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ECOSYSTEM-BASED MANAGEMENT OF POVERTY ALLEVIATION: EVIDENCE FROM ARMENIA

Poverty has always been considered a social evil, not only hindering societal development but also generating social tension and justified discontent among social groups. Overcoming poverty is considered a contemporary socioeconomic challenge, as this phenomenon manifests itself with varying degrees of severity and intensity in both developing and developed countries. The presence of poverty impacts the cohesion of various social strata, social balance, and consumer behavior. The presence of a poor population does not foster high-quality human capital, and a culture of adaptation to life in poverty hinders the full development of society. Moreover, the poor population is characterized by indifference to social development, since they are not interested in the behavioral manifestations of civil society, quality education, involvement, and participation in public administration processes, which, in turn, creates additional obstacles to the development of social life. Finally, the presence of poverty in a country is an economic burden for society, as the state is forced to implement various social measures and expend enormous resources to reduce poverty or prevent its worsening.

Keywords: *ecosystem, key progress indicators (KPIs), poverty reduction, strategic management*

JEL:I32, Q01, Q57

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INTRODUCTION. Poverty reduction management currently emphasizes strategic decisions based on forward-looking progress indicators. In practice, such information is lacking, since management decisions related to poverty reduction are mainly based on retrospective information. The article proposes the use of

key progress indicators within the framework of strategic management of poverty reduction in Armenia, which receive ecosystem assessments and are interconnected with management decisions using an appropriate methodology.

In the strategic management methodology aimed at poverty reduction, problems currently arise regarding how to measure and evaluate the effectiveness of the management process. In this regard, we emphasize the use of key progress indicators (KPIs) in the strategic management system, as they are mainly presented as measures of implementation of management objectives, the actual performance of which determines the degree of achievement of management targets and the effectiveness of management decisions (A. Benavot, M. McKenzie, 2021). Management using KPIs monitors the results related to the targets set, based on which management decisions are made to identify and eliminate weaknesses in the strategic process of achieving goals.

In this regard, the use of KPIs in strategic decisions to overcome poverty is considered justified. Moreover, official statistics, as a rule, present a retrospective report on the dynamics of the poverty situation, which, in our opinion, does not solve specific strategic problems, since it only records retrospective situations and not prospective assessments. Thus, analyses aimed at the foreseeable future should be more focused on progress, and not on retrospective assessments.

LITERATURE REVIEW. Poverty reduction strategies are formed and implemented through ongoing management decisions, the ultimate results of which are aimed at the foreseeable future. However, when strategic management processes are implemented with a localized approach, without considering the cause-and-effect relationships underlying poverty, the effectiveness of strategic management decisions is reduced. Therefore, it becomes necessary to consider strategic poverty reduction strategies within the framework of an ecosystem that may exist in a given country with its own components, but from a coordination and organizational perspective, simply not be implemented, thereby failing to achieve the desired results (Alkire S., Roche J. M., & Vaz A., 2017).

If numerous educational, social, psychological, or entrepreneurial support measures aimed at reducing poverty are implemented and they are not interconnected and do not have systemic solutions, then poverty reduction will either be episodic or will not make itself felt in the short term (C. Theavy, 2023). The historical record also demonstrates and documents the same point: the failure to overcome poverty without a systemic approach. Thus, in 1835, the Romanian landowner Emanuel Beceanu, inspired by the utopian ideas of Charles Fourier, freed his serfs and formed with them the "Agricultural and Manufacturing Company"—a self-governing community where there was no poverty, private ownership of the means of production, and a fair distribution of labor income prevailed. However, just two years later, this community was dispersed by government troops, as this approach to poverty eradication, while acceptable from below, was not approved from above and was unacceptable to the authorities

(L. Riss, 2023). Another example is the "Réunion" community, founded by French colonists in the United States. It provided jobs to the unemployed poor, and, above all, sought to distribute income equally to avoid social polarization. However, unfavorable climate conditions, coupled with the founders' generous compensation and the workers' laziness, led to internal divisions within the community, and the organization ceased to exist, as the profit mechanism proved ineffective in alleviating poverty (Foundation for Economic Education (FEE), 2021).

