

FROM GLOBAL TO LOCAL: PRIORITISING THE SUSTAINABLE DEVELOPMENT GOALS BY LOCAL GOVERNMENTS IN ROMANIA

Iulian STĂNESCU¹ & Sergiu ȚĂRA²

¹Ph.D., Senior Researcher II, Research Institute for Quality of Life, The House of the Romanian Academy, Calea 13 Septembrie no. 13, District 5, 050711, Romania, ORCID ID 0000-0003-2583-0898.
²Ph.D., Lecturer, National University of Science and Technology POLITEHNICA Bucharest, 313, Splaiul Independentei, BN Building, Room BN 313, Sector 6, Bucharest, Romania, ORCID ID 0000-0003-2283-2919

stanescu.iccv@gmail.com¹
sergiu.tara@upb.ro²

CORRESPONDENCE ADDRESS: Iulian Stănescu,

Abstract

The paper examines how local government representatives in Romania prioritise the Sustainable Development Goals (SDGs) by perceived importance. We use survey data from the 2023 Romanian Voluntary Subnational Review. The survey included a subsample of communes' (rural localities) representatives (N=539) and a subsample of municipalities' (large urban localities) representatives (N=70). The findings show that funding availability, local needs and context strongly influence the rankings. We also expected that differences in municipal development levels relative to communes would lead to differences in SDG rankings. We used a chi-square test of homogeneity to assess whether the two subsamples (communes vs. municipalities) share the same proportions in their SDG rankings. The results were surprising and counterintuitive. Regardless of access to funding and levels of development, local government representatives from communes and municipalities ranked the SDGs by importance in the same order and in broadly similar proportions. The ranking of SDGs by importance was as follows: SDG 6, SDG 7, SDG 9, SDG 11, SDG 4, and SDG 3.

Keywords: sustainable development goals, local government, Romania, rural, urban

1 Introduction

Achieving the United Nations' 2030 Agenda and its Sustainable Development Goals (SDGs) is a global effort that unites national and local governments, international organisations, civil society, and experts. Even if their role in this regard is secondary and supplementary to that of national governments, local government leaders and officials play a pivotal role in implementing SDGs at the regional and municipal levels.

This paper looks into the rankings of the SDGs by local government representatives in Romania, based on their perceived importance. It is the first research of its kind in Romania and one of the few worldwide. We use survey data from the 2023 Romanian Voluntary Subnational Review, which featured a subsample of communes' (rural localities) representatives (N=539) and a subsample of municipalities' (large urban localities) representatives (N=70).

In the first part of the paper, we review the literature, beginning with the prioritisation of SDGs by local governments worldwide. Next, we examine the challenges and peculiarities of implementing the SDGs in Romania. We also reviewed the available financing for local government at the time of the survey in early 2023.

Based on the literature review, we formulated an expectation and a hypothesis regarding SDG ranking by local government leaders. We expect funding availability to influence the types of development projects / SDGs pursued by local government leaders. That is to say, mayors will prioritise projects for which funding is available. We hypothesise that

higher development levels in urban areas than in rural areas lead to differences in SDG rankings. For instance, SDG 6 Water and sanitation is expected to be more salient for communes than for municipalities. The research section of the paper covers the methodology and presentation of the results. In the methodology part, we focus on the survey design, the quality of the two samples, their implications for the study's limitations, and the construction of the dependent variable. Then, in the discussion section, we examine the results.

A recurrent expectation in the scientific literature is that differences in settlement type—particularly between large urban and rural localities—should generate distinct development priorities and thus different SDG prioritisation. This is based on differences and inequalities in socioeconomic development, infrastructure levels, and administrative capacity. This paper intervenes in this debate by asking whether such expected differentiation is empirically observable when local governments operate under shared funding frameworks and legacy infrastructure. Using original survey data from Romanian local governments, we analyse how representatives of communes and municipalities rank SDGs by importance and test whether differences in development levels translate into systematically different rankings. The contribution of this study is twofold. Empirically, it provides one of the first systematic analyses of SDG prioritisation by local government representatives in a less developed, peripheral EU member state, based on institutional rather than individual-level data. Analytically, it advances an explanation for priority convergence that goes beyond descriptive accounts of funding availability or administrative competence. We argue that infrastructural lock-in - stemming from ageing utility networks, sunk investment costs, and compliance-oriented funding programmes - constitutes a key mechanism shaping local development priorities. Under such conditions, local governments are compelled to focus on capital-intensive basic infrastructure, largely irrespective of their settlement type or relative development level.

2 Literature overview

The literature on local government leaders and officials' prioritisation or rankings of SDGs is limited, as few data-driven studies exist on this topic. According to research based on data from Chinese provinces and Spanish municipalities, SDG rankings are context-dependent, influenced by the unique characteristics of regional development in each country, the availability of financial resources to local governments, and local-level challenges (Rieiro-García et al., 2023; Liu et al., 2021). In other words, regional wealth affects SDG prioritisation, with less developed areas focusing on basic needs and infrastructure, particularly utilities (Zhang et al., 2022). Other research indicates that local SDG priorities differ from national or global rankings, mainly due to variations in local governments' areas of responsibility and available financial resources (Xing et al., 2024; Huang et al., 2024). Additionally, SDG prioritisation can change over time, sometimes as a result of external events such as the COVID-19 pandemic (Fernández-Portillo, 2024).

As an European Union (EU) member state, Romania has established a robust policy framework for SDG implementation, including a National Strategy for Sustainable Development in 2018 (Government of Romania, 2023). According to Firoiu et al. (2019), only 40 out of 107 indicators featured in the 2018 National Strategy were forecasted to reach the EU average by 2030. SDG performance is also highly uneven across the country due to structural economic and social disparities (Benedek et al., 2021; Stănescu & Bilan, 2023). Counties and regions with a higher share of urban

population, especially those with large metropolitan areas, show higher SDG index scores. On the other hand, more rural counties and regions, especially in the Eastern and Southern areas, are less developed. In particular, rural areas face higher income inequality, poverty, and social exclusion, as well as limited access to public services, including infrastructure and social services such as education and health care (Nagy et al., 2018; Benedek et al., 2021; Teau et al., 2023). Particularly relevant are the urban-rural disparities regarding the share of households with access to water, sanitation, and natural gas, especially from public networks (Stănescu, 2021).

Romanian local authorities have a robust legal framework that confers on them responsibilities and competencies for a wide range of public services, such as education, health, welfare and social services, culture, sport, transportation, environmental protection, territorial development, etc. (Dragoş & Neamţu, 2007; Profiroiu et al., 2017). Like those in other EU countries (Silva et al., 2023; Orzeszyna & Tabaszewski, 2021), they cover most SDG indicators and serve as essential voices in sustainable development rather than simply observers (Graute, 2016). As recent studies stressed (Bilsky, Moreno & Tortosa, 2021; Ningrum et. al., 2024), local authorities are closest to citizens' problems and expectations, so they are fully entitled to decide on the appropriate strategies and actions for local development initiatives and the provision of quality public services in the benefit of their citizens, thus contributing to the implementation of Agenda 2030.

In Romania, as elsewhere, there were some difficulties on the road to SDG implementation: unclear national policy framework and frequent legislation changes, low awareness of the importance of local SDGs initiatives and resource constraints (Jones & Comfort, 2019), weak collaborative public administration, lack of information, corruption, political pressures, and a trust deficit of local authorities (Suditu et al., 2014; Guha & Chakrabarti, 2019). The success of local governments depends on political and, mainly, financial resources available to them. They tend to implement sustainable policies despite political ideologies, to the benefit of citizens to whom they are directly accountable (Bisogno et al., 2023).

