TRANSPORT CORRIDORS AND "TUNNEL EFFECT" THAT MIGHT EVOKE

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Abstract: Nowadays, during the research and tendencies for further infrastructural developments, to quickly cover a distance from one point to another, the roads have turned into tunnels. This phenomenon is present today in all modes of transport which isolates us from current actuality and contact with the other part. This is often true in the case of transport by train or plane. Road infrastructure which creates its passage corridors and the connection of two or more inhabited centres with different population numbers creates nodes where it interacts with other traffic networks and in these cases such tunnel effects are used to exclude and bypass most of the intervening spaces, in this way they are avoided to access in a faster time two distances.

While, transport and transit corridors have become more common as reference points for urban planning, corridor development has emerged as a more interesting and complex issue in transport planning. The problems of corridor development are always great and they need to provide access to transport, quality transport, develop habitable communities and ensure economic development along the corridor. In case a corridor crosses the jurisdictional boundaries then these problems worsen. There is a need for a model that addresses key problems in corridor planning and management. This paper develops such a model which is based on the 5 main areas of the corridor development process: governance, economic impacts, financing, design and citizens' preferences.

For the basis of this analysis is taken a case study which is "The road of Nation" in Albania, or Route 7, which starts from the city of Durres, crosses the border point Morine-Vermice, passes through Prishtina and the border point of Merdare and goes to Nis (Serbia).

The reason for taking this case is related to the fact that this road connects the important port of Durres with one of the important Balkan corridors such as corridor no. 10.

Also, this corridor is new and with its construction has reduced the travel time in this region, avoiding the old road that passed in difficult mountainous terrain, but which has given negative effects to those settlements which today are left out of attention. In this study, were used several study instruments, such as field observation, stakeholder analysis, annual reports analysis, and questionnaires.

Finally, the lessons learned from implementing the model are presented.

Keywords: "Tunnel effect", Corridor, Transport, Residents, Settlements

1. INTRODUCTION

In this study is analyzed the theoretical aspect of research on the concept of transport corridors and the effects they are bringing to residential centers. The objective of this study is to analyze the behavior of a transport corridor and the effects it brings to the settlements where it passes. From a theoretical point of view, transport has a major impact on the spatial and economic development of cities and regions. The attractiveness of particular locations depends in part on the relative accessibility, and this in turn depends on the quality and quantity of the transport infrastructure (Banister, Lichfield, 1994). The key to the success of transport corridor development and regionalization is harmonization of regulations and or deepening socio economic integration (Kessides, 2012, Monios, 2016). Local and regional development is a highly uneven process, producing diverse economic, social and environmental outcomes as localities and regions wrestle with processes of growth, decline and adaptation (Pike et al. 2016).

In transport network theory, a corridor is only one way of connecting an origin (O) to a destination (D). The transport corridor is a design based on using a high-density flow along an artery and short capillary services to nodes off the corridor. The nodes are thus hierarchically ordered, here denoted corridor and satellite nodes, respectively (Woxenius, 2007). In this view, since these transport corridors have advantages in the countries they cross, but there are also theories that have analysed concepts about the effects caused by these corridors, which have been treated mostly only as crossing corridors, one of them is and the author Andreu (1998), which reports that 'in our search for maximum speed, roads have been turned into tunnels. But this tunnelling effect is not only confined to roads. Present in all modes of transportation today, tunnelling isolates us from reality and cuts us off from the intelligible world. This is even true with trains and airplanes' (1998, 59). Infrastructural developments that have come as a necessity of establishing rapid connections with major settlements have led to inability to participate in development

due to isolation. Secondary or tertiary settlements are not included in these direct transport lines, creating not only territorial but also social segregation.

In those parts where the infrastructure is affected by such solutions there have been immediate connections, reduced time to reach a desired destination, but, this has led to an isolation of settlements, causing them lack of access to other neighbouring countries.

Often these unbundled infrastructures link nodes together into networks whilst using such tunnel effects to exclude and bypass much of the intervening spaces, excluding them, in turn, from accessing the networks.

