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Decision making in Land Use Planning and fiscal policies approaches

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Boosting effectiveness of Land Use planning through fiscalization approaches in an urban context of rising uncertainties

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Supervisor DA: Assoc. Prof. Gastone AVE
Supervisor POLIS: Dr. Merita Toska

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IDAUP Coordinator Prof. Roberto Di Giulio

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Curriculum Urban Planning / IDAUP, Topic Urban Planning and Management (Area– SSD: ICAR20)

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ABSTRACT

Land use planning, is considered as probably the oldest type / instrument of planning, broadly used since the early 19th century and is the root of all planning approaches and methodologies developed and discussed by scholars through the course of time. The modern origins of urban planning lie in a social reform movement which emerged in the later part of the 19th century as a reaction to the industrial city's discontent. At that time, visionaries of the period envisioned the "perfect" city as a desire to plan reasonable grounds for appropriate sanitation, goods mobility and infrastructure. Contemporary planners of today, facing at a large extent also the rising of uncertainties, are seeking for the equilibrium of opposing social equality, just distribution of resources, economic growth, environmental sensitivity and also aesthetic requirements .

With the evolution of human activities and continuous shifting of the planning approaches (both applied and theoretical), especially in different contexts, land use planning (LUP) is one of those instruments within the planning practice which has survived in time, though it's implementation is much "threatened" by the rising uncertainty in territorial development, merely because of its rigid nature and the irreversible effects it might pose to a specific territory/area. The result of the land use planning process may be a formal master plan for an entire city or metropolitan area, a neighborhood plan, a project plan, or a set of policy alternatives. As (Benevolo, 1967) states, "a planned use of space is rather one method, inseparable from any other approach, of creating the overall balance which is the aim of all political actions." It is therefore in this discussion of re-assessing and boosting the effectiveness of land use planning through introducing new approaches, where lies the discussion on this research work.

This research argues that the effectiveness of land use planning can be improved in an urban context of rising uncertainty, by making use of instruments that are not spatial planning-borne, such as *fiscalization of land use*. While land *fiscalization* based on use and other urban criteria have been used for so long in time[i], land use planning should draw on *fiscalization* as an innovative mean to address challenges posed to planning by the rising uncertain events. The later meaning not only unpredictable events as of environmental nature but also those of changing of contexts.

The research adds insight to the theoretical discussion of theories/ methodologies of land use planning and aims at building a practical foundation on how *fiscalization* of land use could

ensure a more effective implementation of territorial / spatial plans in an era of rising uncertainties.

The premise of this research is the growing complicity of land development in the local governmental units in existing dynamic contexts of countries where urban areas are in constant development processes (with focus in Albania / Tirana municipality), and remain in a process of shifting towards an integrated and comprehensive approach in planning. In such contexts, where uncertainties are highly manifested, and prediction (as basis of the planning process) is not only difficult to be drawn, but smart growth theories and instruments in planning are often hard to use, the process of land planning would easily face extreme difficulties in implementation and sometimes would even be purposely misused.

The objective of this research, therefore, is that through theoretical discussion and a step by step qualitative research process, to discuss on the effectiveness and boosting of land use planning as an instrument through fiscalization of land use approaches in an urban context of rising uncertainties. The thesis argues that the introduction of fiscalization of land use' could contribute to the efforts of enabling new possibilities for making *'plans'* work and ensuring that just decision making in distribution of resources is achieved in an urban complex development context.

Both *land use* and *land use planning* as instrument for achieving development, are two important concepts for this research to examine and analyze, but the later (land use planning) remains the central focus of the study. The concept of *fiscalization* is then brought to attention to the research work, as a function of land use planning, in order to give another perspective and dimension on how this instrument could be used in order to boost effectiveness of land use planning in an urban of complex and uncertain development trajectory.

In order to do so, the research work will be anchored to a series of theoretical studies on methodologies in land use planning practices, theoretical concepts tied to land use planning as well as a thorough discussion and understanding of fiscalization approaches and uncertainties.

The research is divided into 3 main chapter, which address the following:

(i) In the introductory part of this research, problem setting and objectives of this research will be set, through assessing and analysing on a full picture of land use planning origins and the evolution of the concept. A clear distinguishment between land use, land use changes and land use planning is presented to set the clear objectives of the

research. Following this, an analysis of approaches of land use planning is given and a specific emphasis is given to land use under the lens of the economic thought. This approach to research is based following on the drawbacks of weaknesses of land use planning to address uncertainties.

(ii) By setting and finally understanding of the main concepts, The theoretical Discussion chapter addresses in one hand the land use planning theory (whether there's one) and methodologies in planning practice and in the other hand fiscalization of land use and it's two-fold approach towards land use planning. The first subchapter here tries to emphasize the weaknesses and challenges that land use planning instrument poses to address uncertainties, while the other (fiscalization) gives a glimpse of another dimension and means to be used to boost the effectiveness of land use planning.

(iii) In the last chapter the empirical analysis is carried out focussing on the Albanian context. The empirical evidence and analysis builds on different levels such as: understanding of land use patterns in the Municipality of Tirana during 1990 – 2020; discussion of planning systems and approaches so far and their shifts through time; understanding and assessing the role of land use planning and decision-making for land use allocations as well as understanding the fiscalization of land use (and properties) system already in place in the country. After doing so, a case scenario is developed on the plan's implementation and it is analysed, in order to corroborate for the effectiveness of land-use planning and the influence that fiscalization of land use might exert in land use allocation and plans implementation in Tirana's context.

The final aim of this research is to contribute to the theory and approaches of planning practices, through building ***a model of step by step qualitative research*** on the interactive process in which the fiscalization of land-use exerts an influence on land-use planning, decision-making and final allocation in Tirana, Albania in a context of uncertain development trajectories (expected and un-expected changes of the context).

Keywords: land use planning | fiscalization of land use | methodologies and theories in planning | land base financing | step by step qualitative research model | uncertainties | interaction

ESTRATTO

La pianificazione dell'uso del suolo, è considerata probabilmente il tipo/strumento di pianificazione più antico, ampiamente utilizzato fin dall'inizio del XIX secolo ed è la radice di tutti gli approcci e le metodologie di pianificazione sviluppati e discussi dagli studiosi nel corso del tempo. Le origini moderne della pianificazione urbana si trovano in un movimento di riforma sociale emerso come reazione al malcontento della città industriale nella seconda parte del XIX secolo. A quel tempo, i visionari del periodo immaginavano la città perfetta come il desiderio di pianificare motivi ragionevoli per servizi igienici adeguati, mobilità delle merci e infrastrutture. I pianificatori contemporanei sono ora alla ricerca dell'equilibrio tra uguaglianza sociale contrapposta, crescita economica, sensibilità ambientale e anche esigenze estetiche.

Con l'evoluzione delle attività umane e il continuo spostamento degli approcci di pianificazione (sia applicati che teorici), soprattutto in diversi contesti, la pianificazione dell'uso del suolo (LUP) è uno di quegli approcci che è sopravvissuto nel tempo, sebbene la sua attuazione sia molto "minacciata" dalla crescente incertezza nello sviluppo territoriale. Il risultato del processo di pianificazione dell'uso del suolo può essere un piano generale formale per un'intera città o area metropolitana, un piano di quartiere, un piano di progetto o una serie di alternative politiche. Come afferma (Benevolo, 1967), un uso pianificato dello spazio è piuttosto un metodo, inseparabile da ogni altro approccio, per creare l'equilibrio complessivo che è l'obiettivo di tutte le azioni politiche. È quindi in questa discussione sulla rivalutazione e sul potenziamento dell'efficacia della pianificazione dell'uso del suolo attraverso l'introduzione di nuovi approcci, che si colloca la discussione su questo lavoro di ricerca.

Questa ricerca sostiene che l'efficacia della pianificazione dell'uso del suolo può essere migliorata in un contesto urbano di crescente incertezza, facendo uso di strumenti che non sono basati sulla pianificazione territoriale, come la tassazione dell'uso del suolo. Mentre la tassazione fondiaria basata sull'uso e altri criteri urbani è stata utilizzata per così tanto tempo, la pianificazione territoriale dovrebbe attingere alla tassazione come mezzo innovativo per affrontare le sfide poste alla pianificazione dai crescenti eventi incerti. Il secondo significato non solo eventi imprevedibili come di natura ambientale ma anche quelli di cambiamento di contesti.

La ricerca aggiunge approfondimenti alla discussione teorica delle teorie/metodologie della pianificazione dell'uso del suolo e mira a costruire una base pratica su come la fiscalizzazione

dell'uso del suolo potrebbe garantire un'attuazione più efficace dei piani territoriali/spaziali in un'era di crescenti incertezze.

La premessa di questa ricerca è la crescente complicità dello sviluppo del territorio nelle unità di governo locale in contesti dinamici esistenti di paesi in cui le aree urbane sono in costante processo di sviluppo (con focus in Albania / Comune di Tirana), e rimangono in un processo di spostamento verso un approccio integrato e globale nella pianificazione. In tali contesti, dove le incertezze sono molto manifestate e la previsione (come base del processo di pianificazione) non solo è difficile da trarre, ma le teorie e gli strumenti di pianificazione della crescita intelligente sono spesso difficili da usare, il processo di pianificazione del territorio dovrebbe facilmente affrontare difficoltà estreme nell'attuazione e talvolta verrebbero addirittura utilizzati in modo improprio.

L'obiettivo di questa ricerca, quindi, è quello, attraverso la discussione teorica e un processo di ricerca qualitativa passo dopo passo, di discutere sull'efficacia e sul potenziamento della pianificazione dell'uso del suolo come strumento attraverso la fiscalizzazione degli approcci all'uso del suolo in un contesto urbano di crescenti incertezze. La tesi sostiene che l'introduzione della tassazione dell'uso del suolo" potrebbe contribuire agli sforzi volti a consentire nuove possibilità per far funzionare i "piani" e garantire che il giusto processo decisionale nella distribuzione delle risorse sia raggiunto in un contesto di sviluppo urbano complesso.

Sia l'uso del suolo che la pianificazione dell'uso del suolo come strumento per raggiungere lo sviluppo sono due concetti importanti da esaminare e analizzare in questa ricerca, ma il secondo (pianificazione dell'uso del suolo) rimane l'obiettivo centrale dello studio. Il concetto di fiscalizzazione viene poi portato all'attenzione del lavoro di ricerca, in funzione della pianificazione dell'uso del suolo, al fine di dare un'altra prospettiva e dimensione su come questo strumento potrebbe essere utilizzato per aumentare l'efficacia della pianificazione dell'uso del suolo in un contesto urbano di traiettoria di sviluppo complessa e incerta.

A tal fine, il lavoro di ricerca sarà ancorato a una serie di studi teorici sulle metodologie nelle pratiche di pianificazione dell'uso del suolo, concetti teorici legati alla pianificazione dell'uso del suolo nonché una discussione e comprensione approfondite degli approcci e delle incertezze di fiscalizzazione.

La ricerca è suddivisa in 3 capitoli principali, che affrontano quanto segue:

(i) Nella parte introduttiva, verranno fissati i problemi e gli obiettivi di questa ricerca, attraverso la valutazione e l'analisi su un quadro completo delle origini della pianificazione territoriale e dell'evoluzione del concetto. Viene presentata una chiara distinzione tra uso del suolo, cambiamenti di uso del suolo e pianificazione dell'uso del suolo per stabilire gli obiettivi chiari della ricerca. In seguito, viene data un'analisi degli approcci alla pianificazione dell'uso del suolo e un'enfasi specifica è data all'uso del suolo sotto la lente del pensiero economico.

(ii) Impostando e infine comprendendo i concetti principali, il capitolo Discussione teorica affronta da una parte la teoria della pianificazione dell'uso del suolo (se ce n'è una) e le metodologie nella pratica di pianificazione e dall'altra la fiscalizzazione dell'uso del suolo ed è duplice approccio alla pianificazione territoriale. Il primo sottocapitolo qui cerca di sottolineare le debolezze e le sfide che lo strumento di pianificazione territoriale pone per affrontare le incertezze, mentre l'altro (fiscalizzazione) lascia intravedere un'altra dimensione e mezzi da utilizzare per aumentare l'efficacia della pianificazione territoriale.

(iii) Nell'ultimo capitolo l'analisi empirica viene svolta focalizzandosi sul contesto albanese. L'evidenza empirica e l'analisi si basano su diversi livelli quali: comprensione dei modelli di uso del suolo nel Comune di Tirana durante il periodo 1990-2020; discussione dei sistemi e degli approcci di pianificazione fino ad oggi e dei loro spostamenti nel tempo; comprendere e valutare il ruolo della pianificazione dell'uso del suolo e del processo decisionale per le allocazioni dell'uso del suolo, nonché comprendere il sistema di tassazione dell'uso del suolo (e delle proprietà) già in vigore nel paese. Dopo aver fatto ciò, viene sviluppato uno scenario di caso sull'attuazione del piano e viene analizzato, al fine di corroborare l'efficacia della pianificazione dell'uso del suolo e l'influenza che la tassazione dell'uso del suolo potrebbe esercitare nell'allocazione dell'uso del suolo e nell'attuazione dei piani nel contesto di Tirana.

L'obiettivo finale di questa ricerca è quello di contribuire alla teoria e agli approcci delle pratiche di pianificazione, attraverso la costruzione di un modello di ricerca qualitativa passo passo sul processo interattivo in cui la fiscalizzazione dell'uso del suolo esercita un'influenza sulla pianificazione dell'uso del suolo, decisione -realizzazione e allocazione finale a Tirana, Albania in un contesto di incerte traiettorie di sviluppo (cambiamenti attesi e imprevisti del contesto).

GLOSSARY

Given the specific use and the abundance of terms used in this research work, this glossary session aims to make a short summary and express the definition of the main concepts and terms used along the research. Of course the list is not exhaustive, but it gives a preliminary yet important note to the main concepts elaborated even further across the specific chapters of this research work. While for each of the concept clear references from previous researchers are given, terms and concepts expressed here might vary and are adapted/customized based on the needs and results from this research.

Land use – In this research work, land use is one of the key concepts, and is defined as the use of land based on the characterisation of what activities can take place on a specific, and unique area of land.

Land cover – refers to the physical condition / characteristics / material at the surface of the earth. The concept of land cover is explained in the introductory part of this research to set the very differences with the land use. Land cover related issues are not on the interest of this research to be exploited.

Land use planning - The practice of distributing land to avoid over-allocation and unnecessary waste of space in favor of land-efficient construction is called land use planning. There is no distinct land-use planning for the development. For proper development to occur, it is vital that land use planning be an important part of the overall planning process. This approach aims to discover, and convey to its inhabitants, the essential social, economic, and environmental necessities of a particular region, while recognizing contemporary economic and technical know-how. Within a legislative environment (which may vary from nation to country), land use planning aims to address these challenges by planning and designing projects in a spatial and technological framework.

Fiscalization of land use – The term is not commonly used among scholars in the field. In this research it used to describe a twofold approach: i) the process which describes the influence local public finances exert on land use policies / land use allocation and even land use changes;

ii) as a generalized term to describe land base financing and innovative financing instruments related to land. Both concepts are described thoroughly through the research work, and make an important node for the empirical research.

Land use policy – In this study, land use policy is defined according to the principle of guiding decisions and achieving reasonable results as regards planning the land use within a given area. This is a set of principles laid forth in this research. The land use policies in this research are national ones and the changes in planning legislation over the study period are reported in this report.

Adaptive planning approach – In this research the adaptive planning approach implies the approach which is focused on strengthening the responsiveness of cities and urban areas towards uncertainties (foreseen and unforeseen events). The adaptive planning approach, is mainly being embraced by planning practitioners to address natural disasters and unforeseen events on this matter, but as it will be discussed in the research work, uncertainties emerge also at the political, social and economic level, and adaptive planning tools, approaches and new means might be explored.

Interactive process – In this research it implies the process under which fiscalization of land use (see above) exerts an influence towards land use allocation in the process of land use planning. As both land use planning and land use management are viewed in this research as an inseparable form of spatial planning, their interaction process is investigated in the primary case study with empirical data.

Land value capture instruments – It is a versatile collection of instruments that can be tailored to a range of institutional and cultural situations, and it attempts to increase the availability of resources for local development by increasing the value of land. On the other hand, their capacity to improve municipal infrastructure and service supply, as well as the improvement of local finances, can have far-reaching social and economic consequences. This combination of potential financial, economic, spatial and social benefits is the reason Land Value Capture instruments has become topical internationally. In the Albanian context they remain still

underutilized and only few are introduced in the law. In other literature, you might find these instruments to be also called innovative financial instruments due to the fact that they are newly introduced and yet to be exploited in some of the developing countries.

Uncertainties – Uncertainties are a very wide and generic concept, and the way we interpret or use them in a given situation may have varied meanings depending on the context. Uncertainties might potentially be categorized in a number of other ways for this purpose. In this study work, uncertainties are defined as the sense of uncertainty and concerns regarding the execution or realization, correctness, and effectiveness of a choice, as well as the accuracy and efficacy of the decision. In the context of planning, uncertainties are a collection of doubts and unknown occurrences that might happen at any point during the planning process's many stages.

Uncertainties in this research work are mentioned from those emerging from natural hazards / emergencies to those more related to the socio-economic factors such as rapid migration, changing of political context, pandemics etc. The uncertainties inherent in the market economy were not recognized during the Albanian transition from a centrally controlled system of planning and development. For the past 30 years, the later have had a major impact on the distribution of resources and land use designations. In this case, they reflect mainly those (uncertainties) of changing of the political and socio economic contexts of development during the transitioning period from early 90s – today.

The reason behind why this research takes on uncertainties, is not to be exhaustive or research deep into the matters of uncertainties dealing in the planning field, rather it is studied / mentioned explicitly because dealing with uncertainties for planner means dealing with the potential risks of putting the plans into implementation. The latter is also sustained by (Faludi, 1973) *saying that "the risk is an unwanted consequence of the actions resulting from uncertainty"*

ABBREVIATIONS

LU – Land Use

LUP – Land Use Planning

LC – Land Cover

GLTP – General Local Territorial Plan

EU – European Union

DCM – Decision of Council of Ministers (referring to the Albanian legislation)

GIS – Geographical Information System

NTPA – National Territorial Planning Agency (in Albania)

TAR – Territorial Administrative Reform

OECD – Organization for Economic and Co-operation and Development

LBF – Land Base Financing

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I. INTRODUCTION

1.1. Scope, General Context and Problem Definition

Since its inception, the activity of planning and/or territorial planning has been known and continues to be known by other related terminologies including: 'land use planning', 'physical planning', 'urban planning', 'town and country planning', 'regional planning' and even just 'planning'. All the above-mentioned notions rely under the bigger umbrella of territorial planning, which as defined by (Healey, 1997) it is: 'a set of governance practices for developing and implementing strategies, plans, policies and projects, and for regulating the location, timing and form of development'. Land use planning per se, also being the oldest instrument for conducting planning practices, stands at the core of territorial planning and territorial planning processes; though no fundamental theory of land use planning can be articulated. This builds up on the arguments of (Alexander, 2015) that there is no planning, in the sense of a definable and identifiable 'planning practices' but planning exists as a set of different and diverse planning practices and/or processes, thus land use planning being one of those.

In this regard, land use planning may be considered as the process of regulating the use of land (and also assigning a use to it) in an effort to promote more desirable social and environmental outcomes as well as a more efficient use of resources. By and large, the uses of land, guided by planning practice/methodology, determines the diverse socio-economic activities that occur in a specific area, the patterns of human behavior they produce, and their impact on the environment, as well as can be instrumental in influencing future development. Yet land use planning, rooting its methodology and approach merely on predictability, thus being a somehow rigid planning instrument, finds its difficulties into ensuring development, especially under circumstances of raising uncertainties. Uncertainties are not a new concept in planning discipline, and recently they are gaining much discourse among scholars, and new approaches are emerging towards adaptive planning methodologies and practices. Especially in contexts of continuous transition, dealing with uncertainties in planning, while trying to reform or re-asses on the existing planning approaches becomes an interesting topic to start gaining insight in.

In short the aim of this introductory part of the research tries to pave its road towards finding the theoretical gap, under which future research design will be built. Given that the main focus remain land use planning, the very first step opening the discussion will be clarification of the

concept of land use, as a prerequisite for explaining the land use planning later on. Later on, the economic dimension of land (and its tight link with land use planning) will be explored. Deepening the discussion on land use planning by adding the economic/fiscal dimension of it, will help both the research and the reader to smoothly focus on the very core of the problem statement.

1.2. Land Use – Origin and evolution of the concept

before entering the discussion on land use planning, its theories and other concepts being represented in this research work, looking towards the core of the discussion – *the land use*, is essential in setting up the context and background of the research.

Regardless of all the attempts made since the 1960's in defining the *concept of land use*, an international and definite accordance on its definition is still lacking [(Guttenberg, 1959), (International Geographic Union, 1976), (Kostrowicki, 1992), (Baulies & Szejwach, 1998) , (UNEP/FAO, 1994), (Duhamel, 1998), (McConnell & Moran, 2001)]. Consequently, also as (Jansen, Harmonization of land use class set to facilitate compatibility and comparability of data across space and time, 2006) expresses "the concept / term of land use has different connotation /meaning across disciplines" and that all the different standpoints might be valid. These differentiations on the concept derive from two possible approaches, as (Duhamel, 1998) argues, *"the functional and the sequential"*.

The first, *"the functional"* approach, corresponds to "describing the land in terms of socio-economic purpose" (Duhamel, 1998)), while the other (adopted by (FAO/UNEP, 1999)), defines land use "as the arrangements and activities that people undertake on a certain land cover type in order to produce, change or either maintain" (Gregorio & Jansen, 1998).

As such, the land use (LU) includes aspects that go far beyond the characterization of the physical cover of land, thus it is not always observable, and within this context additional information regarding human activities on land have to be taken into account. As a result of these distinctions, defining 'land use' as a single concept involves a set of characteristics that are mostly unknown.

