for measuring ethnopolitical processes in the region. In the end of the paper, the major issues for the measuring the data unification got with the use of different methods from qualitatively different sources is set.

**Keywords:** *ethnopolitical processes, ethno-social processes, integral indices in sociology, ethnocultural diversity, interethnic consolidation, ethnic policy, the Russian Arctic.*

### Introduction

Issues of ethno-political regulation are traditionally one of the most difficult in any modern state, which is multi-ethnic, and therefore multicultural. Through political and scientific doctrines, comprehensive research [1, K. Zaikov, M. Zadorin, A. Tamitskiy; 2, Zaikov K.S., Zadorin M.Y., Tamitskiy A.M.; 3, Karelin V.A., Zaikov K.S.; 4, Goldin V.I., Zaikov K.S., Tamitskiy A.M.; 5, Goldin V.I., Zaikov K.S., Tamitskiy A.M.; 6, Zaikov, K.S., Tamitskiy A.M.] attempts to elaborate "models" to "automate" the process of making management decisions to maintain the balance of the system. Monitoring is undoubtedly one of the most important tools in this spectrum of ethno-social processes.

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To date, empirical research on socio-political processes in Russian regions has become a standard tool for the scientific support of the authorities in managing public attitudes and social relations, as well as forecasting and preventing the risks of conflict interaction. The geography of research of Russian sociologists stretches from the North Caucasus to the Volga region and Siberia, and themes — from evaluation of inter-ethnic relations to a broader range of issues related to the dynamics of social tension [7, Astvatsaturova M.A.; 8, Bogatova O.A., Kargin A.I.; 9, Poddubko V.V.; 10, Stepanov E.I., Arsentiev V.A., Golovin Yu.A., Kukonkov P.I.].

Regarding the sphere of ethno-political and ethno-social processes (including components reflecting the content of state policy), experts of the Federal Agency for nationalities specially developed methodological tools for monitoring interethnic and interfaith relations, consisting of three modules [11, Khaykin S.R., Berezhkova S.B., p. 98]:

- mass representative surveys in all regions of the Russian Federation based on a unified system of indicators;
- monographic studies in the "regions of risk";
- panel surveys of experts.

This kind of uniform all-Russian system of monitoring was certainly an important step in the coordination of expert efforts for cross-regional comparison of the dynamics of the processes of inter-ethnic interaction. However, according to experts, the set of indicators used needs to be supplemented, including considering contextual parameters reflecting the specifics of different regions [12, Drobizheva L.M.]. This remark corresponds to the realities in which the Russian society develops, namely the significant geographical, demographic, socio-economic and ethno-cultural heterogeneity of the country with trends towards unification of the system of public administration and regional legislation.

Thus, it seems that the unified all-Russian system of monitoring interethnic and interfaith relations needs additional methodological developments that consider the specifics of individual groups of Russian regions as a kind of cultural and historical integrity. Among these groups of regions belong to the subjects of the Russian Federation, which together form the Russian Arctic. The purpose of this article is to propose several methodological solutions and developments to improve the analytical potential of empirical research in the field of interethnic relations.

### ***Theoretical background of the descriptive modeling of the ethnic-political and ethnic-cultural processes on the territories of the RF Arctic Zone***

To date, there is a sufficient number of both regional and generalizing studies of social processes in the territories of the Arctic zone of the Russian Federation (further — AZ), which was recorded as inter-ethnic relations, including such components as the levels of ethnic tension and mutual tolerance of the ethnic majority and minorities, old people and immigrants [13, Zmeeva O.V., Razumov I.A.; 14, Zmeeva O.V.; 15, Malachova E.G., Osipova O.V.; 16, Maksimov A.M., Tamitskiy A.M.; 17, Oparin D.A.; 18, Tishkov V.A.; 19, Novikova N., 20, Kharlampieva N. K.].

In the part where these studies touch upon ethno-social and closely related ethno-political problems, it is possible to find both a qualitative description of the situation and quantitative measurements of public attitudes and assessments. However, in the latter case, all these works are related to the use of mainly individual indicators. That is why it seems necessary to address the construction of integrated indices that would aggregate the values of the complex of related variables and thus in a more generalized form would Express the state of certain aspects of the life of the regional community. The use of integral indices is more convenient from the point of view of further analytical procedures during empirical research, as well as conceptual understanding of its results. The unity of the principles of building integrated indices for a group of regions belonging to the same cultural and historical integrity, gives a reliable tool for cross-regional comparisons.

The description of the procedures for the development of indicators and calculation based on their aggregated indicators should be preceded by theoretical reasoning about what is behind the concepts of ethno-political and ethno-social processes and relations formed by the course of these processes. The authors proceed from the idea that these processes should be interpreted as functions of the dynamics of structural changes in the social system of the region. The latter is differentiated into functionally interdependent subsystems allocated based on classical models of structural functionalism T. Parsons: social-reproduction model ("socio-cultural subsystem", note. authors), economic and political [21, Parsons T., pp. 23–32]. Typologically uniform sets of elements of these subsystems, the most significant for their reproduction and functioning, are allocated based on developments of neoinstitutional approach [22, North D.K., Wallis J., Weingast B., pp. 56–63]. Three types of elements deserve attention: resources, actors and institutions.

Fig. 1 presents the descriptive model of the the general structure and connections between elements / subsystems of the social system of the region. The social subsystem is a set of stable associations between individuals (social groups) and the structure of relations between them. The socio-cultural subsystem is represented by the values and normative patterns of behavior, as well as cultural institutions that ensure their reproduction. The political subsystem consists of institutions that provide goal-setting and goal-setting for the social system, as well as its adaptation to changing environmental conditions. Finally, the economic subsystem includes institutionalized practices for the production and distribution of goods and services, as well as mechanisms of control (regulation) of these practices [23, Parsons T., pp. 45–54].

"Resources" means different types of capital in form and origin (and, as a rule, mutually convertible), that is, means, the amount of which determines the chances of winning in the competition for power (in the broad sense) in a sphere of human relations [24, Bourdieu P., pp. 15–17].

