INVESTIGATION OF THE DEMAND OF PUBLIC SERVICES OF RURAL AREAS

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Declining rural population increases distances to public services, they become more expensive. Therefore, provision of public services is a growing challenge in rural areas not only in Lithuania but also in Europe. Public services are one of the aspects of rural vitality, which is widely debated by both scientists and politicians. Demand aspects are debated, new, innovative ways of provision of public services discussed, new service models combining private, public sectors and community resources are sought. The aim of the study was to identify public services, the demand for which is the greatest in rural areas. To achieve the aim, the questionnaire for elders of Lithuanian rural wards was prepared. The questionnaires were sent to all Lithuanian rural wards – 450 and 352 elders’ answers were received. The results showed that the best served are public services as information accessibility, school-age children education and social services. The public services where a lot of changes must be done are such as primary health care and all types of utilities (water, sewerage, waste), public transport.

Key words: demand, public services, rural areas.
JEL codes: R10, R20, R50.

1. Introduction

Sustainable rural development depends on the location of social, economic, environmental goods and services, which are necessary to maintain or strengthen the rural vitality. Often highlighted social, environmental, economic inequalities in rural areas have become one of the axes in the public policy discussions (Huby, 2009). The one of the main tasks of authorities is to effectively manage resources of territory and to provide public services to the population within their competence to improve the attractiveness for life and business (Ramanauskienė, 2014).

The provision of public services is directly related to the fundamental role of the state – to ensure the delivery of the most important needs of the population. Services are called public because for a long time services such as schools, hospitals, roads, postal services and communications were supplied almost exclusively by public authorities (Tur, 2014). However, public services could be supplied by other subjects.
Until the nineteenth century, the majority of services, which are now commonly supplied by public institutions (education, health security), were provided by the private sector.

Eventually, services were estimated as particularly important for the public welfare, quality of life, but because of the high cost, the private sector was unable to ensure access to services for all citizens. Assessment of the importance of public services led to believe that certain basic needs (health, education, security) should be guaranteed by the state, regardless of citizens' income, status, and other factors (Stasiukynas, 2011) has to be satisfied by the authorities. For a long time the main supplier of public services was the state, which ensured wide, centralized public service supply.

In the situation of changing public policy models, declining population in rural areas as a consequence the supply of public services is declining. This creates inconvenience for the rest part of population and makes rural areas less attractive.

The aim of the study was to identify public services, the demand for which is the greatest in rural areas.

Methodology of the investigation. To achieve the aim of the study the questionnaire was prepared. The elders of Lithuanian rural wards were chosen as respondents because of their nearness to rural population. The elders every day confront with residents problems, needs and can evaluate the demand of public services the best. With the support of association of local authorities of Lithuania the questionnaires were distributed to 450 elders of rural wards and 352 fulfilled received, that composed 75% of rural wards.

The list of public services, provided by the state is huge. To analyze all the schedule and demand for all public services is inappropriate because of considerable differences between the type, character and importance of them for rural population. This study involves the list of routine, necessarily for everyday life and those where the role of the state is crucially important public services.

Unattractive, uncleansed landscape is the subject for what members of the community can take care of their own, by voluntary base. Cultural, sports events are also not of every day need of services and the role of organizing them often could be taken by rural, school communities, other local subjects. Such public services as filling the documents, application forms, registration, juridical services and etc. are not of daily necessity too. These episodic services needed in the face of a certain situation.

Summarizing of the literature sources research projects, strategies, scientific publications it was concluded that the object of the study should contain 10 public services: early childhood education, children's school education, primary health care, library and information services, water supply, sewage disposal, waste disposal, social services, physical security, public transport, those which meet people's basic needs (often even every day needs) and are the key elements for economic development. Access to these services not only improves individual well-being, but also serves as factors aggregating economic activity.
2. The demand of public services

According to Greener (2009), public services are not self-evident thing. The start of public services supply should be related to poverty solving problems in a postwar period. The mechanisms of the market couldn’t adequate overcome adequately this problem. The only way was the welfare state role to take on this problem. In contrast to Europe, the United States had a different approach, where poverty has been seen as a problem arising from the discrimination of citizens with limited market opportunities and livelihood availability. So, in the USA for the solving the poverty problem the stimulating of labor market and market mechanisms was chosen. Conversely, in Europe for solving poverty problem the public sector was invoked. So, a European model has led to the fact that the service users eventually degraded. Service consumers formed as passive, residing in a deficit model, feeling the constant lack of public services. They were not partners of the system, instead they were only beneficiaries. The author argues that such attitude should not be correct, the services should not be taken for granted. To change this position of residents could be changed in one way – changing people's awareness and expectations, fostering citizenship and consumer membership.

