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Present-day topics

PUBLIC TRANSPORT, THE KEY FOR TOURISM

Abstract

Public transport in rural areas is a crucial point for making there more lively and of course, from a touristic point of view, more attractive and accessible. Nevertheless, with the economic crisis, tourism is a key factor for many subsistence economies. Before, it was an extra complement for home economy but now we are more aware of the possibilities of this activity, not only as an income but also as a tool for creating the external image of the region. Many people before moving to a territory come as tourist, so the territorial marketing is a key for achieving more and more inhabitants. But not everyone has a car, some people, and special targets, as youngsters, elderly people, disable people... that need special attention for making their life as normal as possible. The access of mobility is one of the flagships of the Provincial Government of Teruel, and this is the reason why we are involved in Move on Green. An INTERREG IV C project that study the situation of the transport and Best Practices in 12 mountain territories spread in 10 European countries taking in to account the environmental point of view of the practice.

Key words: tourism, transport, mountain areas, environment, project.

1. Introduction

Transport is a key element if we talk about rural areas, communication with other places is crucial for making it more lively and attractive for present and future inhabitants. In Quality of living terms being close to services and work is essential. In addition, if you want to make it interesting for tourist. This is the reason why 13 different regions have focused their interest on this topic as an essential element for the sustainable development of a territory. In the project Move on Green, the objective is to share positive experience in rural transport that allow communicate special targets (teenagers, elderly people, commuters, disable...) that live or work in the areas or have touristic interest on each region. Talking about tourism we have collected around 10 best practices (BP) around this topic, from a total of 51 BP.

2. Body of paper

Rural regions are the areas in which transport contributes most to the deterioration of the environment, in comparison with high density metropolitan areas. However, taking into account the importance of rural areas in Europe as a whole, if most of them would adopt policies designed to foster sustainable mobility, their natural resources (a source of development for these areas) would be preserved and the impact on the environment at European level would be noticeable.

In addition to environmental damage, the social costs of traditional transport patterns include accidents, time and cost of commuting and vulnerability to the price of oil. In rural areas owing a car is almost compulsory because mobility initiatives decrease due to the lack of critical mass of inhabitants, in this areas live social groups least likely to own and drive cars, what increase the negative impact. How to develop real sustainable mobility in rural and mountain areas?

This was the principal question that MOG's partners face to. 13 partners from 10 countries of the whole Europe were involved during a three-year-project with the objective of finding sustainable transport solutions in rural areas without forgetting the environmental point of view in our best practices.

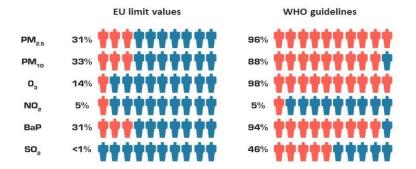
An. Inst.Cerc.Ec.,,Gh. Zane", t. 23, i.II, Iaşi, 2014, p. 143-152

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Table no. 1

Europeans' exposure to harmful levels of air pollution

EU urban population exposed to harmful levels of air pollution in 2011, according to:



Up to a third of Europeans living in cities are exposed to air pollutant levels exceeding EU air quality standards. And around 90 % of Europeans living in cities are exposed to levels of air pollutants deemed damaging to health by the World Health Organization's more stringent quidelines.



3. Starting point

The provision of quality basic services is one of the great challenges in the vast majority of villages marked by low density, dispersion and aging populations. Moreover, this problem is exacerbated in these times when economic sustainability is an absolutely decisive criterion. Clearly, even if all services are important for people living in villages, the transportation service is a key issue in rural areas because it is the gateway to other basic services like access to education, or medical services. Therefore, it is essential to find creative solutions to be economically viable, effective and efficient while being environmentally friendly.

Why?

The ultimate goal is to maintain a rural environment that can be enjoyed by its present inhabitants. As a result is necessary people living in the villages and it is imperative that these areas enjoy adequate access to public services nearby, so they can meet their basic needs and allow citizen to arrive there.

As a result, we encourage imaginative solutions not only for those who live primarily in rural areas, but those who want to go to enjoy the area.

Sustainable mobility in rural areas:

If we want to go deeper on this point we must clarify some concepts that are always in our texts. Let's first agree on definitions. What is a rural area? How can be defined sustainability? How mobility can improve quality of life?