In defining the land use concept, it is important to look in depth in both words of the concept:

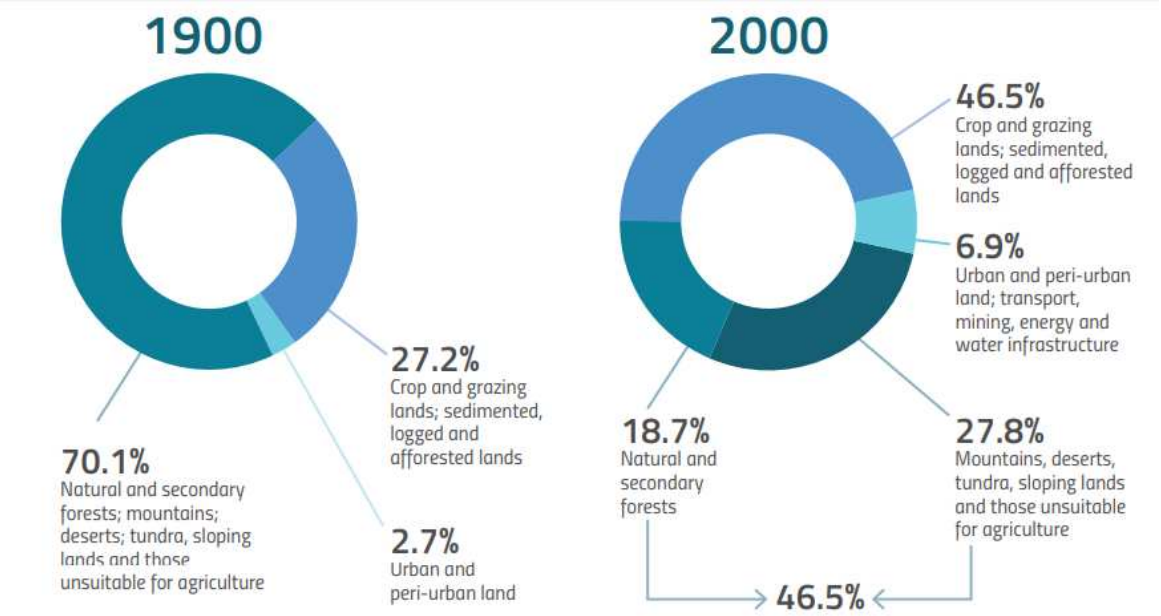
- *Land* "is a delineable area of the earth's terrestrial surface, encompassing all attributes of the biosphere immediately above or below this surface including those of the near-surface, climate, the soil and terrain forms, the surface hydrology (including shallow lakes, rivers, marshes, and swamps), the near surface sedimentary layers and associated groundwater reserve, the plant and animal populations, the human settlement pattern and physical results of past and present human activity (terracing, water storage or drainage structures, roads, buildings, etc.)" (FAO, 1995)
- *Use of* to describe taking, holding, or deploying (something) as a means of accomplishing or achieving something or to put into action or service. (Merriam-Webster-Dictionary, 2021)

Thus for the sake of this research, land use, will be defined as *"the type of human activity taking place at or near the surface"* (Cihlar & Jansen, 2001), and the concept will remain the core for establishing/ defining the other concepts in this research.

In order to analyze environmental and economic processes and problems such as uncontrolled urban development, deteriorating environmental quality, loss of prime agricultural lands, expansion of agriculture into areas that contain either fragile ecosystems (e.g. wetlands) or an increase in urban sprawl, knowledge of land use (and also knowledge of land use changes over time) has become increasingly important. These processes and problems must be understood if living conditions and standards are to be improved or maintained at current levels (Anderson, Hardy, Roach, & Witmer, 1976), (Dumanski & Pieri, 2000). Changes in land use, as one of the main driving forces of (global) environmental, social and economic change, are central to sustainable development ((Meyer & Turner, 1994), (Walker B. , 1998), (Lambin, Rounsevell, & Geist, 2000). It is, therefore, essential to have a detailed and in-depth knowledge of not only land use processes and problems, but also of land uses as a self-isolated term.

Box 1. A century of Land Use change

Figure 1. Representation of major land use changes in the last 100 years



Source: UNCCD, 2018. Global Land Outlook, Chapter 2: Brief History of Land use

A variety of causes have contributed to the expansion of cities and the shift from rural to urban life. A wide range of functions are performed by cities, ranging from transportation to security, as well as market functions, which were initially performed for agricultural surpluses before expanding to include other goods and services such as banking and finance. The diversity of urban characteristics can be traced back to the wide range of functions performed by cities, ranging from transportation to security, as well as market functions for agricultural surpluses and then for other goods and services such as banking and finance. In most cases, cities were built in strategically significant regions, such as commercial centres, agricultural districts adjacent to good agricultural land, or the presence of government and military structures, amongst other things. Throughout the twentieth and twenty-first centuries, the scale, pace, and type of urbanization have been distinguishing characteristics. Despite the fact that high rates of urban population expansion have happened on fewer than 3% of the globe's terrestrial area during the past century, the consequences of this increase have been felt all across the world.

Other forms of environmental change are fuelled by land use change in order to develop cities and meet the needs of expanding urban populations, among other things. For the first time in history, we shifted from being mostly rural inhabitants to being primarily urban

dwellers in 2007, marking a momentous transformation in our society. With regard to the way we utilize and manage our land resources, there is no doubt that the world is at a crossroads in terms of its long-term sustainability. The need for these resources will only grow in the future, and a variety of possible future scenarios must be considered.

In order to ensure that land is conserved and nourished for subsequent generations, as well as to provide social and economic possibilities now, sustainable land use must address both of these concerns.

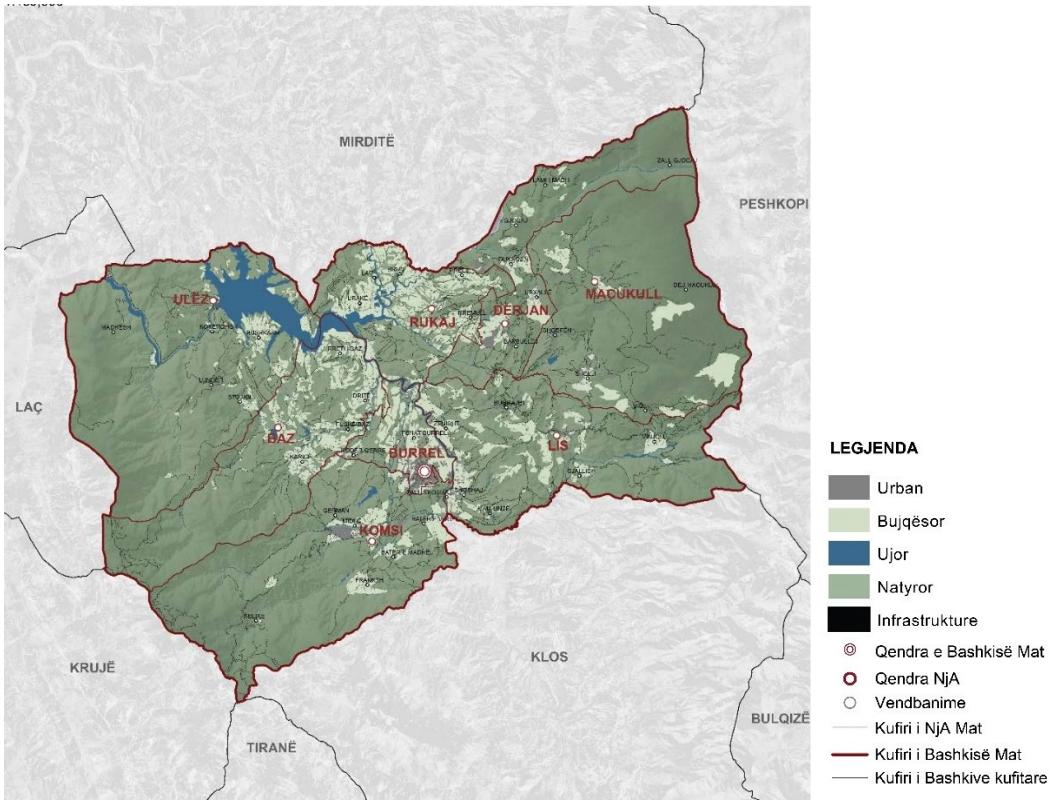
Among planning related practitioners, land use is sometimes easily misunderstood or misinterpreted with land cover (LC), as both of them are the two key elements that describe the terrestrial environments (both natural and human-activity-related terms), and they both comprise one of four major, large-scale environmental perturbations of the earth, together with biodiversity, atmospheric consumption and climate change (Walker & Steffen, 1997). "While land cover may be of a merely natural origin (such as forests, rivers, bare soil etc.), it has been recognized that this relationship between both (LU and LC) is complex" (Fisher, Comber, & Wadsorth, 2005); (Bakker & Veldkamp, 2008)), since land use depends to a considerable extent on the characteristics of the land cover. However, LC and LU are not identical[1], and the knowledge of LC may not define LU[2].

The two following maps are presented to illustrate in a given location (Mat Municipality in Albania) the two different outputs of mapping during a planning process, Land Cover Map and Land Use Map.

[1] There exists different classification of categories for both concepts, with clear distinguishments from each other. Land cover data shows the extent to which forest, wetlands, agricultural and other types of land/water cover a territory. In contrast, land use indicates how people use the terrain — for development, conservation or mixed usage. Over time frames the different land cover types can be maintained or used relatively differently. Yet entering into detail into the LU/LC classification is not in the scope of this research work.

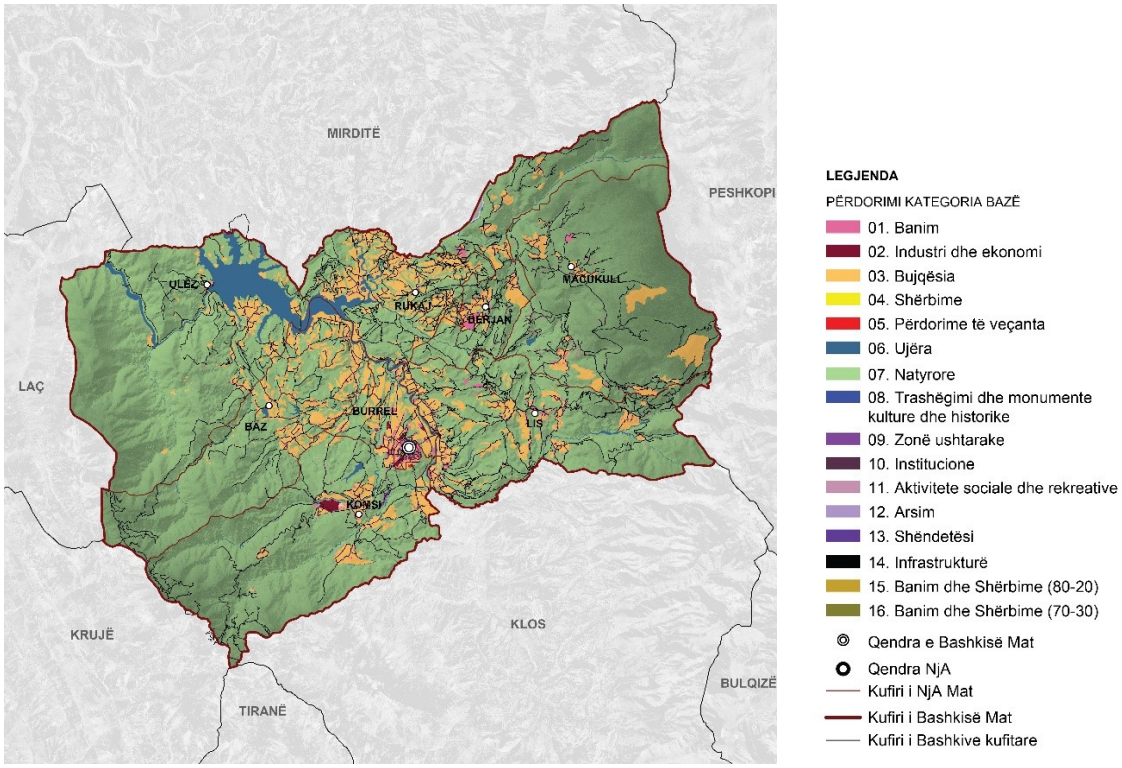
[2] For instance, vegetation areas are often defined as physiognomy and structure without definition of their function as wilderness, agro-forestry, protected area / animal habitats, etc. (e.g. forested types of genuine trees).

Figure 2. Example of Land Cover map - Territory of Mat Municipality in Albania



Source: Mat Municipality and Metropolis, 2017

Figure 3. Example of Land Use map - Territory of Mat Municipality in Albania



Source: Mat Municipality and Metropolis, 2017

However, it is indeed true that the LC maps are used as primary data sources for the preparation of land use maps. The rationale here can be expressed in a threefold way:

1. LC remains as one of the most important determinant of land use, though the strength of the relationship between the two might depend to a number of other factors such as competing human activities in a given location/ territory, need for preservation to some extent to specific land covers etc.
2. Land cover maps, have been (and still are) much easier to prepare, since the effectiveness of satellite remote sensing tools facilitating the observation over extensive areas are available *(google earth imageries, orto - imagery, Corrine land cover[3] maps etc.).* For preparation of land use maps on the other maps a more careful observation is needed in relation to activities actually happening to a specific territory, need to change and predict on the possible future intervention, pressures to change land covers due to societal, economic or environmental dynamics etc.
3. Yet, since land cover and land use are distinguished as separate concepts, and refer to different type of aspects related to land, the mapping process of which should be taken separately.

Given this, a conceptual example of the relationship between both concepts is given diagrammatically in the table below, where 3 simple (conceptual) cases are being used to represent it.

i. Case 1 represents a situation, where for each LU determined there's only one corresponding land cover category. For example, a built-up cover corresponds to urban land use. Thou within this definition more detailed land use sub-categories and specific functions could be distinguished or drawn in a long process of planning.

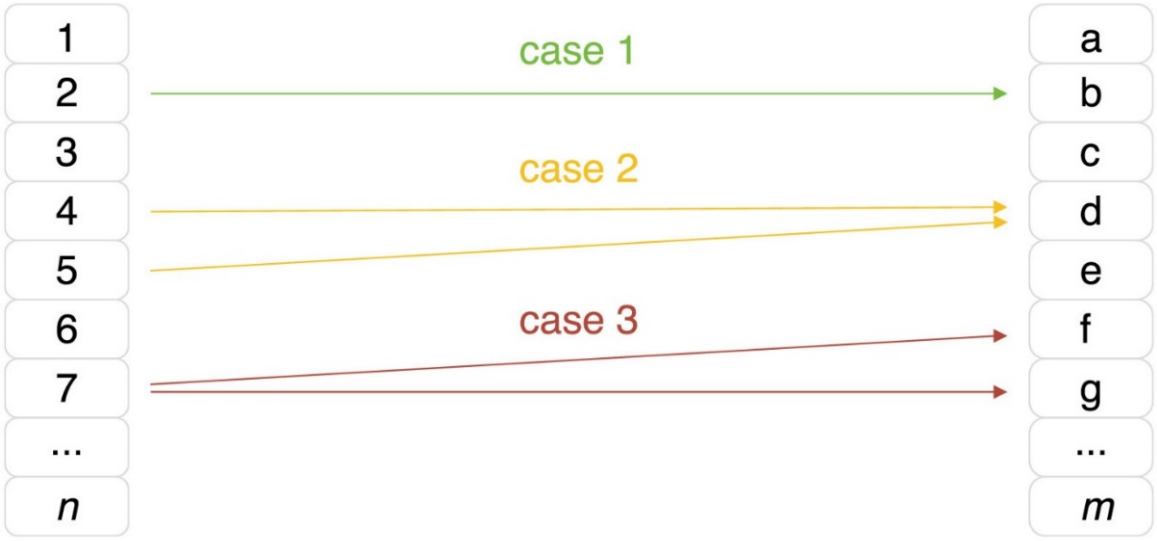
ii. Case 2 refers to the cases when there might be two or more land cover classification[4], representing one land use category. For example, corn/wheat or tree fruit correspond to the agricultural land use in a rural area context.

[3] In 1985 the Corine programme was initiated in the European Union. Corine means 'coordination of information on the environment' and it was a prototype project working on many different environmental issues. The Corine databases and several of its programmes have been taken over by the EEA. One of these is an inventory of land cover in 44 classes, and presented as a cartographic product, at a scale of 1:100 000. This database is operationally available for most areas of Europe.

[4] Classification is defined as "the ordering or arrangement of objects into groups or sets on the basis of relationships. These relationships can be based upon observable or inferred properties" (Sokal, 1974).

iii. Case 3 represents the adverse situation explained above, where for each land cover classification, there might be more than one land use category. This third conceptual case represents a more complicated issue, because the LC→LU relations are of two different types, thematic (depending on the type of land cover or type of land use) and spatial (e.g. spatial arrangements[5]). The first can be represented in a transition matrix and do not depend on the spatial distribution of the two types (e.g., forest used for timber and cattle grazing), while the other (spatial) can be evident from a comparison of two maps for the same area (see figure below). A very common example of the later can be for example the built up-area is always residential or industrial, or services etc.

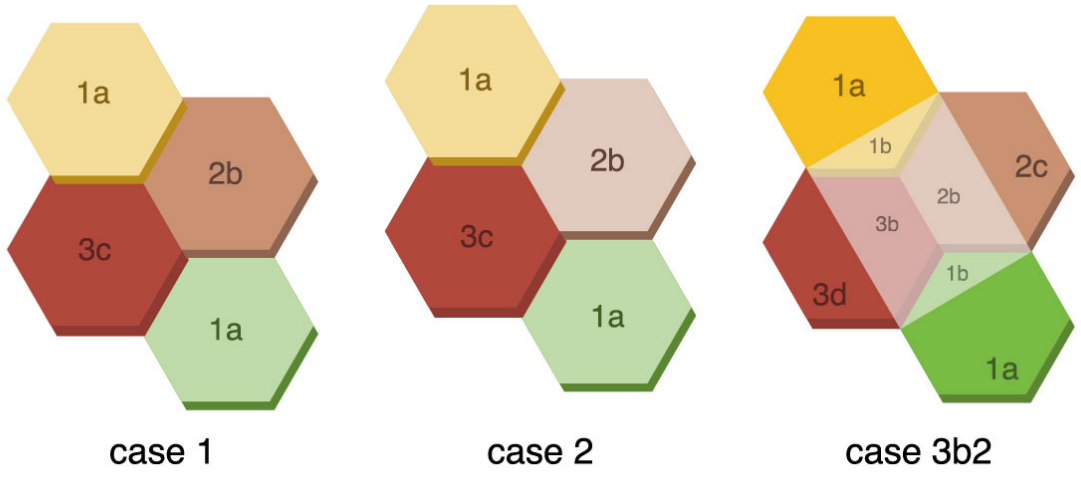
Figure 4. The logical connection between land cover (LC) and Land Use (LU)



Source: (Cihlar & Jansen, 2001) and own interpretation

[5] Spatial arrangements used here in explaining all rational, sustainable and balanced planning of the area; integral and territorial transportation, constructions, energy, tourism, production and other sectors; and better connections between villages and towns.

Figure 5. Possible combinations of land cover (LC) and land use (LU) mapping boundaries. In each polygon, the number represents a LC type, the letter(s) a LU type(s)



Souce: Own interpretation

Some land categories are easy to be understood and assessed using remotely sensed data cover maps. The interpretation is easy. In other cases, it is necessary to analyse the correct dominating category of land use more inferentially and then its specific sub-categories and functions, based on the set of assumptions, existing facts, local expertise, and so on.

In order for the planner and the overall land use planning process for development processes to be successful, understanding and being able to deduce analysis on land use is a critical step. For this reason, exploring the non-obvious factors that determine and influence land use is an important step to be tackled in this research.

Examples presented in the beginning of this chapter proved that land use is being determined by many factors (biophysical factors, cultural context, local traditions etc.). On the other hand, political aspects, as well as demographic and economic dynamics may drive demand for particular services / commodities, which in the end are simply translated as land use changes. Nowadays this emphasis is "shifting from static land use data collection, and representation as maps, towards more dynamic environmental/ socio-economic modelling in order to better understand the past, monitor the present situation and to predict future trajectories" (Lambin, Rounsevell, & Geist, 2000), (DOLMAN, 2003) (McConnell & Moran, 2001). In this sense, observing and analysing land uses "requires socio-economic interpretations of the activities that take place on earth's surface" (Fisher, Comber, & Wadsworth, 2005). A good example on this matter is reflected usually on the continuous transition countries (Albania being one of

those) where paradigmatic shift on planning systems reflects upon the continuous changing dynamics of the context and the decision-making process on land use.

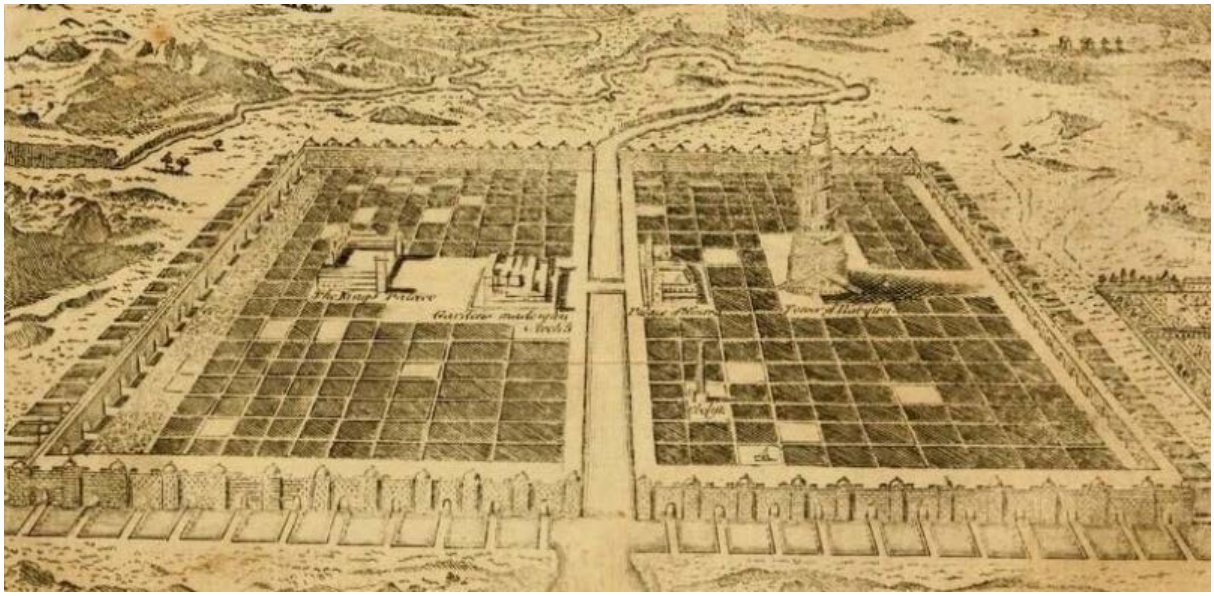
In the following chapters, the research will try and deepen the conceptual and theoretical framework of land use concept, and justify its pertinence focusing on land use planning. Yet it is important to mention in the very first stage, that the difficulty in categorizing land use is that it consists, in theory, of a number of momentary actions undertaken over time, and that land use in itself is not an object that one can describe or delineate.

1.3. Land use planning – between concepts and approaches in the course of time

While in the first chapter a proper distinguishment between land use and land cover was made, in this section this research will try to put land use in the context of planning, as land use planning comprises the main node of this research work.

