# Content analysis as a method to study the features of life of the resident population of coastal settlements of the Yamal-Nenets Autonomous District[1]

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**Abstract.** The authors discuss the methodological approaches to the assessment of the level and quality of life of the population. The analysis of the scientific literature shows that in most cases, such studies are based on the basic statistics. The results of such studies give rise to some controversy related to the fact that at a fairly high standard of living, determined by a statistical method, the actual level of satisfaction of the population in the region, determined by other methods, is estimated lower. In this regard, the authors offer alongside with generally accepted methods of living standards and quality assessment of the population, to use the method of content analysis, which can be also used to identify the real problems of life of the resident population of coastal areas in terms of industrial development of the Arctic region.
**Keywords**: *content analysis, livelihoods of the population, the Arctic zone of the Russian Federation, standard of living, quality of life*

The study of the problems of life activity of the resident population living in the Arctic zone of the Russian Federation (hereinafter — the Russian Arctic) is especially urgent. This is mainly related to the implementation of the state policy in the field of social and economic development of the Russian Arctic reflected in a number of strategic documents[2] which set goals for the progressive development of the social, economic, cultural, political and environmental spheres of the life of the permanent population, including Indigenous small-numbered peoples of the North (hereinafter — the indigenous people). This means that the strategic goal of state and municipal management is to create conditions for raising the level and quality of life of the population. Their quantitative and qualitative indicators make it possible to assess the effectiveness of the activities

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[2] "Fundamentals of the State Policy of the Russian Federation in the Arctic for the Period until 2020 and Further Prospects" — 2008; "Strategy for the development of the Arctic zone of the Russian Federation and ensuring national security for the period until 2020" (2013); "Action plan for the implementation of the Strategy for the Development of the Arctic Zone of the Russian Federation and National Security for the Period to 2020" (2013); The State Program "Social and Economic Development of the Arctic Zone of the Russian Federation" (2014).

of the relevant authorities [1, Glebova I.S., Khabribrakhmanova R.R., pp. 167–170] and are the important analytical tool for socio-economic, sociocultural policy in the region, which makes it possible to determine a further model for the development of the territory.

*Assessment of the level and quality of life of the population as the object of research*

The study of the problems of the life activity of the population is inseparably linked with the concepts of "standard of living" and "quality of life", which in turn are of the same type, but not identical [2, Magomaev M.M., Magomedova E.R., p. 11]. The term "standard of living" is connected with the concepts of production, consumption, cost of living, etc., in this connection the term is often considered in the economic system "resources — consumption". In other words, the "standard of living" is the provision of the population with the necessary material goods and services, the reached level of their consumption and the degree of satisfaction of reasonable needs [3, Titkova L.S.]. Whereas in the structure of the definition of "quality of life" the emphasis is not only on obtaining a material component, but also includes subjective and objective factors that characterize the social, cultural and spiritual aspects of life of the population [2, Magomayev M.M., Magomedova E.R., p. 11]. Hence it follows that the "quality of life" is a broad and multifaceted concept that determines and captures practically all sectors of human life. Meanwhile, the "standard of living" characterizes the quantitative aspect of the quality of life and is limited only by the satisfaction of people's needs. Thus, when assessing the level and quality of life, it is necessary to consider their components in symbiosis, since the criteria for assessing the quality of life is manifested through indicators of the standard of living.

Therefore, assessing the level and quality of life is a multifaceted and time-consuming process that requires the use of various methods. The analysis of domestic scientific literature indicates that the study of the quality of life of the population is carried out by various methods. For example, in the scientific work on assessing the quality of life of the population in Russian regions, researchers Grishin I.V., Polynev A.O., Timonin S.A. have developed the methodology that is based on the calculation of the composite index of each individual component (statistical indicators of the income level of the population, the level of development of the consumer market, the provision of housing and housing conditions, the state of the labor market, the level of development of health care, education, infrastructure, etc.) in a region [4].