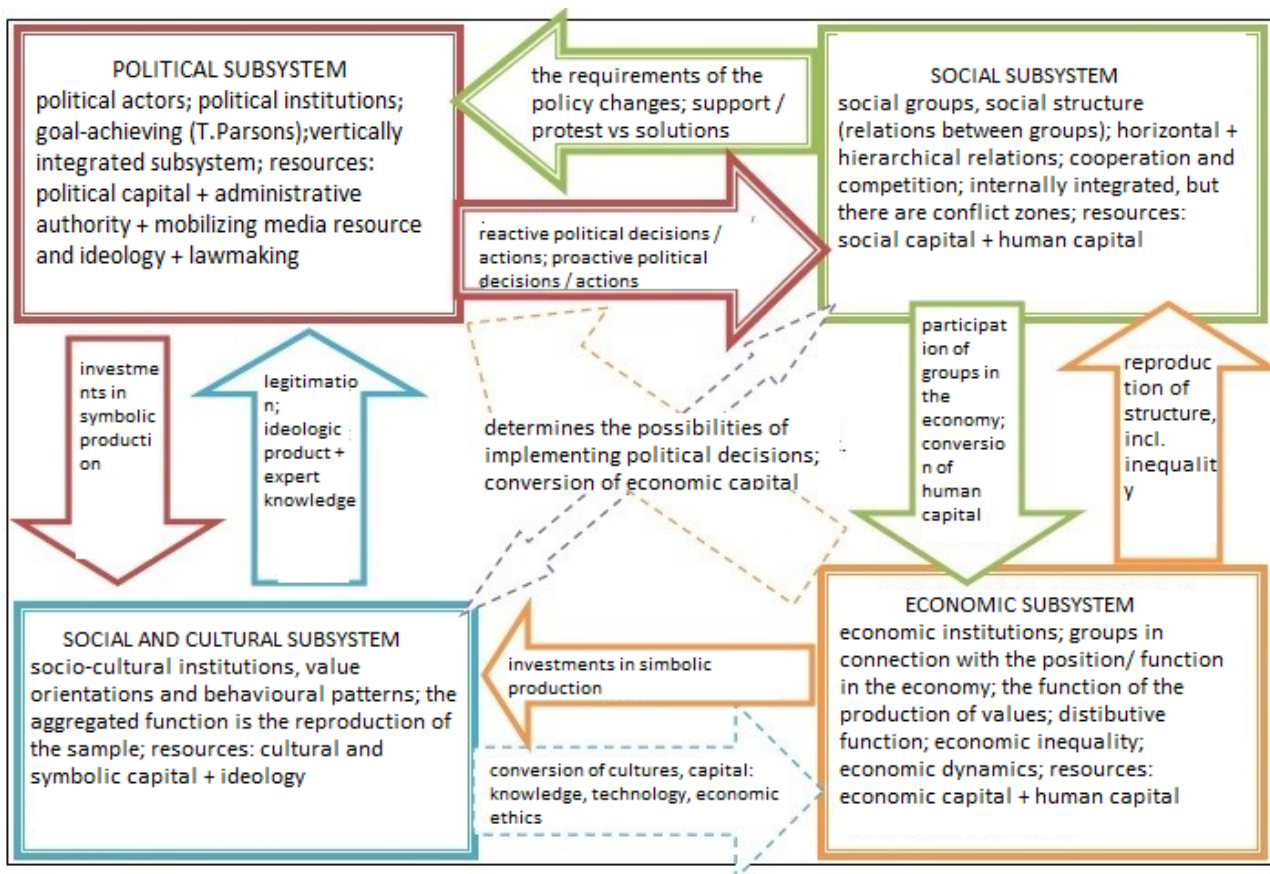


Fig. 1. Block diagram of the descriptive model of the social system of the region

"Institutions" are considered in this case in the generally accepted meaning of the term as standardized procedures of social interactions, ensuring stable and predictable reproduction of the processes of distribution of different types of capital (resources).

"Actors" means individuals, social groups or organizations that can mobilize resources to solve problems of achieving or maintaining dominant positions in a field of specific social relations (economic, cultural production, political in the narrow sense of the word). In other words, the actors carry out purposeful activities, in the process of which they achieve the advantages of control (power) in any subsystem by converting one type of capital into another (for example, the exchange of economic resources, cultural or symbolic capital for political influence).

Despite the importance of the analysis of the economic subsystem of the region in the context of the increase / decrease of ethnic tensions in the multiethnic environment [25, Walter M., pp. 71–74, 132; 26, Mukomel V.I., p. 40], from our point of view, the analysis of the dynamics of interethnic relations, cultural development of ethnic communities and the effectiveness of the state national policy requires only common economic characteristics of the study region or territory. This position is explained by the fact that we could not find in the scientific literature [27, Drobizheva L.M.; 28, Brednikova O., Pachenkov O.; 29, Kuznetsov I., Mukomel V.; 30, Ryazantsev S.V.; 31, Firsov E.Yu.], devoted to the economic situation of the peoples of Russia, empirical studies that would reliably record the correlation between ethnicity (or rather, ethnic identity) and material status. That is, the boundaries within the regional community, which are based on stratification based on inequality in income and ownership, do not coincide with ethnic

boundaries (the division of the population into groups with different ethnic identities). It is reasonable to assume that the General economic conditions prevailing in a region will form a similar structure of economic inequality for all ethnic communities living in the territory of that region<sup>1</sup>. Rare exceptions may be associated either with the historically conditioned fact of compact residence of a certain ethnic group in the territory unfavorable for economic activity or being in a state of economic stagnation, or with the preferences of a significant part of the ethnic community to engage in traditional (less productive and profitable) forms of economic management [32, Bugulov M.; 33, Lashov B.V.; 34, Sirina A.], or with a special cultural and everyday way, which we can observe in some groups of Roma.

In connection with the above, we believe that the characteristics of the economic subsystem of the subject of the Russian Federation act as a "background factor", which can significantly affect the overall social tension in the region, but while maintaining the relative constancy of economic characteristics (stable "depression" or, conversely, sustainable economic growth), the dynamics of interethnic relations and ethno-cultural development to a much greater extent depends on the parameters of other subsystems. If, in a region, ethnic entrepreneurship or traditional environmental management play a significant role in the life of the local community, then to date techniques have been developed to measure individual characteristics of these phenomena in connection with the ethno-social situation in the region [35, Sadova A.N., Belozerova M.V.]. In relation to the regions of the Russian Arctic, this situation can be useful in the case of the study of places of traditional residence and traditional economic activities of indigenous peoples of the North, Siberia and the Far East. As for the urban areas of the Russian Arctic, where the bulk of the population of the Arctic regions lives, different ethnic minorities are either part of the old-age population or seasonal migrant workers. The latter are poorly integrated into the life of local communities, and their social interactions with the old-age population, as a rule, are limited to the sphere of labor relations. In this regard, ethnic groups of migrant workers in the Arctic can hardly be reasonably considered as collective actors influencing the main parameters of the social system of the region (even though they, of course, can be a significant indirect factor of inter-ethnic tension). Thus, the issue of methodological aspects of building integrated indices reflecting the state of social, socio-cultural and political subsystems of the Arctic regions will be considered.

