

ASSESSMENT OF RURAL INNOVATION IN SPECIFIC CASE OF SOMOGY COUNTY

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The Research team for LOCAL ECONOMIC AND ENTERPRISE DEVELOPMENT (LEED) addressed the in depth analysis of a selected rural area in terms of dynamics of rural innovation. The researcher students focused on the factors of rural development. They analysed the available secondary data in order to better understand the socio-economic conditions of the geographic area. In the course of the field research they visited several local settlements and carried out in-depth interviews with local people, representatives of local governments and municipalities, enterprises, NGO's. In the scope of this analysis we found that the results of the field research meet the findings of the interviews. The students made recommendations for the local communities in the frame of a Conference on Dynamics of Rural Innovation.

1. INTRODUCTION AND AIM OF RESEARCH

Higher education institutions must demonstrate to their students how to be effectively engaged in real world problem solving and innovation. Major means for this aim is to get contacted and familiarised (in researches) through partnerships with business, policy makers, NGOs and communities. Especially in the field of development studies the curriculum must include from the ground up to create critical, systemic thinkers; where knowledge alone is not enough. From educational point of view the objectives of the research reported here were to help master students of Regional and Environmental Economic studies gaining practical skills for engagement and the right attitude. This can only come from experience so education programs must build in substantial real world engagement and problem based learning activities.

In general, a rural area or countryside is a geographic area that is located outside towns and cities. The Health Resources and Services Administration of the U.S. Department of Health and Human Services defines the word "rural" as encompassing "...all population, housing, and territory not included within an urban area. Whatever is not urban is considered rural (HRSA, 2016).

Typical rural areas have a low population density and small settlements. Agricultural areas are commonly rural, though so are others such as forests. Different countries have varying definitions of "rural" for statistical and administrative purposes.

There are several researches concerned with poverty reduction, sustainability, and livelihood strategies (e.g. CARNEY (ed.), 1998; SCOONES, 1998), where the focus is on rural areas with traditionally agriculture related economic facilities and facing – from various aspects – lagged or under development.

Concerning the empirical evidences from various geographical scenes the definition "sustainable livelihoods" is referred by DFID (1999), the institute that sees sustainable livelihoods (SL) framework as equally applicable to urban as to rural survival strategies. Assets

in this framework include: human capital (the education, skills and health of household members); physical capital (e.g. farm equipment or a sewing machine); social capital (the social networks and associations to which people belong); financial capital and its substitutes (savings, credit, cattle, etc.); and natural capital (the natural resource base). According to the definition, not only the assets are covered, but also social factors and exogenous trends behind of a range of activities, both the access to assets and the use to which they can be put.

In line with the SL framework, a livelihood is defined as ‘the activities, the assets, and the access that jointly determine the living gained by an individual or household’. Rural livelihood diversification is then defined as ‘the process by which households construct a diverse portfolio of activities and social support capabilities for survival and in order to improve their standard of living’.

It had been assumed that rural households’ engagement in multiple occupations would create plentiful non-farm income earning opportunities in the rural economy. However, this assumption is no longer tenable; for many poor rural families, farming on its own is unable to provide a sufficient means of survival, neither the yield gains related with poor technological infrastructure nor the market position driven prices and management skills provide good base for development or even survival.

It is argued that the future rural poverty reduction policies need to be better informed on the nature of interactions. It is widely agreed that a capability to diversify is beneficial for households at or below the poverty line. Having alternatives for income generation can make the difference between minimally viable livelihoods and destitution. However, diversification does not have an equalising effect on rural incomes overall. The conventional wisdom for many years has been that rising output and incomes in agriculture itself are the catalyst for diverse non-farm activities in rural areas. As with agriculture, the effects of diversification on environmental resource management are mixed and context-specific (DIDF, 1999).

Rural innovation (MCINTYRE, 2008) has a number of dimensions – social, technical, organizational and institutional - and can take different shapes and forms. It is the process whereby individuals or organizations bring existing or new products, processes and forms of organization into social and economic use (RAJALAHTI, 2012). The system refers to all the different actors (farmers, businesses, researchers, policy-makers, NGOs, etc.) who, in some way, need to be involved in an innovation process.