Rural area²: a definition based on population density and accessibility criteria

Two main criteria are used to define rural and urban areas: population density and accessibility criteria.

First, a commune is classified as rural if its population density is less than 150 inhabitants/km². Above this limit, the commune is systematically classified as urban. One restriction has nevertheless been introduced: whatever its population density, a commune located

² According to the definition given in the LAU2 (Local Administrative Unit – communes, municipalities, or similar) delimitation of rural areas.

in an urban centre is classified as urban³. MOG partners' areas do fulfil this population criterion: the lowest population density is 0,067 inhab./km² (UK: Shetland Islands), while the highest is 119 inhab./km² (Poland: Podkarpackie) in the project area (average: 54,6 inhab./km²).

Distinctions between different types of rural communes are then made on the basis of the peripherally analysis. A rural commune is considered as "peripheral" if located at more than 45 minutes from the nearest city, with at least 50 000 inhabitants. Otherwise, the commune is considered as accessible.

4. Right of people to mobility:

Right to adequate, quality and safe mobility is one of the basic rights of EU citizens⁴ which have been constantly declared by development and transport policies both on pan-European and national states' levels. Such mobility not only ensures equal economic and social opportunities for all (possibility to carry out economy activities, access to educations and jobs...), but also their social inclusion and access to other elements of quality of life. Ability to fully use such proclaimed right depends on geographical (e.g. configuration of terrain, distances to mobility destination), personal (e.g. income of someone to buy a car or pay for transport ticket, driving licence) and joint public elements (e.g. level of transport infrastructure development, number of transport lines and transport companies available in certain territory). As joint public elements depend strongly on economic parameters and political actors (e.g. number of inhabitants as a potential transport consumers and voters), it is evident that securing equal mobility rights is a much more difficult task in rural, less/sparsely populated areas. All this is even more true for groups who are additionally hindered by their physical, mental or social "handicap" (disable, youngsters, mental patients, woman in more patriarchal societies...), although some of them can be also privileged by favourable public transport options (e.g. youth during school days).

5. Sustainability: where social, environment and economic development met

Sustainability can be thought as the ability to meet the needs of the present without compromising future generations to meet theirs. There are always three dimensions in sustainability: social equity, environmental protection and economic development in the present and in the future.

Sustainable mobility has to take into account these three dimensions comprehensively. A sustainable mobility solution is thus one that:

- meets societal transportation needs and provides accessibility to basic services for all social groups in a safe manner;
 - is affordable, operates efficiently and supports economic development,
- protects, preserves, and enhances the environment by limiting transportation emissions and wastes; minimizes the consumption of resources; and enhances the existing environment as practicable.

6. Quality of life: quality of life as attached to dipole city-rural rural areas

A lot of resources have been spent in projects and programmes⁵ aiming to develop rural communities. It is necessary to distinct two different concepts: Quality of life and Conditions of life.

Conditions of life are the objective criteria that allow assessing how easily it is to live into a certain area. There is some strength in rural areas: proximity with the environment, healthy food, healthy air, tranquillity and peace, activities of enjoying free time, that normally carry rural culture, strength human relationship.

³ The new OECD-EC definition identified 828 (greater) cities with an urban centre of at least 50 000 inhabitants in the EU, Switzerland, Croatia, Iceland and Norway. www.oecd.org/gov/regional/measuringurban

⁴ Strengthening passenger rights within the European Union 16-02-2005

⁵ 347 million of euros only in FEDER programme during 2007-2013

Quality of life depends not only on the conditions of life, it also depends on the personal perception each inhabitant has of these conditions of life.

Accessibility is one of the major factors of competitiveness, quality of life and business attractiveness of mountain areas. It has strong impact on local economy and environment, but also on social inclusion of people. Imbalances in the accessibility across the EU, together with imbalances in education systems and current demographic trends, make territorial cohesion a serious challenge to the EU development policies.

7. Picture of mobility in rural, mountain and sparsely populated regions of EU ⁶-Accessibility is one of the major factors of competitiveness, quality of life and business attractiveness of mountain areas. It has strong impact on local economy and environment, but also social inclusion of people. Imbalances in the accessibility across the EU, together with imbalances in education systems and current demographic trends, make territorial cohesion a serious challenge to the EU development policies.

