

poverty *in*
mobility
in **Romania**
II
field research
danube delta *and*
apuseni mountains

author **Adela Fofiu**

editing: Raul Cazan

published by 2Celsius Association ©2026

web: 2celsius.org

e-mail: team@2celsius.org



Executive summary

This report presents the results of qualitative field research on transport and mobility poverty in two remote territories of Romania: the Danube Delta and the Apuseni Mountains. The research extends and deepens the findings of the previous *desk research* report (Fofiu, 2022) through semi-structured interviews and field observations, analysed thematically and comparatively. The central objective was to investigate how transport, through the lens of accessibility, cost, governance and sustainability, produces and reproduces poverty in the everyday lives of communities in isolated/remote rural areas (*remote, en.*).

The analysis identifies four structural mechanisms of transport poverty, present in both territories: costs disproportionate to income, invisible costs (transaction, intermediation, relational dependence), prices amplified by isolation, and subsidies captured by operators or intermediaries. These mechanisms converge remarkably between the Delta and the Apuseni, despite radical differences in geography, demonstrating that mobility poverty is institutionally produced, not naturally determined.

The field data made it possible to construct five typologies of mobility experience: functional but fragile (T1), relationally dependent (T2), episodic and reactive (T3), blocked (T4) and community-negotiated (T5). The typologies describe a process of cumulative degradation, in which mobility slides from fragility to blockage through the accumulation of minor shocks in a context lacking institutional protection. Vulnerability is concentrated along gender and generational lines: older women living alone emerge as the most exposed group in both territories.

The report argues for the need to reframe transport from technical infrastructure into an essential social service. Current approaches fail because of the institutional capture of resources, the neutralisation of subsidies, ill-adapted hyper-regulation and administrative fragmentation. The recommendations target two horizons: in the short term (12–24 months), a national map of mobility poverty, real-access indicators in official statistics, and pilot interventions with anti-capture monitoring; in the medium term (3–5 years), reform of subsidies from operators to users (a mobility card), a PNSC sub-component dedicated to isolated rural areas, coupling infrastructure investments with operating obligations, and a *smart villages* programme with a mobility component.

The central message of the report: mobility is not a sectoral problem, but a synthetic indicator of social inclusion. As long as transport is treated as an economic activity, its absence in isolated rural areas remains a market outcome. Reframed as a social service, this absence becomes a public policy failure.

Contents

Executive summary	1
1. Introduction	4
1.1. Purpose of the research	4
1.2. Context: transport poverty as a problem of everyday life	4
1.3. Why the Danube Delta and the Apuseni Mountains	5
1.4. Research questions	6
2. Theoretical and conceptual framework	7
2.1. Transport and mobility poverty: the conceptual framework	7
2.2. Operational definition of “remote area”/“isolated area”	8
2.3. Physical and digital connectivity as interdependent dimensions	9
2.4. Relevant European and national policy frameworks	9
2.5 Rationale for the qualitative approach	10
3. Methodology	10
3.1 Research design	10
3.2 Methodological limitations	11
3.3 Anonymised composition of the sample	12
4. Territorial context	13
4.1. The Danube Delta	13
4.2. The Apuseni Mountains	14
5. Analytical synthesis	15
5.1. Anticipation: Danube Delta vs Apuseni Mountains	15
5.2. Thematic map of the field research	16
5.3. Data analysis	17
The Danube Delta	17
The Apuseni Mountains	20
5.4. Typologies of the experience of mobility poverty	23
Cross-cutting analysis of the typologies	25
Cross-cutting reading: gender, age and dignity	26
5.5. Final synthesis: themes, geography and typologies	26
Convergences and divergences: mobility poverty beyond geography	27
6. Implications for public policy	28
6.1. Why current approaches fail	28
6.2. The need for differentiated territorial solutions	30
Danube Delta: specific implications	30
Apuseni Mountains: specific implications	31
6.3. Transport as a social service, not just infrastructure	31
7. Recommendations	33
7.1. Short term (12–24 months)	33
7.2. Medium term (3–5 years)	34
7.3. Distribution of responsibilities	35
8. Conclusions	36
Bibliography	37
Annexes	38
ANNEX 1. EXTENDED INTERVIEW GUIDE	38
ANNEX 2. INTERVIEW GUIDE ADAPTED CONVERSATIONALLY ACCORDING TO SATURATION	41

1. Introduction

This report continues and tests the hypotheses formulated earlier, shifting the analysis from the domain of policy and infrastructure to that of everyday life. The report follows on from the desk study Transport Poverty in Romania (Fofiu & 2Celsius, 2024), whose analytical framework and hypotheses it tests empirically.

1.1. Purpose of the research

The purpose of the field research is to shift the emphasis from a predominantly structural description of transport and mobility poverty towards an effort to validate, nuance and humanise the concept. Starting from the hypotheses formulated in the initial report (Fofiu & 2Celsius, 2024), the research seeks to test them empirically by anchoring the analysis in the concrete experiences of the people affected. Mobility is approached as a factor of social exclusion not only through the lens of access or infrastructure, but as a set of constraints that shape everyday life, social relations and the field of available opportunities. In this sense, the emphasis falls on the lived experience of travel: the temporal, economic and symbolic costs of mobility, the constant effort of organisation, uncertainty and the impact on personal dignity. The field is not used to illustrate macro data, but to identify the real mechanisms through which the lack of mobility produces vulnerability, as well as the informal adaptation strategies developed by communities and individuals. If the macro analysis in the previous report (Fofiu & 2Celsius, 2024) indicates where problems are concentrated, the field research explains how they are lived, negotiated and internalised in day-to-day life.

1.2. Context: transport poverty as a problem of everyday life

In public debate and in existing policies, transport poverty is addressed predominantly through aggregate indicators and sectoral instruments: AROPE¹ rates, infrastructure investments, transport programmes or subsidy schemes. Although necessary, these analytical frameworks only partially capture reality, because they translate mobility into a problem of access and provision, without capturing territorial inequalities as they are lived every day. From a sociological perspective, transport poverty is not reduced to the lack of a means of travel, but manifests itself as a continuous fragmentation of everyday life: lost time, physical and emotional effort, dependence on others and a constant narrowing of options.

Defined along axes such as access, cost, time and reliability, transport and mobility poverty remains insufficiently captured by statistical indicators, which cannot reflect the relational dimension of the

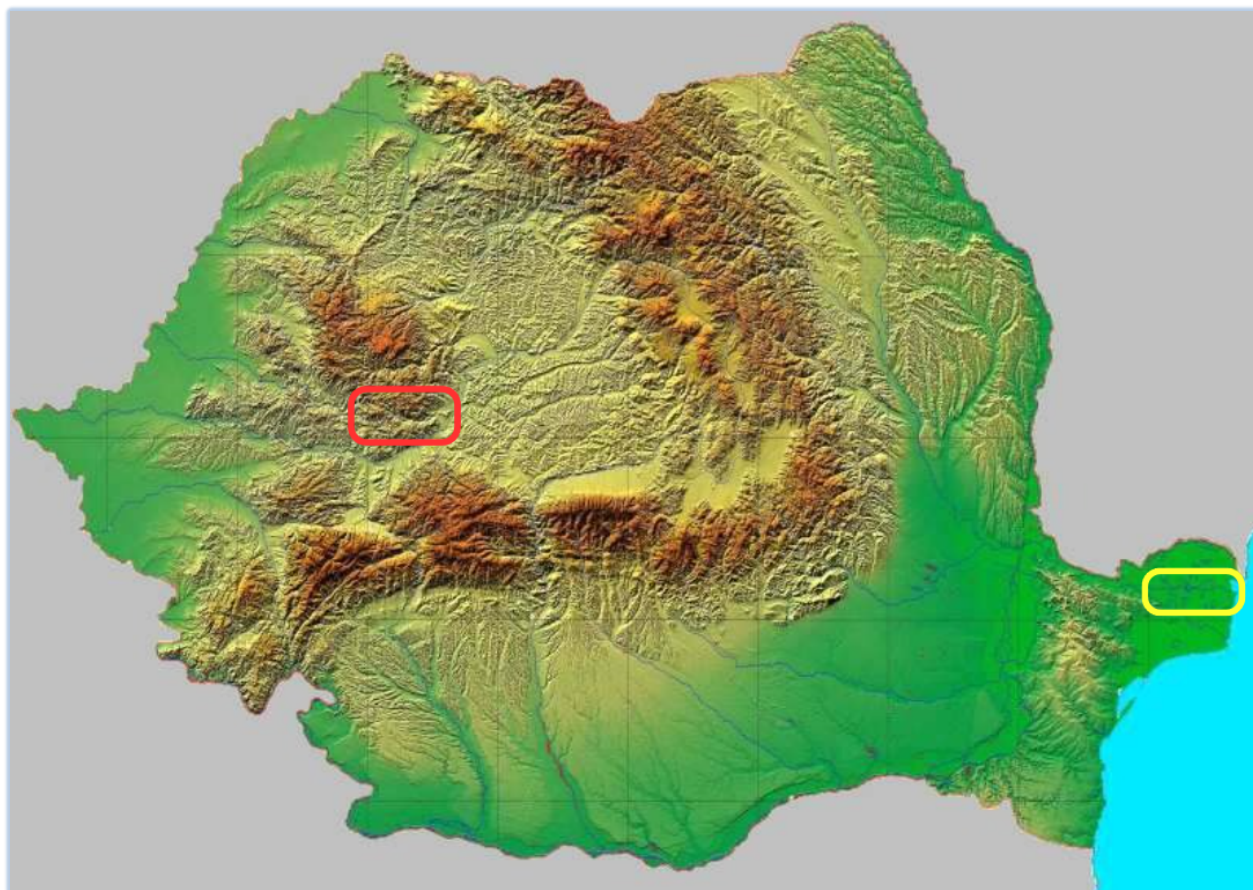
¹ AROPE (At Risk Of Poverty or Social Exclusion) is the indicator used at European Union level to measure the risk of poverty and social exclusion, defining the population that finds itself in at least one of the following situations: at risk of monetary poverty, severe material and social deprivation, or very low household work intensity. Although AROPE offers a multidimensional perspective on social vulnerability, it does not directly capture mobility constraints and effective access to services, and is therefore limited in the analysis of transport poverty, especially in isolated or poorly connected territories.

problem. Mobility simultaneously structures access to education, health services, work and social participation, directly affecting the dignity and autonomy of individuals. While public policies tend to treat transport as a distinct technical field, the social experience of mobility is deeply intersectional. The emphasis placed in the initial report (Fofiu & 2Celsius, 2024) on rural–urban disparities, infrastructure and governance grounds the need to bring the analysis down to the micro level, where these inequalities become visible, concrete and negotiated day by day.

1.3. Why the Danube Delta and the Apuseni Mountains

The Danube Delta and the Apuseni Mountains are not treated in this research as extreme cases, but as two distinct expressions of the same structural problem: territorial isolation and its effects on everyday mobility. Both territories are recognised, including at European Union level, as vulnerable rural spaces, characterised by low accessibility, low density of services and dependence on fragile infrastructure. Choosing them allows for an analysis that goes beyond local particularism and facilitates the identification of the common mechanisms of transport poverty, as well as the separation of constraints generated by geography from those produced or amplified by public policies and institutional arrangements.

The differences between the two territories are essential to this analytical approach. In the Danube Delta, isolation is hydrographic in nature, with mobility conditioned by water transport, seasonality and a strict regulatory framework, which influences the frequency, costs and predictability of travel. In the Apuseni Mountains, isolation is mountainous, marked by poor road access, large distances between settlements and a pronounced fragmentation of basic services. The contrast between the two contexts makes visible both the experiential convergences of mobility poverty and the differences in mechanism, providing a solid basis for formulating context-sensitive policies. For analytical clarity, the report includes a map of the areas studied, delimiting the research areas.



