Besjana QAJA

"Transport Corridors" Large scale planning for regional and national development. Case study: Albania





## **Transport Corridors**

Large scale planning for regional and national development. Case study: Albania

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I want to dedicate my work and achievements to my family and the people of my heart. Their happiness and presence in my life are my energy, inspiration, and my breathing.

#### Abstract EN

Transportation and the need for movement was born together with humans, and the transportation system in its modern concept consists of a series of components such as network infrastructure, control systems, movement flow, accessibility of regions, etc. These constituent components have been the basis for the development of this research topic. Beyond the development of transport, the opportunity and the trail they create in the territory creates the possibility for corridors development which encompass more than the geographical crossing line. The quality of Regional development connections through transport corridors has great importance in the economic and social development of a country.

A transport corridor represents an important structure to serve and strengthen the functional characteristics of a region, and the corridor can provide important interconnection and communication between two or more separate functional regions. The transport corridor is a model based on the use of a high-density flow along an artery and short capillary services at the corridor nodes, where these nodes are arranged hierarchically creating an interconnected network. Regions that have no connection and interaction with others are considered as isolated and inaccessible places remaining unexploited. Transport corridors depend on its construction objectives.

In this context, this research has been developed about the concept of road transport corridors, the impact they have on the social and economic development of the region where they pass, built only within one country or between several states, often impacting cultures of the regions where they pass and bringing the settlements closer to each other in time. In addition to developing and discussing the concept of the corridor in its construction theory, the research includes fieldwork through: visual observation of the connection of the settlements to the corridor, focus groups with 5 different stakeholders who mostly use this infrastructure, analysis of annual reports and data from preliminary studies, interpretation of results and their processing in giving some conclusions on the situation. Methodologically, the geographical area of the research is a road corridor which connects the settlements with each other and northern Albania with the state of Kosovo. In generating this process, the work is developed in 3 different clusters which are grouped according to several characteristics. Work has also been completed on the analysis of different contexts to see the differences between them (Egnatia Odos).

The findings revealed that in the case of the "National Road" the regional benefit was only in terms of the effect of reducing travel time, while the region has faced a population exodus. To help this situation, a combined model of corridor management is proposed by integrating

and connecting the settlements jointly, where in the centre of this corridor observatory is placed and some theoretical conceptions for "transport corridors" are suggested.

The research provides a logical framework for further and in-depth study of this field based on the recommendations given at the end of this study to give these projects another territorial range of their importance.

#### Abstract IT

Il trasporto e la necessità di movimento coesistono nell'essere umano. Il sistema di trasporto nella sua concezione moderna è costituito da una serie di fattori come l'infrastruttura di rete, i sistemi di controllo, il flusso di movimento, l'accessibilità delle regioni, ecc. Questi componenti costitutivi sono stati la base per lo sviluppo di questa tema di ricerca. Al di là dello sviluppo dei trasporti, l'opportunità e i percorsi creati nel territorio offrono la possibilità dello sviluppo di corridoi che sono molto di più di un confine geografico. La qualità dello sviluppo dei collegamenti regionali attraverso i corridoi di trasporto ha una grande importanza nello sviluppo economico e sociale di un Paese.

Un corridoio di trasporto rappresenta una struttura importante per servire e rafforzare le caratteristiche funzionali di una regione e il corridoio può fornire un'importante interconnessione e comunicazione tra due o più regioni funzionali separate. Il corridoio di trasporto è un modello basato sull'utilizzo di un flusso ad alta densità lungo un'arteria e di brevi servizi capillari ai nodi del corridoio, dove questi nodi sono disposti gerarchicamente creando una rete interconnessa. Le regioni che non hanno connessione e interazione con le altre sono considerate luoghi isolati e inaccessibili che rimangono non sfruttati. I corridoi di trasporto dipendono dai suoi obiettivi di costruzione.

La ricerca si è svilppata in questo contesto, sul concetto di corridoi per il trasporto su strada, l'impatto che hanno sullo sviluppo sociale ed economico della regione in cui passano, la loro costruzione all'interno di un solo paese o tra più paesi, spesso impattando le culture delle regioni in cui passano e avvicinando gli insediamenti nel tempo. Oltre a sviluppare e discutere il concetto del corridoio nella sua teoria costruttiva, la ricerca prevede un lavoro sul campo attraverso: l'osservazione visiva della connessione degli insediamenti col corridoio, focus group con cinque parti interessate diversi che frequentano maggiormente questa infrastruttura, l'analisi dei rapporti annuali e dati provenienti da studi preliminari, l'interpretazione dei risultati e la loro elaborazione, per trarre alcune conclusioni sulla situazione. Metodologicamente, l'area geografica della ricerca è un corridoio stradale che collega gli insediamenti tra loro e con l'Albania settentrionale e il Kosovo. Nel generare questo processo, il lavoro si sviluppa in tre diversi gruppi che sono riuniti secondo diverse

caratteristiche. Si è lavorato anche sull'analisi di diversi contesti per vedere le differenze tra loro (Egnatia Odos).

I risultati hanno rivelato che nel caso della "Strada Nazionale" il beneficio regionale è stato solo in termini di effetto di riduzione dei tempi di viaggio, mentre la regione ha dovuto affrontare un esodo della popolazione. Per aiutare questa situazione, viene proposto un modello combinato di gestione dei corridoi integrando e collegando tra loro gli insediamenti, dove al centro di questo corridoio è posto l'osservatorio e vengono suggerite alcune concezioni teoriche per i "corridoi di trasporto". La ricerca fornisce un quadro logico per ulteriori e approfonditi studi di questo campo, sulla base delle raccomandazioni fornite alla fine di questo studio, per dare a questi progetti una più ampia gamma territoriale della loro importanza.

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BRI - Belt and Initiative Road	
CBA - Cost-Benefit Analysis	
CF - Cohesion Fund	
EIB - European Investment Bank	
ERDF - European Regional Development Fund	
EU - European Union	
GDP - Gross Domestic Product	
KFOS - Kosovo Foundation for Open Society	
MoU - Memorandum of Understanding	
OBOR - One Belt One Road	
PATHE - Patras – Athens – Thessalonica – Evzoni	
REBIS - Regional Balkans Infrastructure Study	
RIINVEST - Institute for Development Research	
SEETO - South East Europe Transport Observatory	
SPSS - Statistical Package for the Social Sciences	
SSPP - Single Sector Project Pipeline	
TEN-T - Trans-European Network Transport	
TFEU - Treaty on the Functioning of the European Union	
WB - Western Balkans	

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#### INTRODUCTION

#### Research background

The road network of a country is just as essential as the arterial system in the human body. Roads significantly facilitate progress in a country's economy and simultaneously facilitate communication. The relationship between roads and economic development is the subject of a permanent theoretical debate and it is very difficult to reach a conclusion that will include all the dimensions of the issue. Since ancient times, a series of roads were known to connect countries and carry out trade, which later enabled the creation of many new settlements along these "corridor" roads, which encouraged human societies to increase not only economic exchanges but also exchange culturally.

"Roads as a construction structure have a very important role in a country's economic development. They enable fast and convenient transportation of people to settlements, as well as economic transport of goods. The geographical position of the places, the natural beauties and the sea, is a prerequisite for tourism development. But in many cases the natural and inviting attractions for tourists remain unused due to lack of a roads and a good road network/ lack of a good road network". (Qaja, 2020)

In the transport sector, there are several problems that affect the quality of life of residents in different regions. These issues need analyzing aiming to explore the cause and consequences that hinder regional and subsequently national development planning levels. A modern road network has a strategic goal: to unite markets, avoid situations where overcrowded areas would be created and lower pollution levels

In a number of countries around the world, connected road infrastructure networks have been seen as key factors in promoting a more balanced and sustainable development for less developed regions or marginalized social groups. The creation of a road network ensures the connection of many people living in villages with important urban centers and economic areas.

A modern concept of transport system can be defined as a network infrastructure (fixed facilities, traffic circulation and management systems) that allows people and goods to overcome geographical barriers to space; effective to be present at the right time, manner and place. This concept identifies the functional components of transport systems (fixed

facilities, traffic flows, and management systems), and makes sense that transport is intended as a link and interaction between social activities and other activities.

One of the main challenges facing corridors is determining the affected region or area. A transport corridor has three main categories of intertwined dimensions: infrastructure, services and institutions for coordinating corridor activities. With the development of these transport corridors, different effects and concepts have been created, which are faced today by different specialists, such as the concept of tunnel effect.

Various events related to this sector, discussions with colleagues and other sources of information and references such as strategies, studies, books and daily situation monitoring, influenced the opening of a new thought and brought inspiration for the development of this topic with focus on transport sector.

#### State of the art

The thesis is divided into 4 main conceptual and analytical mainstays, which can function as different areas of research. Actually, this contribution tries to bring them under a common discussion, by combining theoretical approaches of transport corridors, with practical approaches applied in some countries, the importance of transport in regional and national development, and the instruments used for close analysis and study of the impact that these corridors have on some settlements.

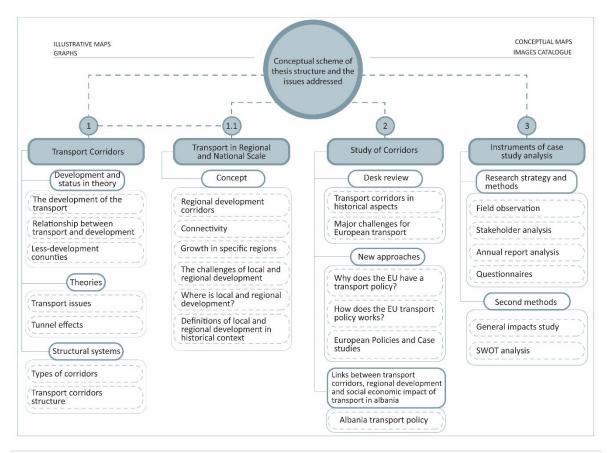


Figure 1. Conceptual scheme of thesis structure and issues addressed.

#### First mainstay, Transport Corridors.

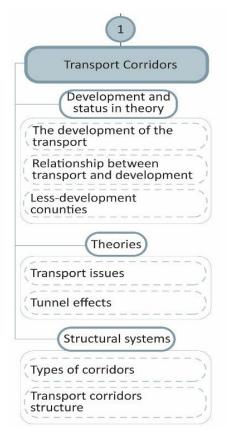


Figure 2. Conceptual framework for mainstay 1.

This mainstay contains an analysis of the basic principles of transport corridors, as well as the relationship of transport with the further development it brings. From a theoretical point of view, it is based on the analysis of some problems and effects that the development of corridors can bring, creating an opposition to the need for their existence. In particular, this part covers a sensitive issue about the development of transport in less developed areas.

- a) First, an analysis of the importance of transport is included, emphasizing its initial purpose and multidimensional nature. This sector can be considered as an embodiment of the relations between the terrain, economic history, social and political systems and development levels and models. The concept is also addressed in less developed countries, in which there is a widespread concern about transport in the context of the desire to promote rapid economic development (Hoyle, 1996).
- b) Second, transport has a major impact on the spatial and economic development of cities and regions. Over time, investment in transportation has been based on the idea of how to divide and grow, and then the main tools to promote development. Theoretically and

practically, some of the problems that the transport sector generates both at the urban and regional level are mentioned, starting from the increase of traffic, the most polluted environment; the problem with mobility; tunnel effect; justification of investments for regional development purposes deriving directly from improved access, etc., (Banister, 1994).

c) Third, the analysis of the different types of corridors and the role they have in providing faster and safer mobility, this and related to the structure they provide in terms of content in relation to cities and regions. Based on the frequent discussion between an 'economic' corridor and a 'transport' corridor that author Jean-Paul Rodrigue, mentions at Transportation Corridors in Pacific Asian Urban Regions case study. Also, the author Woxenius (2012) mentions and analyzes six options for transport from an origin (O) to a destination (D) in a network.

First point one mainstay, Transport in Regional and National Scale.



Figure 3. Conceptual framework for mainstay 1.1

This mainstay contains an analysis of the concept of transport at the regional and national levels based on the regional development determined by transport and the accessibility generated by the improvement of transport. Also, issues are discussed which belong to the challenges of local and regional development as a whole, taking a look at the historical context.

a) First, regional development is considered a broad term, but is often seen as an attempt to reduce regional inequalities by supporting employment and generating income through

economic activities in the regions. Corridors are sometimes developed to promote growth in specific regions, but these corridors evolve over time as a result of technological change, planning, infrastructure, and political initiatives.

- b) Secondly, in these conditions the regional development is understood to face some challenges which aim at the improvement of localities and regions and consist of economic, social, environmental, cultural and political forces. Economic dimensions such as growth, employment, income and wealth creation have historically been at the forefront of determining what constitutes local and regional development. Local and regional research for prosperity and well-being has focused on the continued growth of employment, income and productivity that remain at the heart of economic development (Stoper, 1997).
- c) Third, the question often arises, where is the local and regional development? Of course, this happens in different geographical dimensions, where local and regional development continue to guarantee critical reflection and engagement with the main geographical concepts. In this sense development, however defined, does not continue in a social and spatial gap.
- d) Fourth, over time, a series of definitions have been encountered for the concept of local and regional development which differ from the geographical context and over time.

#### Second mainstay, Study of corridors



**Figure 4.** Conceptual framework for mainstay 2.

This chapter deals with the theoretical and study part developed in a existing context as the case of European corridors. There are also discussions about the challenges of European transport and the role that corridors play in facilitating movement between countries.

- a) First, The Corridor concept is part of the Pan-European transport infrastructure concept, which has developed the three Pan-European Transport Conferences, 1991 at Prague, 1994 at Crete and 1997 at Helsinki.
- b) Secondly, Nowadays, questions often arise as to why a transport policy is important and how it works in this context.
- c) Thirdly, the most important part of the chapter is related to the analysis of the relationship between transport corridors, regional development and the socio-economic impact of transport corridors in Albania, referring to a case study which is elaborated and further studied in the fourth chapter.

#### Third mainstay, Instruments of case study analysis



Figure 5. Conceptual framework for mainstay 3.

The third chapter maintains the main weight of research with desk research / study and field study. Specifically, the case of the national road in Albania was studied, which was analyzed

through several instruments, drafting during the process and a series of questionnaires according to the necessary categories for research.

- a) First, the research method and strategy are placed in a complex way taking into account three different approaches and providing an overview of three different perspectives regarding the operational mode of this road closely related to terrain and settlements. Attached here is the processing of images, maps and illustrations to give a more complete panorama. Being framed at the end by giving the results from the questionnaires conducted in eleven settlements.
- b) Second, the second manner is related to the analysis of the impacts of this road (corridor) and in the context of the SWOT analysis. Also, the processing of information obtained directly from the field context (questionnaires).

#### The aim of the research

The aim of this study thesis is the analysis of the main concepts and placing them in a reallife situation, also explaining one concrete situation where some of the theoretical concepts can be applied and analyzed. Specifically, in cases of good planning, the topic tries to conclude in a study focused on the connection that transport corridors promote.

This research aims to provide the answer to the main question and sub-questions it raises in this regard, and in this frame, tries to bring in the end a critical observation of one real case study which will elaborate in the next chapters, and in the conclusions, this research tries to give a transport corridor scheme of interactivity and development, also some defined meanings of the corridor concept.

#### The importance of the study

At the end of this scientific research is expected to be concluded with a critical view about the main concept of the thesis like "transport corridors". Regarding the hypothesis that tries to prove the dual nature of the transport corridors, it aims to provide an answer working together with the main and sub-questions. This point of view is expected to analyze the concept related to its impact in the territory and in the settlements. Furthermore, the thesis can contribute to a new way of the view of the transport corridors. At the conclusion is important to include the realization of research objectives in a way that the subject of research is realized. Also, the study will end with a critical observation and some proposals for region improvements of the case study and the concepts applied to them. In this critical

view, can find themselves those researchers of this field who can continue this study in further steps.

#### Research objective and Research questions

#### **Objective:**

To identify the real behavior and the role of transport corridors in the connectivity of the settlements and economic areas which are directly or indirectly related to the corridor.

#### Questions

- How can transport corridors be used for connectivity enhancement in regional areas?
- Which are the social-economic impacts of transport corridors in regional development?

#### **Sub-questions**

- How was developed a transport corridor in different contexts?
- How was impacted the settlement and economic areas by the new corridor in the study area of "Road of the Nation"?
- How was the impact of the Transport Corridor in settlement developments perceived from different stakeholders?
  - How do transport corridors might improve to increase interactivity and development between regions?

#### **Hypothesis**

#### The aim of this study is to explore four main hypotheses:

- Transport corridors provide opportunities for further development of the regions where they
  pass, and one of the main challenges facing corridors is determining the area or region
  affected by their extent, and considering transport as a link and interaction between social
  and economic activities.
- 2. In a number of countries around the world, connected road infrastructure networks have been seen as key factors in promoting a more balanced and sustainable development for less developed regions, and through the creation of a road network to ensure connection with village inhabitants and important urban centers.
- 3. The transport corridor in its practical concept has been treated differently in different places, therefore it may not be effective or reliable for its users.
- 4. The connection of the settlements with the main transport corridor taken as a study case in this thesis research is not performed according to the needs of the residents and users.

#### **Data collection**

The first period of this research was concentrated in the re-edition of the research topic and further literature research focused on the main concept of Transport Corridors. The literature review part of the chapter "study of corridors" is focused on three main topics:

- Theoretical analysis of transport corridors,
- Analysis the different reports and officially approved documents,
- Case studies for transport corridors applications.
- Field visits and questionnaires in several settlements.
- Use of programs like SPSS for field data processing.

#### Research methodology

This sub-section describes the methodological aspects in general and their order in stages. Methodological details are given in Chapter 3. The latter contains the logical framework of the study with further methodological details coming after the conclusion of the theoretical discussion in chapters 1 and 2. Geographically, the transport corridor that is the subject of this study is located in the north-eastern part of Albania. The discussion on transport corridors starts on an international scale (where some examples are given) and then focuses on cases investigated such as context analysis "Egnatia Odos" and specifically as a case study is taken "Road of the Nation" which is part of several municipalities that extend in this region.

Former Head of State at the time and in 1999, the proposal was reintroduced for the former Country's Prime Minister following a tax impose on all goods and services in Albania. In July 2006, the government in consultation with the World Bank announced an open international tender. The length of the road is estimated at 170 kilometers. With the construction of this highway, travel time was reduced from 6 hours to 2 and a half hours, with a traffic speed of 80–130 km / h. In October 2010, the northern gallery of the Kalimash tunnel was opened thus marking the completion of the Durrës-Kukës-Morinë highway. The initial cost of the four-lane highway was estimated at around 600 million euros, but then it exceeded 1 billion euros. The highway passes through some important settlements in the region, such as Milot, Rrëshen, Rubik, Kukës, etc. The population of the region exceeds 38,437 inhabitants. The construction of this very important artery overshadowed the former settlements where the old road that connected Albania with Kosovo passed. The construction of the highway affected: a) Sevenfold increase in trade between the two countries since 2006; b) Fivefold number of tourists from Kosovo compared to 2006; c) 1.5-1.8 million citizens from Kosovo entered in one year; etc.

This research aims to use theoretical instruments to analyze the actual context and also the case study in Albania. These instruments include the stakeholder analysis involved in this concept, and which are directly related to this transport corridor. To better understand the level of commitment and satisfaction towards the project, the scale level was used, which has 5 levels of stakeholders. Three phases of analysis were used, the first of which included the analysis of stakeholders, the second the field observation and questionnaires, and the third the analysis of annual reports. These tools are the aspects that will be used during the case analysis according to the main concepts addressed in chapter 1 and 2. The selection of research principles and instruments is based on theoretical discussion and is therefore given in chapter 3. This part contains the logical framework for the study, which results from the theoretical review, where the formulation of the questionnaire questions designed in this research refers to the theoretical concepts. Therefore, before engaging in the observation of the transport corridor and its impact on the selected settlements, in the empirical chapter (chapter 3), a complete overview will be provided in the theoretical discussion on the main theoretical concepts raised in this introductory chapter, in which the cases are analyzed consequently, giving the elaborated results of the study.

The work consists of the following main parts:

- Literature review- theoretical analysis and review through the use of books, articles and papers, as well as some website resources / documents; and collecting information and analyzing annual reports with their results and findings on the case study situation through the use of official government websites, websites and project documents, maps displayed on the Internet, various reports on the situation of the analyzed context, statistical data from INSTAT (Albanian Institute of Statistics), data from different municipalities that are part of the region affected by the corridor of study. This document contains a complete list of sources of information and literature that are given in the Bibliography Chapter and all sources are also referenced in the text.
- <u>completion of Fieldwork This includes questionnaires completed with stakeholders and visual field observations as the main research tools. The interview formats reflect the theoretically made description of the principles on which this corridor operates and how it serves the residents. The way of formulating these questionnaires is further explained in section 3 (the way of formulating in annex no. 1), and some of the formats are given in annex no. 2. The selection of interviewees is designed in a way that covers all groups and different categories of individuals despite of using this facility or not. Initially the cases were identified with the support of the relevant directorate in each municipality that covers the area and stakeholders. In the 11 settlements in</u>

which the questionnaires were conducted, it was used as a criterion in their selection: a) Location, where they are positioned, either at the beginning, middle or end, close or away from the main line; b) Distance from the entry / exit point of highway; c) Different number of population (inhabitants); d) other general reasons. The questionnaires are intended to cover the case with information and not necessarily to describe the specifics of each case. As a result, there is a shift between questionnaires and direct discussion in stakeholders. This is also unavoidable because, depending on the area and cultural aspects of the community, people often prefer to come as a group, rather than be interviewed separately. However, in all cases, the interview also collects quantitative data about ordinary people and explores individual concerns as a means of assessing the profile of each case. A total of 5 types of questionnaires were formulated, one for each stakeholder (1. Residents (type 1), + Residents (type 2), 2. Investors, Shop-services; 3. Farmers, 4. Taxi driver + bus driver + Transport companies, 5. Individuals (key in flow), and the number of questionnaires depends on the population size of the settlement. The purpose of this questionnaire was to generate local information (Albanian case) and to support arguments on useful theoretical discussions as raised earlier in the theoretical deepening chapters.

The implementation of this questionnaire supported the researcher to gain an accurate understanding of the benefits that users have from this facility in the infrastructure and the gained access they have had. Therefore, the questionnaire was about expressing the satisfaction or dissatisfaction of stakeholders by ranking their answers in a rating system from -3 to 0 to +3.

The questionnaire was applied to urban and rural contexts for the following reasons: comparison of results in two different contexts; users have different frequencies in using this route; different stakeholders have different approaches to the importance and assistance that this artery can provide to the further development of the region - thus helping to better understand the theoretical concept of the corridor and the relationship they have with it. 560 questionnaires were completed, which is a representative sample for the total population of municipalities affected by this corridor directly or indirectly (stakeholders) of about 61,265 inhabitants. The questionnaires were developed over a period of 2 months, having conversations with residents or other stakeholders during the time of questionnaire completion. These questionnaires were developed by the topic researcher herself, avoiding subjectivity in the interview process. The format of the questionnaires is also given in annex no. 2. Again, it is necessary to emphasize that the use of this questionnaire was of indirect interest to this

research and it served to increase the researcher's understanding of the concept of the corridor, its attendance and users' perception of the values of this facility for access in the region. The questionnaire produced data in response to the research questions of this research. For the determination of the inhabited areas where the questionnaires were completed, the map griding method was considered. Which makes the griding map of the settlement and in each of its frames the nearest residence is taken into account. Confirmation was then received from the local government if questionnaires could be developed in these residences.

- <u>iii)</u> **Data processing -** the data were grouped in excel as initial results; the information contained in the questionnaire and the results provided were processed in SPSS.; in GIS for mapping and linking qualitative information with the territory and borders, graphic processing in illustrator for study dates and maps.
- <u>iv)</u> Analysis and findings the type of analysis is described in detail in section 3.4, with the completion of the theoretical framework and conclusions together with the results in percentage and in the evaluation system. However, at this stage, the analysis can be defined as having the following dimensions: theoretical analysis of key concepts; analysis of the transport system in the region; corridor frequency analysis; analysis of the approach of stakeholders towards the importance of this corridor; analysis of the impact that this corridor has at a national level.
- <u>v)</u> Theoretical discussion The discussion, theoretical analysis and findings from the fieldwork conclude with theoretical models and a list of some definitions of what can be understood by the "transport corridor" that follow the Critical Observation. At the end of the empirical part, a reflection is made on the models, the main findings and possible research results (these are theoretical and graphical / schematic results). Furthermore, topic limitations are addressed and provided as a research opportunity in the recommendations section, and the research objective and main question is reviewed to assess the contribution of this research to a theoretical level and to determine future research needs.
- vi) Conclusions on the Albanian case study in addition to confronting the theoretical models, the conclusions of the empirical discussion make a different reflection of the situation within the generation of conclusions through 3 groups with different specifics, orienting the conclusions towards social and economic specifics for settlements. These findings also lead to recommendations that other scholars and researchers on these topics of interest can further use.

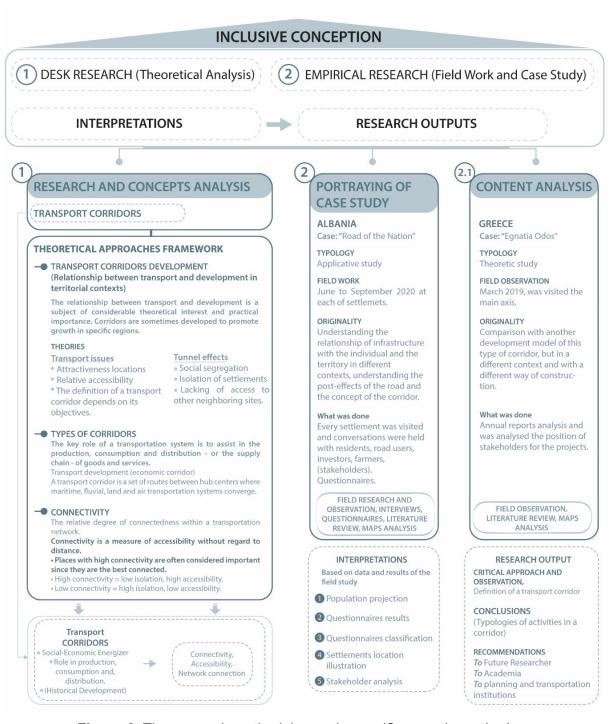
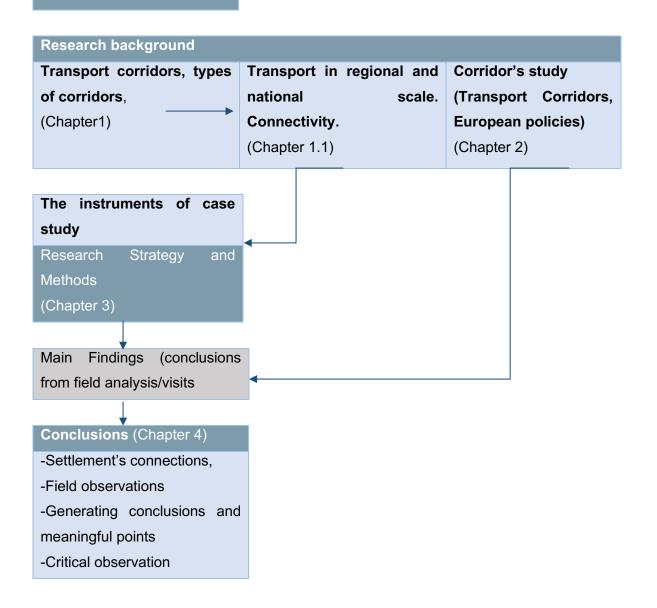


Figure 6. The research methodology scheme. (Source: the author).

#### Structure of the thesis

Introduction



### **Chapter 1. TRANSPORT CORRIDORS**

In this chapter, the concept of transport corridors has been addressed broadly, including focusing on key concepts and addressing them as appropriate. The concept of transport corridors is closely related to the relationship it has with the development it brings to the regions it passes through and influences. Sub-chapters of this chapter will gradually approach problems of transport, transport corridors and its structure, then the concept of "tunnel effect" is analyzed, and the types of corridors which are divided into: maritime corridors, inland corridors, land corridors (road, rail), air corridors, multimodal transport corridors, Where the latter relates to components and functioning of a corridor, components of a trade and transport corridor. These concepts treated in the way they affect the distribution of economic and social impact are then related to the concept of network effects that is implied by spillover effects and cost benefit.

#### 1.1 Transport development

The relationship between transport and development is a subject of theoretical and practical importance, which has received much attention for many years in developed and underdeveloped countries. The interdependence between the level and structure of transport resources and the average standard of living of the region's population is an important factor influencing economic and social progress and must be taken into account at all stages of national planning and regional development.

The words quoted above are expressed by the author Hoyle, who in his studies on the transport sector, clearly argues its importance in relation to other activities that take place in the territory.

In the advanced countries, much attention was paid to transport innovation during the formative years of industrial growth; today, new strategies of economic planning require the modification or renewal of inherited transport systems. In the less-developed countries, there is widespread concern for transport in the context of the desire to promote rapid economic development (Hoyle, 1996).

The study of transportation is not the prerogative of any discipline, but is shared by many fields of study, each with its own perspective. For geographers, the prime importance of transport stems from its role as one of the main factors influencing the location and distribution of economic and social activities.

Geographers are thus concerned with the changing spatial structure of transport networks in relation to other aspects of the landscape, and with the factors affecting changing patterns of traffic flow (Hoyle, 1996).

Ideas about the nature of the relationship between transport and development have changed considerably over time. Of course, the basic importance of transport is not in question: transport is clearly a factor of fundamental importance in all economic activity, and the cost of transport one of the most significant variables in the market price of any commodity (Hoyle, 1996).

But beyond the basic level of infrastructural provision, where transport (like labor, capital, markets, land and power supplies) is an obvious sine qua non for modern economic growth, it quickly becomes a matter for debate and inquiry whether, as development proceeds, it is advantageous to extend or otherwise improve transport facilities, or whether limited capital resources available for investment might more efficiently and beneficially be used in other ways, (Hoyle, 1996).

This is an issue of concern to development planners and it is important to maintain awareness of the multidimensional nature of the issue: the economic, social, political and spatial dimensions of transport. that it is often the political dimension in which particular situations and problems are considered first.

The transport sector may, with some justification, be regarded as an epitome of relationships between terrain, economic history, social and political systems, and levels and patterns of development (Hoyle, 1996).

#### 1.2 Transport issues

"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).

At a general level, it seems that these links are well established, the methods we have available for the analysis of the links between transport and urban development is not adequate, particularly in the context of the changing nature of cities and the globalization of the world economy.

Cities are changing with the movement of people and businesses out from the center, increased suburbanization and the desire for lower residential and job densities. Suburbanization of employment has followed, and the simple local journey-to-work pattern or the public transport based movement to the strong central area employment location has been replaced by more complex longer distance car based movements (Banister, Lichfield, 1994).

"The exodus from cities is partly caused by a lack of affordable housing in city centers, but also because of higher income levels, higher car ownership levels and the desire for more space. Investment in new roads to accommodate the new demand patterns may only result in further suburbanization and the abandonment of the city center".

Such phenomena have occurred in many countries but their reasons are different, the author mentions them as the reasons for frequency increase in the of centers during certain hours and the emergence of the need for development of roads that connect city centers with other countries.

In the past, further transport investment in cities has been argued firstly, on the basis of how to allocate growth, and subsequently on the main means to promote economic development and the revitalization of depressed areas (Banister, Lichfield 1994).

"Yet the evidence seems to suggest that in advanced Western economics, the addition of new road links means that more traffic will be generated, making the environment more polluted and increasing the mobility problems for those without access to a car.

In addition to housing and employment migrating out of the city, shopping centers, science and industrial parks and leisure facilities, have all moved to green field sites where the densities of development are much lower and access is made primarily by the car. The net result has been an unprecedented growth in car-based travel with longer journey lengths, yet the transport infrastructure has not been expanded at the same rate".

The emergence of such great needs for the car has come as a result of the movements over greater distances and the necessity to reach the destinations on time.

As Blonk (1979, p. 331) concluded some years ago, "transport is a catalytic force; it is both an agent vital for industrial growth and an agent for decline where economic resources and conditions and human endeavor are insufficient to meet competition of outside areas".

# "At the regional scale, the links between transport and development are also evident".

Major transport infrastructures, such as international rail links, airports and ports, all have a substantial effect on local traffic, employment and the local economy. Apart from the direct employment in transport activities, these major transport infrastructures have substantial multiplying effects as they must be served by a range of firms and industries.

"Planners, economists and urban policy-makers have been concerned about growth in urban traffic, particularly the increase in journey lengths and the reliance on the car. As noted above, part of the explanation for this increase in travel has been the decentralization of cities, the development of local centers of activity within the expansive city, and the concentration on particular functions (e.g., specialization in banking and financial services)".

# "However, the links between transport and urban development are not well known, even in a physical sense".

In addition to the physical relationships (e.g., density), there are important economic factors (e.g., rent levels and land prices), social factors (e.g., equity and distributional factors) and environmental factors (e.g., quality of life).

In each case, transport has an important influence, which is well accepted at the general level, but at a more detailed level both the methodologies for analysis and the empirical evidence are limited.

### "It is widely accepted that major new transport infrastructure has a significant impact on the local economy and development potential of an area."

The logic of accessibility changes gives a region a new competitive advantage over others, which in turn translates into higher levels of efficiency and productivity. However, there are a number of complications ranging from evidence of changes in land values and rent levels due to new investments, to the debate over whether the new activity is in fact a new activity. or the transfer of activity from one place to another.

At the regional level, much infrastructure investment is justified on the basis of regional development benefits which accrue directly from improved accessibility. These benefits include a greater attractiveness for new firms who might move to the area, cheaper distribution of goods and a general expansion of the labour market areas (Banister, Lichfield 1994).

However, there are counter arguments, in particular as to whether major investments, such as high-speed rail links, actually increase centralization and the benefits to peripheral regions are minimal. Where local benefits are found, they are very highly localized and small in scale. The high-speed rail network in Europe has been used to argue the case both for and against the regional impacts of transport infrastructure.

Traditionally, it has been argued that transport costs form only a small part of total production costs. In Western economies, where there is already a dense network of routes, any additional link in the network is only likely to improve accessibility marginally. Other factors such as labour supply, access to markets, availability of land, government grants and incentives are all more important factors in the location decision.

The logic of this argument is that the transport infrastructure is not a primary factor in determining where a firm or household should locate, **but that it is a secondary factor**, **at least in developed economies**. Yet it is often cited as a major reason to justify investment in peripheral regions, and in locations where there is high unemployment or where restructuring of the economy is necessary (Banister, Lichfield 1994).

#### 1.3 Transport Corridors Structure

It is of conventional wisdom in development theories to consider inequalities as a structural factor of spatial accumulation (Dwyer, 1990).

Transportation, among other factors, reinforces spatial inequality by linking the most productive places.

When a set of large cities are interacting at the regional level, they reinforce the regional spatial inequality of accessibility by their corridors of interaction; transportation corridors.

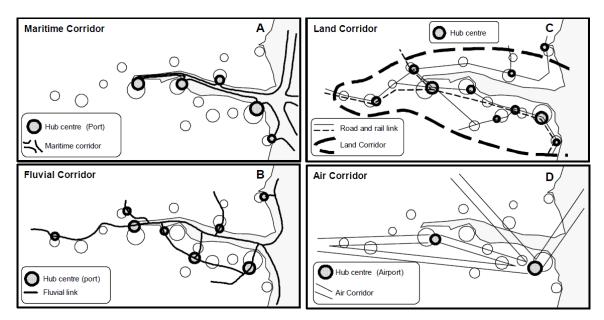
"From an economic perspective, transportation corridors provide two fundamental attributes for territorial development: <u>lower distribution costs and land supply for diverse activities".</u>

Since spatial accumulation tends to occur at productive places where there are adequate land supply and accessibility, corridors are in that context an efficient regional urbanization structure.

The emergence of transportation corridors, as a process, is the overlay in time and space of diverse transportation modes where they (the corridors) become the structure of urban regions. We can no longer speak of a set of interacting cities, but of a regional transactional space composed of diverse - more or less linked - specialized economic functions; a new spatial region (Rodrigue, 1996).

Geographical and historical conditions create a basic set of regional inequalities in accessibility that the subsequent economic, demographic and transport developments strengthen. Contemporary urban regions have their anchor points along a fluvial axe, a coastal plain, a natural harbour, or any geographical feature providing accessibility, notably an efficient maritime / land interface.

We suggest here that corridors are the structure behind the emergence of most urban regions where transportation supports transactions and spatial accumulation along a privileged axe. Corridors can be classified in four modal structures; maritime, fluvial, land and air corridors (Rodrigue, 1996).



**Figure 7.** Transportation Corridors in Pacific Asian Urban Regions. (Source: Jean-Paul, Rodrigue, 1996).

#### **1.4 Transport Corridors**

#### "There is no commonly agreed definition of a transport corridor".

The corridor concept in this case is confined to the resources, facilities and services that are available to ensure efficient freight transport within the corridor, and the external connections. A distinction is often made between an 'economic' corridor and a 'transport' corridor.

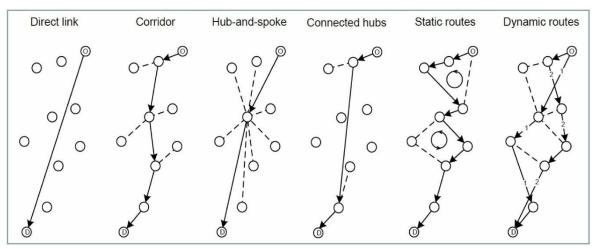
The transport corridor definition is closely related to the functional region concept (SUTRANET WP 1, 2005).

A transport corridor represents an important structure to serve and strengthen the functional characteristics of a region, as well as the corridor could provide important interconnections and communication between two or more separate functional regions (Kristiansen, J. et al. 2005).

"Corridors are lines of concentration of socio-economic activity that connect two or more sovereign countries".

"The public sector generally takes a large interest in the transport system as part of developing the society and because transport activities build on economies of scale requiring shared resources, and that traffic affects also non-users resulting in potentially conflicting goals. Besides the obvious role of supplying infrastructure, there is often a large share of public ownership in firms supplying transport services. It is most pertinent in passenger transport over short distances, but also railways, airlines, forwarders and postal services have a long tradition of state ownership."

"In transport network theory, a corridor is only one way of connecting an origin (O) to a destination."



**Figure 8.** Six options for transport from an origin (O) to a destination (D) in a network. (Source: Woxenius. 2012).

"The transport corridor is a design based on using a high-density flow along an artery and short capillary services to nodes of the corridor. The nodes are thus hierarchically ordered. In this example, O is a satellite node, and D is a corridor node. Corridors often origin in concentrations of population and industry in linear belts with natural resources or fertile soil, or in the supply of natural infrastructures like rivers." (Woxenius. 2012).

**Table 1.** Six significantly different theoretical designs of transport systems. (Source: Woxenius, 2007; improved by the author).

Options	Theoretical analysis	Conclusions of the research
		thesis author
Direct link	"In the direct link alternative,	This is a direct and uninterrupted
	transport is obviously direct from	connection pattern from O to a
	O to D, and there is no	destination D. In these
	coordination with transport	examples, the phenomenon
	between other O-D pairs. Also,	known as the <u>"tunnel effect"</u> can
	no other nodes are involved."	also be created.
Corridor	The NVF Dictionary, version 2 (Nordic	A transport corridor serves to
	Road Association, Technical Committee	connect two nodes at a certain
	No. 53, September 2002) describes a	distance but between them
	transport corridor as "A set of essentially	many other inhabited centers
	parallel transport facilities offering	can interact and access these
	alternative mode choices between two	two important centers for the
	points".	region.
	Transport systems concepts and	
	Definitions.	
	"The transport <i>corridor</i> 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. In this example O is a satellite node,	
	and D is a corridor node.	
	(Woxenius, 2012)"	
Hub and	"In the <i>hub-and-spoke</i> layout,	In this network model, one of the
spoke	one node is designated the hub,	centers is most important and
3,500.0	and all consignments call this	contains the functions that other
	node for transfer, even for	centers need; thus, they create
	consignments between adjacent	direct connection with it and then
	origins and destinations.	secondary links between them
	Terminals are then either hub	

terminals or spoke terminals.

While the operations follow simple principles; the challenge is to coordinate a large number of interdependent transport services (Woxenius, 2012)."

that pass from the most important center.

A conceptual framework to capture the geographical effects of contemporary infrastructure networks. Hubs are the dominant nodes that articulate and connect the flows of major infrastructure systems. Spokes are infrastructure connections that radiate from hubs to serve subservient places (Graham and Marvin, 1996).

Connected hubs

The connected hubs design is another hierarchical layout in which local flows are collected at hubs that in turn are connected to hubs in other regions. It can thus be described as a direct link with regional consolidation. Also, here terminals are either of the hub type or the spoke type.

In this scheme of network models, residential centers stay in a hierarchy order, they are connected to other centers and function as a region.

Static roads

"When using the static routes design, the transport operator designates a number of links to use on a regular basis. In contrast to the hub-and-spoke layout, several nodes are used as transfer points along the route. Usually only a part of the load is transferred, and the rest stays on the transport means to the next node. The term exchange terminal is here used if only parts of the unit loads are

In this scheme, there are a series of points that are intertwined with one another. These centers may be terminals, ports, airports and residential centers that have specific needs for the services provided.

Their mode of operation is well organized and correct.

exchanged; terminals with full exchange between trains are referred to as gateways. In figure 8, O is on a one-way loop, connected by a feeder link to a two-way loop, which in turn is connected to D through another node."

# Dynamic roads

"The maximum flexibility is offered by the *dynamic routes* design. Links are designated depending on actual demand, and the network operator can choose many different routes between O and D. Transport services are planned by rules of thumb or optimization methods. In an extreme form, routes can be changed during transportation.

Transport networks can be of a complex design using several basic designs. Hence, the layout principles are not mutually exclusive. The example of domestic hub-and spoke systems in combination with other domestic systems making up a connected hubs system has already been mentioned. If the hubs themselves are significant sources and sinks, users of a direct link are then combined with users of a connected hubs design."

In this scheme the links are dynamic and generated by the requirements of the inhabited centers, terminals, etc., for links with other countries and between them.

An imperative is to define what a transport corridor actually is and surprisingly the definitions are rather few and somewhat limited. One is that a transport corridor is

"generally linear area that is defined by one or more modes of transportation like highways or public transit which share a common course. Development often occurs along transportation corridors because they carry so many people, creating linear agglomerations like the New York Strip or the linear form of many neighborhood retail areas" (COMCEC, 2017).

"Consequently, the definition of a transport corridor depends on its objectives. If mostly political, then expect the corridor to become an almost nebulous network of routes that merely has a common geographical orientation. But if the corridor has economic objectives, then expect it to be of a much narrower format offering traders and travellers the shortest and least costly alternative."

"Transport corridors are mostly certainly advantageous to land locked countries, (Arvis 2011) notes that the logistics performance indices (World Bank, 2016) for landlocked countries is usually lower than maritime countries and the existence of transport corridors makes a significant difference to price and time."

"Transport corridor development in many cases is either a part of a process of **regionalization** or a precursor to it."

"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). The main **components** of a transport corridor are typically a gateway port, hinterland road and rail networks, inland ports or dry ports and border controls. In addition to land corridors there are also sea corridors, especially short sea "bridge substitutes" (Woxenius, 2012) and aviation corridors as well. Invariably all transport modes follow a similar orientation and serve the principle conurbations within its tract."

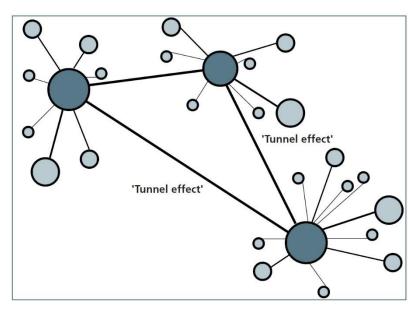
"The corridor concept is also used for development of transport systems with less focus on a linear geography".

#### 1.5 Tunnel effect

This little-known concept for infrastructure developments has been especially addressed today by environmentalists in a highly discussed issue not only in the infrastructure but also in the environmental aspect.

Infrastructural developments that have come as a necessity of creating fast connections to the main settlements have brought an inability to participate in development due to isolation. Secondary or tertiary settlements have not been included in these direct transport lines, creating not only territorial but social segregation.

In those parts where the infrastructure is affected by such solutions has had immediate connections, reduced time for achieving a desirable destination but, this has brought an isolation of settlements, causing them lacking access to other neighboring sites.



**Figure 9.** The logic of unbundled infrastructures: a schematic representation of 'hub and spoke' infrastructure networks which use 'tunnel effects' to traverse non-valued territory. (Source: Graham and Marvin, 1996, 59).

Andreu (1998), reports that 'in our search for maximum speed, roads have been turned into tunnels. But this tunneling effect is not only confined to roads. Present in all modes of transportation today, tunneling isolates us from reality and cuts us off from the intelligible world. This is even true with trains and airplanes' (1998, 59).

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.

## 1.6 Types of corridors

In all the range of types of corridors are specified some of them as the most frequented and that have an important role in the way of moving flows, generating activities and the way the goods are distributed in the territory.

The key role of a transportation system is to assist in the production, consumption and distribution - or the supply chain - of goods and services.

Trade, transportation, and development are by no means unrelated. Obviously, trade, whether within a country or overseas, is dependent largely upon the various transportation networks and corridors, on the sea, on inland waterways, across the land, or in the air (Rodrigue, 1996).

A transport corridor is a set of routes between hub centers where maritime, fluvial, land and air transportation systems converge (Fleming, 1999). The nature of convergence in modal corridors is twofold:

First, there exist hub center-related convergence where transhipment functions are of prime importance and settle the capacity of the distribution system (Flemming & Hayuth, 1994). This is the case of maritime, rail and air transportation and also for some parts of fluvial transportation. In those conditions, hub centers tend to have a radial influence in space.

Second, infrastructure related convergence where shipment infrastructures are the transport system's capacity constraints, like road transportation, and to some extent fluvial transportation (Loo, 1999).

The structure of corridors lies within a set of interacting hub centers where converge modal interactions. Hub centers can be classified in four modal structures: maritime, fluvial, land and air corridors.

#### 1.6.1 Maritime Corridors

International trade and maritime transportation are closely related and enable the establishment of closer trading links between continents. There also exists an important logistic process for the operational exploitation of maritime transportation by a management of transhipment infrastructures and means of shipping. Each of these components converges in places of reduced discontinuity that correspond to littoral zones with a developed regional distribution system providing demand on maritime transportation.

"Ports are often the chief facilities linking an economic system with the international market and therefore represent the main hub centers of trade (Takel, 1978). Ports are above all multimodal places and points of convergence of inland transportation (Hayuth, 1987). With the economic growth of their foreland and hinterland, an increasing demand over the port system is felt. The capacity of ports to transit goods imposes a limit to economic development."

"One of the strategies is therefore to enable the multimodal capacity of the port to fulfil joint demand of the foreland and hinterland with a heavy reliance on the logistics performance of the infrastructures for shipment and transshipment.

The logistics of maritime transportation have experienced important changes during the last 25 years and several ports have specialized in the concentration of transhipment activities (Hayuth, 1982; Wang, 1998)."

Hub centers thus require specialized high-capacity transhipment infrastructures. However, infrastructures are not the only one dimension in port restructuring, where others like location, maritime services, and strategies pursued by maritime companies, and inland distribution system play a crucial role (Bryan, 1998).

"Maritime transportation is very flexible in terms of choice of routes. However, the fixity of ports coupled with economic, political, and physical constraints between them impose the creation of maritime corridors (Pearson & Fossey, 1983)."

"The maritime corridor is a non-discrete path between maritime hub centers, which are places of transhipment functions. The summation of those functions implies a maritime/land interface where maritime corridors are connected with fluvial and land corridors. Considering that maritime corridors have almost an unlimited capacity, the capacity of maritime transportation is related to the transhipment capacity of ports. Maritime corridors are structured by the integration of maritime services and transhipment functions to maritime distribution functions at hub centers (Frankel, 1999a)."

"The world has become a system of shipping networks in which individual ports are linked into intricate patterns of dependency in hub/feeder relationships as well as into end-to-end shipping linkages that reflect the increasing trade dependencies between regional and global economy (Robinson, 1998)."

"According to Frankel (1999b), the rapid growth of some regional ports provides the necessary cargo threshold conditions for inclusion in new or existing feeder or mainline networks. These ports provide new options for maritime corridor development. But in a competitive regional environment, inclusion in shipping networks has underlined the need for efficiency as well as growth; and these conditions have impacted on, and will continue to impact on management and ownership strategies ports around the world (Flemming, 1999)."

#### 1.6.2 Inland Waterways

An inland waterway, even if slow, offers a high capacity and a continuous flow. Ports perform the role of hub centers by providing fluvial/land and fluvial/maritime interfaces. The fluvial/land interface, often rely less on transhipment infrastructures and is thus more flexible.

"Ports may seem less relevant to fluvial transportation but fluvial hub centers are experiencing a growing integration with maritime and land transportation, notably since the emergence of the container. Several industrial regions have emerged or are emerging along a major fluvial axis such as the Rhine River axe in Europe."

Roads and railways have overshadowed the older transport network, which is inland waterways, diminishing their importance.

"According to Janelle and Beuthe (1997), the European Union situation relating to inland waterways corridors is instructive. While the Rhine River is open to competition, waterway traffic among the Netherlands, Belgium, and France is strictly regulated by the state or by collusive agreements among concerned parties."

A new dimension is being offered for river transport, creating an interconnection between sea and river navigation, this provides a new circulation system.

The places of convergence of fluvial transportation correspond to important waterways having access to port infrastructures and industrial regions. Charlier (1996) suggested that the prosperity of Rotterdam in the Netherlands, and Antwerp in Belgium is partly conditioned by their hinterland relationship with inland navigation, especially into the Rhine system.

#### 1.6.3 Land Corridors

Land transportation corridors can be divided into two modes having separated but often integrated logistics: road and rail.

#### > Road

"Road transportation is by far the most flexible land transportation mode (OECD, 1992). Its importance has increased with the fragmentation of economic systems over vast territories and the growth of the light industrial sector. It handles generally small shipments between several points of origin and destination."

"Road transportation, usually, provides only haulage services, except for important road haulage companies managing a fleet and providing transhipment with other modes. The corridor associated with road transportation is not limited to places adjacent to major road axes, but also to points and other facilities located within a peripheral zone. Road hub centers are crossroads where they locate warehouses, truck yards and any land transportation structure."