Mobility is a complex system with many components that influence on it (like behaviour, quality of vehicles, and development of infrastructure...), that is why it is difficult to shift it into new, more sustainable mode. Main factors that make mobility unsustainable, and which are at the same time those who can convert it into more sustainable one, are: price, technology, conditions of supply and planning. As for price, road transport, both, personal and freight one, does not take into account all costs of negative effects that current patterns cause to both society and individual citizens with their families (environmental pollution, extensive use of valuable space for road infrastructure, lost working hours due to congestions, negative individualisation of society, costs of road accidents...). These costs and effects are present, except of congestions due to relatively low traffic intensity, also in majority of EU rural areas.

In the broad development and social perspective, support to transport infrastructure in rural areas has characteristics of public goods as it helps to prevent their territorial isolation. If such support is made to public transport by using internalisation of external costs of other, unsustainable transport modes, it simultaneously contributes both to economic growth and less pollution, which in total can ensure the quality of life and prevent rural exodus.

Current situation in the EU on the matter of public transport (in rural areas) can be divided into two groups: in new EU member states public transport was relatively well developed and accessible (although obsolete in terms of infrastructure) until two decades ago when it has started to decline as car and highways have been seen as a development priority and status symbol; it is currently still declining in spite of some attempts to reverse such trends. Rest of the Europe is on the other hand already for some time predominately car oriented, but has made in last 10-15 years number of serious attempts to reverse situation in the light of evident negative effects of current mobility patterns (congestions, environment pollution, increasing costs of cars & fuel for users, social exclusion of people not using cars). The current result is that car transport is predominant transport mode in the vast majority of rural EU.

Problem arising out of lower population density in all EU rural areas is that small labour market and low numbers of consumers prevent to deliver some private and public services in a cost-effective way. Decreasing or already declined public transport and increasing necessity of owning car as transport mean, limit the access of people without the car to those services. Most of all, peri-urban and rural area are characterized by higher number of driven kilometres per person as in urban areas (but only in old EU), which brings to a higher number of cars per person (and higher costs) and significant share of CO2 emissions. Even in rural areas of France, only 9 to 16% of people in rural areas have access to public transport less than 1 km from their home.

When analysing situation across rural EU, one of strengths of rural areas that could lead to improvement of sustainable mobility are new reasons to visit country side have arisen in last

⁶ This is the summary of the results from 13 studies from the territories members of Move on Green project, that represent 10 countries (Hungary; Austria; Greece; Latvia; Slovenia; Germany; United Kingdom, France; Poland and Spain)

decade (ex. increase of eco and ethno tourism, interest for (organic) local food). On the side of weaknesses, some of most critical ones are bad condition of transport network and obsolete technical condition of infrastructure and vehicles, while biking infrastructure is strongly underdeveloped. Sparse and mainly scattered population makes organisation and implementation of (public) transport more difficult and expensive. As a result of all listed factors, public transport attracts less and less people. In fact, only those who are forced to use it (pensioners, school pupils, people without car...), while 85% of population uses private cars.

Public transport is also ineffectively organized, with little integration among different networks and companies, and with insufficient respond and adjustments to needs of new (eg. biking tourists) or special groups (disabled people). All this, along with the insignificant promotion of public transport compering to "bombardment" by aggressive advertisements of car companies, led to a relatively low imagine of public transport as a transport of "poor" or those who are forced to use it. Consequent further decrease in number of users makes operating of public transport even harder due to higher operational costs per user.

There are, however, opportunities to overcome these weaknesses and to exploit strengths of the current situation in rural areas. Potentials of such areas (quality food, tourism attractions) are becoming increasingly popular among mainly urban people, attracting by new clients also new potential users of mobility services in rural areas.

Also development of new ICT and transport technologies make possible to better plan and organize transport suited to the characteristics and needs of rural areas. Biking is increasingly popular and can substitute part of short-distance car drives, while increasing costs of using cars (ex. prices of fuels) can persuade many people to use public transport instead of medium- and long distance car trips. Important change of current period is also that transport and mobility, respectively, is taken into account and integrated in spatial planning, and territorial units (local communities, even regions) now increasingly cooperate and coordinate planning and operating of transport networks and companies. Among important opportunities is also increased cooperation among EU regions, which enables them to exchange experiences and good practise.