#### ***Interpretation and operationalization of the main categories of description ethnopolitical and ethno-social processes***

In the previous section, an interpretation of the key types of elements ensuring the functioning of each of the subsystems of the social system of the region is given. In this section,

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<sup>1</sup> Of course, this is not about labor migrants occupying certain niches in the structure of the regional labor market, since in most cases they are not integrated into the social system of the region. Equally the facts of ethnically tinted branch specialization in the sphere of small and medium business are also taken into account, since the stratum of entrepreneurs from among ethnic minorities in no way represents the socio-economic status of the corresponding ethnic community.

the substantive differences between types of actors, capitals and institutions are specified in the framework of the three subsystems outlined above, and it is also proposed to operationalize the concepts used by introducing several latent variables and their corresponding indicators.

Let's start with the specification of the main categories in the context of the functioning of the political subsystem of the region. We interpret the political actor as a specific person or organization that has the potential to legitimately influence the process of making and implementing meaningful decisions in the public sphere. Among the political actors involved in the adoption and implementation of decisions on the regulation of inter-ethnic relations in the Russian Federation (in other words, directly involved in the implementation of the regional national policy), first, include regional government bodies, local self-government bodies, system officials state and municipal government, advisory and advisory bodies, political parties and socio-political movements. The specific composition and number of actors, the ratio of the volumes of their *political capital* determine the value of the variable, which can be conditionally designated as the level of pluralism of the national policy. At the same time, the size of the *political capital* of each actor (more precisely, its average disposable volume at a certain time interval) is determined, first, by the official status of this actor, by the totality of its official powers, the current level of legitimacy and the opportunities for mobilizing public support. *Political institutions* as normatively fixed, organizationally designed and regularly reproducible ways of managing social processes [36, Abramov A., p. 55] it is proposed to be operationalized by means of two variables - the degree of formalization of the procedures for managing social processes<sup>2</sup> and the degree of publicity of organizational forms (measures) that mediate the managerial process. The first variable can be recorded through the assessment of the quality of regulatory and legal support for management activities, and the second — through the total number of events for a certain period and the average number of their participants.

Within the societal subsystem of the region, if the subject of research interest is limited only by ethno-social processes, very specific types of actors operate that have a common property - ethnic identity as the basis for constructing a group, but differing in the number, development of social networks, status (as an intersubjective notion of place in the hierarchy, and official in some cases), the representation of interests in power structures and other parameters. The authors propose to distinguish three main types of such actors: a dominant ethnic group, an ethnic minority, an indigenous minority (in the case of the Russian Arctic, the indigenous people).

*Dominant* ethnos is a concept used as an analogue of the out-of-use term "titular nation". The dominant is understood to be an ethnos that predominates within a region over other ethnic communities in terms of political and cultural capital [37, Tishkov V.A., Shabayev Yu.P., pp. 144–145]. At the same time, the numerical superiority of representatives of one or another ethnic community, of course, does not guarantee either political or cultural domination. Dominant ethnos quite often manifests its political dominance symbolically using the ethnonym as the

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<sup>2</sup> In this case – management of interethnic relations.

official name of the region (country), and cultural - through the appropriation of the national language as a state language (that is, the main or only language of education, record keeping and state mass media).

Following the Additional Protocol on the Rights of Minorities to the European Convention on Human Rights, the ethnic minority is understood by authors to be an ethnically homogeneous group, politically, culturally and, as a rule, not numerically dominant in its territory, self-organizing to protect its linguistic, cultural and religious identity and transfer them to future generations. An *ethnic minority* can be both an autochthonous (indigenous) and an alien population. At the same time, it seeks to preserve the specific characteristics of the group, since they allow maintaining relative autonomy from the state due to a certain cultural isolationism, as well as solving local issues within the community based on common values and interests<sup>3</sup>.

As an actor, an ethnic minority can be organizationally organized in various ways: through the formation of formal structures for representation of ethnic interests (national-cultural autonomy, association, etc.) or the maintenance of informal networks of social contacts and mutual support (diaspora).

Indigenous peoples in the context of studying the dynamics of ethnopolitical and ethno-social processes in the Russian Arctic, due to the peculiarities of Russian legislation, should be singled out as a special category of actors. The "indigenous minorities" of the North, Siberia and the Far East of the Russian Federation are understood to be peoples living in areas of the North, Siberia and the Far East in the territories of the traditional resettlement of their ancestors, preserving the traditional way of life, management and crafts, numbering less than 50 thousand people and aware self-reliant ethnic communities<sup>4</sup>.

As in the case of ethnic minorities, the indigenous people act like collective actors through various associations - associations and communities.

The main resource used to reproduce the unity of the above actors and ensure solidarity and mutual support within ethnic communities is the so-called social capital. It is a collection of real or potential resources associated with the possession of a stable network of institutionalized relationships of mutual acquaintance and recognition [38, Bourdieu P., p. 247]. In other words, social capital is a category that describes the individual's involvement in various social and communication networks, the possession and use of his social connections. Indicators of the available volume of social capital can serve as a level of social confidence and social distance. In addition, the communicative competence of individuals - the practical skills of mastering a language

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<sup>3</sup> Recommendation 1201 (1993), Additional protocol on the rights of minorities to the European Convention on Human Rights. URL: <http://www.assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=15235&lang=en> (Accessed: 28 December 2017).

<sup>4</sup> Federalnyi zakon ot 20 iulia 2000 g. № 104-FZ "Ob obshchikh printsipakh organizatsii obshchin korennykh malochislennykh narodov Severa, Sibiri i Dalnego Vostoka Rossiiskoi Federatsii". [Federal law No. 104-FZ of 20 July 2000 "On general principles of organization of communities of indigenous peoples of the North, Siberia and the Far East of the Russian Federation"]. URL: <http://docs.cntd.ru/document/901765288> (Accessed: 28 December 2017). [In Russian]

as a dominant ethnic group, and (if it is a question of an ethnic minority or an indigenous small people) its own ethnic community, is an important factor in increasing the volume of social capital in a multiethnic environment. In the case of fluency in several languages, the network of social contacts is obviously expanding, which, even with a pronounced heterogeneity in the ethnic composition of the population of the region, increases the integration of the societal subsystem and the level of interethnic consolidation. In the case of a mass predominance of the language of its ethnic community with a poor knowledge of the language of the dominant ethnos (including the state language), a certain level of its communicative isolation will be preserved.