From elitist 'City Beautiful' designs in the nineteenth century to participatory, broad-based methods for managing urban transformation and new difficulties in the twentieth century, physical development plans and land use planning have continuously changed/ evolved over time. However, planning as part of construction and architecture for urban planning dates back to antiquity as regulating land use may have originated about 4,000 years ago in the mud brick cities of Mesopotamia with the Code of Hammurabi and the Laws of Eshnunna (Pava, 2019). Planning, zoning, and the following environmental laws are not ideas conceptualized in the 19th or the America's of the 20th century, but rather originated in the Near East in anciently[ii].

Figure 6. Plan of the City of Babylon, engraving from 1795



Source: (Pava, 2019)

The traditional concept of *Land Use Planning* (LUP) has diversified over time, to include the appraisal of factors related to sustainability (i.e., social acceptance, economic viability, physical suitability, and environmental sustainability), as well as social impacts (i.e., access to land resources, nutritional status, health status, and education). Meanwhile, the continual inclusion of new ideas and approaches has proved to be beneficial in enriching land use designs with innovation, as evidenced by policy plans, evolution of land categorization, development management plans, adaptive planning, and other such initiatives as well. Thanks to this flexible adaptation over time, planning (and land use as part of it) can be used to support building consensus and further decision making on controversial issues about territory (or space), development, infrastructure implementation and so on. Though critics of comprehensive physical planning "have regularly predicted its demise" [(Perin, 1967), (Perloff, 1980), (Jacobs, 1992), (Friedman, 1993)], it is clear from the results of all previous research studies that spatial planning is alive and well in a wide variety of geographic situations across all seven continents.

The transition towards a more comprehensive concept of land use parallels the shifting attitudes of the time regarding humankind's relationship with land. In the 1700s, land equated 'wealth'; it was later understood through the more comprehensive concept of 'commodity' (late 1700s to World War II); this shifted again to that of 'scarce resource' (post World War II to the 1970s); from the 1980s onwards, it was generally viewed as a 'scarce community resource', representing both a commodity, and wealth).

Though much debate is raised around the matter it can be stated that land use planning (LUP) as a planning discipline has evolved from a top-down, expert-driven approach, to one of land suitability, in the early 1960s and 1970s and ***can be referred to the process by which land is allocated between competing and sometimes conflicting uses in order to secure the rational and orderly development of land in an environmentally sound manner to ensure the creation of sustainable human settlements.***

To illustrate how the twentieth century land use plans have nowadays become an extremely complicated combination of design policy and management, Godschalk and Kaiser (1995) use the metaphor of a tree to move from the history (‘roots') to the first 50 years into the mid-century period (‘new growth/trunk') and finally to the contemporary/comprehensive plans (‘new branches'). Using this analogy, 3 main periods of land use/planning are illustrated as following:

1. Roots of the land use planning: the first 50 year of planning

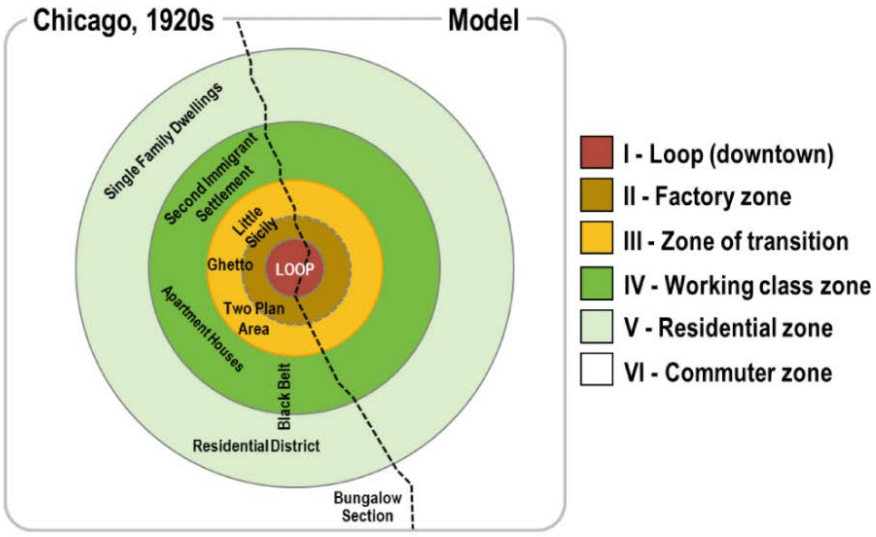
New world city plans certainly existed before the 19th century, including here the famous *L’Enfant’s* plan for Washington or the William Penn’s plan for Philadelphia or the first land use regulations traced in America in 1906 (Los Angeles) and The Building Zone Resolution[6] adopted in 1916.

As (Benevolo, 1967) states in its book “The origin of town planning” The birth of urban planning did not correspond with the technical and economic forces that built and changed the industrial towns, but rather later on, these changes became fully felt and beyond and when a conflict began. For example, the attempt towards land use planning made in the early 1920 while industrialization and its related pollution played a large role in the fight to separate land uses, which map of Chicago developed by Burgess illustrate well (see map below in the figure 7). This model of land use, followed on the *Von Thuenen Theory* (explained more thoroughly in the following chapter under the economic lenses) and though it lacked geographical context, showed the desire to separate uses.

[6] It refers to the Resolution adopted by City of New York – Board of estimate and Apportionment, Building Zone Resolution, Adopted on July 25, 1916. It referred to a resolution regulating and limiting the height and bulk of buildings hereafter erected and regulating and determining the area of yards, courts and other open spaces, and regulating and restricting the location of trades and industries and the location of buildings designed for specified uses and establishing the boundaries of districts for the said purposes.

The plan at the time was only some inspirational vision, focused only on designing of public spaces as a City Beautiful effort, though a slight shifting started to be seen after the National Conference on City Planning in 1911, where Frederick Law Olmsted, Jr[7]. defined a city plan as "encompassing all uses of land, private property, public sites and transportation." The independence of the planning function from municipal administration as well as the plan's emphasis on physical growth were both being questioned just before to the beginning of the so-called conventional planning period, circa the 1940s. "The scope of city planning is properly as broad as the scope of city government," writes Robert Walker in The Planning Function in Local Government. "While a central agency might not necessarily do all the planning, it would coordinate planning as a comprehensive approach in light of general policy considerations." Of course the idea was not widely (Walker, 1941) accepted at the time and the plan though addressing both public and private uses of the land, did not really deal in detail with the implementation.

Figure 7. Attempt of Chicago 1920s land use plan as developed by Burgess



Source: Burgess model 1920, own graphical interpretation

2. *The mid-century: Traditional Planning*

[7] Frederick Law Olmsted Jr. (July 24, 1870 – December 25, 1957) was an American landscape architect and city planner known for his wildlife conservation efforts. He gained national recognition by filling in for his father on the Park Improvement Commission for the District of Columbia beginning in 1901, and by contributing to the famous McMillan Commission Plan for redesigning Washington according to a revised version of the original L'Enfant plan.

Local development planning approaches started to grow rapidly in the early 1950, in the what so called birth of the traditional planning period, influenced by the American experience. Several reasons might have influenced the system at the time:

- First, the governments had to deal with the post-war population and urban expansion on the one hand, while also needing a tool to ensure the capital investments in infrastructure and public amenities on the other.
- Secondly, as planning began to transition from being the responsibility of an independent central commission to being a proper function within the local government, municipal managers (at the sub-national level) grew increasingly interested in the subject matter.
- Lastly, "Section 701 of the Housing Act of 1954 required local governments to adopt along-range general plan in order to qualify for federal grants for urban renewal, housing, and other programs, and it also made money available for such comprehensive planning." (Godschalk & Kaiser, 1995)

Box 2. – The 701 Program Comprehensive Plan Guidelines of the Housing Act of 1954

In order to be eligible for federal urban renewal assistance-and later, for other grants-a local government was required to develop a general plan, which included plans for physical development, programs for redevelopment, and administrative and regulatory measures for controlling and guiding growth.

The 701 program defined the following elements that should be included in a comprehensive development plan:

• A land use plan, indicating the locations and amounts of land to be used for residential, commercial, industrial, transportation, and public purposes

• A plan for circulation facilities
• A plan for public utilities
• A plan for community facilities

It is at this time, that the planning concept was pruned and shaped with the contribution of two planning educators: T.J. Kent Jr. and Stuart Chapin Jr., who attempted of the first time to codify the methodology of land use planning and give answer to several questions such 'What should the plan look like' 'What's its purpose' and 'What should it be about'.

Kent sees the plan as a vision of the future, rather than a blueprint for action; a policy statement, rather than a program of action; a formulation of goals, rather than timetables, priorities, or cost estimates; and a declaration of intent rather than a program of action. Inspirational and free of short-term practical issues, it was to be the focus of the meeting. It was Kent's proposal that the plan be presented in a format that included a unified comprehensive but general physical design for the future that covered the entire community and was depicted on maps, as well as a document that contained goals and policies rather than conclusions and recommendations.

Instead, Chapin advocated for a more restricted focus on the land use plan as a scaled design process that encompassed both private land uses and public infrastructure, which was in stark contrast to the conventional wisdom. Following this concept, the creation of the land use plan was regarded to be the very first stage in the preparation of the general comprehensive plan, and once completed, the land use plan would serve as a temporary general guide for decision-making in the community (until the comprehensive plan would be developed). According to the Chapin plan, the purpose of public amenities, zoning, subdivision control, and urban renewal was to direct government choices and to tell private developers about the anticipated future pattern of urban growth.

Even though they differed in their conceptualization, both of the planning techniques discussed above were founded on a simple concept: The goal of the plan is to establish, explain, and implement a complete strategy toward development for both private and public users in the city. However, the coverage of the plan (the plan's scope) appeared to be the only item that remained comprehensive in the sense of addressing for the first time both public and private growth while encompassing the full planning jurisdiction in the city. Yet these plans merely remained in papers and nor were action-oriented as the land use plans being drafted and implemented today.

3. Contemporary Plans: The emerging of the new branches of the planning tree

By the beginning of the 1970s, based on very insightful experiences of the 50s-60s, new ideas on planning has started to take way, such as "*land use design"* (detailed mapping of the future land use arrangements); "*land classification plans"* (the general map of growth policies) and the "*development management plan"* (introducing a specific programme of actions to guide development). Even if strategic planning cannot be distinguished as a distinct branch of the land-use planning branching tree, the methodology and effect of strategic planning may be seen

in a wide range of contemporaneous plans from the time period under consideration. In order to emphasize the distinctions between them, a brief explanatory note is provided for each of the three major kinds as follows:

a. The *land use design plan* is the most traditional of the 3 prototypes of contemporary plans and is the most direct descendent of the Kent-Chapin-701 plans of the 1950s and 1960s. It offers a long-term urban structure as a pattern of retail, office, industrial, residential, open areas, public and traffic. In Europe the concept of "Circular flow land use management"[iii] was also introduced (though much later in time, mainly during the beginning of New Urbanism era in the early 1980) with the aim of promoting sustainable land use patterns that strife for compact cities and prevention of sprawl through instruments such as green fields etc. The Land Use Plan addressed contemporary social problems, in particular the environmental crisis, the infrastructural crisis and the burden on the financing of local governments.
b. *Land classification plan* on the other hand, was merely used to identify areas where development will be encouraged to occur (development areas) and areas where development will be discouraged (natural areas protective zones, historic ones etc.). In this sense for each of the designated areas (for and against development), the planning authority would define policies with regard the type, timing, density allowed, extension of infrastructure or constrains to be applied. The planning principle consists of concentrating financial resources, utilities and services within a limited (previously specified/determined) area and suitable for development and alleviating pressure on areas where there has been no development (or has been somewhat) through the retention of growth-friendly facilities.
c. *The development management plan*, much similar to today's plan, featured a coordinated program of actions and intervention with high possibility to occur, based on and supported by analyses and goals for specific planning authorities (agencies or local government) to undertake over a three to ten-year period. One point of origin for development management plans is Henry Fagin's (1959, 1965) concept of the "policies plan," whose purpose was, as he defines, "to coordinate the actions of line departments and provide a basis for evaluating their results, as well as to formulate, communicate, and implement policy."

4. Shifting paradigms – towards a new planning period

From the 1980s onwards, these initial approaches have shifted towards a more integrated approach, involving planning experts, decision-makers and citizens (Bourgoin, 2012); An integrated approach in national institutions, which is then becoming increasingly linked to financial planning. In this way, the concepts related to integration LUP, spatial LUP, participatory LUP, participatory rural planning, regional environmental planning, ecosystem-based LUP and many other processes / activities / concepts related to land use emerged from the 1980s onwards.

As a result of this integration, all the beneficial aspects of each branch described above have been combined into a hybrid and innovative approach to planning that not only attempts to map and classify land uses (whether they are specific or general), but also proposes policies and management measures in order to deal with growth and the challenges of the future. Land use design was generally paired with an overlay of land use categorization, and criteria and processes for obtaining development permits were incorporated in the production of these types of plans. Such plans, on the other hand, were often created with a significant amount of citizen input and represented a high level of political discussion regarding the costs and advantages of various land use choices. This way of thinking is also reflected in today's planning techniques. Growing worries about quantifiable implementation and realistic financing methods are attributed to new hardheaded concerns about planning under growth management systems, according to DeGrove (1984). Local governments, for example, are required to establish detailed capital improvement projects as part of their comprehensive plans, and large state funding may be withheld if their plans do not fulfill consistency and concurrency standards.

Figure 8. Illustrative image of The L'Enfant Plan for Washington, D.C

Source: revised by Andrew Ellicott in 1792, free internet source

1.4. A glimpse of Land Use Planning in the European Context

Through the regulation of development, planning has always played a prominent role in local, regional, or national government. In some areas, planning has even played a key role in policies aimed at achieving sustainable growth, urban-rural renewal, and place making.

As slightly represented n the subchapter above, efforts[8] to regulate land development date in the USA since the colonization period, in the 1600s, mostly aiming at preventing conflictual land uses in neighbouring areas, but land use regulations only began in the early 1900s, and have since spread rapidly in other planning systems. While of course that attempts and even earlier models of urban regulations, and cities date since the anxiety, the scope of the research will only focus on what constitutes the root of urban planning as a separate discipline.

A summarized picture of the planning approaches was given in the introductory part of this research work, so there's no need for repetition, but it is important to underline that there was

[8] One of the earliest examples of such regulations is the Cambridge Ordinance of 1632, in Massachusetts, where for the first time it was stipulated that the mayor should give consent to every development in the city (Nisenson, 2012)

a considerable pragmatic shift that occurred in planning process from 60's and 70's (a period where the approach towards planning was much technocratic, rational and one must say very rigid), to mid-70's and 80's when planning when planning was seen as a political discourse, and finishing with the 90's, where this approach was taken into extremes, and comprehensiveness and a strong connection with other disciplines and approaches was being achieved (Pissouris, 2013). To illustrate this a comparative analysis is done within different planning approaches/processes in these 3 main periods (illustrated with planning examples for each of the era), as presented in the table below.

Table 1. Assessment of planning approaches/ processes throughout time (1920's - 2000s)

		Burgess Planning Era 1920s	**1950s' General Plan**	**Contemporary Plans (60's – mid 70's)**			**The shifting Paradigms 80' - 2000s**
				Lan Use Design	*Land Classification Plan*	*Development Management Plan*	
1	Land Use Map	conceptual	detailed	detailed	generalized	generalized/growth areas	general and area specific
2	Time- frame	long period	long period	long period	long period	short time oriented	both (context oriented)
3	Recommendation type/ nature	general provisions	general community goals	land use policies	growth locations	specific management actions	specific policies , actions and intervention areas
4	Implementation link	very weak	very weak/ visionary	general / average/medium	general provisions / average/medium	strong. implementation intentional	average/medium to strong
5	Participatory approach	informative	informative	slightly active	average/medium	active	very active
6	Capital Improvements	NI[9]	advisory	general recommendations	general recommendations	highly required	recommended and highly required
7	Transportation link	main driving force	average/medium	strong	weak	strong	strong
8	Environmental protection provisions	considered	weak	average/medium	strong	varying	strong
9	Link to social issues/ aspects	considered	weak	weak	weak	weak	strong

Source: Author's assessment (based on literature review)

In all the examples represented in the table above (as well as described in the introductory part of the research) show evidence of the extensive use of the land use planning, land use maps as a first step towards planning processes, albeit land use being the oldest instrument / concept towards planning. As such it can be assumed that land use is still a very important aspect of

[9] No Information – meaning that there is no evidence of any capital improvements or related issues deduced in Burges Planning era

spatial planning systems, especially land development. This is evident especially in the American approach towards planning, the latter being focused thoroughly on New Urbanism principles in the last 30-40 years. This movement emerged as one of the most comprehensive theories on planning, encompassing both formal characteristics (following concepts like "Collage City" by Rowe and Kotter, or "Wholism" by Alexander); and environmental ones, like "liveable streets" from Jacobs and Appleyard, and "Urban Quarter" by Krier. For the very first time the New Urbanism movement brought the idea of promoting greater integration of different types of land uses at the neighbourhood level and its principles argued against the massive suburbanization and expansion of cities. Indeed, there are several general observations about New Urbanism that provide some direction to the newly introduced land use regulations.

i. with its emphasis on the street as a public space, New Urbanism codes classified streets by their function as a public space, not just as a traffic mover.

ii. because of New Urbanism's focus on the interaction of all parts of the neighbourhood, lot-by-lot, the rigidity previously offered by the Euclidian zoning[10] was being shifted.

iii. Separation of uses into distinct zones would obviously be unnecessary and, in effect, will be prohibited. New Urbanism codes would promote, if not require, a mix of different types of uses within residential uses, as well as a mix of different price levels of housing with more subjective urban design concepts, to varying degrees.

The strength of this approach is that new urbanists think it is necessary for a location to be adapted to the proper typology for the physical development features of a place (Bohl, 2000). However, since New urbanism aims for places that are not only functional but also attractive to look at, these codes would put a greater focus on design guidelines. The emphasis on design extends beyond the site plan to include building design. Although design review criteria have been used in a few areas, such as central cities, historic districts, or thematic districts, New urbanism would necessitate a degree of design complexity across the board.

Obviously, in Europe this was not the case. Not only do European cities have completely different challenges in terms of urban form, but they also don't refer to an integrated approach

[10] The importance of zoning as a local planning tool was demonstrated in the well-known 'Village of Euclid v. Ambler Realty' case, which held that the general public interest generated by zoning outweighs the private interest in making the best use of their land.

to land development. The reason behind this is obvious: planning is considered a process that is closely linked to a country's history, institutional culture, legislative system, etc. Thus, even though the EU issues specific mandatory directives on sectorial issues, like water management, common agricultural policy, etc, the approach to planning is more flexible. The only unified instrument that regulates planning in EU is the European Spatial Development Perspective, which merely suggests principles for sustainable planning. Land development is even less regulated/unified, with instruments varying from Euclidian zoning and development regulations, to flexible zoning and well-established negotiating processes in land development. This is also linked to the categorization of spatial planning traditions from EU Compendium of Spatial Planning (CEC, 1997) into 4 models: land use planning, urbanist tradition, regional economic development and comprehensive integrated approach. Therefore, it is needless to say that it is challenging to develop a comprehensive model for land development in European countries, as it is suggested by the New Urbanism approach.

Box 3 – A glimpse of the 4 planning systems operating in the EU

1. ***The comprehensive integrated approach***, where planning is conducted according to a very systematic formal hierarchy, integrating different sectors but focusing more specifically on spatial co-ordination rather than on economic development;
2. ***The regional economic planning*** approach, in which the central government plays a fundamental role and planning has a very broad significance relative to the pursuit of broad social and economic objectives, in relation to the disparity of wealth, employment and social conditions;
3. ***The land use management***, where planning is closely linked to the task of controlling changes in land use and the authorities are the main actor, while the central government has the task of supervising;
4. ***The urbanism tradition***, which has a strong architectural taste and a marked concern for urban planning, the physical form of the city and the development control, are therefore present rigid zonings, codes, laws and regulations, but the systems are not so well defined and fail to direct political priority or general public support.

A number of larger and more detailed meanings of the word *"spatial planning"* are available both at the European level and at the level of the individual Member States since "spatial planning" is a term that lacks a universally accepted definition. For the purpose of this document the definition of the EU compendium of spatial planning systems and policies can act as an aid for understanding (EUROPEAN COMMISSION 1997, 24):

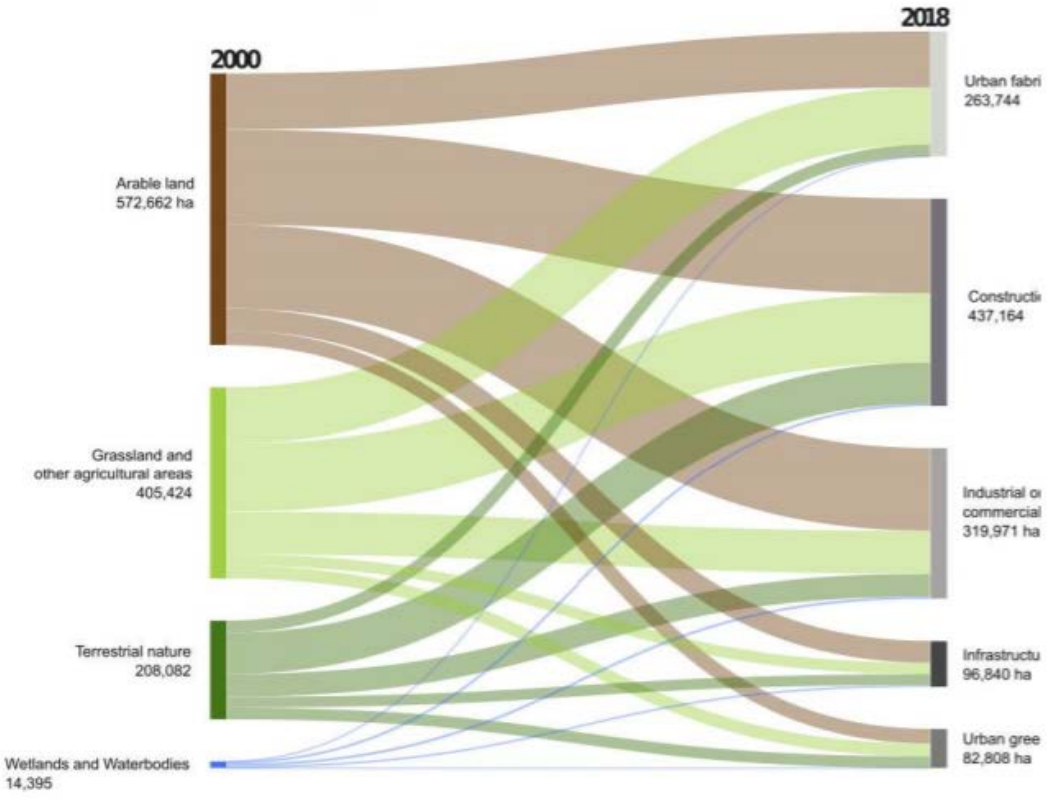
Generally speaking, spatial planning refers to the strategies employed mostly by the public sector in order to affect the future allocation of activities in the environment. In order to achieve these objectives, it is necessary to develop a more rational territorial organization of land uses and the links that connect them, as well as to strike a better balance between development demands and environmental protection needs, as well as to achieve social and economic objectives. Aspects of spatial planning include policies that aim to coordinate the spatial impacts of other sectoral policies, to achieve a more even distortion of economic development between regions than would otherwise be the case if market forces were left to their own devices, and to regulate the conversion of land and property uses. The competencies for spatial planning are delegated at the national, subnational, and local levels, respectively. The European Union does not have any broad competences designated in this area. On the level of the Member States, a diverse range of mechanisms for allocating the formal competencies in spatial planning are in place. These systems, which are founded in national planning heritage and custom, are vastly different from one another in terms of functionality. However, some common features can be distinguished (ESPON 2018, 14-26). In general, most Member States have a system in place where 3 levels of government are fitted with some sort of competence in planning.