The aim of the research is to reveal in the rural, basically agricultural sector how the actors involved in the whole of the process face with recognising and taking measure on challenges in rural livelihoods.

2. METHODS AND DATA

With the intention to experience the Hungarian rural life and see the daily routine, problems and obstacles that face the rural population the students and supervisors groups were undertaking the research in the neighbour villages. The research method was consisting on interviewing the local people of the villages to have thorough vision and information on their life.

Further on, in order to better understand the social-economic situation of the rural communities the research group analysed secondary statistical data on the area as well.

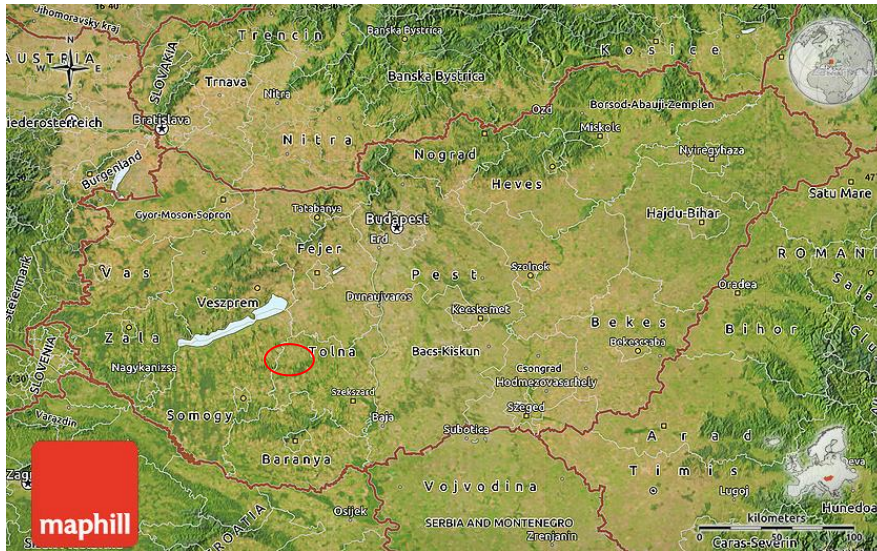


Figure 1: Satellite map of Hungary indicating the research area
 Source: maphill.com

The semi-structured in-depth interviews took place in all of the villages nearby and for around a week in some places two visits were necessary. Through 2 days we could have in all 4 interviews with the local people; that was based on it we could conclude enough information about the rural people and the rural life of the villages.

One of the main objectives of the LEED Research Program is help our participating students to use the previously learnt research methods (eg. in-depth interviews) in practice.

Another aim is to get them know the country, local economic and social conditions as well. We believe that this is important because the students have mixed social backgrounds and they do not know much about disadvantaged regions through their own experiences.

During the research the following topics were researched:

- aftermath of the regime,
- local and rural economic structure,
- livelihood opportunities for disadvantaged communities,
- situation of minorities,
- local infrastructure and possibilities (health care, public services, transport, etc.)
- health and income status of the population,
- higher education and employment opportunities,
- ability of local leadership,
- examples of good practices.

During the one-week fieldwork students were divided into groups. The groups summarized the gathered information at the end of a day each afternoon. Finally, the experiences, acquired knowledge were asked to summarise in a report paper and presented on the Conference on Rural dynamics May 16-17 2016 Somogydöröcske. A concluding round table session was part of the Conference, where the locals were also invited.

3. RESULTS AND DISCUSSION

In the following chapters we introduce the results of the secondary data analysis and the findings of the field research.

3.1. Introduction of the villages addressed in the field research

The settlements of the rural area chosen in Somogy County for field research are situated in the Tab district.