Ethnic (non) homogeneity, the level of self-organization of individual ethnic groups, social trust and social distance between the main ethnic groups, the level of language competencies, as well as intersubjective assessments of inter-ethnic tensions, provide a comprehensive description of the ethno-social components of the societal subsystem of the region.

As for the sociocultural subsystem, in terms of the composition of actors, substantial intersections with the societal subsystem are observed within its framework: the same public associations articulating the interests and opinions of certain ethnic communities in the public space act as key actors in the field of cultural activity. Along with them, specialized institutions (educational, cultural, leisure, museum and other organizations) act as actors. The institutional component is represented not only by the legal and regulatory framework of cultural policy, but also by cultural events, including national holidays and religious rituals.

In connection with the latter, it is necessary to single out a special type of actors, which can be designated by the term "confessional commonality". By "confessional commonality" we mean an organized group of believers united by adherence to a special doctrine within a religious tradition. At the same time, ethnic and confessional borders do not always coincide, and within the confessional community there can be a mixed ethnic composition. At the same time, one cannot ignore the role of the activity of confessional associations in the construction, maintenance and mobilization of ethnic identity, which, in the context of the subject matter of the stated research interest, makes the confessional composition of the population of the region meaningful.

In the socio-cultural subsystem, the dominance of certain actors is ensured by the growth of *cultural capital*. According to P. Bourdieu, it exists in three forms: incorporated (the embedded state), objective and institutionalized. In the first case, we are talking about acquired "long dispositions of mind and body", peculiar cultural habits, signaling the features of the early stage of socialization of individuals. In a specific cultural context, these features are interpreted as a sign of the status of the family in which the socialization of the individual, as they indicate the quality, "correctness" of education. *An objective form of capital* is a combination of cultural goods (books, works of art, access to services of cultural institutions) possessed by an individual. Their volume and qualitative composition demonstrate not only the degree of readiness of a person to convert economic benefits into cultural, but also the availability of skills of prestigious cultural consumption. Finally, in its institutionalized form, cultural capital is represented by official



documents on academic qualifications (certificates fixing the level of education, availability of academic degrees and academic titles, etc.) [38, Bourdieu P., pp. 243–247].

Regarding inter-ethnic relations, the uneven distribution of cultural capital reflects the real inequality in the opportunities of representatives of different ethnic communities to master the norms of dominant culture, acquire the skills of prestigious cultural consumption (and the General tendency to such consumption), education and professional competencies. These constraints themselves are not currently institutionalized. However, the ethno-cultural specificity of the traditions of upbringing, different attitudes of different peoples to the value of education and career, differences in language competencies in conditions where prestigious education requires knowledge of non — native language—all this creates prerequisites for the preservation of the tendency to uneven distribution of cultural capital between individual ethnic groups. In these circumstances, interest is the analysis of the activities of the intellectuals from among ethnic minorities and activists of ethno-cultural organizations in the redefinition of the status of non-dominant ethnic cultures — activities that Bourdieu describes in the categories of the struggle for symbolic domination [24, Bourdieu P., pp. 78–81]. Such activities may result in an increase in the number of educational establishments teaching languages of certain ethnic minorities (e.g. indigenous peoples) or in teaching in these languages alongside with the state language.; increased support from regional and local cultural institutions for the preservation of national cultural traditions; the emergence of mass media, including those financed from the budget, in the languages of major ethnic groups living in a particular subject of the Russian Federation. All the above can be used as indicators of the state of the ethnic component of the socio-cultural subsystem of the region.

Summing up this section, it is logical to present the operationalization of the main categories of analysis of ethno-political and ethno-social processes in the regions of the Russian Arctic in the form of a summary table.

*Table 1*

*Operationalization of categories of analysis of ethno-political and ethno-social processes in the regions of the Russian Arctic*

<b>Analysis category</b>	<b>Latent variable</b>	<b>Indicator</b>
Political actor	Pluralism level of the national policy	presence / absence of the relevant executive authorities
		presence / absence of specialized committees in the Legislative Assembly of the RF subject
		presence / absence of core functions of agencies in local administrations
		presence / absence of party organizations, whose programs state ethno-cultural issues
		presence / absence of socio-political movements of ethno-cultural orientation
Political institute	Level of publicity of the national policy	number of public actions of ethnic subjects and the average number of their participants: a) protest, b) pro-government
		presence / absence of advisory and advisory bodies on national policy issues

		share of media materials on ethnopolitical issues
	Formalization level of the national policy	quality of the regulatory framework of the national policy
Political capital	Political capital concentration	the amount of rights and powers fixed in the legislation (for each type of actors)
		the size of staff resources of regional authorities and local authorities
		number of active members of party organizations, whose programs state ethno-cultural problems
		number of active participants in socio-political movements of ethnocultural orientation
Dominant ethnic group	Organization level of the dominant ethnic group <sup>5</sup>	number of public associations of the dominant ethnic group
		level of representation of the dominant ethnos in legislative bodies and local self-government
Ethnic minority	Organization level of the ethnic minority	number and composition of public associations of ethnic minorities
		level of representation of ethnic minorities in legislative bodies and local self-government
		presence / absence of regional centers of intercultural communication <sup>6</sup>
Indigenous small-numbered people	Organization level of the indigenous small-numbered people	number and composition of public associations of indigenous small peoples
		level of representation of indigenous peoples in legislative bodies and local self-government
Social capital	Density of social ties	level of interpersonal trust
		social distance
Confession	Organization level of the confessions	number and composition of religious associations in the region
Cultural capital	The level of ethno-confessional diversification in education and culture	presence / absence of schools with teaching in the language of the dominant ethnic group <sup>7</sup>
		the share of schools teaching ethnic minority language
		the share of schools with the teaching of indigenous languages
		degree of diversity <sup>8</sup> of ethnic / confessional holidays celebrated in the region publicly
		degree of diversity of cultural events of ethnic / confessional themes organized jointly with authorities

### *Methodological issues of the sociological monitoring studies of interethnic relations*

The main methodological difficulties that arise when developing tools for monitoring ethnopolitical and ethno-social processes in the region can be divided into two types. The first ones are related to the method of constructing integral indices, the latter - with the search for relevant data sources, methods of their collection and quantitative processing.

<sup>5</sup> Of interest is the measurement of this variable in such subjects of the federation as republics, where the dominant ethnic groups are represented by non-Russian peoples. This circumstance gives rise to specific differences between the content of cultural policy (including the language policy and state-confessional relations) at the federal and republican levels.

<sup>6</sup> E.g., clubs of "international friendship", etc.

<sup>7</sup> In case when the dominant ethnos is not represented by Russians, and therefore, its language is not the national one.