- **At the national level**, a very large number of planning tools/approaches are based on a visionary approach, establishing broad objectives or a set of principles for spatial planning as a whole. National spatial plans and territorial development strategies are two examples of common sorts of tools.
- A common type of instrument **at the subnational (regional) level** is a strategy or framework-setting instrument, which defines explicit policies and references for decision-making while also providing a frame of reference for coordinated action. In Germany, for example, state development plans and regional development plans are in place.
- At the local level most planning instruments are regulative in nature. Typically, the local planning authority is responsible for the creation of instruments, with the municipal council being responsible for their implementation. Examples include land use plans, zoning regulations, and construction codes.

With on average 117.5 people living on each of the EU's 3 million square kilometres, it is easy to see why land use planning and management is such an important issue for the

Union. The way we use our land space can have major impacts on environmental conditions. In the 2000-2018 period, a little under 2.87 million hectares of land changed from one main land-use category to another, or about 0.6% of the surface area of ESPON space. Almost half of this (1.26 million ha or 44%) concerned a conversion to urban land. Most of this urbanisation came at the expense of agricultural land (78%); but a few regions in Austria and the UK (Scotland) saw newest urban land coming from natural areas. Only in Romania (-0.8%) and Bulgaria (-0.1%) did the share of urban land decrease as a whole, mostly in non-built uses such as construction sites or dump sites. In total, 8.6 times more land was converted to urban/artificial use than vice versa (ESPON SUPER, 2019).

Figure 9. Land converted to urban land use during 2001 - 2018 period in the EU Countries



Source: ESPON SUPER, 2019

The latest figures (of Romania and Bulgaria presented above) reflect on a particularity that can be found in the Baltic countries[11], or rather, the ones belonging to the former Soviet bloc. These

[11] A project aimed to understand spatial development and spatial planning in the Baltic Sea Region (Belarus, Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Norway, Poland, Russia and Sweden) is COMMIN, which promotes spatial development by creating "Common Mindscapes" i.e. mutual understanding by combining mind and landscapes, which aims to improve the exchange of transnational experiences and to make communication more efficient (http://commin.org/en/commin/)

countries have therefore seen a transition from systems characterized by structures, networks and institutions with a strong Soviet footprint towards a market economy and towards a new reality, that of the European Union. It was therefore a process of rapid evolution, characterized by numerous reforms, even radical ones, in order to be suitable and to access European structural funds, and thus be able to promote economic development, although it was driven exclusively by capital cities generating great disparities within the country. The same situation and phenomena can also be distinguished in the Western Balkan context, and therefore in Albania[12] as well.

1.4.1. Summary and first critical assessment

As to open a first gate for debate and draw a summary on the above review, it is evident that since the mid-century of XIX, the nature of the plan has shifted from an elitist, inspirational vision to a more comprehensive framework for community consensus on future growth. Its implementation features have shifted as well from some fiscally weak implementation advices to fiscally ground actions to manage change. And its format has changed from being a simple policy statement and a single large scale map of land-use to a combination of data, texts, time frames and rather detailed analysis. Designing / mapping land uses is still a common form of drafting development plans (especially in municipal level) and producing maps for this purpose are still emphasized, but are slightly being shifted to maps for development policy purposes rather than a specific policy about pattern of land uses.

And it is within this wave of shifting paradigms, that the planning practice has changed and the role of planning itself would require some changes. Planning theorists such as *Friedman, E.R Alexander, Faludi etc*. have too questioned the mid-century approach to planning, and have proposed changing in focus, process, subject, format and sometimes challenging even the idea of rational planning.

In response to thorough physical planning, each critic proposes his or her own alternative solution. There are some who offer extreme proposals, such as "doing away with the mapped land-use general plan or even with long - range planning for Euclidean space based on straight

[12] Albania, nd more explicitly Tirana Municipality, is the main case study of this research. Hence a thorough explanation and critical assessment on the situation of land use planning in Albania will be reviewd in Chapter III of this research work.

and parallel lines and angles of plane triangles (Friedman, 1993).” However, the ideas reflected in their solutions have a tendency to bring up the topic of inland land uses. In fact, no one could have predicted in 1980 the degree to which geographic information systems (GIS) would be used to link policy analysis to land use mapping, suitability assessments, sketch plans, and scenario planning. (Harris and Batty 1993). Planning, according to Friedmann (1993), should be normative and creative, as well as politically charged, transactive, and based on social learning and reflection. As far as land use planning goes, it is possible to find examples of cutting-edge practice that exhibit all of these characteristics. (Jacobs, 1992), on the other hand sees land use planning as: “a modernist conception challenged by postmodern phenomena, including a populist citizen movement, a redefinition of private property rights, and growing computer literacy. Yet these factors affect land use planning without rendering it obsolete”

As (Benevolo, 1967), rightly argues, “the last 30 years have taught people to recognize the essentially political nature of all decision taken in land use planning, but this recognition remains purely theoretical as long as planning is thought of as an isolated set of interests which must then be brought into contact with politics – a view which grew directly out of the gulf which opened up between the two in the early 1848”. Owen and Chadwick showed the plain truth that urban planning cannot be equated merely with planning in general, even though it is a political element and thus vital for any effective program to take shape. The improved economic and social links on which such activities depend must be achieved in order to establish a more satisfactory allocation of human activity.

Saying so, the goals of planning have always been very ambitious (and still are), one of which is to put planning at the center of the spatial development process, not just as a regulatory of land and property uses but as a proactive and strategic coordinator of all policy and actions that influence spatial/territorial development – and all of this in the interest of the general idea of a more sustainable and resilient environment. But changing attitudes would require time and resources. And more fundamentally, as planning itself lies in the very uncomfortable position between property market and diverse political demand, where win – win situations are difficult to find. For this purpose, it is necessary to talk about planning also under the loop of economic approaches/perspective. Nevertheless, when planning, planners must consider making it sustainable, providing potential financial resources to enable developments, and do it at an acceptable level of adaptation to resources, needs, and uncertainty.

1.5. Land / Land use planning under the lenses of the economic thought

Land, as explained many times in the preceding chapters, is a collection of many different attributes that perform a variety of important functions that are not always part of market transactions. As a result, an examination of the economics of land (and land use) is needed, as well as consideration of land's specific character, which stems from its distinct *physical, environmental/ecological, and institutional* characteristics, all of which affect/influence land decision-making.

The quantity of land, its value, its availability, and the basic characteristics of land resources are all part of the first, physical nature of land (that includes biological and technical factors). All these characteristics "define the limits on what operators can do in using these land resources." (Hubacek & Vazquez, 2002). All of the above characteristics clearly apply to the raw land. That being said, what a property owner actually owns is real estate, which only occurs as a product of dynamic interactions of institutional transactions.

Second, as mentioned in the previous sentence, the institutional aspect of land is the one that determines the 'rules of the game' in a community, creating the human-created constraints and unconscious behaviors that mold our relationship with land. And it is in the institutional scope that aspects such as culture, economy, politics, social and even traditional and religious factors take place.

Lastly, the purely economic factors of supply and demand, are the ones shaping the present land use.

But, analyzing land making decisions on its use and changes should not be solely guided by signals on price of land, or shadow prices under shadow economies; instead, this has to include historical and institutional factors as well. In the end, land is as much a social product, as it is a physical reality or economic theory, representing an aggregate of many different attributes. "Different uses of land call for a different mix of land attributes and affect the land in different ways, some of which might be very long lasting. Anthropogenic land transformation is as old as humanity itself but only in the last two centuries have land-cover changes become truly global in scale and now occur at unprecedented speed." (Hubacek & Vazquez, 2002).

For the majority of history, land transformations (particularly shifts from agricultural/natural regions to built-up areas) have been generated mostly by the agricultural revolution and the population expansion that has resulted from this revolution. However, with the advent of the

Industrial Revolution, which was aided by the globalization of the world economy, as well as the massive increase (nearing peak) in the world's population, technological advancement, and the development of mega infrastructure, the transformation of land use has accelerated even further. Perhaps even to the point where it is difficult to keep the situation under control.

In this sense, for the purpose of this research, it is also of interest to see how land has been treated in the market economy and how the economic aspect of land could inform on (future) innovative ways of influencing the decision making, in this scarce and unique product.

Land played a much greater role in the early history of economics than it does today, also because its role was purely linked with the importance of delivering food (production of wheat and corn), as well as due to its role as identifiable social prestige (class), in the contrary of today where other economic, social and environmental features are attributed to it.

The earliest economic thought on land, would come from the so called *Physiocrats*[13], for which "agriculture was the only sector being able to yield a net product", and the level of the agricultural output was the one determining the general level of economic activity, hence the only variable used for identification of different land uses. For this economic thought, "manufacturing and commerce were by contrast unproductive" (Hubacek & Vazquez, 2002). The Physiocrats' distinctive agricultural orientation is evident not just in their management of land, but also in their immobile view of the economy as a whole. If the economy is organized in accordance with the natural order, it will quickly reach a maximum level of output that is consistent with the amount of arable land available in the nation and the state of technology available (Gilibert, 1987). Many writers associated with what was eventually referred to as the Classical school of economics rejected both elements of their work.

The Classical economists, who wrote during the first wave of the Agrarian and Industrial Revolutions, coinciding with the rise of the industrialists and the beginning of the fall of the landlords, are the second group of the economic thought. This marks also the very beginning of the acceptance of technical advancement.

For Adam Smith, one of the fathers of this school of thought, the productivity of land (next to productivity of labor or improvements in transportation), was itself a precondition for economic development (Smith, 1776), hence assigning for a differentiation in the uses of land due to the

[13] Physiocracy is an economic theory developed by a group of 18th-century Age of Enlightenment French economists who believed that the wealth of nations derived solely from the value of "land agriculture" or "land development" and that agricultural products should be highly priced.

purpose and productivity. This thought was sustained and furthered with a shifting of attention from *land* as the main factor of production to a more abstract notion – that of *rent* (money payed for the use of land). In this notion of rent, Ricardo's theory states that "labor and capital shift from one unit of land to another, but land itself never shifts between alternative uses (different uses of land)" (Ricardo, 1951 - 1973)

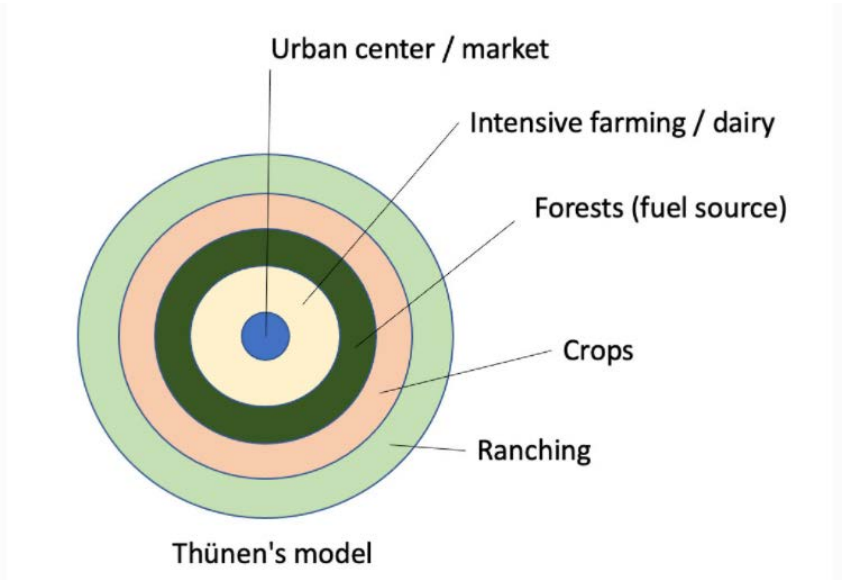
In this thought, while Ricardo only focused his concept of rent with regard to the qualities of land, Johann Heinrich von Thuenen (1875), shed light on different variable that determine/ influenced the use of land – the concept of distance. A system of concentric circles was devised in which bulky or perishable goods could be produced closer to a city and valuable and durable goods could be imported from a more distant location. He sought the principles that would determine the prices that farmers received for their products, the rents that they earned, as well as the patterns of land use that would accompany such prices and rent (see figure 4 below). The von Thunen model describes a city that is located centrally within an *'isolated state'* which is self-sufficient and has no external influences. This isolated state is surrounded by unoccupied wilderness, and the land of the state is completely flat and has no rivers or mountains to interrupt the terrain. The soil and quality of land are consistent and farmers in this state transport their own goods to market via oxcart across land, directly to the central city. Within this description, Von Thunen hypothesized that a pattern of 4 agricultural rings would develop around the city, on which (also as indicated in the figure):

1. Dairying and intensive farming occur in the ring closest to the city. Since vegetables, fruit, milk and other dairy products must get to market quickly, they would be produced close to the city;
2. Timber and firewood would be produced for fuel and building materials in the second zone, considering that before industrialization (and coal power), wood was a very important fuel for heating and cooking. Being very heavy and difficult to transport, it is located as close to the city as possible.
3. The third zone consists of extensive fields crops such as grains for bread. Since grains last longer than dairy products and are much lighter than fuel, reducing transport costs, they can be located further from the city.
4. Finally, ranching is located in the final ring surrounding the central city. Animals can be raised far from the city because they are self-transporting. Animals can walk to the central city for sale or for butchering.

Under this theoretical model, the general assumption is that "land prices decrease the further away you go from the city center' and that "there's a smooth transition in land prices from urban to rural if there are no planning control in place. As (Evans, 2004) states, the only implication about this case is that location of various activities within the urban area (in the absence of planning constraints) is determined by a tradeoff between the cost of transport to the center and the cost of land.

The explanation given above, states once again that even though the Von Thunen model[14] was created in a time before factories, highways, and even railroads, it is still an important model in geography and an excellent illustration of the balance between land cost and transportation costs. As even today, as one gets closer to a city, the price of land increases, though the factors influencing this raise in price not necessarily reflect on the same situation.

Figure 10. Representation of von Thuenen 4-Rings Theory



Source: Johann Heinrich von Thuenen *Der isolierte Staat* (1875), Own graphic interpretations

Following on this logic of the classical thought, ***the foundations for neo-classical economics*** was born. "The production-based approach to value in classical economics (also referred to as objectivism) is in contrast to the subjectivism of the marginalism approach of neoclassical economics" (Hubacek & Vazquez, 2002). For the very first time, during the period the notion of 'value' starts to being shaped. For neoclassical economists, value is a subjective entity

[14] This debate on model vs theory, and the way these preliminary models have sought their way through real life implementation and empirical evidence will be further elaborated and discussed throughout the thesis.

arising from the utility the good[15] gives to the beholder and its relation to other goods. At the turn of the century, the milieu of neoclassical economics could be described by the longevity of the industrial revolution, the pace of technological developments, shifts from food and fibre-based economies to mineral and fuel-based economies, and economies in the industrialized world that seemed to be independent of extractive industries (Randall & Castle, 1985).

Land was being reduced to the status of a factor of production and an object of consumption in accordance with the logic of the free market economy. Different functions of land and land resources do not have any intrinsic value according to this utilitarian logic and are only manifested as they are revealed by final demand. Thus, land's value is only constituted as it provides utility to humans, and the physical qualities of land are reduced to the willingness-to-pay in market transactions (Heilig, 1996). Individual producers and consumers should strive to maximize the utility they receive from their production and consumption decisions, such as the allocation of land or resources between alternative uses, while keeping in mind the constraints imposed by prevailing technology or resources as well as government policies. In this way of thinking, choices concerning land use are largely driven by the supply and demand dynamics in the marketplace.

The abovementioned assumptions are however countered by a number of economists[16], and while the debate still goes on, the statement becomes more and more irrelevant, given the fact that even in the most developed economies, the land market (also because of the uniqueness of this product) is indeed and inefficient one, and the decision making is, and never will be guided solely by the forces of demand and supply (Randall A. a., 1985).

To put it simpler and also in terms of land use changes, the economic approach to these changes uses a number of basic assumptions, the most important of which being that economic agents (hence consumers and operators) are rational entities, which in the end of the day only try to maximize their profit (income or even welfare in terms of utility), and they do respond by the price (stimuli under which these agents are influenced). Hence were prices being low, there's

[15] A good in economics is any object or product (factors of production) that is useful. A commodity is one kind of good. (Cambridge Dictionary, 2021)

[16] During the 1980s a renewed discussion of natural resources in mainstream economics was instigated, and concepts of sustainability were put for the first time forward by the International Union for the Conservation of Nature and later by the World Commission on Environment and Development (1987). During the discourse two main concepts of sustainability emerged: i) advocates of weak sustainability claiming that the aggregate stocks of artificial and natural capital (including land) can be replaced by human made capital; and ii) the advocates of strong sustainability arguing that the natural capital should be maintained and preserved. In between of this discourse remained the fact that there are certain stocks of critical natural capital, land for example, for which no substitute exists, hence they must be strongly preserved (Victor, 1991)

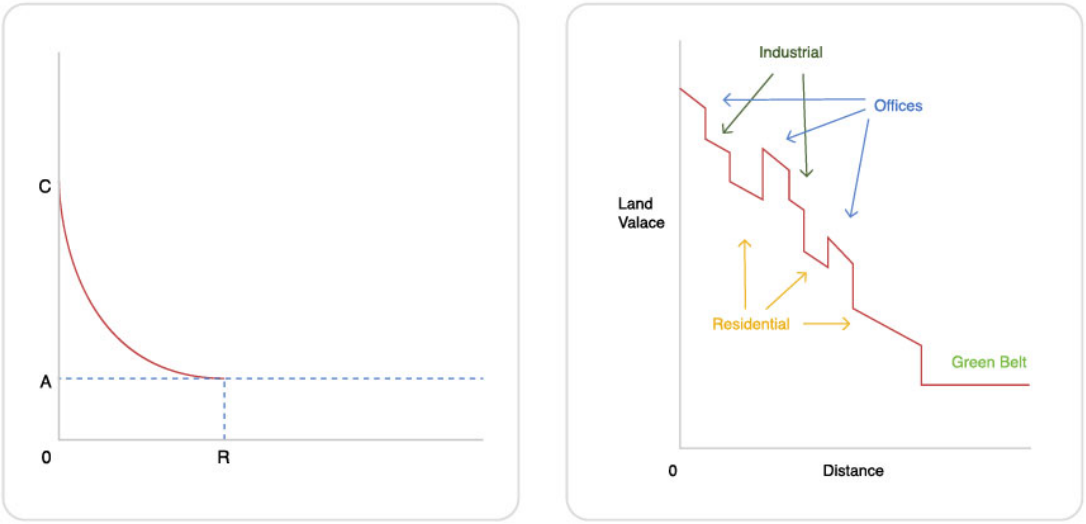
no doubt of buying more, and the vice versa when prices are being increased. This cause - effect reasoning happens in a quasi-experimental condition/ model, where the *"so-called economic human"* has all the necessary and accurate information to be able to assess the opportunities, its advantages and disadvantages, prices and make the best profitable decision. This reasoning is indeed true to most of economic activities (e.g. buying a stock of new technological machineries or raw materials for production), but individuals differ to the extent in which they measure their satisfaction and maximization of profit, and that becomes more challenging and difficult to measure when it comes to land. Particularly, land has often been owned for other purposes in life than maximization of income, and that because it entails both quantitative dimension (hectares of space that can be interpreted to x incomes / sq. meters) and qualitative dimension (fertility, solidity, geographic position etc. leaving space to different uses of it).

To parallelize it with the statement of the classical economist analysed above, the existence of the smooth transition between urban and rural land, and the shifting of land prices do not occur for 3 main reasons:

1. Land market is imperfect and inefficient
2. Use of land is affected by preferences and behaviour of land owners (which can be irrational to economists)
3. Land use is affected by planning controls which consequently affect land values and have a domino effect towards land prices, provision of utilities and so on.

Especially the last two reasons become important stating that the implication when assuming that planning controls are in place is that they at some extent will always limit / shift the supply of land for some specific uses. On the other hand, with inflexible planning constraints, land use conversions will not be possible to happen, hence the restricted availability of land will result (artificially) in higher land prices.

Figure 11. Comparison between graphical representation of Land Rent Theories: Von Thuenen's (in the left) and Neoclassical Theories (in the right)



Source: Allan W. Evans, 2004 and own graphical representation

So to conclude, when land resources are exploited in a way that gives the greatest and best return to their users or to society, they are at their highest and best usage. Increasingly, the highest and best use is subject to a variety of changes and challenges at the same time, for example, changes in the quality of a land resource, changes in technological advancements, changes in demand structure, changes in the rules of the game (institutional framework and provisions), or changes in other legal framework conditions, and, more recently, by a high degree of uncertainty in the course of life events.

As a result, I believe that, the economic nature of land and all economic factors influencing decision making in land are extremely important for the planner's job, and as a result, the interaction of economic factors (whether they be economic development-related or fiscal-related) is important to understand and be included in planning practice frameworks.

1.6.Gaps of the Reserch

Land use – based planning and the way it enormously effects the land market, public investments and the welfare of the final users constitute the broad scope of this research, though a roadmap towards the identification of the final scope should be drawn in this introductory part of the thesis.

The introductive – literature presented above highlights that though attitudes towards planning are shifting, the pressure to make decisions in the relatively short term interest of economic performance, will remain and be more difficult to reconcile with the future's development goals. In this very uncomfortable situation, planning function has become largely disconnected from other sectoral policies that drive spatial development patterns and quality of places. (Nadin, 2006). The lack of attention to the territorial dimension of development is most evident in the way that plans have been bounded by administrative decisions, ignoring for example the realities of housing markets and commuting flows across boundaries. (Nadin, 2006). Same issues seem to emerge in almost every context, though more evidently highlighted in developing countries context.