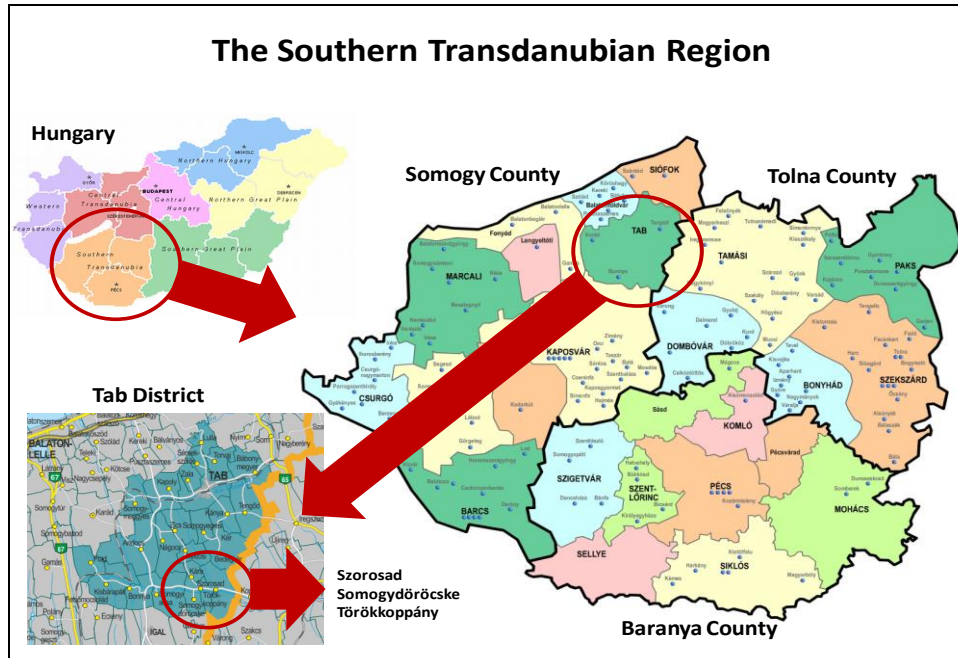


Figure 2: The territory of the research project

Source: Molnár, 2016

In order to better understand the situation of people living in this area and to ground the field research with a more complex situation analysis, we reviewed secondary data (TEIR) of the region.

The residential population (*Figure 3*) suffers from great losses not only in terms of time but in comparison with the average figures of the county, the region and the country, too. The biggest population loss was seen in year 2012, more than three times higher than the country level average.

(a) The Number of Residential Population (people) and (b) the Natural Decrease of Population in Tab District (2002–2013)

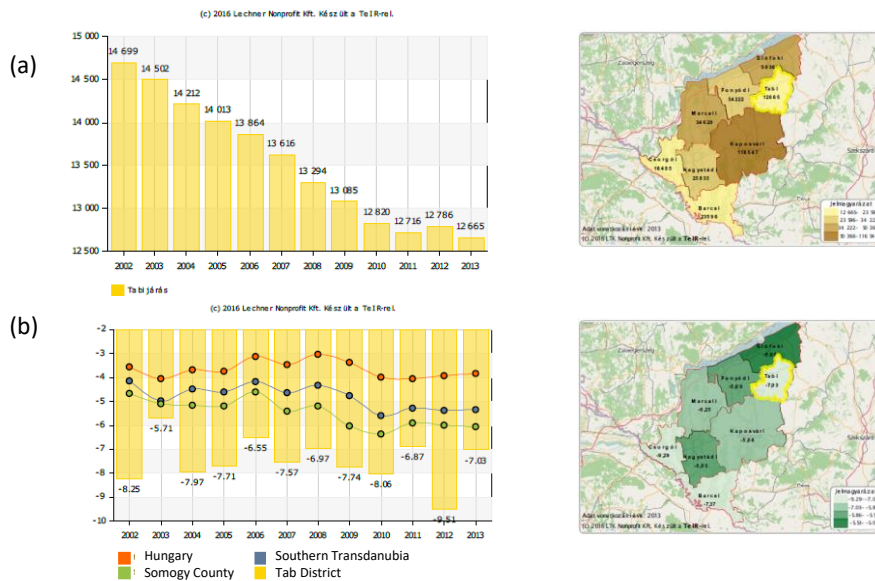


Figure 3: Population and population change in the district of the analysis
Source: Molnár, 2016 based on TEIR 2016

On top of the unfavourable migration tendencies, the analysed region has a 207 per cent ageing index, referring to that the number of people above 60 years of age is twice as higher than that of below 15 years.