<sup>8</sup> The value of the indicator is determined by expert assessments. The high value of the indicator will be if all the most numerous ethnic and confessional groups could regularly celebrate their national and religious holidays.

Turning to the problem of constructing integral indices, it is important to note, firstly, the need to solve the problem of determining the boundaries of the domain, which each specific index would be able to characterize. Following the logic of theoretical analysis described above, it is intended to construct a separate index for assessing the state of each of the subsystems of the social system of the region considered in the previous section. Thus, to monitor the dynamics of the ethno-political component of the political subsystem, a nationality policy index (or p-index) can be proposed; ethnic aspects of the functioning of the societal subsystem are proposed to be characterized by an ethnic consolidation index (or c-index); the socio-cultural sphere can be reflected by constructing an index of ethnocultural diversity (ethnic cultural diversity index, or d-index).

Each index for its construction requires an optimal set of variables and corresponding indicators: it should allow the most complete and complex capture of the parameters of each of the three subsystems of the social system of the region that interests us, but do not contain redundant indicators, that is, only the key factors of the studied processes.

The above operationalization of the basic concepts of theoretical analysis basically allows us to identify key variables. However, to achieve a more comprehensive result, additional indicators or modifications of previously proposed ones may be required. So, to calculate the index of interethnic consolidation, in addition to the indicators allocated for measuring the level of organization of various types of actors and the density of social networks, it is certainly necessary to consider the level of heterogeneity of ethno-confessional composition<sup>9</sup>, as well as the level of language competencies of members of a multi-ethnic community reflecting the degree of language assimilation<sup>10</sup>. When calculating the index of the quality of the national policy, along with indicators of the level of ethno-confessional diversification in education and the cultural sphere, it is necessary to introduce an indicator of the presence / absence of regional legislation in the field of support of ethno-cultural and confessional diversity, as well as an indicator of the level of reflection in events and phenomena of an ethnocultural nature.

Much greater complexity in comparison with the formation of a system of indicators is the solution of the problem of bringing them to a single measurement system. Ensuring the uniformity of measurement procedures facilitates the calculation of the values of integral indices, since in this case they can be calculated as the sum of the weighted average values of all indicators used. In addition, this will ensure the validity of the toolkit for cross-regional comparisons since qualitative differences in regions can be quantified in a single measurement system. However, the obvious

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<sup>9</sup> The value is calculated as the product of the variation coefficients for the two indicators - ethnic heterogeneity (based on the data of the All-Russian censuses) and confessional heterogeneity (based on the data of representative surveys considering the sampling error).

<sup>10</sup> The ratio of the proportion of those who know the state language or the language of the dominant ethnic group to the proportion of those who speak the language of their ethnic group - ethnic minority or indigenous small-numbered people.

differences sources of primary data<sup>11</sup> and the corresponding methods of their collection give rise to certain difficulties in solving this problem.

Let us turn to the consideration of the proposed methodological procedures for calculating the above integral indices.

**National Policy Quality Index (p-index).** The indicators deliberately did not include those by which the level of concentration of political capital is measured. First, this variable for most actors, except for government bodies and officials, reflects their situational, rather than structural, characteristics. Secondly, in the case of the authorities, the problem of the irreducibility of political capital of the specialized in the sphere of national policies of departments to their staffing and official powers due to their involvement in interdepartmental interaction and supervision by higher officials seems to be intractable.

Table 2

Indicators for the National Policy Quality Index (p-index)

Latent variable	Indicator	Data source	Scale / units
Plurality level of the national politics	presence / absence of profile executive bodies (p1)	inform. resources of government bodies and local self-government; legal documents	index, 2-rank (yes = 1, no = 0)
	presence / absence of profile committees in the legislative assembly of the subject of the Russian Federation (p2)		
	presence / absence of core functions of agencies in local administrations (p3)		
	presence / absence of party organizations, whose programs contain ethno-cultural issues (p4.1-4.4 <sup>12</sup> )	data of the Ministry of Justice, party programs	index, 2-rank (yes = 1, no = 0)
	assessment of the political role of the ethnocultural social movements (p5)	expert survey	index, 5-rank <sup>13</sup>
Publicity level of the national politics	number of public actions of ethnic subjects and the average number of their participants: - protests (p6.1), - pro-state (p6.2)	media content analysis	metric (in natural units, during the period T)
	presence / absence of advisory bodies on ethnic policy issues (p7)	inform. resources of government bodies and local self-government; legal documents	index, 2-rank (yes = 1, no = 0)
	share of media materials on ethnopolitical issues (p8)	media content analysis	share in the general array of political media materials (for the period T, in the interval 0; 1)

<sup>11</sup> State statistics, media content analysis, mass surveys, expert assessments, etc.

<sup>12</sup> It is proposed to calculate the values separately for parties representing the interests of different ethnic communities: p4.1 - the Russian people (national patriotic), p4.2 - dominant ethnic groups (for the republics), p4.3 - ethnic minorities, p4.4 - indigenous small-numbered people.

<sup>13</sup> If there are no actors in the region of this type, the indicator is assigned the value "0".

Уровень формализации национальной политики	quality of the regulatory framework of the ethnic policy (p9)	expert survey	index, 5-rank
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The index is calculated using the formula:

$$p\text{-index} = \sum_{i=p1}^{p3} i + \sum_{i=p4.1}^{p4.4} i + k_{p5} * p5 / N + \frac{p6.2 - p6.1}{p6.1 + p6.2} + k_{p7} * p7 + k_{p8} * p8 + k_{p9} * p9 / N,$$

where  $k_{pn}$  — weighting factors for the respective indicators,  $N$  — number of experts interviewed;  $\frac{p6.2 - p6.1}{p6.1 + p6.2}$  — the formula for calculating the vector of socio-political activity<sup>14</sup>.

**Interethnic consolidation index (c-index).** This index integrates the values of variables reflecting the ethnic and confessional heterogeneity of the population, the distribution of social capital within the ethnically structured space of social communication, and the degree of dependence of the general level of social tension on tensions in the sphere of inter-ethnic and inter-confessional relations. In Table 3 presents detailed operationalization of the selected variables.