In the economic sphere demand means the volume of goods and services that customers wish to acquire. Demand is the buyers need to solve their problems through the goods or services, and this need is based on the buyer's possibilities of solvency. Thus, demand consists of two components – the need and the willingness to pay for need satisfaction. This is with the assessment of private goods and services demand in market conditions, but talking about demand of public services and goods, provided by public sector the question of solvency often disappears, since many of public services are provided relatively free (education, medical consultations, lighting of the streets and etc.), as for many of them consumers do not pay directly. One of the research methods, used to evaluate consumers demand on public services – the willingness to pay for them analysis. The respondents are asked to answer how much they agree to pay additionally for the particular service or good supply. J. Reiljan (2012) argues that this method is not suitable for the investigation of public services, as the demand for public services and goods is more complicated phenomenon comparing with demand for private sector goods and services.

If in the market conditions consumers usually can evaluate certain market price, for public services, “an individual usually does not have a complete understanding of the tax price of public services (the expenditures of the taxpayer) and the budget constraints of the public sector, making his or her opinion of the amount and quality of public services needed in excess of the economic capacity of the public sector” (Reiljan, 2012). That’s why individuals could not properly evaluate the price, required for the public services supply. Because of the difficulties to evaluate demand in above mentioned method, the demand is often evaluated on a public opinion survey. On the ground of these insights, the research method for this article chosen.

In the scientific literature the supply of public services and the compliance to population demands are analyzed (Deolalikar 2013; Machold, 2007; Chong, 2007). A range of different methods is used from qualitative (in-depth interviews, focus
groups, expert interviews) to quantitative (questionnaires, statistical analysis) methods. Frequently researches about demand of public service narrow analysis to one of public services. The authors analyses transport services, delivered in rural areas (Gronau, 2015; Beecroft, 2011; Velaga 2012; Prabhakar, 1997; Marr, 2015), health services (Sheaff, 2002; Tamutienė, 2011) cultural and recreational services match (Reijljan 2012; Spangenberg, 2009; Kublickienė, 2004), local service centers functions and compliance needs (Carvalho, 2012), services for the disabled, senior citizens, families and so on. Analyzing the situation in rural areas, highlighting the services necessary to ensure the quality of the rural population it is often analyzed in the overall package of services without distinction to public and private (Carvalho, 2012; Dax, 2006; Defra, 2006; Atkočiūnienė, 2014).

Welfare state is under obligation to take care of their citizens by ensuring them a certain volume and quality of public services. The challenge for the EU and Lithuania in particular, is becoming more acute as the population is declining, especially in rural areas, and service assurance becomes more and more complicated as it becomes more expensive and hard to implement in a physical sense. Under such conditions it is particularly important to optimize the need for such services (population desires, expectations) and supply (possibilities of public authorities to) balance.

3. The results

After the completion of the survey the 352 answers were received, that comprise more than 75 % t of rural wards. The results showed that 80 % t of the respondents were those where population since the last Population and Housing Census (2001) declined, and only 20 % t of those where rural population remained stable or increased.

The survey questionnaire consisted of two parts. The first contains questions related to inherent problems for the individual public services (PS), while the second deals with identification of two or three types of PS provision of which is the biggest problem in the wards. The aim was to find out the problems associated with a given public services "inside" as well as to identify the major challenges associated with the provision of PS in a particular ward.