Map of the study locations. Red marker – the south-eastern area of the Apuseni Mountains, on the border between Hunedoara and Alba counties. Yellow marker – the Sulina branch, central, in the Danube Delta, Tulcea county.

1.4. Research questions

Main questions. How does transport poverty manifest itself in isolated territories of Romania, and through what mechanisms does it influence access to essential services, economic opportunities and social inclusion? To what extent does transport poverty function as a mechanism for reproducing social exclusion in isolated territories, beyond the geographical differences between water and mountain relief?

Secondary questions. How is everyday mobility experienced in the Danube Delta and in the Apuseni Mountains, and which constraints are perceived as the most problematic (access, cost, time, reliability, dignity)? How does transport poverty influence effective access to essential services and economic opportunities (work, education, health) in the two territorial contexts? What formal and informal strategies do residents develop to cope with mobility constraints, and how do these differ between the Danube Delta and the Apuseni Mountains? How is the role of the state and of public policy in ensuring mobility perceived, and what expectations do local communities have?

2. Theoretical and conceptual framework

2.1. Transport and mobility poverty: the conceptual framework

The research is situated within the international literature on mobility and transport poverty, developed systematically since the 2010s in the United Kingdom and later extended to the European level. Lucas, Mattioli, Verlinghieri and Guzman (2016) propose a four-part definition of transport poverty, which distinguishes:

(a) the lack of availability of adequate transport options; (b) accessibility poverty, understood as the inability to reach essential services within reasonable limits of time and cost; (c) the cost of transport as a disproportionate share of the household budget; (d) exposure to the negative externalities of transport (pollution, accidents, urban fragmentation). This distinction underlies the analytical axes used in the present research – access, cost, time, reliability, dignity. Mattioli (2021) extends the framework through the concept of “*forced car ownership*” – structural dependence on the private car generated by the absence of public alternatives, a central phenomenon in European rural and mountain areas. Sheller (2018) and Martens (2016) frame the problem in terms of “*mobility justice*” and “*transport justice*” respectively, placing mobility in the field of social rights and not merely of sectoral infrastructure policy. This normative positioning supports the report’s orientation towards reading transport as a social service and as a right, not as profitability.

Everyday mobility and real access to essential services. Mobility is treated in this report not as an autonomous sectoral domain, but as a cross-cutting condition of social access. The possibility of travel structures effective access to essential services – health, education, administration, basic supplies – and mediates the relationship between individuals, territory and institutions. From this perspective, the formal existence of a service is not sufficient to guarantee access to it. Real access is conditioned by the capacity to turn institutional proximity into a practical possibility of use, and mobility plays a central role in this process. When travel options are limited, irregular or expensive, access to services becomes fragmented, discontinuous or conditional on additional resources. Mobility thus functions as a mechanism of social selection, producing systematic differences between those who can convert formal rights into everyday practices and those for whom these rights remain, to a large extent, theoretical. In this sense, transport and mobility poverty is not merely a logistical problem, but a structural factor that shapes the effective exercise of citizenship and access to public goods.

Mobility, costs and the field of economic opportunities. Mobility structures the field of economic possibility, defining not only access to work, but also the diversity, stability and predictability of the available economic options. The capacity to travel conditions the geographical area within which

opportunities can be sought, the compatibility between working hours and transport infrastructure, as well as the economic sustainability of participation in the labour market. In this framework, phenomena such as migration, population ageing or territorial depopulation can be understood not merely as autonomous demographic dynamics, but as cumulative effects of mobility constraints. Limited access to diversified and stable jobs restricts social mobility and favours the persistence of fragile local economies, with few options for adaptation and development. Transport and mobility poverty thus operates as a structural mechanism for reproducing economic inequalities, influencing the strategies of economic participation available to individuals. Forms such as seasonal work, informal activities or partial withdrawal from the labour market should be read as rational strategies of adjustment to persistent structural constraints, and not as expressions of a lack of individual initiative or motivation.

Inequity, community practices and relationship to governance. The dimensions of equity and inclusion, community practices and the relationship with the authorities can be understood as interdependent expressions of the way mobility structures social relations and people's relationship to the state. Differentiated access to travel possibilities generates not only functional inequalities, but also systematic differences in autonomy, social visibility and capacity to make claims. Mobility constraints do not affect populations uniformly, but intersect with pre-existing social positions, producing specific forms of vulnerability. In this context, community support practices emerge as mechanisms that compensate for the absence or insufficiency of public interventions. These informal networks can strengthen local solidarity, but can at the same time generate relations of dependence, power asymmetries and increased exposure to risk. Transport and mobility poverty thus produces effects that go beyond the logistical sphere, influencing social participation, the sense of belonging and the way individuals assess their position in relation to state institutions. The internalisation of mobility limits can lead to lower expectations of public intervention and to a persistent perception of territorial marginality. The relationship with local governance is shaped by these cumulative experiences, often reflecting a symbolic and practical distance between public policies and the everyday realities of the communities affected.

The dimensions of gender and age cut across the way transport poverty is experienced, internalised and negotiated. The field data show that women, especially those living alone in mountain or delta communities, older people (with or without reduced physical mobility) and adolescent girls commuting to school are exposed to cumulative forms of constraint: pronounced relational dependence, waiting times in public spaces that are unsafe or lack shelter, high social and symbolic costs (shame, the obligation of reciprocity, vulnerability to abuse), and restricted decision-making autonomy over travel. This intersectional reading is not a supplementary reading, but a key to understanding the whole phenomenon – mobility poverty does not affect a homogeneous “population”, but is distributed differentially according to pre-existing social positions.

2.2. Operational definition of “*remote area*”/“*isolated area*”

The concept of “isolated area” used in this report is taken from the European rural typology developed by the European Commission’s Joint Research Centre (Perpiña Castillo et al., 2023). This typology distinguishes between rural areas close to urban centres and isolated rural areas, defined by a combination of indicators: travel time to the nearest urban centre (over 45 minutes via the existing road network), low population density, poor physical and digital connectivity, and limited access to essential services. The JRC research shows that approximately half of the EU’s remote rural areas are disadvantaged on most of the indicators analysed, with challenges concentrated around transport infrastructure, internet speed, access to services, household income and demographic decline. The Danube Delta and the Apuseni Mountains fall into the category of remote areas according to this typology, but with important specificities: in the Delta, isolation is hydrographic and amplified by the regulatory framework of the protected area; in the Apuseni, isolation is mountainous and amplified by the administrative fragmentation of public services. Both territories are also recognised as such in the European Parliament Resolution of 3 October 2018 on addressing the specific needs of rural, mountainous and *remote* areas (2018/2720(RSP)), which grounded the call for a European Agenda dedicated to these territories.

2.3. Physical and digital connectivity as interdependent dimensions

A key element of the JRC typology, relevant to the conceptual approach of this report, is the joint treatment of physical connectivity (road network, public transport, temporal accessibility) and digital connectivity (*broadband* coverage, internet speed, mobile signal). The research by Perpiña Castillo et al. (2023) shows that less than 40% of households in remote rural areas of the EU have access to very high capacity networks, compared with 62.5% in urban areas, and that average *broadband* speed in rural and remote areas is roughly half that of urban areas. In this framework, contemporary mobility cannot be separated from access to data and telephony; the lack of mobile signal on critical routes is not only a communication problem, but a component of mobility poverty, adding further risks to safety, navigation and access to services.

2.4. Relevant European and national policy frameworks

The present research is set within a landscape of European and national public policies that are being reconfigured. At European level, three instruments structure the space for intervention: the Social Climate Fund (EU Regulation 2023/955), operational from 2026, which explicitly recognises the category of “vulnerable transport users”; the Long-Term Vision for the EU’s Rural Areas (2021); and European Parliament Resolution 2018/2720(RSP) on rural, mountainous and *remote* areas

At national level, alignment with the National Social Climate Plan (PNSC), the Transport Operational Programme, the Transport Infrastructure Development Strategy 2021-2030 and the Rural Development Strategy underpins the recommendations chapter.

2.5 Rationale for the qualitative approach

In this undertaking, the qualitative approach is not used as a mere complement to quantitative analysis, but as a critical instrument for interrogating its limits. Standardised indicators – such as those relating to poverty, infrastructure or the level of public investment – offer an aggregate picture, but remain insufficient to capture the relational, temporal and subjective dimensions of everyday mobility. Transport and mobility poverty involves forms of uncertainty, continuous effort and permanent negotiation that cannot be reduced to measurable variables. It manifests itself through invisible adaptation strategies, through emotional and symbolic costs, and through constrained choices that do not appear in administrative or statistical data. From this perspective, mobility cannot be understood exclusively as an outcome of available infrastructure, but as a situated social experience, produced at the intersection of resources, norms, relationships and territorial contexts. The qualitative approach thus allows a deeper understanding of the mechanisms through which mobility constraints are transformed into social, economic and symbolic inequalities. It makes visible intra-territorial differences and local hierarchies of vulnerability, which often remain blurred in aggregate analyses. At the same time, this perspective gives access to the way local actors define their priorities, assess their options and construct their relationship to institutions and public policies.

Consequently, the qualitative approach is essential for grounding context-sensitive public policies and for avoiding standardised solutions that treat mobility as an isolated technical problem. By focusing on lived experiences and local mechanisms, it contributes to the formulation of differentiated territorial interventions capable of responding to the diversity of forms of transport and mobility poverty. The analysis is informed by a perspective that treats mobility as a condition for the effective exercise of social rights and everyday dignity. This positioning shapes the reading of the phenomenon, not by substituting normative judgements for empirical description, but by offering an interpretive framework for understanding the social effects of mobility constraints.

3. Methodology

The field research was designed as a qualitative extension of the previously conducted desk analysis, with the aim of exploring how transport poverty is lived and managed in everyday life, in territorial contexts characterised by structural isolation. The methodological approach starts from the premise that mobility cannot be analysed exclusively through indicators or infrastructure, but requires an understanding of the practices, constraints and strategies people develop in relation to them.

3.1 Research design

The research uses a qualitative, exploratory design based on semi-structured interviews focused on the subjective experience of daily mobility. The choice of the semi-structured interview as the main data collection instrument responds to three requirements of the research object. First, mobility poverty is a phenomenon that manifests itself through everyday practices, adaptation strategies and subjective experiences that are neither directly observable nor reducible to measurable variables. The semi-structured interview gives access to these dimensions, offering respondents the space to articulate in their own terms how mobility constraints affect their lives, relationships and decisions. Unlike the standardised questionnaire, which imposes predefined categories, the semi-structured interview leaves room for unforeseen themes to emerge, and in this research some of the most valuable analytical findings (such as the mechanism of “captured subsidies” or the role of informal “community couriers”) emerged precisely from these openings.

Second, the comparative nature of the research, the Danube Delta versus the Apuseni Mountains, requires an instrument flexible enough to adapt to very different contexts, yet structured enough to ensure analytical comparability. The interview guide was built around seven thematic sections (everyday mobility, costs, environment, community practices, equity, governance, vision) derived from the conceptual framework and the hypotheses of the previous report (Fofiu & 2Celsius, 2024), and during the research it was adapted conversationally as thematic saturation was reached on certain axes.

Third, in the small and isolated communities studied, the relationship of trust between researcher and respondent is a condition for producing valid data. The semi-structured interview, through its conversational format, allows this trust to be built progressively and gives access to information that respondents would not provide in a formal or standardised anonymous context. This advantage proved essential especially in the Apuseni Mountains, where the community’s reluctance towards outside researchers limited access and required methodological adaptations.