"However, Black (1993) suggested that integration with other modes favor the convergence of regional road transportation towards hub centers of other modes, notably ports."

"A key point here is that these European road corridors do:

- a) Funnel traffic in particular directions;
- b) Concentrate traffic;
- c) Stimulate growth and activity along the corridors;
- d) And, are catalysts for change, for example, in the standardization of transport documentation systems and cross border procedures."

#### > Rail

Rail transportation offers simultaneously speed and capacity, but at the expense of flexibility. It offers an efficient interface between maritime and land transportation systems. This is even truer with the appearance of containers and the impact of multimodal transportation over inland rail distribution systems.

Rail logistics are highly complex and imply network management strategies under several constraints of capacity, schedule, nature of shipments, origin and destinations (Henstra & Woxenius, 1999).

Rail and road corridors in Europe are seen as the arteries of the continent and are both the focuses of very powerful policy measures. The aim of these policy measures is to "shrink" European regions, reduce the problem of peripherals and create an integrated European transport network.

"The European Union is trying to implement rail corridors under the "Trans-European Rail Freeway" concept in order to boost the efficiency of European multimodal transport corridors. It is a system of rail freight freeways, where services are provided in a competitive environment by all licensed EU-based railway operators, allowing for fast, frequent and predictable freight transport by rail in shuttle trains along the main trading axes (Eberhard, 1999a & 1999b)."

"The freight freeway concept was launched as a concept in the early 1997 and four 'freeways' are currently in operation but with only limited success:

> **Belifret Freightway**: Connecting Antwerp, Brussels, Luxembourg with Lyon and Marseilles with connections to Turin, Milan and Gioia Tauro in Italy and the

Spanish cities of Barcelona and Valencia. The service commenced in January 1998 and is provided by the national railways of each country.

- ➤ **North-South Freightway Freeway**: Connecting Rotterdam, Hamburg, and Bremerhaven to Vienna, Milan, Brindisi and Gioia Tauro. It is also operated by national railways and started in February 1998.
- ScanWays: This has been linked with the above freeway and provides direct service between Oslo, Stockholm and Gothenburg, and Austria, and Italy. It started in November 1998 and extended to Helsinki. This service is provided by the national railways of the respective countries.
- ➤ London-Sopron (Hungary) Freeway: This links London with central and Eastern Europe. It is the result of initiatives by Rail freight Group and the European freight and Logistics Club. The startup of this service is imminent".

In February 1999 at Containerization International, it was stated that the European rail freight business was characterized by very high access tariffs, prolonged transit time and poor quality of service, lack of priority leading to poor reliability and so on. All these showed the problems with the implementation of corridors in the European Union.

According to Baasch (1999), these are some of the main reasons why US rail corridors are vastly more efficient than their European counterparts. Nonetheless, the European Commission is pursuing this 'freight freeway' policy actively.

Since land transportation infrastructures are the reflection of the territorial structure, land corridors emerge between major hub centers. They are notably the regional extension of a maritime/land interface where ports have access to their hinterland (Charlier & Ridolfi, 1994).

In order to have efficient transportation systems, several North American and European cases are presented, where for these transport corridors there are studies that show the high level of infrastructure and institutional development.

#### 1.6.4 Air Corridors

To connect the city centers, in a faster and more efficient time, is provided international air transport.

"The strategy of the majority of international airports is to consolidate regional links, create new national and international services for passenger and freight, to raise

their capacity and to make land transportation systems converge towards them (O'Connor, 1995)."

"If an airport succeeds in positioning itself according to those criteria, it will become a point of convergence and interface at the regional and international level; an air transportation hub center (Flemming & Hayuth, 1994). The vitality of the air transportation hub is tied to its global accessibility, thus strengthening the role of airports in economic development."

"Flemming and Hayuth (1994) have argued on how 'centrality' and 'intermediacy' are two significant influences upon the location of a major transport hub. They also suggested that 'proximity' to large facilities in contrast to smaller ones could also be another important factor. They believe that the influence of these concepts' changes over time, and that the patterns of air corridors' changes with them."

## 1.6.5 Multimodal transport corridors

Over time, the importance of intermodal and multimodal transport has been better established.

"The usage of containers shows the complementary between freight transportation modes by offering a higher fluidity to movements and standardization of loads (Mahoney, 1985)."

"Multimodal transport enables economies of scale within a transportation system where modes are used in the most productive manner (Andersson, 1996; Huerta, 1996). Travel time and costs take a fundamental importance in the globalization of trade and consequently in transportation."

This is even more reinforced by "just-in-time" production and "door-to-door" service that require a low inventory level and movements between several points of origin and destination.

The development of new modal and multimodal infrastructures on a global scale has increased the growing accessibility to the international market; several parameters of international transportation have been transformed or at least modified.

The figure below, where regional and local transport networks converge, shows the movement along a corridor within a multimodal transport system, consisting of several key competing centers.

## 1.6.6 Generic Multimodal Transport Corridor

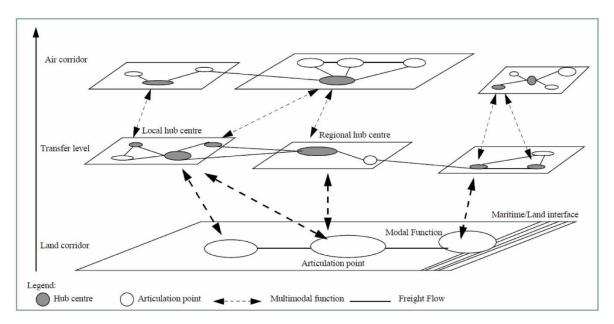


Figure 10. Multimodal Transport Corridor. Adapted from Jean-Paul Rodrigue (1996).

"A hub center can simultaneously have a modal and multimodal convergence functions, particularly if it is the interface between several modal corridors. An international multimodal network converges at hub centers allowing linkages with the transportation system through a maritime /land/air interface. Hoyle (1996) suggested that ports could be the main agents of that function."

"An 'articulation' point is an interface between several modes of transport, it is a gateway. Multimodal transport reinforces the articulation point as a main transport management and value-added center. The volume and the nature of the traffic it handles measure the importance of the articulation point (Robligio, 1996)."

"An international articulation point will transit important maritime, land and air traffic. It will also have an area of influence that will encompass several regional hub centers. This notion of articulation point cannot be separated from port infrastructures, where a port acts as an articulation point between a foreland and a hinterland (Hayuth, 1982)."

"The aim of a transport system is to link economic activities, therefore supporting a number of articulation points along multimodal transport corridors (Manouch *et al.*, 1996)."

"Multimodal transport corridors will provide an accessible penetration axis for fragmented production systems over a territory or a region. Articulation points, as gateways, will play a fundamental role in a regional economic system, especially as centers of distribution. The tendency for an articulation point is to develop and reinforce its transhipment functions between foreland and hinterland (Hayuth, 1991)."

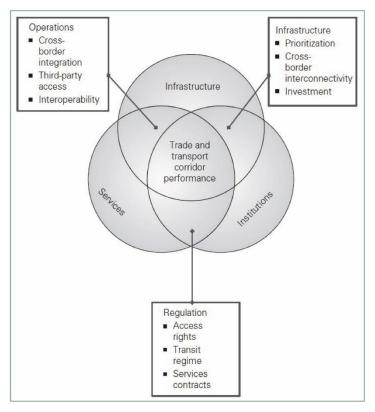
Rodrigue (1996) suggested that as long as an economic system requires the distribution in space of goods, people and information, transport and communication would play a role in the structure and regulation of countries, regions, and their transactional networks. Congestion that may appear along a transport corridor will imply higher distribution costs and even un-reliance of supply. According to Gillis and Damas (1998), this will force the findings of new alternatives and new logistics practices, which can change the regional importance of several articulation points.

#### 1.6.7 Components and Functions of a Corridor

"A corridor has three main categories of intertwined dimensions: infrastructure, services, and institutions for coordinating corridor activities".

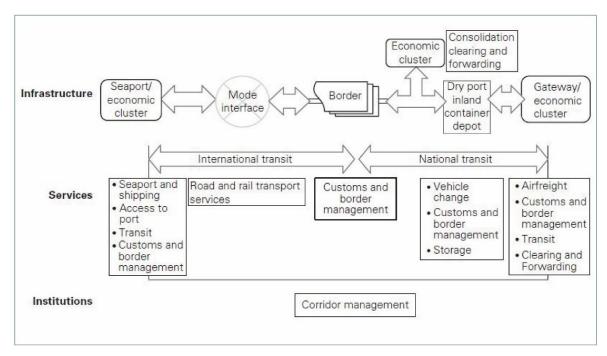
A trade corridor and transport in its usual form, has an international port (airports, ports, land border), on one side and on the other side has a large metropolitan site or production cluster.

"In fact, as Arnold (2006) argues, some corridors are developed to increase traffic volumes at a gateway."



**Figure 11.** The Infrastructure-Services-institutions Nexus of Corridors. (Source: Kunaka Ch., Robin C., 2014).

## 1.6.8 Components of a Trade and Transport Corridor



**Figure 12.** Components of a Trade and Transport Corridor. (Source: Kunaka Ch., Robin C., 2014).

#### A corridor can play various functions. It can:

- Facilitate the prioritization of investments in infrastructure, policy reform, and services:
- Facilitate network effects, by promoting the consolidation of trade and transport volumes through a few links and nodes, which in turn can encourage improvement in quality of service;
- Influence spatial planning and development in sub regions and countries served;
- Help enterprises optimize their production networks.

#### 1.7 Network Effects

"Corridors are subject to network effects"

To reduce costs for all users is needed a critical mass of users, causing a symbiotic relationship between infrastructure and high-quality service by promoting usage, attracting even more traffic generated by the provision of high standard infrastructure and services. Indirect benefits come after increased use which causes the production of goods in the regions served by the corridor.

In conclusion, one of the primary tasks is to market and promote a corridor where they exist and where they extend their effect beyond direct impact.

# 1.7.1 Spillover effects

"One of the major challenges faced with corridors is determining the area or region that will be affected."

In most cases, the effects of a project extend beyond the boundaries of the immediate area. The effects of the spread from the development of international corridors reach their maximum when improvements in one part of the border encourage the creation of traffic or improvements in services on the other.

In this regard, diffusion effects are a product of network effects and also cause the transfer of costs and benefits to other regions.

However, in most projects the assessment of such effects is still at a very early stage; estimates have only been made in a few developed regions, such as Europe.

"Burghardt (1971) shows that corridors integrate the territorial functions of economic systems and the distribution functions of transport systems and that trade gateways have influence and control over a definable hinterland. It is therefore necessary to define the geographical region that forms a corridor's catchment area. However, most countries, including landlocked countries, have access to several competing

corridors, complicating the assessment of effects of the development of any one corridor. Their catchment areas and therefore their impacts can overlap, complicating the process of attribution of effects from individual interventions." Corridors serving landlocked countries are a special case. In low-income landlocked countries, the problem of distance is exacerbated by physical, bureaucratic, regulatory, and legal barriers associated with crossing borders. Low trade volumes limit the bargaining power of such countries with global logistics groups, often forcing them to rely on foreign intermediaries to consolidate shipments. As argued above, the corridor approach offers advantages to these countries in accessing higher-quality infrastructure that helps consolidate flows, which in turn justify higher-quality infrastructure and services.

#### 1.7.2 Cost-benefit effects

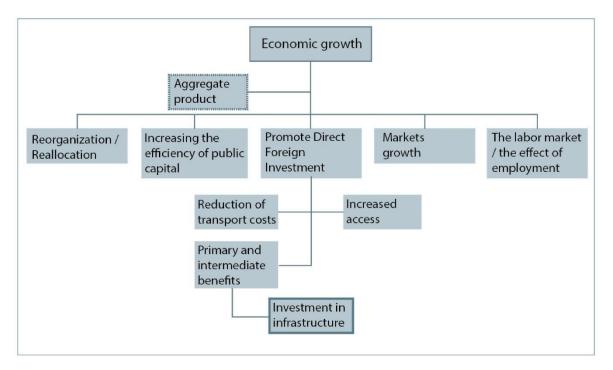
There are two major benefits of the economy, which come as a result of an improved or developed road transport system. These benefits point to reducing the cost of transport and increasing cross-regional access. Taking into consideration these benefits, it is expected that transport will directly and indirectly influence (through other factors) as appropriate.

Based on the OECD Report (2002), in the cost-benefit analysis of infrastructure investment, the user benefits from travel time, reduces vehicle operating costs and increases safety. Furthermore, road infrastructure investments have a socio-economic effect, which refers to indirect impact - economies of scale, better production and higher private investment, reorganization and rationalization of production, increased specialties, larger markets.

Investments in transport have an impact on cost, labor productivity and labor supply, where these public investments in infrastructure have direct effect on intermediate input costs and increase access. This in turn brings the reallocation effect, increases the efficiency of private capital, attracts domestic and foreign direct investment, delivers market expansion, generates labor market and efficiency in employment. All of these effects bring improvements to aggregate productivity, stimulating economic growth.

Referred to the Seetanah author who has studied the transmission channels between road infrastructure investments and economic growth, we understand that infrastructure projects have a significant impact in the region, thus further promoting the development of other sectors.

Channels through which public infrastructure investments affect the final product and economic growth are summarized in the chart below.



**Figure 13**. Transmission channels between investments in road infrastructure and economic growth. (Source / Seetanah, 2009)

The graph shows that public investment in infrastructure has a direct impact on intermediate input costs and increases access to the infrastructure. This in turn brings the reallocation effect, increases the efficiency of public capital, attracts domestic and foreign direct investment, delivers market expansion, produces labor market and efficiency in employment. All of these effects bring about improvements in aggregate productivity, stimulating economic growth (Seetanah, 2009).

#### Main findings of the chapter (conclusions)

In the conclusions of the theoretical research about the concept of transport and transport corridors are listed some of the main findings of the theoretical aspect studied by different authors. These conclusions are the main ones for the continuation of the research topic and their reflection in the further research steps.

Author	B. S. Hoyle 1996
Findings	"Transportation is clearly an important fundamental factor in all economic activity
	and its cost is one of the most important variables in the market price of any
	commodity. This sector is often seen as an embodiment of the relationship between
	terrain, economic history, social and political systems, and development models."
Author	Banister D., Lichfield N., 1994

Findings  Author  Findings	"Transport sector has a major impact on the spatial and economic development of cities and regions. At the regional level, much infrastructure investment is justified on the basis of regional development benefits that accrue directly from improved accessibility. These benefits include a greater attractiveness for new firms who might move to the area, cheaper distribution of goods, and a general expansion of the labor market areas."  Blonk W.A.G, 1979  Transport is considered a catalytic force and at the same time is a vital agent for industrial growth, it is also an agent for decline when resources, economic conditions
	and human efforts are insufficient to meet the competition of other areas.
Author	Rodrigue J.P., 1996
Findings	"From an economic point of view, transport corridors offer two basic attributes for territorial development: 1) low distribution costs, 2) land supply for various activities. Corridors are considered as the structure behind the emergence of most urban regions where transport supports transactions and spatial accumulation along with privileged axes."
Author	Kristiansen J., et al. 2005
Findings	"A transport corridor represents an important structure to serve and strengthen the functional characteristics of a region, as well as the corridor could <i>provide important interconnections and communication between two or more separate functional regions</i> "
Author	Woxenius J., 2007
Findings	"The transport corridor is a design based on using a high-density flow along an artery and short capillary services to nodes of the corridor, where these nodes are thus hierarchically ordered. Corridors often come from population and industry concentrations in linear belts with natural resources or fertile soil, or in the supply of natural infrastructure such as rivers. The definition of a transport corridor depends on its objectives."
	"If these objectives are political, then the corridor becomes an almost nebulous network of roads that simply has a common geographical orientation. If they are economic objectives, then it will be in a much narrower format offering traders and travelers the shortest and least costly alternative. The main components of a transport corridor are typically: a) a gateway port, b) hinterland road and rail networks, c) inland ports or dry ports and d) border controls. In addition to land corridors there are also sea corridors, and aviation corridors as well."

Author	Arvis 2011
Findings	"Transport corridors are mostly certainly advantageous to land-locked countries, as
	the author points out, the logistics performance indices (World Bank, 2016) for
	landlocked countries is usually lower than maritime countries and the existence of
	transport corridors makes a significant difference to price and time."
Author	Kessides 2012
Findings	The key to the success of transport corridor development and regionalization is the
	harmonization of regulations and or deepening socio-economic integration.
Author	Graham, Marvin 1996
Findings	Infrastructural developments that have come as a necessity of creating fast
	connections to the main settlements have brought an inability to participate in
	development due to isolation. Secondary or tertiary settlements have not been
	included in these direct transport lines, creating not only territorial but and social
	segregation.
Author	Andreu 1998
Findings	Numerous requests for maximum speed have prompted the return of roads to
	tunnels, but this tunneling effect is not limited to roads. It is present in all modes of
	transport, where tunneling isolates us from reality and disconnects from other parts.
Author	Arnold 2006
Findings	"A corridor has three main categories of intertwined dimensions: a)
	infrastructure, b) services and c) institutions for the coordination of corridor
	activities."
	Several corridors have been developed to increase traffic volumes at one gateway.
Author	Burghardt 1971
Findings	"Corridors integrate the territorial functions of economic systems and the
	distribution functions of transport systems and that trade gateways have
	influence and control over a definable hinterland. Corridors serving
	landlocked countries are a special case."
Author	Seetanah 2009
Findings	The studied of transmission channels between road infrastructure investments and
	economic growth relation gives us an understanding that infrastructure projects have
	a significant impact in the region, thus further promoting the development of other
	sectors.

# Chapter 1.1 TRANSPORT IN REGIONAL AND NATIONAL SCALE

This subchapter of first chapter is a continuation of the concept of analysing it in relation to the regional development and connectivity created in the regions it passes through. Focusing on regional development and the focus it has on increasing well-being in specific regions, it is understood that the role played by transport and connectivity in this context manages to respond to needs created. Regional development faces various challenges where transport corridors are often used to promote growth and development in specific regions which face challenges of processes of growth, decline and adaptation of the population to the needs. The institute of Economic Development have elaborated some meanings and definitions of local and regional development, and subsequently comes some objects and subjects of local and regional development that are treated in this subchapter and it come to aid current and historical concepts of transport corridors and connectivity, in nowadays and in historical context.

Since World War II no single problem has commanded the attention of social scientists more than that of economic development. Efforts to understand the process of modernization and to find effective techniques for accelerating economic growth have generated an enormous literature in economics, political science, sociology and planning.

Undoubtedly transportation is an important component of capital formation. A review of the literature suggests three potential relationships, with transportation having:

- (1) a positive effect on the development process-the expansion in directly productive activities being a direct result of providing improved transportation facilities;
- (2) a permissive effect on the development process, because transportation does not independently produce directly productive activities or subsequent increases in the level of economic growth;
- (3) a negative effect occurring when an over-investment in transportation reduces potential growth in directly productive activity and, consequently, leads to an absolute decline in the level of income *per capita*. The historic and most common view of the role of transportation in the development process is as a precondition or prerequisite for economic growth.

Discussions about regional and local development found themselves in a combination of difficulty and discomfort. In a world of increasing inequality, inequality, and environmental pressure, it is becoming more and more important to improve the living conditions,

decentralization, prosperity, well-being and life opportunities of people and places at the international level. However, powerful social forces are changing the environment and posing huge challenges to the understanding, role and purpose of local and regional development.

Other views, however, countered that local and regional development was broadening beyond a narrow focus on the economic to encompass the social and the ecological.

Such diversity about what local and regional development means does not, however, imply that we confront a relative, context-dependent concept. Far from it, perceptions of local and regional development across the world share numerous characteristics and a growing sense that "causes and solutions... are increasingly integrated across borders and disciplines, and revolve around common if differently-experienced patterns of change and the capacity to control it" (Edwards 2007).

A first such current connecting local and regional development internationally is the shifting and sometimes turbulent context that imparts complexity, inter-dependency, risk, uncertainty and rapidity of change upon any considerations of the development of localities and regions.

#### 1.1.1 Regional Development

Regional development is a broad term but can be seen as a general effort to reduce regional disparities by supporting (employment and wealth-generating) economic activities in regions (OECD 2014a).

# "Corridors are sometimes developed to promote growth in specific regions".

Fundamental to the concept of development corridors is the presence of inherent economic potential, usually in the form of a natural resource, such as minerals, timber, or agriculture. Development or resource corridors seek to maximize public and private sector investments and related actions in order to multiply economic returns and benefits. Investments typically have to include both hard and soft infrastructure. The emphasis has to be on the transformational impact of the corridor. In this regard, resource corridors seek to achieve a sequencing of investments to leverage a large investment by an extractive industry in infrastructure, goods, and services into viable economic development in a defined geographic region.

The few cases in which governments have tried to use the development corridor approach have not always been successful in attracting private sector investment, especially in Africa. They have not involved all key stakeholders in the definition of the projects from the beginning. Particularly in development corridors, it is critical to involve several sectors with stakes in the region and corridor. A key to success is to coordinate across borders and involve small-scale enterprises, in order to increase volumes. The development corridor approach has to be holistic in promoting efficient integrated production. It must nurture supply chains that are regionally and globally competitive.

Therefore, the corridor can become a product and tool for the spatial planning of a country and a region. Thus, corridors will inevitably change with changes in transportation, commerce, and their impact on countries, communities, and institutions. There is a great debate about whether it is moving from pure transportation to commerce and development corridors.

Corridors evolve over time as a result of changes in technology, planning, infrastructure, and policy initiatives. However, evidence and experience suggest that the evolution is not as linear as implied in some regional strategies.

## 1.1.2 The challenges of local and regional development

The challenges of local and regional development are faced by actors across the world. Indeed, the transformation of the economic, social and environmental prospects and potentials of localities and regions are central to the story of globalization. But 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).

Powerful economic, social and environmental as well as cultural and political forces are at work in the remaking of localities and regions. Over recent decades, international and cross-border flows of trade, finance, people and culture have accelerated, leading to greater integration of hitherto separate and sequestered national economies, and have formed the backdrop to the rise and decline of localities and regions.

The term "globalization" has slipped from the lexicon of social science into popular and political discourse to explain these processes. Although widely used in attempts to "explain" economic, social and environmental changes and their outcomes, globalization is frequently discussed with imprecision. The nature and meaning of globalization is contested in academic and political debates. Broadly, globalization refers to the simultaneous marketing and sale of goods and services around the world requiring global systems of production,

distribution and consumption supported by global regulation of trade and finance. In some accounts – which were especially influential in the 1990s and 2000s – the accelerating global flows contribute to the emergence of an increasingly borderless, "flat" and slippery world in which people, investments and multi-national companies are perfectly mobile and free to locate in any part of the globe (Christopherson et al. 2008; MacKinnon and Cumbers 2011). In this context national, regional and local governments were thought to have less capacity to intervene in their development and to regulate and shape social, economic and environmental outcomes.

Economic dimensions such as growth, employment, incomes and wealth creation have historically been at the forefront of defining what constitutes local and regional development (Hirschman 1958; Armstrong and Taylor 2000).

In some views, local and regional development is articulated as local and regional economic development. For Storper (1997), the local and regional search for prosperity and well-being is focused on the sustained increases in employment, income and productivity that remain at the heart of economic development.

**Table 2.** Definitions of local and regional development. (Source: Elaboration from Institute of Economic Development)

Organization	Туре	Definition
Institute of Economic	Professional	A set of policies and actions designed to improve
Development	Association	the performance of a spatially defined economy
	(UK)	for the benefit of all residents.
International Labor	United Nations	Local economic development (LED) is a
Organization (ILO)	agency	strategy for employment promotion
		through micro and small enterprise
		development, support of social dialogue
		and development planning.
Organization for	International	The purpose of local development is to
Economic Co-	organization	build the capacity of a defined area to
operation and		improve its economic future and the
Development (OECD)		quality of life for inhabitants.
		Regional development is a broad term but
		can be seen as a general effort to reduce
		regional disparities by supporting

		(employment and wealth-generating) economic activities in regions.
Regional	Non-	The RDAs use regeneration to turn
Development	departmental	around local economies, lever in
Agencies	public bodies	investment in both urban and rural
	(UK)	settings and raise aspirations. They work
		with partners to improve the quality of the
		environment, revitalize communities,
		create more jobs, provide more skills, and
		improve transport and communications
		infrastructure.
World Bank	International	The purpose of local economic development
	financial	(LED) is to build up the economic capacity of a
	institution	local area to improve its economic future and the
		quality of life for all.

(http://www.ied.co.uk/images/uploads/A Definition of Economic Development 1.pdf);

OECD (<a href="http://www.oecd.org/regional/#d.en.194438">http://www.oecd.org/regional/#d.en.194438</a> Regional development:

(http://www.oecd.org/gov/regional-policy/regionaldevelopment.htm); Regional

**Development Agencies** 

(http://webarchive.nationalarchives.gov.uk/20100113230530/http://www.englandsrdas.com/what we do/regeneration) and World Bank.

## 1.1.3 Definitions of local and regional development in historical context

The definitions and conceptualizations of local and regional development differ geographically and change over time. The historical context and trajectory of their evolution is central to their understanding.

Dating back 250 years to the late eighteenth century, the notion of "development" as sustained increases in income per capita is a relatively recent phenomenon in human history (Cypher and Dietz 2008).

From the nineteenth century, the ascendancy of capitalism as a form of social organization generated industrialization and urbanization – marked by technological change, productivity increases, the dominance of industrial employment, and periodic crises and slumps (Harvey 1982). In this era, development constituted economic change and the relative extent to which capitalism had penetrated the economic and social structures of localities, regions and nations, modernizing and replacing pre-capitalist social formations (Barratt Brown

1995). The late-nineteenth-century Industrial Revolution laid the foundations of geographical and social inequality in what became known as the "developed world" (Pollard 1981). Local and regional economic specializations were established, shaped by their relations to national and/or imperial geo-politics and trade.

Development was highly geographically and socially unequal, fomenting social and political organization against its injustices by the labor movement and trade unions in the midst of rapid industrialization and urbanization (Pollard 1999). Legacies and paths shaping development were established that, in early industrializing localities and regions in the global North, are still being grappled with today (Birch et al. 2010).

The early part of the twentieth century was marked by international conflicts and the Depression of the 1930s (Hobsbawm 1994). Uneven local and regional development persisted and intensified with mass unemployment and poverty prompting national state action of the top-down variety that has incrementally and unevenly shifted in the direction of more bottom-up locally and regionally-oriented approaches.

The most affected areas with localized concentrations of high unemployment received public policy support. National state interventions and institutional innovations were framed as regional policy – such as President Roosevelt's pioneering Tennessee Valley Authority as part of the federal New Deal in the US during the 1930s (Hargrove 2001) – and were mirrored elsewhere, particularly in Western Europe (Clout 1981; Hudson and Williams 1994) and Australia in the Snowy Mountains hydro-electric scheme (Beer et al. 2003b). Limited understandings of the inter-connected problems of over-developed core regions and under-developed peripheral regions within nations were evident at this time (Morgan 2001). By the late 1940s, consensus emerged concerning development definitions and international institutions were established that heralded the post-war era of "developmentalism" (McMichael 2012).

## 1.1.4 Where is local and regional development?

The geographical dimensions of where local and regional development proceeds warrant critical reflection and engagement with key geographical concepts. However, it may be understood, and in whichever spatial setting, development is a profoundly geographical phenomenon. Reflecting the historical evolution of its definitions over time and space, the geographical aspects of local and regional development relate to location and distance, territory and scale, relational circuits and networks, place and context. These spatial dimensions are not simply a backdrop or canvas on which local and regional development

activities and practices unfold (Scott and Storper 2003). Development, however defined, does not proceed in a social and spatial vacuum.

**Table 3.** The objects and subjects of local and regional development. (Source: Pike et al. 2016).

Level/scale	Objects	Subjects
People	Individuals	
	Households	Homecare services
	Families	Childcare services
	Neighborhoods	Neighborhood renewal
Spaces, places and territories	Communities	Community regeneration
	Villages	Rural diversification
	Localities	Strategic partnerships
	Towns	Market Town revival
	Cities	Growth Strategies
	City-regions	Local authority collaboration
	Sub-regions	Spatial strategies
	Regions	Regional Economic Strategies
	Sub-nations	Economic Development Strategies
	Nations	Regional development
	Macro-regions	Economic and social cohesion
	International	Aid distribution
	Global	Trade liberalization

# 1.1.5 Connectivity

Territorial connectivity is considered as a relative degree of connection within a transport network which is characterized by two important features such as high connectivity which leads to low isolation and high access, as well as the second feature low connectivity which means high insulation and low access.

Connectivity is considered an achievable measure regardless of land or air distance, where high-connectivity sites are considered important as they are best connected to other areas, providing fast and functional access.

Connectivity is based on topological (territorial) distance, which represents the number of direct connections or steps separating two nodes.

The concept of connectivity includes socio-economic connectivity together with the planning of a transport network, where they can promote urban connectivity at three different levels:

a) Intercity connections, b) Intra-metropolitan connection, c) Interconnection local. Connectivity gives firms access to the input market which includes labor and production which facilitate consumer choices.

This enables the simultaneous creation of public spaces, art centers, street markets, sociocultural events which turn cities into spaces of pleasure, entertainment, various activities and celebrations.

# Chapter 2. STUDY OF CORRIDORS

This chapter analyses the historical context of the development of transport corridors from the road of silk and development that brought it to the countries and cultures that connect between them, then moving on to the existing case on the Balkan Peninsula, the development of the Egnatia Road, bringing it closer to the context of the country and then the possibility of connecting the European corridors, the historical aspect of their approach towards the development on the territory and their impact on territorial connectivity. Historical contexts have had an impact on the space development and on cultural exchanges. Analysis is further made on the reason why the European Union nowadays presents some challenges in transport corridors development to include motives of the creation of a dedicated European Transport Policy and how this works. For this purpose, the concept of SEETO and several case studies from different countries are briefly analysed to give an approach to their functioning and impact on territory.

Taking this approach, in this chapter, the topic tends to be closer to the context of the case study. In addition, in the Albanian context, the integration of legislation with the European Union and the Albanian infrastructure corridors is addressed. Making this escalation of the historical and current context also gives the reasons why Route 7 is considered in the study, as part of the X corridor and as a branch of the exit of the countries in the Adriatic Sea.

#### 2.1 Transport Corridors historical aspects

One of the oldest examples of transport corridors is the Silk Road or Silk Route, which was an ancient network of trade routes that were for centuries central to cultural interaction through regions of the Asian continent connecting the East and West and stretching from the Korean peninsula and Japan to the Mediterranean Sea.

Human beings have always between places and traded with neighbors, exchanging goods, skills and ideas. Throughout history, Eurasia was crisscrossed with communication routes and paths of trade, which gradually linked up to form what are known today as the Silk Roads; routes across both land and sea, along which silk and many other goods were exchanged between people from across the world. Maritime routes were an important part of this network, linking East and West by sea, and were used for the trade of spices in particular, thus becoming known as the Spice Routes.

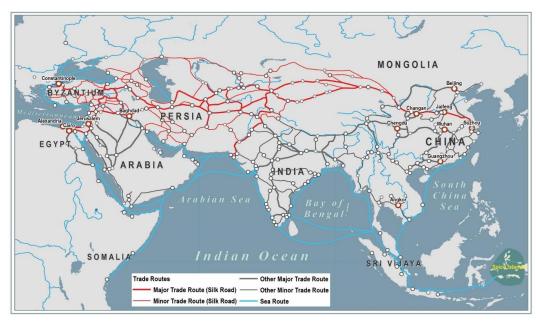
It is important that the historic role of the Silk Road is seen in economic and cultural terms. The main traders during antiquity included the Chinese, Arabs, Turkmens, Indians, Persian, Somalis, Greeks, Syrians, Romans, Georgians, and Koreans (Khyade, 2012).

Trade on the Silk Road played a significant role in the development of the civilizations of China, the Goguryeo kingdom (now called Korea), Japan, the Indian Subcontinent, Persia, Europe, the Horn of Africa and Arabia, opening long-distance political and economic relations between the civilizations.

"The ancient route, which operated for 1700 years, gave rise to new cities along its path, many of which have become famous contemporary centers of religions and culture.

Though silk was certainly the major trade item exported from China, many other goods were traded, and religions, syncretic philosophies, various technologies and diseases, most notably the plague, also spread along the Silk Road. In addition to economic trade, the Silk Road was a route for cultural trade among the civilizations along its network (Christian, 2000). The Silk Road encapsulates almost everything that is diagnostic of a contemporary transport corridor, many countries, moving trade and spreading culture."

Silk was one of the most important goods carried on the Silk Roads because it combined great beauty, light weight, and high value. But they also carried many other goods, including ceramics, glass, precious metals, gems, and livestock. Material goods, in turn, were just one element in the varied traffic of the Silk Roads. They also transported disease vectors, languages, technologies, styles, religions, and genes. The term Silk Roads is sometimes extended to include the sea routes that linked the Mediterranean, Africa, the Indian subcontinent, southeast Asia, and China. These routes were certainly as important as the land routes in maintaining the underlying unity of Afro-Eurasian history, but here, purely for the sake of simplicity, I focus only on the land routes.



**Figure 14.** The Silk Road and Arab Sea Routes (11th and 12th Centuries), (Source: Adapted from Martin Jan Mansson).

#### 2.2 Silk Road

Some years ago, the U.S.A. has revived two major infrastructure projects in South and Southeast Asia, in which India would be a vital player, an action that could potentially act as a counter to the ambitious China Belt and Road initiative. The Trump administration has revived the New Silk Road initiative, first announced by then-Secretary of State Hillary Clinton in July 2011 in a speech in Chennai, and the Indo-Pacific Economic Corridor connecting South and Southeast Asia. India will play an important role in both projects. (NDTV, 2017).

In this frame the state of China has continued this idea which was part of its strategies to extend the impact of previous Chinese policies.

#### 2.3 A New Silk Road Initiative

The Belt and Road Initiative (BRI, or B&R), formerly known as One Belt One Road or OBOR for short, is a global infrastructure development strategy approved by the Chinese government in 2013 to invested in nearly 70 countries and international organizations.

It is considered a foreign policy center of Chinese Communist Party General Secretary Xi Jinping. In 2013, President Xi Jinping proposed building a New Silk Road. "Belt" refers to land routes and "Road" refers to sea routes. The Belt and Road Initiative is a new Silk Road project that promotes global cooperation and economic development.

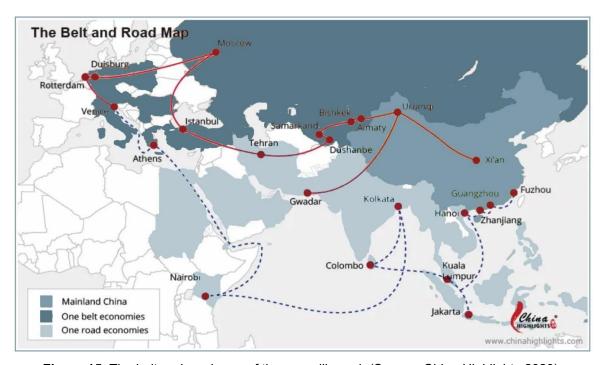


Figure 15. The belt and road map of the new silk road. (Source: China Highlights 2020).

President Xi's great project of the 21st century - aims to create a new economic zone under Chinese domination, in which Eurasian and African countries will be closely connected by land (Belt) and sea (Road) lines - stands to be fulfilled of multiple Chinese ambitions of a geo-economic and geo-strategic nature. The giant intercontinental trade and infrastructure networks, which have been set up by Beijing, currently include 68 Asian, African and European countries. In 2015, President Xi pledged \$ 900 billion in investments to build bridges, roads, railways, highways, airports and seaports. In parallel with the implementation of these construction projects under the auspices of the BRI (Belt and Initiative Road), the Chinese government has launched other projects within the Silk Road, such as the "Digital Silk Road", "Polar Silk Road" and "Spatial Silk Road". In fact, all these "silk roads" are an integral part of the BRI.

#### **Silk Road Economic Belt**

The New Silk Road is also called the Strip and Road Initiative. It connects countries in Europe, Asia and Africa together. The plan was initiated by Xi Jinping, President of the People's Republic of China. The New Silk Road focuses on investments in railways, highways and port construction.

On September 7, 2013, the Silk Road Economic Belt was launched, which aims to connect the countries of Central Asia. The "One Belt" route stretches across the Baltic Sea area through Central Asia and Russia, the Mediterranean Sea area through Central and West Asia, and the Indian Ocean area through Southwest China.

#### Places along the Silk Road Economic Belt:

Countries in Central Asia like Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan are just across the border from China. They are closely linked to China's economy. Middle Eastern countries such as Iran, Iraq, Jordan, Syria, Saudi Arabia and Turkey mainly trade oil and gas. They hope to develop other industries and agriculture through cooperation with China. Other countries on the border between Europe and Central Asia such as Azerbaijan, Georgia, Armenia, Ukraine, Belarus and Moldova are expected to achieve economic integration. Russia is an important part of the Silk Road Economic Belt. It has a close relationship with the countries of Central Asia, the countries of the Caucasus region and the countries of West Asia.

If issues in Afghanistan can be resolved peacefully, then the development of Afghanistan, Pakistan and India will also be promoted by the Belt and Road Initiative.

Modern technology allows the economic construction of rail and road connections throughout Eurasia. The Chinese government believes they can greatly boost China's

growth and become a superpower by building land and sea transportation facilities to make trade and travel more economical and faster.

They have announced a trillion-dollar plan that they call "1 belt 1 road" that would affect 4.4 billion people. Within a decade, it could generate trade worth more than \$ 2.5 trillion if successful. China plans to spend 500 billion euros (\$ 580 billion) on it by 2020.

New Trans-Asia transport infrastructure: Substantial progress has already been made. The first freight trains from Europe to China began running in 2011 and have shortened transit time from Germany to China from 50 days by sea to 18 days.

In 2018, a major highway of 5,400 kilometers to St. Petersburg from the Yellow Sea was opened in 2018 that allows vehicles to travel the distance in 10 days. This is a new travel option for economic tourists and anything interesting along the Silk Road sites.

## Silk Road Roads - 5 Trade Roads throughout the Old World

There were actually 5 'Silk Roads' from China to Europe. The main road went from Xi'an / Luoyang, the capital of the Han Empire, through the Gansu Corridor to Dunhuang and Kashgar, through Central Asia to Europe.

Four more routes: The northern spur route went from the Gansu Corridor through Russia to Northern Europe. A southern spur route went from Xinjiang through the Karakorum Mountains to India / Pakistan. The Tea Horse Road crossed from Yunnan and Sichuan through Tibet to India, and the 'Marine Silk Road' passed through seas in the Middle East, Africa and Europe.

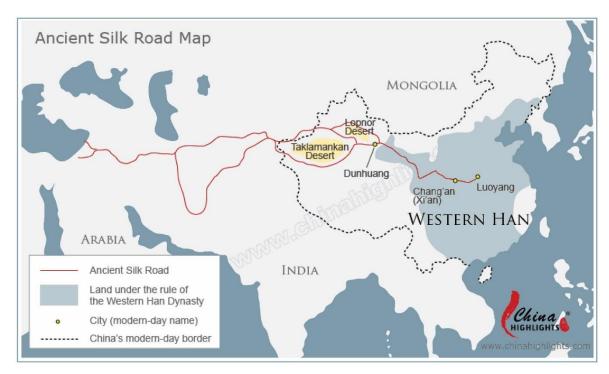


Figure 16. The belt and road map of the new silk road. (Source: China Highlights 2020).

## 2.4 Egnatia Old Road

Another case of transport corridor in the ancient world near the Balkan is Egnatia road.

The Via Egnatia was built by a Roman senator named Gnaeus Egnatius, who served as praetor with the powers of proconsul in the newly conquered province of Macedonia in the late 140s BCE. A milestone found near the place where the Via Egnatia crossed the Gallikos River, just west of Thessaloniki, is evidence for his activities. The bilingual inscription, now in the Archaeological Museum of Thessaloniki, correctly records a distance of 260 miles to Dyrrhachium (modern Durrës), the port on the Adriatic Sea where the road started.

Although the road as a whole is called the Egnatian Road, the first part of it is called the Road to Candavia (an Illyrian mountain) and passes through the city of Lychnidus [mod. Ohrid] and Pylon, a place on the road which marks the boundary between the Illyrian country and Macedonia. From Pylon the road runs to Barnus through Heracleia [mod. Bitola] and the country of the Lyncestae and that of the Eordi into Edessa and Pella and as far as Thessalonica. The total length of the road must have been about 1120 kilometers.

"After Byzantium had become the capital of the eastern half of the Roman Empire, a special gate was made for the Via Egnatia, called the Golden Gate. It was used for the triumphal entries of the Byzantine emperors. The road was very important. Connecting the eastern and western part of a once powerful state, the Macedonian kings had already built a road from the Adriatic to the Aegean Sea. For the Romans, it was essentially the continuation of the Via Appia: anyone coming from Rome and travelling to the east, would come to Brundisium, cross the Adriatic, reach Dyrrhachium (or Apollonia), and continue along the Via Egnatia (Fasolo, 1976)."

The "Egnatia Via" was a road built in the time of the Roman Empire. It started in Dyrrachium (modern-day Durres) on the Adriatic Sea and followed a difficult route along the Genusus River (Shkumbin), and from there continued around Lake Ohrid. It then turned south to reach on the northern coastline of the Sea in Thessaloniki.

From there he reached the city of Byzantium (later Constantinople, now Istanbul). It reached a total distance of about 1,120 (km). Like other major Roman roads, it was about six feet wide, paved with large polygonal stone slabs or covered with a large layer of sand (Fasolo, 1976; O'Sullivan 1972).

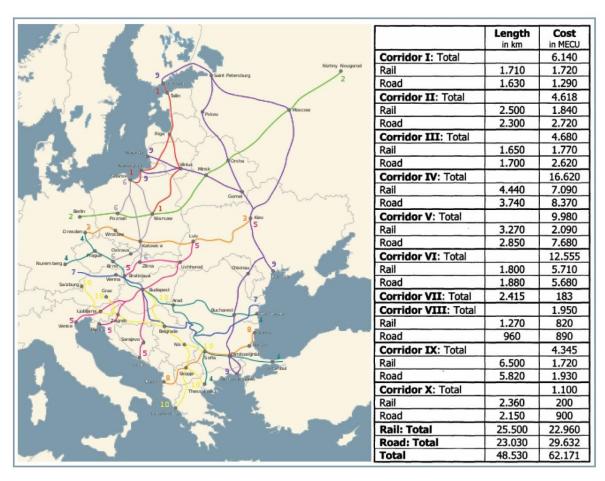


Figure 17. Map of Via Egnatia which connected south of Italy with Constantinople (Nowadays Istanbul). (Source: AramcoWorld, 2019)

## 2.5 Transport Corridors in Europe

The corridor concept is part of the pan-European transport infrastructure concept, which developed three pan-European transport conferences in Prague in 1991, Crete in 1994 and Helsinki in 1997. The pan-European transport corridor was chosen to promote commercial and social relations between the EU and Central and Eastern European countries. Furthermore, in Central Europe, the corridor provides infrastructure development of international importance and will eventually become part of the enlarged trans-European transport network within the enlarged EU. The role of transport and its networks in Europe's global development cannot be underestimated. The current and future expansion of the EU, especially trade relations with the newly independent countries and the Mediterranean countries, are highly dependent on adequate transport connections.

In the table below are shown the ten transport corridors in Europe.



**Figure 18.** Ten transport corridors in Europe, length and costs of the corridors. (Source: File: Blank map of Europe - Atelier graphique colors.svg).

#### 2.6 European policies

# Transport policy has been one of the EU's common policies for more than 30 years.

With the opening of the transportation market and the establishment of trans-European transportation networks, the "sustainable transportation" model will become more important from now to 2020, especially considering the increasing greenhouse gas emissions of the transportation sector. This may jeopardize the EU's efforts to achieve its climate goals.

"The legal basis is supplied by Article 4(2)(g) and Title VI of the TFEU. As long ago as the Treaty of Rome, Member States stressed the importance of a common transport policy by devoting a separate title to it. Transport was therefore one of the Community's first common policy areas. The first priority was the creation of a common transport market, the establishment of freedom to provide services and the opening-up of transport markets. This goal has been achieved to a large extent, because even domestic rail markets have steadily been opened up to competition."

"Volumes of goods and passengers transported have increased as a result of the completion of the European internal market, the abolition of internal borders, the drop in transport prices as a result of the opening-up and liberalization of transport markets, and changes in manufacturing and stock management systems.

An economically successful and dynamic transport sector has found itself facing increasingly serious social and environmental constraints, however, so that the 'sustainable mobility' model has become more important than ever before."

#### 2.7 Major challenges for European transport

The main challenges facing the transportation systems have requested from the EU the need to design policies that help our society to sustain its need to move.

- Congestion affects both road and air traffic. It costs Europe around 1% of annual
   GDP and freight and passenger transport alike are set to grow.
- **Oil dependency** despite improvements in energy efficiency, transport still depends on oil for 96% of its energy needs. Oil will become scarcer in future, increasingly sourced from unstable parts of the world. By 2050, the price is projected to more than double compared to 2005.
- **Greenhouse gas emissions** by 2050, the EU must cut transport emissions by 60% compared with 1990 levels, if we are to limit global warming to an increase of just 2°C.
- Infrastructure quality is uneven across the EU.
- **Competition** the EU's transport sector faces growing competition from fast-developing transport markets in other regions.

## 2.8 Why does the EU have a transport policy?

Europe needs strong transport connections to drive trade and economic growth, and to create employment and prosperity. Transport networks are at the heart of the supply chain and are the foundation of any country's economy. They allow goods to be distributed efficiently and people to travel. They make places accessible, bring and bind us together and allow us a high quality of life.

Transport is a cornerstone of the European integration process and is firmly linked to the creation and completion of the internal market, which promotes jobs and economic growth. As one of the first common policy areas of today's European Union, it was seen as vital for fulfilling three of the four freedoms of a common

market as established in the Treaty of Rome in 1957: the free movement of individuals, services and goods.

Without smooth transport connections and networks, there would be no such movement. This is why EU transport policy has always focused on overcoming obstacles between Member States and creating a single European transport area with fair competition conditions for and between the different forms of transport: road, rail, air and waterborne.

Over the past 60 years, EU transport has progressed substantially and continues to make a significant contribution to European prosperity and employment. The industry now employs around 10 million people, accounting for 4.5 % of total employment in the EU and creating about the same percentage of gross domestic product (GDP). Smooth transport connections are also vital to the EU's economy in terms of its exports — shipping carries 90 % of the EU's foreign trade.

Many European companies are world leaders in infrastructure, logistics and the manufacturing of transport equipment.

And EU households today spend 13.5 % of their income on transport-related goods and services, such as season rail tickets and holiday or business flights, making transport the second-largest item in their household budgets after house-related expenditure.

Over the past decades, developments in European transport policy have helped to strengthen the wider EU internal market by opening up national markets previously dominated by public monopolies, such as in aviation and rail.

In addition, barriers to access, unnecessary differences in technical and administrative standards and distortions of competition across EU countries - pricing, taxes and other charges, are gradually being removed as part of the process of creating a genuine single European transport area across all forms of travel.

This has largely been achieved in areas such as aviation, where a policy of market liberalization initiated in the 1990s sparked a period of unprecedented growth.

But market liberalization alone is not enough to achieve the European Union's objectives of improving travel possibilities across Europe and ensuring high-quality transport services, both for citizens and for business.

Expanding, modernizing and streamlining EU-wide infrastructure is also essential to create seamless cross-border networks across the different forms of travel. This is why the trans-European network policy was enshrined in the EU's Maastricht Treaty of 1992. In addition, the Treaty incorporated environmental protection requirements into transport policy as a tool to help complete the internal market.

EU transport policy is also about helping and protecting people when they travel. Here, one of its achievements has been secure and uphold passenger rights. Now, when passengers experience delays, they no longer have to find out for themselves what has gone wrong. They have a right to information and they know they can demand it from their transport company. And passengers with disabilities and reduced mobility qualify for special attention.

The EU is the first, and only, region in the world whose passengers enjoy comprehensive and integrated basic rights across all means of transport.

These rights are based on the principles of non-discrimination; accurate, timely and accessible information; and immediate and proportionate assistance.

#### 2.9 How does EU transport policy work?

As part of the project to complete the European internal market, it is essential that transport connections are properly joined up across the 28 Member States that make up the European Union.

This involves building missing links and removing the many technical and administrative barriers that hinder smooth traffic and trade flows and generate unnecessary bottlenecks in Europe's transport system. It also often requires the streamlining of national differences in transport policy which can cause distortions of competition, as well as the removal of barriers to market access.

The ultimate aim is to create a single European transport area, to help Europe stay competitive by optimizing the performance of the entire transport sector for the benefit of all.

For this to succeed, there must be access to top-quality transport infrastructure and services, backed by research, innovation and solid long-term funding.

(European commission / transport document / Connecting Europe's citizens and businesses).

#### 2.10 South East Europe Transport Observatory Policies (SEETO)

To achieve a balanced regional development, the European Union aims to implement the "cohesion policy", which is the European Union's strategy to promote and support the "harmonious overall development" of its member states and regions.

Social cohesion policies are inclusive and aim at achieving social and economic equality in the regions of Europe by reducing disparities in the level of development between the regions. For this reason, various organizations have been set up aiming at achieving the objectives of the European Union for these regions. One of them is SEETO.

"South East Europe Transport Observatory (SEETO) is a regional transport organization established by the Memorandum of Understanding for the development of the Core Regional Transport Network (MoU) signed on June 11th, 2004 by the Governments of Albania, Bosnia and Herzegovina, Croatia, the former Northern Macedonia, Montenegro and Serbia and the United Nations Mission in Kosovo and the European Commission."

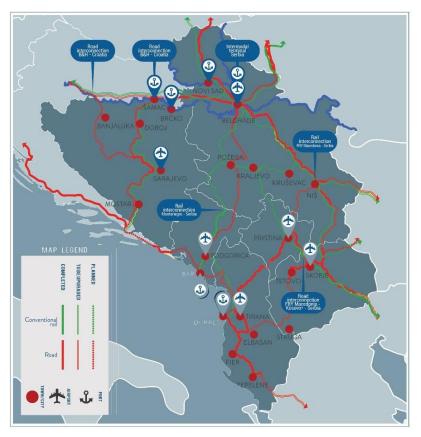


Figure 19. European western Balkans Connections. (Source: European Western Balkan's webpage 2019).

The aim of the SEETO is to promote cooperation on the development of the main and ancillary infrastructure on the multimodal Indicative Extension of TEN-T Comprehensive

Network to the Western Balkans and to enhance local capacity for the implementation of investment programmers as well as data collection and analysis on the Indicative Extension of TEN-T Comprehensive Network to the Western Balkans.