*Table 3*  
*The system of indicators for calculating the integrated index of interethnic consolidation (c-index)*

Latent variable	Indicator	Data source	Scale / units
The degree of homogeneity of the population of the area	ethnic composition (c1)	data of state statistics	calculation of the values of indicators is made based on the calculation of the coefficients of variation
	confessional composition (c2)	representative mass surveys	
Uniformity in the distribution of social capital (in the ethnic context)	социальная дистанция между основными этническими группами (c3)	representative mass surveys	The E. Bogardus scale
	level of interpersonal trust (c4)		index, 5-rank
Ethno-cultural component of social tension	attitude of assessing the level of inter-ethnic tensions (c5.1) to the general level of social tension (c5.2)	representative mass surveys / expert survey	index, 5-rank
	the ratio of assessing the level of inter-confessional tensions (c6.1) to the general level of social tension (c5.2)		

The index is calculated using the formula:

$$c\text{-index} = (v_1 c1 * v_2 c2) + k_{c1} * (c3 + c4) - k_{c2} * \left( \frac{c5.1}{c5.2} + \frac{c6.1}{c5.2} \right),$$

where  $v_1$  и  $v_2$  — coefficients of variation,  $k_{cn}$  — weighting factors for the respective indicators.

**Ethno-cultural diversity index (d-index).** This index primarily reflects the degree of institutionalization and public articulation of ethno-cultural differences, the stability of ethnic identities and the rigidity of demarcation of imaginary ethnic boundaries. The most important indicators are the levels of organizational design of actors acting as referents of ethnocultural

<sup>14</sup> In the range from -1 to 1. The higher the value of the indicator, the higher the level of approval of the ethnic policy.

communities in the region. Two ways can be considered to measure these levels. The first of them (most obvious) is the fixation of the number of formal public associations of one or another type of actors representing the dominant ethnic group, ethnic minorities and indigenous small peoples respectively, as well as the number of their members. However, following this path, we face a number of methodological and practical difficulties: first, the above quantitative showed without taking into account the amount of organizational, financial and information resources available to each public association of the type in question, do not fully express the most important parameters of their practical influence on ethno-political processes and the ethno-cultural landscape: they cannot be judged on the real mobilization capabilities of the organization with respect to that ethnic community, the articulation the interests of which this organization claims, nor about its actual popularity among the population, nor about the scale and regularity of its public events, the scale of its statutory activities; secondly, the solution of the problem of accumulation of data on these parameters is limited by the insurmountable barriers connected with the closure of some information (primarily financial possibilities of public associations), its incompleteness in open sources. In the light of these circumstances, we believe that it would be more productive to follow a different path: the identification of real influence on the ethno-cultural situation in the region by certain groups of public associations based on expert assessments. In this regard, we propose to replace indicators of the number of ethnically oriented NGOs and their membership in the indicator of the organizational and mobilization potential of these NGOs, the importance of which would be derived from expert surveys.

Table 4

*The system of indicators for calculating the integral index of ethno-cultural diversity (d-index)*

Latent variable	Indicator	Data source	Scale / units
Level of the dominant ethnic group organization	organizational and mobilization potential of public associations of the dominant ethnic group (d1)	expert survey	index, 5-rank [0; 5]
	level of representation of the dominant ethnoses in legislative bodies and local self-government (d5)		
The level of ethnic minorities organization	organizational and mobilization potential of public associations of ethnic minorities (d2)		
	level of representation of ethnic minorities in legislative bodies and local self-government (d6)		
The level of the indigenous small-numbered peoples organization	organizational and mobilization potential of public associations of indigenous small-numbered peoples (d3)	expert survey	index, 5-rank [0; 5]
	level of representation of indigenous small-numbered peoples in legislative bodies and local self-government (d7)		

Organizational level of the confessional groups	organizational and mobilization potential of religious associations in the region (d4)		
The level of ethno-confessional diversification in education and culture	Language diversification in the educational sphere <sup>15</sup> (d8)	data of state bodies of the subject of the Russian Federation in the sphere of education	metric, [0; 1]
	degree of diversity of ethnic / confessional holidays celebrated in the region publicly (d9)	expert survey	index, 5-rank [0; 5]
	degree of diversity of cultural events of ethnic / confessional themes organized jointly with authorities (d10)		
The level of legal support for ethno-confessional diversification	presence of regional legislation in the field of support of ethno-cultural and confessional diversity (d11)	data of reference and legal bases of regional legislation	index, 2-rank (yes = 1, no = 0)
The level of information support for ethno-confessional diversification	share of media materials on ethnocultural and confessional topics (d12)	media content analysis	share in the general array of media materials devoted to cultural life (for the period T, in the interval 0; 1)

The index is calculated by the formula:

$$d\text{-index} = k_{d1} * \sum_{i=d1}^{d4} i/N + k_{d2} * \sum_{i=d5}^{d7} i/N + k_{d3} * d8 + k_{d4} * (d9 + d10)/N + k_{d5} * d11 + k_{d6} * d12,$$

где  $k_{dn}$  — weighting factors for the respective indicators,  $N$  — number of experts interviewed.

As it is easy to see, the calculation of the values of indicators implies an un-unified procedure, access to different scales and units of measurement. We propose that it is possible, by means of some transformations, to bring the data obtained based on the application of various measuring instruments to a single metric (as shown in the formula); and calculating the weighting factors allows you to adjust the values of individual indicators. At the same time, we are faced with several methodological subtleties of expert surveys, including the use of the hierarchy analysis method to determine the weight coefficients [39, Korobov V.B., Tutygin A.G.]. To date, there is a whole arsenal of methodical techniques that allow increasing the accuracy and reliability of the averaged expert estimates [40, Korobov V.B.], but their discussion is beyond the scope of this article.

In conclusion, we note that the methodology for calculating integral indices for measuring ethnopolitical and ethno-social processes proposed in this article is open for correction considering specific features of the Russian Arctic region. At the same time, the methodological principles underlying our approach allow us to increase both the heuristic potential of quantitative

<sup>15</sup> It is calculated as the sum of the shares in the total number of secondary schools in the region of schools with teaching in the language of the dominant ethnic group, schools teaching ethnic minority languages, schools with the teaching of indigenous languages (in the presence of the latter in the subject of the Russian Federation).

sociological research in the field under consideration and the comparability of data within the framework of cross-regional comparative studies of interethnic and inter-confessional relations.