The design is *place-based*, with the territorial context treated as an active factor in shaping travel options and access to services, work and social life. Respondents were selected purposively, aiming for diversity in situations of exposure to mobility constraints, according to household type, occupation, age, gender and degree of dependence on transport. The objective was not statistical representativeness, but analytical relevance. The interview guide was built on the conceptual framework of transport poverty and on the hypotheses formulated in the initial report

(Fofiu & 2Celsius, 2024), and was designed to allow subsequent comparability between the Danube Delta and the Apuseni area. The data were analysed thematically and iteratively, seeking to identify recurring patterns, contextual differences and the social mechanisms linking mobility to access to opportunities.

3.2 Methodological limitations

The main limitation of the research relates to the sample size and the qualitative nature of the approach, which does not allow statistical generalisation of the results. Access to the territory was influenced by logistical factors and seasonality, limiting uniform coverage of all relevant localities. The data collected are based on self-reported accounts, which reflect subjective perceptions and experiences. The research, however, embraces this subjectivity as an essential part of the phenomenon analysed, since the way mobility constraints are perceived directly influences the behaviours and strategies adopted.

3.3 Anonymised composition of the sample

The Danube Delta sample. In the Danube Delta, 11 interviews were conducted, including both individual interviews and informal community conversations with multiple participants. The sample covers a wide spectrum of social positions and exposure to mobility constraints: local actors involved in tourism and water transport, with long experience in the Delta and detailed knowledge of legislation and informal practices (3 interviews); residents of communities on the Sulina branch, working in fishing, seasonal tourism and casual jobs (4 interviews, including 2 multi-voice community conversations); older people with severely impaired physical mobility, dependent on informal networks for access to food, medicines and medical services (2 interviews); young adults with direct experience of informal community transport (1 interview); witnesses of the post-1989 deindustrialisation process with longitudinal perspectives on the withdrawal of public services (1 interview). The gender distribution includes both men and women, with an over-representation of men reflecting the local demographic structure and male predominance in water transport and fishing activities. Ages range from young adults to pensioners over 60. The interviews were conducted in communities on the Sulina branch of the Delta in November 2025.

The Apuseni Mountains sample. In the Apuseni Mountains, 6 interviews were conducted in two localities in the south-eastern part of the mountain range, on the border between Hunedoara and Alba counties. The first locality is a valley village, approximately 18 km from the nearest urban centre, with an estimated population of between 130 and 240 inhabitants, without public transport (the transport licence for the route stopping in the village was suspended during the pandemic and never resumed), with recent access to an asphalted county road (4 interviews). The second locality covers a very extensive area with both “valley” and “hill” villages, 30-40 km from the nearest towns, with difficult access and public transport limited to a few daily runs on the

metropolitan route (2 interviews). The sample includes²: young commuters who drive their own cars to urban centres; families who moved from urban areas and have become informal nodes of community organisation; older people with chronic medical transport needs; representatives of the local administration. The gender distribution includes men and women, with ages ranging from young adults to pensioners. The interviews were conducted in November-December 2025.

Ethical procedures. All interviews were conducted with informed consent, including the right to withdraw at any time. Audio recordings and transcripts were fully anonymised. Given the small size of the communities studied, where any combination of demographic *markers* (gender, approximate age, occupation) could make people identifiable, the report uses an attribution convention that protects anonymity: quotations are identified generically (“resident of the Delta” or “resident of the Apuseni”), without additional information. The data are stored securely and are not accessible to third parties.

² Methodological note. In one of the Apuseni localities, after the first round of interviews, attempts to schedule further interviews were refused by potential respondents, who cited their reluctance to “talk to these people”. This reluctance is in itself a significant finding, indicating the perceived distance between the community and any form of outside intervention, including research, and confirming, at the methodological level, precisely the isolation and institutional distrust that the study documents at the analytical level.

4. Territorial context

4.1. The Danube Delta

Geographical configuration. The Danube Delta is a territory with a distinctive geographical and administrative configuration, characterised by dispersed settlements, low accessibility and a structural dependence on water transport. Localities are separated by channels, river branches and protected natural areas, which makes mobility conditional on water-transport infrastructure, seasonality and regulations specific to a territory with special status.

Existing transport infrastructure. Access to and from the Danube Delta is mediated almost exclusively by the municipality of Tulcea, which functions as the main hub connecting it to the rest of the country. For most residents, travel involves one or more legs of water transport, followed by road or rail transport, which generates high costs, long travel times and a high degree of uncertainty.

Dependence on water transport. The water-transport infrastructure intended for the local population is limited in frequency, capacity and flexibility. Regular services exist, but they are few, rigidly scheduled and poorly adapted to residents' everyday needs (work, school, medical services). In this context, mobility depends to a large extent on external factors such as water levels, weather conditions and the availability of operators. The Delta is also a territory strongly marked by economic seasonality. Income-generating activities are concentrated in certain periods of the year, and mobility is influenced by tourist flows, which prioritise the needs of visitors over those of local communities. This dynamic heightens the tensions between mobility as a public service and mobility as a commercial activity.

The role of the state vs informal solutions. Access to essential services – health, education, administrative services – is profoundly affected by transport constraints. Journeys for medical or educational services often involve complex planning, high costs and dependence on third parties. In many cases, formal access to services does not translate into effective access because of mobility limitations. From an institutional perspective, the Danube Delta benefits from dedicated strategies and programmes, but these are predominantly oriented towards infrastructure, conservation or economic development, and less towards the population's everyday mobility needs. Responsibilities for transport are fragmented across several administrative levels, which hinders the implementation of coherent solutions adapted to the local context.

Digital infrastructure. Mobile signal coverage is not uniform across the branches and channels of the Delta: there are extensive sectors where mobile telephony works intermittently or not at all, which turns every journey on the water into an additional exposure to risk – the impossibility of calling for help in the event of a breakdown, illness or medical emergency, the difficulty of coordinating the transport of goods

or people in real time, and the lack of access to weather or hydrological information essential for navigation. Digital connectivity is thus not a problem separate from mobility, but a component of it: in the absence of functioning mobile telephony, dependence on pre-arranged social arrangements and informal networks increases, and the margin of error for an isolated resident shrinks dramatically. This observation follows the “*mobility as a service*” framework outlined in recent literature on the EU’s rural and *remote* areas (Perpiña Castillo et al., 2023).

In this framework, mobility poverty appears not merely as a problem of insufficient infrastructure, but as a complex phenomenon resulting from the interaction between geography, public policies, the local economy and the organisation of services. The Danube Delta thus offers a relevant case for understanding how territorial isolation is transformed into social exclusion through mobility.

4.2. The Apuseni Mountains

Geographical configuration. The Apuseni Mountains area is a mountain territory characterised by fragmented relief, low population density and highly dispersed settlements. Localities are located at great distances from one another, connected by a secondary and tertiary road network that is often degraded or difficult to travel, especially at certain times of the year. Mobility is thus conditioned by relief, road conditions and limited access to public transport. Unlike the Danube Delta, where isolation is mediated by water, in the Apuseni isolation is produced by altitude, slope and the fragmentation of the built environment. Reaching urban centres or the localities where essential services are concentrated involves long journeys, often with several changes or by private means, in the absence of functional public transport alternatives.

Existing transport infrastructure. Transport infrastructure is dominated by road transport, but it is characterised by low frequency, rigid timetables and limited adaptation to the everyday needs of the local population. Public transport, where it exists, is often insufficient to support regular access to work, education or medical services, which leads to increased dependence on the private car or on informal support networks. The Apuseni area is marked by a long process of depopulation and demographic ageing, accentuated by low mobility and limited access to economic opportunities. Economic activities are limited and often seasonal, and the lack of mobility acts as a bottleneck for diversifying sources of income and for integration into wider labour markets. A phenomenon specific to the mountain context is the use of recently modernised road infrastructure by heavy timber-haulage vehicles, unsuited to the load-bearing capacity of the roads and the geometry of mountain bends. This use accelerates the degradation of the infrastructure, creates additional risks for other users and contributes to the community’s feeling that public investments are partly captured by extractive economic interests. The mismatch is thus not only between the infrastructure and the specifics of the mountains, but also between the way the infrastructure is used and the priorities of local communities.

The role of the state vs informal solutions. Access to essential services is deeply unequal. Schools, medical units, administrative and commercial services are concentrated in a few local centres, and travelling to them involves a long time, high costs and, in many cases, significant physical effort. In the absence of transport solutions adapted to the mountain context, effective access to services is often limited, even where they formally exist. Institutionally, the Apuseni area is covered by general policies for mountain or rural areas, but mobility is rarely treated as a distinct and integrated issue. Responsibilities for transport are fragmented among local authorities with low administrative capacity, which makes it difficult to plan and implement transport services adapted to territorial dispersion and to the needs of the population.

Digital infrastructure. In the Apuseni Mountains area, digital infrastructure partly reproduces the fragmentation pattern of the physical infrastructure. Mobile signal coverage is patchy, with large areas where telephony works only in certain spots (ridges, peaks, road junctions), and data connections are systematically below the threshold needed for essential digital services (telemedicine, online appointments, bill payments, communication with the schools of commuting children). For commuters, the lack of signal on critical stretches of the route adds a layer of anxiety and real isolation: physical mobility is not accompanied by informational mobility, which contradicts the premises of the European “*smart villages*” model and underlines the need for an integrated mobility-digitalisation approach.

In this context, mobility poverty in the Apuseni Mountains manifests itself as a form of persistent territorial isolation, in which geographical constraints are amplified by the lack of services, poor infrastructure and the absence of flexible mobility solutions. The Apuseni thus offer a case complementary to the Danube Delta, allowing mobility poverty to be analysed from the perspective of another type of structural isolation, with distinct but comparable mechanisms and effects.

5. Analytical synthesis

The analysis below does not seek to reconstruct how the transport system functions as an institutional or technical architecture, but to identify how it is lived, interpreted and negotiated in everyday life. Inferences about structural mechanisms are drawn from the experiential regularities observed, not as exhaustive descriptions of the system itself.

5.1. Anticipation: Danube Delta vs Apuseni Mountains

The comparative analysis of the Danube Delta and the Apuseni Mountains is an exercise in identifying the common mechanisms and structural differences of transport poverty in territories characterised by extreme geographical isolation. The two regions are not compared as administrative or socio-economic units, but as distinct types of isolated territory, in which mobility plays a central role in access to services, economic opportunities and social inclusion.

In both territories, transport poverty is anticipated to manifest itself as a multidimensional phenomenon, resulting from the interaction between geographical constraints, poorly adapted infrastructure and the fragmented organisation of public services. In both cases: formal access to services does not automatically translate into effective access; mobility costs are disproportionately high relative to income; the population develops informal adaptation strategies and dependence on local networks; a perception of institutional abandonment and of a lack of priority in public policy is present; reduced mobility contributes to processes of depopulation, ageing and self-exclusion.

“In Sulina, for example, the future for young people, where everyone will end up leaving, who stays? The rest of you will stay, [...] who have nowhere to get a job.” (resident of the Delta, Interview 8)

The main structural difference between the two territories is the geographical environment that generates isolation. In the Danube Delta, mobility is conditioned by water, channels and river branches. In the Apuseni Mountains, isolation is produced by relief, slope, distances and the fragmentation of the road network.

For the Danube Delta, the working hypothesis is that transport poverty is amplified by structural dependence on water transport, by the rigidity of existing services and by competition between tourist mobility and that of the local population.