The main objectives of the SEETO cooperation:

- Develop the Indicative Extension of TEN-T Comprehensive Network to the Western Balkans;
- Improve and harmonies regional transport policies and technical standards for the Indicative Extension of TEN-T Comprehensive Network to the Western Balkans development;
- Maintain an effective coordination and communication network; and
- Integrate the Indicative Extension of TEN-T Comprehensive Network to the Western Balkans in the framework of the wider Trans European Network.



**Figure 20.** Route 7 part of Corridor X, Durres-Nish. (Source: Riinvest, Graphic edition by the author,2020)

## 2.11 Transport corridors examples



Figure 21. Transport corridors example's location. (Source: the author)

- Bulgaria
- Croatia
- Greece
- Italy
- Romania

**Table 4.** Transport corridors examples, analytical summary. (Source: the author).

No.	Location	Distance	Benefits
1.	<ul> <li>- "Trakia" (A1), connecting the city of Burgas with the capital Sofia (Bulgaria).</li> <li>- Passing through the city of: Pazardzhik, Plovdiv, Stara Zagora, Yambol.</li> <li>- Part of Pan-European Transport Corridor № 8.</li> </ul>	360 kilometers / 4 hours	<ul> <li>Increase road travel safety (canalized traffic flows, and interchanges).</li> <li>Reduces the distance and travel time.</li> <li>Reduces the cost of transport.</li> <li>Continuous motorway link between Port of Burgas and Sofia.</li> </ul>
2.	- Autostrada Soarelui (A2), connecting the city of Constanța, with the capital Bucharest (Romania).	206 kilometers / 2 hours 21 minutes	- Reducing distances and time travel

	- Counties Ilfov, Călărași, Ialomița, Constanța Major cities Fetești, Cernavodă, Medgidia. - Part of Pan-European Transport Corridor № 4.		- Connecting the capital with the important city port of Constanţa.
3.	<ul><li>- Egnatia odos (Northen Greece)</li><li>- From Igumenica to Kipoi on the Turkey border.</li></ul>	621 Kilometres 5 hours, 55 minutes	<ul><li>Successful case of corridor function.</li><li>Existence of Observatory for the road and its functionality</li></ul>
4.	<ul> <li>- Bari - Brindisi motorway.</li> <li>- Connecting both important ports for the Italian nation.</li> <li>(Italian case)</li> </ul>	105 kilometers / 1 hours, 29 minutes	<ul><li>Connecting secondary settlements</li><li>Connect to important ports in Italy.</li></ul>
5.	<ul> <li>Motorway (A1), Croatia,</li> <li>connecting Zagreb capital, to</li> <li>Split the second largest city in</li> <li>the country.</li> <li>Part of the Blue Corridor.</li> </ul>	410.3 kilometers / 3 hours 39 minutes	- The national importance of the highway is reflected in its positive economic impact on the connection of cities, as well as its importance for tourism in Croatia.

#### 1. Bulgarian case (Trakia).

The motorway is named after the historical region of Thrace, the northern (Bulgarian) part of which it spans from west to east. The total length of Trakia motorway is 360 km (220 mi) and the final section opened on 15 July 2013 after 40 years of construction.

The last section of the Trakiya highway in southern Bulgaria, connecting the capital Sofia and the Black Sea city of Burgas, which has been built for 40 years, was finally launched on Monday, July 15.

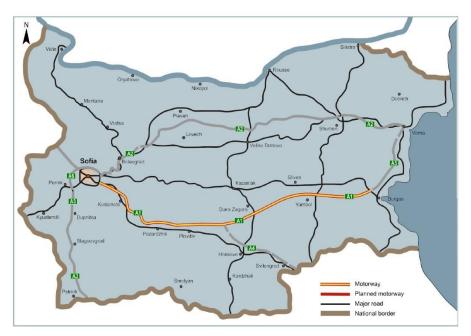
After the Monday launch, for the first time Bulgaria has not only a highway that connects Sofia to the Black Sea, but also its first completed highway ever.

The decision to build it as part of the highway ring to also include the Hemus highway between Sofia and the Black Sea city of Varna and the Black Sea highway along the coast was made in 1965 and the construction started in 1973, both under the Communist regime of Todor Zhivkov. The construction was stopped several times due to lack of money and several corruption scandals related to public tenders.

The first section between the capital Sofia and the second largest city of Plovdiv was launched in 1985, still under Zhivkov's rule.

As the entire highway opens Monday, the above section has been repaired at least four times. In 1995, PM Zhan Videnov, elected on the mandate of the Bulgarian Socialist Party, opened another 32 km between Plovdiv and Orizovo, bringing the total length to 142 constructed kilometers in 22 years. Another 4 km were added in 2001.

EUR 250 M have been spent for the 116 579 km of Lots, 2, 3, and 4 and another EUR 1.7 M for construction control. The total length of the Trakiya highway is 360 km.



**Figure 22**. Trakia Motorway in Bulgaria. (Source: Bulgarian motorway network en.svg, Author: AleXXw)

## 2. Croatia case Motorway (A1, Dalmatina)

Motorway (A1), Croatia, connecting Zagreb capital, to Split the second largest city in the country.

The A1 motorway was originally created in the early 1970s, albeit along a different route from the current Zagreb-Split highway. Following the suppression of the Croatian Spring and the departure of the Croatian leadership that proposed and approved the construction plan in 1971, was stopped all work on the Zagreb-Split highway.

The plans were revived in the 1990s and new designs were developed to include a motorway section built between Zagreb and Karlovac into the design so that the section could be shared between Zagreb–Split and Zagreb–Rijeka motorways. Construction work started in 2000 and the motorway reached Split by 2005 and was extended towards Dubrovnik later on. Both in the 1970s and in the 2000s, construction of the Zagreb–Split motorway was perceived to symbolize rebuilding of national unity.

The motorway represents a major north–south transportation corridor in Croatia and a significant part of the Adriatic–Ionian motorway.

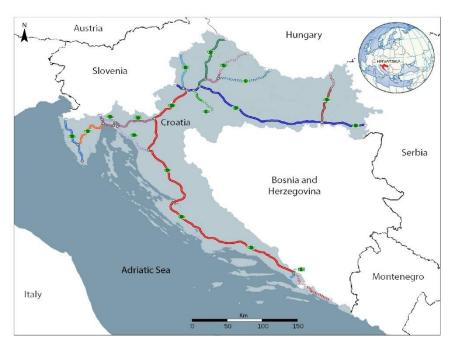


Figure 23. Motorway in Croatia (A1). (Source: imgur.com 2020)

#### 3. Greece Case (Egnatia Odos)

#### Successful case "Egnatia Odos" in northern Greece

This project is a motorway in Greece that extends from the western port of Igoumenitsa to the eastern Greek–Turkish border at Kipoi. The megaproject began in 1994 and was completed in 2009 at a cost of €5.93 billion (\$7 billion). It runs a total of 670 km.

This road passes through the Greek mountain regions of Epirus and Macedonia, starting from the territorial situation has not been easy for its construction engineers.

The road passes through 1650 bridges and 76 tunnels. Its stretch starts at the port of Igumenica, Thesprotia to the border crossing of Kipoi, on the Evros River. The regional units are, Thesprotia - Ioannina - Grevena - Kozani - Imathia - Thessaloniki - Kavala - Xanthi - Rhodope - Evros.

The road is also linked to nine main vertical axes connecting it with neighboring countries in the north (Albania, North Macedonia, Bulgaria, Turkey).

The highway passes through the cities of: Igoumenitsa - Ioannina - Metsovo - Grevena - Kozani - Veroia - Thessaloniki - Kavala - Xanthi - Komotini - Alexandroupolis

It connects with the ports of: Igoumenitsa - Thessaloniki - Kavala - Alexandroupolis and Airports: Ioannina - Kastoria - Kozani - Thessaloniki - Kavala - Alexandroupolis.

It serves 36% of the country's total population and 33% of the total national production.

Part of its length, about 360 km from Evros in Thessaloniki, is parallel to the ancient Roman road "Via Egnatia", which starts from modern Durres in Albania to Thessaloniki and then to Byzantium (now Istanbul, Turkey). For this reason, the project is called a modern Via Egnatia street (in Greek, Egnatia Odos / Eyvatía Oδός).

However, parallelism is not correct; the original Via Egnatia was much longer (1,120 km) and its western part, from Thessaloniki to the Adriatic Sea, went much further north than the modern road.

In addition to the main highway, three perpendicular auxiliary motorways are being built linking the highway with North Macedonia's cities, ports and airports.

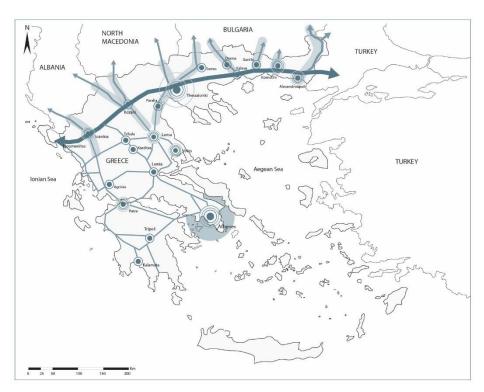


Figure 24. Egnatia Odos in northern Greece.

(Source: MINENV, 2007, graphic edition by the author)

#### 4. Italian case Brindisi to Bari motorway.

This case is an important road in the south of Italy because it connects two important ports of Bari with Brindisi.

Today this is considered the continuation of Corridor VIII in southern Italy, which is connected on the other side of the sea with Albania, continuing in Northern Macedonia and further in Turkey (Istanbul). Today this road serves as a connecting axis for all settlements located in this region and can be considered as one of the most important roads in the region of Puglia, Italy. It is 105 kilometers long and can be traversed in about 1 hour and 29 minutes.



**Figure 25.** Brindisi – Bari road fragment. (Source: Rete\_autostradale\_italiana.svg, graphic edition by the author)

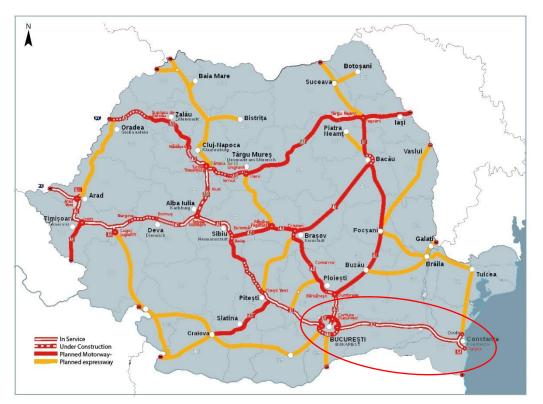
#### 5. Romanian case "Autostrada Soarelui"

Autostrada Soarelui (A2), connecting the city of Constanța, with the capital Bucharest (Romania).

The A2 motorway (Romanian: Autostrada A2), also known as The Motorway of the Sun (Romanian: Autostrada Soarelui), is a motorway in Romania which links Bucharest with Constanța, a city-port on the shore of the Black Sea, where it merges after an interchange into the A4 motorway. It is 206 km long, and has been operational on its entire length since November 2012.

"The construction of the motorway between Bucharest and Constanța began in the communist era during Nicolae Ceaușescu's regime. The first section, from Fetești to Cernavodă (about 18 km), was opened in 1987 and underwent a major rehabilitation in 2003. It crosses the Balta Ialomiței island and includes the Cernavodă Bridge complex system of motorway and railway bridges and viaducts over the Danube and one of its branches at Cernavodă. After the fall of communism in 1989, construction continued for a short period, but it was finally stopped in 1993

due to lack of financial resources. Construction continued after 1998, the motorway being completed in late 2012."



**Figure 26.** Motorways in Romania, in red cycle Autostrada Soarelui. (Source: Romania\_Motorways\_DE.svg)

#### 2.12 Albanian transport policies

Albania country is focused on the development of the WB6 transport networks aiming to improve connectivity throughout the region. Albania is a committed supporter of the 'Western Balkans 6 process' and is fully engaged to achieve its goals, particularly the Connectivity agenda.

Regarding transport networks, Albania has already identified and approved the national and regional short and medium-term goals and sub-measures on the transport sector. Investments in the core transport network and corridors are being prioritized through the single sector project pipeline SSPP/SPP.

#### **Concerning Road Transport**

The main challenges in the road sector for the 2016-2020 planning period are:

- 1. Harmonize the national legislation with the EU acquis for road transport of goods and passengers;
- 2. Complete the construction of the national road network, including strategic arteries;

- 3. Complete the feasibility study for the Adriatic-Ionian Highway North-South,
- 4. Reform the intercity passenger road transport network;
- 5. Accelerate the amelioration of Albania's road safety performance (maintenance of road transport infrastructures according to EU technical standards, regular implementation of Road Safety Audits & Inspections, elimination of Black Spots, deployment of ITS systems).

Regarding the first strategic objective there are some developments in the approximation of the legislations, as follows:

- Accordingly, to the Law No 8308 of 18.03.1998 "On road transport" as amended by Law No 10/2016 of 11.02.2016 "On some addenda and amendments to Law No 8308 of 18.03.1998 'On road transports", there were included two articles on ITS elements. So, this Law is partially aligned with the Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport. Following the amendment of the Law, the Minister of Transport and Infrastructure issued the Guideline of Minister of Transport and Infrastructure No 3616/3 of 20.07.2017 "On rules for implementation of the intelligent systems in field of road transport and connection with other modes of transport", which further approximated the Directive 2010/40/EU.
- Guideline of Minister of Transport and Infrastructure No 328 of 20.01.2017 "On detailed rules for the list of data, which are kept in the national electronic register on road transport undertakings". The Guideline approximates the Article 16(1) of Regulation (EC) No 1071/2009 of the European Parliament and of the Council of 21 October 2009 establishing common rules concerning the conditions to be complied with to pursue the occupation of road transport operator and repealing Council Directive 96/26/EC.
  - The Directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 "on road infrastructure safety management" is partially approximated in the Albanian Legislation by CDM no. 815, dated 23.11.2011 "Amendments of CDM No. 153, dated 7.4.2000 "On the approval of the implementation regulations of the Road Code" and Joint Instruction of the Minister of Internal and Minister of Transport No. 9, dated 3.7.2012 "On audit and inspection of road safety".

As regards the road infrastructure in the core transport network and corridors investments have been prioritized through the Single Sector Project Pipeline, a process launched in 2015. For the years 2016–2017, 29 transport infrastructure

projects, mainly part of Core and Comprehensive Network have been prioritized and are included in the priority list. In April 2015, in the framework of TEN-T days in Riga, the Ministers of Transport of the WB region together with the European Commission discussed and approved the indicative extension of the TEN-T core and comprehensive Network to the Western Balkan which was officially formalized by our PMs during the Vienna High Level Summit in August 2015. Our Core Transport Network is now part of the TEN-T Network (Trans-European Network) and according to its methodology shall be completed by 2030, while the Comprehensive Transport Network shall be completed by 2050.

All the investments in roads sector (Foreign Financing and Albanian Budget), during the period 2016-2018, are mainly concentrated on the Albanian Core Network, as follows:

- Adriatic Ionian Highway/Expressway (Route 2b/Corridor VIII/ Route 2c) 305 km
- Feasibility Study to be completed within May 2019. Some of the projects in this Corridor include:
- Construction of Lezha bypass, 4 km, estimated cost EUR 24.6 million. Currently, the ToR for the Feasibility study for the construction of the Lezha Bypass in Albania and Environmental and Social Impact Assessment (ESIA), funded under WBIF, with a grant of EUR 350,000, are approved;
- Construction of Tirana bypass, 22 km, estimated cost EUR 109 million. Currently, the Preliminary Design has been completed and the Detail Design is foreseen to be completed within 2018;
- *Upgrade of Thumanë Kashar;* Length 20,4 km; FS and Concept Design completed, estimated cost EUR 169.3 million;
- Construction of Tepelena bypass, estimated cost EUR 38 million; Length 3.5 km, Technical status preparatory;
- Construction of Gjirokastra bypass, estimated cost EUR 14 million; Length 8.7 km; Technical status Feasibility Study, Detail Design, Environment Impact Assessment are completed.

## Corridor VIII: 236 km of motorway connecting the Adriatic to the Black Sea:

- Construction of Tirana Elbasan Road Segment (ongoing);
- Construction of "Qukës Qafë-Plloçe" Road Segment (ongoing);
- Construction of Fieri By-Pass (in tendering procedures);
- Construction of Vlora By-Pass (in tendering procedures);

Route 7: 129.4 km segment from Durres to Morine, connecting the existing Corridor X to the Adriatic coast;

Milot – Morine road section under concession for the maintenance; Doubling of Milot - Rreshen road (Detailed Design completed);

#### **National Network:**

- Vlora River Road (reconstruction)
- Arbri Road (to be granted with concession)
- Kardhiq Delvina
- Tirana Ring (to be completed)

#### 2.13 Road Infrastructure (National Road Network)

The overall road network in Albania, considering all the categories of roads where vehicles are circulating is about 18,000 km long including 3,636 km of National Main Road, 10,500 to 11,000 km of Roads and Municipal Roads and the remaining 4,000 km is under the jurisdiction of different autonomous units, enterprises or firms. The primary road network is about 1,138 km with nine main links forming the backbone of the network as well as a secondary network with a total length of 1,998 km.

This road network has a greater extent in the western part, favoured this and by field terrain formations, while in the other parts there is a lower percentage associated with the hilly terrain of the country.

The road code defines six road categories in terms of their construction, technical project standards and functional characteristics: Highway, Interurban main roads, secondary interurban roads, main urban roads, secondary urban roads and local roads. These roads are further divided by state road ownership, district roads, internal roads (roads under the jurisdiction of some special enterprises such as mines or forests) and municipal roads (all roads within the territory of administrative units or municipalities).

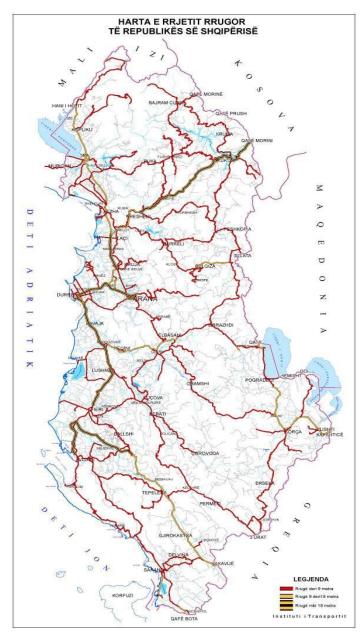


Figure 27. Road network in Albania (Source: Albania Construction Portal).

### 2.14 Integration with European Legislation

Albania has already planned a series of measures to meet its obligations as a full member of the Stabilization and Association Process. In the road transport sector, EU integration implies the legislative adaptation of the transport legal framework to International Standards and Regulations.

The Government of Albania has signed a Memorandum of Understanding for Core Network (SEETO). This network aims primarily to facilitate the integration of Southeast Europe in line with the aims of the Stabilization and Association Process. Includes along with the segments of the Pan-European Corridors IV, V, VII, X and Corridor VIII (Durrës-Varna through Tirana) the ports of Durres and Vlore and the

Rinas Airport. This network also gives a regional value by raising the infrastructure connection of corridor VIII and X corridor, Durrës-Kukës-Morina-Prishtina-Nish. Development of infrastructure in the Western Balkans area, including Albania, has been the subject of several studies funded by community institutions such as the Regional Balkans Infrastructure Study (REBIS), (EU CARDS 2003).

#### 2.15 Albanian corridors

Pan-European VIII Corridor was approved in Crete in '94, and confirmed in Helsinki in '97. The road corridor follows the route: Tirana / Durrës / Vlora - Elbasan - Skopje - Pernik - Sofia - Plovdiv - Burgas - Varna. Though it has shorter lengths than others and also the lowest cost it has seen slower developments due to lack of investment.

A Memorandum of Understanding signed in Bari where this artery was added to the ports of Bari, Brindisi and Vlora has increased the interest of the Italian Government which has funded its important parts. However, in the Albanian territory, its main segment has been rehabilitated (road axis Durrës-Qafë Thanë), while segments of road connection between Vlora and Durrës ports are already in construction. The purpose of the construction of this corridor has been the link between the two seas, the Adriatic and the Black Sea, in a horizontal way to reduce the time travel and transport of goods from east to west and vice versa.

#### 2.15.1 North – South Corridor

This corridor has a length of 405 km and connects Montenegro through Hani Hoti to Shkodra, Gjirokastra itinerary Kakavija in Greece. The central part of this corridor is aligned with Corridor VIII in segments that are already under construction, a significant portion of road segments have been rehabilitated although not at European standards levels, while some are in the process of negotiation. Even in this case traffic projections after the completion of all road axes are optimistic.

The Adriatic-Ionian highway is a highway under construction along the western coast of the Adriatic and the Ionian Sea. The Blue Corridor passes to the western part of the Balkan peninsula. The highway of the valley, or the Adratik-Ionian Coastal Motorway, an idea that logically unites the dalmatian road with the Greek coastal axis, passing through Albania. It starts in Trieste (Italy) and passes first through Slovenia to Rijeka in Croatia. Most of Croatia consists of the A1 motorway. In the vicinity of Dubrovnik, the Adriatic-Ionian highway will pass through Bosnia and Herzegovina to Trebinje to Montenegro. There it will continue through Podgorica in the northern part of Shkodra to Albania further to Durrës in the direction of Greece. In Greece this highway will cross Janina and Patra ending in Kalamata.

In the National Transportation Plan, before this road was built, it is quoted the traffic flow data would not justify a significant investment in this road axis. But from the dates they show that the social impact of building this artery as one of the most important investment criteria in the Core Network is quite high.

This also led to increased traffic. It is emphasized that about 53% of the vehicle inventory in the Republic of Albania belongs to the districts (administrative units, municipalities, counties), where this Corridor passes.

The Durres-Morine Corridor (Kukes) has a regional impact. It is likely to have more opportunities for transport links between the Adriatic Sea and the Mediterranean Sea and does provide links to the Ports of Durres and Shengjin addressing tire trade in countries of such as Kosovo, Montenegro, Serbia, North Macedonia, and other Balkan countries such as Romania, Bulgaria and beyond.

In the main regional network, it is considered as the most optimal connection of the Pan-European Corridor VIII to X on the <u>Durrës-Kukës-Prishtina-Nish</u> route.

"The construction of this Corridor is of particular importance due to the fact that freight and passenger transport occupies the major share of transport both domestically and with Kosovo."

Also, its construction has reduced the distance and nearly halved the cost of transporting goods and passengers through the port of Durres to Kosovo. The linking of two important markets to Albania and Kosovo has helped in the utilization of economic resources, such as the mining, forestry and tourism industries in particular.

Important road segments, integral parts of the East-West, North-South, Durres-Morine corridors, tourist roads and those leading to the border crossings, have been constructed and put into use.

Despite relatively significant investments (rehabilitation and new construction in many segments), the road network is limited in both size and quality compared to the regional countries and currently its condition is not good, due to the lack of an efficient maintenance system.

While using public funds, maintenance costs, while more effective, remain below the level of national road network maintenance needs.

"Damaging factors are the illegal constructions along the main roads that still prevail, mainly due to the lack of second level infrastructure and access roads (Qaja, 2020)."

Also, the continuous on-axis weight control system is not implemented, with measurements were taken showing that about 75% of trucks are overloaded. This causes damage to road axes that are not designed to withstand such weights (Tema, 2016).

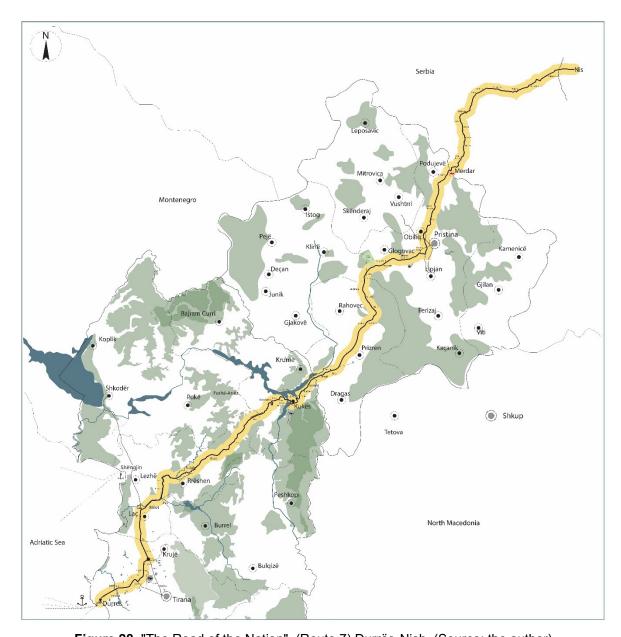


Figure 28. "The Road of the Nation", (Route 7) Durrës-Nish. (Source: the author)

Table 5. Why the road of the Nation? (Source: the author).

Why route 7 ("Road of the Nation" part)								
European policies TEN-T	The Corridor concept is part of the Pan-European transport infrastructure concept, which has developed the three Pan-European Transport Conferences	The benefit of the trade and social relations between the European Union and the countries in Central and Eastern Europe.  Basic infrastructure development of international importance  The benefit of the April 2015. Europe needs strong transport connections to discussed drive trade and economic growth, and to create employment and prosperity.		Europe needs strong transport connections to drive trade and economic growth, and to create employment and prosperity.	Transport networks are at the heart of the supply chain and are the foundation of any country's economy.			
Balkan Corridors	Corridor IV, Corridor V, Corridor VII, Corridor VIII, Corridor IX. Corridor X,	To achieve a bala development, the Union aims to imp "cohesion policy European Union's promote and supp "harmonious ove development" of states and regions	European plement the strategy to port the erall its member	Social cohesion inclusive and ai social and economic the regions or reducing dispari of development regions.	m at achieving omic equality in further by ties in the level			
SEETO Policies	Various organizations have been set up aiming at achieving the objectives of the European Union for these regions. One of them is SEETO.	Regional transport organization established by the Memorandum of Understanding for the development of the Core Regional Transport Network (MoU).	Albania Herzeg the forr Macedo Monter Serbia Nations	negro and and the United s Mission in and the an				
Blue corridor	Route 1, Route 2b and 2c (in Albania).	So many parts under construction (in Albania).						
Route 7 "Road of the Nation"	Branch of Corridor X.	Connecting the existing Corridor X to the Adriatic coast	Links with central Balkan,	Under concession for Maintenance	Albania government consider it completed			
Corridor VIII	Connect Adriatic Sea ports with Black sea ports.	So much parts (in tendering procedures)	So many parts ongoing process					

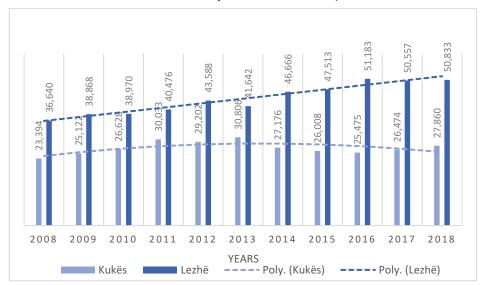
## 2.16 Demographic situation and population projection in the northern prefectures of Albania where this corridor passes.

**Table 6.** Demographic changes and projection in northern prefectures of Albania. (Source: INSTAT, elaborated by the author).

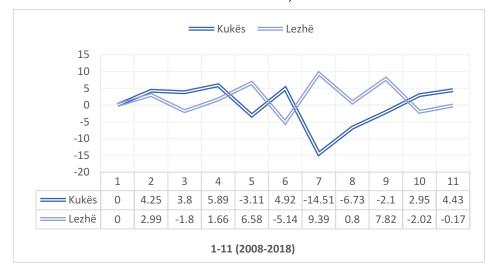
Prefecture	Population						
	2011	2017	2021	2031			
Kukës	85,292	79,559	73.423	61.341			
Lezhë	134,027	129,019	125.959	116.345			
Dibër	137,047	125,579	116.812	95.680			
Shkodër	215,347	207,924	204,898	188,816			
Albania	2,907,362	2,876,591	2,863,311	2,782,309			

Below is the GDP at current prices for the period 2008-2018 for Kukës and Lezhë prefectures.

**Graph 1.** Gross Domestic Product in million Lekë (AL) at current prices. (Source: INSTAT, elaborated by: G. Rëmbeci 2019).



**Graph 2.** Real growth of Gross Domestic Product in %. (Source: INSTAT, elaborated by: G. Rëmbeci 2019).



## Chapter 3. INSTRUMENTS OF CASE STUDY ANALYSIS

The methodology developed to answer research questions consists of a combination of quantitative techniques (economic analysis, long-term, short-term effects) and qualitative (personal interviews, field observations, economics research and newspaper archives, etc.). The qualitative techniques, (including websites or blogs) these in particular have proven to be an excellent source of evidence that identifies or reveals objective information and objective perceptions about the project, thus competing to assess the impact of the project on social benefits. At the same time, quantitative data have provided important support to test and validate several findings derived from personal interviews and other sources.

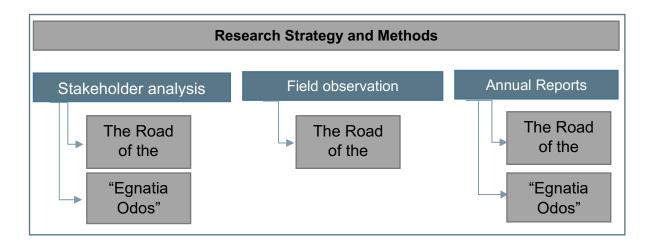
## 3.1 Research Strategy and Methods

Beyond research and theoretical understanding of the transport corridors and their role in regional development through growing the connectivity, the continuation of the study and research topic focused toward concrete analysis of an Albanian case study.

In this phase of the research, it is necessary to show the approach taken to collect and enter data and methodology used to analyse these data. (Qaja, 2020)

The first case study is "The Road of the Nation" Albania – Kosovo, Route 7, Corridor X and the second is "Egnatia Odos" (content analysis), in Greece but it will be used as a success case content analysis.

The first phase is to analyze in different groups, Social and Economic impact.



#### 1. "The Road of the Nation" Albania – Kosovo, Route 7, Corridor X.

#### 3.2 Analysis of main case study

#### First group (Social Analysis)

The social impact analyses were focused on stakeholder's analyses and field observation while the economic impact analysis will be oriented towards analyzing the Annual Reports.

- 1. The first is stakeholder analysis;
- 2. The second field observation and questionnaires;
- 3. The third annual reports analysis.

#### 3.2 Stakeholder analysis

In the stakeholder analysis divide into stakeholder that have been positively and negatively impacted or beneficiaries and non-beneficiaries.

Stakeholder Analysis Stakeholder analysis is an important technique used to identify stakeholders and their needs. In this case it will use to identify all key (primary and secondary) stakeholders who have an interest in the issues with which the project is concerned.

In this case, which is equally important for both Albania and Kosovo, individuals whose activity is generated are concerned with two questions; who has the power and who has the interest?

Table 7. Stakeholders (Road of the Nation). (Source: Qaja, 2020).

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

<sup>\*</sup> Citizens (Type1), those who live near access points

For the two questions raised above the table lists individuals and groups who have the interest or the power to use this corridor.

Each of them has individual intentions that are expressed based on the interest they have to move from one point to another, from origin to destination.

<sup>\*</sup> Citizens (Type2), those who live far, or on the other side of the area.

In the case of those who have the power, (investors, citizens, transport companies, farmers):

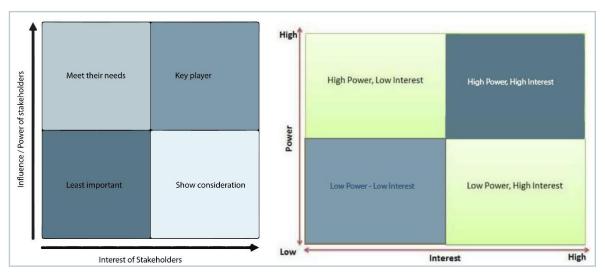
Table 8. Features of stakeholders (Road of the Nation). (Source: Qaja, 2020).

		Power		
Investors	Citizens	Transport companies	Farmers	Ministry of Infrastructur e and Energy
Their goal is to derive benefits from the investment made	Their purpose is to efficient the time of circulation	Their goal is to minimize transport costs and to benefit in time.	To safe their farms compact (Land and greenhouses)	Its purpose is to orient investment
Benefits from concession for the maintenance of the road axis	There are potential for setting up new service businesses along the corridors	Avoiding delays during movement.	To increase production and reduce costs	To oversee the project and its stages of implementation
	Create motion fluxes and impose them, and consequently the investment worthiness.			

In the case of those who have interest (Taxi driver, Bus driver, Shop service, Individuals):

Table 9. Features of stakeholders (Road of the Nation). (Source: the author).

	Interest								
Taxi driver	Bus driver	Shop service	Individuals						
The primary purpose is to understand the need of the people to reach destinations timely and safely	The primary purpose is to understand the need of the people to reach destinations on time and safely.	It aims to position itself in a strategic location along the corridor to benefit more customers	Intend to shorten travel time						
Minimize cost and maximize profit.	Enhance service delivery to increase the number of travellers	Offer quality services to increase customers	Aim not to damage their personal vehicles						
To achieve significant gains and increase the frequency of the road.	There should be low tax rates for road frequency.	Aims to have low competition to maximize profit	They should be safe during the journey						
			Access different points (cities) along the voyage, providing access and exit along the corridor						



Graph 3. Example of graph Stakeholders Analysis.

(Source: Scholar99.com https://www.scholar99.com/stakeholder-analysis-techniques/)

This way of analysis helps to understand which stakeholders have the highest and the least interest for the implementation of such projects as project corridors that in their entirety complete vital functions for different size settlements and points of interest where services are received.

#### Following the methodology that this analysis provides based on the evidencing of:

- High power and high interest
- High power and low interest
- Low power and high interest
- Low power and low interest,

Stakeholders along these corridors are positioned in different geographic locations based on what they represent.

#### (High power and high interest)

If a stakeholder has high power and high interest, these are stakeholders who should support the project. These are the decision-makers who always work for the project to be successful. For this category, the expectations and concerns of these stakeholders should be closely monitored.

#### (High power and low interest)

If a stakeholder has high power and low interest, it must be kept in the loop. Although the interest rate is low in the project, as these are high-powered people, the project needs to satisfy the hopes.

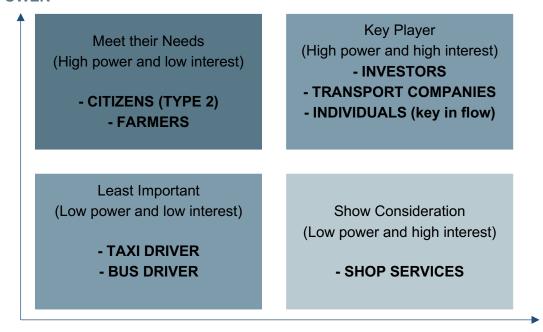
#### (Low power and high interest)

These are people who will work on the project and are more affected by it, even though they are decision-makers. They should be kept in the loop and updated with project information, such as project progress.

#### (Low power and low interest)

These are people who will come last in the line of interest. They may have little interest in the project as they are a small group of people and they have low power to influence the project.

#### **POWER**



**INTEREST** 

Graph 4. Stakeholders position on graph analysis (Road of the Nation).

The above chart is positioned according to interest and their stakeholder power which, depending on the level expressed, have taken the position. The methodology used is based on how stakeholder analysis is built considering those who have more relevance and influence in this analysis.

To better understand the level of engagement and satisfaction for the project, A rank scale has been used that has five levels of stakeholder groups as previously analysed.

The five levels that are taken into consideration are explained below.

## **UNAWARE**

This group of stakeholders is unaware of the project. They have no information on the project and its impact on the territory and access to residential areas. At this level, stakeholders are not able to influence the project in any way.

#### RESISTANT

Stakeholders do not want or like the project or the decisions for the project, as they will not benefit from it or, in the worst case, make losses. These stakeholders may pose a risk to the project and need to be carefully handled.

#### **NEUTRAL**

The stakeholder does not have either an opposition or interest towards the project and they are neutral. They are not interested in the outcome of the project and momentarily their position is impartial.

#### SUPPORTIVE

The stakeholder wants the project or decision to succeed. They support it and the interventions that are made to improve it, also have a positive approach to the impact of the project on the territory.

#### **LEADING**

In the end, these are the stakeholders involved in every decision and actively helping the project to make it a success. For example, the sponsor but, in some cases will exist some group which will support the project and will have a positive approach on it.

In the matrix below, stakeholders have been assessed with regard to their positioning in the assessment scale, where some of them reach two positions due to their dual stand.

Stakeholder Neutral Unaware Resistant **Supportive** Leading Investors Citizens (Type1) Transport companies Citizens (Type2) Taxi driver Bus driver Shop service Individuals (key in flows) Farmers

Table 10. Assessment scale of stakeholders. (Source: Qaja, 2020).

#### **Conclusions about this analysis**

The matrix above analysed each stakeholder against their engagement and satisfaction regarding the project. In this five-level scale rank each stakeholder has reasons for their positioning. Based on each individual analysis an explanation is provided below.

**Investors take** these positions (neutral, supportive, leading) because they depend on the investments that the government makes in each of the main or secondary settlements. Furthermore, their position is affected by the population fluxes and growth.

**Citizens** (Type 1, those who live near access points), have taken this scale rank (Unaware, Neutral) because in some cases they are not informed of the project and its benefits or in some cases where the projects impact the settlements where they live, they stay neutral and wait from the impacts of the project to take into consideration its benefits.

**Transport companies, taxi drivers and bus drivers,** these types of stakeholders are positioned in these places (Neutral, Supportive) because they benefit from this type of project, the cost reduction of travel and the time of transport.

**Citizens** (Type 2, those who live far, or on the other side of the area), are position as (Unaware, Leading), because they are not beneficiaries of this project for the reason of leaving the area, or they are leading because the project is impacting their business or investment in another settlement.

**Shop service**, this type of stakeholder is positioned as (Supportive) because they generate their activity for those types of individual flows which use the road and its services.

**Individuals (key inflows),** this type are those who use the road at a different frequency and for their needs which are not for daily use. They are (Neutral, Supportive) because they fulfill their interests and arrive at a destination in a shorter time.

**Farmers** are positioned (Resistant) because at times the projects are not safe for their land and they are not beneficiaries.

#### 3.3 Field observation

In this analysis it is important to understand the real situation of an important project in terrain. It will include opinion on observations, feedback 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 is defined as a qualitative method of data collection that seeks to observe, interact and understand people. For example, social scientists conducting field research can conduct interviews or monitor people from distance to understand how they behave in a social setting and how they react to situations around them.

Field research includes a wide range of social research methods, including direct observation, limited participation, analysis of documents and other information, informal interviews etc.

Field research typically begins in a specific environment, though the ultimate objective of the study is to observe and analyze the behavior of a subject in that setting.

#### The methodology used for field observation include:

#### 1. Direct Observation

In this method, the data was collected through an observation method where the behavior or outcome of the situation was in no way affected by the subject's researcher. The advantage of this direct observation is the provision of contextual data to people, situations, interactions and the environment.

#### 2. Participant Observation

In this method of field research, the researcher has tried to be deeply involved in the research process, not just as an observer, but also as a participant.

#### 3. Ethnography

Ethnography is an expanded survey of social research and social perspective and the cultural values of an entire social environment. In ethnography, all communities are objectively observed. The researcher has chosen to observe the residents and silently observe their daily behaviors.

#### 4. Qualitative Interviews

During qualitative interviews, questions were raised directly to residents of the area. Qualitative interviews are organized as informal and negotiating. This has provided a wealth of data. This also helps in collecting relational data. This method of field research has worked with focus groups.

#### 5. Case Study

It includes a thorough analysis and a thorough understanding of the methods of data collection and data extraction. (QuestionPro 2019)

# The methodology followed for obtaining information from field visits. Steps in Conducting Field Research

Some basic steps that have been pursued in field research management are:

#### 1. Select the right settlement for questionnaires:

It was important to select the right settlements for questionnaires of research that was developed by the author. The way that follows from the author for the questionnaires full fill consists of creating contacts with the directors of main municipalities.

## 2. Data Collection Methodology:

Data collection methods for field research are different. In the case of this study is a mixture, interviews, concrete case study, conversations with different residents of the selected areas, leaders of travel companies, drivers and observations. The key issues that have been discussed and observed have been fixed since the beginning.

#### 3. Site Visit:

A field visit is the most important part of the study and the success of this field research. It was developed in 2 months. The questionnaires were filled for each of the interest groups in eleven settlements.

#### 4. Data Analysis:

The analysis of the data collected is important as it helped to validate the research premise to determine the outcome of the field research.

#### 5. Processing the results:

At the end of the field visit and the collection of the necessary data, was been carried out the processing the data obtained from the visit. In the end, conclusions were drawn.

#### Perception of field observation

**Table 11.** Perception of field observation. Appearance in matrix. (Source: the author).

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

<sup>\*</sup>Measurement scale \_\_\_\_

#### Comments about the observation

The field observation of the settlements and the relationship that residents and different users have with this corridor is done through a series of components. The components used are: a) Conversations with different residents, which helped to understand more about their feelings and how satisfied or dissatisfied they are with all the changes that the road brought or did not bring after construction; b) Informal interviews, which according to the case and the interviewee went beyond the questions contained in the questionnaire; c) Daily behaviors, due to the long stay and field work for the interviews it became possible to observe the daily life of residents and other stakeholders, their movement flow and itineraries movement; d) and e) Situation and Interaction are two of the observed elements for the creation and formation of opinion about the situation of settlements and the

relationship they have with this corridor but also between them, realizing that the needs and expectations of communities are higher for interaction; **f)** Territorial cohesion, this important factor to reduce inequalities between regions by strengthening the economic and social aspect was not felt in this region leaving the population groups unorganized, out of attention and unsafe for the situation and daily interaction; **g)** Social happiness, is shown and appears at average levels, not being positive in most of them, related to economic factors.

The measurement scale in the table above indicates according to the intensity of the color, how positive, average, or non-positive is the observation and the feeling conveyed by this observation. The darkest color indicates the most positive level, the average color indicates the average level and the pale color indicates the non-positive level.

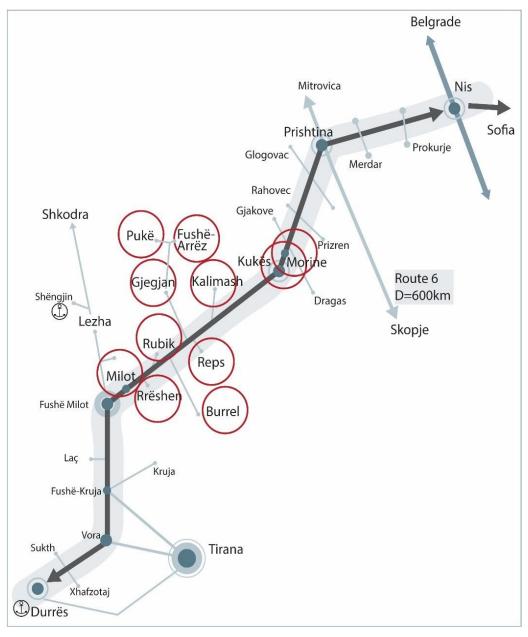


Figure 29. Illustration of the settlement's position. (Source: the author)

## 3.4 Questionnaires

 Table 12. Types of questionnaires. (Source: the author)

Criteria for selecting settlements   questionnaire   questio		Types of Number of							
Location (at the beginning ,in the middle or at the end, near or far)  1. Milot beginning 1.21 km   4,454   Important settlement during the highway  3. Rrëshen middle 3.5 km   8,803   Important settlement during the highway  4. Gjegjan* middle 20 km   2,846   Connected with old road too.  5. Reps middle 3 km   <1,000   Small settlement for the number of populations.  1. Residents (type 1), + Residents (type 2), + Residents (type 2), 2. Investors, 5 individuals (type 2), 2. Investors, 5 individuals (key in flow)  1. Milot beginning 1.30 km   8,461   Entry point of highway  2. Rubik beginning 1.21 km   4,454   Important settlement during the highway  3. Rrëshen middle   3.5 km   8,803   Important settlement during the highway  4. Gjegjan* middle   20 km   2,846   Connected with old road too.  5. Reps middle 3 km   <1,000   Small settlement for the first settlement and the middle road too.  6. Kalimash   at the end   9.8 km   <1,000   First settlement fafter the tunnel  7. Kukës at the end   2.7 km   16,719   Important   Type 1-2-3-4-5   100		Settlements	C	riteria for sel	lecting settleme	ents	questionnaires	questionnaire	
(at the beginning in the beginning in the entry / populations exit point (inhabitants) of highway.   (inhabitant					- 100				
beginning in the middle or at the end, near or far)  1. Milot beginning 1.30 km 8,461 Entry point companies, 5. Individuals (key in flow)  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important Settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small settlement after the tunnel  7. Kukës at the end 9.8 km ~ 1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						Others		-	
, in the middle or at the middle or at the middle or at the middle or at the highway. end, near or far)  1. Millot beginning 1.30 km 8,461 Entry point companies, 5. Individuals (key in flow)  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First settlement  6. Kalimash at the end 9.8 km ~ 1,000 First settlement  6. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100			,						
middle or at the highway. end, near or far)  1. Milot beginning 1.30 km 8,461 Entry point companies, 5. Individuals (key in flow)  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100				-				populations.	
at the end, near or far)  at the end, near or far)  at the end, near or far)  A. Taxi driver + bus driver + Transport companies, 5. Individuals (key in flow)  1. Milot beginning 1.30 km 8,461 Entry point of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100					(inhabitants)				
end, near or far)  end, near or far)  a. Farmers, 4. Taxi driver + bus driver + Transport companies, 5. Individuals (key in flow)  1. Milot beginning 1.30 km 8,461 Entry point Type 1-2-3-4 70 of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100							-		
3. Farmers, 4.Taxi driver + bus driver + bus driver + bus driver + bus driver + Transport companies, 5. Individuals (key in flow)  1.   Milot   beginning   1.30 km   8.461   Entry point of highway  2.   Rubik   beginning   1.21 km   4.454   Important settlement during the highway  3.   Rrëshen   middle   3.5 km   8.803   Important settlement during the highway  4.   Gjegjan*   middle   20 km   2.846   Connected with old road too.  5.   Reps   middle   3 km   < 1,000   Small   Type 1-3-4   30    6.   Kalimash   at the end   9.8 km   ~ 1,000   First settlement after the tunnel  7.   Kukës   at the end   2.7 km   16,719   Important   Type1-2-3-4-5   100			at the	highway.			Shop-		
A.Taxi driver + bus driver + bus driver + bus driver + Transport companies, 5. Individuals (key in flow)			end, near				services;		
bus driver + Transport companies, 5. Individuals (key in flow)			or far)				3. Farmers,		
Transport companies, 5. Individuals (key in flow)  1. Milot beginning 1.30 km 8,461 Entry point of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100							4.Taxi driver +		
companies, 5. Individuals (key in flow)  1. Milot beginning 1.30 km 8,461 Entry point of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100							bus driver +		
5. Individuals (key in flow)  1. Milot beginning 1.30 km 8,461 Entry point of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First Type 1-3-4 30  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100							Transport		
Milot   beginning   1.30 km   8,461   Entry point   Type 1-2-3-4   70							companies,		
1. Milot beginning 1.30 km 8,461 Entry point Type 1-2-3-4 70 of highway  2. Rubik beginning 1.21 km 4,454 Important settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important Settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First Settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100									
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settlement during the highway  3. Rrëshen middle 3.5 km 8,803 Important settlement during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						of highway			
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highway  3. Rrëshen middle 3.5 km 8,803 Important Type 1-2-3-4 70  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30  settlement  6. Kalimash at the end 9.8 km ~1,000 First Type 1-3-4 30  Type 1-3-4 30  settlement  first Type 1-3-4 30  settlement  after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						settlement			
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during the highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First Type 1-3-4 30 settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100	3.	Rrëshen	middle	3.5 km	8,803	Important	Type 1-2-3-4	70	
highway  4. Gjegjan* middle 20 km 2,846 Connected with old road too.  5. Reps middle 3 km <1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~1,000 First Type 1-3-4 30 settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						settlement			
4.Gjegjan*middle20 km2,846Connected with old road too.Type 1-3-4305.Repsmiddle3 km< 1,000						during the			
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road too.  5. Reps middle 3 km < 1,000 Small Type 1-3-4 30 settlement  6. Kalimash at the end 9.8 km ~ 1,000 First Type 1-3-4 30 settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100	4.	Gjegjan*	middle	20 km	2,846	Connected	Type 1-3-4	30	
<ul> <li>5. Reps middle 3 km &lt; 1,000 Small Type 1-3-4 30 settlement</li> <li>6. Kalimash at the end 9.8 km ~ 1,000 First settlement after the tunnel</li> <li>7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100</li> </ul>						with old			
Settlement  6. Kalimash at the end 9.8 km ~ 1,000 First Type 1-3-4 30 settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						road too.			
6. Kalimash at the end 9.8 km ~ 1,000 First Type 1-3-4 30 settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100	5.	Reps	middle	3 km	< 1,000	Small	Type 1-3-4	30	
settlement after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						settlement			
after the tunnel  7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100	6.	Kalimash	at the end	9.8 km	~ 1,000	First	Type 1-3-4	30	
7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						settlement			
7. Kukës at the end 2.7 km 16,719 Important Type1-2-3-4-5 100						after the			
						tunnel			
city in	7.	Kukës	at the end	2.7 km	16,719	Important	Type1-2-3-4-5	100	
						city in			

					northern		
					Albania		
8.	Morinë	at the end	0.50 km	~ 1,000	Settlement	Type 1-3-4	30
					near the		
					border		
9.	Burrel	Far from	35 km	10,862	Important	Type 1-2-3-4	60
		entry			city in the		
		point			region		
10.	Fushë-	Far from	41.1 km	2,513	The old	Type 1-2-3-4	40
	Arrëz	entry			road		
		point			passed		
					there		
11.	Pukë	Far from	52.3 km	3,607	Near the	Type 1-2-3-4	50
		entry			old road.		
		point					

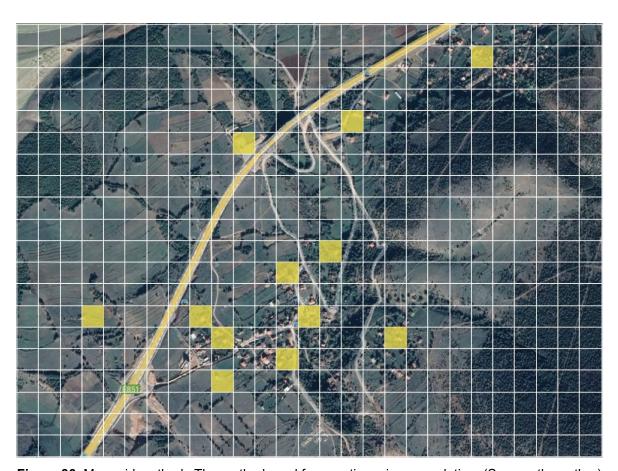


Figure 30. Map grid methods. The method used for questionnaires completing. (Source: the author)

The figure above shows the map grid method for completing the field questionnaires. This method was used to determine the residential areas where the questionnaires could be completed, and then the confirmation, whether or not people live in these residential buildings, was obtained from the local authorities.