Best practises of development or improvement of rural mobility presented in the study conducted by Euromontana organisation, bring solutions for number of these challenges of public transport. These cases stretch from PIMMS, eg. train stations in France where transport services are combined by also offering other services (postal, energy...) to decrease costs, cooperation among 13 public transport authorities in Auvergne region (France) in coordinating offer of public transport and simplifying access to network of public transport to Alpine buses in Switzerland where new touristic mobility services offer additional option for overall sustainable mobility in rural areas.

These practices show that innovative solutions combining strong political will, smart use of ICT technologies, good planning and coordination among various actors, connecting pure transport to other economic services, use of mobility experts, and economical motivation of users can bring effective and quality public transport in rural areas.

7. SWOT-Analysis – Summary

The project partners each submitted their own unique SWOT-analysis. With 13 different partners in this project, the answers were very diversified and as individual as the respective regions. It was however possible to identify and determine certain common issues for each of the elements of the SWOT (Strengths, Weaknesses, Opportunities and Threats).

The histogram after the SWOT-analysis shows the distribution of the individual aspects of each region to the common points that were identified.

Table no. 2

SWOT analis

Strengths		Examples taken from the SWOT-analyses of the Project Partners
S1.)	Current transport infrastructure There are adequate means of transport, the infrastructure is in a good condition, a certain level of service is provided etc.	 Services are flexible in the sense that they are planned around local needs. Wide spread use of public passenger transport among youth and well organized school transport. A developed network of roads and public transportation.
S2.)	The position of the region (geographically, economically, etc.) The region is situated in a way that allows a positive outlook for the future; high tourist potential, developed industry, good connections to surrounding area,	 The region has a very favourable geopolitical position, it is crossed by European development zones, transport corridors, it is located in their utilizable intersection. Natural heritage and numerous touristic attractions; dynamics of tourism development.
S3.)	Open for new ideas in transportation Sustainable transport methods, optimizing existing lines/routes, introducing new and customized means of transport etc.	 Openness to new forms of collective trips (carpooling). Alternative services in off-peak periods are: dial-a-bus systems, citizens' buses (voluntary drivers), disco-bus, reduced taxi fares for young people (fifty-fifty taxi).
S4.)	Plans and programmes being implemented There are or will be plans/programmes that will help the development of the region	 The ISEAL Program continues to operate in the province of Teruel (Spain)within the framework of the European Social Fund 2007-2013. This program is performing adapted transport. Remarkable level of introduction of ICTs applied to mobility in the province, mainly through the "Transport on Demand" programme.
Weak	nesses	programme
	High level of individual traffic, unfavourable modal split	 Motorization rate higher than the national average; growth of the number of cars (new and used). Dependency on one's own car.
W2.)	Lack of information and cooperation Different operators unwilling to cooperate, no regional plans by authorities/public actors, missing coordination and discussion between actors, etc.	 Lack of co-operation among public actors and lack of wider/regional sustainable mobility plans. Poor co-operation between the service providers. BP 8.2 Multimodal transportation Larissa-Volos (Gr)
W3.)	Financial and economic situation, funding of public transport and infrastructure High costs for public transport, insufficient funding for infrastructure, global financial & economic crisis	 Excessive reliance on the public financing for the maintenance of regular lines in the territory. Insufficient funding for the maintenance, renovation and expansion of the road network. Economic crisis, lack of funding.
W4.)	Demographic change, situation of the region Change in population, employment rate, age structure, scattered villages, low population density, etc.	There is a great dispersion of the population and its distribution is very heterogeneous. Migration of working population from deprived areas.
W5.)	Current transport infrastructure and accessibility No adequate transportation system, old and unreliable motor pool, not enough stops, unsatisfactory schedules, extreme weather, system focused on certain users (e.g. workers) etc.	 The majority of the roads were renewed 30 years ago. The rural areas do not have a transportation system adequate to the needs of the population. Insufficient number of bus stops