For the Apuseni Mountains, the working hypothesis is that transport poverty is determined mainly by territorial dispersion, poor road infrastructure and the lack of public transport services adapted to the mountain context.

These hypotheses are tested and nuanced through the empirical analysis of the field data.

5.2. Thematic map of the field research

The table below summarises the emerging themes identified in the transcripts and field notes, allocated to the two territories, and can be used as a tool for navigating this chapter.

Thematic axis	Danube Delta	Apuseni Mountains
1. Transport as life infrastructure	Water transport = condition of existence; travel is compulsory; costs in time, money, effort; a single engine, a single route, no safety net	Incomplete infrastructure: asphalted road but no services; minibus licence suspended during the pandemic; physical access separate from functional access; seasonal ambivalence
2. Mechanisms of transport poverty	Disproportionate costs (boat fuel ~100 l/day); invisible costs (taxi, intermediaries); prices amplified +200-300%; subsidies captured by operators	Cumulative cost: 120 lei/taxi trip; diesel +10-12% in winter; car wear on slopes; cost ranked alongside medicines; forced car ownership (Mattioli, 2021)
3. Inequity, gender and age	Internal hierarchy: mobility capital, physical capacity, social networks; older people, women living alone, households without resources functionally excluded	Differences valley vs hill vs hamlets; women living alone the most isolated; pupils captive to informal arrangements; mobility = mechanism for reproducing inequality
4. Community practices and informality	Community courier (school minibus driver); shared boats; fuel contributions; subsistence poaching; induced illegality	The bag on the fence; Facebook for coordination; consolidated shopping lists; the pharmacist as hub; fuel collections; selective, not universal
5. Governance, environment, future	Institutional capture; DDBRA as a blockage; environment-survival conflict seen as artificial; pessimism, resignation; youth migration; inevitable depopulation	Administrative fragmentation; snow clearing as political revenge; green transition as an external theme; caution, incremental solutions; window still open

5.3. Data analysis

The Danube Delta

The interview data consistently confirm the working hypothesis: transport poverty is perceived as a structural problem, not as an occasional difficulty. Mobility appears rare, expensive and unreliable, directly affecting the everyday life of the local population and access to essential services.

Transport as life infrastructure

The data consistently converge on the idea that in the Danube Delta transport is not perceived as a distinct sector (infrastructure, logistics, mobility), but as life infrastructure. Mobility structures access to food, health, income, education, social relations and dignity. The absence or malfunctioning of transport has cascading effects on all other dimensions of living. For most respondents, mobility is compulsory, not optional; daily or weekly journeys are driven by basic needs: supplies, access to a doctor, technical repairs, seasonal work. The differences between respondents are not qualitative (some “have transport”, others “don’t”), but a matter of the degree of exposure to the consequences of its absence.

“First of all, the business of supplies, food supplies or groceries. If, for example, it just so happens right now that you’ve run out, the fridges in the shops are empty, because their transport, or the restocking of the shops, happens twice a week. If I’ve run out,

they've run out of bread too. I've run out of bread too. I have to think about what I'll use to get to Sulina tomorrow or today, since that would be closer." (resident of the Delta, Interview 7)

The interviews show that dependence on water transport is not only an effect of the Delta's geography, but the result of a systematic lack of functional alternatives. Water transport is perceived as inevitable, but at the same time as inefficient, expensive and demanding, especially for older people and people with reduced mobility. The rigidity of existing services is confirmed empirically by limited timetables, lack of flexibility and the absence of logistics for goods and emergencies. From the locals' perspective, services are designed for an "abstract user", without taking into account the real needs of daily life. The data point to a clear competition between tourist mobility and that of the local population, but a deeply unequal one. Tourist mobility is fast and capitalised, while local mobility is constrained, more expensive and subordinated to the economic priorities of tourism.

Mechanisms of structural transport poverty

The data indicate that poverty in the Danube Delta is not explained primarily by a lack of natural resources or work, but by the cost and accessibility of transport, which acts as a multiplier of poverty. Four recurring mechanisms structure this dynamic.

Disproportionate costs. Transport (by water or improvised overland) consumes a significant part of income: fuel, tickets, towing, repairs, trips to Tulcea. For pensioners, people on low incomes or households without mobility capital, a single trip can amount to a major part of the monthly budget. This mechanism recurs in the European literature on "transport affordability" (Lucas et al., 2016).

"Fuel is very expensive for everyone. And the tourists who come to the Delta say: what's with these prices, why is it so expensive? Well, let's see, with this engine I burn close to 100 litres of petrol a day." (resident of the Delta, Interview 2)

Invisible costs. Besides direct costs, there are transaction costs: lost time, taxis, intermediaries, "tokens of appreciation", dependence on others for transporting parcels or goods. These costs are rarely recognised in public policy, but they are omnipresent in local experience and turn every journey into a complex process of negotiation.

"No courier gets here, so the courier only gets as far as Tulcea, and from there, because we have boat transport three times a week, we ask the boatman to go to the courier. That means I pay for the taxi there and back and give him some money too, because he helped me pick up the parcel from the courier." (resident of the Delta, Interview 7)

Prices amplified by isolation. Limited supply and lack of competition lead to very high retail mark-ups (200-300%) on food and basic goods. Thus, even any transport subsidies are neutralised or captured, and the final cost is passed on to local consumers. Mobility poverty directly feeds the general poverty of households.

Captured subsidies. Several interviews show that subsidised transport does not produce real accessibility. The subsidy is absorbed by intermediaries or operators, with no effective mechanisms for controlling final prices. From the locals' perspective, the subsidy "exists on paper", but does not reduce poverty.

"This subsidy that is grabbed by the state should perhaps be redirected to companies that have appeared in the last ten to fifteen years, which provide exactly these services and aren't after any subsidy. And in a way they are in real competition with the company that receives the subsidy. The fund should be redirected and rethought and get exactly to where the need is greatest." (resident of the Delta, Interview 3)

Inequity and internal differentiation

Mobility poverty does not affect the community uniformly. The analysis highlights an internal hierarchy of mobility, determined by mobility capital (owning a boat, a car, a tractor, or having the connections needed to obtain transport), by physical capacity (age, illness and disability turn transport into a bodily barrier) and by social networks (access to informal help becomes decisive). Older people, people with reduced mobility, women living alone and households without relational resources are functionally excluded from access to essential services; mobility is delegated to others, and living depends on goodwill, not on guaranteed rights or services.

Access to health care as an expression of mobility poverty

Of all the dimensions affected by mobility constraints, access to health care is the most consistently documented in the field data and, at the same time, the one with the most serious direct consequences for everyday life. In the Danube Delta, access to medical services involves a journey of at least two hours (Sulina–Tulcea), transport costs of at least 80–100 lei per trip, complex planning and dependence on weather conditions. The local medical practice is open from 9 to 11-12, Monday to Friday. Patients with chronic illnesses requiring dialysis are transported three times a week to Tulcea in dedicated fast ambulances, which is one of the few functioning institutional interventions documented.

"There are, for example, sick people who need dialysis; they are taken three times a week to Tulcea, in fast ambulances meant strictly for transporting those on dialysis. And all the services are reimbursed, I mean there is progress, we are not completely abandoned." (resident of the Delta, Interview 3)

Access to medicines is mediated by distance and informal networks. In the Delta communes, prescriptions are passed on through intermediaries, medicines are brought by informal couriers or relatives from Tulcea, and the lack of a local pharmacy turns every renewal of treatment into a logistical problem.

Health is the strongest argument for reframing transport as a social service: when being unable to reach a doctor or a pharmacy becomes a risk factor for life, mobility ceases to be a sectoral problem and becomes a public health emergency.

Community practices: solidarity, informality and induced illegality

In the absence of functioning public services, communities develop an informal survival infrastructure: mutual help with supplies and transport, “community couriers” (drivers, boatmen, school minibuses used informally), mixed economies (fishing + tourism + casual work), and tolerated illegal practices (subsistence poaching). Respondents do not perceive these practices as moral deviations, but as rational responses to the systemic failure of the state. Illegality appears not as an option, but as a last resort. Informal solidarity has its limits: it is fragile, dependent on personal relationships and incapable of substituting for stable public services.

Environment and mobility: a conflict perceived as artificial

A cross-cutting finding of the analysis is the widespread perception of a conflict between environmental protection and the survival of communities. Most respondents acknowledge the negative impact of intensive boat traffic on the ecosystem (erosion, waves, habitat destruction), but consider environmental policies to be rigid, ill-adapted to local realities and lacking functional alternatives. Interviews 1, 5, 8 and 10 contain an articulate, non-naïve discourse. Interview 10 explicitly proposes a controlled overland road — with limited traffic, cycle lanes and access control — as a solution that would simultaneously reduce the ecological pressure of water transport and community isolation. The respondent points to the historical existence of an overland road (18th–19th centuries) linking Tulcea–Sulina–Periprava–Letea–Chilia Veche, maintained through community labour (*corvée*).

The paradox is central: the current model of intensive water-borne mobility is anti-ecological; alternative solutions could reduce the pressure on the Delta. Their absence is attributed not to natural constraints, but to institutional blockages, in particular the position of the DDBRA, perceived as a hypertrophied institution. Technical solutions exist (hovercraft, special vessels, dedicated off-road vehicles) but are blocked by a lack of political will, not by a lack of technology.

Governance: abandonment, capture and implementation failure

The governance dimension is one of the most consistent in the entire dataset. Regardless of the respondent’s profile, public institutions are perceived as absent or ineffective, captured by political or economic interests, and incapable of implementing coherent projects. Town halls are described as having resources, but lacking the capacity or the will to use them for basic public needs. Excessive regulation is seen as ill-adapted hyper-regulation, which inhibits local initiative, favours large actors and produces informality.

“They bought a boat many years ago, 10, 8, ten years ago, a boat for the town hall and for emergencies, and it sits in his yard. For 8 years now the engine hasn’t worked, because if it doesn’t get its running hours, it deteriorates.” (resident of the Delta, Interview 7)

The analysis predominantly reflects experiences of institutional dysfunction, fragmentation or absence. The field data suggest that investments and resources coming from outside are often

filtered through local power structures, being captured or preferentially redistributed to actors who already hold economic, social or political capital.

The future: migration, resignation and anticipated decline

In most interviews, the outlook on the future is marked by pessimism and resignation. Expectations of the state are minimal or non-existent. Migration (internal or external, including work on ships) appears as a rational adaptation strategy, especially for young people. Depopulation, ageing and the gradual disappearance of communities are anticipated as inevitable developments in the absence of structural interventions. Transport is not just a technical problem, but the key variable that decides whether or not a community still has a future.

Analytical conclusion. Mobility and transport poverty is the structural mechanism through which inequity, poverty and exclusion are produced and reproduced in the Danube Delta. The problem is not the communities' lack of adaptation, but the lack of governance that would turn transport into an equitable public service, adapted to the ecological and social context. Without systemic interventions in transport, any health, education, environmental or local development policy remains partial and ineffective.

The Apuseni Mountains

The statement regarding territorial dispersion and the lack of public transport services adapted to the mountain context is strongly confirmed by the field data. Dispersion is not only spatial, but topographical and functional (valley vs hill, village core vs hamlets), which produces qualitative differences in access, not just greater distances.

The expectation of "poor road infrastructure" requires an important correction. The data show that the problem is not only the poor state of the infrastructure, but its unsuitability to the mountain context: asphaltting has improved access in summer, but increased the risk in winter; the lack of adapted maintenance produces new forms of vulnerability; road infrastructure is not linked to mobility services.