#### Maps illustration for the settlements during The Road of the Nation.

In maps below are illustrated some of the settlements position along the way which are taken into consideration for the study of this corridor. Settlements have a different geographic position, area, and a number of populations.

In these maps show some of the indicative elements for residential areas; inhabited areas, main roads, agricultural areas, entry and exit points from the settlement to the highway, etc. also below is a short description for each of the settlements.

Images show one by one eleven settlements starting from: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë, Burrel, Fushë-Arrëz, Pukë.

#### ➤ Milot,

The city of Milot is located in the central part of the Republic of Albania. It has a strategic position that connects the north of Albania with the capital (Tirana). In the administrative division it is included by the district of Kurbin. Miloti is also of great importance for the fact that the Durres-Prishtina highway passes through the outskirts of the city in a length of 13 km. Milot municipality covers an area of 138 km2 where 8461 inhabitants live. Milot is located 45 km from the capital and is a junction with all the provinces of Northern Albania and Northeast as a crossroads of national roads. Miloti is located 65 km from the port of Durrës, 20 km from the port of Shengjin, 40 km from the airport "Mother Teresa", 20 km from the beach of Shengjin and 14 km from the beach of Patoku. The city center is located 1.20 kilometers from the entrance point of the national road.



**Figure 31.** Milot settlement and a different point of view of the highway and some of the built resources.

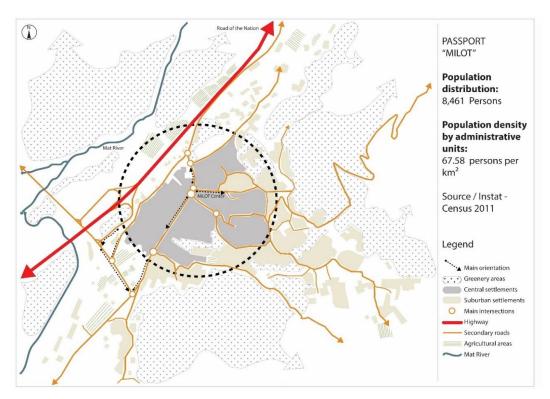


Figure 32. Passport of Milot settlement. (Source: the author).

### > Rubik,

Rubik is a town and a former municipality located in the central-north of Albania along national roadway SH30 which links Tirana/Lezhë County with Rrëshen/Kukës and the new A1/SH5 Albania–Kosovo Highway. At the 2015 local government reform it became a subdivision of the municipality Mirditë. The population at the 2011 census was 4,454. The municipal unit consists of the town of Rubik at its center and eleven peripheral villages.

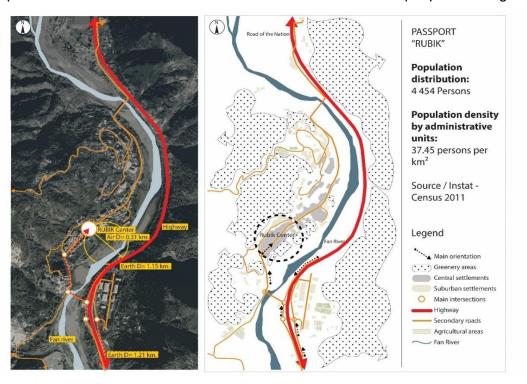


Figure 33. Rubik settlement and passport. (Source: the author)

#### Rrëshen,

Rrësheni is a city in Albania with about 8,803 inhabitants, the capital of the Municipality of Mirdita, in northern Albania. The main route from the Kosovo border to Tirana and Durres passes on both sides of Rrëshen, providing good transportation to the capital and the Adriatic Sea. Since the fall of communism, most of the mines have been abandoned. This led to large-scale migration to Tirana and larger industrial centers. The agricultural sector is in poor condition and lacks investment.

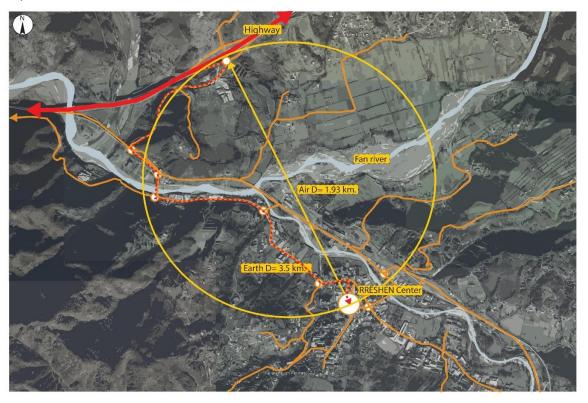
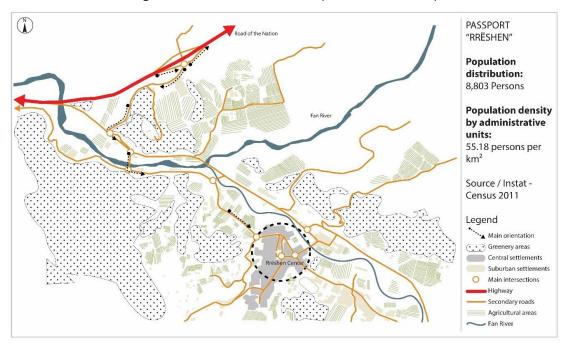


Figure 34. Rrëshen settlement. (Source: the author)



**Figure 35.** Passport of Rrëshen settlement. (Source: the author)

# ➢ Gjegjan,

Gjegjan is a village and a former municipality in the Shkodër County, northern Albania. At the 2015 local government reform it became a subdivision of the municipality of Pukë. The population at the 2011 census was 2,846.

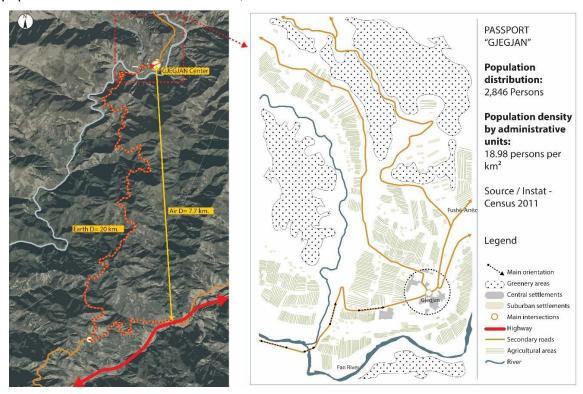


Figure 36. Passport of Rrëshen settlement. (Source: the author)

### > Reps,

Reps is a small town in Lezhë County, northwestern Albania. At the 2015 local government reform it became part of the municipality Mirditë. It was the seat of the former municipality Orosh. It is located in the middle flow of the small Fan river.

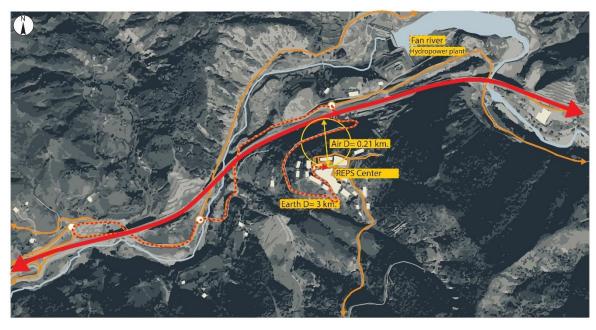


Figure 37. Reps settlement. (Source: the author)

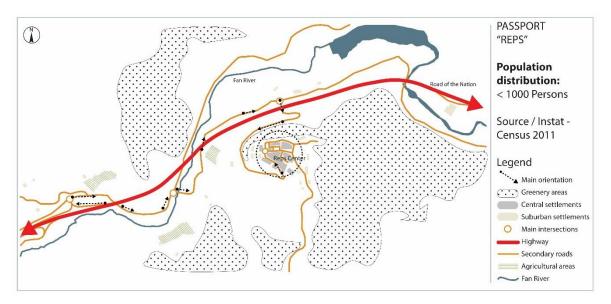


Figure 38. Passport of Reps settlement. (Source: the author)

# > Kalimash,

Kalimash is a village in the former municipality of Malzi in Kukës County, Albania. At the 2015 local government reform it became part of the municipality of Kukës. There are several chromium mines near the village.

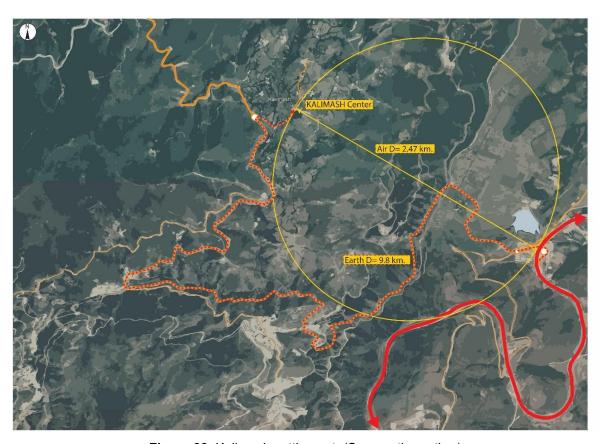


Figure 39. Kalimash settlement. (Source: the author)

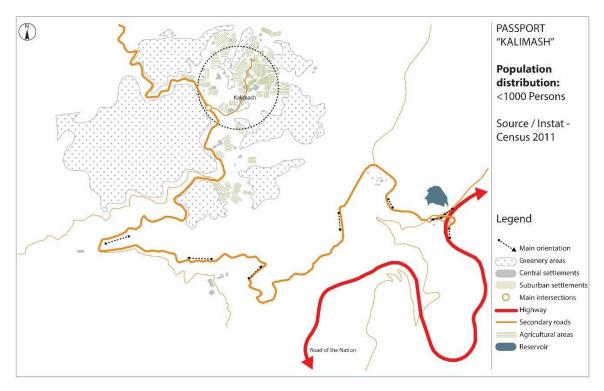


Figure 40. Passport of Kalimash settlement. (Source: the author).

### Kukës,

The city is the center of the surrounding municipality of Kukës and county of Kukës, one of 12 constituent counties of the Republic of Albania. It spans 8.2 square kilometres (3.2 sq mi) and had a total population of 16,719 people as of CENSUS 2011. By air distance, Kukës is located 98 kilometres (61 mi) northeast of Tirana, 75 kilometres (47 mi) to the east of Shkodër and 34 kilometers (21 mi) to the south of Gjakovë and 30 kilometers (19 mi) to the west of Prizren in Kosovo. Geologically, the terrain of the surrounding area is dominated by mountainous and high terrain. The city of Kukës is located in the north-eastern part of Albania and is a mountainous country and is bordered on the Northeast and East by the city of Prizren (Kosovo), where the point of contact is the Morina customs.

Mountain Tourism is developed in this city and is very frequent during the winter season. Kukës is surrounded by mountains from Gjallica and Mount Koritnik. The city is surrounded on three sides by water and resembles the shape of a peninsula. The city of Kukes, since 2009, has become a crossroads of national and international transport, after the commissioning of the highway that starts at the border crossing point in MorinaThe center of northeastern Albania is connected through land roads with the city of Bajram Curri, Peshkopi, Kruma, etc. Kukes Airport is one of the most important investments of transport alternatives for the region in addition to the roads that connect this city. Built 15 years ago by the State of Qatar fund as a category *C* airport.



Figure 41. Kukës settlement. (Source: the author).

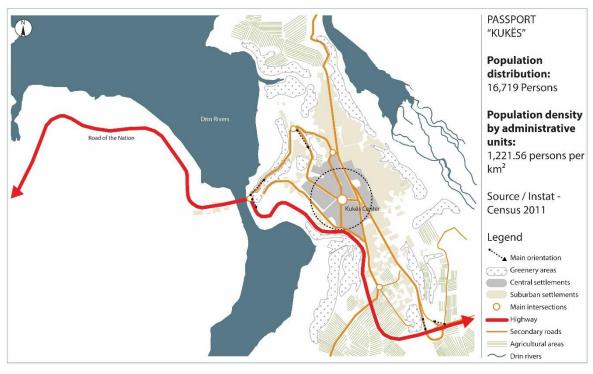


Figure 42. Passport of Kukës settlement. (Source: the author).

### Morinë

Morinë is a settlement in eastern Albania, on the border with Kosovo. The Kosovo side of the border is Vërmica. At the 2015 local government reform it became part of the municipality Kukës.

Morinë is an important stop on the highway that connects the Prishtina capital of Kosova to Albania and then with the Adriatic Sea.



Figure 43. Morinë settlement. (Source: the author).

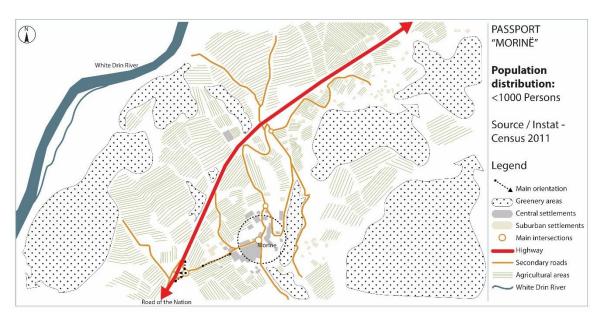


Figure 44. Passport of Morinë settlement. (Source: the author).

### > Burrel

Burrel is a city 91 km from Tirana. At the 2015 local government reform it became a subdivision and the seat of the municipality Mat. The population at the 2011 census was 10,862. Burrel was a miners' town during the Communist period in Albania, but the mines closed, with the exception of a ferrochrome plant still operating near Burrel. The economic development of the town of Burrel cannot be seen in isolation from the surrounding area. Burrel have a huge number of natural resources and beauty, natural or artificial (Ulza Lake)



Figure 45. Burrel settlement. (Source: the author).

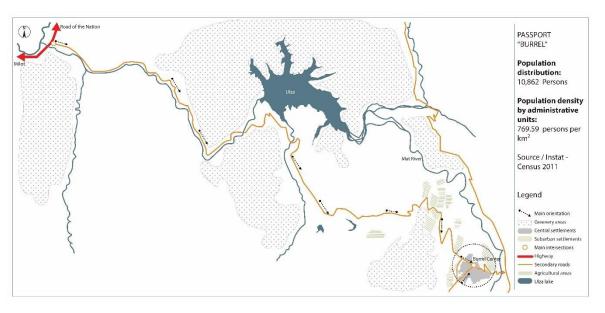


Figure 46. Passport of Burrel settlement. (Source: the author).

## ➤ Fushë-Arrëz

Fushë-Arrëz is a town and municipality in the Region of Shkodra, part of Northern Albania. It was formed in 2015 as a central municipality. The population at the 2011 census was 2513. It is mostly known as a center for processing wood and copper ore. The town sits along a long street, connecting shops, flats, homes and other establishments. Before the construction of the Road of the Nation the city of Fushe Arrëz was an important city in that segment of the road because it served as a resting point and modality for passengers.

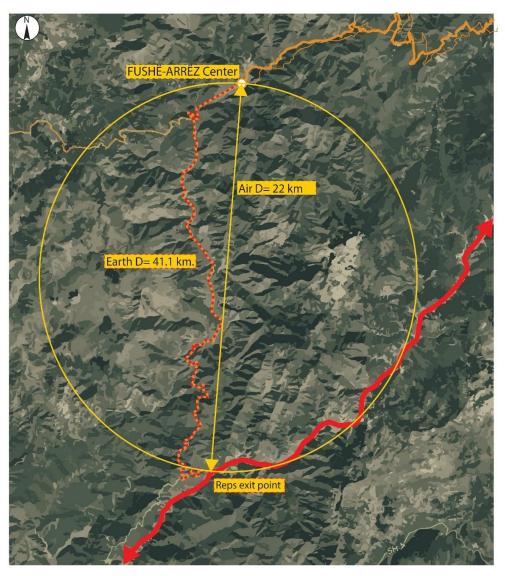


Figure 47. Fushë-Arrëz settlement. (Source: the author).

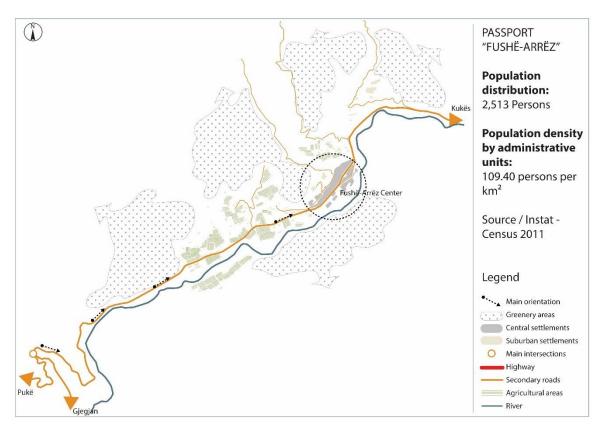


Figure 48. Passport of Fushë-Arrëz settlement. (Source: the author).

# > Pukë

Puka is a city and municipality located in the north of Albania. It was formed in the local government reform 2015 by merging the former municipalities of Gjegjan, Puka, Qelëz, Qerret and Rrapë, which became municipal units. The seat of the municipality is the city of Puka. The population in the city of Puka is 3607 inhabitants. The city is located 838 meters above sea level, and is considered one of the highest altitudes in Albania and a well-known ski area. Around it is beautiful forests mainly pine.

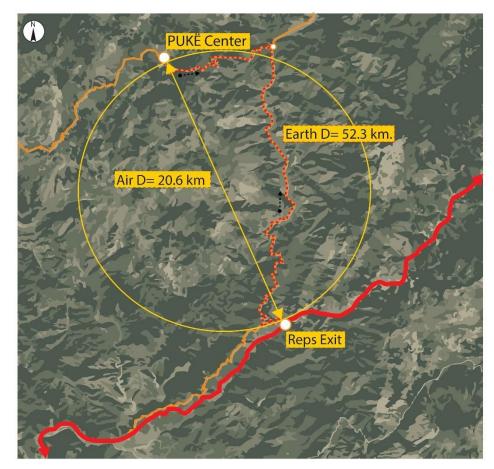


Figure 49. Pukë settlement. (Source: the author).

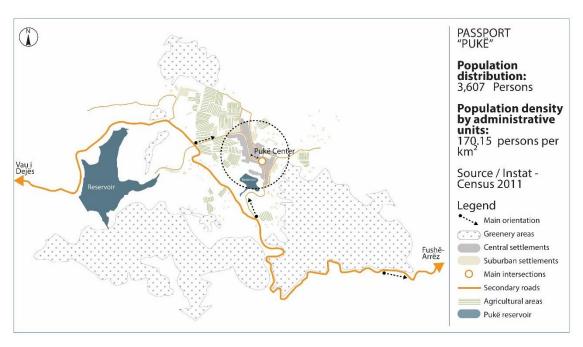


Figure 50. Passport of Pukë settlement. (Source: the author).

**Table 13.** Ratio of earth-air distance for each of settlement. (Source: the author).

Settlements (according to the established order)	Milot	Rubik	Rrëshen	Gjegjan	Reps	Kalimash	Kukës	Morinë	Burrel	Fushë -Arrëz	Pukë
Earth Road distance (km)	1.30	1.21	3.5	20	3	9.8	2.7	0.5	35	41.1	52.3
Air Distance (km)	0.22	0.31	1.93	7.7	0.21	2.47	2.22	0.21	22.5	22	20.6
Ratio	5.9	3.9	1.8	2.59	14.2	3.9	1.2	2.3	1.5	1.86	2.5

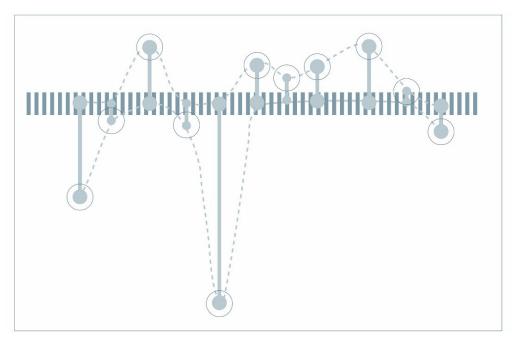


Figure 51. Diagram illustration of the ratio distance. (Source: the author)

## Milot



Figure 52. The Milot settlements visual condition. (Source: the author).

In the settlement of Milot, which is part of the municipality of Kurbin, 70 questionnaires were conducted according to stakeholders, of which, 35 for residents, 10 for transport companies - bus and taxi driver, 10 for farmers and 10 for investors. The questionnaire Envisaged with the purpose of providing answers regarding the economic and social effects felt by inhabitants after the construction of the national road. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

## **Residents**

The interviews included 3 age groups of which, 40% age group 20-35 years, 40% age group 36-45 years and 20% age group 45-60 years. Where 54.3% of these were male and 45.7% female. Their level of education was different, 2.9% with 8-9 years of education, 51.4% with secondary education, 45.7% with higher education. Depending on age and education in this settlement, those interviewed were 57.1% employed, 22.9% self-employed, and 17.1% unemployed, and 2.9% with seasonal employment. Depending on their employment status, 62.9% were employed in the area where they lived and 37.1% were not employed, or work away from the area where they live.

#### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments in terms of its quality or the effect it has had on their economy as well as in relations with other countries (surrounding areas), being considered as the point of departure for the road of the nation.

In their daily life, they use 31.4% of the road on a daily basis, 25.7% 1-2 times a week, 20% every month, 22.9% rarely.

From this frequency, the residents were asked about the effects that the nation's road had on their income, where 5.7% think that very few, almost negligible negative effects were generated, 31.4% said that there was no effect, 22.9% are of the opinion that very few positive effects have been given, almost negligible, and 31.4% have a more positive approach stating that moderate positive effects have been given, with a lot of possibility for further improvement, and 8.6% think that given existing constraints, the highest positive effects are generated.

Miloti being at the entrance of Road of the Nation, has a direct connection with it, reducing the cost along the secondary road that residents have to walk to access this road. In their daily activity they say that 5.7% are not impacted at all by the road, 5.7% are impacted very little by the road, 17.1% have little impact, 2.9% no impact, 34.3% average, 22.9% sufficient and 11.4% are highly impacted.

In terms of their income and daily or non-road use, residents think the nation's road tax is having moderate negative effects, but they could be worse for 2.9% of them, 8.6% think it has generated very few negative effects, almost negligible, for 17.1% no effect was generated, 37.1% gave very few positive effects, almost negligible, for 22.9% moderate positive effects were given, with a lot of possibility for further improvements, and for 11.4% given the existing constraints, the highest positive effects were generated.

# Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. Depending on the questions, residents said that in terms of road quality and services on it, 17.1% think it is poor, 17.1% think it is not good, 40% think it is good, 11.4% think it is enough, and 14.3 think it's very good.

Depending on the first question, the second question is related to road safety where 2.9% think that there is moderate risk, and 22.9% think that there is low risk, 2.9% have no assessment for this, 25.7% think that there is negligible risk, 37.1% think it is not dangerous at all, while only 8.6% think it is safe. This assessment at intermediate levels is related to the lack of crossing points for pedestrians (74.3% say that there is, 5.7% say that there is not while 20% are not informed), unsafe exits, lack of signage and crossings to other levels which prevent the connection of this settlement with other settlements, thus creating a division of the area, often the placement of some businesses with direct access to the road has increased its risk.

## **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on household economic incomes and in social terms.

Respondents say that 20% every 2 weeks, 40% every week, 40% 3 times a week. From this percentage in frequency, we understand that this stakeholder has an average frequency of this path and can have a low impact on traffic flows.

Based on this flow of movement, the effect that the construction of the nation road has had on the income of farmers is impacted, where they say that 60% think that very few positive effects have been given, almost negligible, 30% think that positive effects have been given. moderate, with a lot of possibility for further improvement, and 10% think it has generated no effect.

The farmers of this area mostly have products which are closely related to the household economy, being conditioned by the terrain conditions (plain terrain), they are somewhat more favored than the rest, they think about increasing their farm (80%), and income from production is according to 20% of them low, 30% have average income and 50% think they have enough income (this depending on the years). This production for 20% of farmers does not justify the cost of transport, 60% think that it justifies the cost en masse, 20% think that it justifies it enough. Based on these results, the national road tax for this stakeholder is thought to have no effect for 20% of them, very few positive effects are given, almost negligible (30%), 50% think that positive effects are generated. moderate, with ample possibility for further improvement.

#### Social effects:

Farmers are mostly unsure about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability and other financial difficulties, but despite these, these farmers are investing as it is the basis of their economy. family. About 80% of them think that they will increase the farm for the effect of increasing production and also 10% are not sure if they will do so, but maybe in the future (10%) Related to the effects of the road that the nation in their revenue can be said that the road has reduced travel time and transportation cost but has had no effect on other relief for this stakeholder category.

# <u>Investors</u>

This stakeholder has relatively good distribution in this area, depending on the number of populations. Investors in this area in 60% of respondents aimed to support the household, 40% are in support of socially responsible enterprises and common good. These investors face obstacles in return on investment and the risk they take to invest in these areas not as a result of lack of resources but as a result of population displacement, and lack of support from relevant authorities to lack of business knowledge and lack of of expertise to assess opportunities, where none of the investors says that they can withstand a high degree of risk to ensure the continuity of the business but seek more to ensure their income no matter how small.

The lack of information from the governing bodies as a whole for the area but also for the settlement of Milot has created a state of uncertainty for investors who despite their experience in their reasonable business (60%), and average (40%) does not help to be sure about the continuation of the investment, where 50% of them express fear of bankruptcy.

# **Transport companies, bus-taxi driver:**

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers by linking it to the aspect of economic benefits. Regarding the settlement of Milot, the frequency of use of this road by this party of interest is frequent and they say that they use this road every day. In terms of road quality and road safety during the trip they go to almost the same evaluation values from this stakeholder, where: 30% think it is good and 70% think it is average. As for road safety, 30% think it is not dangerous at all, and 70% think it is safe.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are on average satisfied with the number of passengers they transport (70%), 30% are sufficiently satisfied. This is related to the fact whether this number of passengers justifies the cost of transport where they say that 30% of them are moderately satisfied, and 70% are sufficiently satisfied.

Regarding the tax of this road which opened a big debate when it was initially decided, this stakeholder thinks that it has generated for 70% of them very few positive effects, almost negligible, while 30% think that positive effects have been given moderate, with ample possibility for further improvement.

# Rubik



Figure 53. The Rubik settlements visual condition. (Source: the author)

In the settlement of Rubik, which is part of the municipality of Mirdita, 50 questionnaires were conducted according to stakeholders, of which, 25 for residents, 5 for transport companies - bus and taxi driver, 5 for farmers and 5 for investors. The questionnaire is constructed in such a way as to answer in the end the economic and social effects felt by the inhabitants after the construction of the national road. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

# **Residents**

The interviews included 3 age groups of which, 52% age group 20-35 years, 80% age group 36-45 years and 20% age group 45-60 years. Where 68% of these were male and 32% female. Their level of education was different, 8% with 8-9-year education, 48% with secondary education, 28% with higher education and 16% with post-university education. Depending on age and education in this settlement those interviewed were 48% employed, 20% self-employed, and 20% unemployed and 12% seasonal employment. Depending on

their employment status, 52% were employed in the area where they resided and 48% were unemployed.

#### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments in terms of its quality or the effect it has had on their economy as well as relations established with other countries. In their daily life, they use 52% of the road on a daily basis, 20% 1-2 times a week, 28% every month.

From this frequency, residents were asked about the effects that the road of the nation has had on their incomes, where 4% said that there were moderate negative effects, but they could be worse, 8% think that negative effects were generated. very few, almost negligible, 12% said that it had no effect, 28% are of the opinion that very few positive effects were given, almost negligible, and 32% have a more positive approach stating that the positive effects of moderate, with a lot of possibilities for further improvement, and 16% think that given the existing constraints, the highest positive effects are generated.

This settlement, being close to the Road of the Nation, has a direct connection with it, somewhat reducing the cost along the secondary road that residents have to walk to access this road. In their daily activity they say that 20% are not impacted at all by the road, 20% are impacted very little by the road, 8% no impact, 24% average, 24% sufficient and 4% are highly impacted.

In terms of their income and daily or non-road use, residents think the nation's road tax is giving the highest negative effects for 20% of them, moderate negative effects, but they could be worse for 12% of them, for another 12% side generated very few negative effects, almost negligible, for 4% no effect was generated, 40% say that very few positive effects were given, almost negligible, and for 12% the effects were moderately positive with space for further improvements.

#### Social effects:

Regarding the social effects felt by the inhabitants of Rubik, they are impacted by a series of factors which are related to the quality of roads and services, road safety, the existence or not of pedestrian crossing points and direct or indirect access to the residential area. Depending on the questions, residents say that in terms of road quality and services in it, 4% think it is very poor, 4% think it is poor, 12% think it is not good, 12% have no answer, 52% think it is good, and 16% think it is enough.

In continuation to the first question, the second question related to road safety, where 16% think it is high risk, 24% think it is moderate risk, and 16% think it is low risk, 28% think it is negligible risk, and 16% think it is not dangerous at all. This assessment at negative levels is related to the lack of crossing points for pedestrians (12% say yes, 76% say no while

12% are not informed), unsafe exits, lack of signage and crossings to other levels which hinder the connection of this settlement with other settlements, thus creating a division of the area.

### **Farmers**

#### **Economic effects:**

This category of respondents play their role in the importance of this road, for them this road has had different effects on family economic income and in social terms.

In terms of usage, 20% stated they use the road every 2 weeks and 80% every week. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path and cannot impact to a large extent the traffic flows.

Based on this flow of movement, the effect that the construction of the national road has had on the income of farmers is impacted, where they say that 70% think that very few positive effects have been given, almost negligible, 30% think that positive effects have been given. moderate, with ample room for further improvement.

Farmers in this area mostly have products that are closely related to the household, and very few thinks about increasing their farm (40%), and income from production is according to 20% of them not good (this depending on the years), 40% think they have an average income, 40% think they have sufficient income. This production for 20% of farmers justifies the cost a little, 60% think it justifies the average cost, and 20% think it is sufficiently justified. Based on these results, the national road tax for this stakeholder is thought to be giving very few negative effects, almost negligible for 20% of them, while 80% think that very few positive effects have been generated, almost negligible.

### Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability and other financial difficulties. About 40% of them think that they will not increase farming due to the increase in production and also 60% are not are not convinced they will do so, maybe in the future. Related to the effects of the nation road on their revenue it can be said that the road has reduced travel time and transportation cost but has had no effect on other facilities for this stakeholder category.

### **Investors**

This stakeholder has an average distribution in this area, depending on the number of population and inherited resources. Investors in this area in 60% of respondents aimed to

support the household, and 40% are in support of socially responsible enterprises and common good.

These investors face obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities. , where none of the investors says that they can withstand a high degree of risk to ensure the continuity of the business (20% afford low risk, 80% medium risk), but seek more to secure their income no matter how small , and a smaller but safer increase. The lack of information from the governing instances as a whole for the area but also for the settlement of Rubik has created a state of uncertainty for investors who despite their limited business experience (20%), reasonable (20%), and extensive experience (60 %) does not help them to be sure about the continuation of the investment, where 50% of them express fear of bankruptcy.

### Transport companies, bus-taxi driver

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers by relating it to the aspect of economic benefits. Regarding the residence of Rubik, the frequency of use of this road by this party is of interest between those who visit it 3 times a week (20%), those who visit it every day (60%), and 20% those who visit it. attend 2 times a day. In terms of road quality and road safety during the trip they go to almost the same evaluation values from this stakeholder, where: 40% think it is average and 60% think it is enough. While in terms of road safety 60% think that there is low risk, while 40% think that there is negligible risk.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are on average satisfied with the number of passengers they transport (60%), 40% are sufficiently satisfied. This is related to the fact that if this number of passengers justifies the cost of transport where they say that 20% of them are very dissatisfied, 60% are moderately satisfied, 20% are guite satisfied.

Regarding the tax of this road which opened a big debate when it was first decided, for 60% of the stakeholders very few effects have been generated which are almost negligible and 40% think that positive effects have been moderately generated, with ample possibilities for further improvement.



Figure 54. The Rrëshen settlements visual condition. (Source: the author)

In the settlement of Rrëshen, which is also the center of the municipality of Mirdita, 70 questionnaires were conducted for different stakeholders, respectively, 35 for residents, 10 for transport companies - bus and taxi driver, 10 for farmers and 10 for investors. The questionnaire is constructed Aiming to provide answers for the economic and social effects the construction of the National Road has had on the area inhabitants. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

### Residents

The interviews included 3 age groups of which, 68.6% age group 20-35 years, 17.1% age group 36-45 years and 14.3% age group 45-60 years. Where 42.9% of these were male and 57.1% female. Their level of education was different, 5.7% with 8-9 years of education, 14.3% with secondary education, 65.7% with higher education and 14.3% with post-university education. Depending on age and education in this settlement, those interviewed were 77.1% employed, 14.3% self-employed, and 8.6% unemployed. Depending on their employment status, 91.4% were employed in the area where they resided and 8.6% were unemployed.

### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments in terms of its quality or the effect it has had on their

economy as well as in relations with other countries which these residents create with the surrounding areas being the center of the municipality.

In their daily life, they use 22.9% use the road daily, 42.9% 1-2 times a week, 20% every month, 8.6% rarely and 5.7% 1 time a year.

From this frequency, residents were asked about the effects that the nation's road has had on their income, where 5.7% said that there were moderate negative effects, but they could be worse, 14.3% said that there is no had no effect, 25.7% are of the opinion that very few positive effects are given, almost negligible, and 45.7% have a more positive approach stating that moderate positive effects are given, with plenty of room for further improvement, and 8.6 % think that given the existing constraints, the highest positive effects are generated.

The settlement of Rrëshen, being close to the national road, has a direct connection with it, somewhat reducing the cost along the secondary road that residents have to cross to access this road. In their daily activity they state that 8.6% are not impacted at all by the road, 20% are impacted very little by the road, 31.4% have little impact, 8.6% no impact, 11.4% average, 14.3% sufficient and 5.7% are highly impacted.

In terms of their income and daily or non-road use, residents think the road of the nation tax is giving the highest negative effects for 60% of them, moderate negative effects, but they could be worse for 22.9% of them, for 2.9% no effect was generated, 11.4% were given very few positive effects, almost negligible, and for 2.9% moderate positive effects were given, with a lot of possibilities for further improvement.

#### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. Depending on the questions, residents said that in terms of the quality of the road and services on it, 11.4% think it is very poor, 8.6% think it is poor, 20% think it is not good, 11.4% have none estimate, 28.6% think it is good, and 20% think it is enough.

Depending on the first question, the second question is related to road safety where 14.3% think it is high risk, 22.9% think it is moderate risk, and 31.4% think it is low risk, 20% have none estimate for this, 5.7% think that there is negligible risk, and 5.7% think that it is not dangerous at all. This assessment at negative levels is related to the lack of crossing points for pedestrians (14.3% say there is, 68.6% say there is not while 17.1% are not informed), unsafe exits, lack of signage and crossings to other levels which prevent the connection of this settlement with other settlements, thus creating a division of the area.

#### **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them, this road has had different effects on family economic income and in social terms. Respondents say 40% every 2 weeks, 40% every week, 10% 3 times a week and 10% every day. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path and cannot impact to a large extent the traffic flows.

Based on this flow of movement, the effect that the construction of the Road of the Nation has had on the income of farmers is impacted, where they say that 40% think that very few positive effects have been given, almost negligible, 60% think that positive effects have been given. moderate, with ample possibilities for further improvement.

Farmers in this area mostly have products that are closely related to the household, and very few thinks either increasing their farming or expanding their farm (20%), And the income from production according to 10% is poor, 30% have poor income (depending on years), and 40% think they have an average income, 20% think they have enough income. This production for 20% of farmers does not justify the cost, 10% think it justifies the cost very little, 30% think it justifies it a little, 30% think it is moderately justified, and 10% think it is sufficiently justified. Based on these results, the Road of the Nation tax for this stakeholder is thought to be giving the highest negative effects for 10% of them, moderate negative effects, but they could be worse (10%), 30% think that very few positive effects are generated, almost negligible, while 50% think that given the existing limitations, the highest positive effects are generated.

# Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability and other financial difficulties. About 40% of them think that they will not increase the farm for the effect of increasing production and also 40% are not sure if they will do so, but maybe in the future (60% related to the effects of road in their revenue can be said that the road has reduced travel time and transportation cost but has had no effect on other facilities for this category of stakeholders.

### <u>Investors</u>

This stakeholder has a lower distribution in this area, depending on the number of populations. Investors in this area in 60% of respondents aimed to support the household, 20% support the local economy and only 20% are in support of socially responsible enterprises and common good.

These investors face obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities, where none of the investors says that they can withstand a high degree of risk to ensure the continuity of the business but seek more to ensure their income no matter how small.

The lack of information from the governing bodies as a whole for the area but also for the settlement of Rrëshen has created a state of uncertainty for investors who despite their limited business experience (20%) reasonable (40%), and average (40%) do not helps to be sure of the continuation of the investment, where 50% of them express fear of bankruptcy.

### <u>Transport companies, bus-taxi driver</u>

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers by linking it to the aspect of economic benefits. Regarding the settlement of Rrëshen, the frequency of use of this road by this party is of interest between those who frequent it every week (20%), those who use it 3 times a week (40%), and 40% those who attend every day.

In terms of road quality and road safety during the trip they go to almost the same evaluation values from this stakeholder, where: 60% think it is average and 40% think it is enough. While in terms of road safety 10% think that there is moderate risk, 30% think that there is low risk, while 40% think that there is negligible risk, 20% think that it is not dangerous at all.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are slightly satisfied with the number of passengers they transport (30%), 60% are moderately satisfied and 10% are sufficiently satisfied. This is related to the fact if this number of passengers justifies the cost of transport where they say that 10% of them are very dissatisfied, 40% are less satisfied, 50% are moderately satisfied.

Regarding the tax of this road which opened a big debate when it was initially decided, this stakeholder thinks that it has generated the highest negative effects for 30% of them, 30% think that it has had moderate negative effects, but they could be worse, 10% think that very few negative effects are generated, almost negligible, 20% think that very few positive effects are generated, almost negligible, and 10% think that moderate positive effects are generated, with a large space for further improvements.



Figure 55. The Gjegjan settlements visual condition. (Source: the author)

In the settlement of Gjegjan, which is part of the municipality of Puke, 30 questionnaires were conducted according to stakeholders, of which, 20 for residents, 5 for transport companies - bus and taxi driver and 5 for farmers. The questionnaire is designed to respond in the end to the economic and social effects felt by residents after the construction of the nation road. This settlement is considered as a very small residential center where it was very important before the construction of the national road, as there passed the old road which connected the lower area from Milot to Kukës and then crossed the border point of Morina. Today, this settlement, in addition to experiencing a decrease in the number of inhabitants, has also been closed and some businesses which have been frequented by passers-by, it is located 20 kilometers away from the entry point at Road of the Nation. The following are some of the conclusions drawn from the questionnaires and field visits:

# **Residents**

In the interviews were included in this case 3 age groups of which, 20% age group 20-35 years, 65% age group 36-45 years and 15% age group 45-60 years. Where 60% of these were male and 40% female. Their level of education was different, 45% with 8-9-year education, 10% with secondary education, and 45% with higher education. Depending on age and education in this settlement, those interviewed were 25% employed, 35% self-employed and 40% unemployed. Depending on their employment status, 75% were employed in the area (mostly in agriculture and farming).

#### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments regarding its quality or the effect it has had on their economy, especially in countries where this road is no longer of previous importance. The settlement of Gjegan is in the typology of the rural area with a small number of inhabitants (2846 inhabitants).

In their daily life, these residents use this road at the rate of 15% every day, 15% with a frequency of 1-2 times a week, and 30% every month, 35% rarely, 5% once a year.

From this frequency, residents were asked about the effects that the nation's road has had on their income, where 50% said that the highest negative effects were generated, for another 40% moderate negative effects were generated, but they can be worse, and 10% think no effect is generated.

Regarding the cost of transport in their daily activity they say that 15% are not impacted at all by the road, 15% are impacted very little, 15% have no rating, 35% on average, and 20% sufficiently impacted.

Regarding their income and daily use or not of the road, residents think that the national road tax has no impact on their place of residence but in cases of using this road 55% of them think that they are generated from the tax, very few negative effects, almost negligible, 20% think that moderate negative effects have been generated, but they could be worse, 10% think that no effect has been generated and 15% think that very few positive effects have been given, almost negligible.

#### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. Depending on the questions, residents say that in terms of the quality of the road and services on it, 45% think it is very good, 30% think it is good and 25% think it is not good. Depending on the first question, the second question is related to road safety, where 65% think that there is an almost negligible risk, 25% think that there is a low risk and 15% think that it is not dangerous at all.

#### **Farmers**

# **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on both family economic income and social aspect, most

residents work in agriculture or livestock providing and family income, another part works in the administrative unit of Gjegjan. Respondents say that 80% of them attend the national road once a month, and 20% every 2 weeks. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this road and cannot greatly affect the traffic flows for the number of inhabitants living in it.

Based on this movement flow, the effect that the construction of the nation road has had on the income of farmers is impacted, as well as that of residents, where they say that the highest negative effects have been generated.

The farmers of this area have as primary purpose the provision of family income, without thinking about investments in the farm, where the income from production is weak, this is also influenced by the high unemployment rate or the lack of young people.

This production for the farmers of the area does not justify the cost of transport at all but covers more difficulties only the household (this and depending on the production for each family).

#### Social effects:

Farmers in this area are insecure about expanding the farm or establishing collaborations with other farmers. This is mainly due to the population leaving, difficulties in covering expenses and lack of support from the government.

# Transport companies, bus-taxi driver

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers related to the aspect of economic benefits, companies and individuals interviewed are private sector.

Since Gjegjan is an administrative center, there is a certain flow of traffic in this area, but this is reduced and the starting point of public transport is connected to the area of the city of Puka and Fushë-Arrëz. Having these itineraries movements, they say that they frequent this street 20% every week, 20% 3 times a week and 60% every day.

Regarding the quality of the road during the trip, these individuals say that it is good and with low risk.

Regarding the economic benefit that comes from this activity, this stakeholder has it related to users in the city of Puka and Fushë-Arrëz as well as the surrounding areas. But 60% say that they are very dissatisfied with the number of passengers they transport due to the high cost.



Figure 56. The Reps settlements visual condition. (Source: the author)

Reps settlement is part of the municipality of Rrëshen, 30 questionnaires were conducted according to stakeholders, of which, 20 for residents, 5 for transport companies - bus and taxi driver and 5 for farmers. The questionnaire is designed to respond in the end to the economic and social effects felt by residents after the construction of the nation road. This settlement is considered as a very small residential center very close to the national road, but despite this they do not have a direct exit to the national road. Almost all services this settlement performs in the city of Rrëshen because of its proximity to it. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

#### Residents

The interviews included 3 age groups of which, 5% age group 20-35 years, 35% age group 36-45 years and 60% age group 45-60 years. Where 80% of them were male and 20% female. Their level of education was different, 25% with 8-9 years of education and 50% with secondary education and 25% with higher education. Depending on age and education in this settlement, those interviewed were 45% employed, 15% self-employed and 40% unemployed. Depending on their employment status, 60% were employed in the area (mostly employed in some of the businesses along "Rruga e Kombit" or employed in the town of Rrëshen) and 40% were unemployed.

#### **Economic effects:**

In the inhabitants of this area there have been different frequencies in the use of this road, despite the fact that they are located very close to the road of the Nation have not had direct benefits from its construction, in addition to access but also this limited.

The settlement of Reps is in the typology of the rural area with a small number of inhabitants who have close ties with the area and especially with the center of the municipality.

In their daily life, these residents use this road to the extent of 20% every day, 20% with a frequency of 1-2 times a week, 25% every month and 35% rarely.

From this frequency, residents are asked about the effects that the Road of the Nation has had on their income, where 50% think that no effect has been generated, for another 20% are of the opinion that very few positive effects have been given, almost negligible, and 30% think that moderate positive effects are given, with a lot of possibilities for further improvement.

Regarding the cost of transport in their daily activity they say that 35% are not impacted at all by the road, 25% are impacted very little, 10% are impacted little, 5% have no effect, 5% are moderately impacted, 15% sufficient and 5% are highly impacted.

Regarding their income and daily or non-road use, residents (60%) think that the nation's road tax is giving very few positive effects, almost negligible, 20% think that it has not generated any effect.

#### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points very necessary for this settlement very close to the road and direct access or not. of the residential area.

Depending on the questions, residents say that in terms of the quality of the road and services on it, 15% think it is poor, and 40% think it is not good, 45% think it is good. Depending on the first question is related and the second question is about road safety where 60% think it is low risk, 15% think it is moderate risk, 5% do not give any assessment, 10% think it is very low risk, almost negligible, and 10% think it is not dangerous at all. This result is related to the absence of crossing points for pedestrians, a fact that promotes insecurity of residents to move in the direction of other areas.

### **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this path, focusing their activity on marketing products to provide family income. Respondents say that 20% attend it every 2 weeks, 40% attend it every week and 40% 3 times a week.

From this percentage in frequency, we understand that this stakeholder has an average frequency of this road and affects the traffic flows for the number of inhabitants living in it. Based on this flow of movement, the effect that the construction of the national road has had on the income of farmers is impacted, where they say that for 60% very few positive effects are given, almost negligible, for 20% no effect is generated and for another 20% moderate positive effects are generated with a large space for further improvements.

The farmers of this area have as primary purpose the provision of family income, where the income from production is according to them 20% very poor, 60% think that they are not good, and 20% think that they are average.

This production for 20% of farmers justifies very little the cost of transportation, 40% think it justifies the cost a little, and 20% think it justifies it on average (this and depending on the production for each family and finding the market for sale).

Based on these results, the national road tax for this stakeholder is thought to have generated very few, almost negligible, negative effects but has failed to have a positive impact on the safety and improvement of connections between settlements.

#### Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability, population flight and other financial difficulties. They say that they can not expand the farm or establish cooperation with other farmers due to lack of market and labor, especially in special production crops in this area.

# Transport companies, bus-taxi driver

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers related to the aspect of economic benefits, companies and individuals interviewed are private sector. Although Gjegjan is a settlement with a small number of inhabitants has a reduced frequency of public transport, 60% frequent it 3 times a week, 20% every day and another 20% every week.

Regarding the quality of the road during the trip, these individuals say that it is good and has shortened the travel time.

Regarding the economic benefit that comes from this activity, this stakeholder has it related to the users in the city of Puka and the Fushe-Arrez as well as the surrounding areas. They are moderately satisfied with the number of passengers they transport, but the Road of the Nation has reduced traffic flows in these areas where it passed before.

# **Kalimash**



Figure 57. The Kalimash settlements visual condition. (Source: the author).

In the settlement of Kalimash, which is part of the municipality of Kukës, 30 questionnaires were conducted according to stakeholders, of which, 20 for residents, 5 for transport companies - bus and taxi driver and 5 for farmers. The questionnaire is constructed in such a way as to answer in the end the economic and social effects felt by the inhabitants after the construction of the Road of the National. This settlement is considered as a very small residential center where it took on more importance after the construction of the national road tunnel, very close to this village. Despite the proximity to the road, only 9.8 km of land road away from the entrance of the national road, residents have not felt positive effects on their households. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

#### Residents

In the interviews were included in this case 2 age groups of which, 40% age group 36-45 years and 60% age group 45-60 years. Where 80% of these were male and 20% female. Their level of education was different, 20% with primary education, 70% with 8-9-year education and 10% with secondary education. Depending on age and education in this

settlement, those interviewed were 30% employed, 50% self-employed and 20% unemployed. Depending on their employment status, 100% were employed in the area (mostly in agriculture and farming).

#### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments in terms of its quality or the effect it has had on their economy as well as in relations with other countries which these residents create with the surrounding areas. The settlement of Kalimash, is in the typology of the rural area with a small number of inhabitants.

In their daily life, these residents use this road at a rate of 20% every day, 30% with a frequency of 1-2 times a week, and 50% every month.

From this frequency, residents were asked about the effects that the Road of the Nation has had on their income, where 40% said that moderate negative effects were generated, but they could be worse, for another 40% effects were generated. very few negatives, almost negligible, and 20% are of the opinion that very few positive, almost negligible effects have been given.

Regarding the cost of transport in their daily activity, they say that 20% are not impacted at all by road, 10% are impacted very little, 60% are impacted little, 10% on average. Regarding their income and daily or non-road use, residents think that the Road of the Nation tax is giving moderate negative effects, but they could be worse for 50% of them, very few negative effects have been generated, almost negligible for 30% of them, 10% think that there was no effect, 10% think that very few positive effects are given, almost negligible.

### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area.

Depending on the questions, residents have expressed that in terms of the quality of the road and services on it, 90% think it is not good, and 10% think it is good.

Depending on the first question, the second question is related to road safety where 50% think it is moderate risk, and 50% think it is low risk. This result is related to the partial presence of crossing points for pedestrians (70% say that there is not, while 30% say they are not informed), exits and accesses with partial signalization, partial lack of signalization which impede the connection of this settlement with other settlements on the other side of the road, thus creating division of residential areas and access distance.

### **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on both family economic income and social aspect, most residents work in agriculture or livestock providing and family income. Respondents say that 20% of them frequent this street every 2 weeks, 80% every week. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this road and cannot greatly affect the traffic flows for the number of inhabitants living in it.

Based on this flow of movement, the effect that the construction of the national road has had on the income of farmers is impacted, where they say that for 60% of them the highest negative effects have been generated, 20% think that very few negative effects have been generated, almost negligible, 20% of them think that very few positive, almost negligible effects have been given.

The farmers of this area have as primary purpose the provision of family income (80%), and 20% of them think about increasing their farm, where the income from production is according to their 20% very poor, 40% think that they are poor, and 40% think that they have a poor income, this is also influenced by the high unemployment rate or the lack of young people.

This production for 40% of farmers does not justify the cost of transportation at all, 20% think that it justifies the cost very little, 20% think that the cost is slightly justified, and 20% think that it is moderately justified (this and depending on the production for each family). Based on these results, the national road tax for this stakeholder is thought to have generated moderate negative effects, but they could be worse, due to the fact that the settlement of Kalimash is located very close to the city of Kukes and is supported by the economy of this city.

#### Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability, population flight and other financial difficulties. They say they cannot expand the farm or establish collaborations with other farmers.

### <u>Transport companies, bus-taxi driver</u>

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers related to the aspect of economic benefits, companies and individuals interviewed are private sector. Although Kalimash is a small village that has a reduced frequency of public transport, 60% frequent it 3 times a week and 40% once a

day. These means of transport are coordinated by a center which is located in the city of Kukës and frequent this settlement depending on the requirements of the inhabitants. Regarding the quality of the road during the trip, these individuals say that it is weak and low risk.

Regarding the economic benefit that comes from this activity, stakeholders relate to users in the city of Kukës and the surrounding areas. But 80% say they are not satisfied with the number of passengers they transport due to the high cost.

## Kukës

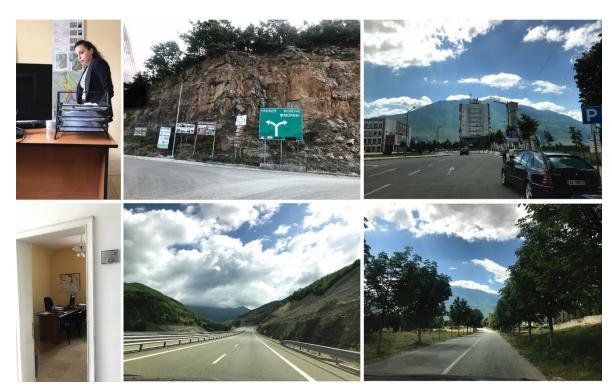


Figure 58. The Kukës settlements visual condition. (Source: the author)

In the settlement of Kukës, which is also the center of the municipality of Kukes, 100 questionnaires were conducted according to stakeholders, of which, 50 for residents, 15 for transport companies - bus and taxi drivers, 15 for farmers and 5 for investors and 15 for different transient individuals. The questionnaire is designed to respond in the end to the economic and social effects felt by residents after the construction of the Road of the Nation. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

#### Residents

The interviews included 3 age groups of which, 52% age group 20-35 years, 26% age group 36-45 years and 22% age group 45-60 years. Where 46% of these were male and 54%

female. Their level of education was different, where 6% were uneducated, 16% with 8-9 years of education, 22% with secondary education, 36% with higher education and 20% with post-university education. Depending on age and education in this settlement those interviewed were 46% employed, 10% self-employed, 38% unemployed and 6% with seasonal work. Depending on their employment status, 84.6% were employed in the area where they resided and 15.4% were unemployed.

### **Economic effects:**

In these groups of respondents there have been different frequencies in the use of this road as well as different assessments regarding its quality or the effect it has had on their economy as well as in relations with other countries which these residents create with the surrounding areas.

In their daily routine, 16% use the road daily, 20% 1-2 times a week, 52% every month, and 12% rarely.

From this frequency, residents were asked about the effects that the Road of the Nation has had on their income, where 34% said that it had the highest negative effects, 26% said that it had moderate negative effects, but they could be worse, 10% are of the opinion that very few positive effects are given, almost negligible, and 30% have a more positive approach stating that moderate positive effects are given, with a lot of possibilities for further improvement.

The settlement of Kukes being close to the Road of the Nation has a direct connection with it, somewhat reducing the cost along the secondary road that residents have to walk to access this road. In their daily activity they say that 42% are slightly impacted by the road, 6% have no impact, 20% on average, 26% enough and 6% are highly impacted.

In terms of their income and daily or non-road use, residents think the nation's road tax is delivering the highest negative effects for 48% of them, Moderate negative effects, but they could be worse for 46% of them and Very few negative effects have been generated, almost negligible for 6% of them.

### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. Depending on the questions, residents say that in terms of the quality of the road and services on it, 10% think it is very poor, 6% think it is poor, 26% think it is not good, 36% think it is well, while the rest refused to give an opinion on this question. Depending on the first question, the second question is related to road safety where 10% think that it presents

high risk, 62% think that there is moderate risk, and 28% think that there is low risk, this assessment at negative levels is related to the lack of crossing points for pedestrians (72% say that there are none while 28% are not informed), unsafe exits, lack of signage and overpasses which hinder the connection of this settlement with other settlements thus creating area division.

# **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on family economic income and in social terms. The surveyed individuals state that 13.3% of them frequent this street once a month, 20% every 2 weeks, 53.3% every week, 6.7% every day and 6.7% 2 times a day. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path and cannot impact to a large extent the traffic flows.

Based on this flow of movement, the effect that the construction of the national road has had on the income of farmers is impacted, where they say that 13.3% of them have had moderate negative effects, but they could be worse, 13.3% of them think that very few, almost negligible, negative effects have been generated, 20% think that very few positive effects, almost negligible, have been given, 46.7% think that moderate positive effects have been given, with a lot of room for further improvement, and 6.7% think that given the existing constraints, the highest positive effects are generated.

Farmers in this area mostly have products that are closely related to the household (86.7%), and very few thinks about increasing their farm (13.3%), and income from production is according to 13.3% of them poor, 46.7% have poor income (depending on years), and 40% think they have good income. This production for 13.3% of farmers does not justify the cost, 46.7% think that it justifies the cost very little and 40% think that the cost is justified. Based on these results the national road tax for this stakeholder is thought to be giving moderate negative effects, but they could be worse (46.7%), while 6.7% think it is giving very high negative effects, and 6.7% think that very few, almost negligible negative effects have been generated.

#### Social effects:

Farmers mostly express insecurity about their investments in agriculture and farming, which is related to taxes, lack of market, economic instability and other financial difficulties. About 73.3% of them think that they do not know if they will increase the farm due to the increase in production and also 66.7% of them do not have collaborations with other farmers. Related to the effects of the Road of the Nation on their revenue it can be said that the road has

reduced travel time and transportation cost but has had no effect on other facilities for this stakeholder category.

### <u>Investors</u>

This stakeholder has a lower distribution in this area, depending on the population which is relatively lower than in other regions (16,719 inhabitants Kukes municipality, INSTAT 2011). Investors in this area in 50% of respondents aimed to support the household, 33.3% support the local economy and only 16.7% are in support of socially responsible enterprises and common good. These investors encounter obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities, where none of the investors says that they can withstand a high degree of risk to ensure the continuity of the business but seek more to ensure their income no matter how small. Lack of information from the governing bodies in general for the area and in particular for the residence of Kukës has created a state of uncertainty for investors who despite the experience in their business low (33.3%) or reasonable (50%), and average (16.7%) does not help them to be sure of the continuation of the investment, where 50% of them express fear of bankruptcy.

## Transport companies, bus-taxi driver

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers by linking it to the aspect of economic benefits. Regarding the residence of Kukes, the frequency of use of this road by this party is of interest between those who frequent it 3 times a week (53.3%) and those who frequent it every day (46.7%). In terms of road quality and road safety during the trip they go almost to the same evaluation values from this stakeholder, where: 26.7% think it is not good and 73.3% think it is good. While in terms of road safety 20% think that there is moderate risk, 46.7% think that there is low risk, while 33.3% think that there is negligible risk.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are on average satisfied with the number of passengers they transport (66.7%), 13.3% are slightly satisfied and 20% are very dissatisfied. This is related to the fact that this number of passengers justifies the cost of transport where they say that 46.7% of them are moderately satisfied, 26.7% are very dissatisfied, 13.3% are slightly satisfied, and 13.3% are sufficiently satisfied.

Regarding the tax of this road which opened a big debate when it was decided at the beginning, this stakeholder thinks that there have been very few positive effects, almost negligible, (46.7%), 26.7% think that effects have been generated negative very few, almost negligible, while 26.7% think that no effect is generated.



Figure 59. The Morinë settlements visual condition. (Source: the author)

In the settlement of Morina, which is part of the municipality of Kukes, 30 questionnaires were conducted according to stakeholders, of which, 20 for residents, 5 for transport companies - bus and taxi driver and 5 for farmers. The questionnaire is constructed in such a way as to answer in the end the economic and social effects felt by the inhabitants after the construction of the national road. This settlement is considered as a very small residential center very close to the border crossing point that connects us with the state of Kosova. Morina has a direct exit to the national road, the main part of the village is positioned on one side of the road and the other part that is more sprawl is located on the other side. Almost all services this settlement performs in the city of Kukes because of its proximity to it. Despite the proximity to the road, residents have not felt positive effects on their households. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

### Residents

The interviews included 3 age groups of which, 15% age group 20-35 years, 40% age group 36-45 years and 45% age group 45-60 years. Where 75% of these were male and 25% female. Their level of education was different, 55% with 8-9 years of education and 45% with secondary education. Depending on age and education in this settlement, those interviewed were 10% employed, 30% self-employed and 45% unemployed, and 15% with

seasonal employment. Depending on their employment status, 55% were employed in the area (mostly in agriculture and farming or employed in the town of Kukes) and 45% were unemployed.

#### **Economic effects:**

In the inhabitants of this area there have been different frequencies in the use of this road as well as different assessments regarding its quality or the effect it has had on their economy and in relations with other countries. Morina settlement is in the typology of the rural area with a small number of inhabitants who have close connections with the area and beyond the border.

In their daily life, these residents use this road at the rate of 10% every day, 30% with a frequency of 1-2 times a week, 40% every month and 15% rarely.

From this frequency, residents were asked about the effects that the Road of the Nation has had on their income, where 20% said that moderate negative effects were generated, but they could be worse, for another 5% effects were generated. very few negative, almost negligible, 5% think that no effect is generated, 40% think that very few positive effects are given, almost negligible, and 40% think that moderate positive effects are given, with a space great for further improvements.

Regarding the cost of transport in their daily activity they say that 10% are not impacted at all by road, 30% are impacted very little, 40% are impacted little, and 20% on average.

Regarding their income and daily or non-road use, residents (35%) think that the Road of the Nation tax is giving the highest negative effects, 60% think that moderate negative effects have been generated, but they can be worse, and 5% think that very few positive, almost negligible, effects have been given.

## Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area.

Depending on the questions, residents say that in terms of road quality and services on it, 5% think it is poor, and 10% think it is not good, 65% think it is good and 20% think it is sufficient.

Depending on the first question, the second question is related to road safety where 5% think it is high risk, 25% think it is moderate risk, 65% think it is low risk and 5% think it presents very little risk, almost negligible.

This result is related to the absence of crossing points for pedestrians (90% say that there is not, while 10% say that there is), exits and accesses with partial signage, partial lack of

signage which impede the connection of this settlement with the rest of the settlement on the other side of the road, thus creating a division of the residential area and distancing.

## <u>Farmers</u>

#### **Economic effects**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on both family economic income and social aspect, most residents work in agriculture or livestock providing and family income. Being located very close to the border, these residents have often had the opportunity to find a market for the sale of their products outside Albania, in the part of Kosovo.

Respondents say that 40% of them frequent this street once a month, 60% every 2 weeks. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this road and cannot greatly affect the traffic flows for the number of inhabitants living in it.

Based on this movement flow, the effect that the construction of the national road has had on the income of farmers is imitated, where they say that for 40% of them moderate negative effects have been generated, but they could be worse, 60% think that very few, almost negligible, negative effects have been generated.

The farmers of this area have as primary purpose the provision of family income (60%), and 40% of them think about increasing their farm, where the income from production is according to their 20% very poor, 40% think that they are not good, and 40% have no assessment of the situation they are in.

This production for 40% of farmers does not justify the cost of transportation at all, 60% think that it justifies the cost very little (depending on the production for each family and finding the market for sale).

Based on these results, the national road tax for this stakeholder is thought to have generated very few, almost negligible, negative effects but has failed to have a positive impact on security and improved connections between settlements.

#### Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability, population flight and other financial difficulties. They say that they cannot expand the farm or establish cooperation with other farmers due to lack of market and labor, especially in special production crops in this area.

## <u>Transport companies, bus-taxi driver</u>

This stakeholder based on the economic focus that has tended to be as objective as possible in the selection of answers related to the aspect of economic benefits, companies and individuals interviewed are private sector. Although Morina is a small village that has a reduced frequency of public transport, 40% frequent it 3 times a week and 60% once a day. These means of transport are coordinated by a center which is located in the city of Kukes and frequent this settlement depending on the requirements of the inhabitants.

Regarding the quality of the road during the trip, these individuals say that it is good and with insignificant risk.

Regarding the economic benefit that comes from this activity, this stakeholder has it related to the users in the city of Kukes and the surrounding areas. But 60% of them say that they are not satisfied with the number of passengers they transport while 40% are moderately satisfied, depending on the days of movement and because of the high cost.

## **Burrel**



Figure 60. The Burrel settlements visual condition. (Source: the author).

In the settlement of Burrel, which is also the center of the municipality of Mat, 60 questionnaires were conducted according to stakeholders, of which, 30 for residents, 10 for transport companies - bus and taxi driver, 10 for farmers and 10 for investors. The questionnaire is constructed in such a way as to answer in the end the economic and social effects felt by the inhabitants after the construction of the national road. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

## **Residents**

The interviews included 3 age groups of which, 33.3% age group 20-35 years, 36.7% age group 36-45 years and 30% age group 45-60 years. Where 60% of these were male and 40% female. Their level of education was different, 63.3% with secondary education, 33.3% with higher education and 3.3% with post-university education. Depending on age and education in this settlement, those interviewed were 53.3% employed, 23.3% self-employed and 23.3% unemployed. Depending on their employment status, 70% were employed in the area where they resided and 30% were unemployed.

#### **Economic effects:**

In these groups of Respondents have reported different frequencies in road usage as well as different assessments in terms of its quality or the effect it has had on their economy as well as in relations that residents have created with other countries. with the surrounding areas. Burrel being a center located at a distance of about 35 kilometers from the national road has had other effects generated by it.

In their daily life, these residents use it to the extent of 13.3% with a frequency of 1-2 times a week, 36.7% every month, and 50% use it rarely.

From this frequency, residents were asked about the effects that the Road of the Nation has had on their income, where 3.3% said that very few, almost negligible, negative effects were generated, 36.7% said that no effect was generated, 30 % are of the opinion that very few positive effects have been given, almost negligible, 23.3% have a more positive approach stating that moderate positive effects have been given, with a lot of room for further improvement, and only 6.7% have stated that by given the existing constraints, the highest positive effects are generated.

Burrel settlement, not being close to the national road, but located further away, makes this connection by passing through an interurban road that connects the villages of the area, thus there is a travel cost for those who have to move from a settlement in the other. In their daily activity they state that 10% are not impacted at all by the road, 16.7% are impacted very little, 13.3% are impacted little, 3.3% no rating, 26.7% average, 23.3% sufficient and 6.7% are highly impacted.

Regarding their income and daily or non-road use, residents think that the Road of the Nation tax is giving moderate negative effects, but they could be worse for 10% of them, very few negative effects have been generated, almost negligible for 10% of them, 13.3% think that there was no effect, 40% think that very few positive effects are given, almost negligible, 23.3% think that moderate positive effects are given, with a space of great for

further improvements, and only 3.3% think that given the existing constraints, the highest positive effects are generated.

#### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area.

Depending on the questions, residents said that in terms of road quality and services on it, 3.3% think it is poor, 3.3% think it is not good, 6.7% do not have an assessment for this question, 60% think that is good, 23.3% think it is enough and only 3.3% think it is very good.

Depending on the first question, the second question is related to road safety where 3.3% think it is moderate risk, 20% think it is low risk, 20% think it is negligible, 40% think it is not at all dangerous and only 16.7% think it is safe. This average assessment is also related to the partial presence of crossing points for pedestrians (56.7% say no while 36.7% say yes and 6.7% are not informed), exits and accesses with partial signage, partial lack of signage which also hinder the connection of this settlement with other settlements, thus creating a division of the area and social insecurity for travel.

#### **Farmers**

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had different effects on family economic income and in the social aspect, as well as on the trade of their family products to the nearest markets.

Respondents say that 20% of them frequent this street once a month, 40% every 2 weeks, 20% every week, 10% 3 times a week and 10% every day. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path but part of it and cannot greatly affect the traffic flows.

Based on this flow of movement, the effect that the construction of the Road of the Nation has had on the income of farmers is imitated, where they say that for 10% of them very few negative effects are generated, almost negligible, 20% think that it is not generated no effect, 10% of them think very few positive effects have been given, almost negligible, and 60% think that moderate positive effects have been given, with a lot of possibilities for further improvement.

The farmers of this area have as primary purpose the provision of family income (50%), and yes 50% of them think about increasing their farm, where the income from production is according to their 30% not good, 10% do not have an estimate, 40% think they have a good

income (depending on the years), and 20% think they have a sufficient income. This production for 10% of farmers justifies the cost very little, 10% think that it justifies the cost a little, 30% think that the cost is moderately justified, 30% think that it is sufficient and 20% think that it is totally justified (this and depending on production for each farmer).

Based on these results, the national road tax for this stakeholder is divided into two groups where 10% think that very few negative effects are generated, almost negligible, 10% think that no effect is generated, 40% think that very few positive effects are given, almost negligible, and 40% think that moderate positive effects are generated, with a lot of room for further improvement.

#### Social effects:

Farmers mostly express insecurity about their investments in agriculture and farming, which is related to taxes, lack of market, economic instability and other financial difficulties. Despite this, about 60% of them think that they will increase the farm due to the increase in production, 30% of them do not expect to have an increase, while 10% are uncertain. Related to the effects of the Road of the Nation on their revenue, it can be said that the road has reduced travel time and transportation cost but has had no effect on other facilities for this stakeholder category.

#### Investors

These stakeholders have a lower distribution in this area, depending on the population which is relatively lower than in other regions (10,862 inhabitants, INSTAT 2011). Investors in this area in 28.6% of respondents aimed to support the household, 57.1% in support of socially responsible enterprises, common goods and only 14.6% support community energy / clean technology projects.

These investors encounter obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities, where none of the investors states that they can withstand a high degree of risk (42.9% can withstand low risk, 57.1% medium risk), to ensure business continuity but can accept lower increases for greater security large (42.9% of them).

The lack of information from the governing bodies in general for the area and in particular for the settlement of Burrel has created a state of uncertainty for investors who despite their reasonable business experience (28.6%), average experience (14.3%), and knowledge and experience of wide (57.1%), does not help them to be sure about the continuation of the investment, where 45% of them express fear of bankruptcy, and 35% insecure due to the departure of the population.

## Transport companies, bus-taxi driver

These stakeholders, to provide an objective, economic based view related to aspects of economic benefits, these stakeholders have been selected to be companies and individuals from the private sector. Regarding the settlement of Burrel, the frequency of use of this road by this party is of interest between those who frequent it every 2 weeks (20%) and those who frequent it every day (80%). Regarding the quality of the road during the trip, these individuals say that 60% think it is good and 40% think it is enough. While in terms of road safety 40% think that there is low risk, 40% think that there is negligible risk and 20% think that it is not dangerous at all.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are sufficiently satisfied with the number of passengers they transport (40%), 20% are moderately satisfied, 20% are slightly satisfied, and another 20% are very little satisfied. This is related to the fact that this number of passengers justifies the cost of transport where they say that 20% of them are very dissatisfied, 40% are slightly satisfied, 20% are moderately satisfied, and 20% are sufficiently satisfied. Regarding the tax of this road which opened a big debate when it was decided at the beginning, this stakeholder thinks that they are given, very few negative effects are generated, almost negligible (20%), 40% are given very few positive effects, almost negligible, while 40% think that moderate positive effects are given, with a lot of room for further improvement.

## Fushë-Arrëz



Figure 61. The Fushë-Arrëz settlements visual condition. (Source: the author).

Fushë-Arrëz is a separate municipality with a small number of 2513 inhabitants, 40 questionnaires were conducted according to stakeholders, of which, 20 for residents, 5 for transport companies - bus and taxi drivers, 10 for farmers and 5 per investor. The questionnaire is designed to respond in the end to the economic and social effects felt by residents after the construction of the Road of the Nation. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

#### Residents

The interviews included 3 age groups of which, 25% age group 20-35 years, 45% age group 36-45 years and 30% age group 45-60 years. Where 40% of these were male and 60% female. Their level of education was different, 15% with 8-9-year education, 50% with secondary education and 35% with post-university education. Depending on age and education in this settlement those interviewed were 35% employed, 20% self-employed and 15% unemployed and 30% seasonal employment. Depending on their employment status, 60% were employed in the area where they live and 40% were unemployed.

## **Economic effects:**

Fushe-Arrez is one of the settlements where the old road passed which connected the area of Milot and the other part with the city of Kukes and then passed in the border area. With the construction of the nation road there were many negative effects which affected the businesses of the area due to the lack of traffic flows. The municipality of Fushe-Arrez is ranked among the poorest municipalities in Albania (Instat 2011). During the development of the questionnaires there were groups of respondents who expressed different frequencies in the use of this route as well as different assessments regarding its quality or the effect it has had on their economy and relations with countries. Fushe-Arrez being a center located at a distance of about 41.1 kilometers from the entrance to the national road has had other effects generated by it.

In their daily life, these residents use it at a rate of 5% with a frequency of 1-2 times a week, 40% every month, 40% use it rarely and 15% once a year.

From this frequency, residents were asked about the effects that the nation's road has had on their income, where 60% said that the highest negative effects were generated, 15% think that moderate negative effects were generated, but they can be worse, 10% very few negative effects were generated, almost negligible, 15% think that no effect was generated.

The settlement of Fushë-Arrëz, not being close to the national road, but located farther away, performs this connection by passing through an interurban road that connects the

villages of the area, thus there is a travel cost for those who have to move from one residence to another.

Despite the reduction of time and cost for those who have a more frequent frequency of traffic, for the rest it has had negative effects as it has led to the bankruptcy of some businesses.

In their daily activity, residents say that 20% are not impacted at all by the road, 5% are impacted very little, 15% are impacted little, 55% no assessment, 5% on average. Regarding their income and daily or non-road use, residents think that the Road of the Nation tax is giving the highest negative effects for 30% of them, 15% think that it is giving moderate negative effects, but they could be worse, for 10% of them very few negative effects were generated, almost negligible, 40% think that there was no effect, 5% think that very few positive effects were given, almost negligible.

#### Social effects:

Regarding the social effects felt by the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. In the case of walnut fields occurring somewhat away from the national road, its positive impact is low.

Depending on the questions, residents say that in terms of the quality of the road and services on it, 5% think it is poor, 40% think it is not good, 10% do not have an assessment for this question, 35% think that is good, 10% think it is enough.

Depending on the first question, the second question is related to road safety where 5% think it is moderate risk, 55% think it is low risk, 40% do not have an assessment for this.

This assessment is also related to the partial lack of crossing points for pedestrians (35% say that there are not while 65% are not informed about their existence), lack of overpasses, exits and accesses with partial signalization, partial lack of which also hinder the connection of this settlement with other settlements, thus creating division of the area and social insecurity for travel.

## <u>Farmers</u>

#### **Economic effects**

This category of respondents plays their role in the importance of this road, for them this road has had negative effects on family economic income and in social terms, the departure of the population and the closure of businesses.

Respondents say that 50% of them frequent this street once a month, 33.3% every 2 weeks, 16.7% every week. From this percentage in frequency, we understand that this stakeholder

does not have a high frequency of this path but part of it and cannot greatly affect the traffic flows.

Respondents say that 50% of them frequent this street once a month, 33.3% every 2 weeks, 16.7% every week. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path but part of it and cannot greatly affect the traffic flows.

Farmers in this area have as their primary goal the provision of family income (50%), very few of them aim at increasing the farm (16.7%), and 33.3% of them think about increasing their farm, where the income from production is according to 16.7% of them good, 66.7% average, 16.7% think they have enough income (this refers only to the household and not the opportunity for investment).

This production for 50% of farmers justifies it on average, and 50% think that it justifies it enough (this and depending on the production for each farmer).

Based on these results, the road of the Nation tax for this stakeholder is divided into two groups where 33.3% think that higher negative effects have been generated, and 50% think that moderate negative effects have been generated, but they could be worse.

#### **Social effects:**

Farmers mostly express insecurity about their investments in agriculture and farming, which is related to taxes, lack of market, economic instability and other financial difficulties. In this situation, about 33.3% of them think that they will increase the farm for the effect of increasing production, 33.3% of them do not expect to have an increase, while 33.3% are insecure. Related to the effects of the Road of the Nation on their revenue it can be said that the road has reduced movement time and transportation costs in that part of the settlements where it passes, but has had no effect on other facilities for this stakeholder.

#### **Investors**

This stakeholder has a lower distribution in this area, depending on the population which is relatively lower than in other regions (2513 inhabitants, INSTAT 2011). With the closure of businesses (bar-restaurant-hotel), they have tried to find other alternatives depending on the resources of the area to support the household economy.

In these conditions, Investors in this area, in 60% of respondents, aimed to support the household, 20% to support family businesses and friends and 20% to support socially responsible enterprises, common good.

These investors face obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities, where none of the investors states that they can withstand a high degree of

risk (20% can withstand low risk, 80% medium risk), to ensure the continuity of the business but they are risking to have higher growth levels with high (60% of them).

The lack of information from the governing bodies in general for the area and in particular for the settlement of Fushë-Arrëz has created a state of uncertainty for investors who despite their reasonable business experience (20%), average experience (20%), and knowledge and extensive experience (60%) does not help them to be sure about the continuation of the investment, where 50% of them express fear of bankruptcy, and 50% insecure due to the departure of the population.

## Transport companies, bus-taxi driver

Regarding the settlement of Fushë-Arrëz, the frequency of use of this road by this party is of interest between those who frequent it 3 times a week (20%) and those who frequent it every day (80%). Regarding the quality of the road during the trip, these individuals say that 20% think that it is not good, 20% think that it is good and 60% think that it is enough. As for road safety, they say that the risk is low due to the improvements that have been made in some parts of it in recent years.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are slightly satisfied with the number of passengers they transport (20%), and 80% are moderately satisfied.

This is related to the fact whether this number of passengers justifies the cost of transport where they say that 60% of them are moderately satisfied, and 40% are sufficiently satisfied. Regarding the tax of this road which opened a big debate when it was initially decided, this stakeholder thinks that higher negative effects have been generated for 80% of them, and 20% think that moderate negative effects have been generated, but they could have been worse.



Figure 62. The Pukë settlements visual condition. (Source: the author).

Puke is a separate municipality with a population of 3,607 inhabitants, 50 questionnaires were conducted with to stakeholders, of which 35 for residents, 5 for transport companies - bus and taxi drivers, 5 for farmers and 5 for investors. The questionnaire is constructed in such a way as to answer in the end the economic and social effects felt by the inhabitants after the construction of the national road. At the end of these questionnaires and field visits, conclusions are drawn which are listed below:

## **Residents**

The interviews included 3 age groups of which, 22.9% age group 20-35 years, 40% age group 36-45 years and 37.1% age group 45-60 years. Where 48.6% of these were male and 51.4% female. Their level of education was different, 5.7% are not educated, 5.7% with 8-9 years of education, 42.9% with secondary education and 37.1% with higher education and 8.6% with post-university education. Depending on age and education in this settlement, those interviewed were 48.6% employed, 17.1% self-employed, 22.9% unemployed and 11.4% seasonal employment. Depending on their employment status, 65.7% were employed in the area where they live and 34.3% were unemployed.

## Economic effects:

Puke settlement is an area which is located 52.3 kilometers from the entry point on the Road of the Nation. With the construction of the national road there were many negative effects

which affected the businesses of the area due to the lack of traffic flows. In recent years, some investments have been made in this settlement, referring mostly to the tourism sector. During the development of the questionnaires there were groups of respondents who expressed different frequencies in the use of this route as well as different assessments regarding its quality or the effect it has had on their economy and relations with countries.

In their daily life, these residents use it at a rate of 5.7% with frequency every month, 77.1% use it rarely and 17.2% once a year.

From this frequency, residents were asked about the effects that the Road of the Nation has had on their income, where 20% said that the highest negative effects were generated, 5.7% think that moderate negative effects were generated, but they can be worse, 14.3% very few, almost negligible negative effects were generated, 57.1% think that no effect was generated, and 2.9% think that very few positive effects were given, almost negligible.

The settlement of Puka, not being close to the Road of the Nation, but located further away, makes this connection by passing through an interurban road that connects the villages of the area, thus there is a travel cost for those who have to move from a settlement in the other.

In their daily activity, residents say that 25.7% are not impacted at all by the road, 11.4% are impacted very little, 5.7% are impacted little, 42.9% no assessment, 14.3% on average. Regarding their income and daily or non-road use, residents think that the Road of the Nation tax is giving the highest negative effects for 11.4% of them, 20% think that it is giving moderate negative effects, but they could have been worse, for 11.4% of them very few negative effects were generated, almost negligible, 57.1% think that there was no effect.

#### Social effects:

In terms of social effects on the residents, they are impacted by a series of factors which are related to the quality of the road and services, road safety, the existence or not of pedestrian crossing points and the direct or indirect access of the residential area. In the case of the settlement of Puka being located somewhat away from the national road, its positive impact is low.

Depending on the questions, residents said that in terms of road quality and services on it, 2.9% think it is poor, 14.3% think it is not good, 28.6% do not have an assessment for this question, 22.9% think that is good, 25.7% think it is enough and 5.7 think it is very good. Depending on the first question is related and the second question which is about road

safety where 2.9% think it is moderate risk, 45.7% think it is low risk, 37.1% do not have an assessment for this, 14.4% think it is not dangerous.

This assessment is related to the partial lack of crossing points for pedestrians (17.1% say that there is, 14.3% think that there is not, while 68.6% are not informed about their

existence), lack of overpasses, exits and signalling access partial, partial lack of signage which hinders the connection of this settlement with other settlements thus creating zoning and social insecurity for travel.

## <u>Farmers</u>

#### **Economic effects:**

This category of respondents plays their role in the importance of this road, for them this road has had negative effects on family economic income and social aspects, the departure of the population and the closure of businesses, especially bars and restaurants.

Respondents say that 30% of them attend every 2 weeks, 10% every week, 50% rarely and 10% once a year. From this percentage in frequency, we understand that this stakeholder does not have a high frequency of this path but part of it and cannot greatly affect the traffic flows.

Based on this flow of movement, the effect that the construction of the nation road has had on the income of farmers is imitated, where they say that for 60% of them higher negative effects have been generated, 20% think that moderate negative effects have been generated, but they could be worse, 10% of them think very few negative effects have been given, almost negligible, and only 10% think that very few positive effects have been given, almost negligible.

Farmers in this area have as their primary goal the provision of family income (40%), very few of them aim at increasing the farm (40%), and 20% of them think about increasing their farm and income, where and income from production is according to their 20% poor, 20% good, 20% average, 40% think they have enough income (this refers only to the household and not to the opportunity for investment).

This production for 40% of farmers does not justify the cost, and 60% think that it justifies it enough (this and depending on the production for each farmer).

Based on these results, the national road tax for this stakeholder is divided into two groups where 30% think that higher negative effects have been generated, and 10% think that moderate negative effects have been generated, but they could be worse, 40% have no rating as they are not affected by it, 20% think that moderate positive effects have been generated, with a lot of room for further improvement.

## Social effects:

Farmers mostly express insecurity about their investments in agriculture and livestock, which is related to taxes, lack of market, economic instability and other financial difficulties. In this situation, about 20% of them think that they will increase the farm for the effect of increasing production, 50% of them do not expect to have an increase, while 30% are

insecure. Related to the effects of the nation road on their revenue it can be said that the road has reduced travel time and transportation costs in that part of the settlements where it passes, but has had no effect on other facilities for this stakeholder, that there may be connections and exchanges with places that are directly affected by the road.

## <u>Investors</u>

This stakeholder has a lower distribution in this area, depending on the population which is relatively lower than in other regions (3607 inhabitants, INSTAT 2011).

In these conditions, Investors in this area in 60% of respondents aimed to support the local economy, 40% Support family businesses and friends.

These investors face obstacles in the return on investment and the risk they take to invest in these areas not as a result of lack of resources but as an effect of population displacement and lack of support from the relevant authorities to lack of information on investment opportunities. , where none of the investors says that they can withstand a high degree of risk (80% medium risk, 20% high risk), to ensure the continuity of the business and say that 20% of them want their money to be secure, and 40% agree to have lower increases for greater security.

The lack of information from the governing bodies in general for the area and in particular for the settlement of Puka has created a state of uncertainty for investors who despite their limited business experience (20%), reasonable experience (40%), and knowledge and experience wide (40%), does not help them to be sure about the continuation of the investment, where 50% of them express fear of bankruptcy, and 50% insecure due to the departure of the population.

## <u>Transport companies, bus-taxi driver</u>

Regarding the settlement of Puka, the frequency of use of this road by these stakeholders is constant, they frequent it every day. Regarding the quality of the road during the trip, these individuals say that 40% think it is not good, and 60% think that it is good. As for road safety, they say that there is a low risk due to improvements that have been made in some parts of it in recent years.

Regarding the economic benefit that comes from this activity, this stakeholder states that they are slightly satisfied with the number of passengers they transport (40%), and 40% are moderately satisfied, the rest have no assessment.

This is related to the fact that this number of passengers justifies the cost of transport where they say that 40% of them are moderately satisfied, 40% are sufficiently satisfied and 20% have no rating.

Regarding the tax of this road which opened a big debate when it was initially decided, this stakeholder thinks that no effect has been generated to affect this stakeholder.

# Conclusions from questionnaires developed for the category of "Different individuals"

During the development of the questionnaire regarding this stakeholder, individuals who are not residents but visit at different times were interviewed. The age groups are divided into 3 groups where 62.2% are in the age group 20-35 years, 15.6% are in the age group 36-45 years and 22.2% are in the age group 45-60 years. Of these, 60% are male and 40% female.

Their level of education was different, 28.9% with secondary education, 44.4% with higher education and 26.7% with post-university education. Depending on age and education, those interviewed were 64.4% employed, 4.4% self-employed, 28.9% unemployed, and 2.2% seasonal work.

In addition, these individuals were asked how often they use the road, thus understanding the frequency rate on their part, where 11.1% attend it 1-2 times a week, 31.1% every month, 37.8% rarely, and 20 % 1 times a year.

Based on the usage frequency that these individuals have they provide their evaluation for the road and services with 4.4% thinking it is very poor, 8.9% think it is poor, 15.6% think it is not good, 2.2% did not provide a rating, 37.8% think it is good, 24.4% think it is satisfactory and only 6.6% think it is very good. In terms of safety, they say that for 28.9% of them there is moderate risk, 20% think it is low risk, 4.4 have no rating, 28.9% think it is very low risk, 8.9% not at all dangerous and 8.9 % think it is safe.

Regarding the road tax, most of them (31.1%) think it does have negative effects and only 8.9% think it has moderate to positive effects with plenty of space for improvement with the remaining being skeptical and in disbelief of the tax's positive effects. Individuals who use public instead of private transport think (26.7%) transport is good, 24.4% think it is not good, only 13.3% think it is very good and the rest do not have a rating due to non-use.

Analysing the field data findings, it is understood that these individuals, regardless of frequency in road or route usage, have average and not highly positive ratings. The ratings are affected both by security concerns and cost related expenditures for its usage.

## 3.3.2 Generating results by Clusters 1, 2, 3.

The generation of results is developed in its final form based on the clustering of settlements according to some of their characteristics. In the first cluster we have settlements which are located at the beginning of the national road; in the second cluster we have settlements which are part of the same municipality and are located very close to each other, in the third cluster, we have settlements that are located far from the road of the nation, or where before passed the old road.

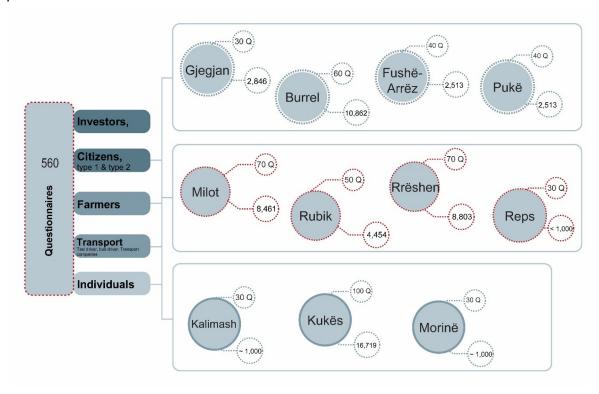


Figure 63. Graphical illustration by clustering. (Source: the author).

On the tables below are the results of questionnaires reflected on percentage, and are explained question by question, based on the theoretical background where they were formulated, (Table 14, 15, 16).

 Table 14. Questionnaires result in percentages of Cluster 1.

Literature, questionnaires results, CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë)				
Transport is clearly a factor of fundamental importance in all economic activity, (Hoyle, 1996)	The cost of transport one of the most significant variables in the market price of any commodity.  (Hoyle, 1996)	The transport sector may, with some justification, be regarded as an epitome of relationships between terrain, economic history, social and political systems, and levels and patterns of development (Hoyle, 1996).	Apart from the direct employment in transport activities, these major transport infrastructures have substantial multiplier effects as they have to be served by a range of firms and industries. (Banister, 1994).	
<ul><li>1. Which is your frequency on using this route?</li><li>2. How much does the road affect your daily activity?</li></ul>	<ul><li>1. Is it justified for you the passenger transport cost?</li><li>2. Is the cost of transporting of the product justified for you?</li></ul>	What do you think about the quality of the road?  Relationship and facilities of necessities, and security	1.What obstacles do you envisage in making local investments? 2.What is your main investment goal?	
(Farmers), 29% once a month, 32.3% every 2 weeks, 12.9% every week, 9.7% no answer, 9.7% 3 times a week, 6.5% every day. (transport companies, bus, taxi), 5% every 2 weeks, 5% every week, 20% no answer, 10% 3 times a week, 60% every day.	(transport companies, bus, taxi), 15.0% very little, 10.0% little, 5% no answer, 45% average, 25% sufficient.	(Farmers), 6.5% not good, 6.5% no answer, 29% good, 48.4% sufficient, 9.7% very good. (transport companies, bus, taxi), 15% not good, 10% no answer, 35% good, 40% sufficient.	(Investors) 5.9% low returns, 29.4% high risks, 29.4% lack of information on investment opportunities, 17.6% lack of business knowledge and lack of expertise to assess opportunities, 5.9% lack of time to evaluate investment opportunities, 11.8% lack of communication mechanisms to stay valued for the status of a business.	
(Residents), 18.1% not at all, 12.4% very little, 8.6% little, 28.6% no	(Farmers), 9.7% not at all, 22.6% very little, 9.7% little,		(Investors), 17.6% Household incomes, 29.4% business growth, 52.9% income and growth.	

answer, 20% average, 10.5% sufficient, 1.9% high.	29% average, 22.6% sufficient, 6.5% high.		(Farmers), 54.8% Household incomes, 16.1% business growth, 29% incomes and growth.
Lite	rature, questionnaires results,	, CLUSTER 1 (Burrel, Fushë-Arrëz, Gje	egjan, Pukë)
It is widely argued that major new transport infrastructure has a substantial impact on the local economy and the development potential of an area.	Transportation, among other factors, reinforces spatial inequality by linking a priori the most productive places.	From an economic perspective, transportation corridors provide two fundamental attributes for territorial development: lower distribution costs and land supply for diverse activities.	The corridor could provide important interconnections and communication between two or more separate functional regions.
1. How are the production revenues?	1.Do you have collaborations with other farmers?	1.The construction of the road of the nation, what effects has had on your income?	<ol> <li>How long does your trip take from the center of the settlement to the entrance of the Road of Nation?</li> <li>Are there any crossing points for pedestrians?</li> <li>How is the quality of the road you describe to access the Road of Nation?</li> </ol>
(Farmers), 3.2% very poor, 9.7% poor, 25.8% not good, 3.2% no answer, 22.6% good, 29% sufficient, 6.5% very good.	(Farmers), 9.7% yes, 32.3% no, 58.1% maybe in the future.	(Residents), 27.6% higher negative effects. 12.4% moderate negative effects, but they could be worse, 34.3% No effect was generated.	(Residents), 30.5% more than 2 hours, 42.9% 1-2 hours, 11.4% 30 minutes to 1 hour. 15.3% 10-30 minutes. (Farmers), 25.8% more than 2 hours, 32.3% 1-2 hours, 25.8% 30 minutes to 1 hour.
		(Farmers), 41.9% higher negative effects, 16.1% moderate negative effects, but they could be worse. 19.4% moderate positive effects, with	(Residents), 22.9% yes, 36.2% no, 41% do not know.

		plenty of possibility for further improvement.	(Decidents) 49/ near 22 99/ net
			(Residents), 1% poor, 23.8% not good, 7.6% no answer, 22.9% good, 35.2% sufficient, 9.5% very good.
Lite	rature, questionnaires results,	CLUSTER 1 (Burrel, Fushë-Arrëz, Gje	gjan, Pukë)
The key to the success of transport corridor development and regionalization is harmonization of regulations and or deepening socioeconomic integration (Kessides, 2012, Monios, 2016).	The key role of a transportation system is to assist in the production, consumption and distribution - or the supply chain - of goods and services.	A transport corridor is a set of routes between hub centers where maritime, fluvial, land and air transportation systems converge. (Fleming, 1999)	A corridor has three main categories of intertwined dimensions: infrastructure, services, and institutions for coordinating corridor activities.
1. Why were you interested in making local investments?	1.How would you describe your understanding and experience of saving and investing?	1. Are the passengers you transport residents of the areas affected by the road?	1. Are you coordinated by a center that commands your departures according to official schedules?
(Investors), 35.3% Support the local economy, 29.4% support family and friend's businesses 29.4% Support socially responsible enterprises, common good, 5.9% support community energy / clean technology projects.	(Investors), 5.9% No knowledge or experience; 11.8% Limited knowledge and experience; 41.2% Reasonable knowledge and experience. 5.9% Better than average knowledge and experience. 35.3% Extensive knowledge and experience.	(transport companies, bus, taxi), 15% Never; 15% Rarely; 5% Sometimes; 5% No answer 25% There are cases that are; 10 Often times 25% Always.	(transport companies, bus, taxi), 65% yes, 35% no

Literature, questionnaires results,	CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë)
Facilitate the prioritization of investments in	"Facilitate network effects, by promoting the consolidation of trade
infrastructure, policy reform, and services;	and transport volumes through a few links and nodes, which in turn
	can encourage improvement in quality of service."
1. What do you think about road safety when traveling?	1. How is the technical assistance in case of any defects during the
2. How do you assess the quality of services on this	trip?
road?	
3. How safe do you consider this road?	
1.(transport companies, bus, taxi),	(transport companies, bus, taxi),
10% moderate risk	25% Very poor
45% low risk	10% Not good
15% No answer	15% No answer
25% Very little, almost negligible	35% Good
5% Not at all dangerous	15% Enough
2.(transport companies, bus, taxi),	
15% Very poor	
5% Poor; 15% Not good	
15% No answer	
20% Good; <b>30% Enough</b>	
3.(Residents),	
2.9% Moderate risk, 36.2% Low risk, 20% No answer	
21% Very little, almost negligible	
14.3% Not at all dangerous	
5.7% Safe	

 Table 15. Questionnaires results in percentage of Cluster 2.

Litera	Literature, questionnaires results, CLUSTER 2 (Milot, Rubik, Rrëshen, Reps)				
"Transport is clearly	"The cost of transport	"The transport sector may,	"Apart from the direct		
a factor of	one of the most	with some justification, be	employment in transport		
fundamental	significant variables in	regarded as an epitome of	activities, these major		

importance in all economic activity, (Hoyle, 1996)."	the market price of any commodity. ( <b>Hoyle, 1996</b> )."	relationships between terrain, economic history, social and political systems, and levels and patterns of development (Hoyle, 1996)."	transport infrastructures have substantial multiplier effects as they have to be served by a range of firms and industries. (Banister, 1994)."			
<ul><li>1. Which is your frequency on using this route?</li><li>2. How much does the road affect your daily activity?</li></ul>	<ul><li>1. Is it justified for you the passenger transport cost?</li><li>2. Is the cost of transporting of the product justified for you?</li></ul>	What do you think about the quality of the road?  Relationship and facilities of necessities, and security	1.What obstacles do you envisage in making local investments? 2.What is your main investment goal?			
(Farmers), 26.7% every 2 weeks, 46.7% every week, 23.3% 3 times a week, 3.3% every day. (transport companies, bus, taxi), 10% every week, 26.7% 3 times a week, 60% every day, 3.3% 2 times a day.	(transport companies, bus, taxi), 3.3% very little, 23.3% little, 46.7% on average, 26.7% enough.	(Farmers), 10% not good, 3.3% no answer, 66.7% good 20% enough, (transport companies, bus, taxi), 53.3% good, 46.7% sufficient.	(Investors) 26.7% low returns, 20% high risks, 13.3% lack of information on investment opportunities, 26.7% lack of business knowledge and lack of expertise to evaluate opportunities, 13.3% lack of time to evaluate investment opportunities.			
(Residents), 14.8% not at all, 12.2% very little, 20.9% little, 6.1% no answer, 20% average, 19.1% enough, 7% high.	(Farmers), 6.7% not at all, 6.7% very little, 26.7% little, 46.7% on average, 13.3% enough.		(Investors), 46.7% Household incomes, 6.7% business growth, 46.7% income and growth. (Farmers), 53.3% Household income, 6.7% business growth, 40% incomes and growth.			
	Literature, questionnaires results, CLUSTER 2 (Milot, Rubik, Rrëshen, Reps)					
"It is widely argued that major new transport infrastructure has a	"Transportation, among other factors, reinforces spatial inequality by linking a	"From an economic perspective, transportation corridors provide two fundamental attributes for	"The corridor could provide important interconnections and communication between			

substantial impact on the local economy and the development potential of an area."	priori the most productive places."	territorial development: lower distribution costs and land supply for diverse activities."	two or more separate functional regions."
1. How are the production revenues?	1.Do you have collaborations with other farmers?	1.The construction of the road of the nation, what effects has had on your income?	<ol> <li>How long does your trip take from the center of the settlement to the entrance of the Road of Nation?</li> <li>Are there any crossing points for pedestrians?</li> <li>How is the quality of the road you describe to access the Road of the Nation?</li> </ol>
(Farmers), 6.7% poor, 30% not good, 33.3% good, 30% sufficient.	(Farmers), 10% yes, 40% no, 50% maybe in the future.	(Residents), 2.6% moderate negative effects, but they could be worse, 25.2% No effect generated, 24.3% very little positive effect, almost negligible, 35.7% moderate positive effect, with plenty of possibility for improvement further, 8.7% Given the existing constraints, the highest positive effects are generated. (Farmers), 41.9% Higher negative effects, 16.1% Moderate negative effects, but they could be worse. 19.4% moderate positive effects, with a lot of possibility for further improvement.	(Residents), 5.2% 30 minutes to 1 hour, 23.5% 10-30 minutes, 47.8% 10 minutes, 22.6% 2 minutes. (Farmers), 20% 30 minutes to 1 hour, 36.7% 10-30 minutes, 30% 10 minutes, 13.3% 2 minutes.
			(Residents), 29.6% yes, 56.5% no, 13.9% do not know.
			(Residents), 10.4% very poor, 26.1% poor, 23.5% not good, 1.7%

The key role of a transportation system	ults, CLUSTER 2 (Milot, Rubik, Rrëshen "A transport corridor is a set of	• •
transportation system	"A transport corridor is a set of	A semidente de la settana e
is to assist in the production, consumption and distribution - or the supply chain - of goods and services.	routes between hub centers where maritime, fluvial, land and air transportation systems converge (Fleming, 1999)."	A corridor has three main categories of intertwined dimensions: infrastructure, services, and institutions for coordinating corridor activities.
.How would you describe your understanding and experience of saving and nvesting?	1. Are the passengers you transport residents of the areas affected by the road?	1. Are you coordinated by a center that commands your departures according to official schedules?
Investors), 3.3% Limited knowledge and experience; 60% Reasonable knowledge and experience. 66.7% Better than average anowledge and experience.	(transport companies, bus, taxi), 23.3% There are cases that are; 40% Often times 36.7% Always.	(transport companies, bus, taxi), 90% yes, 10% no
n Hi Hi Kr	distribution - or the supply chain - of goods and services.  How would you describe our understanding and experience of saving and vesting?  nvestors), 3.3% Limited knowledge and experience; 0% Reasonable knowledge and experience. 5.7% Better than average nowledge and experience.	distribution - or the supply chain - of goods and services.  How would you describe our understanding and experience of saving and vesting?  (transport companies, bus, taxi), 23.3% Limited knowledge and experience; 40% Often times 36.7% Always.

"Facilitate the prioritization of investments in infrastructure, policy reform, and services."	"Facilitate network effects, by promoting the consolidation of trade and transport volumes through a few links and nodes, which in turn can encourage improvement in quality of service."
1. What do you think about road safety when traveling?	1. How is the technical assistance in case of any defects during the
2. How do you assess the quality of services on this	trip?
road?	
3. How safe do you consider this road?	
1.(transport companies, bus, taxi),	1.(transport companies, bus, taxi),
3.3% moderate risk	23.3% Not good
23.3% low risk	60% Good
33.3% Very little, almost negligible	16.7% Sufficient
16.7% Not at all dangerous,	
23.3% Safe	
2.(transport companies, bus, taxi),	
26.7% Not good	
70% Good	
3.3% Sufficient	
3.(Residents), 7.8 % Presents high risk	
15.7% Moderate risk	
30.4% Low risk	
7.8% No answer	
17.4% Very little, almost negligible	
18.3% Not at all dangerous	
2.6% Safe	

 Table 16. Questionnaires results in percentage of Cluster 3.