(c) Balance of Internal Migration and (d) Ageing Index in Tab District (2002–2013)

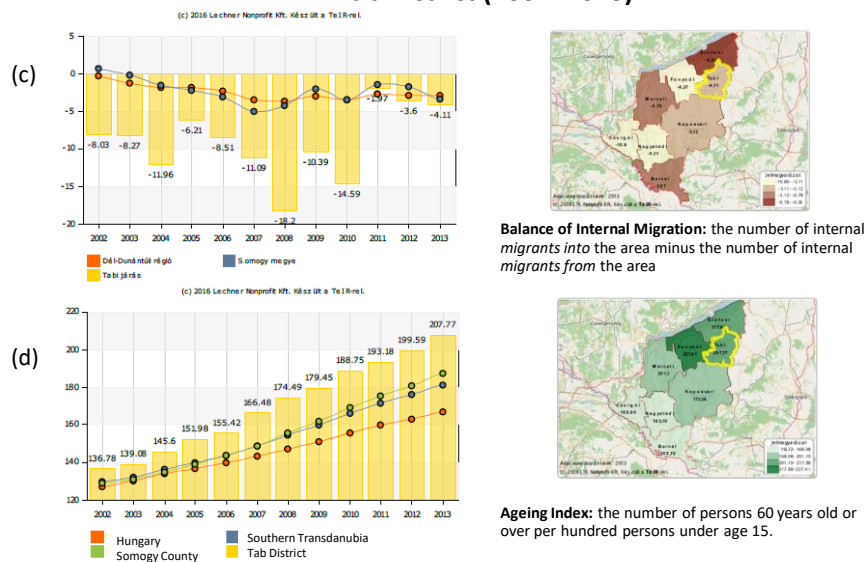


Figure 4: Internal migration and ageing index in the district of the analysis
Source: Molnár, 2016 based on TEIR 2016

The tendency (Figure 4) is very much the same for the country and for the region itself. Following a dramatic peak due to the economic crisis in 2008, the unemployment hardly recovered. By 2013 the government measures have started to make themselves feel (Figure 5).

(e) Unemployment Rate and (f) the Long-term Unemployment Rate in Tab District (2002–2014)

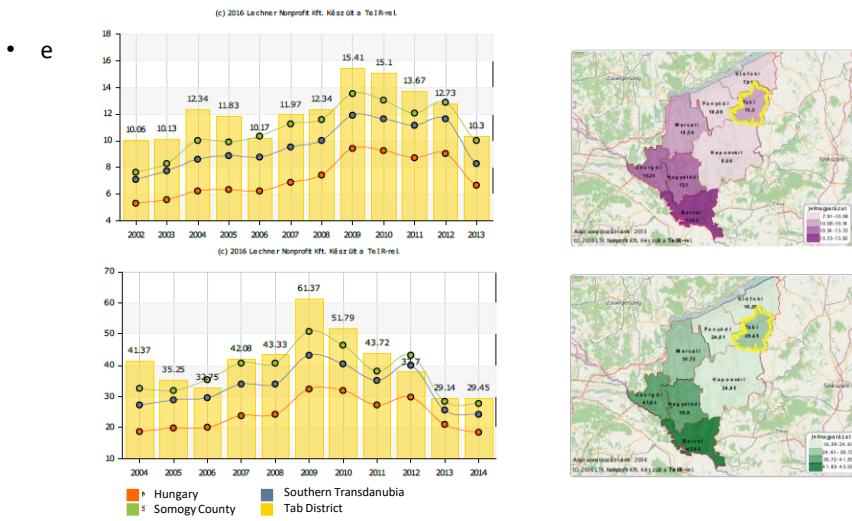


Figure 5: Unemployment in the district of the analysis
Source: Molnár, 2016 based on TEIR 2016

Altogether the negative living conditions results in a very unbalanced wealth index (*Figure 5*). Considering the ratio of the highest and the lowest income earners we see that the number of earners above 5 million HUF annually is four times higher than that of below 1 million HUF annually.