		in the rural areas.
Opportunities		
01.)	New technologies, ways and means of transport Sustainable transport solutions (electric mobility, car- sharing, call-a-bus), local small-scale transport systems, flexible on-demand-systems, etc.	 Evaluate the possibility if introducing "transportation on demand" for underpopulated areas. Improving means of giving information on services/options.
O2.)	New transport infrastructure Building of new roads, railroads, establishing new lines & networks of public transport, acquiring new buses/trains, infrastructure for electric mobility,	 Renovation of the bus rolling stock, introduction of smaller capacity vehicles. The development of the roads crossing the border with the aim of the better availability of the region. Further development of cycling infrastructure.
O3.)	Process of rethinking mobility and transport, new strategies, plans and programmes Environmental issues become more important, ecological footprint, soft tourism and soft mobility, traffic masterplans, European projects & policies etc.	 Trend to pool vehicles both by businesses and individuals.BP 1.1 Kombibus in Germany Elaborating of mobility plans in order to serve isolated and long distanced areas with mostly elder people in need for regular or inregular transportation due to health reasons.BP5.3 Village caretaker (Hu) Increasing awareness at European, national and regional levels of the importance of mobility policies, both at urban and rural levels.
O4.)	Willingness of co-operation between different actors Countries, authorities, companies, citizens,	 Opportunities for cross-border co-operation in the field of transport to finance projects of sustainable mobility through the ERDF under INTERREG (strategic mobility, etc.). Creation of win-win partnerships to overcome the legally established Interurban Buses monopoly.
O5.)	Increased public awareness of environmental issues / public transport etc. Awareness raising programmes & actions, political will for environment preservation, higher costs for fuel & cars,	 Increasing and widespread interest on ecotourism, ecological agriculture and rural societies, in general, on the part of European societies. Popularization of the environmentally friendly mobility to the general public.
Threats		
T1.)	Demographic change, negative development of rural areas Shrinking population, migration, etc.	 Shrinking population – numbers of potential users declining. Due to the increasing costs of production investors will leave the region
T2.)	Financial issues and economic development Declining economic strength, global crisis,	 The current bad economic situation is having a strong impact on financial there are fewer subsidies. Limitations of council funding Poor economic situation of the public means of transportation
T3.)	Inefficient and uneconomical public transport Not enough passengers, cutting of funding for public transport, economic and environmental concerns,	 Low mobility demands in special rural municipalities. Settlements scattered and sparsely populated making a total coverage of the country by public transport difficult both for economic and environmental reasons.
T4.)	Rising level of individual traffic	 Development of activities & businesses in areas accessible by car (only). Loss of public transportation passengers fort he benefit of passenger cars.

• Little awareness of the population to use public transport.
• Further strenghtening of such life style that supports individual car mobility and interest for mobility "here and now";

Source: Policy guide lines of MOG project

Examples of BP linked with tourist ⁷:

West Pannon regional bicycle rental system - HU

The purpose of the project is to increase the number of tourists and local residents who use bicycles by enhancing the attractiveness of bikes. Bikes were promoted and the cycling infrastructures have been improved. Now the regional bicycle rental system consists of 10+1 pick-up points; the network of tourist and cycling organisations has been reinforced thanks to the active cooperation of municipalities.

Nextbike: bike sharing system in rural territories in Purbach, Burgenland (AU)

The main objective of this bike renting system is to reduce harmful greenhouse gases, especially in rural, low-density areas. It makes public transport more attractive by offering a range of bikes to support multimodal mobility. The Nextbike project in a few words:

- Establishment of a network of bike rental stations at railway or bus stations to offer a possibility for complete public transport chains.
 - High usability and easy hiring procedure
 - Public access and bike availability round the clock
 - Cheap rental fee.

Mountain Bike Maestrazgo Centre- Province of Teruel, ES

Developed in Teruel, the Maestrazgo Centre provides free access to practice mountain biking. The cycling trails start at a reception point, with a tourist office and different bicycle services. It offers:

- More than 100 km of marked routes with differing degrees of difficulty
- Two Reception Points that provide bicycle services and also a tourist office.
- Additional services to facilitate cycling: bicycle rental, car park, wash points, showers and toilets, etc.
- Several additional Information Points located in tourist offices, which provide users with information about the routes, tourist resources, accommodation offers, restaurants, etc
 - A quality standard well recognised in the country.

