CLASSIFICATION OF THE REGIONS OF THE REPUBLIC OF ARMENIA ON THE ISSUES OF STRATEGIC MANAGEMENT

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Introduction. It is known that states had been formed to guarantee the well-being of nations, and the final objective of governmental authorities was to enhance the quality-of-life of the population. Hence, improving the quality-of-life of the population itself should be the basis for the strategic planning of socio-economic development of the region. The advantage of this medium is that it doesn't depend significantly on subjective assessments, personal relationships, and social behaviors,which allows to measure progress without relying on personal assessments. The main issue with this concept is that the quality-of-life is a multifaceted standard and difficult to measure.

Literature review. Extensive research on the quality of life has been carried out since the mid-1960's. However, the content and structure of the concept of "quality-of-life" remains controversial to this day. L.Osberg and E. Sharp measured the quality of life by "Economic Well-being" index [6], A. Sen "Human Development" index [5], and R. Veenhoven "Happy Life-Expectancy" index 1 [7]. Among the modern models for quality-of-life assessment integrated index of quality-of-life is classified, developed by researchers at the Central Economic Mathematics Institute of the Russian Academy of Sciences under the supervision of S.A. Ayvazyan [2].

Methodology. The integrated index of quality of life is a hierarchical system of interconnected indicators, that enables us to evaluate the quality of life of the population based on public statistics, with three integrated indicators: population quality, population well-being, social quality. The formative algorithm for calculating the integrated quality of life index is as follows:

1. Accumulation of output statistical indicators
2. Homogenization of output statistical indicators
3. Distribution of indicators in quality-of-life categories
4. Determination of the significance of the quality of life in analyzed category
5. Integrated rates calculation in quality-of-life categories

6. Region ranking by Integrated rate of quality-of-life values[1]

Research. The official statistics of 2020 were used to implement the classification of the regions of the Republic of Armenia according to the Integral Quality of Life Index. Preliminary data were divided into three homogeneous groups: quality of the population, level of well-being of the population, quality of the social sector.

The following outline data for the integrated level of population well-being has been considered: GDP per capita of the region , the cost of average monetary income per capita according to the minimum standard of living measured by CPI, the number of people with low incomes or extreme poverty below the level of standard of living, the ratio of global income to the richest 20% and the poorest 20% of the population, space security index per capita, and the number of emergency housing in housing stock.

The results of the calculations of the "Quality of Well-being" category of the Integral Quality of Life Index are presented in Table 1.

Table 1. Integral Quality of Life Index by "Population Well-being Level" category

RA region	The Integral Quality of Life Index	Position
VayotsDzor	1,79	1
Syuniq	4,16	2
Tavush	4,62	3
Ararat	7,14	4
Aragatsotn	7, 34	5
Kotayq	7,93	6
Armavir	8, 06	7
Gegharquniq	8,49	8
Lori	9,27	9
Shirak	9,57	10

To interpret the results, it is necessary to observe the weights of partial integrated rates at the third level as well as the normalized weights of posteriori indices. As presented in Table 2, the weight of the third-level private integrated index of "Infrastructure" is greater, than the weight of the "Population Wealth and Income" index. Among the characteristics of the third level of well-being of the population, the most prominent are: the population with low income below the standard of life or the extremely poor, the security of housing stock, as well as the share of emergency housing in the total housing stock. The latest once more shows that although it has been longer than 30 years since the earthquake, but the housing stock problem in the regions is still actual (the index of the total housing stock per resident is low, and the share of dilapidated housing is high).

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[1]"Quality-of-Life Index model mathematical algorithm", V. Baghdasaryan, A. Aslanyan's "Methodology for building an Integral Quality-of-Life Index to determine the socio-economic growth issues of the Region". Scientific paper, Vanadzor State University, Yerevan, 2021, Vol. A, page 201.

Table 2. Weights of the third level partial integral indicators and Indicators of "Population Welfare" category

	Weight $\widetilde{w}_k$	Indicator	Weight $l_{j,k}$
Wealth of the popu-lation and incomes	0,319	GDP per capita of the region	0,37
		Purchasing power of the average per capita income according to the CPI	0,08
		The share of low-income population or extremely poor	0,52
		The ratio of income to richest 20% & poorest 20%	0,03
Infra-structu re	0,681	Share of per capita with the total area of housing stock	0,5
		The share of emergency housing in the housing stock	0,5

Fifteen posteriori indicators have been considered for studying of the population quality category of the Integral Quality of Life Index.

1. Natural increase percentage per 1000 population
2. The number of people with disabilities per 1000 population
3. Life expectancy from birth
4. The registered birth defect cases per 1000 population
5. Child mortality rate per 1,000 (born alive)
6. Number of HIV-positive patients
7. Mortality rate from neoplasms per 100 000 population
8. Mortality rate from blood circulatory system diseases per 100 000 population
9. Mortality rate from infectious and parasitic diseases per 100 000 population
10. Mortality rate from respiratory diseases per 100 000 population
11. Mortality rate from diseases of the digestive system per 100 000 population
12. Mortality rate from accidents, injuries and poisonings per 100 000 population
13. Share of university graduates among those engaged in the economy
14. Workforce productivity
15. Share of students with secondary education and high education within the population of the region

The RA regions rating by "Population Quality" category is presented in table 3.