In the last decade, local governments in Romania have had access to various financing opportunities to improve living conditions and the population's access to public services, especially in rural areas, which directly affects some SDG indicators. The primary and most significant financing source was European funds, a genuine driver of local development in specific sectors and rural areas (Şurubaru, 2021), with the absorption rate of local authorities improving over the last two successive programming periods (Marcu, Kandžija, & Dorotic, 2020). The main operational programmes accessible to local authorities were: Regional Operational Programme 2014-2020, mainly financing energy efficiency (better insulation of private and public buildings), urban mobility, urban regeneration, and cadastre for rural areas, with projects totalling nearly 7 billion euros (Ministry of European Investments and Projects, 2025); Large Infrastructure Operational Programme, which financed water supply and wastewater management, sewage systems investments by regional water operators; Sustainable Development Operational Programme (SDOP), with a total budget of 5.25 billion euros, of which 2.9 billion euros were allocated to the water supply network and 480 million euros to waste management; in rural areas, the National Rural Development Programme provided funding for essential rural infrastructure (roads, sewage, kindergartens, etc.), cultural heritage, the reconstruction of flood-prevention and protection infrastructure,

and broadband infrastructure. By the end of the 2020s, around 10 billion euros could be invested solely in Romania's water supply and sewage infrastructure. However, this substantial investment will cover less than half of the necessary funds to meet the EU directive on drinking water quality and urban wastewater treatment, which is estimated at 24.5 billion euros, 9 billion euros for drinking water supply, 13.2 billion euros for urban wastewater collection and treatment, and 2,3 billion euros for the replacement and rehabilitation of infrastructure built in the past 20 years (Agenda Construcțiilor, 2024). During and in the aftermath of the COVID-19 pandemic, a supplementary source of EU funds was the National Recovery and Resilience Plan (NRRP/PNRR). Local governments were eligible for projects in energy (green transition, energy efficiency of public buildings), digitalisation of public services, including education and healthcare, as well as local mobility and public amenities (Ministry of Investments and European Projects, 2025). Although by early 2023, the interval of the data collection period for this study, few projects were under implementation.

Central government grants to local governments complemented EU funds through the National Program for Local Development, which later evolved into the National Investment Program “Anghel Saligny”. While accessible to all types of local government, its focus was on basic infrastructure in rural areas and towns (water and sanitation, local roads, and natural gas distribution network). At the time of its launch in 2021, the total budget exceeded 8 billion euros. However, based on subsequent revisions, it could surpass 12 billion euros by 2030 (Ministry of Development, Public Works and Administration, 2025).

3 Research

Our research had the following three aims:

- (1) Provide a measurement of the SDGs ranked by importance according to local government representatives in Romania, at the municipal (large urban settlements) level, the commune (rural settlements) level, and overall across the two types of local government.
- (2) Explore how funding availability influences the types of development projects / SDGs pursued by local government leaders; e.g., mayors will prioritise projects for which funding is available.
- (3) Test the hypothesis that higher development levels in urban areas than in rural areas lead to differences in SDG rankings; for instance, we expect SDG 6 Water and Sanitation to be salient for communes, but not for municipalities, for which SDG 7 or SDG 11 should be prioritised.

This study uses data from a survey carried out for the 2023 Romanian Voluntary Subnational Review (Stănescu & Bilan, 2023). The review was issued by the Association of Communes of Romania and the Romanian Municipalities Association.

The sample design was based on the structure of local government in Romania, which is organised in a two-tier structure. The first tier includes 42 counties and Bucharest municipality (the capital). The second tier comprises settlements, urban (municipalities and towns), and rural (communes). Each county includes a varying number of municipalities, towns, and communes, depending on its area and population. Altogether, the 42 counties and Bucharest municipality feature 103 cities, 216 towns, and 2,862 communes. Under Romanian law, all four categories are referred to as territorial administrative units. Under EU classification, they are Local Administrative Units (LAU). Since the review was issued by the Association of Communes of

Romania and the Romanian Municipalities Association, it covered only cities and communes. According to the 2021 census, the 103 cities and 2,862 communes cover 90.22% of the total population, 42.42% for the former and 47.8% for the latter (NIS 2003, Table 1.03_1.3.1-si-1.03.2).

The survey featured two samples, one for municipalities and one for communes. Due to the size of the target population, total population sampling was used. This approach was possible and practical due to the small size of the target population and its specific traits. In this case, the target population did not comprise human persons but legal persons in the public sector, i.e., local government units. Invitations to participate in an online survey were sent to all 109 members (103 cities plus six districts of Bucharest Municipalities) of the Romanian Municipalities Association (AMR) and to the 2,267 members of the Association of Communes of Romania (ACOR). Since all municipalities are affiliated with their local government association, all were invited to participate in the study. However, only 2,267 out of 2,862 communes were affiliated with their local government association and thus received the invitation. The data collection method was computer-assisted self-interviewing. Most of the questionnaire was standard, but a small minority of items referred only to municipalities or communes. The questionnaire was drafted in Romanian. During pretesting, the average time duration to complete the online questionnaire was about 10 minutes. A variety of local government representatives completed the questionnaire, including mayors and deputy mayors (28.4%), the secretary general (the most senior civil servant in the local government unit, 38.9%), other civil servants (28.1%), and personal or special advisers (political appointees, 4.6%) (Stănescu & Bilan, 2023).

The survey data were collected from February to March 2023. The survey dataset comprised 609 local government units, of which 70 were municipalities and 539 were communes. The response rate was 64.2% for municipalities and 23.7% for communes (539 out of 2,267 communes affiliated to ACOR). Since not all communes were affiliated with ACOR, the response rate among the target population (2,862 communes) was 18.8% (Stănescu & Bilan, 2023).

Beyond the response rate, limitations of the study could come from the quality of the two samples. In usual population samples, sample quality is assessed by comparing key sociodemographic variables in the sample with census data. However, our target population consists of legal persons, specifically local government units. Two variables were actually used in the 2023 Romanian Voluntary Subnational Review to check the samples: the breakdown of local government units by province and by population size.

Although it had a lower response rate, the communes' sample was closer to the target population's breakdown by province and by commune population size than the municipalities' sample. For communes, the difference between the sample and the target population breakdown for the seven provinces (Transylvania, Banat, Wallachia, Moldavia, Dobruja, Oltenia or Lesser Wallachia, and Bucharest-Ilfov) was less than three percentage points for each province (ranging from -2.7 to +2.0); by population size, the difference between the sample and population breakdown ranged from -2.5 to +4.4 percentage points. As a result, medium-sized (3,001 to 5,000 inhabitants) and

large communes (5,001 to 10,000) were slightly overrepresented, while very large (more than 10,000) and smaller communes (up to 3,000) were somewhat underrepresented (see Table 1).