Alfred Bettman**,** an advocate for land use, reinforced the concept of city planning as a basic and key guide for city development, by stating[17]:

> *"The urban plan is a master project for the physical development of the city's territory. It constitutes a plan for the division of land between private and public uses, defining the general locations as well as the extent of new public infrastructures, squares and structures ... and in the case of private developments, the general distribution [of land areas] between different classes of use, such as residential, commercial and industrial uses."* (Bettman, 1928, 23)

In this scope, regardless of the geographical location, origin or size of an urban area, a rational pattern of land use evolves. This land use pattern is determined mainly by activities competing for sites through the forces of demand and supply – *demand* being the quantity of property required at a given price or rent and *supply* being the amount of property available at those prices and rent. Yet, that is only true when the market forces are the one guiding and determining the land use pattern.

The demand for land is a reflection of the profitability or utility derived from its use by current or potential users. While the supply of land in many countries is fixed[18], the supply of land for different uses can be either increased or decreased, due to market forces competing for different uses, spatial planning processes and land regulation imposed. The same could be said for the

[17] In the National Conference on Urban Planning, 1928

[18] Referring to the supply of land as a physical element, regarding its availability within a country / territory's boundary. Yet experiences for example as Netherlands has shown that supply of land could be increased with the adoption of avant-garde technologies or other land reclamation methods.

demand as well. For example, a change during planning processes from the agricultural land to urban land, causes the changes on the form this "new land use" is taxed, rises the challenges to local governments to provide services for the upcoming development, while in parallel the value of that land is raised effortlessly.

This brings on the idea that while urban growth and land use change analysis need to be linked with urban form and processes for it to lead to effective urban intervention ((Longley & Mesev, 2001); (Hasse, 2004); (Dietzel, Herold, Hemphill, & Clarke, 2005)), each urban intervention is linked to several fiscal decisions and issues as well. For example, a change on the agricultural land to urban land, causes the changes on the form this "new land use" is taxed, rises the challenges to local governments to provide services for the upcoming development, while on the other hand it itself rises the land value of this piece of land.

Therefore, it is exactly in this interaction between the market forces and the land use planning policies, in which the *land use allocation* takes place. Of course the process is accompanied with a lot of challenges as well as unforeseen events. Earlier in this research it is mentioned that land market is imperfect and inefficient, manifested especially under developing economies, meaning that land itself (as a scarce resource) is not being put to its best use due to lack of full information of actors involved in the transaction, and of course due to the fact that humans are irrational thinkers. In general planning is shown to suffer from the lack of a systematic analysis of land use markets. Yet at its heart planning not only regulates/constrains the property market it also shapes and stimulates it. On the other hand, with regard to public policy, much debate is given on the course of time with regard to planning as top – down approach, dictatorial, absolutely rigid etc.

Planning based on land allocation through land use plans designate areas of desirable and permitted development for new homes, new businesses new roads and new parks. And as this land use plan is put into practice, developers and landowners convert the land into more valuable uses. But the question here remains: Who gives the land owners/ developers the right to "gain" more money? And who carries the costs of developing such areas? What happens to the implementation of the land use plan, if the latter does not contribute to the betterment of the land value, on the contrary it decreases it? Does land use, though a traditional instrument within the spatial planning scope, influence development trajectories as a sole instrument?

On responding the first two questions, usually, based on literature and practice, local governments bear most of the costs, which obviously are translated to all residents' taxes and

tariffs. Secondly, land use as an instrument might ensure development or can completely decrease the overall welfare of the citizens, and given the very dynamic nature of both land markets and the evolving planning practices within which land use operates, dealing with these uncertainties in the process are merely avoidable.

As a result, land use planning tends to undermine/ not fully recognize some of the instruments or means to address uncertainties, and as a result contributing to the failure of the implementation of the 'plan'.

It is within this scope that the research is trying to understand the role of land use planning, and its continuous relevance and persistence (though being the oldest planning instrument) in a continuous evolving planning practice/theory, under the larger umbrella of territorial/ spatial planning.

While it is widely acknowledged that spatial planning is rarely implemented as intended as a result of the influence of political constraints, governance arrangements, informal processes, and competing administrations within and outside municipalities (Forester, 1989; Tudor et al., 2014), there is little empirical knowledge that would allow a generalization about how and when planning is implemented. In particular, In other cases, specific policies, such as green belts (Bengston and Youn, 2006; Siedentop et al., 2016) or urban growth boundaries (Bengston and Youn, 2006), are being evaluated to determine their efficacy (Gennaio et al., 2009).

Public and political support, financial and human resource input, and a consistent legal framework for execution are all factors that have been shown to be important in successful planning and implementation (van Rij et al., 2008; Bengston and Youn, 2006). Other studies discovered a significant gap between planned context and actual growth / development occured. (e.g. Waldner 2009; Alfasi et al., 2012; Ali, 2008). Political support (or a lack thereof), institutional structure and decision-making processes, highly dynamic socioeconomic processes, the ability of governments to tax, the existence of a strong local and national governance system, and the emergence of entrepreneurship opportunities have all been identified as very important factors in this implementation divergence.

Overall, striking a balance between strict land use management and future development flexibility remains a challenge, especially in cities with rapid population and economic growth. (Ali, 2008; Fertner et al., 2016). Developing countries, where changing political context are present, make no exception.

Studies on plan evaluation for land use allocation for urban areas are even scarcer, focusing solely on process performance, i.e., plans are considered effective when they are helpful for promoting decision making on specific land uses or infrastructural decision, regardless of whether they will impact planning outcomes (e.g. Abis and Garau, 2016). It is true that establishing causal links between planning and outcomes (effects on socio-ecological systems, including changes in the built environment) is extremely difficult and controversial, and some researchers believe it is nearly impossible. (Wong and Watkins, 2009). Moreover, "the neo-liberalist policy agenda in place worldwide since 1980s resulted in urban planning being more about promoting economic development and less about regulating land uses and guiding future development (Fainstein, 1991; Gerber, 2016).

Nevertheless, land use planning still remains one of the most crucial processes (and instruments as well) in almost all territorial planning practices.

The research will look into it through assessing its interdependency/interaction with the fiscal/economic approaches for addressing/ensuring development in a dynamic and uncertain environment. The research therefore aims to examine the relationship between land use planning and fiscal policies/approaches related to land development and the extent to which these two could guarantee development through the implementation of the territorial plan.

As such, several aspects could be primarily proposed here:

1. There are situations when **land use decision making/ land use changes are completely dictated by the land market** (forces of demand and supply) and costs on providing for infrastructure and services are completely borne/covered by the local authorities.
2. In most of the times, **land use changes are dictated by land use planning outputs** (usually for long period of times as well), **and cost for providing with the infrastructure and all social benefits are covered, or expected to be covered, by authorities**, despite who's really covering the costs for plan's implementation (or part of it)
3. There's a huge potential that **land use as a planning instrument/concept can make use of the fiscal policies to increase local potential for investing, as such guaranteeing the proper implementation of the spatial plan**. Yet this approach has its two-fold results. In fact, fiscalization is not simply underutilized, especially in contexts with unconsolidated property taxes and property systems that have many

challenges and problems. Sometimes, fiscalization is avoided by purpose, or misused. So care must be taken because instead of being an auxiliary instrument it can turn into an instrument that contributes to increasing inequalities and unfair capital accumulation.

While both aspects (1 & 3 above) can be applied in an idealistic context, there's a huge overlapping of both aspects in practice/reality. The interaction of market forces with the power of planning/land use planning instrument is itself bearing uncertainties and if not properly analysed, it will continue to pose a challenge for the role of land use planning as a powerful tool in sustainable city making.

Thus this study tries to tackle the abovementioned issues, through a critical revision of land use planning theories/models *(if those could be articulated*) and fiscalization of land use aspects under the influence exerted by uncertainty. On a more practical observational scope all these elements will be evaluated and analysed through a thorough observation of land use planning patterns and fiscalization approaches in the context of Albania[19] – as a developing country.

1.6.1. Defining the final gap

The effort of this study so far is to investigate how fiscalization of land use can boost the effectiveness of land use planning, as an instrument still relevant in planning practices, in a context of continuously developing countries where uncertainties affect plan implementation and improper resource allocation and decision-making process.

Being quite separated in a first glance, the attempt to create and carefully look at the connection of these three aspects pose quite some challenging issues:

1. **Land use planning (theory?)** – It is indeed necessary to put the 'question mark -?' before starting to fully analyse or give any definition to the theory (if) of land use planning, previously concerned about the planning theory itself.

   Broadly speaking 'land use planning' can be defined as the process of **regulating** the use of land (each piece of land having a specific use), a process usually done by a public authority, in an effort to promote more desirable social and environmental outcomes as well as a more efficient use of resources. As such, LUP can address systemic issues of policy

[19] The rationale on selection of Albania as a case study will be elaborated further in the chapter(s) below.

and institutional coherence, multi stakeholder partnership and high quality data availability, identified as essential factors to strengthen the means of implementation of plans, thus development.

The introduction chapter above brings to a systematic and chronological spectre the evolution of land use planning concept in the course of time, arguing that though having roots to a traditional planning period (1950), it seems still much present in the planning practices of today's. In this sense, even in the European context, land use planning has become more and more a central prerequisite for enhancing (spatial) development, whether it is on a small scale (village/local or regional) whether being a national / international objective (European Spatial Development Perspective for example).

Yet it is still difficult to determine whether there's a ground theory on land use, and the issue roots back to a fundamental question of whether there's even a planning theory itself, before coming to the question on a separate land use theory. Setting up this debate on 'theory' it is crucial for this research as it can be agreed that theory itself should inform and improve planning practices in ways that meaningful improvement could be reflected in our cities, regions and territories, and in the lives of people who live and work within this territory today and in the future. But whether there's a planning theory out there, still remains unclear and a subject prompt to debate. Defining planning theory is hard, because as many scholars can agree on what constitutes an economic or political theory – they differ as to the content of planning theory. Several reasons account for the complexity of defining planning theory. First, many of the fundamental questions concerning planning belong to a much broader inquiry concerning the roles of the state, the market, and civil society in social and spatial transformation. As John Friedmann has put it, planning theory has been "cobbled together from elements that were originally intended for altogether different uses" (Friedman, 1993) 131). Consequently, planning theory overlaps with theory in all the social science and design disciplines, making it difficult to limit its scope or to stake out a turf specific to planning. Second, the field of planning is divided among those who define it according to its object (producing and regulating the relations of people and structures in space) and those who do so according to its method (the process of decision making as it relates to spatial development). Third, planning theory is further divided into those who understand planning through analysing existing practices and those who theorize in an effort to transform planning practices. Thus, planning theory may be both explanatory or normative. And while all theorizing contains some sort of normative framework (even it is

not acknowledged or recognized), these forms of theorization follow different paths and ask different questions rooted in politically and analytically different concerns. And although many fields (such as economics) are defined by a specific set of methodologies, planners commonly use diverse methodologies from many different fields. Consequently, its theoretical base cannot be easily defined by its tools of analysis.

And it's in this middle ground where the very first gap rises in the research, on whether to consider land use planning as a separate theory (rather than a specific methodology/analytical tool in the planning practice/ spatial planning disciplines).

2. **Fiscalization of land** use remains quite a challenge for local authorities. The fiscalization of land use or the use of land use planning to encourage revenue production as a first order goal became quite important in the United States in the beginning of 1980 (as mentioned in the introduction part as well). Within this frame, the decision making process associated with growth would now incorporate the concept of fiscalization of land use, putting the revenue sustainability for local authorities as a first ordered issue, with the justification that accurate planning for capital projects in terms of urban expansion is necessary – after all, public funds are being used. So, more than 15 years ago, new methods and changing the approach of infrastructure financing started to be explored by the planning practitioners. As (Hackbart & Ramsey, 1992) would suggest, this shift will give an increased importance to capital budgeting and will lead to the development of new initiatives in capital finance. The public sector contributes greatly to urban land value through public works projects, land use changes, zoning and other public interventions, as such the use of innovative fiscal instruments related to land would ensure that communities could recover land values and reinvest it in public goods such as infrastructure and megastructures (health centres, schools et.), affordable housing and even economic development.

   The principal advantage to the increased number of techniques that can be used to finance (mainly) infrastructure is that they give the government/decision makers many more tools to tackle their burdens. In theory governments/decision makers should be able to match the tool with the projected outcome – the plan. And only if government becomes knowledgeable about the use and implications of the selected tool it is possible for more efficient decision to be made, hence plans/ project to be successfully implemented. Otherwise, expediency to finance in an era of constrains may lead to many undesirable outcomes. (Chapman, 2008).

The issue here remains, that these tools (weather being pure taxes or other innovative financial instruments) are difficult to get determined how they are being utilized in specific contexts. Are they being used extensively, enough, not enough or even underutilized in some contexts? And the question is ‘’Why?’’. At a first glance the answer might be simple: “… because also the thought /idea of land (as a resource/different uses of it) has shifted from being a purely economic product/good to a scarce economic resource (representing both a commodity and wealth). And on the other hand, decision making on land now imposes greater uncertainties in contexts of clashing or pressure from development”. On the other hand, while some governments manage to use land value capture instruments / innovative financing extensively others do not, probably due to unfamiliarity with the concept, lack of institutional capacity or even lack of political will. And while application of these instruments is considered a greater good, despite the risk that these instruments could oppose in terms of distributional justice[20], among scholars and planning practitioners, yet there has been little documentation on the application of the ‘fiscalization techniques; across different jurisdictions.

In this sense, the interrelation of ‘fiscalization’ with the ‘land’ has yet to be set and further be explored, in an era were paradigmatic shifts are happening, and nonetheless uncertainties are emerging at different scales.

3. **Embracing uncertainties is an emergent necessity**. Planning as a discipline stretches back decades, but the procedures, approaches and models employed (from visioning to normative or predictive methods), are not always up to the task of grappling with irreducible uncertainties. The certainty that we humans place so much value on appears to be an illusion more often than we would want. Weaknesses and instabilities caused by climate change, technological innovation, and societal upheavals are well-known causes of the terrible challenges and profound uncertainties that we are currently confronting ((Haasnoot, Middelkoop, Offermans, Beek, & Deursen, 2012); (Bueren, Klijn, & Koppenjan, 2003); (Rittel & Webber, 1973)). When designing interventions to guide future developments, they have an impact on society as a whole, and in particular policymakers and decision makers. It is these uncertainties that are part of the development trajectories of cities that present a challenge to spatial planners in terms of designing productive

[20] Usually the low capacity levels of authorities and in some cases the political willingness in unconsolidated context or continuous transition countries, could be unable to properly manage land value capture instruments. In this cases the risk opposed is that the rise on the values of land, though being captured could get distributed for other purposes or means, sometimes even prone of corruptive initiatives.

interventions. The majority of the time, uncertainties are associated with natural disasters, climate change, and other aspects of the environment in general. In order to make cities more responsive to the aforementioned changes, we argue that the first and most important step should be to shift the focus of planning from attempting to control and generating conditions to influencing and generating conditions under which development trajectories unfold. This is known as the adaptive approach to planning. [(Yamu, De Roo, & Frankhauser, 2016) & (Rauws & De Roo, 2016)].

But, uncertainties are not limited to these examples. Unexpected natural, political and economic events, coincidental confluences of gradual change processes feeding larger transformations and unforeseen societal responses to policy programmes illustrate how the reproduction of uncertainties occurs in many domains and at multiple levels of scale, driving towards a future which is difficult if not impossible to predict (Pawson, Wong, & Owen, 2011) (Walker, et al., 2003) (Scheffer, 2009). *Uncertainty is also mere change of circumstances and contexts. And here lies the first contradiction to planning, which aims at defining futures (lying in predictability), particularly the land use planning which assigns uses of land that are not changeable (or extremely difficult to) for a relatively long-term future. The main issue faced here is that of justice in use of land and the proper distributional justice of resources over the time, an issue on which fiscalization has as a principle to offer.*

Furthermore, it is within this context that territorial planners involved in urban development processes grapple with the question of how to deal with uncertainty in their everyday activities.

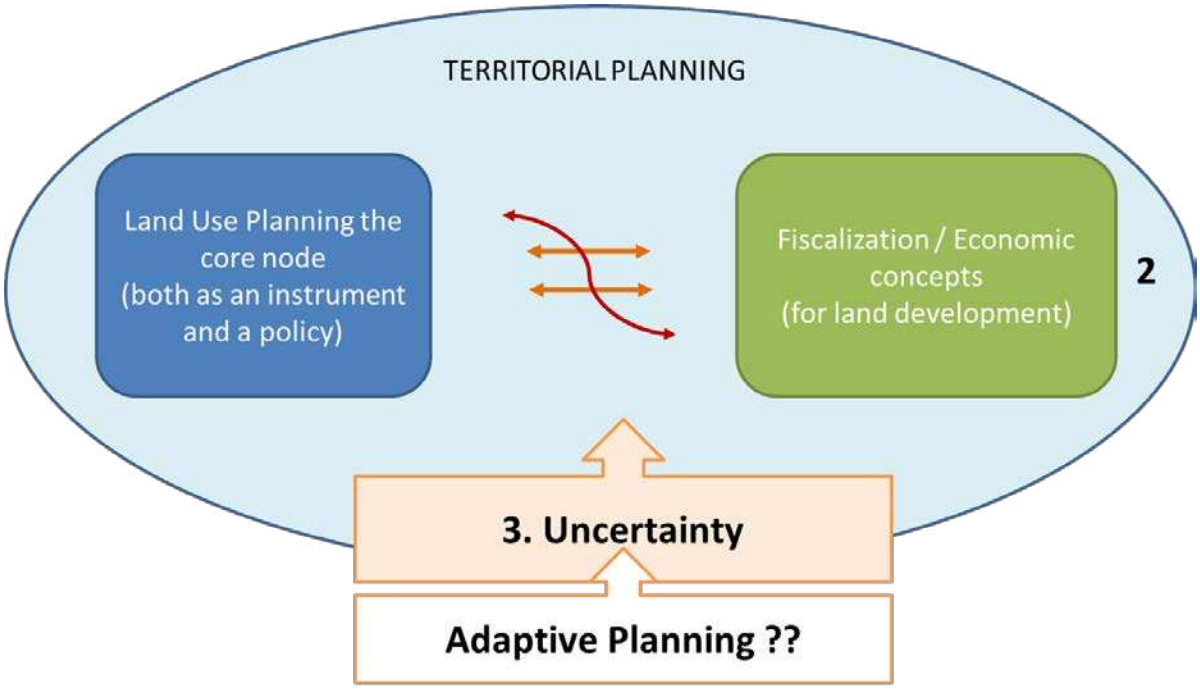
"… do not try to make circumstances fit your plans. Make plans that fit the circumstances…"

Cit. George S. Patton[iv]

It can be tentatively concluded from the snapshot issues discussed here that development occurs partly autonomously, very often outside the scope of the planner/planning process, and that the way a city trajectory unfolds is time- and place-specific. Furthermore, for cities to perform well in terms of development, it is assumed that they will adjust, transform, and innovate from within. As a result, the approach would be to concentrate on improving the responsiveness of

urban areas to both anticipated and unforeseen change, with the goal of enabling urban areas to function well under a variety of conditions while also ensuring proper implementation of the spatial plan, which would ensure the achievement of the 'primides / much desired development'. To be effective, this strategy must move the focus of planning strategies away from content (i.e. what) and procedure (in which case with whom) and toward circumstances for development and other tools/means of implementation.

Figure 12. First conceptualization of Research Gap and main correlation of concepts to be unraveled



Source: Author's own interpretation

Exploring all the abovementioned nodes seperately, brings forward issues that require further research. For instance, to what extent and in what way are all the three concepts/issues mentioned above coorelated, and how they influence one another? and what other dimensions worth researching do they exert to each other? In cocnlusion the research gap identified by this research would be formulated as following:

While there's an overall gap in identifying a purely land use theory, it is slightly evident that land use is constrained and influenced by financial/fiscal issues and vice versa. This gap in the theory of land use planning, and the continous discussion on the prelvance of land use planning as an instrument, even though the cuntinuous evolving approaches in planning, poses enough room for future research in planning. The question that we must rise here is whether the effectivness of land use planning could be boosted by making use of fiscalization

of land use approaches, especially to tackle drawback on land use planning as instrument in an uncertain environment. As such a studied interaction of these 2 nodes (under the general scope of uncertain futures) is relatively vague in the planning research / planning discipline and few answers might have been given on the question.

The further exploration of this gap, would be both of a theoretical importance as well as contribute to the improvement of process and planning approaches in a context of a very dynamic transition countries context. This of course could add additional insight and contribute to adaptive planning approaches, by adding elements or new means for pursuing sustainable planning under uncertain events.

1.7. Objective of the Research

In view of this preliminary context analysis the overall objective of this research is to contribute to the theory and approaches of planning practices, maybe even adaptive planning, for uncertain development trajectories (expected and un-expected changes of the context), through assesing on the interactive process in which the fiscalization of land-use could boost the effectivness of land-use planning, decision-making and final allocation in Tirana, Albania, during 1990-2020.

Taking in acount several theoretical and methodological aspects on land use planning theories, as well as assesing on the relevance of land use planning approach despite continous paradigmatic shift in planning, should inform the research on the evolution and emergent needs to address the issue on a theoretical bases. Concepts of fiscalization of land use and uncertainties are brought and discussed in this research as an additiona influencing element on the land use planning approaches. Through a thorough empirical study, founded on a qualitative research basis, a model of exploring their (land use planning, fiscalization of land use and uncertainties) interconection shall be observed in the case of Tirana Municipality in Albania[21]. The research intends to do so by collecting empirical evidence, analysisng conditions of decision-making processes and by conducting assesments in this specific territory.

[21] Albanian context is considered as a representative case study, fulfilling the following criteria to carry on the research: i) transitional & dynamic context in which planning approaches are in continuous paradigmatic shifting; ii) implementation of plans has always been facing difficulties; iii) due to its dynamic context uncertainties have been emerging and iv) its fiscalization system is still weak making it hard for municipalities to implement plan and secure the public general good

Hence the main research question would be formulated as:

What model of step by step qualitative research can be drawn investigate the interactive process in which the fiscalization of land-use could boost the effectivness on land-use planning and finally influence decision-making and final allocation making use of the case of land development and planning in Tirana, Albania, during 1990-2020?

In order to shed light on the above specific objective and main research question, 6 sub-questions are formulated as follows. Questions 1-4 try to get answer on a theoretical discussion level of confronting existing theories in land use planning as well as unravelling and thorough dicussion on the concept of fiscalization of land use and uncertainties. Questions 5 & 6 are raised based on the selected case study of Tirana Municipality in Albania, and try to get answered in the empirical part of the research.