Literature, questionnaires results, CLUSTER 3 (Kalimash, Kukës, Morinë)			
"Transport is clearly a	"The cost of transport	"The transport sector	"Apart from the direct
factor of fundamental	one of the most	may, with some	employment in transport
importance in all	significant variables in	justification, be regarded	activities, these major

economic activity,	the market price of any	as an epitome of	transport infrastructures
(Hoyle, 1996)."	commodity. (Hoyle,	relationships between	have substantial multiplier
	1996)."	terrain, economic history,	effects as they have to be
		social and political	served by a range of firms
		systems, and levels and	and industries. (Banister,
		patterns of development.	1994)."
		(Hoyle, 1996)."	
1. Which is your frequency on	1. Is it justified for you the	1. What do you think about the	1.What obstacles do you
using of this route?	passenger transport cost?	quality of the road?	envisage in making local
2. How much does the road	2. Is the cost of transporting of	Relationship and facilities of	investments?
affect your daily activity?	the product justified for you?	necessities, and security	2.What is your main investment goal?
(Farmers), 16% once a month,	(transport companies, bus,	(Farmers), 4% poor, 28% not	(Investors) 16.7% low returns;
28% every 2 weeks, <b>48% every</b>	taxi), 8% not at all, 32% very	good, 16% no answer	50% lack of information on
week, 4% every day, 4% 2	little, 8% little, 44% on average,	<b>48% good</b> , 4% enough,	investment opportunities; 16.7%
times a day.	8% enough.		lack of business knowledge and
•	_	(transport companies, bus,	lack of expertise to assess
(transport companies, bus,		taxi), 20% poor, 16% not good,	opportunities;
taxi), 52% 3 times a week, 48%		<b>60% good</b> , 4% enough.	16.7% Lack of communication
every day.			mechanisms to stay valued for the
			status of a business.
(Residents), 6.7% not at all,	(Farmers), 8% not at all, 20%		(Investors), 33.3% Household
8.9% very little, <b>45.6% little</b> ,	very little, 44% little, 28% on		incomes, 16.7% business growth,
3.3% no rating, 17.8% average,	average.		50% incomes and growth.
14.4% enough, 3.3% high.			(Farmers), 80% Household
			incomes, 12% business growth,
			8% incomes and growth.
		CLUSTER 3 (Kalimash, Kukës, Mo	
It is widely argued that major	Transportation, among other	From an economic perspective,	The corridor could provide
new transport infrastructure has a substantial impact on the local	factors, reinforces spatial	transportation corridors provide two fundamental attributes for	important interconnections and

economy and the development potential of an area.	inequality by linking a priori the most productive places.	territorial development: lower distribution costs and land supply for diverse activities.	communication between two or more separate functional regions.
1. How are the production revenues?	1.Do you have collaborations with other farmers?	1.The construction of the road of the nation, what effects has had on your income?	<ol> <li>How long does your trip take from the center of the settlement to the entrance of the Road of Nation?</li> <li>Are there any crossing points for pedestrians?</li> <li>How is the quality of the road you describe to access the Road of the Nation?</li> </ol>
(Farmers), 8% very poor, 16% poor, 44% not good, 8% no rating, 24% good.	(Farmers), 8% yes, 60% no, 32% maybe in the future.	(Residents), 18.9% highest negative effects, 25.6% moderate negative effects, but they could be worse, 10% Very few, almost negligible negative effects are generated; 1.1% No effect was generated, 18.9% were given very few positive effects, almost negligible, 25.6% moderate positive effects, with a lot of possibility for further improvement.  (Farmers), 12% Higher negative effects, 16% Moderate negative effects, but they could be worse, 24% Very few, almost negligible negative effects are generated.	(Residents), 13.3% 1-2 hours, 14.4% 30 minutes to 1 hour, 20% 10-30 minutes, 8.9% 10 minutes, 43.3% 2 minutes.  (Farmers), 8% 1-2 hours, 20% 30 minutes to 1 hour; 20% 10-30 minutes; 32% 10 minutes; 20% 2 minutes.

		16% are given very few positive effects, almost negligible; 28% moderate positive effects, with plenty of possibility for further improvement.	(Residents), 2.2% yes, 75.6% no, 22.2% do not know. (Residents), 11.1% very poor, 15.6% poor, 43.3% not good, 11.1% no rating, 15.6% good, 3.3% sufficient.
Li	terature, questionnaires results,	CLUSTER 3 (Kalimash, Kukës, Mo	orinë)
"The key to the success of transport corridor development and regionalization is harmonization of regulations and or deepening socioeconomic integration (Kessides, 2012, Monios, 2016)."	"The key role of a transportation system is to assist in the production, consumption and distribution - or the supply chain - of goods and services."	"A transport corridor is a set of routes between hub centers where maritime, fluvial, land and air transportation systems converge (Fleming, 1999)."	"A corridor has three main categories of intertwined dimensions: infrastructure, services, and institutions for coordinating corridor activities."
1. Why were you interested in making local investments?	1.How would you describe your understanding and experience of saving and investing?	1. Are the passengers you transport residents of the areas affected by the road?	1. Are you coordinated by a center that commands your departures according to official schedules?
(Investors), 33.3% Support the local economy 50% support family and friend's businesses;	(Investors), 33.3% Limited knowledge and experience; 50% Reasonable knowledge and experience.	(transport companies, bus, taxi), 40% Often times 60% Always.	(transport companies, bus, taxi), 68% yes, 32% no.

16.7% Support socially	16.7% Better than average	
responsible enterprises,	knowledge and experience.	
common good,		
Lit	terature, questionnaires results, (	CLUSTER 3 (Kalimash, Kukës, Morinë)
"Facilitate the prioritization	of investments in infrastructure,	"Facilitate network effects, by promoting the consolidation of
policy reform, and services	5."	trade and transport volumes through a few links and nodes,
		which in turn can encourage improvement in quality of service."
1. What do you think about road	d safety when traveling?	1. How is the technical assistance in case of any defects during
2. How do you assess the quali	ty of services on this road?	the trip?
3. How safe do you consider th	is road?	
(transport companies, bus, taxi	),	(transport companies, bus, taxi),
24% moderate risk		16% very poor,
44% low risk		4% poor
32% Very little, almost negligible		24% not good
		56% good.
(transport companies, bus, taxi	), 4% poor,	
36% Not good		
60% Good		
(Residents), 6.7% Presents high	risk;	
51.1% Moderate risk;		
41.1% Low risk;		
1.1% Very little, almost negligible.		

 Table 17. Questionnaires results in evaluation of the first Cluster.

							Category	of questio	ns							
	Time / Tr	avel spe	ed / Road	quality / Freque	ncy		Economic growt	th / Services	/ Cost of	Quality of	life / Devel	oped secto	rs / Bene	fits		
	1.Which is your frequency on using this route?	is your think about the frequency quality of the road you on using road? describe to this access the Rc of Nation?		describe to access the Road	about road safety when traveling?		1.Is the cost of transporting of the product justified for you?	have collaboratio ns with other	transport residents of the	1.What obsi you envisag local invest	e in making	1.How are t production		1.The const the road of nation, who has had on income?		
Cluster 1	2.How much does the road affect your daily activity?	your tri the cent settleme entranc	ong does p take from eer of the ent to the e of the Nation?	2.Are you coordinated by a center that commands your departures according to official schedules?	the quality of services on this		2.Is it justified for you the passenger transport cost?	2.How is the technical assistance in case of any defects during the trip?		2.What is yo investment		2.Why were interested i local invest	n making	2.How wou describe younderstand experience and investi	our ling and of saving	
	3.Are there any crossing points for pedestrians?			3.How safe do you consider this road?		3. When do you plan to start withdrawing money from your investments for large needs?	3. What level of risk are you willing to face?		3. How do yo road tax and effect do you giving?	d what	3. How is th investment		3. What is your general attitude towards the prospect of losses when investing your money?			
Residents	2. <b>+1</b>	2. <b>+1</b>	3. <b>-3</b>	1. <b>+1</b>		3. <b>+2</b>				3. <b>+1</b>					1. 0	
Investors							3. +1	3. <b>0</b>		1. +2	2. <b>+3</b>	2. <b>+1</b>	3. +1	2. <b>+3</b>	3. <b>-2</b>	
Farmers	1. <b>-2</b>	1. <b>+1</b>	2. <b>-1</b>				1. +1	1. 0		2. <b>+1</b>	3. +1		1. +2		13	Burrel
Transport companies,	1. <b>+2</b>		1. <b>+1</b>	2. <b>+3</b>	11% +1	2 <b>. +1</b>	2. <b>-1</b>	2. <b>+1</b>	1. <b>+1</b>	3. <b>+1</b> & <b>+2</b>						
Residents	2. <b>0</b>	2. <b>-2</b>	3. <b>0</b>	11		3. <b>-1</b>				3. <b>-3</b> & <b>0</b>		1			13	
Investors							3. <b>+1</b>	3. <b>0</b>		1. +1 & 0	2. <b>+2 &amp; +3</b>	2. <b>+2 &amp; +3</b>	3. <b>+1</b>	2. <b>0</b>	3. <b>+3</b>	
Farmers	13	1. +3	2. <b>-2</b>				1. <b>+1</b>	13		2. <b>+1</b>	3. <b>-2</b>		1. +2		1. <b>-2</b>	Fushë-Arrë
Transport companies,																
bus, taxi	1. <b>+2</b>		1. <b>+2</b>	2. <b>+3</b>	1. <b>-1</b>	2. <b>+2</b>	2. <b>+1</b>	2. <b>+1</b>	1. <b>-2</b>	3. <b>-3</b>						
Residents	2. + 1	22	3. <b>-3</b>	1. +2		3. <b>+1</b>				3. <b>-1</b>					13	
Investors Farmers	13	1. +2	2. <b>-1</b>				1. <b>-2</b>	1. 0		2. +1	3. <b>+1</b>		11		13	
Transport companies,	15	1. 72	21				12	1. 0		2. +1	J. <b>+1</b>		11		13	Gjegjan
bus, taxi	1. <b>+2</b>		1. <b>+2</b>	2. <b>-3</b>	1. <b>+1</b>	2. <b>-3</b>	2. <b>+1</b>	2. <b>-3</b>	1. +3	3. <b>+1</b>						
Residents	2. <b>0</b>	23	3. <b>0</b>	1. <b>+2</b>		3. <b>-1</b>				3. 0					1.0	
Investors							318 +1	3. 0		1.0	2. +3	2. <b>+1</b>	3. <b>+3</b>	2.08 +3		
Farmers Transport	1280	1. <b>+2</b>	23				13& +1	1. 0		2. ±1-& +2	3. 0		1. +2		13	Pukë
companies, bus, taxi	1. <b>0</b>		1.08+1	2. <b>+3</b>	1. 0	2. <b>0</b>	2. <b>41</b> & <b>+2</b>	2. <b>0</b>	13	3. <b>0</b>						

Table 18. Questionnaires results in evaluation of the second Cluster.

Time   Travel speed / Road quality of frequency   Section   Travel speed / Road quality of frequency   Section   S								Cat	egory of ques	tions							
1.Which is your wind the read?   1. How is		Time / Tra	vel speed	/ Road qua	lity / Frequency						Quality of I	ife / Develo	oped secto	ors / Benefit	:s		7
The contract of the contract		1.Which is your frequency on using this route?	1.What do about the the road?	you think quality of	1.How is the quality of the road you describe to access the Road of Nation?	1.What do y about road when travel	safety ing?	1.Is the cost of transporting of the product justified for you?	1.Do you have collaborations with other farmers?	1.Are the passengers you transport residents of the areas affected by	1.What obstrenvisage in rinvestments	acles do you making local ?	1.How are production	e the on revenues?	1.The cons road of the effects has income?	e nation, what had on your	
consider this road? vou plan to start withdrawing money from your investments of risk are you willing to watchink it is giving? Investment going? attitude towards money from your investments of risk are you willing to watch it is giving? Investment going? attitude towards investing your new from your investments of risk are you willing to watch it is giving? Investment going? attitude towards investing your new from your property of road tax and what effect investment going? attitude towards investing your new from your property of road tax and what effect investment going? attitude towards investing your new from your property of road tax and what effect investment going? attitude towards investing your new from your property of road tax and what effect investment going? attitude towards willing to wil	Cluster 2	much does the road affect your daily	trip take fi center of t settlement entrance of of Nation?	rom the he t to the of the Road	coordinated by a center that commands your departures according to official	the quality and service	of the road s in it?	for you the passenger transport cost?	technical assistance in case of any defects during the trip?		investment g	oal?	interested local inve	d in making estments?	your under experience investing?	standing and e of saving and	
3. +1   3. 0   11   2. +3   2. +1   3. +1   2. 0   3. 0   11   2. +3   2. +1   3. +1   2. 0   3. 0   11   2. +3   2. +1   3. +1   2. 0   3. 0   11   2. +3   2. +1   3. +1   2. 0   3. 0   11   2. +1   2. +1   2. +1   3. +1			crossing	oints for				you plan to start withdrawing money from your investments	of risk are you willing to		road tax and	what effect			attitude to prospect o	wards the flosses when	
Seriments   1.0	Posidonts	2 ±1	2 ±1	2 12	1 ±1	I	2 17			I	2 ±1	I	1	1	1	1. 0.8.+2	
Farmers 1.0%-2 1.+2 23 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0%-1 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.		Z. <b>T</b> I	Z. <b>T</b> I	J. TJ	1. 71		J. <b>TZ</b>	3 ±1	3.0			2 ±3	2 ±1	3 ±1	2.0		-
Transport companies, bus, taxi  Residents  2 ±1-872 2 .+3 33 1 .+1 3 .+1 3 .0 1 .+2 2 .+3 2 .+1 3 .+2 2 .2 35		1 08-2	1 +2	2 <b>-3</b>									Z. <b>71</b>		2. 0	1. <b>-3</b>	
Investors	Transport companies,			2. 3	2. <b>+3</b>	1. 0	2 <b>. 0</b>			13		3.0		1. 12		<u>.</u> . •	Milo
Sesidents   Sesi		I	1				I	1		1	I	ı	1	1	_		
Farmers 11 1.+1 2.+3 11 1.0 2.+1 3.+1 1.±1&+2 1.+  Transport companies, bus, taxi 1.+2 1.+2 2.+3 11 21 2.+1 2.+1 1.+3 3.+1 1.+1 2.+1 3.+1 1.+1 1.+1 1.+1 1.+1 1.+1 1.+1 1		2. ±1-60+2	2. <b>+3</b>	3. <b>-3</b>	1. +1		3. +1	2 . 4	2.0			2 2	0 1	2 4 2 2	10.0		
Transport companies, bus, taxi													2. +1		_		4
Residents     21     2.+2     33     12     3.+1     33     1.+2     2.+1     3.+1       Investors     3.+1     3.0     1.+2     2.+1     3.+1     31       Farmers     11-2-2     1.+1     11     11-2-1 <td< td=""><td></td><td>11</td><td>1. +1</td><td>Z. <b>+3</b></td><td></td><td></td><td></td><td>1. +1</td><td>1. 0</td><td></td><td>Z. <b>+1</b></td><td>3. +1</td><td></td><td>1,+10,+2</td><td></td><td>1. +1</td><td>Rubi</td></td<>		11	1. +1	Z. <b>+3</b>				1. +1	1. 0		Z. <b>+1</b>	3. +1		1,+10,+2		1. +1	Rubi
Residents 21 2.+2 33 12 3.+1 3.0 1.+2 2.+1 2.+1 2.+1 3.+1 2.08+1 33 3.+1 3.0 1.+2 2.+1 2.+1 3.+1 2.08+1 32 33 3.+1 3.0 1.+2 2.+1 3.+1 2.08+1 32 34 3.+1 3.0 1.+2 33 3.+1 3.+1 3.0 1.+2 33 3.+1 3.+1 3.0 1.+2 33 3.+1 3.+1 3.+1 3.0 1.+2 33 3.+1 3.+1 3.+1 34 34 34 34 34 34 34 34	•																
Residents 21 2.+2 33 12 3.+1 3.0 1.+2 2.+1 2.+1 3.+1 2.0&+2 3.=  Farmers 11-&-2 1.+1 2.+1 1.0 2.+1 3.+1 1.+1 1.+1 1.+1 1.+1 1.+1 1.+1 1		1 +2	1 +2		2 +3	1 -1	2 -1	2 +1	2 +1	1 +3	3 +1						
1. +2   2. +1   3. +1   3. 0   1. +2   2. +1   3. +1   2. 0. +1   3.	ous, cum	<u>_</u>	·-		20			· _	2	21 - 0	5. · · <u>-</u>					L	
1. +2   2. +1   2. +1   3. +1   2. +2   3. +1   3. +1   2. +2   3. +1   3. +	Racidants	2 -1	2 <b>±2</b>	2 <b>-2</b>	1 -2		2 ⊥1				2 <b>-2</b>		ı	1	1	1. <b>+2</b>	
Farmers 1.18-7 1.+1 2.+1 1.0 2.18-7 3.+1 1.+1 1.+1 1.+  Transport companies, bus, taxi 1.+1 2.+2 1.+1 2.+1 2.+1 2.+1 1.+2 3.38-2 1.+1 1.+1 1.+2 1.+2 1.+2 1.+2 1.+2 1.+			<u>.</u>	J. <b>J</b>			J <u>.</u>	3 +1	3.0			2 +1	2 +1	3 +1	2 08+2	33&-2	
Transport companies, bus, taxi		118-5	1. +1	2. +1											2,000.72	1. +1	
Residents     23     2. +2     33     12     31     3. +1     12       Investors     1. +1     2. +2     12     12     11     12     11			1. 12	2. 12				1, 24, 12	1. 0		<u></u>	J. 11		1		1. 12	Rrësh
Besidents 23 2.+2 33 12 31 31 3.+1 12 14 11 14 14 14 14 14 14	•																
Residents 23 2.+2 33 12 31 3.+1 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	•	1.+1&+2	1. +1		2. +3	1. <b>+1</b>	2. <b>+1</b>	2. <b>+1</b>	2. +1	1. +2	3. <b>-3</b> & <b>-2</b>						
Investors	,	I/									/		1			l.	
Investors	Residents	2. <b>-3</b>	2. <b>+2</b>	3. <b>-3</b>	12		31				3. +1		1			1. 0.8+2	1
Farmers 1_1_1_8+1 1.+1 2.+2 11_8+2 13 2.+1 3.+1 11 1.+1 Transport							J. <u>-</u>						1	1	1		
Transport Transport		118+1	1. +1	2. <b>+2</b>				118+2	13		2.+1	3. +1		11		1. <b>+1</b>	
																	Rep
companies,	companies,													1			
bus, taxi	• •	1. +1	1. +1		2. +3	1. +1	2. +1	2. <b>+1</b>	2. +1	1. +3	3. <b>0</b>		1	1			

Table 19. Questionnaires results in evaluation of the third Cluster.

						•	Cat	egory of q	uestions		•			•	•	1
	Time / Trav	el speed	/ Road qua	ality / Freque	ncy		Economic gr of travel	rowth / Serv	rices / Cost	Quality of life / Developed sectors / Benefits						
Cluster 3	1.Which is your frequency on using this route?		quality of	1.How is the quality of the road you describe to access the Road of Nation?		lo you think ad safety when ?	1.Is the cost of transporting of the product justified for you?	1.Do you have collaborati ons with other farmers?	1.Are the passengers you transport residents of the areas affected by the road?	1.What obsta envisage in r investments?	naking local	1.How are to production		road of t	nstruction of the he nation, what as had on your	
	2.How much does the road affect your daily activity?	the your trip take fro affect the center of the daily settlement to the		2.Are you coordinated by a center that commands your departures according to official	2.How do you assess the quality of services on this road?		2.Is it justified for you the passenger transport cost?	2.How is the technical assistance in case of any defects during the trip?		2.What is yo investment g		2.Why were interested i local inves	n making		your nding and ce of saving and	
	3.Are there any crossing points for pedestrians?			Onicial		fe do you this road?	3. When do you plan to start withdrawing money from your investments	3. What level of risk are you willing to face?		3. How do yo road tax and do you think	what effect	3. How is the going?	ne i nvestment	3. What is your general attitude towards the prospect of losses when investing your money?		
Residents							1	1				ı	1			
	2. <b>-1</b>	2. <b>-2</b>	33	1. <b>-2</b>		31-2				3. <b>-2</b>					12 -1	
Investors				12		31-2	1 2	1 2			2.2		1.4./2			
Investors Farmers	11	2. <b>-2</b> 1. <b>-1</b>	33 21	12		3.:1-2	13	13		3. <b>-2</b> 2. <b>+1</b>	32		11 -2		13	Kalimas
Investors Farmers Transport				12		31 -2	13	13			32		11 -2			Kalimas
Investors Farmers Transport companies,	11	11			1 -1				1 +2	2. +1	3. <b>-2</b>		11 -2			Kalimas
Investors Farmers Transport companies,				2 <b>3</b>	11	21	13 22	1 <b>3</b>	1. +2		3. <b>-2</b>		1,-1-2			Kalimas
Investors Farmers Transport companies, bus, taxi	1 <b>1</b> 1. + <b>1</b>	1 <b>1</b>	21	23	11	21			1. +2	2. <b>+1</b> 3. <b>-2</b>	32		1.1-2		13	Kalimas
Investors Farmers Transport companies, bus, taxi Residents	11	11			11		2. <b>-2</b>	2. <b>-3</b>	1. +2	2. +1 32 33		1. +1		2.0	13	Kalimas
Investors Farmers Transport companies, bus, taxi Residents Investors	11 1. +1 21	11 12 2. +3	21 3. +2	23	11	21	2. <b>-2</b> 3. <b>+1</b>	2. <b>-3</b> 3. <b>0</b>	1. +2	2. <b>+1</b> 3. <b>-2</b> 3. <b>-3</b> 1. 0	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0	
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers	1 <b>1</b> 1. + <b>1</b>	1 <b>1</b>	21	23	11	21	2. <b>-2</b>	2. <b>-3</b>	1. +2	2. +1 32 33		1. +1		2. 0	13	Kalimasl Kukës
Investors Farmers Transport companies, bus, taxi Residents Investors	11 1. +1 21	11 12 2. +3	21 3. +2	23	11	21	2. <b>-2</b> 3. <b>+1</b>	2. <b>-3</b> 3. <b>0</b>	1. +2	2. <b>+1</b> 3. <b>-2</b> 3. <b>-3</b> 1. 0	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0	
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers Transport	11 1. +1 21	11 12 2. +3	21 3. +2	23	11	21	2. <b>-2</b> 3. <b>+1</b>	2. <b>-3</b> 3. <b>0</b>	1. +2	2. <b>+1</b> 3. <b>-2</b> 3. <b>-3</b> 1. 0	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0	
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers Transport companies,	11 1. +1 21 11	11 12 2. +3 1. +1	21 3. +2	23		21	22 3. +1 11	2. <b>-3</b> 3. 0 1. <b>-3</b>		2. +1 32 33 1. 0 2. +1	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0	
Investors Farmers Transport companies, bus, taxi Residents Investors Farmers Transport companies, bus, taxi	11 1. +1 21 11	11 12 2. +3 1. +1	21 3. +2	23 11 2. +3		21 32 2. +1	22 3. +1 11	2. <b>-3</b> 3. 0 1. <b>-3</b>		2. +1 32 33 1. 0 2. +1	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0 1. +2	
Investors Farmers Transport companies, bus, taxi Residents Investors Farmers Transport companies, bus, taxi	11 1. +1 21 11	11 12 2. +3 1. +1	21 3. +2 2. +2	23		21	22 3. +1 11	2. <b>-3</b> 3. 0 1. <b>-3</b>		2. +1 32 33 1. 0 2. +1 3. +1	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0	
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers Transport companies, bus, taxi  Residents	11 1. +1 21 1. +1 21	11 2. +3 1. +1 2. +3	21 3. +2 2. +2 33	23 11 2. +3		21 32 2. +1	2. <b>-2</b> 3. <b>+1</b> 1. <b>-1</b> 2. <b>+1</b>	23 3. 0 13 2. +1		2. +1 32 33 1. 0 2. +1 3. +1	2. <b>+3</b> 3. <b>-2</b>	1. +1	3. +1 11	2. 0	13 13 3. 0 1. +2	Kukës
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers Transport companies,	11 1. +1 21 11	11 12 2. +3 1. +1	21 3. +2 2. +2	23 11 2. +3		21 32 2. +1	22 3. +1 11	2. <b>-3</b> 3. 0 1. <b>-3</b>		2. +1 32 33 1. 0 2. +1 3. +1	2. <b>+3</b>	1. +1	3. +1	2. 0	13 13 13 3. 0 1. +2	Kukës
Investors Farmers Transport companies, bus, taxi  Residents Investors Farmers Transport companies, bus, taxi  Residents	11 1. +1 21 1. +1 21	11 2. +3 1. +1 2. +3	21 3. +2 2. +2 33	23 11 2. +3		21 32 2. +1	2. <b>-2</b> 3. <b>+1</b> 1. <b>-1</b> 2. <b>+1</b>	23 3. 0 13 2. +1		2. +1 32 33 1. 0 2. +1 3. +1	2. <b>+3</b> 3. <b>-2</b>	1. +1	3. +1 11	2. 0	13 13 3. 0 1. +2	

 Table 20. Questionnaires results in evaluation of all three Clusters.

							Cate	gory of qu	estions							]
	Time	/ Travel	speed / F	Road quality	/ Frequen	су	Economic g	rowth / Ser	vices / Cost		Quality of	life / Dev	eloped sect	ors / Benefits		1
	1.Which is your frequency on using this route?			1.How is the quality of the road you describe to access the Road of Nation?	about road	safety	1.Is the cost of transporting of the product justified for you?	1.Do you have collaborati ons with other farmers?	1.Are the passengers you transport residents of the areas affected by the road?	1.What obst you envisag local invest	e in making	1.How are production	e the n revenues?	1.The constru road of the na effects has ha income?	tion, what	
Clusters	2.How much does the road affect your daily activity?	2.How long does your trip take from the center of the settlement to the entrance of the Road of Nation?  3.Are there any crossing points for pedestrians?		2.Are you coordinated by a center that commands your departures according to official schedules?	2.How do y the quality on this roa	of services	2.Is it justified for you the passenger transport cost?	2.How is the technical assistance in case of any defects during the trip?		investment goal? interest		2.Why we interested local inve	l in making	2.How would you describ your understanding and experience of saving and investing?		
					3.How safe do you consider this road?		3. When do you plan to start withdrawing money from your investments	3. What level of risk are you willing to face?		3. How do yo road tax and effect do you giving?	d what	3. How is investmen		3. What is you attitude towal prospect of lo investing you	rds the sses when	
Residents	2. <b>0</b>	2. <b>-2</b>	3. <b>0</b>	1. <b>+2</b>		31	2 .4	2.0		3.0	2. <b>+3</b>	2 .2	2 .4	1. 0	2 2	
nvestors	12	1. +2	2. <b>-2</b>				3. +1	3. <b>0</b>			2. <b>+3</b>	2. <b>+2</b>	3. <b>+1</b>	2. <b>0</b>	3. <b>-2</b>	
Franchert	12	1. +2	2. <b>-2</b>				1. <b>+1</b>	1. 0		3. <b>+1</b>	2. <b>+1</b>		11-+2	13		Cluster
Fransport companies, ous, taxi	1. <b>+2</b>		1. <b>+2</b>	2. <b>+3</b>	1. <b>-1</b>	2 <b>. +2</b>	2. <b>+1</b>	2. <b>+1</b>	1. +1 +3	3. <b>0</b>						
•																
Residents	21 +1	2. <b>+2</b>	3. <b>-3</b>	1.±1 -2		3. <b>-1</b>				3. <b>+1</b>				1. +2		
nvestors							3. <b>+1</b>	3. <b>0</b>			21-+3	2. <b>+1</b>	3. <b>+1</b>	2. <b>+2</b>	3. <b>-2</b>	
armers	1. <b>-1</b>	1. <b>+1</b>	2. <b>+1</b>				1. +1	1. 0		2. <b>+1</b>	3. <b>+1</b>		1. +1	1. +1		
Transport																Cluster
companies,	1. +2		1. <b>+1</b>	2. <b>+3</b>	1. <b>+1</b>	2. <b>+1</b>	2. <b>+1</b>	2. <b>+1</b>	1. <b>+2</b>	3. <b>+1</b>						
us, taxi																
Residents	2. <b>-1</b>	2. <b>+3</b>	3. <b>-3</b>	11		3. <b>-2</b>				3. <b>-2</b>				12 +2		
nvestors							3. <b>+1</b>	3. <b>0</b>		1. <b>0</b>	2. <b>+3</b>	1. <b>+1</b>	3. <b>+1</b>	2. <b>0</b>	3. <b>0</b>	
armers	11	1. <b>+1</b>	2. <b>+2</b>				1. <b>-1</b>	13		2. <b>+1</b>	3. <b>-2</b>		1. <b>-1</b>	1. +2		Cluste
ransport companies,	1. <b>+1</b>		1. <b>+1</b>	2. <b>+3</b>	1 <b>1</b>	2. <b>+1</b>	2. <b>+1</b>	2. <b>+1</b>	1. +3	3. <b>+1</b>						ciuste
bus, taxi		ı										1	1	1	1	

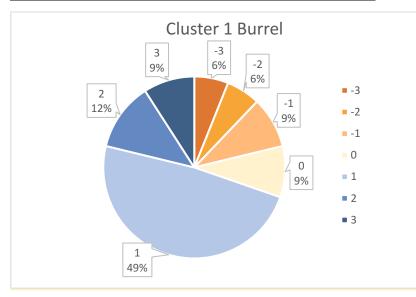
Table 21. Questionnaires results in evaluation of different Individuals (Stakeholder).

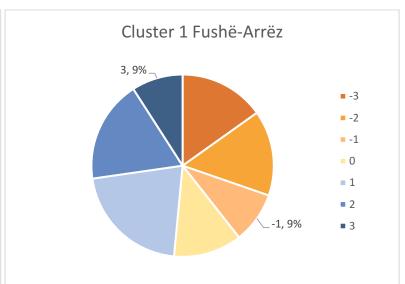
		•		,	Category o	f questions				
	Time / Travel	speed / Road	quality / Fred	quency	Economic g	rowth / Servi	ces / Cost of	Quality of lif	e / Developed	l sectors /
Clusters	does your trip take from the center of the	quality of the road and the services in it?	you assess the quality	do you consider this road?	road how do	assess the public		1. How do you consider road tax and what effect do you think it is giving?		
Different Individuals	1	. +1	. +1	28+1	. +1	. +1		-3		

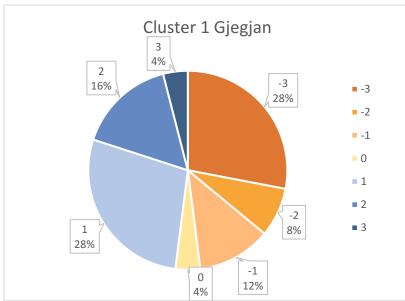
<sup>\*</sup> The tables above explain the values measured by the questionnaires and how the author turned them into values from -3 (most negative) to +3 (most positive). Values are shown based on the questions asked for each questionnaire by stakeholders, as there are questions that were developed for 2 or 3 stakeholders at the same time.

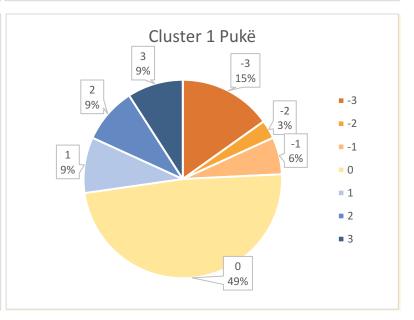
-	3 -2	-1	0	1	2	3

# Summary of results from questionnaires elaboration

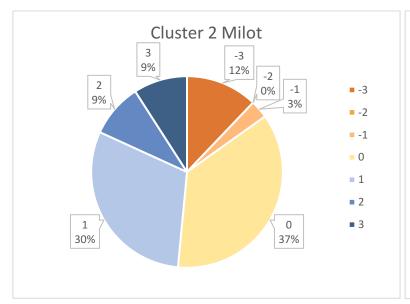


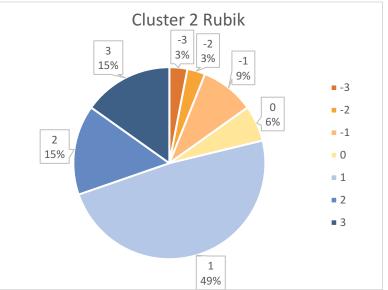


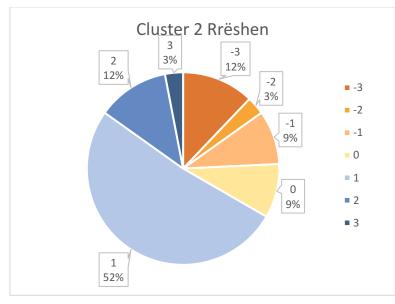


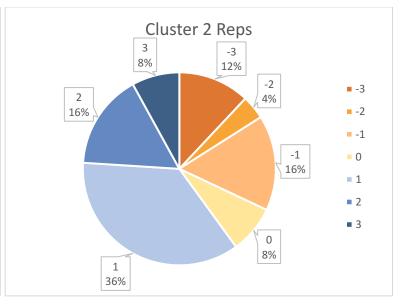


## Summary of results from questionnaires elaboration

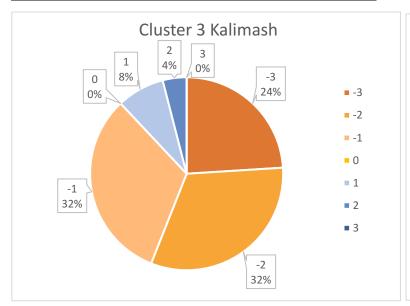


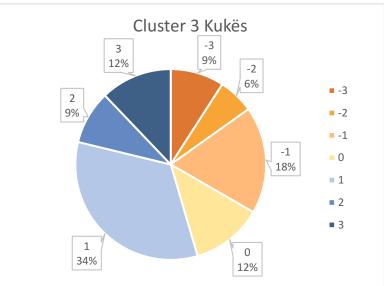


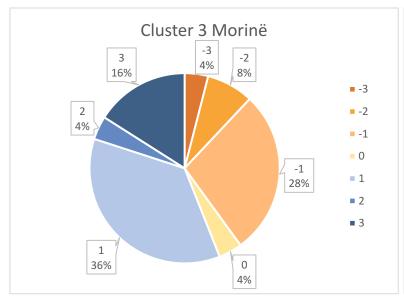


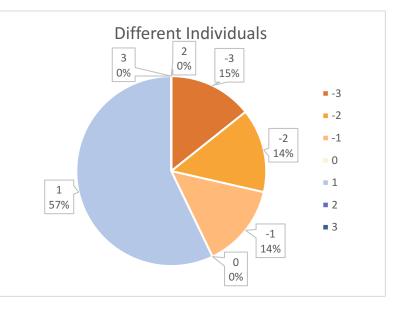


# Summary of results from questionnaires elaboration

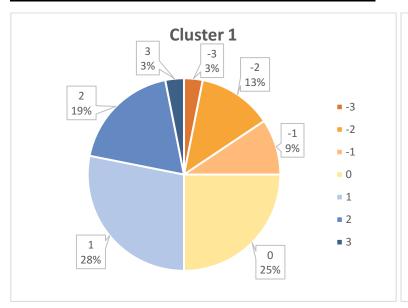


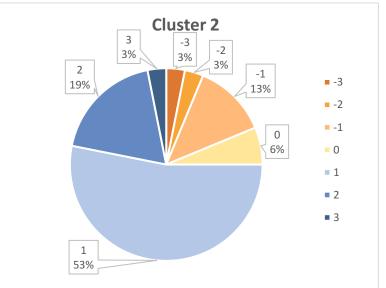


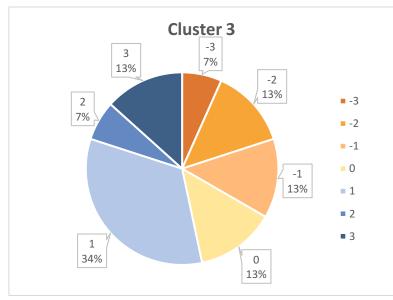




# Summary of results from questionnaires elaboration







# Second group (economic analysis)

# 3.4 Annual Reports Analysis

In this set of analysis digital data will be presented that results from different studies on the importance of this study/ that contextualize the importance of this study. To better understand its economic impact not only for the project area, but also from the importance it has had as a project on a national scale and how it has impacted the state budget. Through the presentation of these data will be drawn conclusions that are directly related to the economic impact and its effect on the region.

# First case study

# "The Road of the Nation" Albania - Kosova, Route 7, Corridor X

The Albania-Kosova highway project (Road of the Nation in Albania, Dr. Ibrahim Rugova Road 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 Shengjin and Durres to the Adriatic Sea along the Corridor E75 / Corridor X in Nis. The highway starts near Lezha as SH5 / State Road 5, enters Kosovo as R7 and ends in Gjergjica, near Prishtina.

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. A tunnel was built around 5.53 kilometers in Albania, making it easier to travel and trade to hundreds of thousands of people who spend the holiday on Albania's shores during the summer months and also for trade exchanges between countries.

The highway connects Durrës and Shëngjin with the border crossing with Kosova in Morina as it passes through A1 through Thumana, Mamurras, Laç, Milot, Rrëshen, Reps, Thirr and Kalimash. As it passes like SH5 through Kolsh, Kukës and Morinë as a continuation of state road 5 (SH5) Shkodër - Puka - Kukës - Morinë.

It has a width of 25-31 meters, a length of 170 kilometers and it develops at 80-120 km/h. From the border in Morina to Durrës, the existing 180-kilometer-long route that runs through 6 to 7 hours, has turned into a fast route that can be crossed for only 2.5 hours.

The Road of the Nation is considered one of the most important Albanian infrastructures 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. After its construction, it has had a drastic impact on the economies of the two countries, implying trade between the two countries and the exploitation of tourism potentials. The trade and movement multiplication figures have risen.

From a time, perspective, 15 years ago, the two countries that speak the same language Were divided by an almost insurmountable barrier creating physical distance between these countries, that hindered trade, business and tourism development. After the realization of this project, Albanian trade with Kosovo, which was almost non-existent years ago, is today among the main export partners and the only country with which the Albanian economy has a trade surplus.

The Road of the Nation, brought the two countries closer both physically and economically, despite obstacles, to be closer than ever, where vacationers from Kosovo occupying more than half of foreign tourists coming to Albania, as well as business relationships have increased significantly.

The Durrës-Kukës-Morina highway is not simply a road linking two states, Albania and Kosovo, part of a nation, but serves as a liaison with millions of potential customers in the Balkan region and beyond.

This project is one of the most important but controversial infrastructure projects, due to the cost it had to pay for its construction, which has not yet been completed (but that actually in its current unfinished version starts in Milot ends in Morinë as far as the Albanian territory).

"Discussions on the construction of a highway between Albania and Kosovo are early, they were born on the eve of the First World War in Austria-Hungary. Even in the 1970s and 1980s there was a discussion about building a road that would have to connect two countries (Tema, 2016)."

"The Road of the Nation Project has started with the first proposal in 1996 by the time president Sali Berisha and then in 1999 the proposal was repeated by former prime minister Pandeli Majko who also introduced a tax on every service and product in Albania, which would serve as public funding for the Road of the Nation. For a few years, they collected around \$ 250 million of this tax, but they were never used for what they gathered. (Tema, 2016)."

"The project started in 2003, when the World Bank funded the feasibility study. Part of the highway, the segment between Rrëshen (north-central part of Albania) and

Kalimash (northeastern part) was inaugurated on June 26, 2009 with technical designation A1.

The four-lane highway became the largest infrastructure project in Albania. Its initial cost was estimated at about € 600 million, but then it came close to € 1 billion, though it never came to a final figure of its full cost up to the current stage (Tema, 2016)."

Often times, the economics specialists, starting from the huge cost change, with almost 80% of the initial cost, which has often sparked little debate in Albania, have led to the question of whether this route has been economically rentable, which means if the economic benefits are higher than the costs of building this road.

Sector researchers who have expressed the financial outlook on the Nation's Profitability have studied direct variables such as the benefits of rising summer and patriotic tourism, financial gains from increased volume of trade exchanges, etc. but none of the studies in Albania and Kosovo does not list beside these benefits provided other potential benefits. The project starts at the Port of Durres (at least that in paper) and ends at the border with Kosovo, in Morinë, where the main points are: Durrës, Milot, Rrëshen, Reps, Thirra, Kalimashi and Morina.

With its construction, the average daily road traffic was projected from 12,000 to 15,000 vehicles (the European standard for highway construction). But today, some years after its construction, the average daily turnover of vehicles reaches around 12,000 only during the summer season. In the days out of this season, the average number reaches around 5,000 vehicles. On average, in a year around 1.8 million vehicles circulate around the Nation's Road, of which about 20% are freight vehicles.

One of Kosovo's main trading partners is Albania and obviously the construction of the highway has given a significant impact, with time and cost reduction. Trade exchanges have increased considerably over the years.

In October 2003, Albania and Kosovo liberalized a considerable trade between them, to reach in 2007 with CEFTA<sup>1</sup> entry into full liberalization of bilateral trade (Tema, 2016).

<sup>&</sup>lt;sup>1</sup> Central European Free Trade Agreement

In 2009, the value of import / export amounted to about 10 million euros, a figure similar to the whole 2003-2006 period (10.4 million euro), (Prifti 2018).

However, the commodity exchange between the two countries remains low compared to the opportunities and needs of the respective economies. This has also come as a result of a number of factors that have led to the establishment of reciprocity measures (the application of non-tariff barriers, such as potato, cement, milk, meat, etc.) (Tema, 2016).

The Albanian Institute of Statistics shows that during the period 2010-2014, exports were those who suffered significant fluctuation, but they have been drastically increasing compared to 2009 levels.

There was a trend up until 2012, which went down in 2013 and marked an increase in 2014. Thus during 2014, they accounted for 7.3% of exports from 6.2% in 2010. Albanian exports to Kosovo during this period were mainly concentrated in the "Minerals, fuels, electricity" and "Construction materials and metals" groups (Tema, 2016).

According to INSTAT data, in 2015, the volume of trade exchange between the two countries amounted to ALL 26 billion, marking an increase of almost three times, compared to the level of 2009 and over 7 times from 2005.

In 2015, Kosovo became the second most important Albanian export destination for the first time. They reached almost ALL 21 billion or about 11.4% more than in 2014. In 2015, exports to Kosovo accounted for 8.6% of the total, from 7.3% in 2014 and 4.7% in 2007 before the Durres Kukës road (INSTAT 2017).

The most exported product from Albania to Kosovo in 2015 was cast iron and steel with about ALL 5.4 billion (4% annual growth) followed by fuels and minerals, with about ALL 5 billion, which saw an annual increase of 22% (Tema, 2016).

Excessive growth, albeit from a small base, in the same period marked the export of agricultural products. Vegetable's sales in Kosovo increased by 45%, reaching 750 million ALL. Even the exported fruits were 50% higher than the previous year, to reach nearly 600 million ALL.

Other businesses that have seen increased activity with Kosovo are also the ore processors and furniture makers. While cement is one of the products that failed to find the neighboring market in 2015 (Tema, 2016).

Kosovo has had a different production system and its consumption profile has been an integral part of the production and distribution chain of former Yugoslav countries by linking

through an infrastructure network that has been more developed and oriented towards other Yugoslav republics during the last century.

External trade for Albania differs from that of Kosovo, dictated by the historical developments and the administrative division of the two parts of the nation during the last century, but obviously by their physical separation as a result of an inexistent infrastructure among them.

The countries of the European Union are the target of the trade orientation of Albania, where the main trading partner remains Italy from the port infrastructure and Greece from the road.

For further trade development between the two countries, it is necessary to identify the reciprocal competitive advantages, to coordinate fiscal, administrative and sectoral policies in sectors such as agriculture and industry to enable much higher levels of economic integration than current levels.

A study titled "Roads Towards a Common Economic Space Albania-Kosovo" conducted by some Albanian and Kosovo academics, highlighted that the Nation's Road, an investment of about **1.6 billion euros** (in both countries), contributed more in diversifying supply sources rather than in modifying the origin of imported goods. The construction of Road 7 (Pristina - Morina), which has cost the Kosovo budget about **830 million EUR**, is considered to be one of the largest projects of the last decades.

In this study it is described that Albania has invested 1 billion Euros to facilitate transit of goods that Kosovo imports from third countries. Lack of Albanian products comparable to Kosovar imports has reduced the expected contribution of this investment.

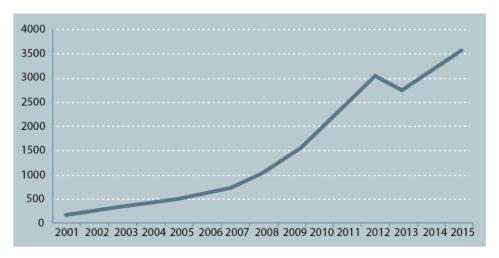
In addition to the tourism sector, "Road of the Nation", was given the opportunity for Kosovo Albanians to have a tourist destination that offered everything from the point of view of natural resources, otherwise called "patriotic tourism" and compared to "Saint Tropez" tourism for compatriots.

INSTAT data shows that inflows of foreign allowances across the land border (where Morina's inflows accounted for more than 50% of the total) marked a significant increase shortly after 2008, fivefold by 2015.

In 2010, the number of foreign visitors to Albania was estimated at about 3.5 million, of which about 1.7 million were citizens of Kosovo.

In one year in Albania there are about 1.5-1.8 million citizens from Kosovo, 70% of whom come during the period June-August. According to statistics, a citizen from

Kosovo stays in Albania on average 3.8 days and 83% of them stay at the hotel. The average daily cost per person of a citizen from Kosovo amounts to 55 EUR.



**Graph 5.** Entries of foreign nationals through the land border in years (thousand). (Source: INSTAT, 2017)

"During 2009, the tourism industry estimated a value that was about 29% higher than that of export of goods and services.

The shortened travel distance (in 2.5 hours) made coastal areas more accessible and at a lower cost."

From the calculation of this data using INSTAT statistics, it turns out that the annual economic benefit of Albania only from the development of tourism sector with Kosovo that has brought the construction of this highway is as follows:

No. tourists	Average daily spending / pers	Day of stay	Benefit
1.7 million (K	S) <b>55 EUR</b>	3.8 days	355,300,000 EUR.

Benefit = 1.7 million tourists (KS) \* 55 EUR/Turist (KS) \* 3.8 Day of stay = 355,300,000 EUR.

The city of Durrës was the favorite destination of tourists for many years and continues to be and today, the beach area became the 'second home' of compatriots from Kosovo. The same culture and traditions, the common language, favored tourism in Albania but also the fact that for the same quality they could take a less expensive vacation.

The construction of the Durrës-Kukës road helped the geographic extent of holidaymakers from Kosovo, who were also given the opportunity to know even the most remote areas of southern Albania.

Thus, economic gain was extended to other areas of the country. At the same time, weekend tourism was developed, while during joint holidays or sporting events the figures grew further.

The impact of the construction of this road gave for Albanian tourism the development of the local economy, providing the state with additional income from taxes, such as VAT, sleeping tax, tour tax, etc. This flow of movement created new jobs, both seasonal and new opportunities to open businesses.

In the summer of 2016, the number of tourists from Kosovo has reached the highest historical level, with about 1.3 million citizens entering the period June-August.

Kosovo Albanians expressed interest in buying apartments in Albania after the construction of the National Road.

Real estate agents in 2009 spoke of a great interest from Kosovo Albanians, Macedonians and Diaspora, who were about to start booking second houses on the coast after the construction of the road.

The sales prices of apartments ranged from 400-900 euros per square meter. Only in 2011 bought houses and apartments worth about 30 million euros (Prifti 2018).

# The favorite area of tourists from the Albanian lands is Durrës from Shkëmbi i Kavajës and extending to Golem.

From the point of view of transport, the construction of the Kalimash tunnel drastically reduced the costs of transporting goods from and to the Port of Durres.

In this way, not only Albania was closer, but it also facilitated business access from Kosovo to other markets and provided them with the opportunity to use in a short time one of the largest ports in Albania (Durrës).

The Durrës-Kukës corridor has a great importance for the fact that transport of goods and passengers occupies the main weight of transport, both domestically and with Kosovo.

Kosovo's enterprises were given the opportunity to have only one supply corridor through Thessaloniki through faster access to the Port of Durres. Compared to Greece and Montenegro, the road helped to reduce costs by about 50% (Prifti, 2018).

In Kosovo a study conducted by RIINVEST<sup>2</sup> and KFOS<sup>3</sup> in 2015 cites the impact that has had on trade relations between Albania and Kosova, the realization of what is known as Route 7 or "Ibrahim Rrugova" street, continuation of the Milot-Morinë segment.

<sup>&</sup>lt;sup>2</sup> Riinvest Institute for Development Research

<sup>&</sup>lt;sup>3</sup> Kosovo Foundation for Open Society

In this study it is said that the construction of this road has been more favorable for Albania's producers than for those of Kosovo. "However, the Kosovo consumer, as a result of the construction of Route 7, had access to a wider range of products, and in many cases (potentially) consumed those products at lower prices due to the lower cost of transport.

According to Kosovo Customs data, exports from Kosovo, which has as final destination Montenegro, are being transported through Route 7, and as a result has greatly reduced the use of the "Kullë" as a customs point. Also, the customs point of Morina (Vermicë) is now being exploited for the exports of Kosovo and Albania, with the final destination of the European countries.

Another study of last year, conducted by the Institute for Development Policy, underlined that Albania has a leading position as a strategic partner of Kosovo for its exports and for this, the construction of the highway has also been important in 2009.

This investment has had a significant impact in terms of reducing the amount of exports destined for North Macedonia.

However, after an in-depth analysis of the trade patterns and exploitation of the highway for intensifying trade exchanges between Kosovo and Albania, since its construction, it is concluded that the construction of this highway has replaced Montenegro and North Macedonia as countries transit for Kosovo exports to Albania, while in the volume of exports there has been no visible effect.

The Institute's analysis said also that it is estimated that the highway is an indirect subsidy that we have made to third countries, who make use of this alternative for faster and lower-cost transportation. According to it, economic relations between Kosovo and Albania are limited to trade exchanges of export / import profile without any significant advancement in direct investment attracting in common or respective ways.

According to data study quoted, the peak of investments in Kosovo by businesses from Albania was registered in 2010 with 108 new enterprises. Dominated, commercial enterprises, as well as construction and pharmaceuticals.

The study underlines that: "Despite the fact that the participation of the two countries in each other's trading portfolio is unsatisfactory and taking into account the poor supply of products on the mutual markets, it is expected that in the coming years, exchanges between Kosovo and Albania will also increase Further, due to cultural

ties, planned improvement of infrastructure, modernization of administrative procedures, greater circulation of knowledge and technology, and other factors. Besides potential, access to the Albanian market provides an automatically higher level of consumption. Albania's importance lies in the fact that it provides cruise to Kosovo goods".

In conclusion, another positive impact in the investment of this road has also been employment.

More than 4500 employees were employed during road construction, who are directly involved in full time for the construction of this road and thousands for special projects in various axes of construction of this road. Employment of several thousand Albanians for the construction of this road is an important economic impact for the Albanian economy, which has a high unemployment rate compared to the countries of the region. This positive impact is mostly economical for the increase of family income of more than 5,000 families, but also social impact for the residents of these areas.

# The negative impact

This project in its entirety besides the positive economic impact of construction and investment in the Road of the Nation, its construction without having a clear and transparent analysis of the project to make its profitability analysis has also led to some negative impacts on the economy of Albania.

In addition to the high cost of this project a negative economic impact has also caused the low efficiency of this project and also the *political impact* on the construction of this highway which was taken as a decision in an important electoral year and political influence has had a greater influence higher than the financial analysis of the project.