But in all these complex elements exist some profitability prerequisites which are impacted by existence of a market, existence of the appropriate magnitude of capital, state policies and international regulation and influence governance decision making (Skayannis, 2018).

In the study of this case there are a series of problems for the development of the corridor where economic development must be ensured, quality transport, to develop inhabitable communities along it.

Based on the government and decision-making systems of this, is analysed the fact how much is taken into account the impact that this corridor has on the lives of residents in terms of social and economic impacts, funding, design (where and which cities will be affected), and the preferences of citizens. Perhaps, these regional projects have had their impact in terms of reducing travel time but have not analysed its effects directly on the terrain and in the lives of residents. Named "patriotic highways", the project connects Albanians to Kosovo and Albania, impacting on economic, political, social and patriotic ties. It is the biggest road project in Albania for decades, costing over 1 billion euros.

In order to give an approach to this study, this paper has been realized and tries to concisely bring the data for the corridor and its condition by analysing it with the help of some instruments such as: field observation, stakeholder analysis, analysis of the annual report and questionnaires.

2. MATERIALS AND METHODS

The methodology developed to follow this study in answer research questions consists in a combination of quantitative techniques (economic analysis, long-term, short-term effects) and qualitative (personal interviews, field observations, economics research and newspaper archives, etc.).

Beyond the research and theoretical understanding of transport corridors and their role in regional development, the continuation of the study and research topic focused on a concrete analysis of an Albanian case study. This study has a customized methodology combining several instruments to conclude in the end the results.

First group is social analysis and the second group is economic analysis, where the social impact analyses were focused on stakeholder's analyses and field observation while the economic impact analysis is oriented towards analyzing the analysis of the annual report, while the questionnaires are relating with both of it. For illustration purpose was taken in consideration only one part of the corridor which is studied.

Graphic 1. Example of graph Stakeholders Analysis. (Source: Scholar99.com 2020).
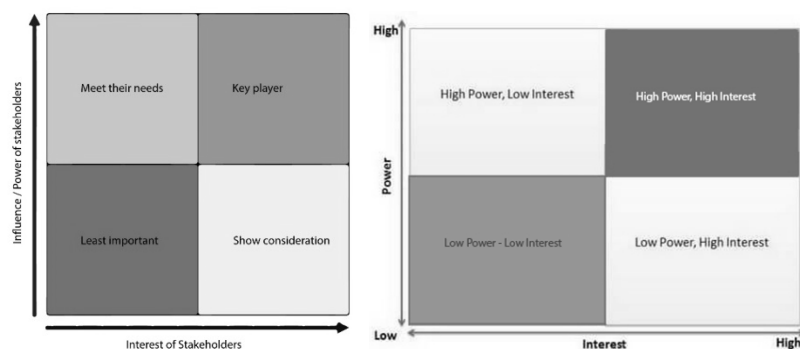
This way of analysis helps to understand which stakeholders have the highest interests and the lowest ones for the realization of such projects such as transport corridors that in their entirety carry out many vital functions for the settlements of different sizes and of their points of interest from which they receive the services.

In this analysis is important to understand the real situation of an important project in terrain. It will include opinion on observations, feedbacks from the inhabitants with whom have been made conversations and have been given personal opinions about the project and their benefits from it.

Field research includes a wide range of social research methods, including direct observation, limited participation, analysis of documents and other information, informal interviews etc. Some basic steps that have been pursued in field research management are: a) Select the right settlement for questionnaires, b) Data Collection Methodology, c) Site Visit, d) Data Analysis, e) Processing the results.

3. RESULTS

In terms of results, they have been elaborated and presented below according to some interpretations coming from the combinations of the used methodology. The case of the road of the nation (Albania to Kosovo), generate their activity a series of individuals, for whom rise two questions; who has the power and who has the interest?

Table 1. Stakeholders (Source: B.Qaja 2020)

No.	Power	Interest
1.	Investors	Taxi driver
2.	Citizens (Type1)	Bus driver
3.	Transport companies	Shop service
4.	Citizens (Type2)	Individuals (key in flows)
5.	Farmers	

* Citizens (Type1), those who live near access points
* Citizens (Type2), those who live far, or on the other side of the area.