Such examples are not uncommon in history and in all cases prove that failures in poverty eradication are linked to an ecosystem that does not function in this direction, since overcoming poverty requires not only multi-vector activity, but also presupposes the coordinated activity of mutually complementary and regulatory components (F. H. Ferreira, S. Chen, and others, 2015).

It should be noted that, according to the classical definition, an ecosystem is a system of harmonious activity among complementary components, resulting in cause-and-effect relationships aimed at the sustainable functioning of the system. Disruption of these relationships leads to a disruption of the harmonious functioning of the ecosystem and its sustainability (J. Gómez-Márquez, 2022).

The functioning of ecosystems was probably initially assessed as a product of nature, and therefore, not so long ago, ecosystem operations were mainly discussed in the context of natural phenomena. However, ecosystems are currently also considered in economic and social environments; that is, ecosystems are formed not only as a result of nature, but also as a result of public intervention, based on the goals of serving specific beneficiaries and the framework of their strategic management (N. Khachatryan, 2024).

In this regard, strategic management aimed at overcoming poverty using KPIs should be carried out within the framework of the ecosystem.

RESEARCH METHODOLOGY. The study utilized scientific abstraction methods to establish correlations between the components contributing to poverty reduction in the ecosystem. Key progress indicators, which had different units of measurement and were converted into coefficients to ensure comparability of the analysis, were used to measure the factorial influence of these components. Comparative analysis methods were employed, and their results were related to management decisions aimed at reducing poverty.

The study's comparability framework was established using relative values. Specifically, a ratio analysis method was used to ensure comparability for poverty progress indicators measured using different units. The ratio analysis yielded estimates of changes in key strategic poverty management indicators, which were correlated with relevant management decisions aimed at poverty reduction. The research hypothesis proposed the use of a roadmap to determine poverty reduction progress indicators. This, on the one hand, serves as a guide for research activities, and on the other, creates opportunities for assessing the effectiveness

of poverty reduction management functions in terms of key progress indicators, which, in turn, provides an informational basis for strategic decision-making that promotes progress.

For some data (in particular, the data in Table 3), the works of several authors were used as a scientific basis; in addition, the list of KPIs, data, and calculation methodology specified in Table 3 and Table 4 are our proposal, therefore, the quantitative assessments are based on hypothetical assessments to demonstrate the methodology for calculating the KPIs used and their effectiveness.

In presenting the research results, schematic interpretations were also used, which made it possible to present the structure of the poverty alleviation ecosystem in an abstract format from a strategic management perspective and conduct a comprehensive analysis.

RESULTS. Official statistics in the Republic of Armenia typically present a retrospective report on poverty dynamics, which, in our opinion, fails to address specific strategic objectives, as it only captures retrospective situations rather than prospective assessments. Thus, according to official statistics, the poverty rate in the Republic of Armenia is increasing in line with the expansion of household size (see Table 1). However, this information does not allow us to identify the causes of this phenomenon. Moreover, management analysis aimed at the foreseeable future should focus more on progress rather than retrospective assessments.

Table 1

Poverty rate in Armenia by household size in 2024 (%)

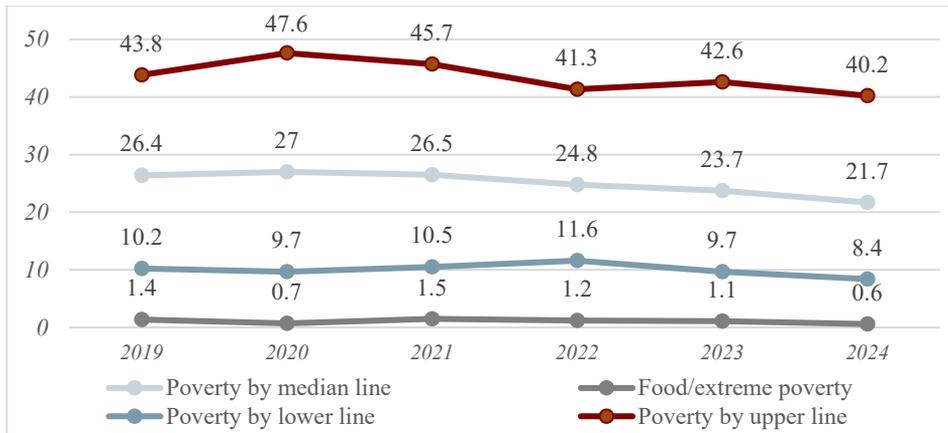
<i>Number of household members</i>	<i>Extremely poor</i>	<i>Poor</i>	<i>Share in the poor population</i>	<i>Share in the total population</i>
1	0,1	4,3	1,0	5,1
2	0,0	8,9	5,7	13,9
3	0,4	16,4	10,9	14,4
4	0,9	18,3	15,6	18,4
5	1,0	25,8	22,4	18,8
6	0,4	27,4	20,1	15,9
7 and up	1,1	39,0	24,3	13,5
Total	x	x	100	100