Table 1 presents the results of the answers, were respondents were asked to point out the scale of the problems with the demands fulfillment in accordance to certain public service. We can see that the best situation is in the provision of information supply, school-age children's education and social services. More than 67 % t of respondents indicated that there are no crucial problems for these types of PS. Conversely, the biggest problems are of the provision of public utilities, primary health care and public transport. Only less than 50 % t of respondents identified that problems in the provision of these types of PS are quite essential and some activities should be taken to improve the situation.
Table 1. Distribution of the respondents answers, communicated that they do not have serious problems with the provisions of particular public goods, in % t

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Total</th>
<th>Wards where population were growing or kept stable</th>
<th>Wards where population were decreasing</th>
</tr>
</thead>
<tbody>
<tr>
<td>The availability of information services</td>
<td>76</td>
<td>75</td>
<td>76</td>
</tr>
<tr>
<td>School-age children in education services</td>
<td>71</td>
<td>69</td>
<td>71</td>
</tr>
<tr>
<td>Social services</td>
<td>67</td>
<td>66</td>
<td>67</td>
</tr>
<tr>
<td>Utilities (waste)</td>
<td>61</td>
<td>64</td>
<td>60</td>
</tr>
<tr>
<td>Physical security</td>
<td>60</td>
<td>58</td>
<td>61</td>
</tr>
<tr>
<td>Preschool children’s educational services</td>
<td>58</td>
<td>40</td>
<td>64</td>
</tr>
<tr>
<td>Transportation</td>
<td>53</td>
<td>68</td>
<td>50</td>
</tr>
<tr>
<td>Primary health care services</td>
<td>49</td>
<td>45</td>
<td>51</td>
</tr>
<tr>
<td>Utilities (water)</td>
<td>23</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Utilities (sewerage)</td>
<td>18</td>
<td>22</td>
<td>17</td>
</tr>
</tbody>
</table>

Another very important aspect of the study was to identify specific problems of the delivery of PS in areas with different population trends. As can be seen from Table 1 there are no significant differences in the provision of 6 PS out of 10. The differences are just few % t. And vice versa, the answers of the respondents representing wards of different population trends for such PS as pre-school children’s education and public transport differs essentially – from 40 to 60 % t and from 68 to 50 % t, accordingly. And if the pre-school education services are less problematic in the wards with decreasing population, for the public transport the less problems were pointed of those wards where population increased.

More detailed investigation had shown that the main problem for pre-school children services is the shortage of free places for children in pre-school institutions in the wards where the population increased or unchanged. This cause was identified 3,5 times more often by the respondents of the wards with increasing population. The next main problem for this PS was the attainment of the pre-school institutions. Here, on the contrary, the answers were 1,4 times more frequent for the wards where population declined.

There are some examples of good practice dealing with care of the pre-school age children, occupation of pupils after school services. The creation of outdoor, non-traditional kindergartens in rural areas is the way of the problem solving. Especially eco minded people, living in the eco villages organize the groups of child care, were the one of parents looks after children in the variable schedule. In this way the question of child care is resolved, the possibility of coordinating child care with career opportunities emerges.

In Finland, for the strengthening of social, emotional skills of vulnerable children for two years local stud was draw on the support. The project aim was not only to ensure the children’s occupation after school, welfare of them, but also increase and to develop cooperation between different institutions providing social care. The work focused on the creation of different packages, reflecting the needs of child protection institutions in that area. The communication with horses was perfect tool to develop emotional and social skills of vulnerable children. Cooperation, networks between rural actors (stables, stakeholders, farmers, health and social care sector) were
built up (Pegasos..., 2015). Problems identified by the respondents of public transport are shown in Table 2.

Table 2. The main problems associated with public transport identified by respondents, in % t out of all answers

<table>
<thead>
<tr>
<th>Population change after 2001</th>
<th>The are no serious problems</th>
<th>Inappropriate schedule</th>
<th>Problems to get to the central town of the region</th>
<th>Decreased traffic density on weekends, day's off</th>
<th>Too expensive trip</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>53</td>
<td>24</td>
<td>12</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Increased or remain stable</td>
<td>68</td>
<td>20</td>
<td>7</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Decreased</td>
<td>50</td>
<td>25</td>
<td>13</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

As we can see, all four main headings outlined by respondents of the wards with decreasing population identified them as more important to compare with those, where population increased. This can be explained by several reasons. In areas where population is growing, the population is younger and, it is likely, transport problems are solved by using individual cars. On the other hand, the population density is higher in these wards, what will facilitate the more efficient organization of public traffic routes and schedule.