The highlighted text in the subquestions below, represents the link between the objective/main esearch question, and the emphasis is made also to help with the identification of the key concepts, which are further explained and theoretically unraveled in the theoretical review chapter.

Sub-questions:

1. Which theories could we identify on land use planning that answer on the persistence and relevance of land use planning despite the continuous shifting in planning approaches?
2. To what extent can land use allocation and land use decision making, secure relevant outcomes of the planning processes?
3. In which way land use planning is being threatened and challenged by the emerging uncertainties?
4. Which are the features of fiscalization of land use and in which ways could it influence land-use decision-making and allocation?
5. What have been the patterns of land-use planning, decision-making and allocation in Tirana, Albania during 1990-2020?
6. How could fiscalization of land use possibly boost the effectivness of land use planning for development process in a countinous transitional and dynamic context, as that of Tirana Municipality in Albania

In order to be more explicit, the following preliminary methodological table is prepared in order to better guide the research study towards findings and conclusions. The table below, drafts a list of variables, methods, and possible indicators that will be tackled throughout the research. Indicators and variables to be unravelled in the theoretical framework regarding the concept and theory of land use planning are not included in this table.

Table 2. Methodological approach towards Research Questions - variables, indicators and methods

Sub Questions of the Research	Description	Variables	Indicators	Data collection method	Data analysis method
*1. Which **theories** could we identify **on land use planning** that answer on the **persistence and relevance of land use planning** despite the continuous shifting in planning approaches?*	literature based discussion and investigation on theories on land use planning	na[22]	land use planning methodologies as explained by Faludi and McLoughlin	Desk Research on Theories	Critical Theoretical Discussion
*2. To what extent can **land use allocation** and land use decision making, secure **relevant outcomes** of the planning processes?*	Literature based discussion on land use effectiveness	na	na	Desk Research on relevant articles	Critical Theoretical Discussion
*3. In which way land use planning is being threatened and challenged by the **emerging uncertainties**?*	Literature based discussion on uncertainty and adaptive planning approaches	na	na	Desk Research on relevant articles	Critical Theoretical Discussion
*4. Which are the **features of fiscalization of land use** and in which ways could it influence land-use decision-making and allocation?*	unravelling on concepts (not broadly used/known)	land fiscalization - concept ; fiscalization of land use -concept	na	Theoretical Review	Critical Theoretical Discussion
*5. What have been the **patterns of land-use planning, decision-making and allocation** in Tirana, Albania during 1990-2020?*	(1) Understanding the changes on land use patterns from 1990 - 2020; (2) understanding drivers for decision making and land use allocation	(1) Corine Land Cover; (2) Spatial/Territorial Plans (approved and not approved); (3) aerial photos of Tirana; (4) data on land market prices (real estate and state's references)	land use pattern change through the course of specified timeframe on 5 main land use categories	1) Desk Research ; 2)Case Study; 3) Context observation and analysis	Analytical / Qualitative / Quantitative
*6. How could fiscalization of land use possibly **boost the effectiveness of land use planning for development purposes** in a continuous **transitional and dynamic context,** as that **of Tirana Municipality in Albania***	Hypothetical scenario based on Tirana Municipality case study	1) information on GLTP indicators ; 2) authors calculation on possible scenario of fiscalization of land use	1) revenue outcomes; 2)planning indicators (FAR)	1) Desk Research; 2) Content analysis; 3) Measurement analysis	Analytical / Qualitative / Quantitative

Source: Authors own interpretations

[22] Not Applicable

1.8. Definite problem statement and significance of the research

The land use patterns of a territory (urban or rural) are continually changing in time, regardless of its geographical position, genesis, or size. This is due to human activities seeking out the optimum places through demand and supply pressures laid forth by the market. In addition to their constructed environment, cities, as previously said, are more than the sum of their parts. Regarding their geographic boundaries and characteristics, land policies, ranging from planning for development purposes to the collection of land-based revenues, as well as emerging environmental challenges and the provision of affordable housing, infrastructure and a variety of adequate services, play a significant role.

Experiences in drafting local territorial plans, territorial development strategies, detailed or partial plans etc. have shown that land use planning as an instrument is one of the key tool in assessing territorial and developmental impacts of urban growth. And while research has shown that urban growth and land use change analysis have to be linked to urban form and processes to lead to effective urban interventions (Longley and Masev, 2008), any urban intervention is associated with several decisions / fiscal issues.

Good land use policies that improve the lives of urban people are being developed on a frequent basis as cities continue to grow and develop their own regulations. Responding to this (as well as the climate problem, which is a very expensive proposition, we should add) comes at a tough moment for most local governments, which are already under financial strain. As such long term developments in land use patterns are surrounded by uncertainties. The complexities of land use, exemplified by the fact that land use interacts with most aspects of everyday life, and the incertitude of the future make it difficult to develop founded views and visions on future land use. In this context several attempts have been made in the past decades to model land use in order to get a better understanding of land use patterns and mechanisms that change land use, though relatively few have attempted to integrally model all land use categories, and the connection or setting up the proper correlation to other aspects is relatively difficult (the lack of sound integrated theories may be a reason for this).

From an economic perspective, land is one of the factors of production, which attracts investment and generates wealth at the same time when socially is a sensible and scarce source, thus taxes on land (or property) are the oldest and most common form of taxation. But the European and developed countries experience has shown that the basic forms of taxations are

not really enough to finance all the required development. In this sense a new generation of taxation and appropriate and dependable land-based income sources (will be referred as fiscalization of land use) will be required to finance the delivery of urban services, to sustain the rise of our cities' populations as well as to cop with emerging uncertainties of the future.

In this framework, the Municipality of Tirana, being the main growth centre of the country, is the most interesting case to study in terms of fiscal capacity, and other ways to foster urban growth and provide better services.

1.8.1. Significance of the study

The research aims to finalize with a conceptual framework and a set of policy recommendation on how the governments, decision – makers and planner can best make use of application of land use, as an instrument which not only guides development, but seen combined with the fiscalization of land use approaches can also address uncertainties in terms of future development and of governance.

On the other hand, the methodology and empirical exercise carried out in this research can be set as an example of establishing a model of step by step qualitative research, which can be later adapted and carried out by other researchers facing same development challenges as those in the specific case study of Albania.

In this context, the research is of an international relevance because it critically discusses theories on land use planning, an ongoing debate among scholars as well as builds based on several authors, researchers and scholar's opinions. At the empirical level, though focused in Albania, the research looks closely to almost same challenges the developing/ transition countries face in terms of urban development, fiscalization issues and addressing needs of the local governments in uncertain context.

On a greater context (external significance), the research will contribute to the theoretical debate on land use planning theories through assessing several theoretical pillars in this regard and discussing further the need, presence and practices of land use planning. Besides that, the research will parallel the fiscalization of land use and land – based financing, under the umbrella of uncertainty and adaptive planning. The later commonly referring to the uncertainties coming from natural disasters, and somehow neglecting the changing of systems, governmental dynamics, changing of planning concepts etc. Moreover, the research contributes

to the overall discussion on the value of local land use planning instruments in relation to better land management, influence on the situation of local finances, the provision of services, etc. These elements, especially in the continuous transition countries, where planning systems are not well established to guide future developments and in the same time are prone to the emerging uncertainties, especially those related to the changing of contact, become really important for starting the debate and opening new quests for future research.

To summarize this research work is significant for the following:

- Planning scholars and researchers on the spatial / territorial planning field. It starts an interesting and thorough discussion with regards to land use planning theories. The critical discussion presented here may be used as a reference for conducting future research. The methodology and the empirical data presented by the case study, may help future researchers in testing the validity of other related findings with regard to land use planning approaches and fiscalization of land use in similar contexts.
- Planning authorities and Decision-makers. The innovative approaches presented in this study will help planning authorities and decision-makers (in Albania and also other countries with similar challenges and burdens) to unfold another possibility for boosting the effectiveness of land use planning in a rising uncertainties context. The results presented in the empirical part of the research could enable them to assess and evaluate their decision-making with regard to land development and pursue other more efficient and effective ways with regard to land use planning implementation in the future.
- Urban Planning Related Universities and Planning students. The research helps as a cross-reference for other planning student eager to carry on related research's. The methodology and the step by step qualitative research model presented in the study is a good example to be used by both students and universities in their planning curricula.

To conclude, at the national level, the research will address the problem of underutilisation of land use planning as the main planning instrument as well as the misuse of it in the last 30 years. To do so, throughout the empirical research, an analysis of land use patterns in the capital of Albania is assessed and a documentation / cataloguing of changing pattern from natural / agricultural to extensive and intensive urban use has occurred. On the other hand, an assessment of planning approaches and shifting of paradigms in the planning policy in the country are documented and analysed through looking in detail to the planning laws in place

during the 30-year period. Lastly, the fiscalization issues are described through an empirical exercise in order to distinguish features of interaction between land use and fiscalization in the context of Tirana, as a continuously changing and developing context.

1.9. Key Concepts

These key concepts represented and explained in this sub-chapter will serve as the basis for unravelling the theoretical discussion in the second level (chapter), as well as help in building up the architecture of the empirical analysis, through designation of indicators and approaches to be analysed. The key concepts in the above objective are: land use, land use decision making, land use allocation, uncertainties, fiscalization of land use, land use based financing, interactive process and model of rigorous design. The theories to refer to are those on spatial planning and/or land use planning theories, land based market theories and the body of literature on uncertainties, land use planning and planning practices, land base financing, and fiscalization of land use and insight on step by step qualitative research.

Land-use planning – Land-use planning is the systematic assessment of land potential alternatives for land use and economic and social conditions in order to select and adopt the best land-use options[23] . Its purpose is to select and put into practice those land uses that will best meet the needs of the people while safeguarding resources for the future. The driving force in planning is the need for change, the need for improved management or the need for a quite different pattern of land use dictated by changing circumstances. Land must change to meet new demands yet change brings new conflicts between competing uses of the land and between the interests of individual land users and the common good. Planning to make the best use of land is not a new idea. Over the years, it was the farmers making plans season after season, deciding what to grow and where to grow it. Their decisions have been made according to their own needs, their knowledge of the land and the technology, labour and capital available. Later with the emerging of cities, competing for different uses for land has become even more challenging. As the size of the area, the number of people involved and the complexity of the problems increase, so does the need for information and rigorous methods of analysis and planning.

[23] A summary of the concept as defined by Food and Agriculture Organization, 1991; The Encyclopedia of Global Change; The Oxford Companion to Global Change; The Dictionary of Environment and Conservation

A huge theoretical discussion rises around the concept of land use planning. Is it an instrument within the wide scope of spatial planning and planning practice, or is it a theory into the enormous world of planning discipline? Both concerns raised here are deeply analysed in the theoretical framework, with the aim of shedding some light in terms of (i) if there's a theory on land use planning, why does it fail to be fully and successfully implemented in different reality complexes? Wouldn't that be easy that the implementation of the theory would impose a successful implementation of the plan, hence guaranteed development? (ii) if land use planning is only considered as an instrument within spatial planning/planning practices, how is it possible that being the oldest form/tool/mean in planning its presence has always been so persistence during the paradigmatic shifts in planning practices?

Land use planning as an instrument belongs to the set of instruments explained by the containment paradigm, as described by (Nelson, Sanchez, and Dawkins 2004, 342, as cited in Angel, et al., 2011).

Containment policies restrict land development outside the designated urban area through encouraging infill and redevelopment. Arguably, the use of containment paradigm may function in mature planning systems, where control over the territory is high and development scenarios are predictable due to abundant data on land and population. (Blei, et al., 2018). Nevertheless, applications in real life of the principles of containment (i.e. green belts, yellow lines, etc.) have resulted to be unsuccessful for a series of reasons, especially in developing or transitional countries. Arguably, the use of containment paradigm may function in mature planning systems, where control over the territory is high and development scenarios are predictable due to abundant data on land and population. (Blei, et al., 2018).

Box. 4: The containment Paradigm

Containment has been defined as follows: "Broadly speaking, urban containment programs can be distinguished from traditional approaches to land use regulation by the presence of policies that are explicitly designed to limit the development of land outside a defined urban area, while encouraging infill development and redevelopment inside the urban area" (Nelson, Sanchez, and Dawkins 2004, 342).

Urban containment is advocated as the antidote to sprawl. It can limit the growth of endless cities, increase urban population densities, reduce the excessive fragmentation of urban footprints, lessen car dependency, revitalize public transport, conserve farmland, protect nature, rejuvenate central cities, decrease the cost of infrastructure, save energy, and reduce carbon emissions. (Angel, et al., 2011)

A list of advantages and disadvantages of the containment paradigm are listed as following:

Containment paradigm has shown great success in (especially) developed countries with strong planning systems in place. The following can be said for its advantages: - Restricting "endless" cities - Reducing of soil fragmentation - Reducing of car dependence - Encouraging public transport - Protecting nature, farmland and resources - Revitalizing city centres - Reducing the cost of infrastructure - Saving energy and reducing carbon emissions	In more complex contexts, in developing countries, such paradigm has proven to not be viable, for the following reasons: - Urban growth boundaries that are too rigid to accept tight-fitting - Misunderstood and misused urban infill development - Unnecessary densification in areas where the provision of services is no longer possible - Overestimation of regulations that, in turn, are not implementable and effective - Lack of a robust arterial road network, which serves to meet the transit needs

Land-use decision-making. In order to make a proper definition on the term itself, it is crucial first of all to look separately to “land use” and “decision making” as two different phrases. While the first is extensively defined and explained, the later can be defined as: the process of making choices by identifying a decision, gathering information, and assessing alternative resolutions. A step-by-step approach to decision-making can help with making more careful and intelligent judgments by structuring important information and outlining options in a systematic manner. A decision is defined in psychology as the cognitive process that results in the choosing of a belief or plan of action from among a set of different possibilities that are available to the individual.

In this sense, decision-making is the process of identifying and choosing alternatives based on the values, preferences and beliefs of the decision-maker. Decision-making can be regarded as a problem-solving activity yielding a solution deemed to be optimal, or at least satisfactory. It is therefore a process which can be more or less rational or irrational and can be based on explicit or tacit knowledge and beliefs. Tacit knowledge is often used to fill the gaps in complex decision making processes (Brockman & Anthony, 2002). Usually both of these types of knowledge, tacit and explicit, are used together in the decision-making process.

Land-use allocation is the process of allocating different functions or activities (or uses) to a specific territorial unit within a spatial context, in order to maximize the socio- economic

benefits of this specific units with the aim of emphasizing the well-being of people and their communities to promote social equality in living, health and education. Land use allocations, as a process within land use planning, is no easy task, as the process itself involves large volumes of data, complex spatial operations as well as a multi-objective trade off.

On another note, (Ligmann-Zielinska, Church, & Jankowski, 2005) defines land use allocation as a normative model that recognizes and evaluates current land use pattern and introduces changes that promote compatibility of adjacent land uses, neighborhood compactness, infill development, and politically defensible redevelopment.

Urban and regional planning, forest management, reserve design, site restoration, facility location, land acquisition, and other fields are all covered by models involving the distribution of spatial activities that are not specific to any of these domains. (Bammi et al, 1976; Brotchie et al, 1980; Chang et.al, 1982; Wright et al, 1983; Gilbert et al, 1985; Benabdallah and Wright, 1992; Dökmeci et al, 1993; Minor and Jacobs, 1994; Williams and ReVelle, 1996; Xiao et al, 2002; Aerts et al, 2003; Aerts and Heuvelink, 2002; Brookes, 2001; Cova and Church, 2000; Nalle et al, 2002; Ward et al, 2003; Williams, 2002).

As (Malczewski, 1999) informs, "the majority of land use allocation models involve integer programming, where the variables are often binary, and represent two-choice decisions of whether or not to allocate a particular activity to a specific site."

Several attempts are made in order to facilitate the process of land use allocation, in providing land use simulation models (Cellar Automaton CA, Land Use Scanner, Clue-S, Land Transformation Model (LTM), Classification and Regression Trees (CART) and Multivariate Adaptive Regression Splines (MARS)). However, all the above-mentioned models aim only at predicting, or offering scenarios on future land uses rather than providing some optimization scenarios of land use spatial configurations, as land-use allocation is always a non-linear, multi-peak, geospatial-related problem and it is impossible to generate optimal solutions using exact methods over a large area with non-linear objectives (Liu, Peng, Jiao, & Liu, 2016). The major shortcoming of most allocation models is the absence of existing land use patterns in model initialization (Church, 1999, 2002). Most of the time, the models are used to convert entirely undeveloped (green-field) regions, where every allocation of activity to the land under consideration is completely new to the model (a revolutionary approach). This is a particularly weak assumption in urban planning, which by and large entails the adjustment of an existing situation (an evolutionary approach), rather than the construction of something entirely new.

"In brown-field planning (i.e. adding to, taking away, or transforming an existing configuration) there must be the capability to solve for a new configuration which maintains much of what currently exists and which adds or moves specific facilities to better locations" (Church, 1999, p.302)

Adaptive planning for uncertain development trajectories: Planning (as a science) itself is characterized by a high level of complexity, a long (probability) process, many involved and impacted stakeholders, and a high investment cost in order to bring it to life, operationalize it and serve its primary and sole purpose (development). Due to these characteristics, uncertainties are unavoidable, and unexpected changes on an economic, environmental, technological, social or societal and political level can impact the forecasted financial and societal costs, benefits and effects of these planning processes.

Uncertainty increasingly gains attention in planning for almost every system's management (residential, land, water etc). The need to handle uncertainty is "highlighted by a recognition of non-linearity" (Milly et al. 2008), "an acknowledgement of social complexity" (Healey 2007) and the "rapidly increasing sophistication of models" (Walker et al. 2003). When planning for extended periods of time, such as in the case of climate change adaptation for example, it is very vital to be able to deal with uncertainty. (Van der Vlist, Ligthart, and Zandvoort 2015). But uncertainties, as stated several times during this research, are not only those of natural disasters or implied by climate change. Uncertainties unravel themselves also on a socio-economic context or changing on the political context, decision making processes etc. Adaptive planning so far has dealt mainly with the first group, integrating careful analyzing and proposing mitigation measures during the planning process, even if the plan's timeframe is very long. Yet, uncertainties unraveled as part of a changing context are less expected, and as such comprise the darkest side of the "unknown" during plan. For this reason, very few literatures can be found in explaining adaptive approaches in dealing with this kind of uncertainties and no planning methodology is proposed / articulated by scholars in discussing about the matter.

Fiscalization of land use: There's a twofold way on defining this key concept for the purpose of this study.

In the first one *"Fiscalization of land use"* implies that the system of local public finance exerts an influence on local land use decisions. (Wassmer, 2002). Here meaning that the government activity through its taxation policies has a direct impact on possible outcomes with regard to land use allocations. This definition builds up on the practices of municipalities of countries on the US, which on their planning practices aim to regulate local land uses with an eye on the fiscal approaches[24]. As such, municipalities and county governments in the US also use local incentives to attract desirable land uses within their boundaries. In this regard, it could be concluded that either it is the taxation incentives that attract specific land uses, either the use of land use planning and development to encourage revenue production, that define in one hand the definition of *"fiscalization of land use"*.

The second definition is based on the concepts of land-based financing and land value capture instruments, which are used to refer to a variety of instruments that help local governments increase their revenue base and generate funds that will assist them in meeting their service delivery, infrastructure development, and maintenance objectives, and thus contribute to sustainable urbanization goals (as its final general aim). Land-based financing methods have considerable potential for linking the value of urban development (which itself is impacted by land allocation practices) with public revenue generation, in growing urban areas. On these bases, there is an agreement that urban development should be financed, at least in part, through capturing the increases in land value resulting from public investment or broad urban trends, as highlighted as well by (Chapman, 2008) that *"... new growth must pay its way – both for operating service provision and for the financing of infrastructure"*.

Both concepts are equally important for this research, and are critically analyzed in the theoretical analysis below.

Interactive process / **Process Interaction** is a model of managing parallel or concurrent processes by defining how data between these processes is exchanged and how the processes are synchronized with each other. an action which is influenced by other actions. An example of interaction is when you have a conversation. Among the most common forms of social interaction are exchange, competition, conflict, cooperation, and accommodation.

[24] For more information and case studies, Fischel's (1985) book on The Economics of Zoning Laws, especially chapter 14, offers a widely explained introduction to zoning in the US and the use of fiscal approaches towards it. On another note, Ladd (1998) provides a recent summary of land-use regulation as a local fiscal tool widely used in the US. Both book's references could be found in the Reference section of this study.

These five types of interaction take place in societies throughout the world. Whenever people interact in an effort to receive a reward or a return for their actions, an exchange has taken place. In this research study the interactive process is studied under the scope of fiscal policies undertaken at a specific period in the main case study and its specific land use /planning approaches.

Model of step by step qualitative research: In this study this term is particularly and thoroughly explained, as it sets the basis of the methodological approach to the research, and in the other hand it is the main element on ensuring the answer to the main research question raised. Hence it is crucial that before jumping into practice of building the model of step by step qualitative research for the specific purpose of this research, try and theoretically explain the notion of it. As usually defined, qualitative research is the process of gathering and evaluating non-numerical data (e.g., text, images, videos, audios or opinions) in order to better comprehend concepts, views, or personal experiences of participants or the one carrying out the research. It may be utilized to get in-depth insights into an issue or to create fresh research ideas for further investigation and development. When it comes to qualitative research, there are several techniques to choose from, but they all tend to be flexible and focused on preserving rich meaning when data is interpreted. Grounded theory, ethnography, action research, phenomenological research, and narrative research[25] are some of the most commonly used techniques.

Deep and insightful interactions with the data are a prerequisite for qualitative data interpretation, in particular, in the generation of grounded theory. The researcher must also employ imaginative insight as they attempt to make sense of the data and generate understanding and theory.

