ECONOMIC ISSUES REGARDING THE AGRICULTURAL INFRASTRUCTURE IN CLUJ COUNTY

ASPECTE ECONOMICE PRIVIND INFRASTRUCTURA ÎN AGRICULTURA JUDEȚULUI CLUJ

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Abstract: *The impact of road infrastructure development on the environment is an important issue if we take into account that roughly 10 hectares of land enter in this circuit each day, especially in peripheral areas. However, the auto transport growth pace is ahead as compared to the transport infrastructure development, leading to the persistence of overcrowded and struggled zones in terms of road traffic. This paper shows the status and level of development and modernity with impact both on the transport activity, but also that on other areas.*

Key words: *infrastructure, transport network, public roads, economic indicators*

INTRODUCTION

A modernized transport network conceived to prevent any shortcomings in the activities delivered has an impact both on the demand in the economic area, especially in those industries highly dependent on the transport and on the economic supply. From the demand side, one can take into consideration the influences due to the rising of the local markets' potential by providing connections amongst different development regions. From the supply side, it is worth mentioning that businesses can reduce their costs and therefore the business efficiency and profit increase by means of providing an adequate and quality infrastructure capacity tailored to efficient transport requirements.

Quality transport influenced to a large extent by the condition of infrastructure allow for reduced costs for maintaining the stock of raw materials, half-finished or finished products and avoid the shortcomings in production. For example, one may indicate that, in case of a road network running through a plains area, the saving than can be achieved in terms of transportation costs by means of high-ranking a road from the worst technical condition to a good technical status is of $ 0.0006 / km for cars, $ 0.007 / km for buses and $ 0.059 / km in case of heavy trucks [FISTUNG, 2003].

MATERIAL AND METHOD

The survey was conducted in Cluj County, as part of North-West Development Region.

In terms of agriculture and forestry, the various climatic conditions of the area have created a favourable framework for the development of agriculture, as the second economic sector in the county economy. An important role within this economic sector it played by the production of livestock, but vegetal crops has a significant share. Both crops and the livestock fields are going through a transitional period featured by a decreasing production as years go by; this devolution requires incentives measures for the recovery of county agriculture [DIRECTORATE ON AGRICULTURE OF CLUJ COUNTY].

Since the ’90s the socio-economic development has been reflected in the modernization of transport capacity. The favourable geographical position of the county is an important factor in the efforts made by authorities to develop local infrastructure. Cluj County has a dense network of public roads reaching a total length 2,632 km, of which 342 km are national roads. Upgraded road network comprises 645 km of roads, most of which are sectors of some roads of national and international interest roads. The length of railways crossing the county is 232 km [DEPARTMENT ON ROADS AND BRIDGES OF CLUJ COUNTY].

RESULTS AND DISCUSSIONS

Transport market, is the vital area where that transports need of forwarders, namely the supply, meets the transport offer of transport operators. A decisive role in this market is played by the transport needs of forwarders, namely the demand.

The activity dynamics in transport area is set by the pace of overall economic growth rates, changes in goods production, and its structure and territorial distribution. In the past years, the European economy as a whole has faced very low growth rates, while shipments showed significant increases for both goods (approximately 2.3% each year) and passengers (3.1% each year) [EUROSTAT, 2009]. In this context, it is expected that the traffic on national roads in 2015 will look like Figure 1 below

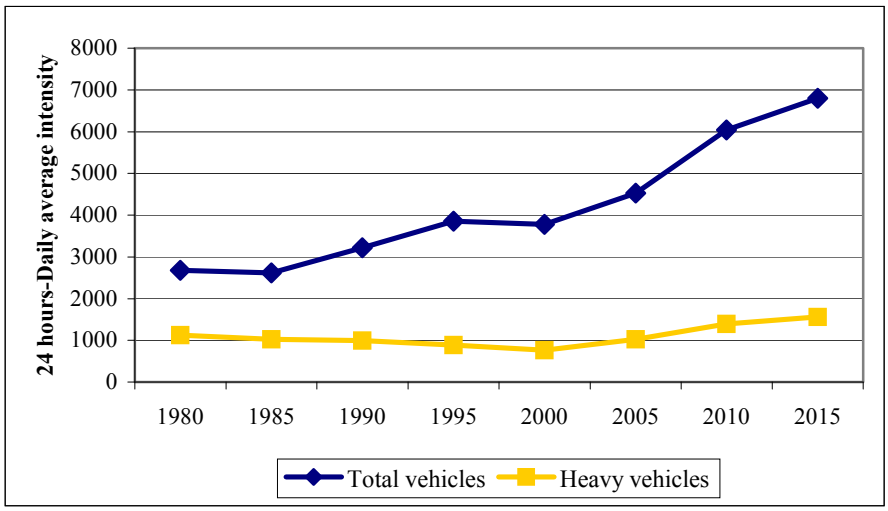


Figure 1. The evolution of road traffic on national highways
Source: ***data processing from http://ocw.mit.edu.ro***

In the first stage the condition roads was analyzed for Cluj County as compared to Romania and EU respectively, namely:
a) A comparison regarding the length of roads reported to a 1000 km^2 area was made between EU, Romania, and several European countries.

The graph in Figure 2 highlights the comparison for several EU countries regarding the length of road network reported to a 1000 km^2 area.