Transport as incomplete infrastructure

In the mountain areas analysed, transport does not function as a proper public infrastructure, but as an incomplete, fragmented infrastructure that is deeply dependent on individual initiative. Although there are visible investments in road asphaltting, they are not matched by transport services. The road exists, but mobility is not guaranteed. Physical access is separate from functional access: you can have an asphalted road, but no bus, no coherent timetable, no real possibility of reaching essential services. The field notes provide a detail that underlines exactly this incompleteness: the transport licence for the route with a stop in the village (a daily minibuss from Brad) was suspended during the pandemic and never resumed. When it operated, its timetable did not support residents' needs. Before 1989 there were 4 buses a day, timed to the shifts at the Rovina mine. The contrast is structural, not nostalgic: in the planned economy, transport was a function of production; in the market economy, transport depends on profitability, and small communities are not profitable.

The cumulative mechanism of transport poverty

Mobility poverty in the mountain context does not manifest itself as a total lack of travel, but as the excessive cost of travel relative to income, effort and risk. Transport is experienced as a structural burden, comparable to health expenditure. The mechanism of transport poverty is cumulative: the lack of public transport forces the use of a private car; these solutions increase costs and dependencies; high costs limit the frequency of travel; limited travel reduces access to services, opportunities and relationships. This dynamic corresponds to the concept of “forced car ownership” theorised by Mattioli (2021). The cost of transport in the field site is quantifiable: 120 lei for a taxi ride from Brad, plus the cost of diesel for commuters (10-12% higher in winter), car wear on mountain roads, and the absence of a petrol station. Respondents rank the cost of transport alongside that of medicines, an association that underlines transport’s position in the household economy as a matter of survival, not comfort.

Internal inequity: geography, gender and age

Mobility inequality is pronounced within mountain communities. The differences are not only between villages and towns, but within the same village: between valley and hill, between the village core and the hamlets, between households with a car and those without, between people with active social relationships and those who are isolated. Women living alone, older people and people with chronic illnesses consistently appear as the most limited in their mobility. High-school pupils and young people without access to public transport become captive to informal arrangements. Mobility thus functions as a mechanism for reproducing inequality.

Access to health care

In the Apuseni Mountains, access to health care is structured by long distances, the lack of a family doctor in the commune (primary medical care depends on annual doctors’ caravans organised by NGOs and the town hall) and the distance to the pharmacy point (Blăjești, 17 km from Curechiu; Brad or Alba Iulia for Intregalde). The ageing population needing oncological, rheumatological or dental treatment must travel to Cluj or Timișoara, costs that respondents compare with the expense of maintaining a private car. The pharmacist in Brad, who is a local, has developed a system for managing villagers’ health cards and prescriptions, sending them their medicines monthly, a clear example of informal infrastructure substituting for the absence of public services. Telemedicine appears in the Apuseni data as a form of resilience: doctors who accept consultations via *WhatsApp videocall*. This practice works, but depends on digital connectivity, which is, as documented earlier, fragmented and unstable.

“An ageing population, with people who need to get to monthly treatment — oncology, rheumatology, dentist in Cluj or Timișoara.” (Apuseni field notes, Curechiu)

Community practices: self-organisation and selectivity

In the absence of a formal system, communities develop complex self-organisation practices: informal transport, collections for fuel, barter, car rotation and consolidated shopping lists are not exceptions, but stable structures of everyday life. These networks are selective: they work well for the socially integrated, but leave isolated people out of the loop. The field notes document specific practices: “the bag on the fence” (for bread orders, with the exact money, by the main road); the Facebook page created by a resident to coordinate transport needs; the pharmacist in Brad who manages health cards; announcements such as “I’m driving to... and have 2 free seats”. These practices are not spontaneous improvisations, but stable structures with informal norms and rules of operation.

“You leave the bag on the fence by the main road, with the exact money, the driver comes and leaves the goods in the bag, and any differences are settled later.” (resident of the Apuseni)

Environment and mobility: a practical tension

The relationship between mobility and the environment in the mountain context is a tense one. Growing dependence on the private car increases pressure on the local environment, while the use of forestry machinery on recently asphalted roads accelerates the degradation of infrastructure. The lack of alternatives means that the discourse on sustainable transport remains abstract. The green transition, without an approach adapted to the mountain countryside, risks being perceived as an external, imposed theme with no immediate relevance, with direct implications for the design of measures under the Social Climate Fund.

Governance: fragmentation and a vicious circle

Mobility governance is characterised by fragmentation, discontinuity and distance from local realities. Transport is rarely approached as a right or an essential public service; more often, it is treated through the lens of economic profitability. This approach produces a vicious circle: the lack of “visible” demand justifies the lack of services, and the lack of services reduces demand. The interviews and field notes provide a revealing detail: road clearing was used by the former administration of București commune as a form of political revenge — the small number of votes in Curechiu led the mayor to explicitly refuse to send the gritting machines, or to send them late, after commuting hours. This example turns infrastructure maintenance, a basic public service, into an instrument of local political power.

The future: caution and incremental solutions

The outlook on the future of mountain mobility is cautious and limited by previous experience. The solutions proposed by respondents are incremental: periodic minibuses, fuel subsidies, support for locally organised transport. Without a paradigm shift, from mobility as an economic activity to mobility as social infrastructure, mountain areas risk remaining dependent on community resilience. In the long term, this dependence may become unsustainable. The anticipation of high dependence on the private car and on informal networks is fully validated. However, the field shows that the private car is not a universally

accessible solution, but a concentrated resource. Informal networks are not neutral; they reproduce internal inequalities and mask the absence of the state. Mobility does not only limit access to opportunities, it reshapes life expectations.

5.4. Typologies of the experience of mobility poverty

This section proposes an analytical synthesis of the field data by identifying recurring types of everyday mobility experience. The typologies do not represent rigid categories of people or households, but configurations of constraints, resources and strategies, which may coexist or succeed one another over time within the same biography.

Typology 1 – Functional but fragile mobility

The typology of functional but fragile mobility was identified recurrently in the interviews from both territories. In the Danube Delta, it appears prominently among respondents who describe active households that work, get supplies and travel, but operate without a safety net: a single engine, a single route, a single source of income. In the Apuseni, the same fragility appears in commuters' households, where recent asphaltting has created an illusion of accessibility, functional in summer but extremely fragile in winter.

“If we're going anyway, we do it all at once – you never know when you'll get there next.” (resident of the Delta)

Mobility is possible, but maintained through an unstable balance between limited resources, careful planning and the absence of unforeseen events. Transport costs are felt acutely, not necessarily in absolute amounts, but in relation to income. A defining element is an extremely low tolerance of shocks: a minor technical fault, a cancelled run or a sudden change in the weather can completely block mobility. This fragility generates constant anticipatory stress.

“We manage, but we can't really afford to make mistakes.” (resident of the Apuseni)

Typology 2 – Dependent (relational) mobility

Dependent mobility was identified with the greatest frequency across the entire dataset, appearing centrally in the Danube Delta interviews with older people with severely impaired physical mobility and in the Apuseni interviews. This typology is strongly marked by gender and age: in both territories, older women living alone are the most exposed group.

“I can't go anywhere. If someone doesn't bring it to me, I don't have it.” (resident of the Delta, Interview 6)

“Women who live alone are perceived as the most isolated, lonely, and as having the greatest mobility problems.” (Apuseni field notes)

Mobility is not autonomous, but delegated. Access is not guaranteed, but conditional on the availability, goodwill or interests of others. In addition to financial costs, dependent mobility involves social costs: shame, debt, the obligation of reciprocity or the loss of autonomy.

“It’s hard to keep asking.” (resident of the Delta, Interview 6)

Typology 3 – Episodic and reactive mobility

Episodic and reactive mobility appears centrally in the Danube Delta interviews and among the hill households in the Apuseni (the hamlets of Cosmești, Niculești, Fodor), where a trip to the family doctor becomes a major financial decision.

“You only go to the doctor if it’s serious. For anything else you don’t bother going.” (resident of the Delta)

Mobility is not part of the daily rhythm. Journeys occur occasionally, in reaction to emergencies. Daily life is organised around avoiding travel. Every journey involves significant expense. Activities that are not strictly necessary are eliminated completely.

“You stay here for months.” (resident of the Apuseni)

Typology 4 – Blocked mobility

Blocked mobility was documented most clearly in the Danube Delta interviews. Interview 6 is the most consistent case: an older woman with severely impaired physical mobility, a pension of ~1800 lei, living alone, entirely dependent on siblings in Tulcea. In the Apuseni, the typology appears among immobilised people in the hill hamlets. The town hall’s programme of checking on isolated people in the hamlets during periods of severe frost confirms that this category exists as an institutionally recognised problem.

“If someone doesn’t bring it to me, I don’t have it. I depend on others for everything.” (resident of the Delta)

Mobility is almost impossible or completely avoided. Isolation is accepted as a “normal” state. Mobility is no longer claimed, but abandoned as a possibility. This internalisation marks the shift from external constraint to self-limitation, with profound effects on dignity and social participation.

Typology 5 – Community-negotiated mobility

Community-negotiated mobility was documented most densely in the Apuseni field notes, where practices include commuter coordination, the Facebook page, “the bag on the fence”, consolidated shopping lists and the fuel collection, while in the Delta the community is active through “community courier” roles, community contributions to road repairs and help between neighbours.

“If someone’s going, a neighbour for example, I tell him: neighbour, get that for me too, because you know that when I go, I’ll help you back.” (resident of the Delta, Interview 7)

Mobility is made possible through informal collective arrangements. Access is regulated by unwritten norms. Not everyone benefits equally: access is influenced by reputation, relationships and the capacity to contribute. Negotiated mobility reproduces internal differences, even though it is based on solidarity.

Cross-cutting analysis of the typologies

The typologies described are neither exclusive nor stable. The same person can pass through several types of mobility experience over time. Mobility poverty is not a fixed state, but a dynamic process in which mobility degrades gradually and adaptation strategies become ever more costly and fragile.

Functional but fragile mobility (Typology 1) represents a zone of unstable equilibrium, in which travel is possible only through careful planning and in the absence of any shock. This typology is essential for understanding *transport poverty* as a process: mobility exists, but without resilience, and the risk of degradation is permanent. It functions as a transition zone, not as a stable state.

Dependent mobility (Typology 2) marks the loss of autonomy. Travel becomes socially negotiated, conditional on relationships and the goodwill of others. This typology explicitly introduces power asymmetries into the analysis of mobility: who can ask, who can refuse, who decides the timing and purpose of the journey. Here *transport poverty* takes on a relational and symbolic dimension, not just a material one.

Episodic and reactive mobility (Typology 3) reflects a functional withdrawal from mobile space. Journeys do not disappear, but are reduced to occasional interventions, triggered by emergencies. Daily life becomes fragmented, and access to services becomes discontinuous. This typology shows how high costs and uncertainty lead to self-limitation of mobility, even before total immobility sets in.

Blocked mobility (Typology 4) represents the extreme form of transport poverty. Here, travel falls completely outside the horizon of the possible, and isolation is internalised. Life shrinks to a minimal perimeter, and dependence on others becomes total. This typology is not only a failure of infrastructure, but a failure of rights, with profound effects on dignity and social participation.

Community-negotiated mobility (Typology 5) cuts across all the other typologies, functioning as a compensatory mechanism. Collective arrangements temporarily allow mobility to function where the state is absent, but they do not eliminate inequalities and do not provide stability. This typology highlights communities' capacity to create solutions, but also the social cost of outsourcing mobility to informal solidarity.

The interpretation of the typologies privileges experiences of vulnerability and constraint, as these appeared recurrently in the field data. This focus reflects the empirical structure of the material collected, not a normative ranking of existing forms of mobility. Taken together, the typologies describe a process of cumulative degradation of mobility, in which people can slide from one state to another as a result of minor events: a technical fault, an illness, a broken relationship, a price rise.