Source: *Statistical Yearbook of Armenia, 2025, p. 152, <https://armstat.am/file/doc/99563928.pdf>*

Moreover, the data in Figure 1 show that all levels of poverty (extreme, lower, middle, upper) have been recording a certain decrease in the Republic of Armenia in recent years, but such statistics do not make it clear what specifically caused extreme poverty to decrease more (about 1.27 times) than poverty according to the lower line (about 1.05 times) compared to 2019. If such statistics were combined with estimates of the KPIs, the impact of individual factors on poverty reduction would become clearer.

Therefore, the definition of key progress indicators, acting as the most important component of the ecosystem being formed around poverty reduction,

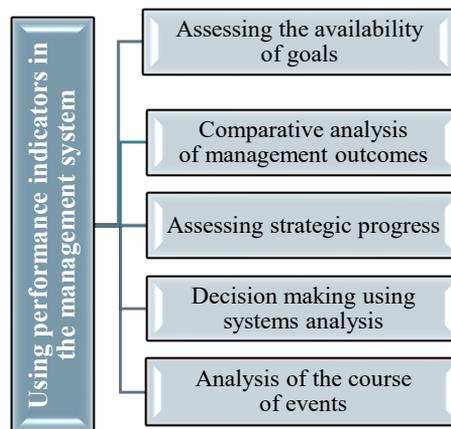
should be used by strategic management as much as possible as a monitoring and evaluation tool.



Sources: *Social Snapshot and Poverty in Armenia 2020-2023*, p. 32 and *Social Snapshot and Poverty in Armenia 2024*, p. 33.

Figure 1. *Dynamics of poverty indicators in the Republic of Armenia in 2019-2024 (%)*

Key progress indicators (KPIs) have been used in management for nearly two centuries. The concept of their application dates back to the early 20th century, when Frederick Taylor introduced management as a science and, consequently, used data and measurements through KPIs in the industrial environment to improve productivity and efficiency. These indicators began to be used to assess the achievement of strategic goals, and later became an effective tool for comparing and interpreting competitive positions. Later, these indicators were also incorporated into management monitoring systems (see Figure 2). Today, progress indicators are used not only in business but also in various areas of public life. In management systems, such indicators are also used to analyze development progress.



Source: *Tshughuryan A., Grigoryan A., Martirosyan T. (2025)*

Figure 2. *Directions for the application of performance indicators in the management system*

The most important indicators of progress in poverty reduction include the results of state social support, access to education, private sector support, and civil society support. Measurability and evaluation of these indicators provide the basis for strategic management decisions. Moreover, research shows that top-down factors in the form of state social programs play a more significant role in preventing food and extreme poverty, while bottom-up initiatives are considered more effective in overcoming the average poverty line, such as improving educational qualifications, retraining, employer support, and measures aimed at eradicating the culture of poverty by non-governmental organizations (NGOs) (CAP, 2021).

Meanwhile, the first UN Sustainable Development Goal defines poverty eradication through the seven sub-goals, which are presented in Table 2, and some of which have already become global benchmarks.