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### *References*

1. Zaikov K., Zadorin M., Tamitskiy A. Legal and political framework of the federal and regional legislation on national ethnic policy in the Russian Arctic. *The Polar Journal*, 2017, vol. 7, no. 1, pp. 125–142. DOI: 10.1080/2154896X.2017.1327748
2. Zaikov K.S., Zadorin M.Y., Tamitskiy A.M. Osnovy etnonatsional'noy politiki gosudarstva na primere Rossiyskoy Federatsii [The basic of ethno-national policy on the example of the Russian Federation]. *Federalizm* [Federalism], 2016, no. 3(83), pp. 145–158.
3. Karelin V.A., Zaikov K.S. Problema saamskikh servitutnykh prav v pogranichnykh otnosheniyakh Rossii i Norvegii v nachale XX veka [Sami easements in the history of Russian-Norwegian border relations in the early 20<sup>th</sup> century]. *Vestnik Severnogo (Arkticheskogo) federal'nogo universiteta. Seriya: Gumanitarnye i sotsial'nye nauki*, 2016, no. 1, pp. 32–41.
4. Goldin V.I., Zaikov K.S., Tamitskiy A.M. V odnoy lodke: «Assimetrichnoe sosodstvo: Rossiya i Norvegiya» za dva veka [In a Common Boat: “Asymmetric Neighborhood: Russia and Norway” over Two Centuries]. *Novyi Istoricheskii Vestnik* [The New Historical Bulletin], 2015, iss. 45, pp. 172–182.
5. Goldin V.I., Zaikov K.S., Tamitskiy A.M. Finnish Factor in the History of the Northern Frontier of the Russian Empire 1809–1855. *Bylye Gody*, 2016, vol. 41, iss. 3, pp. 629–641.
6. Zaikov K.S., Tamitskiy A.M. Lapp Crafts in the History of the Russian-Norwegian Borderland in 1855–1900. *Bylye Gody*, 2017, vol. 44, iss. 3, pp. 915–927.
7. Astvatsaturova M.A. *Severnyi Kavkaz: perspektivy i riski. Transformatsiya regional'nogo etnopoliticheskogo prostranstva* [North Caucasus: prospects and risks. Transformation of the regional ethnopolitical space]. Moscow, 2011, 192 p. (In Russ.)
8. Bogatova O.A., Kargin A.I. Monitoring mezhetnicheskikh i mezhkonnatsional'nykh otnoshenii v Respublike Mordoviya [Monitoring of ethnic and interconfessional relations in the Republic of Mordovia]. *Finno-ugorskii mir* [Finno-Ugric World], 2010, no. 1, pp. 78–88.
9. Poddubikov V.V. Mnogonatsional'nyi Kuzbass: regional'naya model' etnologicheskogo monitoringa kak instrument natsional'noi politiki XXI veka [Multinational Kuzbass: regional model of ethnological monitoring as an instrument of national policy of the 21st century]. *Sotsiologicheskii vestnik*, 2011, no. 2, pp. 61–66.
10. Stepanov E.I., Aksent'ev V.A., Golovin Yu.A., Kukonkov P.I. Monitoring sotsial'nykh napryazhenii i konfliktov v krupnykh regional'nykh tsentrakh Rossii (na primere Nizhnego Novgoroda i Yaroslavya) [Monitoring of social tensions and conflicts in large regional centers of Russia (on the example of Nizhny Novgorod and Yaroslavl)]. *Rossiya reformiruyushchayasya* [Russia in reform: Year-book], 2007, no. 6, pp. 235–253.
11. Khaikin S.R., Berezhkova S.B. Sotsiologicheskii monitoring mezhnatsional'nykh i mezhkonnatsional'nykh otnoshenii Federal'nogo agentstva po delam natsional'nostei [Sociological monitoring of inter-ethnic and inter-confessional relations of the Federal Agency for Ethnic Affairs]. *Monitoring obshchestvennogo mneniya: ekonomicheskie i sotsial'nye peremeny* [Monitoring of public opinion: economic and social changes journal], 2016, no. 5, pp. 97–110. DOI: 10.14515/monitoring.2016.5.07
12. Drobizheva L.M. Mezhnatsional'nye (mezhetnicheskije) otnosheniya v Rossii v zerkale monitoringovykh oprosov FADN i regional'nykh issledovaniy [Interethnic (interethnic) relations in Russia in the mirror of monitoring surveys of FADN and regional studies]. *Vestnik Rossiiskoi natsii* [Bulletin of Russian nation], 2017, no. 4(56), pp. 107–127.