Graphic 1. Stakeholders position. (Source: B.Qaja 2020)
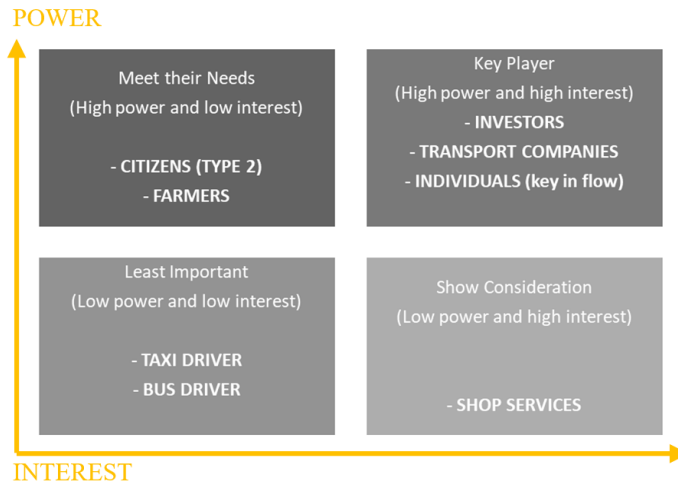
Below is the appearance in matrix of the interpretations about the field observation, which is important for the perception of the different stakeholders about the road quality and effects in their income.

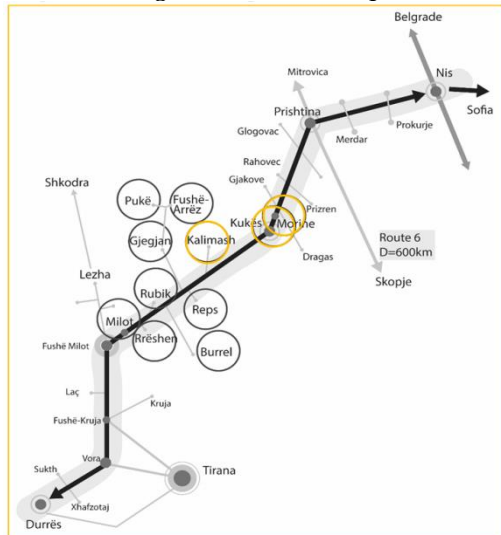|	Conversations with different residents	Informal Interviews	Daily behaviors	Situations	Interactions	Territorial cohesion	Social happiness
Direct Observation	●	●	●	●	●	●	●
Participant Observation	●	●	●	●	●	●	●
Ethnography	●	●	●	●		●	●
Qualitative Interviews	●	-	●	●	●	●	●
Case Study	●	-	●	●	●	●	●

*Measurement scale ● ● ●

In table below is one part of the questionnaires, question and answers for only one cluster of the settlements. In the table are the answers of the different stakeholders which is related with their social and economic situation and how

often they use the road for their needs. These questionnaires result is referring only one part of the study area (Kukës, Kalimash, Morinë settlements).

Table 2. Questionnaires results

1. Which is your frequency on using of this route? 2. How much does the road affect your daily activity?	3. Is it justified for you the passenger transport cost? 4. Is the cost of transporting of the product justified for you?	5. What do you think about the quality of the road? Relationship and facilities of necessities, and security	6.What obstacles do you envisage in making local investments? 7.What is your main investment goal?
(Farmers), 16% once a month, 28% every 2 weeks, **48% every week,** 4% every day, 4% 2 times a day. **(transport companies, bus, taxi), 52% 3 times a week**, 48% every day.	**(transport companies, bus, taxi),** 8% not at all, 32% very little, 8% little, **44% on average**, 8% enough.	**(Farmers),** 4% poor, 28% not good, 16% no answer **48% good,** 4% enough, **(transport companies, bus, taxi),** 20% poor, 16% not good, **60% good,** 4% enough.	**(Investors)** 16.7% low returns; **50% lack of information on investment opportunities**; 16.7% lack of business knowledge and lack of expertise to assess opportunities; 16.7% Lack of communication mechanisms to stay valued for the status of a business.
(Residents), 6.7% not at all, 8.9% very little, **45.6% little**, 3.3% no rating, 17.8% average, 14.4% enough, 3.3% high.	**(Farmers),** 8% not at all, 20% very little, **44% little,** 28% on average.		**(Investors),** 33.3% Household incomes, 16.7% business growth, **50% incomes and growth. (Farmers), 80% Household incomes,** 12% business growth, 8% incomes and growth.