(g) The Ratio of the Highest to the Lowest Income Earners in Tab District (2005–2013)

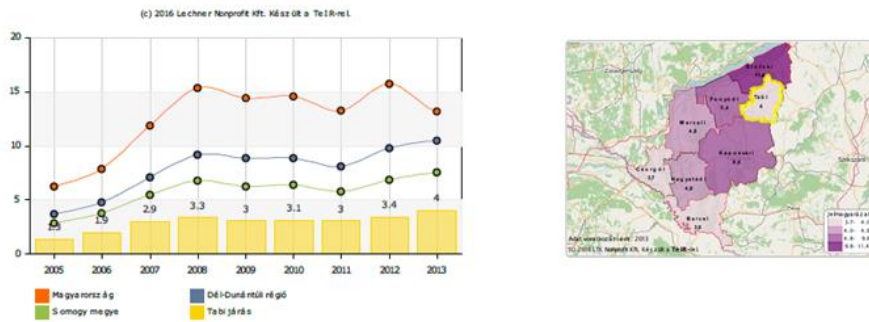


Figure 6: Wealth index in the district of the analysis
Source: Molnár, 2016 based on TEIR 2016

4. MAIN FINDINGS OF FIELD RESEARCH

4.1. Aged population and immigration of youth

The first thing we noticed in the village when we started checking it, was the population demography most of the people living there, were old people 60-80 years -mainly pensioners

who installed in the village looking for calm and peaceful place to continue the rest of their lives, the majority of them were happy with their lives, they are loving the peaceful and clean environment; Their pensions was enough for them to have a normal good life and most of them have kitchen gardens where they grow what the basic needs of vegetables and fruits. It was rare to see children and young people in the village; according to the people we interviewed most of the youth and young people the village to bigger cities looking for better opportunities of education and jobs.

4.2. Lack of infrastructure

Due to the small size of the village and the low number of population, there is no schools or hospitals available, the few children in the village needs to go daily to the neighbour village “Törökkoppány” approximately 5 km away, for education. Which make it one of the reasons that families choose to home teaching their kids, as one of our interviewers said, a 40 years old women with 5 children: “I have 5 children one is already in high school in Kaposvár, and the other 4 I’m teaching them at home, I’m a teacher, and I think that I’m able to that, this is more safe and comfortable for me and my kids”.

The other sector with the lack of infrastructure is the health, no hospitals or health centres in the village only one doctor is affordable, according to the habitants, in case of emergencies they have to transport to the bigger cities as Kaposvár or Siófok to have the necessary health care.

4.3. Agriculture and Honey production are the main economic activities in the village

As we understand from our interviewers the main source for people to get their income was agriculture, but most of the agricultural fields in the village are not owned by the habitants, they are either private lands owned by some rich people or they are owned by the government, and the others are usually working there as farmers. The crops produced are generally vegetables and fruits and usually it is exported because it is too expensive for local people to buy. Beside the lands owners and the farmers, the other social workers in the village are the bee keepers who own honey production fields which make it the second important activity of the local people.

4.4. Aid attempts from the government and the EU

One of the main problems that the habitants mentioned when we talked with them was the bad quality of the water in the village, they said that it is not good for them and can cause health problems. As a solution for this issue, according to the interviewers the EU has made a program that consists on the improvement of the water quality in village but the results weren’t satisfying for all the local people, some of them finds this as a good solution and the water is potable and the problem is solved but others still complaining of the wide amount of the chlorine in the water what makes them avoid using it; instead they use their own wells in their gardens or buy the bottle waters from the shops.