Transitions are not exceptions, but probable trajectories in a context lacking institutional protection. The differences between the Danube Delta and the Apuseni Mountains do not change the structure of the typologies, only their concrete form. This convergence suggests that mobility poverty is less an effect of geography and more a product of institutional arrangements and the absence of adapted public services.

Cross-cutting reading: gender, age and dignity

The typologies are not demographically neutral. Dependent mobility (T2) is concentrated among older people living alone and older women. Blocked mobility (T4) reproduces the same pattern. Episodic mobility (T3) includes households with school-age children and a single working adult, and households headed by single women on low incomes. Community-negotiated mobility (T5) is available mainly to men who own means of transport and to socially integrated women. Mobility poverty concentrates vulnerabilities along gender and generational lines, and intervention policies must integrate this dimension.

Dignity does not appear as a theme explicitly articulated by respondents, but as a diffuse experience, present in the subtext, in hesitations and in mechanisms of moral adaptation. The analysis of the Danube Delta interviews identifies a central tension: there is an ethic of work and decency despite extreme precariousness, and an even starker contrast: borderline cases of poverty alongside the refusal of money and unconditional solidarity, a community ethic of survival that defies the logic of welfare dependency. In the Apuseni, the dimension of dignity appears in the reluctance to ask for help, in turning to informal arrangements rather than to the town hall, and in the ranking of the social costs of dependent mobility: shame, debt, the obligation of reciprocity, the loss of decision-making autonomy over travel.

This dimension has a direct implication for public policy: interventions that reduce financial costs without restoring autonomy of travel — for example, indirect subsidies through operators that do not change the frequency or accessibility of services — do not address the dignity dimension of mobility poverty.

5.5. Final synthesis: themes, geography and typologies

The table below brings together the thematic axes, their concrete forms in the two territories and the experience typologies associated with each. The table summarises chapter 5 and can be read both vertically (each axis through the lens of geography and typologies) and horizontally (the complete thematic profile of each territory).

Thematic axis	Danube Delta	Apuseni Mountains	Associated typologies
Transport as life infrastructure	Water transport = condition of existence; supplies conditional on the boat	Road without services; suspended licence; seasonal ambivalence	T1 (fragile): unstable equilibrium T3 (episodic): withdrawal from mobile space
Mechanisms of poverty	4 mechanisms: disproportionate costs, invisible costs, amplified prices, captured subsidies	Cumulative cost; <i>forced car ownership</i> ; transport = medicines	T1–T4: gradual degradation as the mechanisms accumulate
Inequity, gender and age	Older people, women living alone, households without mobility capital	Valley vs hill; women living alone the most isolated; captive pupils	T2 (dependent): concentrated among older women living alone T4 (blocked): internalised immobility
Community practices	Community couriers; shared boats; subsistence poaching	The bag on the fence; Facebook; the pharmacist as hub; car rotation	T5 (community-negotiated): cuts across the other typologies; selective
Governance, environment, future	Capture; DDBRA; ecological paradox; pessimism; window closed	Fragmentation; politicisation; external green transition; window open	T3–T4: the vicious circle no services → no demand → no services
CONVERGENCE	The four mechanisms of mobility poverty (disproportionate costs, invisible costs, amplified prices, captured subsidies) appear in both territories. The typologies of mobility poverty are distributed similarly. Mobility poverty is institutionally produced, not geographically determined. Solutions must address the common mechanisms, while adapting their concrete forms to the specifics of each territory.		

Convergences and divergences: mobility poverty beyond geography

The parallel analysis of the two territories makes it possible to formulate a central analytical conclusion: the structural mechanisms of mobility poverty converge remarkably between the Danube Delta and the Apuseni Mountains, despite radical differences in geography, mode of transport and institutional configuration. This convergence demonstrates that mobility poverty is structurally and institutionally produced, not naturally determined by geography – the central message of the report.

The convergence of structural mechanisms in two such different contexts has a direct policy implication: solutions must address the common mechanisms (subsidy capture, fragmented governance, the decoupling of infrastructure from services), while adapting their concrete forms to the specifics of each territory. A community water-transport policy works in the Delta but not in the Apuseni; an on-demand minibus system works in the Apuseni but not in the Delta. What must be uniform is the principle – transport as a social service, direct subsidies to users, anti-capture monitoring – not the instrument.

The divergences are just as instructive: in the Delta, the environment–mobility conflict is acute and produces a regulatory paradox; in the Apuseni, the central problem is the decoupling of infrastructure from services. In the Delta, depopulation is accepted fatalistically; in the Apuseni, there is still a critical mass of young commuters who could be retained through incremental interventions. These differences call not only for different solutions, but also for

different degrees of urgency: in the Apuseni, the window for action is still open; in some Delta communities, it could close within the next decade.

Overall, the typologies show that mobility is not only a matter of travel, but a synthetic indicator of social inclusion. As mobility becomes fragile, dependent, episodic or blocked, access to rights, services and opportunities narrows. Mobility poverty thus appears not as a marginal condition, but as a central mechanism for producing territorial inequity.

6. Implications for public policy

This chapter seeks to translate the results of the analysis into a framework of strategic implications for public interventions on transport and mobility poverty. The argument is articulated in three directions: a critique of current approaches, the need for territorial differentiation, and the reframing of transport as a social service. Each of these directions derives directly from the findings of chapter 5 and prepares the concrete recommendations of chapter 7. The implications formulated here are not operational recommendations, but public policy conclusions derived from the field data. They are addressed not only to direct decision-makers (the ministries of transport, labour and European investment), but also to the institutional architecture within which the absence of transport as a social policy priority perpetuates exclusion in isolated rural areas.

6.1. Why current approaches fail

The field data identify four recurring structural causes of the failure of current transport policies in the remote rural areas studied. These causes are neither circumstantial nor local; they reflect systemic deficiencies in the way transport is conceived, financed and governed in Romania.

Institutional capture of public resources

The first and most consistent finding is that public resources intended for local mobility are captured by institutional or economic structures that divert them from their declared function. In the Danube Delta, the interviews document a recurring pattern: town halls own equipment (boats, machinery, vehicles) acquired through externally funded projects, but this equipment is either not used for basic public needs, is degraded through disuse, or is controlled by informal local power networks. This pattern corresponds to the mechanism of “institutional capture” described in the literature on governance in peripheral areas (Bardhan and Mookherjee, 2006): external resources are absorbed by local power structures, without effective mechanisms of transparency or accountability. In the Apuseni, the same logic appears in a different form: road maintenance is politicised, snow clearing is used as an instrument of electoral pressure, and infrastructure investments are disconnected from the services that would make them functional. The implication is direct: any new allocation of funds, including through the Social Climate Fund, that does not include explicit anti-capture mechanisms risks reproducing the same failures.

Neutralisation of transport subsidies

The second recurring mechanism is the effective neutralisation of subsidies. The data show that existing transport subsidies do not translate into real accessibility: they are absorbed by operators or intermediaries, with no mechanisms for controlling final prices or monitoring the impact on vulnerable households. From the respondents’ perspective, the subsidy “exists on paper”, but does not change the cost structure borne by users. This finding has direct implications for the design of measures in the National Social Climate Plan (PNSC), currently being drafted.

The current model of subsidising through operators has been tested de facto in the territories studied, and it has failed. Continuing the same model, even with new financial sources, will not produce different results. The structural implication is that the shift from subsidising operators to directly subsidising vulnerable users is not one option among others, but a minimum condition for effectiveness.

Hyper-regulation ill-adapted to local specifics

The third mechanism, particularly specific to the Danube Delta but with echoes in the mountain context, is hyper-regulation. The regulatory framework of protected areas, especially the one administered by the DDBRA (Danube Delta Biosphere Reserve Authority), is perceived by respondents as rigid, ill-adapted to local realities and, paradoxically, ecologically counterproductive. Bans and restrictions on overland transport keep in operation a model of intensive water-borne mobility that degrades precisely the ecosystem the regulatory framework protects. The paradox deserves to be stated explicitly, because it has a major policy implication: controlled overland transport solutions (a restricted-access road, cycle lanes, dedicated vehicles), proposed by respondents on the basis of historical knowledge of the territory, would simultaneously reduce the ecological pressure of water transport and community isolation. Their blockage is not technical but institutional, which turns the problem from one of conservation into one of governance. The implication for green transition policies is that, without a revision of the regulatory framework allowing explicit derogations for the basic transport of the local population, any ecological intervention risks being perceived as imposed and anti-human, eroding precisely the legitimacy the green transition needs.

Fragmentation of administrative responsibilities

The fourth mechanism is the fragmentation of competences across levels and types of authority, which produces a zone of institutional absence: local authorities know the needs but lack resources; central authorities have resources but lack contextual information; regulatory agencies have normative power but no contact with realities on the ground. The result is a vicious circle documented in both territories: the lack of visible demand justifies the lack of services, and the lack of services reduces demand – a self-perpetuating mechanism that, in the absence of outside intervention, has no exit point.

The fragmentation is not only administrative but also epistemic: decision-making levels lack comparable data on the realities of mobility in *remote* rural areas. There is no national map of mobility poverty, there are no specific indicators in official statistics, and the census does not collect data on the real time and cost of travel to essential services. Without these data, mobility poverty remains invisible to public policy – not for lack of severity, but for lack of measurement.

The four mechanisms described – capture, neutralisation, hyper-regulation, fragmentation – do not operate in isolation, but reinforce one another. Captured subsidies are not corrected because monitoring is fragmented; ill-adapted regulations are not revised because of decision-making capture; fragmentation is not resolved because the data that would demonstrate the urgency are missing. This interdependence explains why one-off interventions fail and why a systemic, not sectoral, approach is needed.

6.2. The need for differentiated territorial solutions

One of the most instructive conclusions of the comparative analysis is the convergence of structural mechanisms in two radically different geographical contexts: the four mechanisms of transport poverty – disproportionate costs, invisible costs, amplified prices, captured subsidies – appear in both territories. The five typologies of mobility experience are distributed similarly. Mobility poverty is institutionally produced, not naturally determined. But the convergence of mechanisms does not imply uniform solutions. On the contrary: the data clearly show that exactly the same intervention principles must be translated into different instruments, depending on the specifics of each territory.

This distinction has a concrete implication for policy architecture. The “*one-size-fits-all*” approach, common in national programmes (the same tendering procedure, the same eligibility criteria, the same operating standards, regardless of context), produces perverse results in territories with extreme specificities. A revealing example from the field data: operating standards designed for conventional intercity routes cannot be applied to water routes with high weather variability, just as profitability requirements that work on high-demand corridors make no economic sense in communities of 200-500 inhabitants.

Danube Delta: specific implications

For the Danube Delta, the implications concern mainly three areas. The first is water transport: the frequency, pricing and integration with the everyday needs of the local population, as distinct from those of tourism, require a specific operating framework, with direct subsidies and price control. The second is regulation: the DDBRA framework must be revised to allow explicit derogations for basic transport (community, utility, medical), based on an ecological audit comparing the impact of current water transport with controlled overland alternatives. The third is investment in digital connectivity infrastructure, without which no system for transport information, planning or coordination can function.

The urgency in the Delta is marked by the data: depopulation is accepted fatalistically by respondents, youth migration is perceived as inevitable, and some communities are approaching the threshold below which disappearance becomes irreversible. The window for action is not open indefinitely.