The smaller size of the municipalities sample ($N=70$, target population = 109) increased the percentage-point difference between the sample and population breakdowns. For provinces, the difference between the sample and population breakdowns ranged from -8.3 to +6.7 percentage points; for population size, the difference between the sample and population breakdown ranged from -8.0 to +4.0 percentage points (see Table 2). In effect, the sample was unbalanced by the low response rates in Bucharest (2 out of 7 municipalities, 28.6%), Dobruja (2 out of 4, 50%), and Oltenia (2 out of 9, 22.2%) provinces. Since all Bucharest district municipalities and the two largest municipalities in Drobuja and Oltenia were in the 200,000 to 300,000 inhabitants' population size category, the decision by representatives from just seven municipalities to decline participation in the survey also unbalanced the sample for this category. Overall, the response rate was higher for the cities' sample than for the communes' sample, but the geographic and population size coverage is better for the latter.

In terms of sample quality, the relevant question is whether there is a significant association between each of the two variables (population size and province) and the study's dependent variable (SDG ranking by importance). In other words, is the SDG ranking given by a commune or city representative independent of its population size or province? To test these hypotheses, we used a chi-square test of independence. We found no significant association between city population size and SDG ranking ($\chi^2(10)=12.67$, $p>.243$), city province and SDG ranking ($\chi^2(10)=10.135$, $p>.604$), or commune population size and SDG ranking ($\chi^2(16)=12.32$, $p>.728$). We did find a significant association between commune province and SDG ranking $\chi^2(24)=45.29$, $p<.005$. However, after examining the multiple cells of the contingency table, we observed a large adjusted Pearson residual (+4.6) for a single cell: the SDG 12 category. In fact, only three communes from the sample chose SDG 12 as the most important, two of which are from Dobruja province. Therefore, we applied a Bonferroni correction to adjust the multiple-comparison cutoffs. To test all 35 cells in the crosstabulation (5 SDGs x 7 provinces), the new alpha level is $\alpha_{Bon} = 0.05:35 = 0.00143$, with a corresponding critical value $N(0,1) = 3.2$. When checking against this Bonferroni-corrected critical value, only one of the 35 cells has a Pearson adjusted residual significantly different from expected under the null hypothesis of no association, i.e., with a value above ± 3.2 . It was the cell with Dobruja province with SDG 12 as the most important SDG (+4.6). So, in our sample of 539 communes, the chi-square test of independence showed that, across all combinations of communes by province and most important SDG, those in Dobruja province and SDG 12 were observed significantly more than expected. Therefore, we conclude that, although this study is limited by sample quality, the two local government samples in Romania (communes and cities) are of satisfactory quality.

The dependent variable in this study aimed to measure the ranking of the SDGs by local government representatives in terms of importance. The item was designed using an indirect approach for two reasons. First, because this was the first research on this topic, the level of local government representatives' knowledge of the SDGs was unknown. Second, the risk of social desirability bias, as elected officials and civil servants may

avoid admitting to low levels of knowledge about the SDGs. In effect, the survey featured two questions on this issue. Respondents were asked to evaluate the extent to which mayors are informed about the UN 2030 Agenda SDGs and the level of knowledge among city hall employees about the SDGs (Stănescu & Bilan, 2023). About 55% of respondents in the consolidated samples evaluated the extent to which mayors are informed about SDGs as being “to a small extent” or “very little or not at all”. Another 9% said they did not know. 32% thought they were informed “to a large extent” and 5% “to a very large extent”. Regarding the level of knowledge of city hall employees about the SDGs, 41% of local government representatives rated it as “low level”, 34% as “medium level”, and 11% as “high level”. Given the unreliability of opinion statements in surveys (Schuman & Presser, 1981; Zaller, 1992; Tourangeau, Rips & Rasinski, 2000), the approach to developing the dependent variable was based on facts. Each local government representative was asked to choose the three most important development objectives (projects) using a semi-closed item with 18 multiple-choice options and two text-answer options.

A second potential limitation of this study concerns the relationship between funding availability and the construction of the dependent variable in the questionnaire. The answer categories for the item measuring the most important development objectives were derived from a systematic review of funding programmes accessible to local governments at the time of data collection in late 2022 and early 2023. In addition, it was intensely pretested with mayors and other local government officials. As a result, respondents were primarily presented with project types that were fundable through EU or central government programmes. This design choice may raise concerns about endogeneity, as funding availability could shape both the response options and the observed prioritisation patterns. However, this feature does not invalidate the findings. First, the purpose of the item was not to capture abstract normative preferences regarding the SDGs, given the level of knowledge about them and the risk of conformist answers, but to identify development priorities as perceived by local government representatives under real-world institutional and financial constraints. In this sense, the alignment between funding frameworks and prioritised objectives is itself a substantive finding rather than a methodological artefact. Second, respondents retained full discretion to select and rank multiple objectives. Finally, as we shall see below, the unexpected similarity in SDG rankings across locality types directly contradicts the second hypothesis of this study. This suggests that the questionnaire item did not merely reproduce prior assumptions but also provided theoretically meaningful and empirically surprising results.

We start the analysis of the survey results with the dependent variable—the multiple-choice item about the most important development objective for local government in Romania. To determine the SDG ranking, we first had to recode the answer categories about development objectives into SDGs. Therefore, each answer category was allocated to an SDG according to its specific. For instance, development objectives related to water or sewerage networks and sewage treatment plants were coded as SDG 6: Water and sanitation. Development objectives that included the natural gas distribution network or the electricity grid, improving the thermal insulation of public buildings, the central heating system (only for cities), and expanding public transport and

transitioning it to green vehicles were recoded as SDG 7: Affordable and clean energy. SDG 11: Sustainable cities and communities comprised several answer categories: increasing the area of parks, public gardens, and green spaces; construction of social or young adults' housing; increased access to local public transport services; and pollution reduction. Several SDGs featured only one answer category: local roads and streets construction and repair works for SDG 9: Industry, innovation and infrastructure; increasing the degree of selective collection of household waste and waste management costs for SDG 12: Responsible consumption and production patterns; modernisation or construction of hospitals, polyclinics, or dispensaries for SDG 3: Good health and well-being; increased education enrolment and better school conditions for SDG 4: Quality education; anti-gender discrimination or domestic violence programmes for SDG 5: Gender equality (Stănescu & Bilan, 2023).

The first-choice answers for communes are shown in Table 3 and for municipalities in Table 4. The consolidated results with all three choices for communes are shown in Table 5, and for municipalities in Table 6. However, since only 7 out of 1,619 answers (0.43%) from local government representatives of communes for all three choices covered SDG 5 projects, and none of the answers from the city representatives did, we reallocated this category to others (Table 5).

The initial observation concerns how categories are divided and their relationship to funding availability. We expected that funding availability would influence the type of development projects / SDGs that local governments pursue. In other words, mayors are likely to prioritise project types for which funding exists. Since the answer choices in the questionnaire item about the most important development objective were based on a thorough review of available funds for local government at national and European levels, we expected these to form the majority in the category breakdown. Across the four tables, the 18 preset options for the most important development objective for local government accounted for 100% of responses, except for the multiple-choice question for communes, which accounted for 98.89%. Essentially, only 18 of 1,619 answers came from text responses that could not be linked to any SDG. This indicates that funding availability plays a crucial role in how local government leaders perceive their most important development objectives.

Following the recoding stage, a clearer picture emerges of how local government representatives in Romania rank the SDGs. Based on first-choice responses, the top three SDGs are: (1) SDG 6, (2) SDG 7 and (3) SDG 9. SDG 11 and SDG 12 followed at a considerable distance, in fourth and fifth place, respectively, and were selected only by representatives of communes (see Table 7).