Mosyakina E.A. [5] and the authors Bondarenko P.V., Fokin E.A., Trukhlyaeva A.A. [6] in their works used the methodology of estimating the integral indicator of the quality of life of the population, based on the use of the odd-number rule (the pairwise comparison method) of

Fishbern. The peculiarity of this method is the use of a mathematical apparatus for estimating the integral indicator of the quality of life of the population.

Ayvazyan S.A. proposed the methodology for assessing the primary official data of state statistics bodies, concerning the quality of life of a region. The methodological approach of this assessment is based on special types of convolutions of particular indicators and on methods for multicriteria ranking of objects [7].

Polyakova A.G. assessed the quality of the socio-economic space of a number of cities in the Tyumen region through a social survey of the local population, where it is proposed to calculate the complex indicator of a number of private indicators (income level, career prospects, access to medical services, crime rates, environmental indicators, totally 13 indicators) [8].

Thus, we see that in most cases, many researchers propose a methodology based solely on the calculation of primary statistics. Quantitative assessments of the criteria for the level and quality of life of the population are based on scientific principles, needs and interests of the individual. At the same time, as the scientists note, "the quality of life of the population" is a complex phenomenon that goes beyond the traditional notion of material well-being and includes difficult quantifiable cultural, psychological and philosophical components. In this case, the qualitative evaluation of a certain criterion is not fixed by a statistical value, but exists in the minds of people, in their personal opinions and assessments.

As Glebova I.S. and Khabribrakhmanova R.R. noted in their article "such situations can occur, when with a sufficiently high level of quality of statistical indicators of the quality of life, the satisfaction of residents with living conditions in a particular territory and life in general can be assessed low. It means that the main goal of the development of the territory, raising the level and quality of life is not achieved, respectively, there are problems in the functioning of the socio-economic system of the territory "[1, Glebova I.S., Khabribrakhmanova R.R., p. 167].

Therefore, in order to assess the level and quality of life, it is necessary to carry out both quantitative and qualitative analysis based on the population's opinion on the degree of satisfaction with different aspects of life. Satisfaction with the quality of life of the population, according to some scientists, can be reflected in the information environment of a particular region, which, in turn, is formed by local media (hereinafter mass media). The description by local media of different views and opinions on the state and development of the region, allows us to identify the problem points of the socio-economic and socio-cultural system of the region. In addition, information in regional and municipal publications is more in line with the interests of

local residents, especially in national subjects [9, Molodov O.B., p. 127], in turn, local mass media form their own opinion and attitude to a particular problem among the residents.

### *Content analysis as a method of studying the level and quality of life of the YNAD*

In this regard, along with the generally accepted methods of assessing the level and quality of life of the population, in our opinion, it is necessary to conduct in parallel the studies of municipal and regional mass media (hereinafter mass media) on the basis of content analysis in order to identify the real needs and problems of the resident population. Content analysis is a special methodical procedure for analyzing the core of communication, what lies between the communicator and the audience, between the author of the message and those to whom this message is addressed [10, Semenov A.V., Korsunskaya M.V.]. In other words, the content analysis allows the researcher to make a conclusion about various socio-economic, sociocultural phenomena using a large textual array, highlighting information aspects that are not lying on the surface.

The purpose of this article is to describe the algorithm for conducting a study of municipal media using the "content-analysis" method in order to assess the identification of the problems of vital activity of resident population living in the coastal territories of the Yamal-Nenets Autonomous District under the conditions of industrial development.

### *Brief characteristics of the research object*

The Yamal-Nenets Autonomous District has become one of the most dynamically developing regions of the Far North of the Russian Federation, which possesses the necessary natural and resource potential for independent and self-sufficient development in the Arctic. The main economic activities of the region are: industry, construction, trade, transport and communications, agriculture and forestry. The most successful sphere of the economy of the Yamal-Nenets Autonomous District is the industry, which accounts for about 600 billion rubles.