Table 2

Poverty eradication sub-goals by the UN (UN, 2014)

Sub-Goal 1.1	By 2030, eradicate extreme poverty for all people everywhere, currently defined as income of less than US\$1.25 a day.
Sub-Goal 1.2	By 2030, reduce by 50% the proportion of men, women, and children of all ages living in poverty in all its dimensions, according to national definitions.
Sub-Goal 1.3	Implement nationally appropriate social protection programs and measures for all, including through tax policies, and achieve by 2030 substantial coverage of the poor and vulnerable.
Sub-Goal 1.4	By 2030, ensure that the poor and the vulnerable have equal access to economic resources, including basic services, property, inheritance, natural resources, appropriate new technology, and financial services, including microfinance.
Sub-Goal 1.5	By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters.
Sub-Goal 1.6	Ensure significant mobilization of resources from various sources, including through enhanced development cooperation, to provide adequate and predictable means for developing countries to implement programs and policies to end poverty in all its dimensions.
Sub-Goal 1.7	Establish sustainable policy frameworks at the national, regional, and international levels, based on poverty reduction development strategies, to support accelerated investment in poverty eradication activities

In this regard, when defining KPIs, it is of great importance to determine their national benchmarks, since, in the case of unrealistic benchmarks, there is no possibility of adequately assessing the effectiveness of a specific indicator, which in turn makes the appropriateness of making subsequent management decisions problematic.

Table 3

Matrix of Annual Benchmarks for Poverty Reduction Factors in Armenia and Their Key Progress Indicators (Normalized Coefficients, %)¹

<i>KPI</i>	<i>Extreme poverty</i>	<i>Lower poverty line</i>	<i>Middle poverty line</i>	<i>Upper poverty line</i>
Access to vocational education	15	20	25	25
Access to higher education	5	8	10	15
State social assistance	30	20	15	10
Supporting employers to reduce the "employed poor"	15	18	20	25
Organization of retraining	10	20	20	25
NGOs support the elimination of the culture of poverty	25	20	15	10
Business micro-financing	10	20	20	25

Source: *Compiled by the author based on the analysis conducted in this study.*

Thus, if employers theoretically set high benchmarks for improving wages, then when compared with actual achievements in practice, they underestimate the progress achieved in reducing “in-work poverty.” Conversely, setting low benchmarks for this factor overestimates the progress achieved in reducing the “in-work poor.”

In this regard, it is important to use the matrix of access to poverty reduction factors and their annual benchmarks for the KPIs, which can play a guiding role in setting benchmarks for key progress indicators (see Table 3).

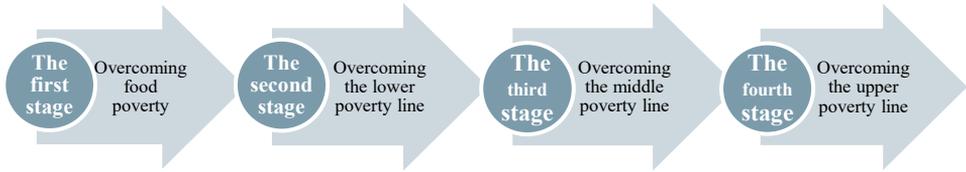
The matrix of access to poverty reduction factors and their annual benchmarks for the KPI demonstrates the ambiguity of approaches to the annual determination of progress indicators, taking into account the influence of various factors. Thus, while progress benchmarks defined for overcoming extreme poverty to the upper poverty line are increasing for indicators such as access to education, "employed poverty," and retraining, the same process, conversely, is declining the importance of NGO activities and the effectiveness of state social programs (see Table 3).

This approach is justified by the fact that the poor, who are at the bottom of the poverty line, are particularly motivated by social support programs and their

¹ Created by the author based on research from the following sources:

- UN (2014), End poverty in all its forms everywhere, <https://www.globalgoals.org/goals/1-no-poverty/>
- World Bank (2018), Social Safety Net Programs Help Millions Escape Poverty, But Coverage Gaps Persist, <https://surl.it/wqygxu>
- D. Wolfe (2023), 8 world-changing solutions to poverty, *World Vision*, <https://www.worldvision.ca/stories/advocacy/solutions-to-poverty>
- World Bank Group (2023), Ending Poverty and Ensuring Dignity for All, <https://www.worldbank.org/en/news/feature/2023/10/16/end-poverty-and-ensure-dignity-for-all>
- Plan International Canada Inc, 5 Ways to End Poverty, <https://plancanada.ca/stories/5-ways-to-end-poverty>