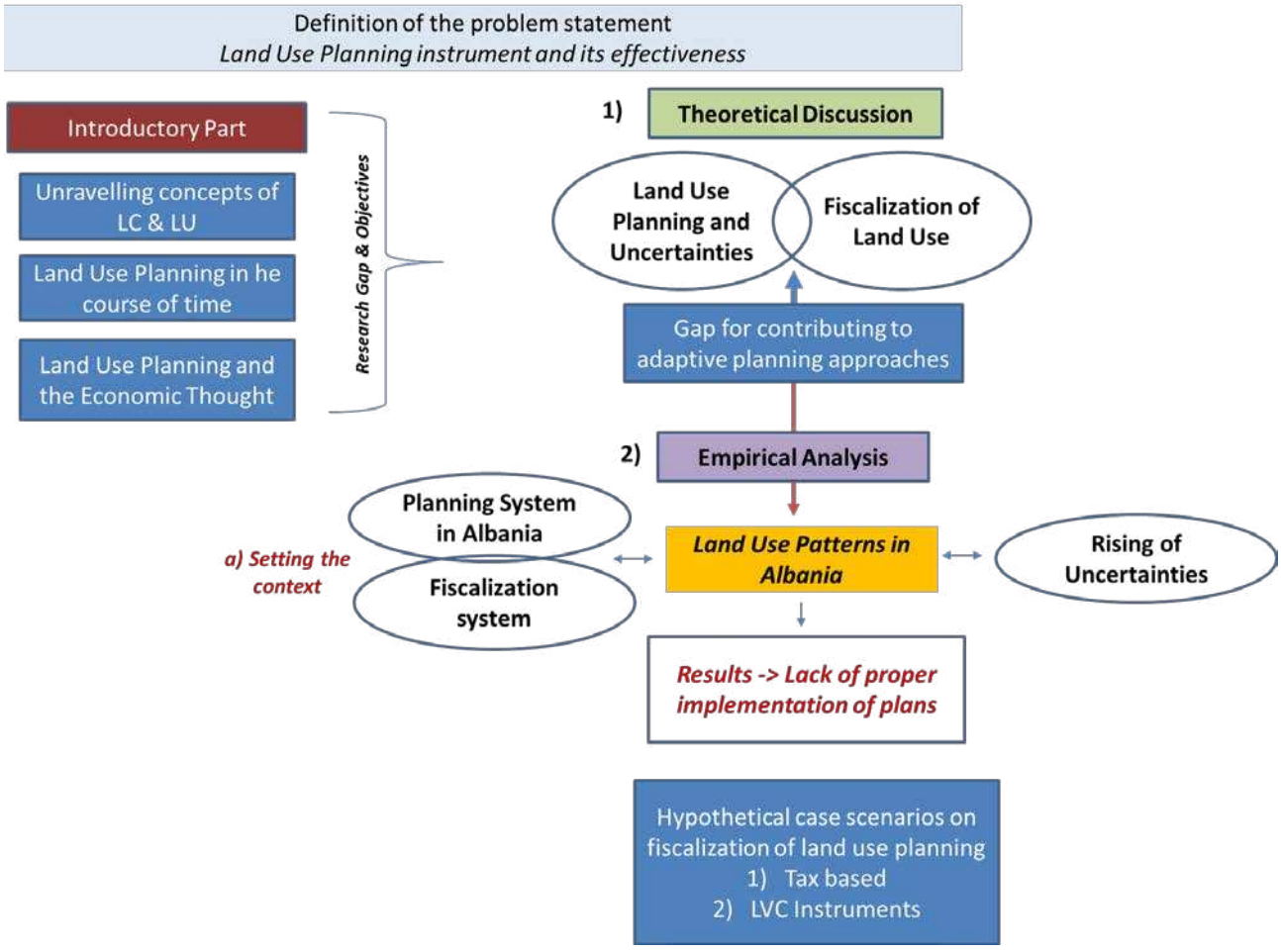
[25] The qualitative approach taken by this research study is thoroughly explained in the methodological part of the research in the following sub-chapter.

1.10. Methodology and Research Design

The research is broadly based in a thorough critical theoretical discussion as well as the practical and empirical part which facilitate the process of analysing the land use planning approaches in the main case study, that of Tirana Municipality in Albania.

The first part of the research is mainly focused on theoretical part of the study, starting with the unravelling of the key concepts identified, as well as confronted theories with regard to land use planning. The second part on the other hand, will tackle the empirical part of the research, based on a case study approach to observation, with the focus in Tirana Municipality, as a representative case study for the research topic.

Figure 13. Conceptualization of Roadmap of the Research Topic



Source: Author's own interpretation

In terms of methodological approach, two approaches are considered in applying this research:

1. The grounded theory for qualitative research. – Grounded theory refers to a set of systematic inductive methods for conducting qualitative research aimed toward theory development (Charmaz, 2009). The methodological strategies of grounded theory are aimed to construct middle-level theories directly from data analysis. The inductive theoretical thrust of these methods is central to their logic. The resulting analyses build their power on strong empirical foundations. These analyses provide focused, abstract, conceptual theories that explain the studied empirical phenomena which is sustained by the case study approach below.

2. Case study approach to observation – is a research method based on an in-depth investigation in the case Albania's Tirana Municipality where both land use patterns and interaction of the latest with the fiscal approaches are carefully observed and analysed. The proposed case study relies both on qualitative and quantitative data which aim to carefully identify the key issues of the case in relation to the theoretical concepts.

With regard to data collection method the following is approached by this research:

- Observation, based on recording of main land use patterns changes in Tirana, illustrated by maps (from approved and non-approved territorial plans from 1990 – 2020); illustrative images of development sites in Tirana, and data gathered on land price changes

More precisely, following up with the research, there are 4 main steps which constitute the broader research framework, presented as following:

A: Key concepts are identified and are unravelled through literature review and critical theoretical discussion (Chapter 2). The list of key concepts is presented in the chapter above, where a direct link with the research objective and main research question is made. While few concepts are unravelled discussed above, few other which constitute the main nodes of the research are elaborated, analysed and critically discussed below. As such the Theoretical part of the research is mainly focused on the land use planning theories discussed under McLaughlin and Faludi's works, as well as a careful selection of research articles supporting and confronting their approaches.

B: 2 Main Blocks of evidence (Chapter 3) are built and used in the empirical analysis chapter. In the first block land use patterns in Albania are analysed to prove that land use as a planning instrument have been extensively used in the Albanian context (more specifically in

Tirana) to promote higher property values in specific areas within the municipality boundary. The following indicators, tools and approaches is used here:

a. Through literature review, a critical discussion on paradigmatic shifting on planning approaches in Albania is made. The context is enriched adding to the discussion parallel issues such as decentralization policies in Albania, Territorial reform, and the context of fiscalization related to properties and land

b. To assess land use patterns, the aerial photos of Municipality of Tirana, from the Google Earth archive and orthophotos for 1994, 2008, 2015 and 2018 are observed and analysed.

c. Corine land cover database is used to determine the land cover changes in Tirana, through making use of GIS system. The available data of Corine for 2000, 2006, 2012 and 2018 are used to draw calculations on the 5 main land cover types and their changes through the years

d. A database on the changes on the land values between 2000 and 2020 is drawn using two main sources of data: i) indicative land values as determined in various DCMs in the given years and ii) secondary data/information gathered through researching previous articles and real estate agencies.

e. Maps, written text, land use indicators and other information based on all territorial plans of Tirana Municipality (approved and not approved plans) is used to describe the changing in approaches of land use planning in Albania

f. Photography cataloguing on main changes in specific areas in Tirana Municipality, on which evident extensive development could be observed.

The second block analyses the connection between fiscal approaches and land use decision making, through investigating the potential that land use as instrument could have in generating municipal revenues. Under this part two main data ae collected and analysed following also the concept of "fiscalization of land used" as explained in the theoretical framework.

a. Land use potential is unravelled taking into consideration existing fiscal policies in Albania (direct calculations based on existing taxes strongly related to land use)

b. Land use values are discussed by bringing cases of hypothetical situations while making use of the innovative financial instruments (land value capture instruments). Here different case studies/ specific areas within the city are observed and analysed.

C: A final discussion is made based on the results of the abovementioned empirical blocks, to show that neither land use planning, nor fiscalization of land use can operate alone and contribute to the spatial development.

D: Conclusions resulting from the analysis and research work, together with any recommendations are drawn, aiming to: i) contribute to the theoretical discussion on land use planning and fiscalization of land use ii) create a model of rigours research design in order to improve the planning practice in Albania.

To conclude, the theories that are unravelled, and on which the Albanian - Tirana case study is tested for are not covered by any other research work done previously in Albania. The final aim of the thesis is to present a comprehensive step by step model of qualitative research on how the effectiveness of land use planning could be boosted by fiscalization of land use in a context of rising uncertainties. This model, aims to be adaptive to any changing situation, and definitely avoids the 'one size fits all' approach. Rather it's an initial point on how future researchers and decision – makers could start new quests in making land use planning more efficient, effective and in the same time adaptive.

On this methodological note, the following should also be considered and justified in designing process of the research:

1.10.1 Limitations and risks to the research.

This research takes into account all the limitations set out in the study, such as the lack of an accurate database on land use, lack of information on potential investments carried out in the study area as part of the plan projections, or lack of the precise indicators of monitoring the implementation of the plan. In fact, the following detailed analysis on this limitation is made in order to set out the assumptions that on the other hand will help carrying on the research:

Other limitations and assumptions can be listed as following:

1. There's lack of availability on the updated data related to properties and property market in Albania. Due to very dynamic context and the fact that the Albanian real estate market, after the 90s operated in its larger part informally, no accurate data with regard to transactions made on land could officially be found in the Cadastral system of Albania. Yet, available data on land values could be found and used for research

purposes in all relevant approved Decision of Council of Ministers (DCM) on "Reference land prices". These reference land prices, though not 100% accurate (as they are not reflecting real value on plot base), are the main legal source of information based on specific zones of municipalities. To confront these data, information gathered from real estate agents and other research articles is used. The reason of doing so is, also to prove the existence of a parallel shadow market of land on which transactions are being made, and by which the dynamics of land use patterns are somehow affected.

2. There are difficulties in assessing all GIS systems (or other digital platforms) used when drafting the Local Territorial Plans in Albania. The issue behind this limitation is due to the fact that previously drafted GLTPs in Albania, and more specifically for Tirana Municipality, were drafted mainly in design related software's (such as AutoCAD) and important information on land related indicators and features (such as land use, development indicators etc.), were only given as a written text in the specific Regulations Document accompanying the GLTP folder. The use of GIS system, as a requirement when drafting the GLTPs was only introduced in 2014, when the era of drafting the new territorial plans for the 61 municipalities (after the TAR) started.

   As such maps used in this research refer to the publicly accessed document updated in the official sites of municipality, or as contribution by Co-Plan Archive.

3. There's no other project or study dealing with the issue of fiscalization of land use in Albania. While many studies refer or asses land use changes, the issues tackled in this research are not previously explored by any research

II. CRITICAL THEORETICAL ANALYSIS

Following on the brief explanation of the key theoretical concepts analysed in the chapter above, the theoretical discussion made in this chapter aims to shed light to the main concepts of this research study: *land use planning.* The critical theoretical discussion made here seeks on analysing land use planning in two main directions: a) land use planning under the influence of uncertainty and b) fiscalization of land use planning, concept and approaches.

2.1.Land use Planning and Emerging Uncertainties

Land use planning is the main concept, around which this research work is designed and carried on. As the first research question of the research remains the unravelling on the persistence of land use planning as an instrument in the planning practice, despite its features as a rather rigid and old instrument, two main paths are important to be unravelled here. The first (2.1.1 below), tries to understand the positioning of land use planning rather as a theory, a methodology or something in between both, in order to understand its role in the planning practices despite the continuous shifting in planning approaches in time. Having set this discussion, new approaches to planning are slightly touched, those on adaptive planning approaches as to both open a new gap for further exploration, as well as to shed a glimpse of light in the discussion as weather land use planning as a quite rigid instrument could fit in the contexts of rising uncertainties of today. Brief conclusions in the end of each chapter are provided.

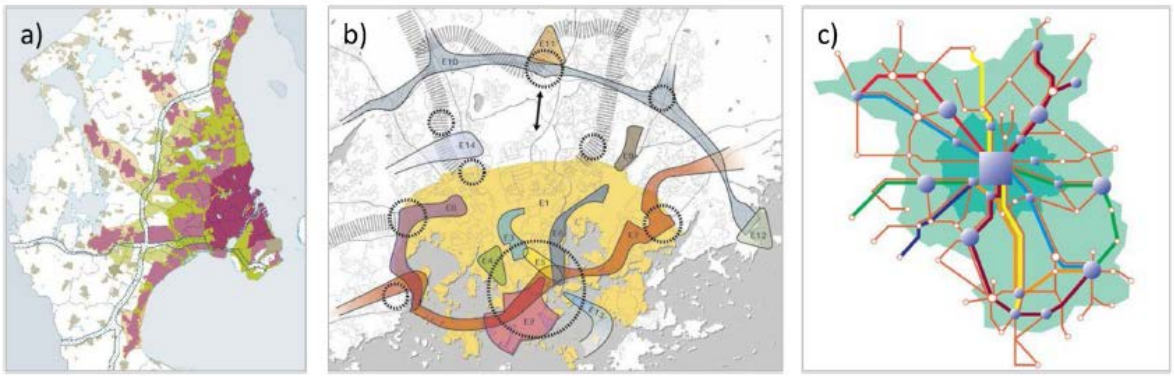
2.1.1 Land use Planning – Theories, Methodologies and in Between(s)

Continuous changes in land use remain "one of the key processes of global environmental changes" (Magliocca et al., 2015; Turner II et al., 2007; Verburg et al.,2015) , and as such, studies for this topic have gradually shifted from only focusing on simple patterns of land use (or land covers) to an analysis of dynamic interactions within the socio – economic and ecological systems and their impact on the territory (Rounsevell et al., 2012; Rindfuss et al.,2004). In this sense, land use (and consequently changes in land use) can be described as the result of a very dynamic interaction between political/institutional, economic, cultural, natural, spatial and technological driving factors and their corresponding actors/stakeholders

in a given specific territory on a very specific course of time, which comprise the overall land use allocation.

While assessing and discussing land use patterns and land use allocation is not the primary focus of this research, it is critical to emphasize the role of land use planning and spatial planning policies in a specific context as a major driving factor for many different land development processes that ultimately result in the implementation of the plan at the end of the research. In light of the fact that researchers have only recently begun to pay attention to plans, policies, and regulations on land use within a specific context (in contrast, for example, to the fact that data on economic, natural, and sociological conditions have a long history of being used to explain land use patterns and allocations/decision making), this is not an easy task. But ***"a widely accepted premise is that, especially in urban territories, spatial planning - a multifaceted activity with many purposes, including project planning, master planning, land-use planning and strategic planning - influences patterns of land use and land cover"*** (Couclelis, 2005).

Figure 14. Graphical illustration of planning intentions as geographically accurate maps with (a) clear and (b) fuzzy borders, or as (c) diagrammatic representation. a) Copenhagen Fingerplan (2007); b) Helsinki Strategic Vision "From city to city region "(2009); c) State Development Plan Berlin Brandenburg (2009).



Source: Hersberger et. al, 2018 in Urban land-use change: The role of strategic spatial planning

"Amongst the many purposes of spatial planning, spatial planners and governments have been trying to steer urbanization processes with the aim of developing sustainable cities and regions" (Collier et al., 2013; Albrechts et al., 2017). However, "conceptualizing the role of planning in guiding land use allocations is a great challenge" (McNeill et al., 2014). This is partially due to the fact that research on the contribution of territorial / land use planning to land use allocation is situated at the confluence of two paradigms (Briassoulis, 2008; Hillier, 2007):

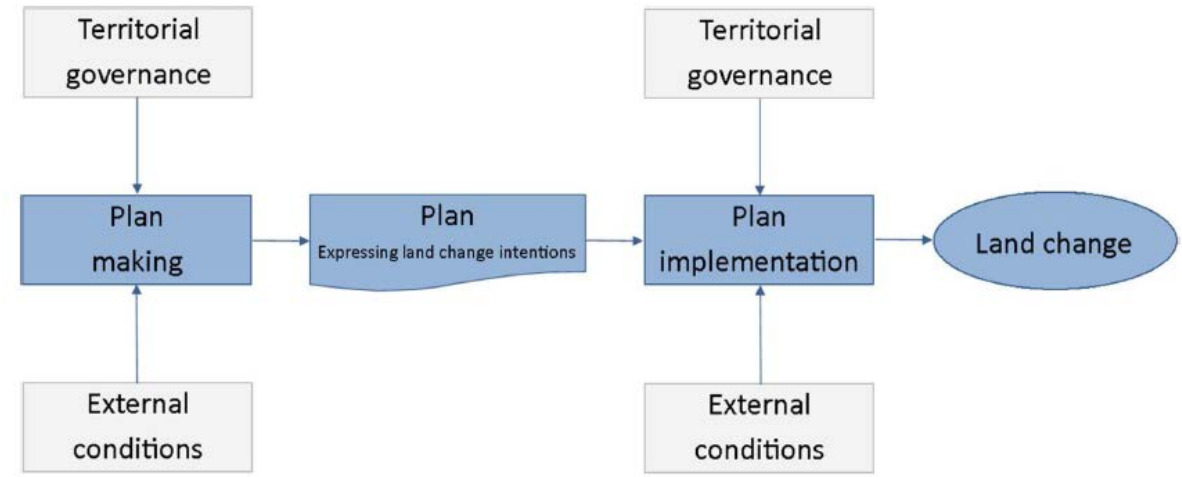
a. Planning experts, among themselves, prefer to highlight the relevance of context and the social construction of space on a regular basis.
b. In the subject of land use, scientists and practitioners have a tendency to assume that there are objectively definable and measurably observable facts in their work.

There is a significant difference between the two paradigms in terms of how they position themselves in respect to the concepts of territory and uncertainty. “Many urban geographers and planning theoreticians conceive space as a social construct (Lefebvre, 1991; Harvey, 2006) and expect future urban development to be open ended. For them, *uncertainty* is inherent; to be expected and subject to exogenous factors (Graham and Healey, 1999). Land use scientists, on the other hand, quantify and model space by establishing a causal relationship between drivers and outcomes, as well as attempting to identify sources and levels of uncertainty in land cover projections. (Alexander et al., 2016).”

As a result, planning and planning policies are not well integrated in quantitative land - use assessments and further research or protocols should be developed for the future land use allocations by planning practitioners, so the aimed of planning implementation will be achieved .

In addition to economics, scholars from a variety of other disciplines, including sociology and anthropology, have contributed theoretical understandings of the mechanisms that lead to spatial patterns of land use, as was mentioned at the introduction of this research study. (Christaller, 1933; Alonso, 1964; Fujita et al, 1999; Von Thunen, 1966). Other researchers have focused on urbanisation from the perspective of either economic geography (Arthur, 1994; Fujita et al, 1999; Krugman, 1999) or from a more technology-driven perspective that focuses on the interaction of land uses through cellular automata models (Torrens and O'Sullivan, 2001; White and Engelen, 2000; Wu, 1999). As a result, numerous factors that impact land-use change interact and result in complicated patterns that vary according to the local cultural, socioeconomic, and biophysical context at various geographical scales. (Lambin et al, 2001).

Figure 15. Conceptualizing the impact of territorial planning on land change through spatial information expressed in plans, territorial governance, and external conditions



Source: Hersberger et. al, 2018 in Urban land-use change: The role of strategic spatial planning

So the prolonged discussion, aimed to be theoretically unravelled in this sections is whether there's an existence of land use theories, that could be without doubt be established in any given context, or there are only land use models in the scope of spatial planning. Therefore, I will not limit this research to a single academic discipline or typical land-use conversion, but will instead employ a multidisciplinary approach (fiscalization and uncertainty in planning in general) to investigate the effect of various determinants derived from various theories explaining land-use allocation for a variety of land uses.

To do so, in this chapter 2 main questions will be raised and theoretical research will be unravelled as following:

A. *Is there a land use planning theory, which eventually guides planning approaches and lead to plan's implementation?*

The reason for posing this issue in the first place is due to the lack of a single, holistic land use planning theory or narrative that is based on ongoing consensus among scholars. (such are those of economic theory for example). It is touched a bit in the introductory part above, that the issue related to that is that in the big domain of planning as well, there is and will be always

a debate on the articulation of theories *in* planning, *on* planning or that are *related to* and influence planning as a discipline[26].

In this regard to address the question raised, the research builds its arguments on *Alexandros Lagopoulos* recent research work, which tries to pose an argument whether there's an epistemological possibility for establishing middle ground theory of land use planning, by trying to compare the methodological components of comprehensive planning against a series of land use planning approaches.

As is well known, following the dominance of the physical planning and design approach, which was closely related to architecture and engineering in the first half of the previous century, a genuine paradigm shift occurred in the 1960s with the development of the first land-use planning theory in the full sense of the word; "*procedural planning theory or also called comprehensive planning theory*[27]. (Lagopoulos, 2018)

Comprehensive planning, as Nigel Taylor sees it, it's the part of the first three major shifts in urban planning theory since 1945, a shifting which occurred from:

(a) Physical planning ------ > (b) Systems and Rational Planning
(c) Rational Planning ------ > (d) The view of planning as a political process
(e) From these modernist forms of modernist planning ---- > (f) Postmodernist planning theory

Taylor's idea that this paradigmatic shift is much more of a nature of radical changes in the main notions and experimental practices of planning as a scientific discipline has been sustained (previously as he then retreated from it), but his saying is much more of an abstract level, resulting in a rather orderly (yet rigid) image. The image of planning today is much complex, expressed as a great mosaic, as (Lagopoulos, 2018), compares, where competing land use planning theories and/or methodologies occur. Aside from that, planning methodologies, perhaps even more so than addressing planning theories, could provide a more complete picture. In the end, methodology is second only to theory in science, and it is this that allows us to get from pure ideas to applications. This is of course true for many theories, yet contrary to these, in applied domains such that of planning which aim to be operational and achieve real

[26] Further reads on this matter might be Faudi's lifelong works

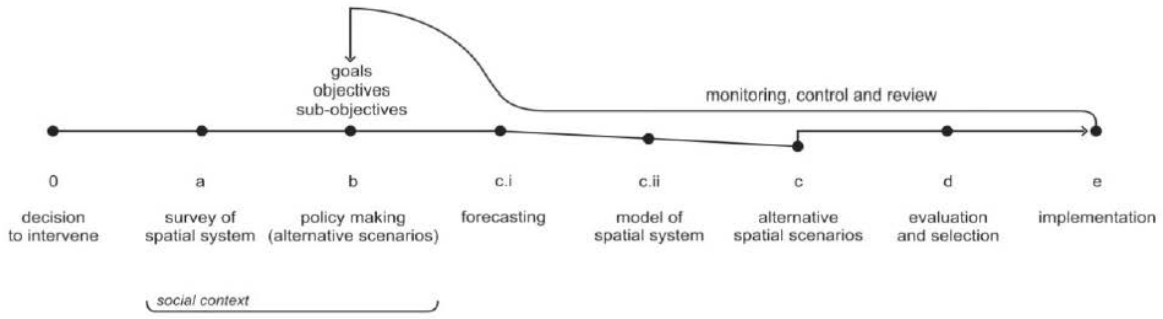
[27] Confusion should not be created with the difference in terms/concepts used in the introductory part of the research. The procedural planning as a concept here refers to the theory mainly used to explain the contemporary plans of the 60's as represented in the introductory part and the planning approaches emerged as paradigmatic shifts in the late 80's.

results, the emphasis should be given to methodology rather than pure theories. This primacy of methodology is recognized by Andreas Faludi, who proposes to replace the term "planning theory" with "planning methodology".