The decline in public transport in rural areas in England, France, Holland, Germany, Switzerland, is solved by organizing public transport delivery according to residents' needs rather than fixed schedules, especially vulnerable groups (the elderly population, people with disabilities) needs (Wallaga, 2012). The system “dial – a-ride” is provided. The routes are formed by specific weekly needs of the population. Service is organized by the local government, the community, or even mixed mode involving the private sector. In Germany, public transport routes, the local needs of the population, for optimal results, is combined with tourist routes.

One should not be surprised that the highest positions (having the less problems) are scored for such PS as access to information, school-age children's education and social services. Today, actually, every ward has a public library with internet connection. Thus, the local population has an access to almost all the world's information. Besides, today, as shown by the Lithuanian Department of Statistics, almost every household has a computer with internet connection, which, on the other hand, reduces public facilities for information access.

As a good example can serve the UK mobile postal services. During the week postal services busses, adapted for disabled customers, visits 250 rural areas. The basic postal services are provided to isolated areas – mail, parcels, banking services, cash withdrawals, savings and insurance services. One of the possibilities in Lithuania – private and public sector coordination – certain postal services transfer to local shops or other institutions, which could provide minimal postal services alongside their ordinary activities.

As the major facilities are located away from the center of municipality of Zwevegem in Belgium, one of the main aims of municipality is to ensure equal access to public services to residents of the municipality. The solution was found – pro-
vision of mobile services. One of them – mobile library “Zwevegem Bibliobus” were library services combines with other vital public services for local communities, especially for disadvantaged and less mobile residents. The services include library databases, book requests, DVD rentals, municipality documents and application forms social services, compensation and various information. Library bus serves work as a multi-service center. If the documents and forms cannot be completed and delivered immediately, then they can be sent to a resident’s home (Mobile ..., 2015).

Among the main problems identified by respondents for school-age children services it is a yellow van problem. This problem was mentioned by 16% of the responses in areas where the population increased and 10% of answers where declined. In addition, the problem of quality of teaching (respectively 14 and 10% of) was mentioned. It is here that the problems seen higher in wards where the population increased, most likely it can be concluded that people living in these areas scored teaching standards for their children are greater and, accordingly, the requirements for a public education service compared with areas where population is decreasing, because it is unlikely, that teaching standards could be less in areas with decreasing population.

Among other problems which were pointed out by the respondents was the decline in the number of children in the wards which results in the lack of after-school clubs, schoolchildren moving to cities or towns schools, decline of number of teachers and others.

The main problem, which was identified by respondents regardless of population trends as the most important demand for social services – not sufficient variety for the provided social services (14–15% of all responses). In comments it has been explained that these services are increasingly required for single and elderly persons. But there were also some interesting reflections on social service’s recipients. Quite often it was indicated that people tend to be the recipients of social services, because they have very low motivation to work, gets certain benefits and services from social services sphere, tend to roll over concerns for social workers and not to solve problems by themselves. Often recipients refuses to accept services provided for them if they are asked to pay extra. The bigger demands for social services are reported to have elderly, although able-bodied children or grandchildren are living nearby, often recipients fail to fulfill their obligations under the law.

As can be seen from the Table 1, those that were identified as having the biggest problems, it’s of primary health care and utilities (water and sewerage). Summary of the responses on the PS provided shown in Table 3.

As we can see from the answers, the biggest problems in the provision of public utilities, is that a large part of the households in the wards do not have centralized water supply and sewage disposal systems, what was indicated by 48 and 79% of respondents. Respondents also indicated that the existing systems are functioning reliably and sufficiently, there are no serious disturbances. One fifth of the respondents noted that the quality of water in the areas of their responsibilities is below approved water quality standards.
Table 3. The main problems identified associated with utilities, % t out of all answers

<table>
<thead>
<tr>
<th>Services</th>
<th>The are no serious problems</th>
<th>Water quality does not meet the requirements</th>
<th>Water or sewage disposal system disorders</th>
<th>Big part of households do not have central water supply, sewage disposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply</td>
<td>23</td>
<td>19</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Sewage disposal system</td>
<td>18</td>
<td>–</td>
<td>3</td>
<td>79</td>
</tr>
</tbody>
</table>

Commenting on these questions, respondents indicated that the water quality is low because of the large amount of iron and limestone amount in drinking water and poor water taste. Small settlements are unable to carry out water development projects and residents unable to connect to the centralized networks and that is why they have to pay higher prices for drinking water supply companies.