The ranking sequence of the top three SDGs is consistent across communes and municipalities, despite variations in the proportions within each category. Specifically, communes show a 12.70 percentage-point higher prioritisation of SDG 6 than municipalities. Conversely, municipalities display a 12.97 percentage point greater preference for SDG 7. To determine if these

differences are statistically significant, a chi-square test of homogeneity was conducted to compare the distributions of first-choice SDGs between the two groups. The results revealed no statistically significant difference, with $\chi^2(4) = 8.86$, $p > 0.05$, indicating that representatives of communes and municipalities ranked the SDGs in broadly similar proportions. Full crosstabulation details are provided in (see Table 9).

The SDG rankings based on multiple-choice responses closely resemble those from the first-choice responses: (1) SDG 6, (2) SDG 7, (3) SDG 9, (4) SDG 11, (5) SDG 12, (6) SDG 4, and (7) SDG 3 (see full results in Table 8). However, several notable differences emerge. The percentage-point gaps between SDGs are smaller than in the first-choice rankings. SDG 6 remains at the top, but with only 32.5% of preferences among communes and 29.0% among municipalities. Additionally, the percentage scores for each SDG vary between the two types of localities: communes allocate a higher share to SDG 6, while municipalities assign higher shares to SDG 7 and SDG 9. To determine whether these differences reflect statistically distinct distributions, we again used a chi-square test of homogeneity comparing communes and municipalities based on their multiple-choice SDG rankings. The results indicate no statistically significant difference between the two groups, $\chi^2(7) = 7.739$, $p > 0.05$, suggesting that representatives of both communes and municipalities prioritise the SDGs in broadly similar proportions (see full crosstabulation in Table 10).

4 Discussion

The SDG rankings based on multiple-choice responses closely resemble those from the first-choice responses: (1) SDG 6, (2) SDG 7, (3) SDG 9, (4) SDG 11, (5) SDG 12, (6) SDG 4, and (7) SDG 3 (see full results in Table 8). However, several notable differences emerge. The percentage-point gaps between SDGs are smaller than in the first-choice rankings. SDG 6 remains at the top, but with only 32.5% of preferences among communes and 29.0% among municipalities. Additionally, the percentage scores for each SDG vary between the two types of localities: communes allocate a higher share to SDG 6, while municipalities assign higher shares to SDG 7 and SDG 9. To determine whether these differences reflect statistically distinct distributions, we again used a chi-square test of homogeneity comparing communes and municipalities based on their multiple-choice SDG rankings. The results indicate no statistically significant difference between the two groups, $\chi^2(7) = 7.739$, $p > 0.05$, suggesting that representatives of both communes and municipalities prioritise the SDGs in broadly similar proportions (see full crosstabulation in Table 10).

Overall, the ranking results were surprising and counterintuitive. Despite their different levels of development, local government representatives from communes and municipalities ranked the SDGs in the same order and with the same proportions.

The first, and arguably the most surprising, finding is that SDG6 dominates the rankings. To understand why and how, one must look beyond headline official statistics, which focus on the proportion of the population with access to water and sanitation, regardless of whether it is through public networks or individual solutions. In fact, there is a massive effort in Romania to expand public water

and sanitation networks, led precisely by the local government. According to headline official statistics (National Institute for Statistics, 2025a), 84.6% of households in Romania (97.0% urban, 69.7% rural) had access to running water in their homes in 2023. The percentages are very similar for households with a flushing toilet in their dwellings: 83.3% nationwide (96.6% urban, 67.3% rural). However, connectivity to public networks is much lower. For water networks, the 2021 census (National Institute for Statistics, 2023b) records 70.1% of total households (89.5% urban, 44.7% rural); for sanitation, 55.2% of total households (84.8% urban, 16.6% rural). According to 2023 statistical survey data published by the National Institute of Statistics (2025b), 77.1% of the population was connected to a public water network, with no data available for an urban/rural breakdown. In the same year, 60.1% of the population was connected to a public sanitation network, 98.9% in urban areas and 17.8% in rural areas (National Institute of Statistics, 2024). Moreover, in 2024, the European Commission referred Romania to the EU Court of Justice for failing to collect and treat urban wastewater adequately. (European Commission, 2024) So, there is ample scope to expand water and sanitation networks in rural areas. Demand is even greater in metropolitan areas affected by sprawl (Suditu, 2012; Georgescu, Mitrică & Mocanu, 2015; Dumitrache et al, 2016). Thus, part of the explanation for the importance of water and sanitation projects lies in their coverage of basic human needs at the first level of Maslow's (1954) hierarchy of needs. Another reason is the time-consuming, administratively cumbersome nature of these projects, which are prone to delays and often fail to meet targets. Georgescu (2018) highlighted the shortcomings of the water and sanitation programmes for the 2007-2013 multiannual financial framework, the first after Romania's EU accession: only 48% of the target for the water supply network and 90% for the sanitation network were achieved in rural areas, along with 71% of water treatment plants. Local government leaders place water and sanitation projects high on their agendas due to their large budgets, heavy administrative burdens, and long duration until completion.

Nevertheless, the big question is about urban centres: why do local government leaders rank SDG6 as the most important if headline statistics show that 97% of households have access to running water and a flushing toilet in their homes? Once more, part of the explanation lies with lower connectivity to public networks: 89.5% of the population for water networks, 84.8% for sanitation. Another explanation is that Romania's largest urban areas are experiencing a real estate boom, with densification and/or sprawl, as noted above, which requires the expansion of public utilities. However, yet another important explanation is not reflected in official statistics. Most of the urban water and sanitation networks date back to the 1960s and 1970s, when Romania experienced its most significant period of urbanisation (Zamfir, 2019). To better understand the ranking of SDG6 across municipalities, we conducted several follow-up interviews with city officials. They highlighted the age of the networks and the urgent necessity for substantial repairs and upgrades.

For SDG7, ranked second, we can observe both differences and similarities in the reasons why urban and rural local governments made their choices. Communes are much more interested than municipalities in expanding the gas

distribution network because household connectivity is significantly lower in rural areas than in urban areas. According to census data (National Institute for Statistics, 2023b), the only source of information about gas network connectivity, 52% of households nationwide were connected in 2021 (78% in urban areas, 19% in rural areas). Conversely, modernising central heating systems and expanding public transport (including the shift to green vehicles) only made sense for municipalities—particularly larger ones—which are the only types of local administrative units that provide such public services. The extension of the electricity grid seems perplexing, given the nationwide connectivity of 99.5% (99.8% urban, 99.1% rural), according to the 2021 census (National Institute for Statistics, 2023b). The explanation again lies with housing expansion, both in terms of sprawl and densification. Funding availability drives projects focused on thermal insulation of public and residential buildings (condominiums, present only in urban areas). The EU 2021-2027 multiannual framework and the NRRP have made financing available for such projects. The breakdown of development projects or objectives under SDG7 reflects the country's overall development level. Romania strives to balance coverage of basic needs (access to electricity, gas, and central heating) with the green transition (improved home and public building insulation, transition to green public transport vehicles).

SDG9, which ranks third, featured only one development objective: construction or repair works on local roads. Nevertheless, this is the single most important development objective in the multiple-choice classification for both communes and municipalities (Table 5 and Table 6). This development goal is high on the agenda for both types of local government, with ample financing opportunities from central government programmes, EU funds, and local budgets (the latter only for large municipalities).