Apuseni Mountains: specific implications

For the Apuseni Mountains, the central implications concern the decoupling of infrastructure from services. Roads have been asphalted, but mobility has not been guaranteed; the example of the minibus licence suspended during the pandemic and never resumed is emblematic of an investment logic that stops at physical infrastructure without ensuring that services operate. The implication is that any future investment in mountain road infrastructure must be conditional on concrete commitments to operate transport services, what the field data call “coupling investment with an operating obligation”.

A second specific implication concerns maintenance adapted to the mountain context. Asphalted roads have improved access in summer, but have created new vulnerabilities in winter (black ice on slopes, increased risk of accidents).

Without early, depoliticised snow clearing and anti-icing treatment, infrastructure becomes a source of risk, not of access. The politicisation of maintenance, documented in the field data as a concrete practice, not as a subjective perception, must be countered by minimum national standards for seasonal maintenance, with central funding and independent monitoring.

Unlike the Delta, the Apuseni still have a critical mass of young commuters and active households that could be retained through incremental interventions. The window for action is open, but not guaranteed in the long term: population ageing, the progressive withdrawal of public services and dependence on community resilience create a trajectory whose direction can still be reversed, provided there is intervention within the next 3-5 years.

6.3. Transport as a social service, not just infrastructure

The central argument of the report, derived from the convergence of the field data with the theoretical framework, is that transport in *remote* rural areas must be reframed – in the architecture of public policy, in funding and in monitoring – from an economic activity or technical infrastructure into an essential social service. This reframing is not a rhetorical formulation; it has three distinct operational consequences, each with direct implications for current policies.

Recognising vulnerable transport users

Regulation (EU) 2023/955 on the Social Climate Fund explicitly introduces the category of “vulnerable transport users”, people and households whose mobility is disproportionately affected by the costs of the climate transition. This concept, although designed for the urban context of carbon pricing, accurately describes the situation documented in this report: households for which the cost of transport is a structural burden, not a marginal expense, and for which the absence of mobility alternatives produces exclusion from essential services. The implication is that Romania, in drafting the PNSC, has the European legal framework to define and explicitly protect this category. The field data show who these users are: older people in the Delta whose trips to Tulcea cost 80–100 lei per trip, women living alone in the Apuseni who depend on informal arrangements to get to a doctor, commuters who spend 120 lei on a taxi ride. Turning these empirical findings into eligibility criteria for support measures is a technical step, not a political one, but it has not yet been taken.

Transport as a social right

The second consequence of the reframing is the integration of transport into the architecture of social rights, alongside health and education. This idea is not new in the specialist literature. Martens (2017) argues for a right to sufficient accessibility, and Sheller (2018) proposes the concept of “*mobility justice*” as a dimension of social justice. These, however, remain absent from the Romanian institutional framework.

The field data offer the strongest empirical argument for this reframing: health. When being unable to reach a doctor or a pharmacy becomes a risk factor for life – and the data document exactly this situation in both territories – mobility ceases to be a sectoral problem and becomes a public health emergency. Formal recognition of this reality would mean including access to adequate transport in the set of services assessed by the National Quality of Life Survey, in the minimum package of guaranteed social services and in the funding criteria of the rural health strategy. Operationally, this would mean that a territory where citizens cannot reach a doctor because of a lack of transport is treated with the same urgency as a territory without a medical practice.

Indicators of real access, not of physical infrastructure

The third consequence concerns how the success of interventions is measured. At present, performance indicators in the transport sector are predominantly physical: kilometres of road built or rehabilitated, number of subsidised runs, amounts invested. These indicators measure inputs, not impact. They do not capture whether an asphalted road produces real mobility, whether a subsidised run is affordable or whether the investment reduces isolation.

The field data demonstrate the discrepancy: in the Apuseni, the road was asphalted, but the minibus licence was suspended; the infrastructure indicator shows progress, the access indicator shows regression. In the Delta, the transport subsidy exists, but final prices remain prohibitive; the financial indicator shows intervention, the accessibility indicator shows failure.

Reframing transport as a social service requires outcome indicators, not effort indicators: actual travel time to essential services (health, education, supplies), the cost of transport as a share of household income, the frequency of forgoing journeys because of cost or lack of options, and the degree of dependence on informal arrangements. These indicators exist in the specialist literature (Lucas et al., 2016; Van Wee and Geurs, 2011), but are not yet included in official Romanian statistics.

The proposed reframing is not a change of vocabulary; it is a paradigm shift with consequences for how resources are allocated, how impact is assessed and how responsibility is assigned. As long as transport is treated as infrastructure – an object of investment, not an access service – its absence in isolated rural areas remains a problem of profitability, not of justice. Reframing it as a social service turns this absence from a “market outcome” into a “public policy failure.”

7. Recommendations

The recommendations are organised by time horizon and conclude with the distribution of responsibilities between administrative levels. Each recommendation is anchored in the empirical findings of chapters 5 and 6 and aligned with the three funding frameworks relevant for the 2026–2032 period: the Social Climate Fund (SCF) and the National Social Climate Plan (PNSC); the Transport Operational Programme (POT) with the Transport Infrastructure Development Strategy 2021–2030; and the Rural Development Strategy 2030 together with the European Agenda for rural, mountainous and *remote* areas (EP Resolution 2018/2720).

The Social Climate Fund (EU Regulation 2023/955), operational from 2026, is the first European instrument to formally recognise the category of “vulnerable transport users”, defined as people and households disproportionately affected by the costs of the climate transition in transport. For Romania, the SCF allocation is between 5 and 6 billion euros for 2026–2032. Households in the Danube Delta and the Apuseni Mountains clearly fall within this definition: low incomes, disproportionate exposure to transport costs, the absence of public alternatives, and structural dependence on individual or informal solutions. At national level, the Transport Operational Programme and the Rural Development Strategy 2030 complete the framework, but with an emphasis that is still predominantly on physical infrastructure and urban contexts.

The guiding principle of the recommendations is a single one: common mechanisms (direct subsidies to users, anti-capture monitoring, coupling infrastructure with services), territorially differentiated instruments.

7.1. Short term (12–24 months)

Low-cost, quick-impact actions, achievable within the timeframe of the ongoing PNSC consultations.

(a) A national map of mobility poverty. Drawing up and publishing a map of isolated rural areas according to the JRC typology (Perpiña Castillo et al., 2023), with disaggregated indicators of mobility poverty: actual time to essential services, transport cost as a share of household income, frequency of forgone journeys. The map becomes the objective basis for allocating PNSC and POT funds and allows changes to be monitored over time. Achievable in partnership with the National Institute of Statistics (INS) and the National Cadastre Agency, at a marginal cost relative to its impact on the quality of allocation decisions.

(b) Mobility indicators in official statistics. Introducing dedicated indicators into the census and thematic surveys: average time to the nearest health, education and shopping services; the cost of transport as a share of household income; the percentage of households without access to public transport within 5 km; the frequency of forgone journeys for economic or logistical reasons. These indicators are already used in the JRC rural typology and can be adopted directly. Without them, mobility poverty remains officially invisible, and the population the PNSC should target cannot be identified.

(c) Community transport pilot projects with anti-capture monitoring. Funding 3–5 pilot interventions in communities in the Delta and the Apuseni that test two models: a community water-transport

service with fixed routes and regulated fares in the Delta, and an on-demand minibus network in the Apuseni, with booking by telephone and physical points in town halls. Mandatory condition: a complete anti-capture monitoring system, through control of final prices, quarterly public reporting, independent audit and an *omnichannel* feedback mechanism for beneficiaries. The major lesson of previous policies (chapter 6.1) is that without these mechanisms, funds are captured.

(d) Mandatory participatory consultation. Formal consultations with local communities (focus groups, deliberative workshops) before any major transport or mobility intervention. The recurring finding in the interviews – that decisions are taken “elsewhere” and local expertise is systematically ignored – points to a rupture between planning and reality that only participatory consultation can repair. Mandatory for investments above an established value threshold, with public conclusions.

7.2. Medium term (3–5 years)

Structural reforms that go beyond the current PNSC consultation cycle and build a long-term architecture.

(a) Subsidy reform: from operators to users, integrating mobility into social services. The central reform needed is the shift from subsidising transport operators, with the capture effect consistently documented in this report, to directly subsidising vulnerable users. Concretely: a mobility card with a monthly allowance for households in *remote* rural areas, transferable between modes of transport (road, water, rail) and operators, with individual traceability. The SCF framework explicitly allows this mechanism (temporary direct income support for vulnerable transport users). Similar models operate in other member states, for example the “*carte mobilité solidaire*” in rural France. In addition, access to transport must be formally integrated into the architecture of social services: including a “mobility assessment” in the process of determining social benefits, and recognising the costs of transport to access medical and educational services in the calculation scales.

(b) A PNSC sub-component dedicated to isolated rural areas and a *rural proofing* mechanism. The current emphasis of the PNSC falls on urban contexts and energy poverty (thermal renovation, firewood subsidies). The realities of the Delta and the Apuseni call not for *affordability* (purchasing possibility / accessibility) within an existing system, but for the creation of the system. We recommend that the PNSC explicitly set out a sub-component with: eligibility criteria aligned with the JRC typology, a distinct allocated budget, indicators of real access (not of physical infrastructure) and its own monitoring mechanisms. In addition, establishing a “*rural proofing*” mechanism – the obligation, called for by EP Resolution 2018/2720, to systematically assess the impact of national policies on isolated rural areas before adoption, including closures of medical practices, schools or post offices. The risk to be avoided is real: without this explicit provision, the most relevant European instrument for the just transition will miss the very vulnerable category that the European framework itself recognises.

(c) Coupling investments with operating obligations. Current practice – building the infrastructure, then waiting for demand – is documented in both territories as producing exactly the critical pattern: roads

asphalted without buses, licences suspended and never resumed, pontoons without ferries. We recommend that any new investment in road or water infrastructure in an isolated area be conditional on an operator's commitment to provide a transport service on that route for a minimum of 5 years. A minimum of 15% of the funds earmarked for isolated areas should be allocated to actual operation, not just construction. This coupling is the condition without which investment in infrastructure does not produce mobility.

(d) Revising regulation in protected areas and a *smart villages* programme. Two complementary interventions. The first, specific to the Delta: derogation regimes for the basic transport of the local population, simplified licences for community transport, exemptions from restrictions for private boats used for local public purposes, and rapid authorisation of informal runs, strictly separated from commercial or tourist operation. The second, at national level: a *smart villages* programme with an explicit mobility component in at least 50 isolated communities by 2030, built on three interconnected pillars: adapted transport (minibuses, shuttles), digital connectivity (4G/5G signal along routes) and decentralised services (telemedicine, e-government). Coordination through a single inter-ministerial point, to avoid the fragmentation that characterises current interventions. Co-financing from the PNSC, EAFRD and ERDF, linked with the European SMARTA network and the Euromontana framework.

7.3. Distribution of responsibilities

The field findings show a systemic imbalance: local authorities have knowledge of the context but not the resources; central authorities have the resources but not the adaptation. Neither full decentralisation nor bureaucratic centralisation works. A three-tier architecture is needed.

Level	Functions
Central (ministries, agencies)	Regulatory framework (PNSC, Transport Strategy, <i>rural proofing</i>). Allocation of funds on objective criteria (the mobility poverty map). Impact monitoring: public reporting disaggregated by region, gender and age, independent audit, anti-capture mechanism. Guarantor of territorial equity, correcting the tendency of markets to favour dense areas.
Intermediate (IDA consortia, NGOs, LAGs)	Aggregating demand from small communes that lack economic critical mass. Operating efficient services at inter-communal scale. Mediating between community needs and the requirements of European funding. The IDA model (already in place for water and waste) explicitly extended to community mobility.
Local (town halls, communities)	Adapted implementation: scheduling runs according to school and medical calendars. Continuous consultation and feedback. Recognising existing community practices (car rotation, "the bag on the fence", Facebook coordination) through frameworks that legitimise them without bureaucratising them.