The industry is represented by the extraction of minerals, processing industry, as well as the production of electricity, gas and oil. In this regard, due to the peculiarities of the economy of the Arctic region, which is based on the extraction of minerals, as well as the small number of permanent residents, the Yamal-Nenets Autonomous District positions itself as the Arctic region that combines favorable conditions for the civilized and traditional way of life of different categories of citizens of the Russian Federation, including indigenous small-numbered peoples of the North, originally employed in traditional industries [11, Zuev S.M.]. This is evidenced by the

study conducted in 2015 by the Rating Agency "RIA Rating", in which the agency's experts rated the subjects of the Russian Federation on the quality of life on the basis of objective indicators[3].

Among the regions located in the Arctic zone of the Russian Federation, the Yamal-Nenets Autonomous District occupies a leading position (see Table 1).

*Table 1*

*Rating of the quality of life of the subjects of the Russian Federation*
*that are part of the Russian Arctic*

| Region | Position in rating 2015 | Position among the regions of the Russian Arctic 2015 |
|---|---|---|
| YNAD | 24 (49.16) | 1 |
| The Murmansk region | 49 (41.41) | 2 |
| The Komi Republic | 60 (39.15) | 3 |
| Nenets Autonomous Area | 69 (34.98) | 4 |
| The Republic of Sakha (Yakutia) | 72 (33.51) | 5 |
| The Arkhangelsk region | 74 (32.95) | 6 |
| The Chukotka Autonomous Region | 79 (25.83) | 7 |

However, if we consider the life activity of the population of the autonomous area on a local scale, then we can clearly see the differentiation of the level and quality of life in the territorial context. Considering the social and economic development, functional specifics, as well as geographical and natural climatic conditions of the autonomous area, the populated areas can be conditionally divided into administrative, agro-industrial, transport and industrial, depressive. According to the level and quality of life, administrative, transport and industrial settlements are considered to be the most favorable, since it is here where the social, cultural and transport infrastructure is concentrated and developed, the population has a high level of purchasing power, etc. But at the same time, this group is most susceptible to external geo-economic and political risks, which is caused by the dependence of populated areas on the long-term plans of the fuel and energy complex and weak diversification of the economy, which may entail a variety of crisis situations.

Agroindustry and depressive ones lag behind in a number of indicators of quality and living standards. This is due to the fact that most of the settlements are in relative distance from administrative centers, where the transport and social infrastructure is not sufficiently developed, the issue of employment among the indigenous minorities of the North is acute.

In this context, the analysis of the following settlements located in the coastal zone of the Yamal-Nenets Autonomous District is of particular interest, namely:

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[3] Reiting rossiiskikh regionov po kachestvu zhizni – 2015. URL: http://www.riarating.ru/infografika/20160225/6300 10958.html (Accessed: 14 October 2016)
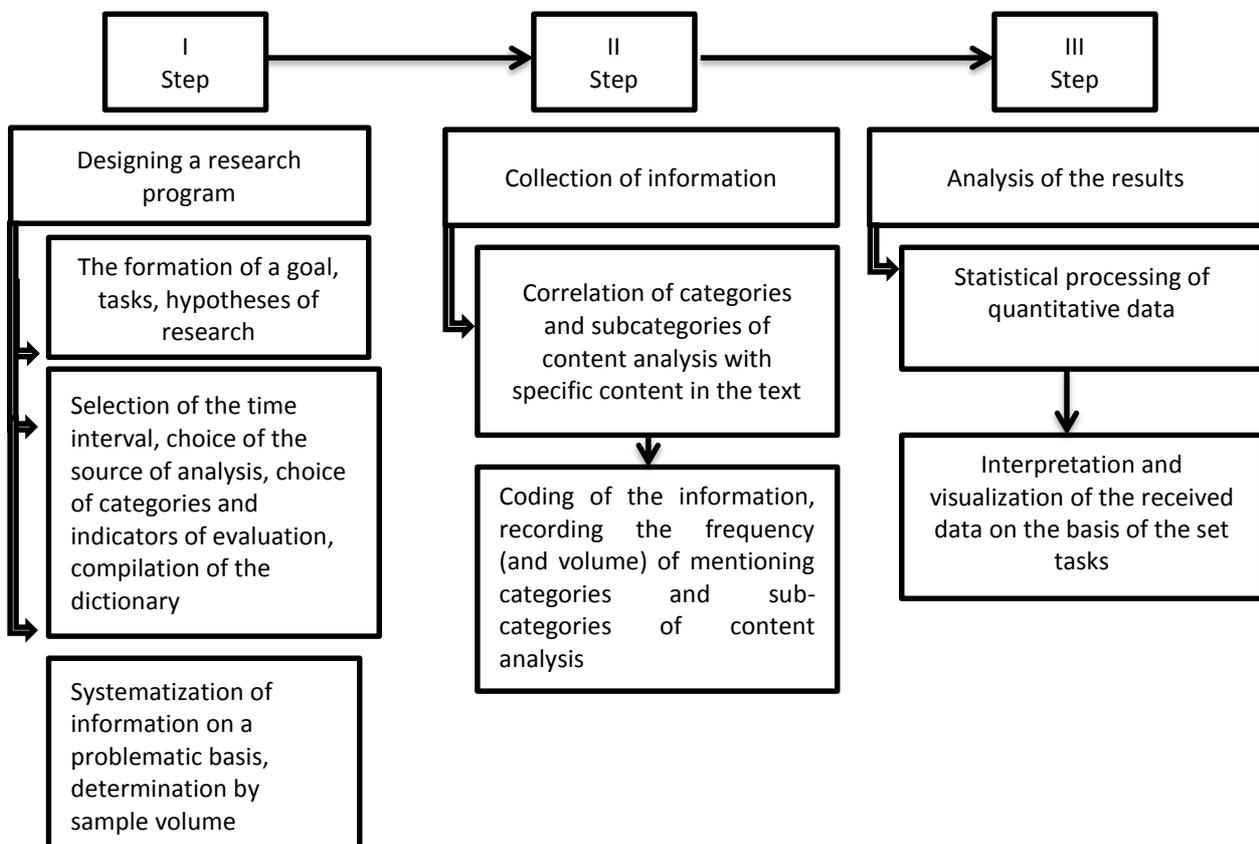
1) Salekhard, as an administrative center, where the administrative apparatus of the area is concentrated, the sphere of services is developed, it is a business, cultural and scientific center of the YNAD.
2) Nadym and Novy Urengoy, as industrial and transport cities, which are characterized by the most developed, in comparison with other cities of the region, industrial, transport and social infrastructure.
3) Tazovsky (Tazovsky district), Yar-Sale (Yamal district), as centers for industrial development and development of the agro-industrial complex, focused on the production of venison, fish products. The main income of settlements is the tax deductions of energy companies and subsidies of the district budget.
4) Gyda (Tazovsky district), the most depressed settlement, where the transport infrastructure is less developed, social and domestic services are at a low level. The basis of the economy of the village is reindeer husbandry and fishing.

The analysis of the above-mentioned settlements, on the one hand, will reveal the existing social, cultural, economic and environmental problems of the urban and rural population. On the other hand, as noted above, the information environment, generated by local media, which broadcasts a negative, neutral or positive attitude to a particular problem, will help to determine the public opinion about the quality and standard of living.

To achieve the goal, the authors have developed the following algorithm for the study of municipal news agencies, which provides the following stages.

*Scheme 1*
*Algorithm for carrying out the research by the method of content analysis (compiled by the author)*

In accordance with the scheme presented above, at the initial stage the authors develop the theoretical base of the research (goals, tasks, hypothesis, object and subject of research, choice of time interval, choice of source of analysis, evaluation criteria, etc.). The hypothesis of the conducted research consists in the attempt to extract from the articles published by the municipal mass media the semantic load for revealing a negative, neutral or positive attitude to the social, economic, political, cultural and environmental satisfaction of the resident population living in rural and urban settlements.