Figure 1. Settlements position in corridor.   *Figure 2. Kukës settlement*
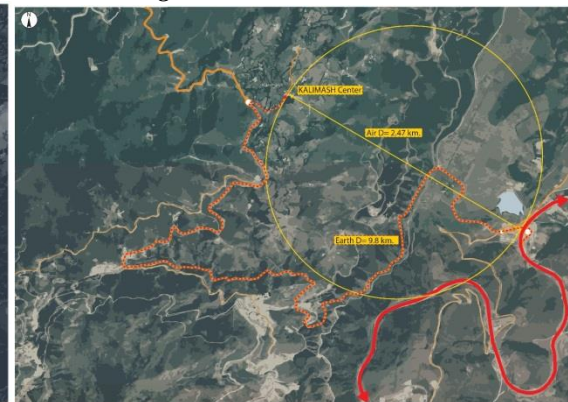
Figure 3. Morinë settlement   *Figure 4. Kalimash settlemnt*

4. DISCUSSIONS

In this paper is important to highlight the role of governance in financing of the project and how the residents are filling or earning about it. The Albania-Kosova highway project (Road of the Nation in Albania, Dr. Ibrahim Rugova Street in Kosova), constructed by the Turkish-American consortium Bechtel-ENKA and Austrian and Albanian companies is a four-lane highway. As part of the Southeastern Europe Route 7, the highway connects the ports of Shëngjin and Durrës to the Adriatic Sea along the Corridor E75 / Corridor X in Nis. The Nation's Road is considered one of the most important Albanian infrastructure works, which has a unique character on the European continent, to economically connect two states of the same nation, and has provided opportunities for access to larger markets. But, with all the expectations that this road had, it has not been studied today how it has affected the lives of residents in the areas where it passes. In these conditions the questions of questionnaires try to interpret some of the stakeholder's conditions and sensation about the road.

The asked questions are related to all stakeholders and how much they frequent and benefit from the road.

After using this route to access quickly two or more settlements, it frequently has generated what is often referred to as the "tunnel effect", as users seeking to reach a destination in a shorter time do not frequent the settlements along the route and do not generate economic impact on it.

Thus, they are simply passers-by and do not turn into frequenters of the region, in the other case being residents or other stakeholders they express that attendance, the impact of the road in their daily activity, the cost of transport, the quality of the road, the goals of investment or obstacles to doing so, have an average assessment of their impact or are made solely for the purpose of securing family income.

Reasons that show that this corridor did not meet the expectations for which it was initially invested (at least in the settlements illustrated). Thus, this corridor has affected in terms of "time" and "travel" but not in increasing the number of businesses in the area or in other facilities and social security for residents.

5. CONCLUSIONS

The main conclusions of this study are treated in 3 main parts, first is the social part, second economical part and third is regional interest.

In social terms:
-Increasing employment in one of the poorest regions of Albania (only during the road construction).
- The road slightly influences the daily activity of the inhabitants (so it shows that it does not play an important role in their mobility).

In economic terms:
-Reducing the cost of transport (at regional level and wider).
- There has been no increase in the number of investments in the years since the construction of the road, or they have focused only on the household and not on the increase in the number of employees.

In regional interest:
-Increase of interregional access.
-Creating better opportunities for countries like Kosovo and Serbia to have quick access to the Adriatic Sea and beyond.
-Non-financing of residents during areas where the old road was passing.

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