13. Zmeyeva O.V., Razumova I.A. «Ya reshil zhit' zdes'...»: adaptatsiya azerbaidzhantsev v zapolyarnom gorode v 2010-e gody ["I have decided to live here...": adaptation of Azerbaijani in northern town in 2010s]. *Uchenye zapiski Petrozavodskogo gosudarstvennogo universiteta* [Proceedings of Petrozavodsk State University], 2014, no. 5(142), pp. 13–17.
14. Zmeyeva O.V. Otnoshenie zhitelei malogo promyshlennogo goroda k migrantam [Attitude to migrants of the inhabitants of a small industrial city]. *Trudy Kol'skogo nauchnogo tsentra RAN* [Proceedings of the Kola Science Centre RAS], 2014, no. 6(25), pp. 87–97.
15. Maklashova E.G., Osipova O.V. Gosudarstvennaya natsional'naya politika v usloviyakh rossiiskogo etnofederalizma: sotsiologicheskii srez (na materialakh Respubliki Sakha (Yakutiya)) [State national policy in conditions of Russian ethnic federalism: sociological cross-section (case study of the Republic of Sakha (Yakutia))]. *Teoriya i praktika obshchestvennogo razvitiya* [Theory and practice of social development], 2015, no. 12, pp. 28–34.
16. Maksimov A.M., Tamitskii A.M. Mezhnatsional'nye otnosheniya v Arkhangel'skoi oblasti i Nenetskom avtonomnom okruge v predstavleniyakh naseleniya [Interethnic relations in the Arkhangel'sk region and Nenets Autonomous Area in the eyes of their inhabitants]. *Vestnik Severnogo (Arkticheskogo) federal'nogo universiteta. Ser.: Gumanitarnye i sotsial'nye nauki*, 2016, no. 6, pp. 15–22. DOI: 10.17238/issn2227-6564.2016.6.15
17. Oparin D.A. «Mestnye» i «priezzhie» na Yamale: sotsial'nye granitsy i variativnost' migratsionnogo opyta ["Locals" and "newcomers" in Yamal: social boundaries and variations of migration experience]. *Sibirskie istoricheskie issledovaniya* [Siberian Historical Research], 2016, no. 4, pp. 120–126. DOI: 10.17223/2312461X/14/6
18. *Rossiiskaya Arktika: korennye narody i promyshlennoe osvoenie* [The Russian Arctic: indigenous peoples and industrial development]. Ed. by V.A. Tishkov. Moscow, Saint Petersburg, 2016, 272 p. (In Russ.)
19. *Sever i severnyane. Sovremennoe polozhenie korennykh malochislennykh narodov Severa, Sibiri i Dal'nego Vostoka Rossii* [North and northerners. The current situation of indigenous small-numbered peoples of the North, Siberia and the Far East of Russia]. Ed. by N.I. Novikova, D.A. Funk. Moscow, IEA of the RAS Publ., 2012, 288 p. (In Russ.)
20. *Etnonatsional'nye protsessy v Arktike: tendentsii, problemy i perspektivy: monografiya* [Ethnonational processes in the Arctic: trends, problems and prospects]. Ed. by N.K. Kharlampyeva. Arkhangel'sk, NArFU Publ., 2017, 325 p. (In Russ.)
21. Parsons T. *Sistema sovremennykh obshchestv* [The system of modern societies]. Transl. L.A. Sedova i A.D. Kovaleva, ed. M.S. Kovaleva. Moscow, Aspekt Press Publ., 1998, 270 p.
22. North D.C., Walliss J., Weingast B. *Nasilie i sotsial'nye poryadki. Kontseptual'nye ramki dlya interpretatsii pis'mennoi istorii chelovechestva* [Violence and social orders: a conceptual framework for interpreting recorded human history]. Transl. by D. Uzlaner et al. Moscow, Gaidar Insitute Publ., 2011, 480 p.
23. Parsons T. Sotsial'nye sistemy [Social systems]. *Voprosy sotsial'noi teorii*, 2008, vol. II, iss. 1(2), pp. 38–71.
24. Bourdieu P. *Sotsiologiya sotsial'nogo prostranstva* [Sociology of social space]. Transl., ed. N.A. Shmatko. Moscow, Insitute for Experimental Sociology Publ.; Saint Petersburg, Aleteiya Publ., 2007. 288 p.
25. Walzer M. *O terpimosti* [On toleration], Moscow, Ideya-Press Publ., 2000, 159 p.
26. Mukomel' V.I. Ksenofoby i ikh antipody: kto oni? [Xenophobes and their opposites: who are they?]. *Mir Rossii* [Universe of Russia], 2017, vol. 26, no. 1, pp. 32–57.
27. Drobizheva L.M. (Ed.). *Sotsial'noe neravenstvo etnicheskikh grupp: predstavleniya i real'nost'* [Social inequality of ethnic groups: representations and reality]. Moscow, 2002, 480 p. (In Russ.)
28. Brednikova O., Pachenkov O. Etnichnost' «etnicheskoi ekonomiki» i sotsial'nye seti migrantov [Ethnicity of the "ethnic economy" and social networks of migrants]. *Ekonomicheskaya sotsiologiya* [Journal of economic sociology], 2002, vol. 3, no. 2, pp. 74–81.
29. Kuznetsov I., Mukomel' V. Formirovanie etnicheskikh nish v rossiiskoi ekonomike [Formation of ethnic niches in the Russian economy]. *Neprikosnovennyyi zapas. Debaty o politike i kulture* [NZ. Debates on politics and culture], 2007, no. 1, pp. 175–184.

30. Ryazantsev S.V. Etnicheskoe predprinimatel'stvo kak forma adaptatsii migrantov [Ethnic entrepreneurship as a form of adaptation of migrants]. *Obshchestvennye nauki i sovremennost'* [Social sciences and contemporary world], 2000, no. 5, pp. 73–86.
31. Firsov E.Yu. Sotsial'naya stratifikatsiya, etnichnost' i etnicheskie ekonomiki (na primere Rossii) [Social stratification, ethnicity and ethnic economies (on the example of Russia)]. *Ekonomicheskaya sotsiologiya* [Journal of economic sociology], 2004, vol. 5, no. 3, pp. 66–77.
32. Bugulov M. *Malye narody i etnosy Rossiiskogo Severa: sovershenstvovanie sistemy sotsial'no-ekonomicheskogo razvitiya korennykh narodov Severa* [Small peoples and ethnic groups of the Russian North: improving the system of socio-economic development of the indigenous peoples of the North]. Magadan, 2002, 170 p. (In Russ.)
33. Lashov B.V. Usloviya predprinimatel'stva v traditsionnom khozyaistve korennykh malochislennykh narodov Severa (KMNS) [The business conditions in the traditional economy of smaller peoples of the North]. *Vestnik Leningradskogo gosudarstvennogo universiteta im. A.S. Pushkina* [Vestnik of Pushkin Leningrad State University], 2011, vol. 6, no. 1, pp. 25–43.
34. Sirina A.A. *Ot sovkhoza k rodovoi obshchine: sotsial'no-ekonomicheskie transformatsii u narodov Severa v kontse XX veka* [From the state farm to the clan community: socio-economic transformations among the peoples of the North at the end of the 20th century]. Moscow, IEA of the RAS Publ., 2010. 185 p. (In Russ.)
35. Sadovoi A.N., Belozerova M.V. Indikatory monitoringa realizatsii strategii gosudarstvennoi natsional'noi politiki Rossiiskoi Federatsii: modeli traditsionnogo zhizneobespecheniya i etnicheskoe predprinimatel'stvo [Indicators for monitoring the realization of strategy of Russian Federation state national policy: models of traditional life-support and ethnic entrepreneurship]. *Nauchnyy dialog* [Scientific Dialogue], 2016, no. 2(50), pp. 296–312.
36. Abramov A. Politicheskii institut i politicheskaya institutsionalizatsiya: opredelenie ponyatii [Political institute and political institutionalization: definition of concepts]. *Vlast'* [Power], 2010, no. 5, pp. 53–55.
37. Tishkov V.A., Shabaev Yu.P. *Etnopolitologiya: politicheskie funktsii etnichnosti* [Ethnopolitology: political functions of ethnicity]. Moscow, Moscow State University Publ., 2011, 376 p. (In Russ.)
38. Bourdieu P. The Forms of Capital. *Handbook of Theory and Research for the Sociology of Education*. Ed. by J. Richardson. New York, Greenwood Publ., 1986, pp. 241–258.
39. Korobov V.B., Tutygin A.G. Problemy ispol'zovaniya metoda analiza ierarkhii i puti ikh resheniya [Problems of the analytic hierarchy process and some solutions]. *Ekonomika i upravlenie* [Economics and management], 2016, no. 8(130), pp. 60–65.
40. Korobov V.B. Sravnitel'nyi analiz metodov opredeleniya vesovykh koeffitsientov «vliyayushchikh faktorov» [Comparative analysis of methods for determining the weight coefficients of "influencing factors"]. *Sotsiologiya 4M: Metodologiya, metody, matematicheskie modeli* [Sociology: methodology, methods, mathematical modeling], 2005, no. 20, pp. 54–73.