The political debate on this road and the political accusations of corruption and misappropriation of funds as well as the poor quality of the works show the negative impact that decision-making has had on the construction of this road in unfavorable economic conditions.

This decision for the construction of this highway that requires such a large investment has brought other negative impacts to the Albanian economy, where due to the high cost of financing the Road of the Nation from 2008-2012 public investments for this highway have received about 50% of all investments in all national roads, thus paralyzing public development and investment in many other projects and causing a high opportunity cost.

Last but not least, the negative economic impact has also led to the high level of public debt worsened by the financing of the deficit created for the financing of the Nation's Road which only in 2008 demanded about EUR 32 million of external debt financing.

# **Cost-Benefit Method (Short Term and Long Term)**

In this way, to make an assessment of the impact or the road usage another method will be used aiming to provide an evaluation for private or public projects founded with public funds depending on the benefit ratio received for the project against its expense.

In this case, the nation's road project is more acceptable to be funded due to the huge benefits that it brings in addition to the cost. Thus, being a rentable project but at a very high cost of funding, it is a necessary funding reason.

The following table explains the cost-benefit analysis for the Nation's Road for the benefits and costs recognized by other researchers of the economic impact of public investment in Albania:

Table 22. Cost-benefit analysis (Source: Prifti 2018).

Benefits	Usefulness	Costs	Usefulness
Seven-fold of trade volume	9	Costs 1 billion euros	9
Reduce the cost of transport by 60%	7	Low efficiency- Misappropriation of funds	5
Five-fold of tourism	8	Blocking of other infrastructure investments (2006-2010)	8
Increased investments in real estates	4	High maintenance costs	6
Increased activity in Port of Durres (+ 47%)	4	Increase of public debt	6
Potential market of the region	3		
Increase of employment	2		
Average usefulness	5.28	Average usefulness	6.8

<sup>\*</sup> Nation's road cost-benefit analysis presented in the table above is a simple estimation with the poorly assessed estimate of the economic impact of the construction of this publicly funded road. In this analysis the assessments are subjective and may vary depending on the views of the various authors.

From the above analysis where have been taken in consideration all the positive economic impacts that has been the construction of this road and as a cost all the negative impacts that this financing has had in the Albanian economy it is noted that the **average usefulness costs** are greater than the **average usefulness benefits** by making this project a non-repairable project financially.

The greatest impact on cost increases has the high cost of financing and public debt growth in Albania, which are two factors of significant importance to the performance of a developing country's economy such as Albania.

Although cost-benefit analysis through the asset values is not termed as a decision-making financial analysis, as it is based on the subjectivity of estimates for each of the public investment impacts in a particular project, it is a method which presents a good overview of the impacts that there is public investment in a specific project on a country's macroeconomic indicators.

# **Economic benefits**

"In general, public investments in the road transport infrastructure and not just in the nation's road have two main economic benefits. **These benefits consist of:** 

- increase of interregional access
- reducing the cost of transport (at regional level and wider).
   Taking into consideration these benefits, it is expected that transport will affect direct and indirect economic growth (through other factors) as appropriate (Qaja, 2020)"

In Albania, high spending on public investment over the years has increased productivity and has added accumulation of public capital.

Public investments have also had a positive effect on economic growth, but also in reducing poverty and inequality both in the short-term and the long run.

Moreover, international financing (external financing, external debt) is a better option than tax funding when considering the terms of its ability to improve the physical infrastructure of the economy in order to create employment opportunities, improve productivity and meet social needs.

By comparing our country with other case studies that have been most deployed in developing countries, they have tested the most traces of periods when the effects of public investment have started rather than predicting the spill effect of infrastructure investments.

These studies did not take into consideration a very important aspect of public infrastructure, where investments implicate the benefits of individuals and businesses beyond the locality and the state where infrastructure is concentrated.

On the other hand, a good local infrastructure can help neighboring businesses to easily access resources that are essential for functioning of firms where infrastructure is built. These effects, related to each other, positive and negative, are very important in calculations of cost-benefit analysis of public investment.

# Historical analysis and economic necessity

In the following paragraphs are presented the requirements of the country for the development of the project, starting with the historical point of view and what brought further this development. In this way, the historic aspect of the construction of this road is related not only to the need for distance cuts but also to the need for public investments that have passed through a long passage and are affected by many historical factors in the development of the country.

Albania's economic growth has undergone significant fluctuations, starting from the first years of transition to the present day. The decline in economic growth and macroeconomic insecurity have led to an increase in budget deficit and public debt.

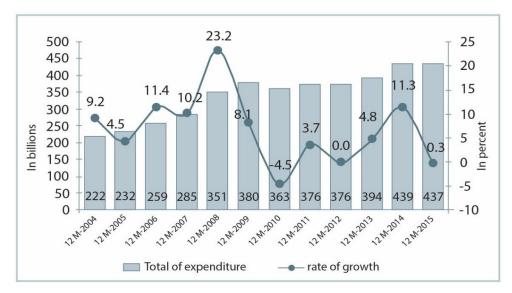
The causes of insecurity and rejection are many, but the most important one, directly linked to Albania, is the European crisis and the inability of our country to manage, control and cope with the crisis. Debt and deficit deepening also led to a reduction in government spending and a macroeconomic destabilization. Capital investments have gradually increased since 1990 with a decrease during the crisis of the Pyramid schemes 1997-1998, as well as growth during 2001-2003 and 2007-2008.

With the onset of the European crisis and the overall decline in consumption and production, public investment declined in response to further tightening of debt and deficit growth. This increase in public debt has come as a result of financing infrastructure projects mainly with debt. Moreover, investments in rural areas have been small, hampering the livelihood of residents of these areas.

This has also been a barrier to the development of rural areas; the insufficiency of infrastructure to produce and trade agricultural products.

Likewise, the rural population not only in the north and north-east but also in other areas has acknowledged that lack of infrastructure has been one of the key factors of their poverty and survival in difficult atmospheric conditions.

In this situation, it was judged by the government, and the best and quickest way to recover the economy was increasing public investment by stimulating economic strength. Below is a graph showing the total expenditure and growth rate of the country for nearly 10 years.

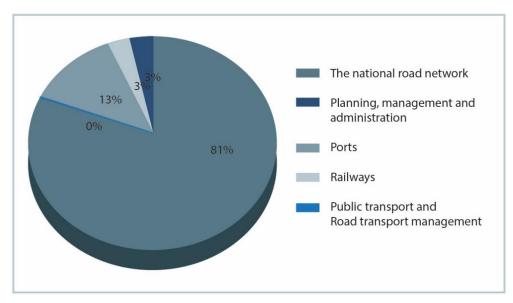


**Graph 6.** Total expenditure and growth rate of the country for nearly 10 years. (Source: Ministry of Finance of Albania, 2018)

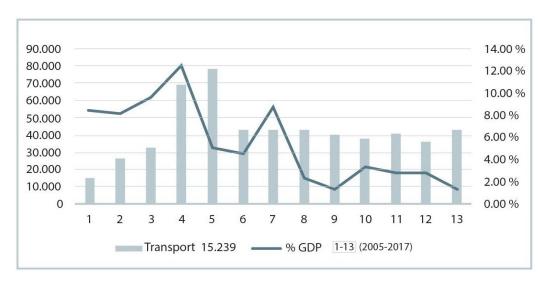
In Albania capital spending, mainly in road infrastructure, has increased significantly since 2007-2009, where economic growth also reached its highest level.

But, the beginnings of the World Crisis caused a rather significant decline in GDP, but maintaining positive values.

State intervention through public investment in infrastructure managed to protect the economy from deep recession and the direct impact of the crisis coming from neighboring countries.



Graph 7. Infrastructure investments. (Source: Ministry of Finance of Albania, 2018).



Graph 8. Investments in road transport and GDP change. (Source: Ministry of Finance of Albania).

Graph **8**, shows the comparison of changes in annual GDP growth with changes in annual public investments in road transport in Albania. In the graph above, are illustrated the values for the period 2005-2017, when public investments were high in the transport sector (year 2009, period 5 in the graph), in the coming year the GDP grew and when investments in this sector was lower (year 2016, period 12 in the graph), then GDP rate has been declining. In this way we understand from the graph in a summarized way, how public investments in the road transport sector has affected the Albanian economy.

But although, investments have been made in a good part of the main Albanian arteries as new roads have been opened such as the Nation's Road, still a part of the inhabited areas are mostly isolated but now in another scheme of malfunction.

This is related to the old road from Durrsi to Kukës, which is known as a road that passes on very difficult terrain where for many years the residents of the area opened their businesses to welcome the passersby and travelers.

In addition to its positive sides, it seems in a different perspective, a few years after the opening of the highway connecting Albania with Kosovo, few of the residents have managed to find new sources of survival, the rest of the residents and businesses built along the old road are facing bankruptcy and isolation.

For many years this was the road which connected poor Albanian towns such as Fushe-Arrezi, Shemeria or Milot, with the other part of which were transported heavy duty trucks carrying wood, cement or other goods to the north of the country.

Since the end of the Road of the Nation, in the spring of 2009, the importance of well-known bars along the old road has faded, while their owners are facing abandonment without returning to the area.

The old road linking Shkodra to Kukës was built between 1939-1944, thanks to a loan of 50 million gold francs given by the fascist government of Benito Mussolini for Albania. Along

with the other axis in the north of Dibra, the two routes symbolized the strategic interest of the Italians for a corridor linking Albania with the rest of the Balkans.

Since 2009, the old road was out of function after being replaced by the Albania-Kosova highway, improving the quality and reducing the travel time. However, the new infrastructure has also caused side damage; dozens of businesses along the old Shkodra-Puka road, Fushë Arrëz-Kukës are depleted or bankrupt.

Over the last two decades, the old artery served as a source of income for the residents of the poorer area of Kukës and Fushë-Arrëz, who invested poorly enough money to build bars and restaurants on the street side. The new highway drew some of them out of service, while many others were forced to look for new ways to survive.

Many residents who had opened their businesses in this area spent all of their property at the opening of bars, restaurants or hotels without knowing the government's plans for the area.

Some of the residents having encountered these changes in the value of their property have already made more sacrifices open to other businesses to revive their family economy, despite the fact that the state has not created any facilities or subsidies for new products from their businesses.

# **Access points**

On this highway there are some access points for residential centers that want to connect to the rest, or that connect the villages of the respective areas on both sides of the highway. The 59 km long segment, Durrës-Milot, is part of the north-south corridor, while from Milot to Morina is the new 111 km corridor divided into three segments.

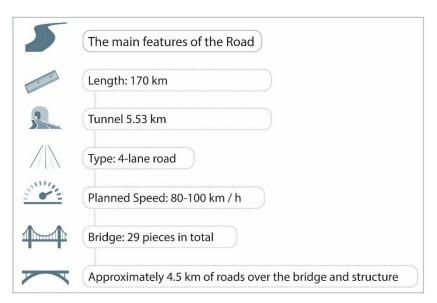
- Milot-Rrëshen section 26 km long.
- Second segment of Rrëshen-Kalimash, 60 km long.
- •The third segment passes from Kalimash to Kukës and to the Morina border crossing point (SH5).

Another segment is Thumana-Milot which is already part of A1.

# The Rrëshen-Kalimash segment

This 60km-long wilderness segment has in the past been taboo if Albania and Kosovo were ever to be connected to the highway, presenting the biggest Albanian construction challenge since the engagement of foreign consultants, experienced in choosing the construction firm, up to the multi-million price tag of bridges and tunnels, among the longest in the Balkans. Along this segment, vehicles can develop speeds of 100–120 km / h. The initial target value of the project for this segment was € 420 million, but this fixed forecast changed based on

the volume of work the contracting company performed. After the completion of the project in early 2008, the construction value was raised to 640 million Euros.



**Figure 64**. The main features of the Road. (Source: Milot – Morinë highway project / Graphic Interpretation: by the author).

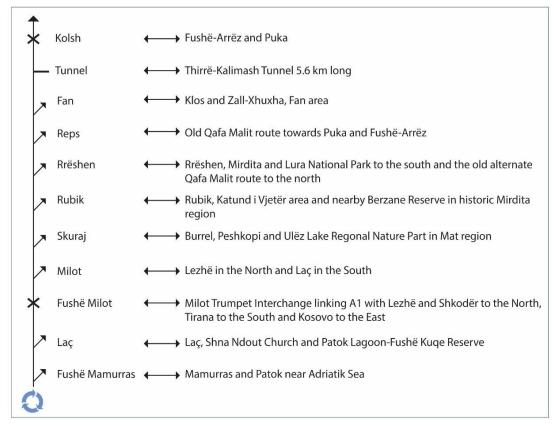


Figure 65. Exits along the axis.

(Source: Milot – Morinë highway project / Graphic Interpretation: by the author).

## Summary of annual reports analysis for the first case study

In this summary of this set of evidence and economic data, summarize the positive and negative effects that the "the Road of Nation" has had at regional and national levels.

No.	Positive Impact	Negative Impact
1.	Increasing employment in one of the poorest regions of Albania during the period of construction.	High project cost after the implementation
2.	Minimize transport cost and the time of traveling for the settlement	Interruption of other investments in public infrastructure during the construction of this road
3.	Reduce of circulation time	Increasing public debt for investment
4.	The attempt of creating a common economic space	The impact of policy on project decision making
5.	Increase in the level of trade between Albania and Kosova	Low efficiency of the project in tangible and beneficial cases.
6.	Development of the tourism sector in coastline of Albania	Political allegations of corruption and misappropriation of government funds
7.	Development of access from the port of Durres to the landlock countries	Failure to improve logistics for the port of Durres (after 10 years of road construction)
8.	Increasing the number of tourists especially from Kosova	Non-financing of residents in areas where the old road was passing
9.	Impact on other sectors (properties, real estate agencies),	The road network is missing the consolidation.
10.	Development of inter-regional links	Low cases of resources and activities identification in the region for simulation of social-economic growth.
11.	Creating better opportunities for countries like Kosovo and Serbia to have quick access to the Adriatic Sea and beyond.	

# 3.5 SWOT analysis of case study

The SWOT analysis for the Nation Road Project is being used in this case as a subjective analysis.

Below are listed strengths with the weak points of this project, opportunities and threats. The purpose of this analysis is to understand the advantages and disadvantages of this project, which are its internal factors, and the opportunities or threats that are the external factors from which it is affected.

Taking into account this analysis, the goal is to maximize the benefits and opportunities that this project offers and eliminate as many disadvantages as those listed below, while minimizing the economic impact of its threats.

# **Strengths**

- Located at the intersection of important corridors in the Balkans
- > Creates a fast exit to the coast of northern Balkan countries (Kosovo, Serbia, etc.)
- > Develops the road infrastructure of the region as a whole and improves the links between them
- Enables increased exchange trading capacity
- > Contributes to sustainable growth
- > Reduces the cost of transport
- Improves access to residential centers in the region.
- > It favors the development of tourism

#### Weaknesses

- > Deficiencies in the Albanian legislation on the control of public-private partnership
- Passing high number of heavy vehicles (often unchecked)
- > Ineffectiveness of the use of public funds
- High project cost (no final figure)
- > High cost of maintenance
- > Imbalances in the development of the region

# **Opportunities**

- Potential market of the entire western Balkan region
- > Improvement of transport links
- Development of access to the port of Durres
- Continued growth of tourist numbers
- Encourage employment development
- > Improve the socio-economic conditions of the inhabitants of the region

## **Threats**

- > The country's unfavorable political climate
- Lack of maintenance
- Lack of detailed financial plans
- Blocking of other public investments
- Increase public debt
- Increase of heavy vehicles in urban areas uncontrolled way

This case is taken into consideration for analysis because it was a success case of a road that has completed its objectives.

# General description of "Egnatia Odos"

The need for a horizontal axis connecting the eastern part with that of western Greece to the north dates back to Roman times. The Egnatia motorway is actually a revival of the Roman road - Via Egnatia - which connects the Adriatic coast of the Roman Empire with Trak and the Black Sea. Starting from Durres and Vlora (Albania), Via Egnatia went through Macedonia and Traki and ended in Kypsela (now part of Turkey).

The Egnatia highway today is a road that crosses Northern Greece horizontally with a length of 670 km and a width of 24.5 m. The highway starts from Igoumenitsa in Kipoi and passes through five regions: East Macedonia and Thrace, Central Macedonia, Western Macedonia, Epirus and Thessaly.

The Egnatia highway is a priority project of trans-European transport networks (TEN-T). It represents a major investment in Northern Greece's transport infrastructure, helping in particular the development of the region and South East Europe in general.

To understand the features of the project, consider two historical facts.

First, initially Egnatia was conceived as a road that only went from Igoumenitsa to Thessaloniki, leaving the deeper areas of Eastern Macedonia and Thrace, and was designed as a highway in just a few sections. The project is fundamentally different from the original design and is the result of stringent negotiations between the various actors, of which the European Commission played a key role.

In fact, at the request of the European Commission, the Egnatia highway was re-mapped as a trans-European road network coming from Igoumenitsa to Kipoli in order to make it a collecting route for the Pan-European Corridors and Trans-European Networks converging in the Balkan Region.

Secondly, following a request from the Commission, the regulatory framework for public infrastructure management in Greece was basically revised.

Starting from the traditional management system, an ad-hoc executive agency was set up for the construction, supervision and management of the highway. "Egnatia Odos" was created in 1995 and, although fully owned by the Greek state, operates under the private sector rules.

An international consulting firm (Brown & Root) was appointed and joined in the organizational scheme of "Egnatia Odos" with the role of the project manager. The goal was to provide the developing company with the management and technical expertise needed to implement and direct the project.

Along the Egnatia Odos highway, there are 73 twin tunnels (about 50km in total), of which 15 are classified as long tunnels, ranging from 800m to 4.6km., longer tunnels are located in the regions of Epirus, Central and Western Macedonia where the highway passes the Pindus Mountains.

#### **Direct effects**

The end of the Egnatia highway resulted in a considerable saving of the time needed to travel to Northern Greece. Distances between cities, terminal stations and transit centers have decreased, on average, by 50%. Before the implementation of the project, the journey from one point (Igoumenitsa) to the other (Kipoi) was about 11 hours and 30 minutes. Now travel time is just over 6 hours.

# Stakeholder analysis

# In the stakeholder analysis divide into winners and losers or beneficiaries and no beneficiaries.

Stakeholder Analysis considers as an important technique for stakeholder identification and analyzing their needs. In this case it will use to identify all key (primary and secondary) stakeholders who have an interest in the issues with which the project is concerned.

In this case, important for northern Greece, generate their activity a series of individuals, for whom rise two questions; who has the power and who has the interest?

 Table 23. Stakeholders (Egnatia Odos). (Source: the author)

No.	Power	Interest		
1.	European Investment Bank	Egnatia Observatory		
2.	Residents (Type1)	NGOs		
3.	Transport companies	European Commission		
4.	Residents Type2)	Individuals		
5.	Ministry of Environment and Public Works	Company of investment		

<sup>\*</sup> Residents (Type1), those who live near access points

<sup>\*</sup> Residents (Type2), those who live far, or on the other side of the area.

Table 24. Features of stakeholders (Egnatia Odos). (Source: Qaja, 2020).

	Power		
European Investment Bank	Citizens	Transport companies	Ministry of Environment and Public Works
It aims to orient the investment and its efficiency for the implementation of the project	Their purpose is to efficient the time of circulation	Their goal is to minimize transport costs and to benefit in time.	Its primary purpose is to orientate the investment.
There is a high percentage in the investment budget	There are potential for setting up new service businesses along the corridors	Avoiding delays during movement.	Need to manage the project and its way of funding.
	Create motion fluxes and impose them, and consequently the investment worthiness		

 Table 25. Features of stakeholders (Egnatia Odos). (Source: the author).

		Interest		
Egnatia Observatory	NGOs	European Commission	Individuals	Company of investment
Its purpose is to supervise the transport corridor	It has environme ntal access and needs to look at it frequently	The primary goal is to influence the cohesion policy with its decisionmaking	Intend to shorten travel time	Provide assistance before starting the project to properly address the various issues
It intends to collect and process data	Its primary purpose is to study the fauna	To create opportunities for such projects not to stay as islands but to connect with other transport networks (TEN-T).	Aim not to ruin their personal vehicles	Providing expertise in project realization
To orientate its activities and generate more accurate reports		To carry out financing that has positive effects and lifespan.	They should be safe during the journey	Fulfillment of deadlines for the realization of the project
			Access different points (cities) along the	

voyage,
providing
access and exit
along the
corridor

#### **POWER**

Meet their Needs (High power and low interest)

- RESIDENTS (TYPE 2)

Key Player (High power and high interest)

- Company of investment
- TRANSPORT COMPANIES
- INDIVIDUALS (key in flow)
  -Ministry of Environment and Public
  Works
  - -European Commission

Least Important (Low power and low interest)

- NGOs

Show Consideration (Low power and high interest)

- Residents (Type1)
- European Investment Bank
  - Egnatia Observatory

#### INTEREST

**Graph 9.** Stakeholders position on graph analysis (Egnatia Odos).

"In the above chart are positioned according to interest and their stakeholder power which, depending on the level expressed, have taken the positioning. The methodology used is based on how stakeholder analysis is built considering those who have more relevance and influence in this analysis. To better understand the level of engagement and satisfaction for the project, has been used the scale rank, which has 5 levels of stakeholder that have been analyzed above."

**Table 26.** Assessment scale of stakeholders. (Source: the author).

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
European Investment Bank				I	
Citizens (Type1)	I		I		
Transport companies					

Citizens (Type2)	I			I	
Ministry of Environment and Public Works				I	I
Egnatia Observatory					
NGOs			I		
European Commission				I	I
Individuals		I			
Company of investment					I

The economic and territorial impacts created by the project have positively impacted the satisfaction level of people living in Northern Greece. Reductions in travel time and more comfortable and safer trips are perceived by everyone. People's satisfaction is mainly related to the positive changes generated by the project in their way of life. By halving travel time, many people were no longer forced to move from their places to work, but they can travel every day to work.

The level of people satisfaction for the project, living in the regions where the highway passes is different. On the one hand, general satisfaction usually comes from significant reductions in travel time for business and leisure travel. In addition, citizens have been offered new opportunities for leisure, thanks to improved access to natural, historical and tourist attractions in Northern Greece.

On the other hand, a certain level of dissatisfaction has been expressed with the introduction of tariffs and the lack of an adequate number of service stations along the highway.

EFFECTS	STAKEHOLDERS												
	Road E	Egnatia	Land	Greek State	Road Designers and Builders	Gover	nment and citi	zens			Other modes		
	Users	Odos	owners			Local	Regional	National	EU	Neighbouring countries	Rail	Air,	Sea
Direct economic growth	+5	-3	+3			-1	+3	+1		+4	0	+2	+4
2. Endogenous dynamics		+5		+5	+5								
3. Social cohesion													
4. Environmental effects			-1			+2	+2						
5. Territorial cohesion							+5	+5	+3	+4			
6. Institutional quality				+3									
7. Social happiness	+1					+3	+3						

<sup>\*-5 =</sup> very strong negative effect; 0 = no effect; 5 = very strong positive effect, •= expected effects which did not materialise (the criteria considered to assign these scores are presented in Annex I).

Figure 66. Impacts on different stakeholders. (Source: Egnatia Odos observatory)

# Conclusions about this analysis

In this part of the analysis, this context analysis in comparison with the road of the nation in Albania shows a different side of the way how an infrastructure or transport corridor can perform in the frame of different stakeholders. The stakeholders are satisfied with the project because the travel time is reduced, the way how the road is been constructed is transparent bat among the other case (refer to the road of the nation), and this context has its problems related to territorial connectivity, mostly after these years of construction in those cases has appeared the concept of tunnel effect. This concept means that the people in their demand to reduce travel time have caused the avoiding passing through urban centers and their visited fluxes.

In general, the concept of the corridor is been saved and respect because the project has realized his own objectives, related with travel time, stakeholder's satisfaction and territorial cohesion.

# **Annual Reports Analysis**

For the realization of the project after the institutional conditions were set up to operate, construction work began between 1997 and 2011, with the first open section for traffic in 2000. Total investment costs amounted to 7,052.6 million euros (2011 prices), of which 44% European Union (ERDF, CF, TEN-budget) and 56% left from the Greek state, of which 41% are provided by loans from European Investment Bank.

Financing period 1994-2011

First year of operation 2000

Total investment costs (2011 prices) 7,052.6 million euros 100%

Financing sources and co-financing rates on total investment costs

Cohesion Fund EUR 1,033.5 million 14.7%

European Regional Development Fund EUR 2,025.9 million 28.7%

TEN-T Budget EUR 31.2 million 0.4%

European Investment Bank EUR 2,885.4 million 40.9%

National contribution EUR 1,076.5 million 15.3%

Since 2004, the highway performance in terms of volume of traffic, environmental and spatial impacts have been monitored and supervised by the Observatory Egnatia.

The most significant economic effects are caused by the project in the long run.

In particular, the project has succeeded in improving the performance of ports and airports physically and functionally linked to the highway and providing conditions for the development of new business activities and the growth of the tourism industry.

A strong impact has been generated in terms of territorial cohesion. As a result of the reduction of travel time and cost, the relationships between the deepest urban centers and the most dynamic and developed ones have increased. A number of socio-economic indicators indicate that this has led to an increase in cohesion between the five regions where highways pass.

# The effects of long-term and mid-term development

Evidence shows that "Egnatia Odos" most important effects are on economic growth, territorial cohesion and endogenous dynamics.

The impact on direct economic growth is particularly strong for road users, who have benefited from a significant reduction in transportation costs, as well as safer and more comfortable travels.

Road users are not just citizens living in the five regions where the highway pass (or in other words, the "impact zone" project), but also those from the rest of the country, mostly related to Egnatia Odos from the PATHE and Ionian highways, and from neighboring countries, thanks to the construction and progressive opening of **vertical axes**. Thus, the project is of regional, national and European importance at the same time as part of the Trans-European Transport Network.

Cost-Benefit Analysis (CBA) results support road users' findings, showing positive value for benefits such as traveling time savings, vehicle operating costs reduction, and reduced number of accidents.

The results from the CBA analysis show that EUR 292.6 million a year is the average annual benefit generated in relation to passengers using the highway. For freight traffic, the average annual profit is 133.6 million euros a year (Egnatia Odos, 2018).

Economic activities have been affected both negatively and positively aspect. At the local level, the construction of the highway has led to a loss of profits for small business activities (bars, restaurants, cafes, etc.), located along alternative routes from which traffic is avoided. However, this negative effect has been more than offset by the growth

of trade and tourism generated at regional level (and somewhat at the national level), thanks to the reduction of transport costs and the improvement of access to areas of tourist interest. On the other hand, other ways of transport were also positively affected by the project, particularly in ports and airports physically and functionally linked to the highway. Negative and positive effects are generated by the project on the environment.

Negative impacts relate to increased emissions of air pollutants and noise associated with generating new traffic, as well as the negative externalities commonly associated with the construction of major infrastructures. However, despite generating these negative effects, the overall environmental impact of the highway is assessed as positive.

# Indirect and induced effects

Regarding the volume of trade, the latest available data from the Observatory show that, in 2007, total imports into the five regions of Egnatia totaled 8,667 million euros, representing 18.2% of the total national. In the same year, exports reached 4.552 million euros, representing 33.2% of the total national. Compared to 2000, this represents an increase of imports and a decrease of exports with an average percentage of + 5.5% and -0.6%.

Reduced transport costs have also generated opportunities for tourism development. Especially, the road has provided better access to areas of tourist interest within the area of highway influence, as well as new vacation opportunities for residents of the north-eastern regions.

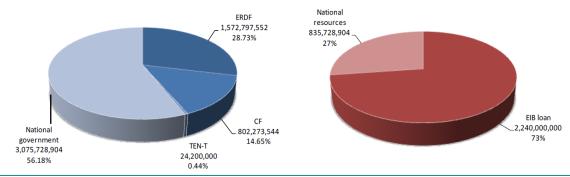
Improving access to areas of tourist interest has contributed to the promotion of regional tourism industry at regional and national level.

According to data processed by the Observatory, during the period 1996-2006, the supply of tourist accommodation to the Egnatia impact zone has increased significantly, exceeding the country's average growth (+ 45.5%, as opposed to + 14.4%).

## Financial analysis

# Investment expenditures and financial resources

Total investment costs amount to EUR 5,475 million (in current terms), of which 44% are funded by the European Union (ERDF, CF, TEN-budget) and 56% by the Greek state. Regarding national government funding, 27% of them were capital from national sources, while the remaining (73%) was provided by EIB loans.



Note: the first figure shows total investment costs by funding provider. The second figure focuses on the origin of resources allocated to the project by the Greek State.

Figure 67. Investment costs by source of funding. (Source: Egnatia Odos Observatory, 2018).

# **Negative Externalities**

Reducing the overall travel cost caused by the project has contributed to the increase in road traffic. Consequently, air emissions of air and noise pollution have increased, producing, among other things, the adverse effects of climate change.

# Summary

The Egnatia motorway is an example of a successful project that achieved the expected objectives and contributed to the economic development of the context in which it happened. Spatial organization of business activities, territorial cohesion and innovation in management systems are the three dimensions in which the project has been the most powerful.

The first two dimensions are indirect consequences of the huge reduction of travel time produced by the project, while the latter is a consequence of dialogue at the political level.

Also, reducing the cost of transport was such as to make changes in social and leisure behavior, for example by giving people the opportunity for new vacation destinations.

# **Chapter 4. CONCLUSIONS**

# 4.1 Elaborating through the Transport Corridors Energizer: Conclusions on Theoretical Principles

Throughout this research, the main theoretical approach which instructs the work and becomes a starting point for further studies and discussions on transport corridors is the fact that transport and the movement of people was born with humanity as a need for the generation of life and economy, developing and affected the growth of settlements or on their shrinkage. Performing this essential role in all the human activity of the history of globalization, transport is seen as the transformer of the economic, social and environmental perspectives of localities and regions, transferring costs and benefits to other regions under the effect of spreading to neighboring countries or with cross-border impact.

The local economy generated by employment and local traffic flow have as their essential generator the main infrastructures such as roads, railways, ports and airports, creating the connection between transport and development at regional and local level of communities. Corridors are often developed and conceived to stimulate growth in specific regions where this transport corridor represents an important functional structure of the region and facilitates communication and interconnection with functionally separated regions. Corridors evolve over time as a result of changes in technology, planning policies, infrastructure and initiatives, but this does not mean that this development is linear, meaning that the links between transport and urban development are not always properly conceived in the physical sense of them.

This occurs as the corridors with a great historical development as well as the corridors developed recently and that have become the same linear poles that attract development or otherwise, that only turn into transition corridors.

Often conceived as the focal point of socio-economic activity connecting two or more sovereign countries, corridors are considered as a way to connect an origin with a destination in a shorter time, a phenomenon that does not allow countries between to absorb economic and social activities. In continuation of this phenomenon is generated and the "tunnel effect" which is little known as a phenomenon that happens in these territorial developments but due to the isolation that is created many secondary or tertiary settlements are not included in these direct infrastructure lines creating two types of divisions: **social** (of communities) and **territorial** (physical).

In its better conditions, a corridor is subject to network effects where a critical mass of users is needed in order to reduce costs for all stakeholders, creating a symbiotic relationship

between infrastructure, high quality services, the individual and flow of use in order to provide infrastructure, superior service, and movement. In addition, indirect benefits are achieved by increasing the production of goods in the settlements connected to the corridor and receiving service to it by promoting and trading through the corridor. The interconnection points of a corridor are hierarchically arranged which perform the role of capillaries by distributing the flows and giving the corridor a functioning model. Also, in support of these infrastructures it should be said that transport corridors are more useful for closed and landlocked places, where their demand for access and traffic flow is higher, making significant changes in price and time. The accessibility given to a given area turns into a competitive advantage for the representative economic sectors and then results in higher levels of efficiency and productivity, representing the development potential of an area.

Improving accessibility opportunities bring in direct way benefits in regional development and increases infrastructure investment. These benefits include a greater attraction for new firms that may be located in these areas, cheaper distribution of goods, and an overall expansion of labor market areas. From a functional point of view, a transport corridor can contain different functions, starting from:

- Facilitate prioritization of infrastructure investments, policy reform and services;
- Facilitate network effects by promoting trade and transport volume consolidation through several links and hubs, which in turn can encourage improved service quality;
- Affects spatial planning and development in sub regions and served places;
- Helps enterprises to choose their production networks;
- Affects the organization of daily life of residents near these affected areas.

# 4.2 Elaborating through the Transport Corridors Energizer: Conclusions on Main Cities and Settlements (Clusters) Connections

#### 4.2.1 Main cities connection corridors

In the Balkan region, the connections between the main and secondary or tertiary settlements have developed significantly in recent decades, especially after the development of the corridor concept which was part of the Pan-European transport infrastructure concept, which has developed some many years the three Pan-European Transport Conferences, 1991 at Prague, 1994 at Crete and 1997 at Helsinki.

The Pan-European Transport Corridors have been selected for the benefit of the trade and social relations between the European Union and the countries in Central and Eastern Europe. Furthermore, in Central Europe the Corridors provide for a basic infrastructure development of international importance, which will eventually form part of the extended Trans-European Transport Network in the enlarged European Union.

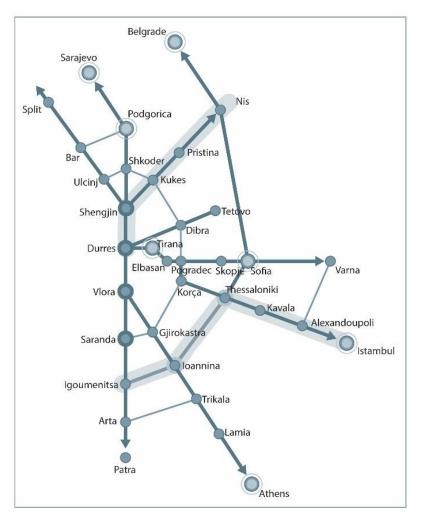


Figure 68. The main connection scheme in the Balkan region. (Source: the author)

The main corridors are particularly connected to the main ports in the Balkans, the port of Durres (Albania) and Igumenica (Greece). This has made it possible to expand the Balkans' connections with the western part of Europe.

The scheme above (figure 55), illustrates the main connections of urban centers. Following the conferences and the adoption of the decisions that have emerged from them, the main axes of the city's connections have taken on another important and have come to be developed to improve the access, economic and social conditions of the countries where they pass, urban regeneration, sustainable forms of mobility and new relations between city and countryside.

## 4.2.2 Illustration of field settlements observations

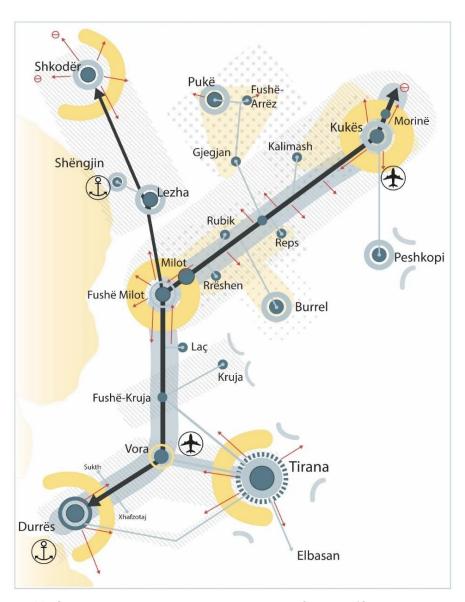


Figure 69. Clusters and main cities connect with the Corridor. (Source: the author).

## 4.3 Conclusions of clusters

# Cluster 1 (Burrel, Pukë, Fushë-Arrëz, Gjegjan)

- The construction of the new road has negatively affected the settlements that were once stopping points for travelers, causing the closure of a series of businesses running from the old road. This has caused the depopulation and the family economic level to decrease for the remaining families in these areas.
- 2. Investors in these areas are few and do not have security for their business, linking this situation with the departure of the local population. In the residential centers which have a larger number of inhabitants there is an effort to develop the tourism sector by extending it to the 4 seasons of the year. While areas which have a small number of inhabitants face difficulties in generating income but also in improving production from their agricultural land as they do not have labor market.
- 3. The main investments have been made in the tourism sector, water plants and fish baths, giving a first impetus to other investments to return the once displaced population. The connection with this important corridor and its network of interaction for the investors of these areas is very important as it affects the increase of security that they should have to further develop the business which is directly related to the frequency flows of the road.
- 4. At the cluster level the situation is moderately positive but at the level of inhabited centers they do not have the same reflection which shows the lack of a standard between rural and urban areas.
- 5. The construction of this corridor from the economic point of view, has not brought the development of residential centers but on the contrary, those that are more distant are disconnected even more in terms of functional connection but access is faster due to reduced travel time.
- 6. The lack of state policies to generate the economy of the deep mountainous areas has brought their abandonment, and the only ones who have benefited from this new road have been the settlements near it, which again have their limitations and dissatisfactions regarding connection with other settlements.
- 7. A significant number of residents are unemployed due to lack of economic activities, some of them in the absence of previous flows of people have changed and adapted their housing facilities by turning them into hostels, so they can return their overview of the activities generated by the tourism sector.

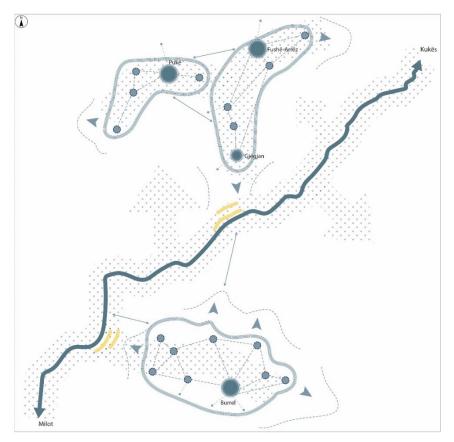


Figure 70. First Cluster, Burrel, Pukë, Fushë-Arrëz, Gjegjan. (Source: the author).

# Cluster 2 (Milot, Rrëshen, Rubik, Reps)

- 1. The small settlement center of Reps has taken an importance and due to the construction of plants which have gained direct access from the construction of the new road, once the rural settlement of Reps was known only as a small village where the road turned to in the prison of Spaç (Famous Prison of the Dictatorship Period).
- Farmers as stakeholders of this road have expressed dissatisfaction with the effects that the road has had on their economy where especially in the settlement Milot, the road has fragmented agricultural land and where support from the relevant authorities has been low for farmers.
- 3. For the settlements which are very close to the road, apart from the benefit during the travel time, which has been shortened, there have been no other benefits where it is clear that they operate separately, not creating interaction with the new road and as a result the construction of the Corridor concept is missing.
- 4. These centers are certainly associated with settlements located in deeper areas and where the lack of generation of the economy in them has negative effects on the smaller centers that depend totally in social and economic terms from the primary centers.
- 5. The investments made in this area are focused on generating income for the family and aiming further for business growth, especially in the Milot area which has a higher concentration of economic and social activities.

- 6. These settlements have benefited from the reduced travel time by quickly accessing a settlement which is located along this axis but have not felt an increase in the number of businesses or services which as a result of improved access should have been generated in settlements.
- 7. These settlements of this cluster have a different relationship with the road compared to the first cluster as they are located very close to it and access the main axis of the connection in a very short time and where their air and ground distance is small, but despite this apart from the fact of better communication, daily life in these countries has not changed.
- 8. With the construction of this important axis, the inhabited centers which were previously on the edge of larger settlements, have become important reference points for the area, developing and promoting important tourist points as well as supporting families who have returned their houses in hostels.
- 9. In the absence of a better connection with the functional network of the corridor concept, currently the settlements of this cluster function territorially separated by not creating joint activities, except the transport between the Rubik-Rrëshen settlements that are part of a municipality.

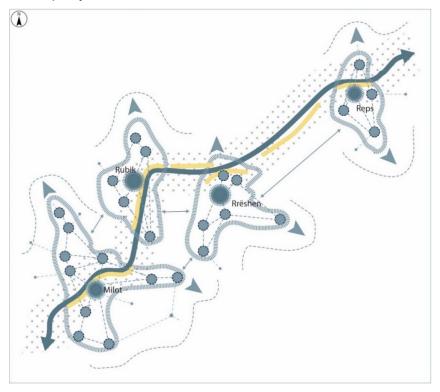


Figure 71. Second Cluster, Milot, Rrëshen, Rubik, Reps. (Source: the author).

# Cluster 3 (Kukës, Kalimash, Morinë)

1. This cluster is composed of a very important residential center for the northern part of Albania as the city of Kukes, which is the center of the municipality and holds the main

- weight of social and economic activity. Its relationship with the road of the nation is very close as it is located near the road and part of the activities are positioned on both sides.
- 2. Kukës as the epicenter of this area located and very close to the border with the state of Kosovo plays the main role of absorbing activities where the flow of movement is higher and functions as a starting point and coordination for vehicles in the area, in region and beyond, where all passengers are residents of these areas.
- 3. The national road tax in most settlements has had a negative impact while for the city of Kukës it has not had a negative impact because its toll is low compared to the toll that other countries have to pay. Road tax serves in maintenance but, is an additional barrier to development (psychological and time barrier).
- 4. The road of the nation in its passage trace has passed the village of Morinë in the middle dividing the area of agricultural land with that of the inhabited area creating the tunnel effect. This created effect has caused the differentiation and distancing of the inhabited area from the agricultural land and in the absence of an overpass, the detachment and division of economic activities for the area is felt more.
- 5. With the passage of the new road, the city of Kukës should have become an even more important regional center, creating facilities for access and services, mentioning here the airport of Kukës, which has not yet been put into use. Also, the close connection with the city of Prizren and other cities in the Republic of Kosova should have been further strengthened to give development and functionality to the region and the entire corridor by creating economic interaction between settlements.
- 6. This whole corridor is represented by a considerable number of mines which have affected and are affecting the economy of the area, but they are not well exploited and therefore have not given positive effects on the economy of the countries that employ the inhabitants in it.
- 7. In order to achieve penetration in many commercial markets, investors in this region are insecure about investing and express uncertainty until bankruptcy, influenced by the departure of the population from this region, especially in the last 5 years, a factor that has negatively affected the flow of individuals and the economic turnover of businesses.



Figure 72. Third Cluster, Kukës, Kalimash, Morinë. (Source: the author).

#### 4.3 Discussions and Critical Observation

It is a well-known finding that the paths exist since man exists. Of course, with the development and advancement of material means, the ways of using and building roads have also changed. At this juncture, the road, which in its early stages of human development, has been and remains an organic, integral part of the life and activity of society.

Roads as a construction structure have a very important role in the economic development of a country. They enable quick and convenient transportation of people to settlements as well as the economical transport of goods. The geographical position of the places, the natural beauties, and the sea, is a prerequisite for tourism development. But in many cases, the natural and attractive attractions for tourists remain unused due to the lack of roads or the existence of a poor road network.

Due to the development of traffic vehicles, road construction was found to be at the forefront of the new task of responding to the demands of the time by raising today's building standards, meeting the conditions for increasing vehicle speed, weight, and traffic density. Today, all over the world, countries aiming for sustainable economic development, the first issue they must address is to build quality roads that respond to the needs of a market economy.

A modern road network has a strategic goal: to bring markets together, to avoid situations where overcrowded areas would be created, and to ensure a lower level of pollution, to give access to deep mountainous areas but with potentials and resources to be evaluated, to create the possibility of non-depopulation of settlements due to the lack of infrastructure and regional connections. In the current situation, it can be said that there are still difficulties present in the construction and development of road networks. But road construction should always take into account the economics of construction without violating basic technical standards.

The network of roads of a country is as essential as the arterial system in the human body. Roads significantly facilitate progress in a country's economy and at the same time facilitate communication and connectivity between regions. The relationship between roads and economic development is the subject of permanent theoretical debate and it is very difficult to come to a conclusion that would encompass all dimensions of the issue. In some circumstances, road investment seems to be a catalyst for economic growth, while in others, economic growth puts pressure on existing transport routes and spurs additional investment.

In a number of countries around the world, connected road infrastructure networks have been seen as key factors in promoting more balanced and sustainable development for less developed regions or marginalized social groups. Road transport is one of the most promising and powerful tools for the rapid industrialization and advancement of agriculture. It plays an important role in the economy of the country and is particularly suitable for short and medium distances. It provides the basic infrastructure for connecting many people living in villages with important urban centers. Transport corridors that are an important part of the road network provide the opportunity to create a major development artery by distributing less the secondary network in the territory.

A modern concept of the transport system can be defined as a network infrastructure (fixed facilities, traffic flow, and management systems) that allow people and goods to overcome geographic space barriers; effective in order to be present in the right time, way, and place. This concept identifies the functional components of transport systems (fixed facilities, traffic flows, and steering systems), and makes full sense that transport is intended as a link and interaction between social activities and activities.

Economic corridors basically contain three components: a transport corridor (roads / railways), industrial or agricultural production centers and towns / villages. The transport

corridor is the backbone of the economic corridors, constituting the main connection between the inhabited centers. It defines the geographical space of the corridor (its extent), and facilitates the flow of goods functions and services. The centers of industrial and agricultural production produce these goods, both for consumption in the surrounding region and for international trade, and cities are major consumer markets. Corridor urban centers also provide the critical source of work, technology and innovation needed to drive economic growth, strengthen the service network and deliver the highest standards. In all this chain of operation, in the concrete case of the corridor, these links do not work. This newly built line simply functions as a crossing line without being able to generate and awaken the economy of settlements.

#### 4.4 Definitions generation

In the context of the research findings in this sub-topic, some possible definitions are given for the meaning of the transport corridor and how it should be conceived theoretically and diagrammatically. These definitions are formulated at the end of the research and after the conclusions are drawn by the author.

- > The transport corridor is the trace in the territory which enables people to benefit equal benefits between the regions that these corridors effect, such as rights of movement, travel safety, job benefits, faster access to economic and social activities.
- The purpose of the corridor is to improve the well-being of citizens thanks to affordable, accessible, reliable and safe transport networks without unnecessary administrative burdens.
- > The transport corridor has at its center the transport asset to increase economic competition within the functional regions.
- The transport corridor can be considered complete when it manages to provide access to a series of markets, avoiding the creation of overcrowded spots or areas.
- > The transport corridor can be named functional when it manages to interact with the economic corridor by providing a whole network of communication and connectivity between functional areas.

Below is an alternative, how, transport corridor can function and generate activities to rise up the livability.

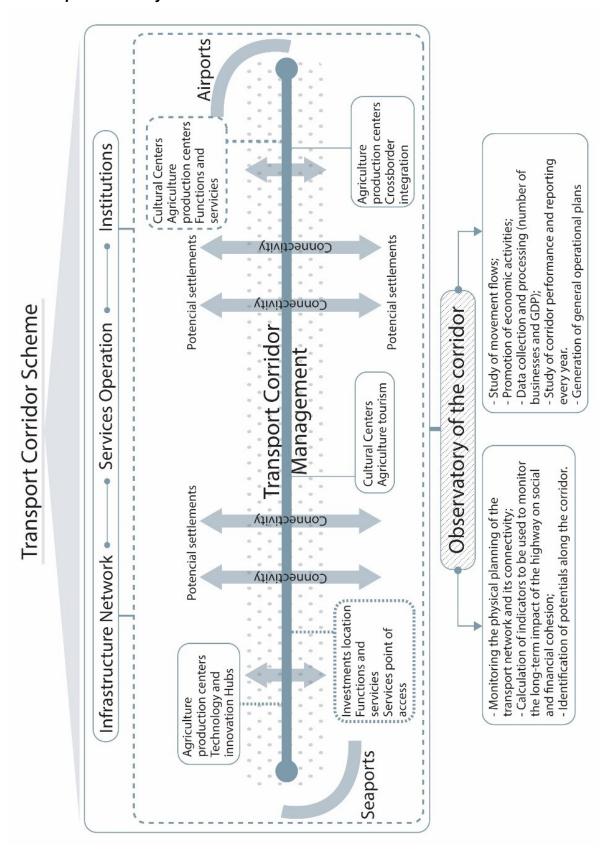


Figure 73. Transport corridor scheme of proposed Observatory (Source: the author).

## 4.4.1 Application in concrete case study

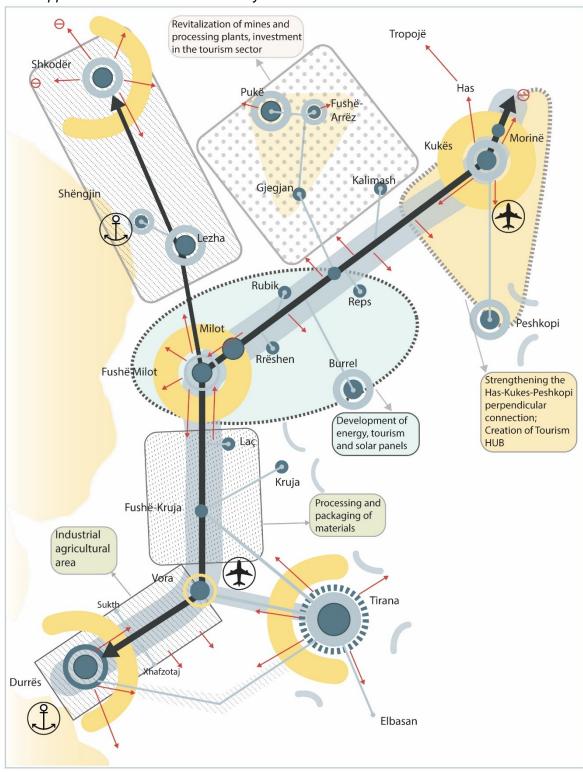
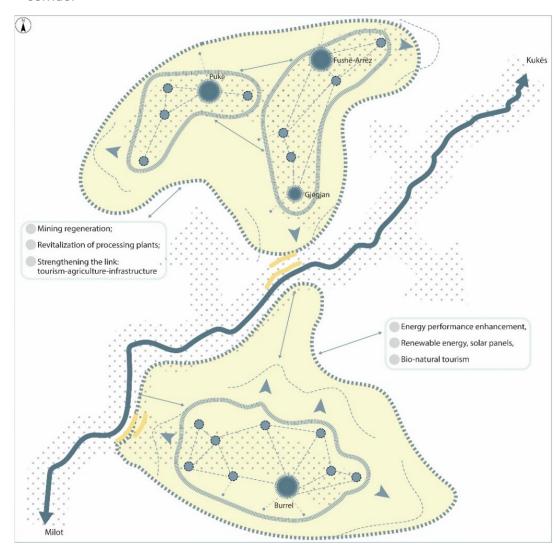
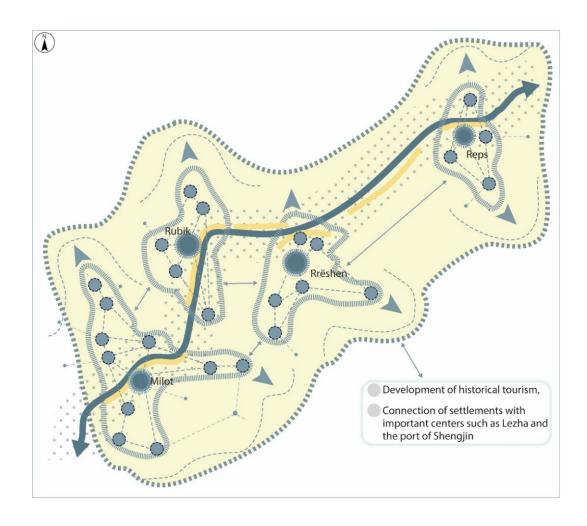


Figure 74. Clusters functions generation with the Corridor connection. (Source: the author)

## 4.4.2 Application according to the potentials of clusters

- I. First Cluster (Burrel, Pukë, Fushë-Arrëz, Gjegjan) located far away from the axis.
- II. Second Cluster (Milot, Rreshen, Rubik, Reps) grouped by location near the axis
- III. Third Cluster (Kukës, Kalimash Morinë) grouped by location near the main city in the corridor





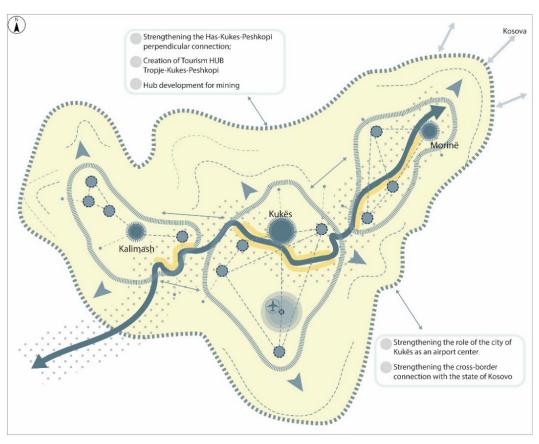


Figure 75. Proposals for the three Clusters I, II, III (Source: the author).