As for the EU; one of the main goals of the Hungarian governments is the improvement of the rural life and rural villages; which makes the improvement of the infrastructure a first requirement, according to the mayor the government is trying to renew the old buildings and houses in bad situation, as a good example the church which is now after being renewed one of the important sites in the village visited by the tourists who come by the village.

4.5 Analysis of Environmental Issues

Agriculture is a very common practice in the 3 villages under study. Similar too many rural areas around the world; two forms of agriculture exist in the villages, communal agriculture and commercial agriculture. Through our research we have discovered that majority of the households have 'kitchen gardens' where they grow necessary vegetables for home consumption such as tomatoes and onions. There are some local people that owned medium-large sized farms where they produced in large quantities for local resale purposes as well. We further discovered that there are large commercial farms that exist in the area, these farms mainly grow corn and they employ local people. These large farms are owned by different shareholders, majority being big corporations. Another form of agriculture present is animal farming. We encountered few farmers that are farming chicken and pigs. He primarily farms for sustenance, however he has recently expanded to local commercial production in order to supplement his income. One major environmental issue that was brought to our attention during the research was soil erosion. In our 3 villages the soil is terribly eroded, this is very visible on the road when it rains. The soil gets washed down from the fields to roads and as results the roads have slippery and dirty. Furthermore, the farmers we spoke to indicated that soil erosion is very big problem for them and it does have a significant effect of the farming choices and outputs. This problem is very much associated to the terrain and topography of the villages; the large scale commercial farming and deforestation as a result of large scale commercial farming. The small to medium side local farmers are most affected by this problem as they do not possess to resources or skills to mitigate the effects, these farmers mainly use indigenous methods such as crop rotation. The large scale farmers however do have access to appropriate technology and skills to mitigate this problem thus the effects are not as devastating. The last environmental factor that caught our attention during the research is the issue of rural land and land acquisition. The aim in this regards was to research the possibility of young farmers to acquire rural land for agriculture projects and innovations. We have discovered that in order to obtain agricultural land in the three villages, one has to go through long and bureaucratic processes involving many different stakeholders. We came to a conclusion that this may deter young aspiring farmers that have great innovations and idea for agriculture and the local economy.

4.6 Analysis of Economic issues

During research in villages we realized that most of the citizens are above 40 years old, all the houses have kitchen garden, agriculture is a main sector of economy for this area. Our attention was directed for job opportunities. Since size of the villages it's not big, for example not more than 400 people, they don't need big staff of employees for government work (fireman, ambulance, police). But this kind work needs young people, so in the end we have not so much opportunities for youth. However some of young populations are working in agricultural feed. But still a lot of them are searching work out side of the villages. Some people working in neighbors villages, but they are still living in other one. We think that this is good, because otherwise villages will «die». According to interview, people are sure that this is possible to find a job, If you really need it. At the same time we have a lot of people above 40 or in a retired. Their problem that pension money it's not enough. And unfortunately they don't have any kind of job opportunities. Before in one of the village it was some special job for old people. They was making jam, knitting and all these products was selling in a market. But unfortunately local government closed this program because customers were not so interested. In that case it is good that all of inhabitants have they own kitchen garden. If we will speak about young population (after school) most of them want to move to big cities. The problems which they

mention were small job opportunity, quality of social life, study opportunity. But 10% of them said that they want to come back after study, to develop their home place. So good that in villages we found people how is working with «social work» program. Some of them are working like a gardeners or cleaners. This program is supporting by government of Hungary. This is so useful because program create a job place. People are busy, and it's help to have social life.

Nowadays in one village Torokopany local government made a place for social active rest. This is a big place with grill part, football field, some game place for kinds. We think that this is also having good impact on a village. Later this place can became wider and probably crate new job places. Still in all this villages we have big problem – transport. And in our opinion if transportation system will be better it will help to villages develop faster. Connections with neighbors will be closer and more productivity. It will make new markets, and new customers. Demand will be growing and of course supply also we will have more job places.