Another significant surprise in the results was SDG11's low ranking. Issues such as housing for young people, parks and green spaces, increased access to public transport, and pollution reduction should be higher on local governments' agendas, especially for municipalities. Romania has been facing a prolonged housing crisis since the 1990s, particularly in urban areas (Zamfir, 2019). Romanian cities rank poorly in the EU in terms of green space per capita (European Environment Agency, 2017). For instance, Bucharest has one of the lowest per capita green space proportions among European capitals (Badiu et al., 2019). Romanian cities also rank among the poorest in the EU for air quality, as officially confirmed by the European Commission's decision to refer Romania to the EU Court of Justice for persistently exceeding PM₁₀ limits in 13 urban zones (European Commission, 2023). This legal action is based on monitoring data showing that 11 out of 12 Romanian air quality zones failed to meet EU standards (European Environment Agency, 2023). For housing, the explanation lies in the lack of funding for public housing and Romania's neoliberal approach to this issue, with the state all but completely withdrawing (Vincze, 2017; Lancione et al., 2020). Regarding green issues, there appears to be low interest among political elites in a green transition (Niță et al., 2018). The level of public support for a green transition also seems low. Opinion data showing environmental concerns consistently rank as a top priority for less than 5% of the Romanian public, far behind immediate economic issues

(European Commission, 2023). Scholars explain the low level of support as a product of a politically marginalised environmental movement and elite narratives that frame the green transition primarily as an economic burden rather than a societal imperative (Meyer & Pacurari, 2022; Buzogány & Mihuş, 2021). Therefore, more fundamental needs and their corresponding SDGs rank higher, such as access to water, sanitation, energy, and better public roads. Another explanation comes from a lack of available funding for green issues. At the time the survey was carried out, EU funds to support a green transition, both from the 2021-2027 budget and the NRRP, were about to become available.

SDG12 closes the top five ranking. Selective waste is within the area of competence of local government. The issue is high on the agenda of local government leaders due to fines for failing to meet waste management targets. Since its accession in 2007, Romania has repeatedly been warned of non-compliance with EU waste management directives, including by the European Commission through infringement procedures (Pătăuş & Tătar, 2017; Cugleşan, 2021).

SDG3 and SDG4 close their rankings. The level of competence of local governments in Romania in education and healthcare explains their low ranking. Their responsibilities focus on infrastructure roles, including the upkeep, construction, and maintenance of buildings that house kindergartens, schools, health clinics, and hospitals. They also provide ancillary services, such as school transportation in rural areas and canteens, but the latter are very limited. The central government retains the leading role in the governance of public education and healthcare in Romania. Nevertheless, some funding is available to local governments for the construction and refurbishment of buildings that house health and education services, primarily from EU or national grants (Profiroiu et al., 2017).

To sum up, the SDG rankings in Romania are based on a policy convergence of municipalities and communes. This convergence cannot be explained by fiscal dependence or unitary-state governance alone, given that local governments retain substantial discretion in allocating investments across multiple funding programmes. Specifically, the “Anghel Saligny” programme allows local government to choose between water, sanitation, local roads, and natural gas network expansion. The main explanation lies in infrastructural lock-in, which eludes headline statistics. Sunk costs force continued investments, and EU funds reinforce the lock-in. Local governments align priorities with what is fundable but also with the highest issues on the voters’ agenda. Rural suburban voters press for basic needs to be met. Local businesses and growth coalitions likely add to this pressure. Therefore, resources and administrative capacity are absorbed by capital-intensive development goals, such as utilities. As a result, we observe a prioritisation of SDGs 6, 7, and 9, while SDGs covering green transition and climate change, green spaces, housing, and even social services become secondary.

Looking beyond Romania, a less developed EU member state, we suggest that local contexts characterised by a lack of or ageing infrastructure and high fiscal

dependence on intergovernmental or central government transfers, local governments tend to prioritise SDGs related to basic infrastructure. Under such conditions, infrastructural lock-in, the voters, and local business growth coalitions push toward a policy convergence, despite substantial development disparities in socio-economic indicators across local administrative units.

5 Conclusions

According to the 2023 survey of Romanian local governments - municipalities and communes – the ranking of SDGs by importance is as follows: SDG 6 Water and sanitation, SDG 7 Clean and affordable energy, SDG 9 Industry, innovation, and infrastructure, SDG 11 Sustainable cities and communities, SDG 12 Responsible consumption and production, SDG 4 Quality education, and SDG 3 Good health and well-being (Table 7, Table 8).

The availability of funding to local governments from national and EU sources strongly influences the ranking. Local government representatives' choices of the top development objectives for their municipalities or communes match almost exactly the list of eligible investments under available funding. However, we should not regard local government as a mere administrator of SDG implementation, since the design of national and EU programmes for which local governments are eligible is made with their full consultation and thus based on their needs.

The ranking of SDGs by importance is also highly dependent on local needs and context. We expected that higher development levels in urban areas than in rural areas would lead to differences in SDG rankings between municipalities and communes. However, the results were surprising and counterintuitive. The rankings were identical for both the first-choice and multiple-choice items across both municipalities and communes. The test of homogeneity showed no statistically significant difference between the two local government categories. In other words, representatives of communes and municipalities ranked the SDGs in broadly similar proportions. Our explanation for these results is two-fold. First, most headline statistics on urban-rural development inequalities in access to water and sanitation do not account for differences between individual solutions and connections to public networks. The need to expand or undertake major repair works to public networks is also present in large urban areas. Second, the SDG ranking reveals the saliency of basic needs. Access to running water, sanitation, electricity, and natural gas networks is far from achieved for the great majority, if not virtually the entire, population of Romania. Therefore, more “quality of life” SDGs that address issues such as pollution, the green transition, and waste management are perceived as less important by local government leaders, given the national and local levels of development.

Acknowledgment:

The survey data used in this research come from the 2023 Romanian Voluntary Subnational Review (Stănescu & Bilan, 2023), funded by the Romanian Municipalities Association (AMR) and the Association of Communes of Romania (ACoR) with the financial support of the World Organization of United Cities and Local Authorities (UCLG) and the Network of Associations of Local Authorities from South-Eastern Europe (NALAS)

References:

- Agenda Construcțiilor*. (2024). 181(March/April), 16-17. Bucharest: Agenda Construcțiilor. Retrieved December 6, 2025, from https://www.apa-canal.ro/comunicate/2024/revista_AgendaConstrucțiilor_2024.pdf
- Badiu, D., Onose, D., Niță, M., & Laforteza, R. (2019). From “red” to green? A look into the evolution of green spaces in a post-socialist city. *Landscape and Urban Planning*. doi:10.1016/j.landurbplan.2018.07.015
- Benedek, J., Ivan, K., Török, I., Temerde, A., & Holobacă, I.-H. (2021). Indicator-based assessment of local and regional progress toward the Sustainable Development Goals (SDGs): An integrated approach from Romania. *Sustainable Development*, 29(5), 860-875. doi:10.1002/sd.2180
- Bilsky, E., Moreno, A., & Tortosa, A. (2021). Local governments and SDG localisation: Reshaping multilevel governance from the bottom up. *Journal of Human Development and Capabilities*, 22, 713–724. doi:10.1080/19452829.2021.1986690
- Bisogno, M., Cuadrado-Ballesteros, B., Rossi, F., & Peña-Miguel, N. (2023). Sustainable development goals in public administrations: Enabling conditions in local governments. *International Review of Administrative Sciences*, 89, 1223–1242. doi:10.1177/00208523221146458
- Buzogány, A., & Mihut, O. (2021). Romania: The Green Pact in the shadow of modernization. In V. Noutcheva, K. Pomorska, & S. Van Hecke (Eds.), *The politics of the European Green Deal* (pp. 117–134). Routledge.
- Cugleşan, N. (2021). Romania and post-accession compliance with EU environmental policy. In A. Todor & F. E. Helepciuc (Eds.), *Europeanization of environmental policies and their limitations: Capacity building* (pp. 151–164). Cham: Springer International Publishing.
- Dragoș, D. C., & Neamțu, B. (2007). Reforming local public administration in Romania: Trends and obstacles. *International Review of Administrative Sciences*, 73(4), 629–648. doi:10.1177/0020852307083463
- Dumitrache, L., Zamfir, D., Nae, M., Simion, G., & Stoica, I.-V. (2016). The urban nexus: Contradictions and dilemmas of (post)communist (sub)urbanization in Romania. *Human Geographies-Journal of Studies and Research in Human Geography*, 10(1), 39–58
- European Commission. (2017, November 17). Letter of formal notice addressed to Romania concerning the failure to comply with Directive 2008/98/EC on waste (Reference: INFR(2017)2204). *Official Journal of the European Union*, C 395, 10
- European Commission. (2021, October 15). Reasoned opinion addressed to Romania concerning the failure to comply with Directive 2008/98/EC on waste (Reference: INFR(2017)2204). *Official Journal of the European Union*, C 415, 8
- European Commission. (2023a). *Commission urges 10 Member States to comply with EU rules on air quality and takes additional steps in ongoing infringement procedures* [Press release]. Retrieved December 2, 2025, from https://ec.europa.eu/commission/presscorner/detail/en/ip_23_824
- European Commission. (2023b). *Standard Eurobarometer 100 – Autumn 2023: Public opinion in the European Union. Annex: National factsheets – Romania*. Retrieved October 10, 2025, from <https://europa.eu/eurobarometer/surveys/detail/3152>

- European Commission. (2024). *The Commission decides to refer Bulgaria and Romania* (IP/24/5427). Retrieved November 17, 2025, from https://ec.europa.eu/commission/presscorner/detail/en/ip_24_5427
- European Environment Agency. (2017). *Green infrastructure and territorial cohesion: The concept of green infrastructure and its integration into policies using monitoring systems* (EEA Report No. 18/2017). Luxembourg: Publications Office of the European Union
- European Environment Agency. (2023). *Romania air pollution country fact sheet 2023*. Luxembourg: Publications Office of the European Union. Retrieved November 23, 2025, from <https://www.eea.europa.eu/themes/air/country-fact-sheets/2023-country-fact-sheets/romania-air-pollution-country-fact-sheet>
- Fernández-Portillo, L. A., Demir, G., Sianes, A., & Santos-Carrillo, F. (2024). Setting a shared development agenda: Prioritizing the sustainable development goals in the Dominican Republic with fuzzyLMAW. *Scientific Reports*, 14, Article 12146. doi:10.1038/s4159802462790w
- Firoiu, D., Ionescu, G. H., Băndoi, A., Florea, N. M., & Jianu, E. (2019). Achieving Sustainable Development Goals (SDG): Implementation of the 2030 Agenda in Romania. *Sustainability*, 11(7), 2156. doi:10.3390/su11072156
- Georgescu, F. (2018). *Capitalul în România postcomunistă* [Capital in postcommunist Romania] (Vols. I–III). Bucharest: Romanian Academy Publishing House.
- Government of Romania. (2023). *Voluntary National Review 2023: Romania*. Bucharest: Department of Sustainable Development. United Nations High-level Political Forum on Sustainable Development
- Graute, U. (2016). Local authorities acting globally for sustainable development. *Regional Studies*, 50, 1931–1942. doi:10.1080/00343404.2016.1161740
- Grigorescu, I., Mitrică, B., & Mocanu, I. (2015). Assessing urban sprawl-related housing dynamics in the Romanian metropolitan areas. *Studia Obszarów Wiejskich*, 38, 145–164. doi:10.7163/sow.38.9
- Guha, J., & Chakrabarti, B. (2019). Achieving the Sustainable Development Goals (SDGs) through decentralisation and the role of local governments: A systematic review. *Commonwealth Journal of Local Governance*, 22, 6855G. doi:10.5130/cjlg.v0i22.6855
- Huang, Y., Kang, A., Jiang, Z., Li, J., Ma, Y., Gan, X., & Zhou, B. (2024). An approach based on ecosystem services for assessing progress towards sustainable development goals at both national and provincial levels in China. *Scientific Reports*, 14, 29250. doi:10.1038/s41598-024-78632-8
- Jones, P., & Comfort, D. (2019). A commentary on the localisation of the sustainable development goals. *Journal of Public Affairs*. doi:10.1002/pa.1943
- Lancione, M., McElroy, E., Zamfir, G. I., Vincze, E., Popovici, V.-A., & Florea, I. (2020). Housing struggles in Romania and in Central Eastern Europe (CEE). *Radical Housing Journal*, 2(1), 149–162. doi:10.54825/qjrk3503
- Liu, B., Wang, T., Zhang, J., Wang, X., Chang, Y., Fang, D., Sun, X. (2021). Sustained sustainable development actions of China from 1986 to 2020. *Scientific Reports*, 11, Article 8008. doi:10.1038/s41598-021-87376-8
- Marcu, L., Kandžija, T., & Dorotic, J. (2020). EU funds absorption: Case of Romania. *Postmodern Openings*, 11(4), 222. doi:10.18662/po/11.4/222
- Maslow, A. H. (1954). *Motivation and personality*. New York, NY: Harper & Row.
- Meyer, J. M., & Păcurari, A. (2022). The politics of delay: Climate obstruction in post-socialist Europe. *Environmental Politics*, 31(7), 1179–1202