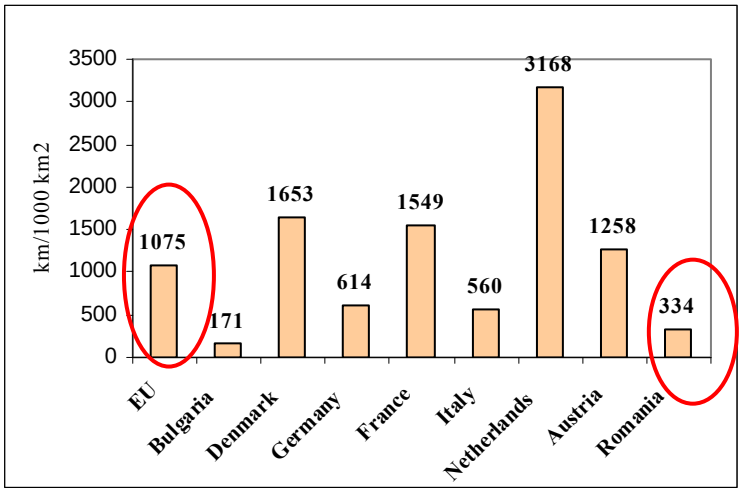


Figure2. Length of road network on an area of 1000 km ^{2}, 2010

Source: ***data processing from http://epp.eurostat.ec.europa.eu***

The length of highways networks reported to a 1000km^2 area was not computed as a variable in this chapter, since Romania's coverage by motorways would have been even more dramatic as compared to the remaining classes of roads.

b) Comparison of public roads density within a 100 km^2 area between Cluj County - North West Development Region – Romania.

One may notice that in terms of density of public in Cluj County roads for a 100 km^2 area as compared to the overall North West development region and Romania the situation is about the same.

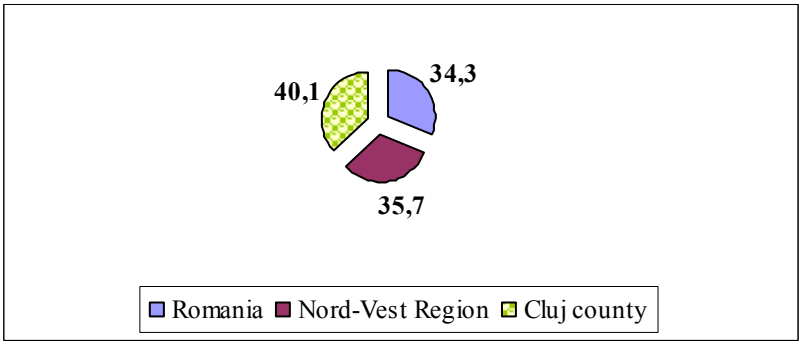


Figure 3. Density of public roads per 100 km^2 area, 2009

Source: ***National Institute of Statistics, Statistic Annual Journal of Romania, 2010***

Table 1.

The structure of public roads throughout the country reported in Cluj County

Road type		Total length (km)	
		in Cluj County	in Romania
National roads (total)		**342**	**16599**
Highways		50	347
National road	European	298	5764
	Main	0	4538
Local roads (total)		**2290**	**65094**
Local road	County	1383	35352
	Commune	913	28379
Total public roads		**2632**	**81693**

Source: http://www.drdcluj.ro

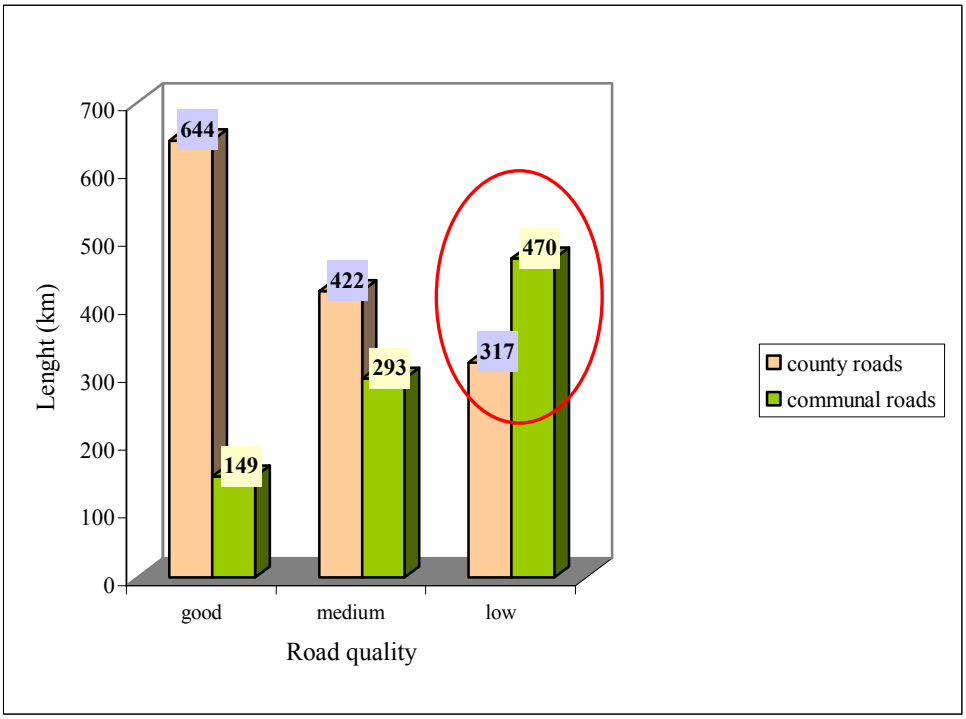


Figure.4 The degree of quality of roads in Cluj County in 2009

Source: ***data processing from http://www.cjcluj.ro website***

CONCLUSIONS

One may notice that both the quantity and quality of the infrastructure reflects the degree of civilization and the level of access to it, as well as the availability for evolution and growth. In terms of infrastructure the situation in Cluj County is less alarming, since a large number of kilometres of deteriorated communal roads have an average to poor quality. One requires upgrading some roads by submitting them to works and using new technologies in the field, this having positive effects in all fields of economy, especially in the field of agriculture transport.

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