In the comments on sewage disposal problems was noted that residents are not connected to the network and often carry sewage to the outskirts, fields. Small villages are not able to carry out development projects in wastewater disposal (excluded from the plans because of too small population). On the other hand, it is estimated by the residents that charges for rural sewerage disposal is too big that is why residents themselves often do not want to connect to the central network.

For other type of utilities – waste disposal – the respondents indicated that they have much less of problems (see Table 1). However, this topic has been given quite a lot of "free" comments, which showed that the main problems are: oversized waste, green waste disposal, not knitwear, medicines waste, metal sorting options. Residents wish the waste to be removed at least 2 times per month. For, as it is considered excessive waste tax, not all residents are interested in sorting of waste, they do nor acquire collecting bins for sorting. It is also emphasized that the problem is the lack of people's awareness and understanding of why it is important to sort waste.

Population’s physical security problems are declared in the middle of the list (Table 1). However, respondents stressing that the situation is quite appropriate concerning this type of public service, nevertheless, commenting on the problems, indicated that there are still complaints about residents feeling of insecurity in the dark and remote granges, residents heavily join in a safe neighborhood programs or other personal or property protection programs, voiced critical remarks on the general assistance center’s effectiveness.

Commenting on the situation in primary health care services in the wards, about 50 % t of respondents indicated that there are no major problems, i.e., situation is satisfactory. As the biggest problem was identified ques on waiting for specialists. It was said by 29 % t of respondents of areas where population is increasing and 20 % t with population decline. This indicates that the health care services planning system does not take into account population changes in the areas. Other causes, identified as problems, collected 12 – 13 % t of respondents' votes, were the quality of service and inadequate health facilities working hours.
In the centralization of services, increasing the distance between the service and the user, one of the medical system alternatives could be telemedicine services, prevention programs, ensuring prior surveillance of risk groups, mobile medicine services. In 2010 for the residents of South Karelia social and health district rural areas in Finland mobile medical care service was started to provide. The aim of Mallu bus was to offer cost-efficient and flexible services to locations that laced access to health care centers. Via the mobile service, nurses provide a set of medical services: flu vaccines, small operations, measurement of blood pressure, sugar amount, prescriptions. The service is available for a fixed timetable, and is serves at least 100 thousand potential patients. Some area visited every 2 weeks, according to the expressed needs of the pre-set timetable. Staff has a connection to the central system, which contains all the information about the patient. If there is need, patient gets telemedical consultation with specialists. In most cases beneficiaries – elderly residents, who experience problems getting to the medical care centers. However, the service is available to all, even for leisure travelers in the area. Electronic registration system allows planning the routes, services and staffing levels. It is planned supply dental service (European network ..., 2015).

The survey revealed that demands of rural population is best meet in the provision of information supply, school-age children's education and social services. Conversely, the biggest problems are in the sphere of the provision of public utilities, primary health care and public transport.

4. Conclusions

1. The survey revealed that the situation in providing the selected set of public services is quite satisfactory. It was revealed that demands of rural population is best meet in the provision of information supply, school-age children’s education and social services. More than 67 % t of respondents indicated that there are no crucial problems for these types of public services.

2. Conversely, the biggest problems are in the sphere of the provision of public utilities, primary health care and public transport. Only less than 50 % t of respondents identified that there are no big problems in the provision of these types of public services are satisfactory and some activities should be taken to improve the situation.

3. The investigation showed that problems in public services supply are slightly different in the areas where rural population is declining and where it remains stable or keep growing. So, the central and local authorities while planning the development of the public services supply in areas with different population patterns should take into account the results of this investigation.

4. Meeting the needs of the public services of eldering rural population will become more complex so the attention should be payed for innovative service delivery models and application, increased focus on mobile services delivery, provision of services tailored to the specific local needs of the population, looking for the new ways of delivering public services cooperation of the private and public sectors, communities and volunteers.
References


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**VIEŠŲJŲ PASLAUGŲ LIETUVOS KAIMO VIETOVĖSE PAKLAUSA**

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**Santrauka**


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**JEL kodai:** R10, R20, R50.