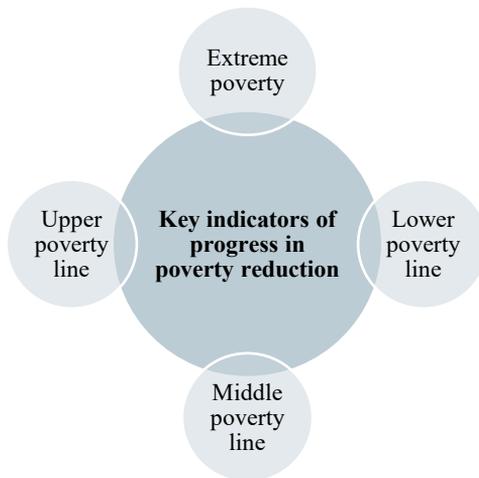
interests, for example, in obtaining microfinance for starting a business, obtaining higher education, or undergoing professional retraining, are of relatively little significance for them (UNICEF, 2024). Therefore, supporting civil society is also crucial to lifting the needy out of poverty. In turn, it is necessary to provide special support to population groups at the middle and upper poverty lines in the area of vocational education and retraining, establishing key indicators for greater progress in these areas.



Source: *Compiled by the author.*

Figure 3. *Approach to defining key performance indicators for stage-by-stage poverty reduction*

The importance of a model for assessing the poverty eradication process using progress indicators is also emphasized here. The first model demonstrates a chain approach, whereby the primary resources for poverty eradication are directed toward eliminating extreme poverty. After completing this stage successfully, a gradual transition is made to overcoming the lower poverty line. Finally, overcoming the upper poverty line is considered the completion of the poverty eradication strategy (see Figure 3). In the second model, the definition of KPIs aimed at assessing the reduction of poverty implies the simultaneous and multi-vector use of state and public resources for comprehensively eliminating all levels of poverty (see Figure 4), which, of course, works effectively if the country has significant socio-economic potential for reducing poverty (Concern Worldwide, 2025).



Source: *Compiled by the author.*

Figure 4. *Model for defining KPIs with an integrated approach to poverty reduction*

The UN's goals and approaches to poverty measurement, while global in nature, cannot be applied identically or fully to the same programs in different countries. At the same time, the capabilities of each country must be taken into account when determining poverty eradication pathways in the foreseeable future and then implemented, with their own key indicators of progress.

Table 4

Annual assessment of the effectiveness of national action plans and the implementation of management decisions within the poverty reduction ecosystem

<i>KPI</i>	<i>Targeting (%)</i>	<i>In fact (%)</i>	<i>Performance</i>	<i>Management decision</i>
Access to vocational education	25	22	0,88	Activate motivational tools for obtaining education.
Access to higher education	10	7	0,7	Activate motivational tools for obtaining education.
State social assistance	15	14	0,93	Re-evaluate the rationale for social programs.
Supporting employers to reduce the "employed poor"	20	14	0,7	Review the benefits provided to employers in support of vulnerable groups.
Organization of retraining	20	11	0,55	Update the list of vacancies in accordance with labor market requirements.
NGOs support the elimination of the culture of poverty	15	12	0,8	Review the goals of eradicating the culture of poverty.
Business micro-financing	20	9	0,45	Simplify the microcredit process.