Table 3. Integral Quality of Life Index by "Quality of Population" category

RA region	The Integral Quality of Life Index	Position
Ararat	3,7	1
Armavir	4,35	2
Gegharquniq	4,45	3
Syuniq	5,28	4
Tavush	5,58	5
Aragatsotn	6,06	6
Shirak	7,09	7
Kotayk	7,6	8

Lori	8,09	9
Vayots Dzor	8,21	10

Studying partial integrated rates at the third level (table 4) we can point out that "Health" subcategory has a greater impact, and its impact has also been aggravated by the increase in the number of Covid-19 mortality rates in 2020. There are significant differences within special characteristics that is, posteriori indicators have different contributions to the calculations of the integrated index.

Table 4. Weights of the third level partial integral indicators and eights of the indicators of the "Population Quality" category

	Weight $\widetilde{w}_k$	Indicator	Weight $l_{j,k}$
Natural growth, defects, disability	0,118	Natural increase percentage per 1000 population	0,218
		Number of people with disabilities per 1000 population	0,128
		Life expectancy duration since birth	0,009
		Registered cases of birth defects per 1000 population	0,314
		Child mortality rate per 1000 born alive	0,085
		Number of HIV-positive patients	0,246
Health	0,629	The mortality rate from neoplasms per 100,000 population	0,523
		The mortality rate blood circulatory system diseases per 100,000	0,086
		The mortality rate from infectious & parasitic diseases per 100,000	0,056
		Mortality rate from respiratory disease per 100,000 population	0,042
		Mortality rate from diseases of the digestive system per 100,000	0,081
		Number of deaths from accidents, injuries, poisonings per 100,000	0,212
Education	0,253	Share of university graduates among those engaged in the economy	0,235
		Workforce productivity	0,531
		Share of students with secondary education and high education within the population of the region	0,234

To study the quality of the social sector, we divided the six indicators of the category into two groups: unemployment-migration, working conditions and crime.

Table 5. Results of integral quality of life indicator calculations for "Social sector quality" category

RA region	The Integral Quality of Life Index	Position
Gegharquniq	3,16	1
Aragatsotn	3,96	2
Syuniq	4,01	3
VayotsDzor	4,15	4
Ararat	7,19	5
Armavir	7,23	6
Shirak	7,81	7
Tavush	8,09	8
Lori	8,65	9
Kotayq	8,89	10

As of the results of the integrated quality of life index calculation, the weights of partial integrated indicators at level third are quite close by numerical values, but the unemployment-migration subcategory has a greater weight (chart 6). In the unemployment-migration subcategory, the weights are almost equal. The weight of the growth rate of migration exceeds the weight of the unemployment rate by 0,08.In working condition and crime categories, the main share has registered crime number by 0.94.

The crime index is the biggest in the third level partial integrated index weight. that have a lot of transparent value, respectively, migration and unemployment rates. The next two indicators, which have a large derivative value, are the migration and unemployment rates, respectively. The migration index is a serious problem for all regions of Armenia.As for unemployment, it's certainly more than permissible value (natural level) and leads to many social problems, from high levels of crime to a myriad of social pathologies. Even, it can be claimed that unemployment is also the main reason for the high rate of migration in the regions.That's what determines the priority of solving the problem of unemployment.

Table 6. The weights of the third level partial integral indicators and the weights of the category "Quality of the social sector"

		Indicator	Weight $l_{j,k}$
Unem-ployment Migration	0,511	The growth rate of migration	0,54
		Level of unemployment	0,46
Workingcon-ditions,Crime	0,489	The share of employees engaged in hazardous working conditions in the average annual number of employees employed in the economy	0,03
		Death outcome or loss of working capabilities	0,03
		Number of recorded crime	0,94

Scientific novelty. The author proposes a mechanism for determining the socio-economic development problems of the region, based on the significance and problematic nature of the factors affecting the quality of life of the population

Conclusion. Research reveals that Lori regionis in the most complex positionaccording to the integral indicator of quality of life, in the Republic of Armenia (the only region with all rankings to occupy the final position).The situation is difficult in Shirak, Tavush, and Kotayk regions, which require additional strategic management efforts.

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Classification of the regions of the Republic of Armenia on the issues of strategic management
Key words: quality-of-life, integral indicator, socio-economic development, unemployment, migration

The purpose of this article is to assess the regions of the Republic of Armenia in terms of quality of life and to identify the main problems. To achieve this goal, the concept of an integrated quality-of-life indicator was used. The integral life quality index is a hierarchical system of interrelated indicators that allows to assessthe quality of life of the population based on publicly available statistical information on the values of three integral indicators: the quality of the population, the level of well-being of the population, the quality of the social sphere. As a result, the regions were classified into three categories: the level of well-being of the population, the quality of the population, and the quality of the social sector. Among the characteristics of the level of well-being of the population, the largest share is distinguished: the numberof the population living below the standard of living or extremely poor, the availability of housing stock, as well as the share of emergency housing in the total housing stock. Thehealth sub-category has the largest impact on the population quality category, the latter's influence severed by the increasing number of deaths from Covid-19 in 2020. Studying "Social Quality" category it proved that migration and unemployment remain serious problems in all regions of Armenia.For the general classification of regions, migration, unemployment and poverty are problems for all the regions of Armenia, but they are prominent in Lori, Shirak, Tavush and Kotayk regions.