Electric vehicle charging infrastructure around Lake Balaton - Central Transdanubian Regional Innovation Agency - KDRIU, H

To date, most vehicles run on petrol or gas. Car manufacturers have recently launched cars operating with electricity and there is a lot of on-going research on how other energy sources, rather than fuel, such as solar energy and water, or electricity could be used for running vehicles. Due to rising oil prices, electric vehicles have become more and more famous. Thus, EON Hungary has started to install electric car charging stations around the country. EON wants to develop electric traffic at zero CO² emission and believes the 1st step for the democratisation of electric cars is the availability of charging stations, even in rural and remote areas.

Alpine Bus – Switzerland

⁷ Best practices collections from Move on Green , available long version and shorter http://www.euromontana.org/en/projets/mog-good-practices.html

The Alpine buses aim to offer common transport where there is no public offer but where there is a demand, especially for tourism purposes. It functions in 10 areas of Switzerland. Services are developed locally by local authorities and local enterprises, with the support of the Alpine bus association. The development process of a new bus line lasts about one year and a half, from the emergence of the idea and of the partnership until the line is running. The objective of the association is to provoke a modal shift of transport: where people used to take their private car, they now have the possibility of using common transport instead. The environmental objective is therefore a priority to create new bus lines under the Alpine bus brand.

"The Mount Pelion Train" - Thematic rail transport to enhance the cultural identity of rural areas - Thessaly Region, GR

Through this initiative, the Thessaly region offers a true historical and cultural experience to tourists through a traditional Greek train ride. This is a purely thematic, tourist train ride that supports entrepreneurship and offers opportunities to people in many sectors, forming part of the backbone of a regional tourism strategy. It operates regularly from April to October and on demand throughout the rest of the year, depending on the weather. Traditional wooden wagons and modern, but with a traditional exterior, engines are being used to increase the cultural feeling of the ride.

Gauja River Tram: Water Bus - Vidzeme Planning Region, LV

The first river tram in Latvia offers its services on the Gauja River in the town of Valmiera. It runs at scheduled times, allowing both city dwellers and guests to explore notable sights of Valmiera from the Gauja River. One journey takes 30-40 minutes. The tram is made in Valmiera, it is eco-friendly and accessible to people with disabilities. This transport mode significantly facilitates tourism as it allows for quick and easy access to various attractions and tourist sites.

Aluksne-Gulbene narrow-gauge railway - Vidzeme Planning Region, LV

The Aluksne-Gulbene narrow-gauge railway offers rail transport services to dwellers in the Vidzeme region for their daily mobility, as well as to interested parties who want to enjoy the trip and view Vidzeme's most scenic places. It is a great example of how traditional transport services can be combined with tourism elements, thus keeping the national cultural facilities in operation.

"GoOpti" Service of transfer from countryside and cities to the airports and vice versa, SI

"GoOpti" service helps passengers to travel from the different airports in Slovenia, Italy, Austria and Germany to the main Slovenian cities (Ljubljana, Maribor, Bled, Bohinj...). Booking is available on-line, in advance (from several months till a few hours).13 shuttles, 1 bus, an excellent web service and promotion allowed the company to transport 40 000 passengers in 2013, after 2 years of exploitation for a very affordable price (from 9 to 200€ for VIP transfers).

8. Conclusions:

Available means of transport in rural areas are essential for keeping people of all ages leaving there and looking after the environment and the territory. This is the reason why, first of all the time table of the public transport must be made thinking in the people living there, because they are the essential piece of this puzzle. On the second point, it is important make it available for tourist, because they are interesting too as economical income, territorial marketing and potential inhabitants. Transportation and travel can be discussed without taking tourism into consideration, but tourism cannot thrive without travel. Transportation is an integral part of the tourism industry. It is largely due to the improvement of transportation that tourism has

expanded. The impacts on the ecology, degradation of destination sites, tourist experience, and economy has called for a better management of resources. In biodiversity-rich areas, opening of sensitive and fragile areas through improved infrastructure and service may prove detrimental to the ecology of the place. In the light of such issues, it is important to re-think the role of transportation in areas such as these. Though careful planning of the components of the destination is done to en sure sustainability, transportation is seldom considered in the process and due to this a number of biodiversity-rich areas have been destroyed due to the easy access. [SORUPIA, 2005, p. 1767 – 1777]

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