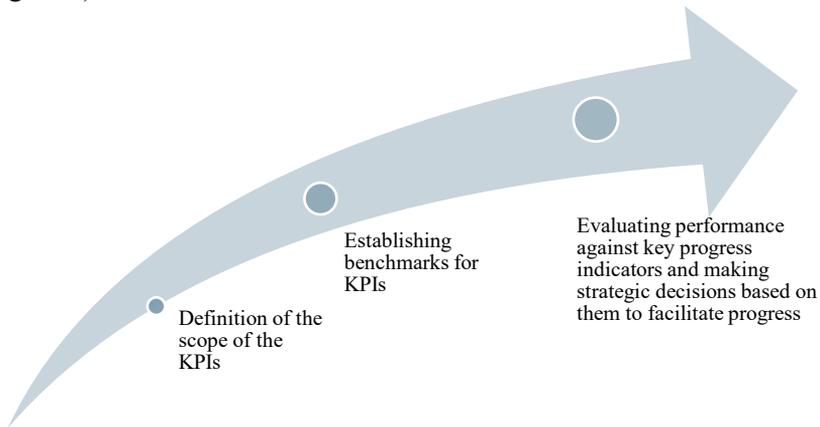
Source: *Compiled by the author based on the analysis conducted in this study.*

It should also be noted that in practice, key progress indicators are expressed in various units of measurement (% , drams, people, years, etc.), which, in turn, requires their conversion to universal measurable units and comparative assessments when assessing the effectiveness of strategic management. Furthermore, professional literature suggests that the comparability of key progress indicators in various units of measurement is achieved by converting the goal achievement ratio (Tshughuryan A., Grigoryan L., Martirosyan T., 2025). To this end, we propose the following approach to assessing the effectiveness of key indicators of progress in the poverty reduction ecosystem in the Republic of Armenia and making management decisions based on them (see Table 4).

Table 4 shows that the weakest links in the strategic path to overcoming the median poverty line are workforce retraining and business microfinance, which annually recorded low rates of key progress indicators (coefficients of 0.55 and 0.45, respectively), while high rates were recorded for progress in access to specialized education and the implementation of state social programs

(coefficients of 0.88 and 0.93). Thus, monitoring the implementation of key indicators enables the making of informed strategic decisions to combat poverty.

Therefore, the process of defining key performance indicators should include choosing their scope, defining criteria, and evaluating their effectiveness (see Figure 5).



Source: Compiled by the author.

Figure 5. Proposed steps for defining indicators of progress in poverty reduction

Indeed, the poverty alleviation ecosystem requires a multi-pronged approach, including individual efforts, community support, and systemic change. Individual actions such as education, financial literacy, and goal setting are also important. Community resources and support organizations can provide significant assistance. Systemic changes such as job creation, economic growth, and reducing inequality are also necessary for long-term solutions.

CONCLUSIONS. From a strategic management perspective, it is necessary to define the framework of the poverty alleviation ecosystem. This system is not clearly defined as a management object, and it is management itself, based on its goals, that shapes the framework of an ecosystem focused on poverty alleviation, where various actors act as individual components. This raises the question of which component is given the greatest weight from a management perspective. While not long ago, the state was considered the primary actor in the fight against poverty (Economic and Social Inclusion Corporation, 2020), in today's civil society, other actors also support the fight against poverty, including employers, non-governmental organizations, local governments, and trade unions. Their goals and resulting actions require harmonization within the ecosystem. In the process of strategic management of the poverty alleviation ecosystem, an important role is played by analyzing the interrelationships between system components and justifying their mutual tensions. Here, the emphasis is on the justification for the actions of each component of the ecosystem to reduce poverty, ensuring that there is no duplication of functions, but rather, mutual complementarity. Particular attention is paid to the coordinated activities of the

private and public sectors of the economy, where strategic decisions on poverty reduction are made.

In conclusion, we propose the following steps for using poverty reduction progress indicators in the strategic management process (see Figure 5):

Step 1: Defining the scope of the KPIs, where indicators with the most realistic and strategic role in poverty reduction are identified based on the country's potential for poverty reduction.

Step 2: Establishing national benchmarks for the KPIs, where selected priority strategic poverty reduction indicators are made measurable and expressed in specific units of measurement.

Step 3: Annually assessing the effectiveness of the KPIs, where strategic poverty reduction goals are compared with actual achievements, thereby interpreting the nature of deviations and shortcomings in goal achievement.

Step 4: Analyzing strategic paths to poverty alleviation based on the KPI results, where weaknesses and strengths of poverty reduction processes are identified, and appropriate strategic management decisions are made to improve them.

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