The authors plan to process the following municipal information agencies of the settlements of the Yamal-Nenets Autonomous District (Table 2).

The choice of mass media is due to the fact that municipal news agencies have a specific audience of readers within the settlement and are the most popular among local residents.

*Table 2*

*Source of the content analysis of local media in the area of research*

| Municipality | Name of local media | Internet resources of news agencies |
|---|---|---|
| Municipal mass media[4] | | |
| Salekhard | Newspaper office «Polarny Krug» | http://polkrug.ru/ |
| Nadym | Nadym TV news desk | http://trknadym.ru/ |
| Novy Urengoy | OOO «Impuls» | http://www.tv-impulse.ru/ |
| Tazovsky district | Mass media «TV studia Fact» | http://fakt-tv.ru/ludi/ |
| Yamal district | «YaTV» | http://yamaltv.ru/ |

The content analysis of media publications is planned for the period from 2014 to 2016, inclusively. The choice of this period of time is due to the fact that there is no lack of information posted on the official websites of news agencies. In addition, this period of time is characterized by an unstable socio-economic situation in the country, in connection with which it will be important to trace the coverage of problems in the municipal media. The analysis of information materials published in the media is carried out in the following categories, which characterize the components of quality and living standards of the population (Table 3).

*Table 3*

*Selection of research categories*

| Categories | Units of account (indicators) |
|---|---|
| Crime | Offense, crime, law enforcement activities |
| Emergencies | Accidents, epidemics, fires, floods, extreme weather conditions |
| Authorities | Activities of municipal authorities, bills, resolutions, |
| Healthcare | Level of morbidity, drug prices, health services (price, quality, problems) |
| Housing and communal services | Construction of housing stock, condition of communications, accidents in the housing and utilities sector (reasons, duration of elimination), condition of houses (emergency, maintenance), tariffs for housing and communal services, road |

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[4] Munitsipal'nye sredstva massovoi informatsii / Ofitsial'nyi sait Pravitel'stvo IaNAO. URL: http://pravitel'stvo.ianao.rf /region/media_yamal/SMI_YANAO/Sr_Mas_Inf/Mun_SMI/ (Accessed: 17 July 2016)

| | conditions |
|---|---|
| Social sphere | Social assistance, various social projects, charity |
| Education | The activities of educational institutions, the achievements of schoolchildren |
| The science | Scientific conferences, seminars, research |
| Industrial development of the Arctic | Mega projects, the role of oil and gas corporations, the activities of corporations, the development of deposits, the coverage of the Arctic development problems |
| Traditional industries of the indigenous economy | Reindeer husbandry, fishing, hunting, socio-economic development and problems of indigenous small peoples of the North |
| International Activities | International projects, cooperation, exchange of experience |
| Culture | Cultural events (festivals, competitions) |
| Sport | Sports events, competitions |
| Tourism | Tourism development, tourist activities |

For the unit of the account, the articles are accepted in which there are the categories presented in Tab. 3, allowing us to identify the most popular topics covered by local media, broadcasting a positive, neutral or negative attitude to the characteristics that are being researched, which reflect the quality of life of the resident population in the studied area.

Encoding of the array of information will be carried out using the multilingual cross-platform Yoshikoder. The program Yoshikoder allows you to work with keywords in the text, count their number, build the proportions of their use with respect to the entire text and allocate a contextual environment for them.

### *Conclusion*

It is assumed that based on the content analysis, a comprehensive assessment of the social and economic problems of activity of various categories of citizens living in the coastal territories of the Yamal-Nenets Autonomous District will be obtained. In addition, it is important to identify unbiased information in the publications of municipal media, as it is noted that local mass media is financed from municipal and regional budgets, respectively, the information provided for review is filled with profaned and laudatory news about the activities of state and municipal authorities.

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