4.7 Analysis of Education Issues

In looking at the educational domain of these villages (Törökkoppány, Szorosad, Somogydöröcske), they all have same thing in common. That is, they all had schools that were controlled by the priest before World War II and were later taken after by the government after the World War II. They also have libraries were books are being kept and also have internet in some of these libraries. Some of these libraries were also used at times for special programmes design for kids .But due to the small number in population of some of these villages (Szorosad and Somogydöröcske) they could not maintain their schools. Presently, these villages have no schools. Children from these villages travel to other neighboring village such as Törökkoppány and some other big cities for educational purposes. Törökkoppány happens to be the only surviving village as far as education is concerned. It has a kindergartens and a primary school. It has about 140 students, six teachers and six classrooms. The increase in population of this village (Törökkoppány) has not only boosted the educational sector but also other sectors of the economy that brings about development such as agriculture.

The main problem as observed from theses villages especially Szorosad and Somogydöröcske is the problem of little population. During the research, it was realized that the majority population of these villages is the aging population. What can an aging group of people do? To solve these problem especially reviving the educational sector, the government, other private individuals and even some inhabitant from these villages, should see how they can sit together and come up with a sustainable plan of activities and infrastructures that will not only attract Hungarian into theses villages but also people from different countries across the world.

4.8 Analysis of Transportation issue

Somogydöröcske, Szorosad and Törökopanny are villages in Hungarian villages in Somogy County and covered a total land surface area of 10.83sq.km, 6.48 sq.km and 25.8 sq.km respectively. These villages have a total population of 772 people (2004 survey). These villages are not well developed for the fact that the indigenes migrate out from the town and live and work in other cities. These villages are void of the youthful population and the main economic activity is agriculture. All these also affect the transportation system in these villages. These villages have good roads and they were built some few years back. These roads link the three villages to other villages, towns and cities in Hungary. But the roads now are wearing out and need maintenance. The drainage systems besides the road are being constructed by LEIER two years in Törökopanny. The only means of transportation that the people of these villages use

to move from one village to the other, from one town to another is the bus. The bus comes into these villages from other towns like Kaposvár every after three hours and leaves. This is so because of the less population and it slows down the movement of the people. With this bus schedule the people face difficulties to move around as often as they want. This problem can be solved if the government or European Union could provide more buses that could leave other towns and cities to these villages as often as possible. Furthermore, during the research, it was discovered that there is no train station or train route in these villages. Travelling by train is faster and it having in a train station in these villages could bring development. Also there are buses which transport school children from their houses to the schools and back. This sector employs some people as bus drivers. 50% of the total population own cars for private use. Tractors are being owned by most families in these villages but these tractors are not used for agricultural purpose. It is somehow like a pride or a legacy in these villages especially Törökopanny for families to own tractors. The farmers use trucks to transport their farm products from the farm to the market and to the factories.

Conclusively, the government and European Union should intervene to develop the transportation system of Somogydöröcske, Törökopanny and Szorosad.

5. CONCLUSIONS

In Summary, and as a conclusion of what we experienced in the course of the LEED research project village, the rural life in Hungary is characterized by the conventional features of every rural area in the world; a leading agricultural sector, population that tends to be more aging with the immigration of the youth to bigger cities; lower incomes and living conditions comparing to the more urbanised and developed area with a lack in infrastructure specially for the health and education sectors.

In our opinion and based on the findings of the research; One of the primal issues that stood out for us as the students in the entire research was the aging population. We further learned that this is not only a problem in this village however in the rest of Hungary as well. This imposes many challenges such disappearance of villages and settlements. Furthermore the lack of work, education and entrepreneurial opportunities in these villages acts as push factors for young people. On the final day of the camp, we had an opportunity to present our findings to all the other participants of the camp, our conclusions were that in order for development to take place and be effective in any society, the community has to be open to change and to that particular development. There should further be enabling instruments and environments in place that only development to thrive and benefit the people its intended for. Monitoring and evaluation is also an integral part of development that cannot be neglected in development project.

Despite the need for improvement and more life facilities the villages area is a small sample of the rural area in Hungary, its clean and green environment makes it a perfect place for its habitants specially the old ones who are pleased the peaceful and calm life they have and they are not hoping for this to change.

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