- Ministry of Development, Public Works and Administration (2025). *Programul Național de Dezvoltare Locală. Etapa a II-a*. Retrieved November 9, 2025, from <https://www.mdlpa.ro/uploads/articole/attachments/64a3c4ac0e8f4332199765.pdf>
- Ministry of European Investments and Projects. *POR 2014-2020: Declarații de cheltuieli pentru rambursarea a peste 342 milioane de euro de către Comisia Europeană*. Retrieved November 9, 2025, from <https://mfe.gov.ro/por-2014-2020-declaratii-de-cheltuieli-pentru-rambursarea-a-pest-342-milioane-de-euro-de-catre-comisia-europeana/>
- Ministry of Investments and European Projects. (2025). *National Recovery and Resilience Plan (NRRP)*. Retrieved December 16, 2025, from <https://mfe.gov.ro/pnrr/>
- National Institute for Statistics. (2023a). *Rezultate definitive* [2021 census final results]. Bucharest: National Institute for Statistics. Table 1.03_1.3.1-si-1.03.2. Retrieved October 9, 2025, from <https://www.recensamantromania.ro/rezultate-rpl-2021/rezultate-definitive>
- National Institute for Statistics. (2023b). *RPL 2021 Rezultate definitive* [2021 census final results]. Bucharest: National Institute for Statistics. Table 8.7 Retrieved October 9, 2025, from <https://www.recensamantromania.ro/rezultate-rpl-2021/rezultate-definitive>
- National Institute for Statistics. (2024). *Populația conectată la sistemele de canalizare și epurare a apelor uzate în anul 2023* [Population connected to sewage and wastewater treatment systems in 2023]. Bucharest: National Institute for Statistics. Retrieved October 9, 2025, from https://insse.ro/cms/sites/default/files/com_presa/com_pdf/sistem_canal_2023r.pdf
- National Institute for Statistics. (2025a). *CAV1020 - Ponderea gospodariilor după dotarea utilitară a locuințelor, pe medii de rezidență, în total gospodăriile din fiecare categorie* [The share of households according to the amenities of their dwellings, by area of residence, out of the total households in each category]. Matrix CAV1020. Bucharest: National Institute for Statistics. Retrieved October 9, 2025, from <http://statistici.insse.ro:8077/tempo-online>
- National Institute for Statistics. (2025b). *Distribuția apei în anul 2024* [The distribution of water in 2024]. Bucharest: National Institute for Statistics. Retrieved November 11, 2025, from <https://insse.ro/cms/ro/content/distribuC5%A3ia-apei-C3%AEEn-anul-2024>
- Ningrum, D., Malekpour, S., Raven, R., Moallemi, E., & Bonar, G. (2024). Three perspectives on enabling local actions for the sustainable development goals (SDGs). *Global Sustainability*, 7(e22), 1–11. doi:10.1017/sus.2024.20
- Niță, M., Anghel, A.-M., Bănescu, C., Munteanu, A.-M., Pesamosca, S.-S., Zețu, M., & Popa, A.-M. (2018). Are Romanian urban strategies planning for green? *European Planning Studies*, 26, 158–173. doi:10.1080/09654313.2017.1382446
- Orzeszyna, K., & Tabaszewski, R. (2021). The legal aspects of activities taken by local authorities to promote sustainable development goals: Between global and regional regulations in Poland. *Lex Localis – Journal of Local Self-Government*, 19(4), 1043–1063. doi:10.4335/19.3.1043-1063(2021)
- Profiroiu, C. M., Profiroyiu, A. G., & Szabo, S. R. (2017). The decentralization process in Romania. In J. M. Ruano & M. Profiroyiu (Eds.), *The Palgrave handbook of decentralisation in Europe* (pp. 353–387). Cham: Palgrave Macmillan. doi:10.1007/978-3-319-32437-1

- Pătrăuș, M., & Tătar, R. (2017). The issue of waste management in Romania. *Journal of Agricultural and Environmental Law*, 12, 208–219. doi:10.21029/jael.2017.23.208
- Rieiro-García, M., Amor-Esteban, V., & Aibar-Guzmán, C. (2023). ‘Localizing’ the sustainable development goals: A multivariate analysis of Spanish regions. *AIMS Environmental Science*. doi:10.3934/environsci.2023021
- Schuman, H., & Presser, S. (1981). *Questions and answers in attitude surveys: Experiments on question form, wording, and context*. New York: Academic Press
- Silva, A. F., Sánchez-Hernández, M. I., & Carvalho, L. C. (2023). Local public administration in the process of implementing sustainable development goals. *Sustainability*, 15(21), 15263. doi:10.3390/su152115263
- Stănescu, I. (2021). *Living conditions in rural areas in Romania from 1990 to 2020*. *Calitatea vieții* 32(2), 153–174. doi:10.46841/RCV.2021.02.03
- Stănescu, I., & Bilan, A. (2023). *Voluntary subnational review 2023: Localising the UN 2030 Agenda Sustainable Development Goals in Romanian municipalities and communes*. Bucharest: Association of Communes of Romania & Romanian Municipalities Association
- Suditu, B. (2012). Urban sprawl - The legal context and territorial practices in Romania. *Human Geographies – Journal of Studies and Research in Human Geography*, 6, 73–77. doi:10.5719/hgeo.2012.61.73
- Suditu, B., Nae, M., Neguț, S., & Gheorghilaș, A. (2014). Responsibilities and limits of local government actions against users of public services of planning and sustainable territorial development in Romania. *The AMFITEATRU ECONOMIC journal*, XVI(35), 154–170
- Șurubaru, N.-C. (2021). European funds in Central and Eastern Europe: Drivers of change or mere funding transfers? Evaluating the impact of European aid on national and local development in Bulgaria and Romania. *European Politics and Society*, 22(2), 203–221. doi:10.1080/23745118.2020.1729049
- Teau, C., Popescu, I., Florescu, C., Constantin, A., Ciocan, C., & Vlaicu, V. (2023). Implementation of water related Sustainable Development Goals in Romania: Overview of current and future challenges. *IOP Conference Series: Earth and Environmental Science*, 1136. doi:10.1088/1755-1315/1136/1/012013
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge University Press
- Vincze, E. (2017). The ideology of economic liberalism and the politics of housing in Romania. *Studia Universitatis Babeș-Bolyai Studia Europaea*, 62(3), 29–54. doi:10.24193/subbeuropaea.2017.3.02
- Xing, Q., Wu, C., Chen, F., Liu, J., Pradhan, P., Bryan, B. A., . . . Xu, Z. (2024). Intranational synergies and trade-offs reveal common and differentiated priorities of sustainable development goals in China. *Nature Communications*, 15, Article 2251. doi:10.1038/s41467-024-46491-6
- Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge University Press.
- Zamfir, C. (2019). *Istoria socială a României* [The Social History of Romania] (2nd ed.). Bucharest: Romanian Academy Publishing House.
- Zhang, J., Wang, S., Pradhan, P., Zhao, W., & Fu, B. (2022). Untangling the interactions among the Sustainable Development Goals in China. *Science Bulletin*, 67(9), 977–984. doi:10.1016/j.scib.2022.01.006

Table 1. Communes: differences in the sample breakdown versus population breakdown (%)

province		Communes categorised by population					total
		<1,500	1,501-3,000	3,001-5,000	5,001-10,000	>10,001	
1	Transylvania	-1.0	-0.4	0.5	2.0	-0.1	1.1
2	Banat	-0.2	-0.3	0.7	-0.2	-0.8	-0.8
3	Muntenia (Greater Wallachia)	-0.2	-1.3	2.8	-0.6	-0.8	-0.1
4	Moldavia	-0.1	0.1	0.7	1.5	-0.4	1.9
5	Dobruja	0.2	0.2	0.5	0.8	0.4	2.0
6	Oltenia (Lesser Wallachia)	-0.6	-0.8	-0.8	-0.4	-0.1	-2.7
7	Bucharest-Ilfov	0.0	-0.1	0.0	-0.8	-0.5	-1.3
total		-1.9	-2.5	4.4	2.3	-2.3	

Note. Source: Stănescu and Bilan (2023)

Table 2. Municipalities: differences in the sample breakdown versus population breakdown (%)

province*		municipalities categorised by population					total
		>300,000	>200,000	100-200,000	50-100,000	20-50,000	
1	Transylvania	1.9	1.4	1.3	1.6	0.9	6.7
2	Banat	1.8	0.0	0.9	0.4	0.4	3.5
3	Muntenia	0.0	0.0	3.8	-0.0	-0.7	3.1
4	Moldavia	0.0	3.0	-1.0	0.3	-0.4	1.9
5	Dobruja	0.0	-3.2	0.0	0.4	-0.2	-2.9
6	Oltenia	0.0	-3.0	0.0	0.2	-0.4	-3.9
7	Bucharest-Ilfov	0.3	-6.2	-2.4	0.0	0.0	-8.3
total		4.0	-8.0	2.5	3.0	-0.4	-1.1