#### 4.5 Recommendations

#### Establishment of an observatory for the Road of the Nation

Establish an observatory to monitor and provide more accurate data on this corridor, traffic flow, how many of these traffic flows are transient and how many relate to settlements, and access them directly. In this way, groups can be planned connected to the corridor, to create the magnet effect to attract other activities related to the resources that the settlements possess. The Observatory can be located in the city of Kukës as an important center of this region from where it can measure flows, socio-demographic dynamics and economic efficiency as well as interactive relationships. It can act in such a way as to identify the markets of its region under surveillance to identify the specific products that are produced and traded. Having a series of data specific to the region and the corridor, this observatory can promote this route as an artery for entering the port of Durrës for all Balkan countries. Following this concept, the connection of this highway with other Balkan axes can come in order to increase the capacity of trade exchange.

#### Creating a specific space in the Albanian legislation for transport corridors.

Albanian legislation may provide the way for the operation of such road, rail or other economic corridors. In terms of planning, the legislation may provide for the planning of corridor laws, the study of the corridor with detailed plans. These corridors need to be seen through some planning instruments to increase their economic effect and improve performance.

The effect of improving the corridor should be distributed, not to function as a line, but as a bandage of related activities. Thus, it may make sense to set a maintenance fee for the passage of heavy vehicles on this highway in order to minimize the cost of public maintenance, therefore the legislation and PPP concessions can be reviewed.

## Promotion of regional socio-economic activities in special settlements through animation of activities

Promoting tourism through the use of low cost as a competitive advantage and rapid access to the coast through the National Road, enabling the possibility of staying in the region through the creation of access points and information for stakeholders. At the same time encouraging farmers for organic production and creating opportunities for trade within the region in different sectors that absorb these local products. Integration in the scheme of perennial tourism and support for residents. Creating and respecting a calendar of periodic events organized in youth centers, promoting the potentials of the area, providing services and various socio-economic and cultural promotions.

Inclusion of this highway in the long-term plan of road infrastructure development through public investments in Albania.

Giving a special importance to this corridor, having that national priority in order for the benefits to be channeled according to the regional needs, bringing the possibility of return of the inhabitants to the areas which they have abandoned due to the impossibility of generating economy for basic living conditions. Branding the corridor not only as a transport line but also as a generator of activities and employment to create a functional scheme such as Route 66 in USA. Inclusion in a common framework of the values of religious coexistence, ethnography and historical attractions. Creating the "comb effect" by creating branches on both sides of the physical trail of the corridor, infrastructure intersections and bringing investments periodically.

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## **APPENDIXES**

**Appendix 1.** Methodology for Questionnaires formulation

No	Literature	Main points	Key questions	(Proxy) Question
1	Transport is clearly a factor of fundamental importance in all economic activity, (Hoyle, 1996)	Transport, economic activity	Daily activity and frequency	1.Which is your frequency on using this route? 2.How much does the road affect your daily activity?
2	The cost of transport one of the most significant variables in the market price of any commodity. (Hoyle, 1996)	Cost of transport, market price	Incomes and profit	3.Is it justified for you the passenger transport cost? 4.Is the cost of transporting the product justified for you?
3	The transport sector may, with some justification, be regarded as an epitome of relationships between terrain, economic history, social and political systems, and levels and patterns of development. (Hoyle, 1996)	Epitome of relationship, terrain and facilities	Relationshi p and facilities of necessities, and security	5.What do you think about the quality of the road? 6.What is your frequency on using this route?
4	Apart from the direct employment in transport activities, these major transport infrastructures have substantial multiplier effects as they have to be served by a range of firms and industries. (Banister, 1994).	Firms and industries, activities, multiplier effects.	Opportunitie s of firms to invest	7.What obstacles do you envisage to make local investments? 8.What is your main investment goal? 9.When do you plan to start withdrawing money from your investments for large needs?
5	It is widely argued that major new transport infrastructure has a substantial impact on the local economy and the development potential of an area.	Local economy impact. Potential of an area.	Production and profit	10.How are the earnings from production?

6	Transportation, among other factors, reinforces spatial inequality by linking a priori the most productive places.	spatial inequality, productive places	Cooperation between producers	11.Do you have collaborations with other farmers?
7	From an economic perspective, transportation corridors provide two fundamental attributes for territorial development: lower distribution costs and land supply for diverse activities.	lower distribution costs and land supply for diverse activities	Effects generation on the inhabitants.	12.The construction of the road of nation, what effects has had on your income?
8	The corridor could provide important interconnections and communication between two or more separate functional regions.	Interconnectio ns	Distance and time cost.	13. How long does your trip take from the center of the settlement to the entrance of the Road of Nation?  14. Are there any crossing points for pedestrians?  15. What is the quality of the road you describe to access the Road of Nation?
9	Corridors are lines of concentration of socio-economic activity that connect two or more sovereign countries.	socio economic activity	exchanges of experiences between countries	16.How would you describe your understanding and experience of saving and investing?
10	The key to the success of transport corridor development and regionalization is harmonization of regulations and or deepening socioeconomic integration (Kessides, 2012, Monios, 2016).	harmonization of regulations, social economic integration	New investments on local context.	17. Why were you interested in making local investments?
11	The key role of a transportation system is to assist in the production, consumption and distribution - or the	production, consumption and distribution	Chain of production and cost	18. Is the cost of transporting the product justified for you?

	supply chain - of goods and services.			
12	A transport corridor is a set of routes between hub centers where maritime, fluvial, land and air transportation systems converge (Fleming, 1999)	Maritime, fluvial, land and air transportation	Opportunitie s for combination of multimodal scheme	19. Are the passengers you transport residents of the areas affected by the road?
13	A corridor has three main categories of intertwined dimensions: infrastructure, services, and institutions for coordinating corridor activities.	Infrastructure, services, and institutions for coordinating corridor activities.	Coordinate activities	20. Are you coordinated by a center that commands your departures according to official schedules?
14	Facilitate the prioritization of investments in infrastructure, policy reform, and services;	Investments	Conditions and security of the road.	21. What do you think about road safety when traveling?  22. How do you assess the quality of services on this road?  23. How safe do you consider this road?
15	Facilitate network effects, by promoting the consolidation of trade and transport volumes through a few links and nodes, which in turn can encourage improvement in quality of service;	Improvement in quality of service	Offering the assistance during the transportati on	24. How is the technical assistance in case of any defects during the trip?
16				How do you consider road tax and what effect do you think it is giving?

#### TYPE 1

#### Questionnaire no. \_\_\_\_ Type 1: Residents

This questionnaire is developed in the quality of drafting the topic of doctoral research with a focus on "Transport Corridors". In this view he will look only at scientific research and will only decide on studies.

Geographical extent: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë, Pukë, Fushë-Arrëz, Burrel.

#### 1. Age

a. 20-35 years old b. 36-45 years old c. 45-60 years' old

#### 2. Gender

M F

## 3. What is your level of education?

a. Not educated b. 4-year education c. 8-9-year-old d. Medium e. High p. After university

## 4. What is your profession?

#### 5. How often do you use this route?

- a. Every day
- b. 1-2 times a week
- c. Every month
- d. Rarely
- e. 1 time per year

#### 6. What is your employment status?

a. Employee b. Self-employed c. Unemployed d. Seasonal work

#### 7. Do you work in the same place where you live?

a. Yes b. No

#### 8. Building the Nation Road, what effects has it had on your income?

-3	Highest negative effects
-2	Moderate negative effects, but they could be worse.
-1	Very few negative effects have been generated, almost negligible.
0	No effect generated.

- +1 Very few, almost negligible, positive effects have been given. +2 Moderate positive effects, with plenty of possibility for further improvement. Given the existing limitations, the highest positive effects are generated. +3
- 9. Do you live in settlements near the road?

Yes No

10. If so, in which one?

11. What vehicle of transport do you use?

- 12. If you live in areas close to the national road, do you directly access your residential area from the main road?
- a. Yes. b. No
- 13. How do you assess the quality of the road and the services in it?

-3	Very poor
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

## 14. How safe do you consider this road?

-3	Represents high risk
-2	Moderate risk
-1	Low risk
0	No Answer
+1	Very little, almost negligible
+2	Not at all dangerous
+3	Safe

#### 15. Are there any crossing points for pedestrians?

3	Yes
-3	No
0	I do not know

## 16. How long does it take to travel from the center of the settlement to the entrance of the "Road of Nation?

-3	More than 2 hours
-2	1-2 hours
-1	30 minutes to 1 hour
0	No answer
+1	10-30 minutes
+2	10 minutes
+3	2 minutes

-3	Very poor
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough
+3	Very good

## 18. How much does the road affect your daily activity?

-3	Nothing
-2	Very little
-1	A little
0	No Answer
+1	Average
+2	Enough.
+3	Many

## 19. How do you consider road tax and what effect do you think it is giving?

-3	Highest negative effects
-2	Moderate negative effects, but they could be worse.
-1	Very few negative effects have been generated, almost negligible.
0	No effect generated.
+1	Very few, almost negligible, positive effects have been given.
+2	Moderate positive effects, with plenty of possibility for further improvement.
+3	Given the existing constraints, the highest positive effects have been generated.

Type 2
Questionnaire no <u>Category: Investor</u>
This questionnaire is developed in the quality of drafting the topic of doctoral research with
a focus on "Transport Corridors". In this view, it will only serve scientific research and will
only be used for research purposes.
Geographical extent: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë.
Name of the interviewee
Company name
For each question choose an answer that is most appropriate in your opinion.

## 1. Why were you interested in making local investments?

+2	Support the local economy
+1	Support family and friend's businesses
0	Support responsible social enterprises, common good

-1	Support community energy / clean technology projects
-2	Know who has my money and what they are doing with it
-3	Withdraw support from the central government

## 2. What obstacles do you envisage to make local investments?

+2	Low returns
+1	Major risks
0	Lack of information on investment opportunities
-1	Lack of business knowledge and lack of expertise to assess opportunities
-2	Lack of time to assess investment opportunities
-3	Lack of communication mechanisms to stay valued for the status of a business

## 3. What level of risk are you able to take over?

-3	Little risk (only fully secured loans, little if any business loans fall into this category)
0	Medium risk (many business loans)
+3	High risk (most initial loans and capital investments)

# 4. What is your general attitude towards the prospect of losses when investing your money?

-3	My investment may not even grow; I just want my money to be safe.
-2	I can accept lower growth for greater security.
0	I am more concerned about potential losses than potential gains.
+2	I can accept potential losses for long-term investment growth.
+3	To achieve high levels of growth, it is necessary to take the risk.

# 5. How would you describe your understanding and experience of saving and investing?

-3	No knowledge or experience.
-2	Limited knowledge and experience.
0	Reasonable knowledge and experience.
+2	Better than average knowledge and experience.
+3	Extensive knowledge and experience.

#### 6. What is your main investment goal?

+1	Family income
+2	Business growth
+3	Income and growth

## 7. When do you plan to start withdrawing money from your investments for large needs?

-2	In more than 10 years
-1	In 5-10 years
+1	In 1-5 years
+2	Can now withdraw or within 1 year

8.	How	is	the	investmen	t going?
----	-----	----	-----	-----------	----------

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

9. What are the risks of this investment?
1
2
10. What other investments do you already have?
1
_

Type 3
Questionnaire no <u>Category: Farmer</u>
This questionnaire is developed in the quality of drafting the topic of doctoral research with
a focus on "Transport Corridors". In this view, it will only serve scientific research and will
only be used for research purposes.
Geographical extent: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë.

For each question	choose an answe	r that is most	appropriate in	your opinion.

Name of the interviewee \_\_\_\_\_

## 1. What is your frequency on using this route?

-3	1 time per month
-2	Every 2 weeks
-1	Every week
0	No Answer
+1	3 times a week
+2	Every day
+3	2 times a day

2. How long does it take to travel from the center of the settlement to the entrance of the "Road of Nation?

-3	More than 2 hours
-2	1-2 hours
-1	30 minutes to 1 hour
0	No Answer
+1	10-30 minutes
+2	10 minutes
+3	2 minutes

## 3. Building the Nation Road, what effects has it had on your income?

-3	Highest negative effects
-2	Moderate negative effects, but they could be worse.
-1	Very few negative effects have been generated, almost negligible.
0	No effect generated.
+1	Very few, almost negligible, positive effects have been given.
+2	Moderate positive effects, with plenty of possibility for further improvement.
+3	Given the existing constraints, the highest positive effects have been generated.

## 4. What is your main goal of investing in agriculture?

- 1. Family income
- 2. Farm growth
- 3. Income and growth

## 5. How are earnings from production?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

## 6. Is the cost of transporting the product justified for you?

-3	Nothing
-2	Very little
-1	A little
0	No Answer
+1	Average
+2	Enough.
+3	Many

#### 7. What do you think about the quality of the road?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

## 8. How do you consider road tax and what effect do you think it is giving?

-3	Highest negative effects
-2	Moderate negative effects, but they could be worse.
-1	Very few negative effects have been generated, almost negligible.
0	No effect generated.
+1	Very few, almost negligible, positive effects have been given.
+2	Moderate positive effects, with plenty of possibility for further improvement.
+3	Given the existing constraints, the highest positive effects have been generated.

## 9. Do you plan to expand the farm for the purpose of increasing production?

3	Yes
-3	No
0	I do not know

## 10. Do you have collaborations with other farmers?

3	Yes
-3	No
0	Maybe in the future

Type 4				
Questionnaire no	Category: Transport Company / Taxi Driver / Bus Driver			
This questionnaire is deve	eloped in the quality of drafting the topic of doctoral research with			
a focus on "Transport Co	a focus on "Transport Corridors". In this view, it will only serve scientific research and will			
only be used for research purposes.				
Geographical extent: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë.				
Name of the interviewee				
Your Employment Company				
For each question choose an answer that is most appropriate in your opinion.				

## 1. What is your frequency on using this route?

-3	1 time per month
-2	Every 2 weeks

-1	Every week
0	No Answer
+1	3 times a week
+2	Every day
+3	2 times a day

# 2. Are you coordinated by a center that commands your departures according to official schedules?

3. Yes. -3. No

## 3. What do you think about the quality of the road?

-3	Very weak
-2	Poor
-1	Not good
0	No answer
+1	Good
+2	Enough.
+3	Very good

## 4. What do you think about road safety during travel?

-3	High risk
-2	Moderate risk
-1	Low risk
0	No Answer
+1	Very little, almost negligible
+2	Not at all dangerous
+3	Safe

## 5. Are you satisfied with the number of passengers you are transporting?

-3	Nothing
-2	Very little
-1	A Little
0	No Answer
+1	Average
+2	Enough.
+3	Many

## 6. Is the cost of passenger transportation justified for you?

-3	Nothing
-2	Very little
-1	A little
0	No Answer
+1	Average
+2	Enough.
+3	Many

## 7. How do you consider the road tax and what effect do you think it is giving?

-3	Highest negative effects
-2	Moderate negative effects, but they could be worse.
-1	Very few negative effects have been generated, almost negligible.
0	No effect generated.
+1	Very few, almost negligible, positive effects have been given.
+2	Moderate positive effects, with plenty of possibility for further improvement.
+3	Given the existing constraints, the highest positive effects have been generated.

#### 8. How do you assess the quality of services on this road?

-3	Very poor
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough
+3	Very good

#### 9. How is the technical assistance in case of any defects during the trip?

-3	Very poor
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough
+3	Very good

#### 10. Are the passengers you transport residents of the areas affected by the road?

-3	Never
-2	Infrequently
-1	Ever
0	No Answer
+1	There are cases that are
+2	Often
+3	Always

#### Type 5

#### Questionnaire no. \_\_\_\_ <u>Category: Various individuals</u>

This questionnaire is developed in the quality of drafting the topic of doctoral research with a focus on "Transport Corridors". In this view, it will only serve scientific research and will only be used for research purposes.

Geographical extent: Milot, Rubik, Rrëshen, Gjegjan, Reps, Kalimash, Kukës, Morinë.

#### 1. Age

a. 20-35 years old b. 36-45 years old c. 45-60 years' old

#### 2. Gender

M F

#### 3. What is your level of education?

a. Not educated b. 4-year education c. 8-9-year-old d. Medium e. High p. After university

## 4. What is your profession?

#### 5. How often do you use this route?

- a. Every day
- b. 1-2 times a week
- c. Every month
- d. Rarely
- e. 1 time per year

#### 6. What is your employment status?

a. Employee b. Self-employed c. Unemployed d. Seasonal work

#### 7. How do you assess the quality of the road and the services in it?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

## 8. How safe do you consider this road?

-3	Represents high risk
-2	Moderate risk
-1	Low risk
0	No Answer
+1	Very little, almost negligible
+2	Not at all dangerous
+3	Safe

# 9. How long does it take to travel from the center of the settlement to the entrance of the "Road of Nation?

-3	More than 2 hours	
-2	1-2 hours	
-1	30 minutes to 1 hour	
0	No Answer	
+1	10-30 minutes	
+2	10 minutes	
+3	2 minutes	

## 10. How do you consider road tax and what effect do you think it is giving?

-3	Highest negative effects	
-2	Moderate negative effects, but they could be worse.	
-1	Very few negative effects have been generated, almost negligible.	
0	No effect generated.	
+ 1	Very few, almost negligible, positive effects have been given.	
+ 2	Moderate positive effects, with plenty of possibility for further improvement.	
+ 3	Given the existing constraints, the highest positive effects have been generated.	

## 11. For as many times as do you use this road how do you assess it?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

## 12. How do you assess the public transport that offers service in this area?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good
+2	Enough.
+3	Very good

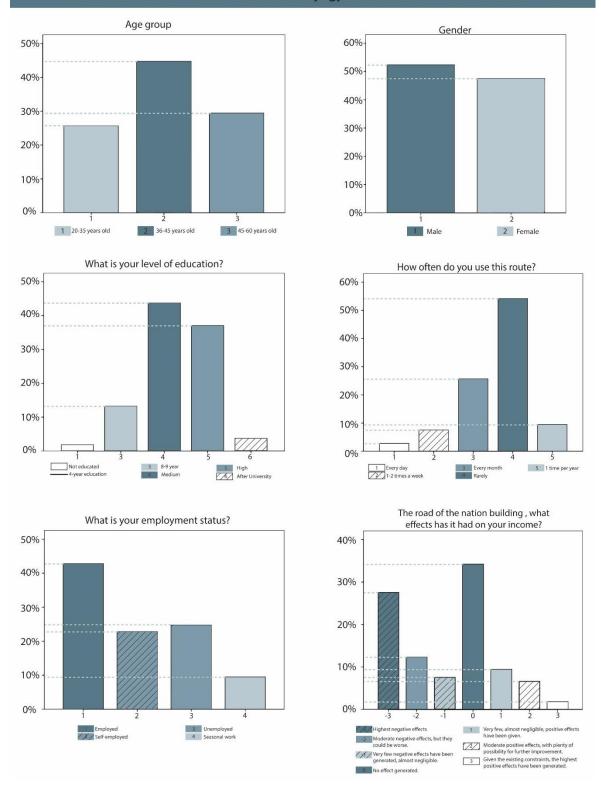
#### 13. What is the quality of services along this route?

-3	Very weak
-2	Poor
-1	Not good
0	No Answer
+1	Good

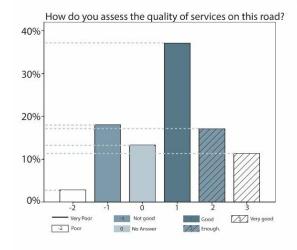
+2	Enough.	
+3	Very good	

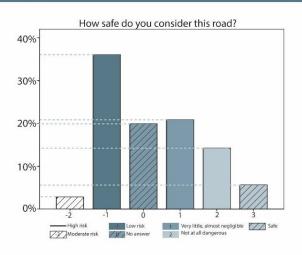
## Appendix 3. Graphs of the first Cluster

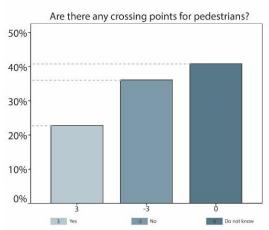


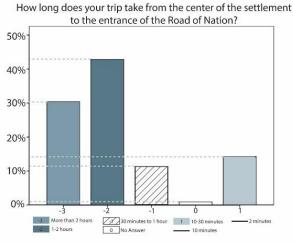


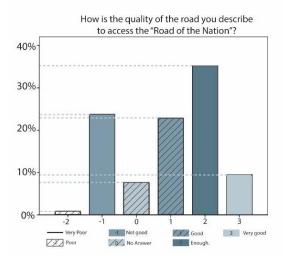
## CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Residents

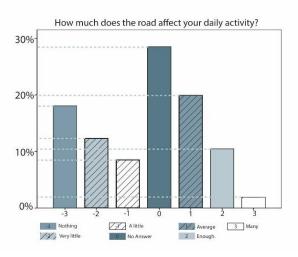




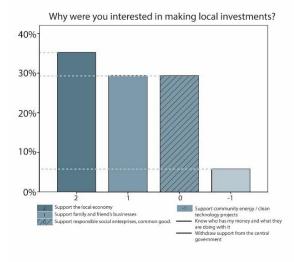


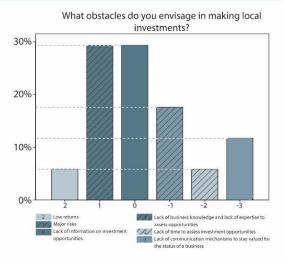


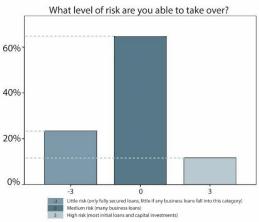


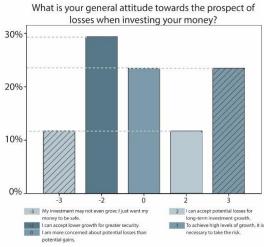


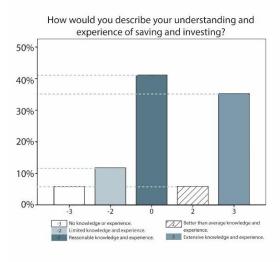
## CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Investors

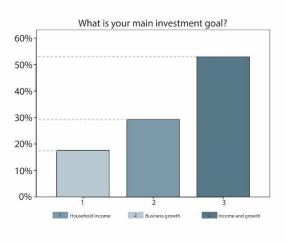




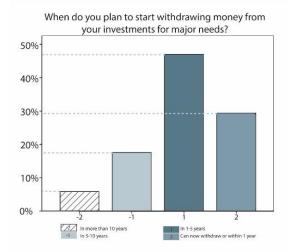


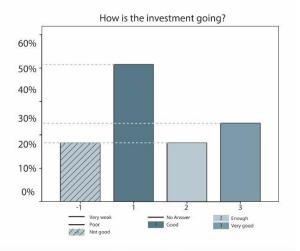




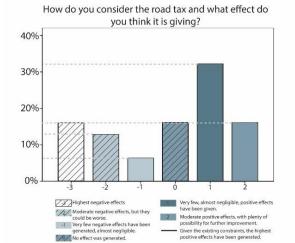


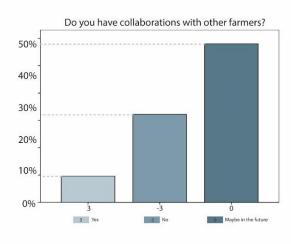
## CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Investors

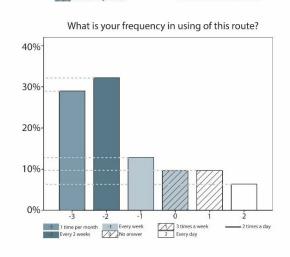


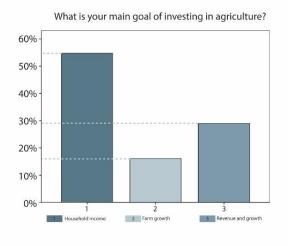


#### CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Farmers

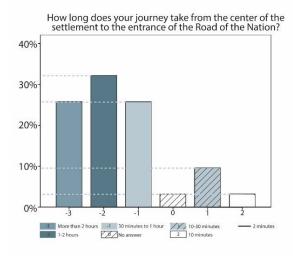


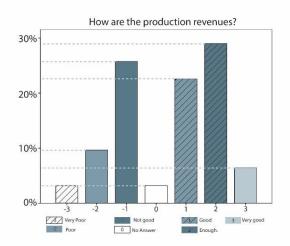


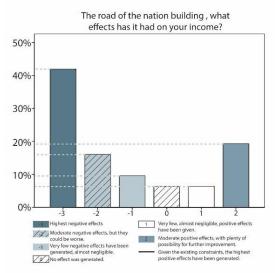


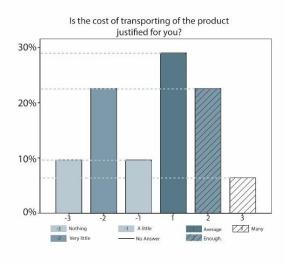


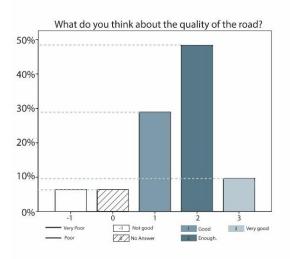
## CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Farmers

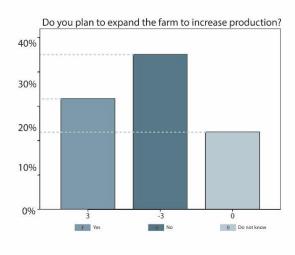




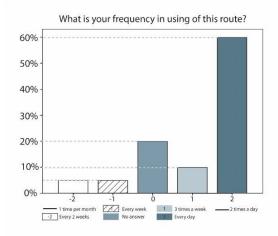


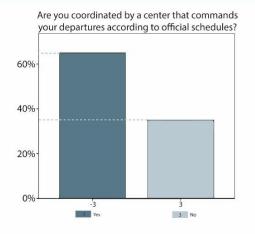


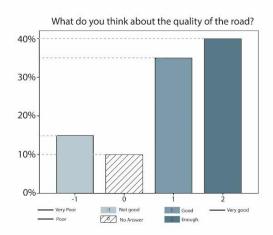


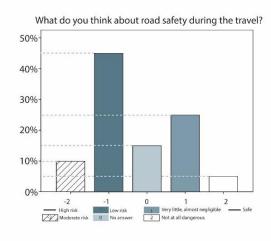


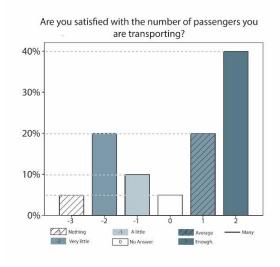
#### CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Transport companies, bus, taxi

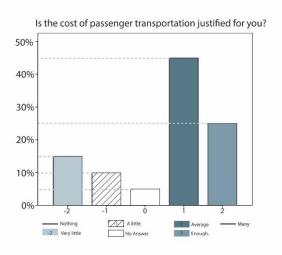




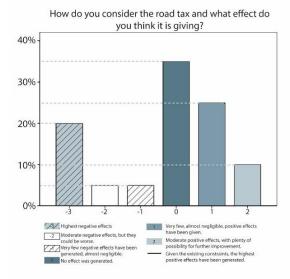


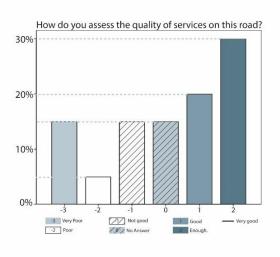


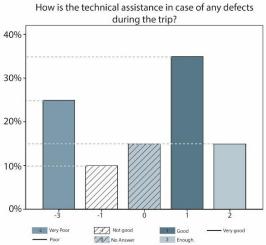


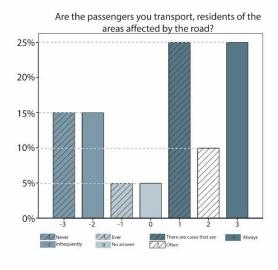


### CLUSTER 1 (Burrel, Fushë-Arrëz, Gjegjan, Pukë), Stakeholder: Transport companies, bus, taxi

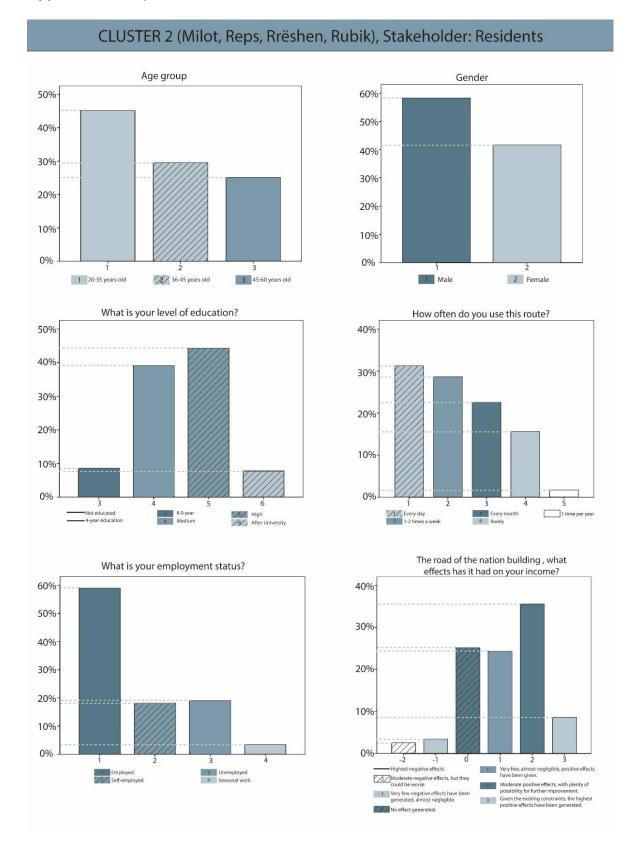




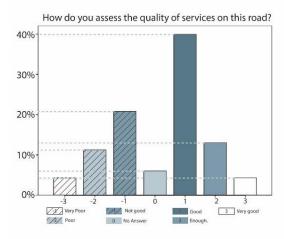


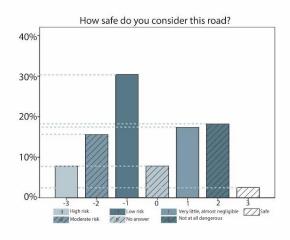


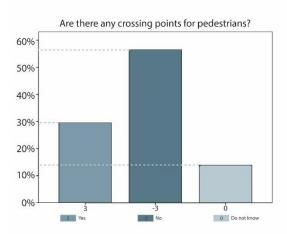
#### Appendix 4. Graphs of the second Cluster

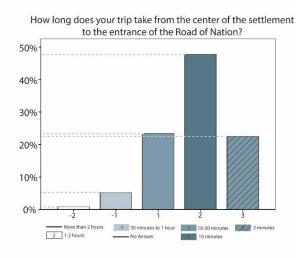


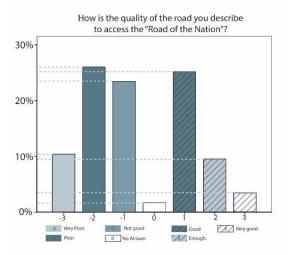
# CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Residents

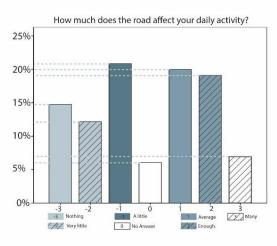




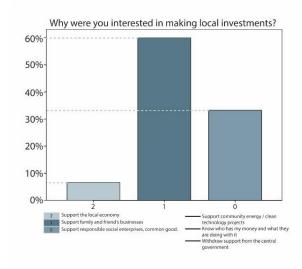


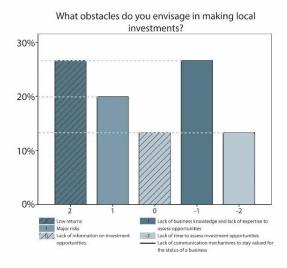


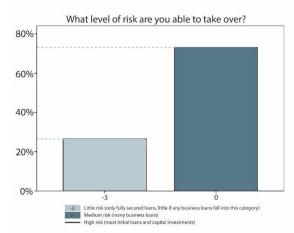


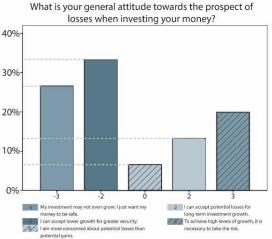


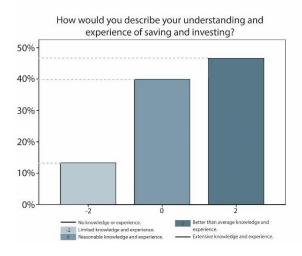
### CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Investors

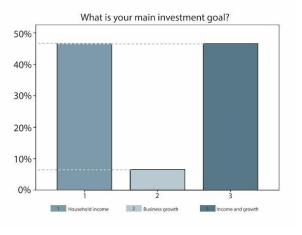




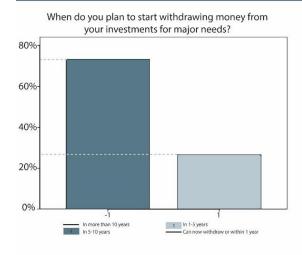


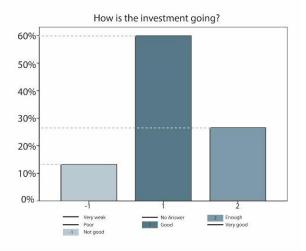




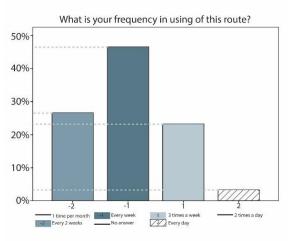


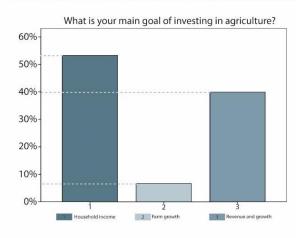
# CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Investors

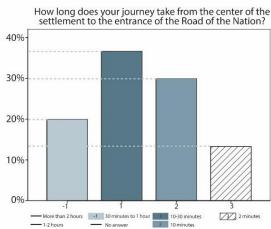


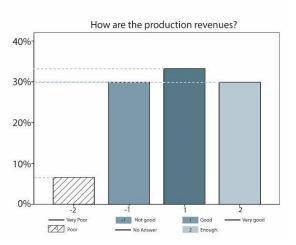


#### CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Farmers

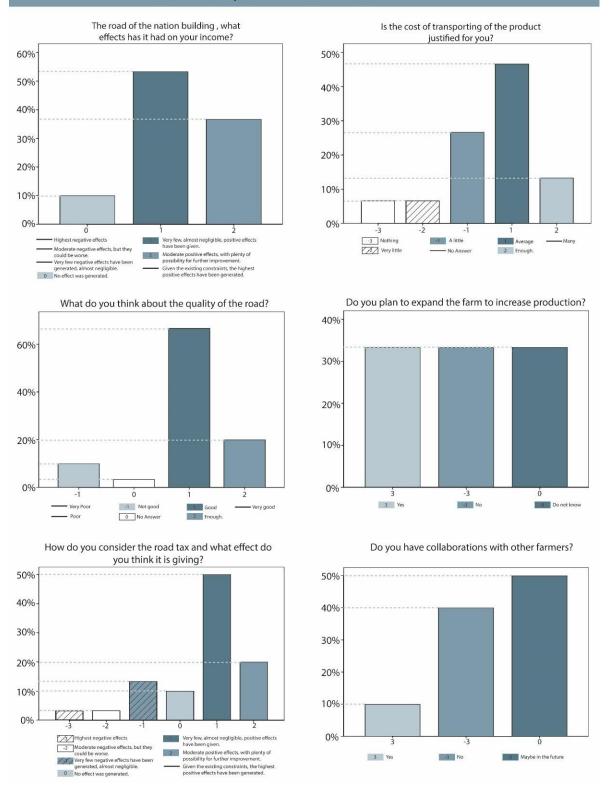




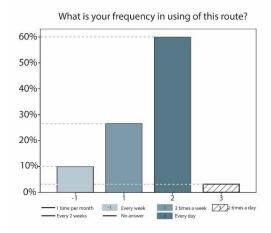


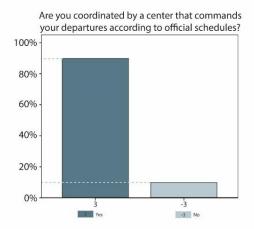


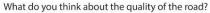
# CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Farmers

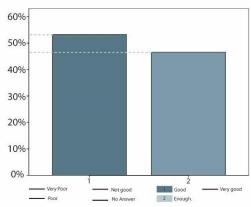


### CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Transport companies, bus, taxi

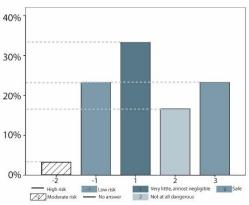




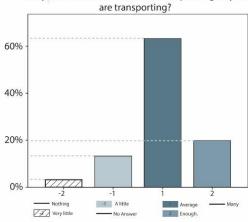


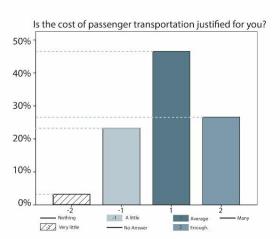




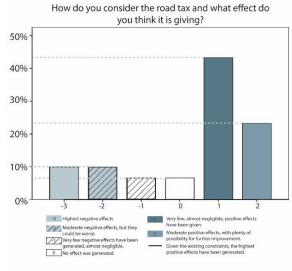


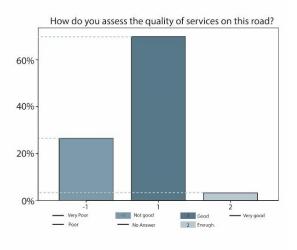
#### Are you satisfied with the number of passengers you

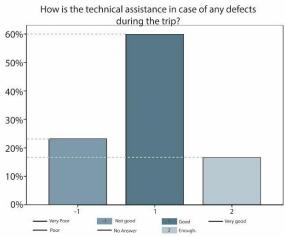


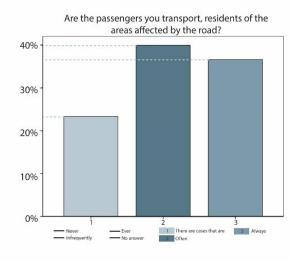


# CLUSTER 2 (Milot, Reps, Rrëshen, Rubik), Stakeholder: Transport companies, bus, taxi

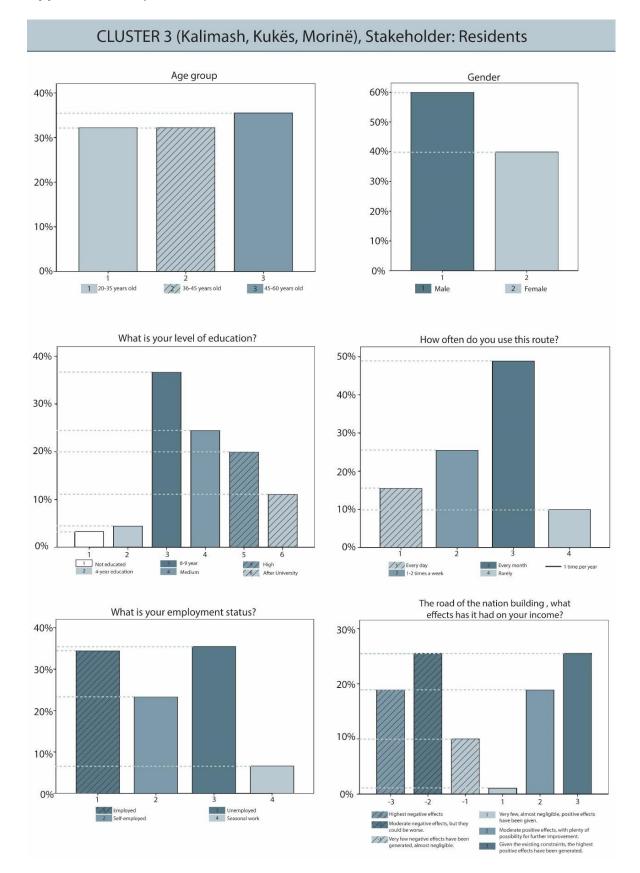




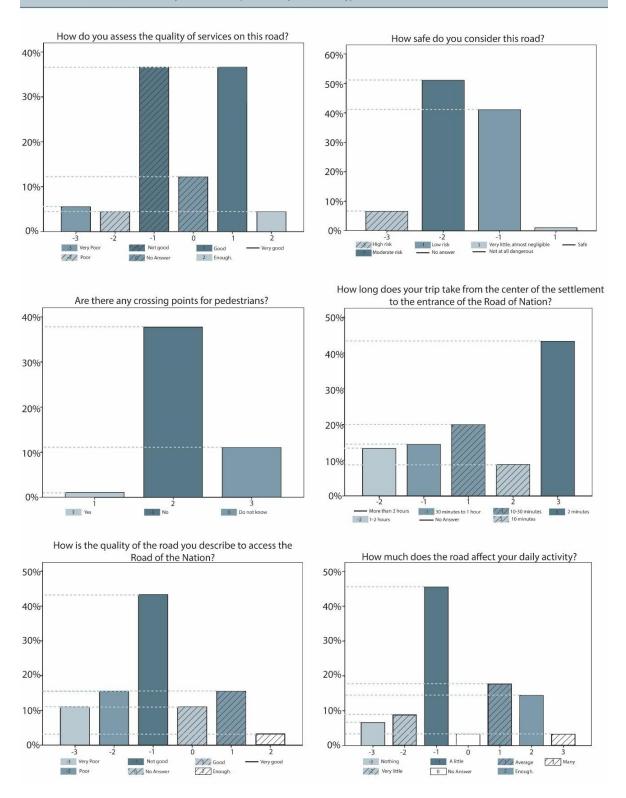




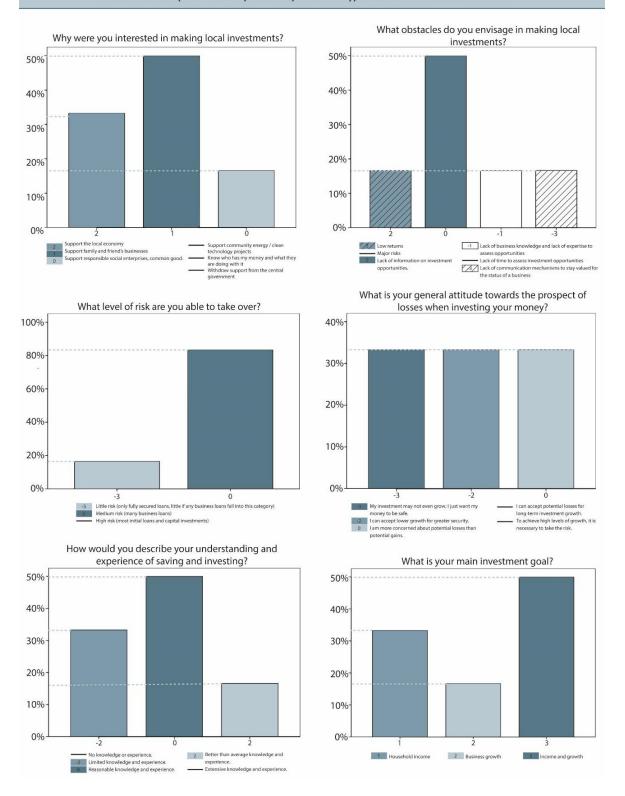
#### Appendix 5. Graphs of the third Cluster



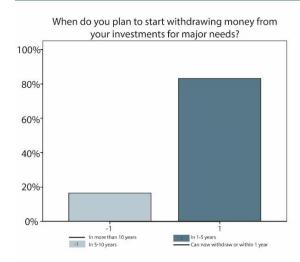
### CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Residents

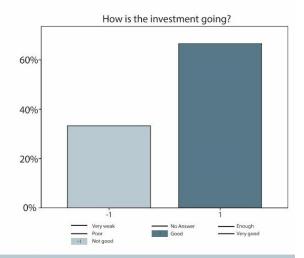


### CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Investors

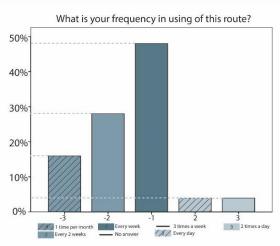


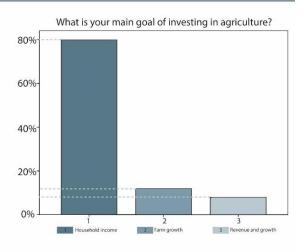
# CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Investors

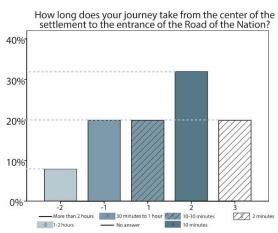


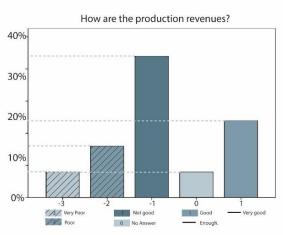


#### CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Farmers

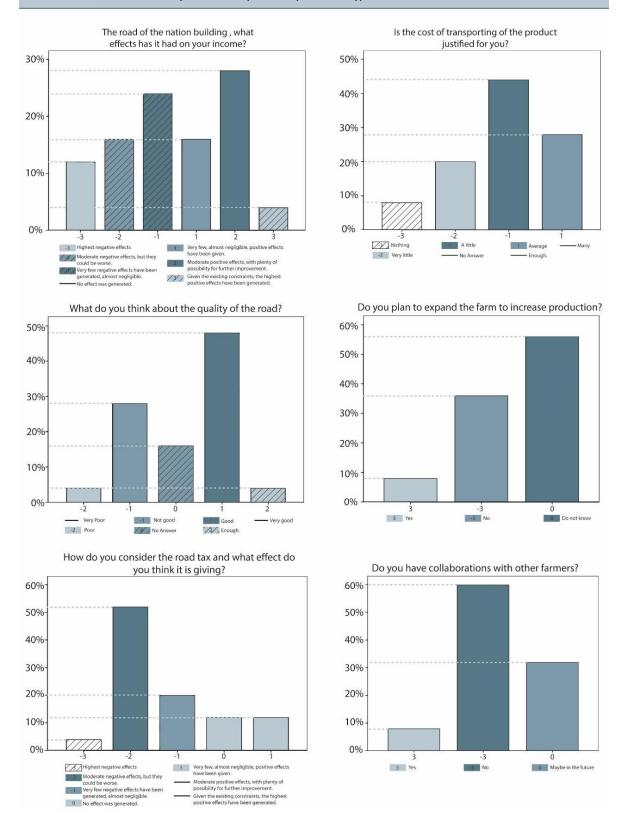




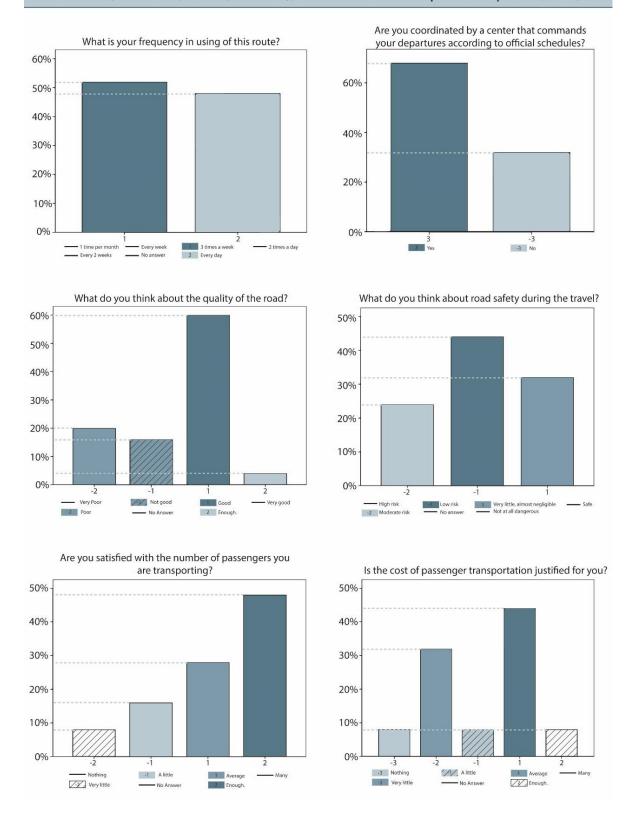




# CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Farmers



# CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Transport companies, bus, taxi



# CLUSTER 3 (Kalimash, Kukës, Morinë), Stakeholder: Transport companies, bus, taxi