This architecture does not currently exist in Romania for rural mobility. It can be built incrementally, starting with the pilot interventions and scaled up through reforms. An additional enabling element is integration with specialised European networks, which are under-used in the Romanian context: Euromontana (mountain territorial cohesion), the European Parliament's RUMRA & Smart Villages Intergroup, and the European Commission's SMARTA network. These networks offer models tested in comparable contexts, from which Romanian experience can be enriched without reinventing solutions. Active participation of national actors in these networks is a low-cost, high-return investment.

Mobility poverty can no longer be treated as a side effect of an infrastructure deficit, but as a stand-alone dimension of social policy, with an allocated budget, dedicated indicators, monitoring mechanisms and clear institutional responsibility. Without this reframing, interventions will continue to produce roads without buses, subsidies without accessibility and consultations without consultation.

8. Conclusions

The field research in the Danube Delta and the Apuseni Mountains makes it possible to formulate three conclusions that go beyond the specifics of the two territories studied and are relevant to any public policy concerning mobility in isolated rural areas of Romania.

Mobility typologies as a framework for reading poverty. The five proposed typologies – functional but fragile, dependent, episodic, blocked and community-negotiated mobility – are not static categories, but dynamic configurations through which people pass depending on age, health, resources and contextual shocks. Read together, they describe a process of cumulative degradation that is not visible in official statistics: mobility erodes gradually, and the transitions from fragility to blockage are triggered by minor events – a breakdown, an illness, a broken relationship – in a context without a safety net. This framework offers a replicable analytical tool: it can be applied in any isolated territory in Romania to diagnose the real state of mobility beyond infrastructure indicators.

Convergence of mechanisms beyond geography. The report's strongest finding is the structural convergence of the mechanisms of transport poverty in two territories with opposite geographies: water and delta plain on the one hand, mountains and fragmented relief on the other. The same four mechanisms – disproportionate costs, invisible costs, amplified prices, captured subsidies – operate in both cases. The same typologies are distributed similarly. The same demographic categories (older women living alone, households without mobility capital) are the most vulnerable. This convergence means that mobility poverty is not an accident of geography, but a product of institutional architecture – of the way transport is conceived, financed and governed. The implication is that solutions cannot be merely local or sectoral: they require a reform of the framework, not just of the instruments.

Mobility as a right and a public service. The field data show that in the territories studied, transport does not function as a distinct sector, but as life infrastructure: it structures access to food, health, education, income, social relations and dignity. When mobility disappears or becomes prohibitively expensive, all other dimensions of living degrade in cascade. This reality requires reframing transport from an economic activity into an essential social service, with concrete consequences: recognising vulnerable transport users as a public policy category, measuring impact through indicators of real access rather than physical infrastructure, and taking institutional responsibility for the absence of services.

Without this reframing, future interventions will continue to produce what the field data already document: roads without buses, subsidies without accessibility, investments without mobility. The communities studied are not asking for handouts; they are asking for a state that treats the ability to get around with the same seriousness with which it treats the right to health or education. The data show that this is not only necessary but also possible, provided that the window for action, still open, is not missed.

Bibliography

- European Commission (2021). Long-Term Vision for Rural Areas — A new vision and action plan for EU rural areas. COM(2021) 345 final. Available at: https://rural-vision.europa.eu/rural-vision_en
- European Commission, Directorate-General for Mobility and Transport (2020). SMARTA — Smart Rural Transport Areas: Policy Recommendations. MemEx Srl. Available at: <https://rural-shared-mobility.eu/>
- European Commission, Directorate-General for Mobility and Transport (2025). SMARTA-NET Guidance: Integrating Rural Mobility Aspects in SUMP Design — Rural Proofing SUMPs. Available at: <https://www.smarta-net.eu/key-reports/>
- European Commission, Directorate-General for Mobility and Transport (2025). SMARTA-NET — Sustainable Rural Mobility for Resilience in Support of Ecotourism: Final Report. Publications Office of the EU. Available at: <https://op.europa.eu/en/publication-detail/-/publication/a2a5f9c8-6dc0-11f0-bf4e-01aa75ed71a1>
- Euromontana (2018). Cohesion Policy in Mountain Areas: How to Increase the Contributions from Mountains and Benefits for Mountain Territories. Proceedings of the Conference co-organised by DG REGIO and Euromontana, Brussels, 7 June 2017. Available at: <https://www.euromontana.org/wt-territorial-cohesion/>
- Euromontana (2020). Euromontana's Recommendations for a Long-Term Vision for Mountain Rural Areas. Available at: <https://www.euromontana.org/en/euromontana-shares-its-long-term-vision-for-mountain-rural-areas/>
- Euromontana, Eureka 21 & ADTconsult (2024). Climate Change in Mountain Areas: Meeting the Challenge of Adapting Water Management and Tourism — Diverse Perspectives on Practices and Policies in Europe. Study for Agence Nationale de la Cohésion des Territoires. Available at: <https://www.euromontana.org/climate-change-adaptation-in-mountain-areas-new-euromontana-study-out/>
- Fofiu, A. & 2Celsius (2024). Sărăcia din transporturile în România [Transport Poverty in Romania] — Report. Available at: <https://2celsius.org/raport-saracia-din-transporturile-din-romania/>
- Government of Romania (2021). Strategia de dezvoltare a infrastructurii de transport 2021–2030. Bucharest.
- Liao, Y. & van Wee, B. (2017). Transport-related social exclusion: A new definition, indicators, and the case of the elderly. *European Journal of Transport and Infrastructure Research*, 17(2), 187–206.
- Lucas, K., Mattioli, G., Verlinghieri, E. & Guzman, A. (2016). Transport poverty and its adverse social consequences. *Proceedings of the Institution of Civil Engineers – Transport*, 169(6), 353–365. <https://doi.org/10.1680/jtran.15.00073>
- Martens, K. (2017). *Transport Justice: Designing Fair Transportation Systems*. New York: Routledge.
- Mattioli, G. (2021). Transport poverty and car dependence: A European perspective. *Advances in Transport Policy and Planning*, 8, 101–133.
- Mattioli, G., Lucas, K. & Marsden, G. (2017). Transport poverty and fuel poverty in the UK: From analogy to comparison. *Transport Policy*, 59, 93–105.

Ministry of Agriculture and Rural Development (2021). Strategia națională de dezvoltare rurală 2030 [National Rural Development Strategy 2030]. Bucharest.

Ministry of European Investments and Projects (2025). Planul Național Social pentru Climă (PNSC) [National Social Climate Plan] — Public consultation document. Bucharest.

European Parliament (2018). Resolution of 3 October 2018 on addressing the specific needs of rural, mountainous and remote areas (2018/2720(RSP)). Available at: https://www.europarl.europa.eu/doceo/document/TA-8-2018-0374_RO.html

Perpiña Castillo, C., Ribeiro Barranco, R., Curtale, R., Kompil, M., Jacobs-Crisioni, C., Vallecillo Rodriguez, S., Aurambout, J.-P., Batista e Silva, F., Sulis, P., Auteri, D. et al. (2023). Are remote rural areas in Europe remarkable? Challenges and Opportunities. *Journal of Rural Studies*, 103180. <https://doi.org/10.1016/j.jrurstud.2023.103180>

Perpiña Castillo, C., van Heerden, S., Barranco, R., Jacobs-Crisioni, C., Kompil, M., Kučas, A., Aurambout, J.-P., Batista e Silva, F. & Lavalley, C. (2023). Urban-rural continuum: An overview of their interactions and territorial disparities. *Regional Science Policy & Practice*.

Regulation (EU) 2023/955 of the European Parliament and of the Council of 10 May 2023 establishing a Social Climate Fund and amending Regulation (EU) 2021/1060. *Official Journal of the European Union*, L 130, 15.5.2023.

Sheller, M. (2018). *Mobility Justice: The Politics of Movement in an Age of Extremes*. London: Verso.

Sánchez de Madariaga, I. (2013). Mobility of care: Introducing new concepts in urban transportation. In I. Sánchez de Madariaga & M. Roberts (eds.), *Fair Shared Cities: The Impact of Gender Planning in Europe*. Ashgate.

Urry, J. (2007). *Mobilities*. Cambridge: Polity Press.

Annexes

ANNEX 1. EXTENDED INTERVIEW GUIDE

SECTION A – Daily mobility patterns and needs

How do you usually travel to meet your daily needs (work, school, market, medical services)?

Which means of transport do you use most often? (boat, bus, car, bicycle, walking, shared transport, other)

How far away are the nearest essential services (school, health clinic, shop, town hall)?

Are there times of the year when it becomes particularly difficult to get around? Please explain (ice, floods, tourist season, etc.)

How does the tourist season or the fishing season affect your mobility?

SECTION B – Accessibility and costs

Roughly how much do you spend on transport per month or per week?

Do you consider transport a burden on the family budget?

Are there groups in the community that have greater difficulty accessing transport (older people, women, young people, people with disabilities)?

How do these groups cope with transport barriers?

SECTION C – Environmental and sustainability aspects

How do the transport methods here affect the environment (water, fuel, noise)?

Have there been changes to routes or means of transport because of climatic or ecological factors?

Are there local or community initiatives that promote sustainable transport (electric boats, ecological routes, etc.)?

SECTION D – Community practices and local initiative

What informal or community-based solutions exist for getting around (shared boats, fuel contributions, help between neighbours)?

Who usually organises or coordinates these arrangements?

How are the costs shared, or how are decisions made?

What traditional knowledge or customs support these practices (navigation, cooperation, boat maintenance)?

How do residents adapt to mobility disruptions (floods, frozen channels)?

SECTION E – Equity and inclusion

Who benefits most from community transport solutions?

Who remains excluded or cannot take part, and why?

How are decisions about shared transport made?

Do women, young people or marginalised groups have a say in how transport is organised?

What unwritten rules influence participation or exclusion?

SECTION F – Governance and public policy

What role do local authorities or public institutions play in providing transport here?

Are there government or EU-funded projects that have influenced mobility in the area?

How do people communicate their transport needs to the authorities?

Do you feel that national or European programmes take into account the realities of your community?

SECTION G – Vision and recommendations for the future

What kind of transport solutions would make life easier in your community?

What should be changed in the way transport is managed in the Danube Delta?

Are there good examples from other villages or communities that you would like to see here as well?

How could existing community initiatives be supported or expanded?

SECTION H – Closing

Is there anything else you would like to add about transport, access or mobility in your community?

ANNEX 2. INTERVIEW GUIDE ADAPTED CONVERSATIONALLY ACCORDING TO SATURATION

SECTION A – Daily mobility patterns and needs

“What does an ordinary day look like for you, when you have to get to several places around the village or outside it?”

SECTION B – Accessibility and costs

“When you think about transport, what seems to you the hardest or most expensive part of the whole thing?”

SECTION C – Environmental and sustainability aspects

“Have you noticed any change in nature (water, vegetation, weather) that has made transport easier or harder in recent years?”

SECTION D – Community practices and local initiative

“How do people help each other when they need to get somewhere and there’s no transport available?”

SECTION E – Equity and inclusion

“Who do you think has it easiest and who has it hardest when it comes to getting around the village?”

SECTION F – Governance and public policy

“If the mayor or someone from the county came to ask you about transport, what would you tell them first?”

SECTION G – Vision and recommendations for the future

“If you could change just one thing about transport here, what would it be?”