Note. Source: Stănescu and Bilan (2023)

Table 3. The most important development objective for local government - communes, first choice

SDG	development objective	communes (N=539)	
		frequency	percent
6	establishment or extension of the public water network	158	29.31
6	establishment or extension of the public sewerage network	152	28.20
7	establishment or extension of the natural gas distribution network	83	15.40
6	construction or upgrading of sewage treatment plants	38	7.05
9	local roads and streets construction and repair works	31	5.75
7	thermal insulation of public buildings	27	5.01
7	thermal insulation of residential buildings	15	2.78
7	extension of the electricity grid	12	2.23
11	construction of social or young adults' housing	10	1.86
11	increasing the area of parks. public gardens and green spaces	7	1.30
12	increasing the degree of selective collection of household waste, and waste management costs	3	0.56
11	pollution reduction	2	0.37
7	modernising or repairing the central heating system	1	0.19
total		539	100

Note. Source: Stănescu and Bilan (2023)

Table 4. The most important development objective for local government, municipalities, first choice

SDG	development objective	municipalities (N=70)	
		frequency	percent
6	establishment or extension of the public water network	21	30.00
6	establishment or extension of the public sewerage network	15	21.43
7	thermal insulation of public buildings	10	14.29
7	extension of the electricity grid	6	8.57
7	establishment or extension of the natural gas distribution network	6	8.57
9	local roads and streets construction and repair works	6	8.57
7	thermal insulation of residential buildings	4	5.71
7	modernising or repairing the central heating system	1	1.43
6	construction or upgrading of sewage treatment plants	1	1.43
	total	70	100

Note. Source: Stănescu and Bilan (2023)

Table 5. The most important development objectives for local government – communes, multiple choice

SDG	development objective	communes (N=1.619)	
		frequency	percent
9	local roads and streets construction and repair works	296	18.28
6	establishment or extension of the public sewerage network	264	16.31
7	establishment or extension of the natural gas distribution network	190	11.74
6	establishment or extension of the public water network	161	9.94
12	increasing the degree of selective collection of household waste, and waste management costs	146	9.02
6	construction or upgrading of sewage treatment plants	101	6.24
7	thermal insulation of public buildings	94	5.81
11	increasing the area of parks, public gardens and green spaces	62	3.83
4	increased education enrolment and better conditions in schools	56	3.46
3	modernisation or construction of hospitals, polyclinics, or dispensaries	47	2.90
11	construction of social or young adults' housing	44	2.72
11	increased access to the local public transport services	33	2.04
7	extension of the electricity grid	30	1.85
7	thermal insulation of residential buildings	28	1.73
11	pollution reduction	24	1.48
7	modernising or repairing the central heating system	9	0.56
7	expansion of the public transport company's fleet and transition to green vehicles	9	0.56
5	anti-gender discrimination or domestic violence programmes	7	0.43
	other	18	1.11
	total	1,619	100

Note. Source: Stănescu and Bilan (2023)

Table 6. The most important development objective for local government – municipalities, multiple choice

SDG	development objective	municipalities (N=207)	
		frequency	percent
9	local roads and streets construction and repair works	43	20.77
6	establishment or extension of the public sewerage network	31	14.98
6	establishment or extension of the public water network	21	10.14
12	increasing the degree of selective collection of household waste, and waste management costs	17	8.21
7	thermal insulation of public buildings	17	8.21
7	establishment or extension of the natural gas distribution network	16	7.73
3	modernisation or construction of hospitals, polyclinics or dispensaries	9	4.35
6	construction or upgrading of sewage treatment plants	8	3.86
11	increasing the area of parks. public gardens and green spaces	8	3.86
7	extension of the electricity grid	8	3.86
4	increased education enrolment and better conditions in schools	7	3.38
11	construction of social or young adults' housing	5	2.42
7	modernising or repairing the central heating system	5	2.42
7	thermal insulation of residential buildings	4	1.93
7	expansion of the public transport company's fleet and transition to green vehicles	4	1.93
11	increased access to the local public transport services	2	0.97
11	pollution reduction	2	0.97
total		207	100

Note. Source: Stănescu and Bilan (2023)

Table 7. The most important SDG for local government - first choice

SDG	communes (N=539)		municipalities (N=70)	
	rank	per cent	rank	per cent
6 water and sanitation	1	64.56	1	52.86
7 clean and affordable energy	2	25.60	2	38.57
9 industry, innovation and infrastructure	3	5.75	3	8.57
11 sustainable cities and communities	4	3.53		
12 responsible consumption and production	5	0.56		

Note. Source: Stănescu and Bilan (2023)

Table 8. The most important SDG for local government - multiple choice

SDG	communes (N=1.619)		municipalities (N=201)	
	rank	per cent	rank	per cent
6 water and sanitation	1	32.5	1	29.0
7 clean and affordable energy	2	22.2	2	26.1
9 industry, innovation and infrastructure	3	18.3	3	20.8
11 sustainable cities and communities	4	10.1	4-5	8.2
12 responsible consumption and production	5	9.0	4-5	8.2
4 quality education	6	3.5	7	3.4
3 good health and well-being	7	2.9	6	4.3

other	1.5
-------	-----

Note. Source: Stănescu and Bilan (2023)

Table 9. The most important SDG for local government in Romania - first choice
crosstabulation

SDG		Communes	Municipalities	Total
6	Count	348	37	385
	Expected count	340.7	44.3	385
7	Count	138	27	165
	Expected count	146.0	19.0	165.0
9	Count	31	6	37
	Expected count	32.7	4.3	37.0
11	Count	19	0	19
	Expected count	16.8	2.2	19.0
12	Count	3	0	3
	Expected count	2.7	0.3	3.0
Total	Count	539	70	609
	Expected count	539.0	70.0	609.0

Chi-Square Test

	Value	Df.	P-value
Pearson Chi-Square	8.857		40.065 (>0.05)
Likelihood Ratio	10.971		40.027
N of Valid Cases	609		
Result	Since the P-value is greater than α (0.05), we accept H0: the populations share their respective characteristics in the same proportions.		

Table 10. The most important SDG for local government in Romania - multiple choice
crosstabulation

SDG		Communes	Municipalities	Total
6	Count	526	60	586
	Expected count	519.57	66.43	586
7	Count	360	54	414
	Expected count	367.07	46.93	414
9	Count	296	43	339
	Expected count	300.57	38.43	339
11	Count	163	17	180
	Expected count	159.59	20.41	180
12	Count	146	17	163
	Expected count	144.52	18.48	163
4	Count	56	7	63
	Expected count	55.86	7.14	63
3	Count	47	9	56
	Expected count	49.65	6.35	56
None	Count	25	0	25
	Expected count	22.17	2.83	25
Total	Count	1,619	207	1,826
	Expected count	1,619	207	1,826

Chi-Square Test

	Value	Df	P-value
--	-------	----	---------

Pearson Chi-Square	7.739	70.356 (>0.05)
Likelihood Ratio	10.422	70.027
N of Valid Cases	1,826	
Result	Since the P-value is greater than α (0.05), we accept H0: the populations share their respective characteristics in the same proportions.	