To start the discussion on land use planning theory, the classical approach to planning theory of J. Brian McLoughlin ideas will be considered. The issue general and human ecology, system theories, operational research, and decision-making theories were all incorporated into his theory and then applied it to the subject of location theory to complete the picture. Thus, McLoughlin defined planning as a process related to the human ecology, since he believes that space is an ecosystem, but that the goal for which it will be utilized by the humans living and working in it determines the type of ecosystem it is.

As can be distinguished by the figure below, McLoughlin comprehensive (land-use) planning model is comprised by 6 main stages; starting with Stage 0: the political decision to intervene to designated area/ territory and continuing from stage "a" – survey on the spatial system to "e" – implementation of the plan.

Figure 16. The components of comprehensive land use planning model by McLoughlin



Source: McLoughlin 1980 in (Lagopoulos, 2018)

After stage 0, the following phase is to survey the space system or, otherwise, to examine the environment that we are planning, known as a thorough scan. Almost every planning methodology has this stage regardless of the kind of scheme we develop and implement.

After this thorough examination/ surveyance of the territory setting up Goals and Objectives is one of the most important stages. This phase is strongly intertwined to the policy-making process as well as the evaluation of many alternative scenarios. This collection is organized in a hierarchical manner, starting with objectives and progressing through action programs. Specifically, the sub-objective level and action program in this case are related to the specific intervention on the paper/map that is related to land usage in this case. According to

McLoughlin, formal and informal groups as well as the general public supply formal and informal groups and general public with direct input on both the planning and the implementation of the goals and objectives of political leaders and the elected, while mass media and public statements by representative groups contribute information to the planning process.

From setting up of the planning goals, the model presented, suggests moving forward into formulating possible course of action. This step (c), as represented in the figure above, is comprised by many small actions to take place including forecasting of the future development, establishing or deciding on the spatial system to testing the alternative scenarios (stage ci and cii). When it comes to planning and logic, McLoughlin's discussion is limited to the present stage. However, projecting the program into space, which is the design component of the design process, is far from linear, as it requires a large number of possible spatial combinations as well as the idiomatic logic of design, which is absent from his proposal.

Coming to the last two components, in stage d, McLoughlin proposes the comparison and evaluation of the alternatives (the one discussed in the previous step). The goal here is to delve further into the evaluation and examine the costs and benefits of each plan (scenario) in order to go as far as feasible in terms of analyzing its overall impact. In order to progress, it is necessary to create quantifiable indicators for assessment, which should be derived directly from the objectives and goals that were established in the earlier phases.

Lastly in the final stage, a control mechanism should be established in order to tackle the so called ‘taking action stage’ of the model presented here. Yet, changes might be proposed during implementation (and that’s what planning practice has taught us indeed), and their influence should be measured to see if they deviate the system from its intended path.

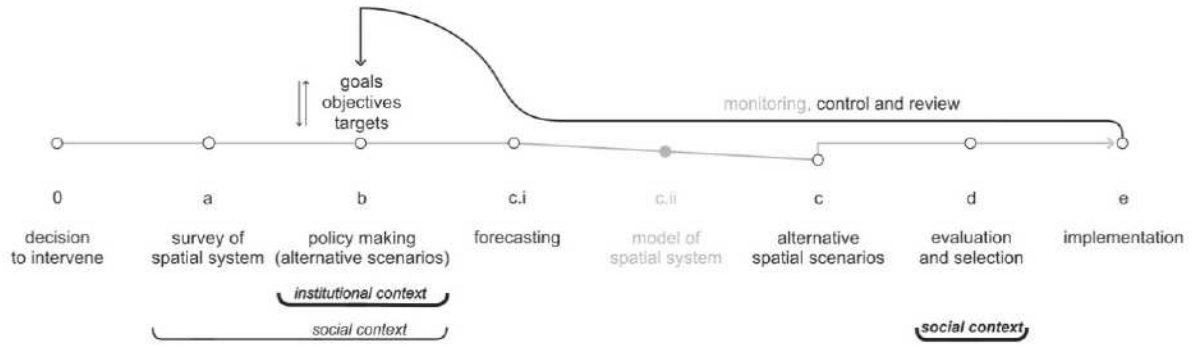
! In this regard, McLoughlin thinks that, in combination with implementation, a lesser or greater examination of the plan and its control mechanisms, as achieved through changes in a continuous control phase, is necessary. The evaluation process is necessary, he argues, when new ideas or political, social, or economic developments result in new demands and ambitions. This means that the evaluation process must be repeated several times, with each subsequent return to stage (b) and, eventually even at the stage 0..

Faludi's approach to planning theory

The other approach (also classical) to planning theory assessed in this chapter is Faludi's rational planning. Rather than being theories in planning, these 'procedural' theories, according to Faludi, are theories of planning that are concerned with the structure of the planning process and operations (or planning theories). This is where Faludi distinguishes between normative planning theory (rational process of planning practitioners), which is believed to be the same thing as the normative planning theory, and empirical planning theory (rational process of planning practitioners) (organization and procedures concerning planning). As outlined in Faludi's critical-rationalist planning theory (later called planning methodology), the logic "of planning as a rational process of thinking and action" is included into the construction of a model for planning agencies.

When describing planning methodology components, Faludi refers to the same ones mentioned by McLoughlin, but he emphasizes the feedback linkages that exist between components. As goals–objectives–targets, the McLoughlin three-level hierarchy is preserved, but Faludi argues that this pyramidal structure has greater flexibility since he incorporates bottom-up elements.

Figure 17. The components of comprehensive land use planning model based on McLaughlin model revised by Faludi's rational planning narrative



Source: Faludi's rational planning methodology in (Lagopoulos, 2018)

Two important components may be highlighted in this process: the first is the critical role played by the institutional framework and the planning agency, which provides the general goals and objectives, and the second is the function played by the planning professional. According to Faludi, the latter plays a significant role in both assessing the risks associated with a politician's decision-making and actively participating in public debates about alternative planning strategies. Both of these might be established as preconditions for a more extensive planning implementation.

Box. 5 Short conclusions on classical approaches to theories

The theoretical classical model to planning presented above from McLoughlin, represents the procedural systemic and comprehensive planning which is a spiral or circular process. The stages presented by McLoughlin are rather technical and address the internal planning process usually made by a specific group of planning practitioners or experts, and represent the set of components of the land use planning methodology, which ends in a land use proposal.

However, in the real world, this system does not operate in a vacuum, but rather as part of a larger complex of economic, social, institutional, and environmental contexts that provide inputs to the components in the form of assessments or constraints of varying degrees of significance to the system components. It is the components, not the context, that McLoughlin is most concerned with; the context, while not completely ignored, has only a minor presence in relation to component (a) and a stronger presence in relation to component (b); this input, however, is far from decisive, because the decision-making process on how to deal with it is in the hands of politicians and planning practitioners.

Contrary to that, Faludi's statement is on a theory of planning rather than a pure planning theory. On he's approach there's a greater presence of feedback and acknowledged need for collaboration between actors in a given social context which is clearly underrepresented in the McLoughlin theory.

Yet both theories will be considered as the spinal cord on the land use planning – methodologies and be further used by this research to further elaborate on the proposed framework.

Continuing on this discussion, (Lagopoulos, 2018) in its recent works, brings into discussion other planning approaches while trying to compare each of their mindset with the components presented with the McLoughling model above. Its work becomes quite relevant and necessary for this research, thus trying to extend the theoretical basis for possible land - use theories. Each of the approaches presented in Lagopoulos work will be shortly describes below.

1. The first planning approach under the so called **Liberal Theories** is that **of John Friedman's action** – centred model, advocating a shift from rational decisions to actions believing that planning and actions should be unified and distinguishing phases into this process is extremely difficult. This action – planning model marks the

emergence of implementation theory, thus criticising the utopic linearity of the rational action. On this note, implementation theorist seems to bring this mind-set to another level, arguing that practical action implies the rejection of planning policy and plans and focus exclusively into actions. Against this view, and I agree with Lagopoulos is that even in the cases where policy might be adapted or changed to implementation… it still remains 'successfully putting policy into action'.

2. Another approach in the liberal tradition, is that of **the pragmatic approach** which originated in the U.S. This approach embraces an empiricist epistemology and is opposed to general theory, therefore restricting itself to empirical facts and refraining from a more in-depth search for interpretive causes and consequences. Main representative of this approach is Philip Harrison which argues that during implementation of the pragmatic approach in planning conflicts of opinions can be solved through enhanced discourse between members of the community, as such creating for collaborative planning. This in my opinion might be the first concern with this approach, as it's application might be limited only within pluralistic context of liberal democracy, and prone to fail in other transitional and unstable political contexts. In contrast to procedural planning, pragmatic approach does not set final goals a priori; rather, the final goals are formed by the integration of individuals into the conversation and the opportunities presented by the unique circumstance, as opposed to procedural planning. Methodology in this approach is replaced with, what Harrison calls it, an 'attitude' towards planning, meaning that: i) planning should call for ad hoc improvisation, ii) encourages to adopt open goals corresponding to the interested communities (even changing them if necessary and iii) integrating lessons learned from experience, adapting to specific situation thus experimenting toward outcomes. As a conclusion the approach proposed here is that the focus is on the greater policy decision making, while the implementation might vary, put it simpler … instead of knowing prior 'what and how to do it' just focus on emphasizing contextual inquiry.
3. Another approach worth considering is that of the **neoliberal movement of the New Right** emerged in the 1970's. According to this approach the strategy would be that of a renewed relationship between the state and the market, based on faith of the market and limitations of state's power (and it's corresponding planning institutions/agencies). Following the implementation of this approach, planning regulations were simplified, new guidelines for the operation of the planning framework were introduced, and a category of development plans that did not require planning approval was expanded to

include more projects. Clearly, this planning strategy was uninterested in planning theory, and neoliberal planning has evolved into a mashup of past planning tendencies under the neoliberal umbrella ideology as a result of this. In fact, neoliberal planning ideas such as city marketing and Urban Development Projects, which are targeted at the creation or radical regeneration of certain urban regions, have spread to a degree that they have become generic and globally widespread.

All three approaches presented below could be without doubt included in the action planning theories, and pragmatic planning amongst them is the only one taking into consideration and addressing the community for which planning is being drafted. In all the approaches land use issues are not specifically and priory discussed or assessed rather that they are in the end results of the final decision-making of the implementation. Following consideration on communities in the planning practice and as basis of universal planning theories, 'Participatory Planning Theories' should be considered as well in this theoretical review. 2 views can be distinguished here and continuing on the previous numbering they are explained as below:

4. **Advocacy planning approach**, first introduced in the U/S in the early 1960s, which supported a stable planning methodology including survey and formulation of alternative scenarios and their deep assessment (similar to comprehensive rational planning presented by McLoughlin and Faludi). The main, and much important distinguishment between theories though, remains the role of the key – actor into the decision making. For advocacy planning decision – making should rely on the people affected by the plan rather than on the planner's and the political institution. In this sense, the planner might be a technician, but it's role must be that of an advocate n a political dialogue and planning scenarios and alternatives should come from the interested community.
5. The second approach to participatory planning is that of **Collaborative Planning presented by Patsy Healey.** Her views overlap at substantial level with those of the advocacy planning but her approach is more focused in the analysis of the micro-scale of the economic and social networks. She hopes to develop normative standards for a communicative activity in public space that is focused on citizen engagement and aimed at achieving strategic consensus. Healey's definition of the strategic phase of spatial planning is an interpretative phase that is open to all parties involved and built upon the foundations of participatory discursive democracy. Even while she recognizes that this

method may be regarded as overly progressive and idealistic in today's environment, her hope is that planning professionals would embrace it for its "utopian edge." (Lagopoulos, 2018). Healey views planning as an example of collaborative governance involving two interconnected levels: the "hard infrastructure," which is comprised of abstract systems of formal institutions (political, administrative, and legal), which are built on rules, rights, duties, competences, and resources, and the "soft infrastructure," which is comprised of informal relationships and relations between individuals. The first stage involves the development of a planning system, while the second stage involves the implementation of planning practices.

Initially, she incorporates something that was absent from comprehensive planning: the arena's constitution; then, she moves on to the planning survey, which includes the introduction of a communicational component; and finally, she moves on to the planning survey, which includes the inclusion of a communicational component (necessarily the survey must precede policy). Alternative scenarios are discussed before a final proposal is chosen, according to her (by definition, the final proposal cannot be chosen before the development of alternative scenarios), and control and analysis are carried out in conjunction with the plan, she believes (those could have no sense if there is no proposal). **Healey emphasizes that "…the planning process is site-specific, that it must be conceived locally each time, and that it cannot be formulated in a process model".**

6. Lastly to this discussion **the post-modernist approach to land use planning** will be provided. Pioneers such as Bent Flyvbjerg and Tim Richardson manifest a strong orientation of what they call 'planning analytics' of which they propose to deal with planning cases into different contexts thus seeing the role of the planner more of that of a researcher. To this approach, planning studies are important but not focusing only to one theory of planning, as this would shift the planner (now seen as a researcher) beyond the text to the real (material) world. The postmodern attitude to planning is accurately described by Mark Oranje as follows: "… a planning proposal becomes a planning "text," the texts are "stories/narratives" generated by the rules of specific "language games," planners are persuasive future-oriented "storytellers," and the "reader" of the planning texts is a "textual" analyst, seeking out the hidden rules and meanings of the language game". As far as Oranje is concerned, textual analysis may be beneficial, but there is a danger that greater penetration into textual analysis would

result in intertextual comparisons between texts rather than connecting to the material world as planned theory would have it.

Box 6. Final conclusions on the above mention theoretical approaches

The panorama of presented planning theories/approaches above, demonstrates the importance of Faludi's and McLoughlin procedural planning, as in almost all planning approaches compared and discusses, as in all these cases (almost) the same procedural planning components revolve.

The procedural model and comprehensive planning do not seem to have any structural methodological issues. Almost all planning approaches (both urban and regional) have been revolving around the methodological elements of the comprehensive model for nearly half a century. During this time, no theory has added any new elements, to this linear approach described above, this research cannot conclude that the comprehensive planning approach is the ground theory of land use planning but it recognizes the fact that the components of comprehensive planning appear in almost all cases, which shows that they present a remarkable flexibility and can be integrated within greatly diverging theoretical approaches.

Thus, spatial planning acquires significant momentum, and land use planning as a specific planning/approach or theory is no longer a prominent concept in the same way that it was previously (as Lagoupulus would say). In this context, land use becomes only significant as a specific tool in the extensive process of spatial planning approach/methodology in terms of development and implementation.

B. To what extent can land use allocation and land use decision making, secure relevant outcomes of the planning processes? (by planning outcomes in this research I refer to the definite results in a territory where planning is implemented)

Land-use allocation is a process of allocating different activities or uses to specific units of area within a geospatial context, to maximize a spectrum of social, economic, and ecological benefits. The process of optimization of land use allocation becomes really important to regional sustainable development, as it promotes the social equality of public services, increases the economic benefits of land-use activities, and reduces the ecological risk of land-use planning. Humans are expected to optimize well-being by allocating land-use conversions

at locations with the highest `preference'[28] for the specific type of land-use conversion at that particular moment in time . This 'optimization' process happens in a given context and with the involvement of different actors, as such a specific decision-making process and finally a 'verdict' on possible land use allocation is made.

Referring to the theoretical/ methodological approaches represented above, easily three main momentums can be defined here:

(i) Decision to intervene
(ii) Decision making (fed by context analysis and forecasting)
(iii) Implementation

While on the very first step a vague/blur idea on land use allocation is, the definite land use allocation will happen during the decision making process, hence when drafting the land use plan, and will be finally executed during the implementation process. The task of course, remains quite risky during the second phase (that of decision making). Here many attempts are made following different approaches, forecasting, building future scenarios and even data modelling (digitally) in order to ensure proper land use allocation.

The identification of the effective drivers of land use change is the prerequisite for the development of land use models (Veldkamp and Lambin 2001). Depending on the types of uses a land is put and the factors influencing them, land use change shows different reactions to ecological, climatic, economic, and social changes (Lambin and Meyfroidt 2010; Pratt 2009; Wood et al. 2004). As a result, thinking about the affective and impacted drivers of land use change is extremely challenging in this context. As a result, scholars from a variety of disciplines, including geosciences, social sciences, regional studies, and economics, have used ideas and methodologies connected with their respective fields to the process of land use change in order to better understand it. (Crosthwaite et al. 2004; Cruz 2004; Hollier et al. 2004; Sohl et al. 2010; Wicke et al. 2008). All of these studies had one thing in common: they were all concerned with understanding land use change. Some were concerned with understanding the impact of demographic or ecological issues on land use change; others were concerned with understanding the impact of demographic or ecological issues on land use change. (Lambin and Geist 2006)".

[28] `Preference' is an unobserved, dimensionless variable, defined by economic returns, market competition, sociocultural context, arbitrary preferences, and policy regulations.

With regard to this type of research, the key question is whether the examination of the process of historical land use change can be utilized as a reliable basis for projecting future land use changes. As a result of the unpredictable nature of human conduct, as well as economic and population instability, ***the answer to this question is a resounding ''no''.*** At the same time, in developing countries due to uncertainty in various fields, the use of these models is associated with greater errors. The literature review in this area shows that forecasting future land use takes place based on the process of land use change over time (Brown et al. 2002; Aspinall 2004; Hansen 2010) so that the process of land use change and its dependence on human drivers has been analyzed and the results have been generalized to the future. As a result of human autonomy in decision-making, human behaviors have changed over time, and hence cannot be characterized as constants in any way. Consequently, the study of historical land use change cannot be used to anticipate or determine future land use, and other approaches and techniques should be employed in order to resolve the issue of land use change instead.

Additionally, to this, another concern, remains of course that of implementation of the land use plan (or any their approach on planning to be honest). The implementation of the territorial plans[29] is the weakest link in the planning process; it has received inadequate theoretical exploration, has been poorly positioned methodologically, and has been carried out only partially in practice. The primary direction in which to examine improvements in the implementation of plans is that they must be seen and focused through the lens of spatial plans in order to minimize the influence of all variables outside the planning system to the greatest extent feasible. Hence the addressing of rising uncertainties, as referred to this research work.

Because of the waning influence of the conservative (strictly expert) approach to planning in recent years, implementation has risen to become probably the most significant topic in both planning theory and practice today. As a result of the shift in perspective that occurred when planning began to be viewed in terms of the relationship between the development of planning decisions (solutions) and the implementation of those decisions (solutions), planning implementation, along with planning evaluation, have become increasingly important in relation to the other phases of the planning process, as emphasized in the rational planning

[29] It is possible to define implementation in spatial planning in a number of different ways. Keeping in mind the fundamental axiom of planning, which states that developing plans is only relevant if they will be implemented, it is expected that spatial planning would incorporate and consider the implementation of plans. This axiom is acceptable, provided that the distinction between the words "realization" and "implementation" is explicitly stated at the outset of the discussion. The term "realization" refers to the actual physical functioning of the space, whereas the term "implementation" has a broader meaning and encompasses not only the realization but also the entire range of actions taken in accordance with and on the basis of the plan, as well as the entire range of actions taken in accordance with and on the basis of the plan. (Nebojša Stefanović, 2018)

approach. Implementation in spatial planning refers to the process of putting planning solutions into action and the instruments that should be used to assure their reality. In other words, the plan's implementation should contain answers to questions such as: how should things be done? who should do it? when should it be completed and how it's going to get financed? with what means / tools should it be completed? and so forth. This has led some planners to classify the instruments of execution, such as legal, financial, economic, organizational and technological, which has found practical application in the field of public administration. In this sense, the research, which has no intention at looking into every means of tools in addressing successful implementation of the land use plan, will only seek to analyses the spectra on financial tools that lead to better implementation of the plan (see following 3.1 subchapter below).

Lastly, following the concept of deciding on interventions in land use, planners must cope with a variety of uncertainties in their work. At the same time, planners must take into consideration the different interpretations of uncertainty held by different players. When working together on a planning project, these various interpretations may come into conflict (Healey 2007). It is particularly difficult to do justice to diverse interpretations when planners are required to include long-term, irreducible (unmanifested) uncertainty, for example, through the use of adaptive planning tools and techniques. Adaptive planning is a kind of planning that seeks to enable future modifications depending on a condition of circumstances that is currently unknown. (Zandvoort, van der Vlist, and van den Brink 2017). While several scholars point to the relationship between collaboration and adaptiveness (e.g. Connick and Innes 2003; Islam and Susskind 2013; Pahl-Wostl et al. 2007), little attention has been paid to the influence of collaboration on the ability to handle a variety of different uncertainties. This skill has an impact on whether or not appropriate interventions in land use can be created. Collaboration may have an impact on if, when, and how adaptiveness is employed to deal with uncertainty, or it may be used to question the existence of uncertainty.

The development of spatial configuration of the living environment is guided by collaborative planning, which is a type of planning in which multiple actors with their own specific interests come together to find mutually shared solutions to problems (Healey 2007). Adaptive planning is also directed at (guiding) the development of spatial configuration of the living environment. (Zandvoort et al. 2017). For this purpose, addressing uncertainties through adaptive planning approaches, is presented in the subchapter below, as a fruitful input to the overall discussion.

2.1.2 Addressing uncertainties through adaptive planning approaches

The certainties that we all so desire and seek to achieve, in the very dynamic word that we are living seem to be an illusion more that we wanted to. Today cities are facing rapid and catastrophic changes induced by climate change, very recently the Covid-19 pandemic, social transformation (migration, poverty etc.) or even unexpected political and economic events. All of the above are manifest how the reproduction of uncertainties occur in many different context, domains and even at multiple level or territorial scales, driving us into a future which is quite challenging (if not impossible) to predict.

"In trying to engage with the positive and mitigate as much as possible the negative, policymakers are continuously challenged by uncertain condition in which they operate." (Teisman, 2008) (Duit & Galaz, 2008). This could be without doubt be said for the territorial planner's / planning practitioners as well.

As (Batty, 2013) sais, "urban areas, including cities an neighborhoods, are dynamic, changeable environments that sometimes follow unexpected routes. Meanwhile planners aim to improve the sustainability and livability of these places through rationally designed interventions.

But there are also limitations that traditional planning theories oppose (as also described in the subchapter above), as often almost all planning strategies, methodologies and tools are based on prediction, stability and risk reduction. Hence the question that is raised here would be that: "How can planners strengthen cities responsiveness towards uncertainties emerging at different levels and scales, in the same time that they predict that societally preferred development would occur?".

So far, many research is done under the loop of the adaptive planning approach. According to the adaptive planning method, planning takes place in a world of becoming, in which processes of development and change are constantly under progress. [(D, 2005), (Tsoukas & Chia, 2002)]. In its core the idea of adaptive planning is to strengthen the responsiveness of urban areas towards several unexpected events (uncertainties) by setting several conditions for development and presenting mitigation tools. The adaptive planning approach can easily be integrated under the spatial planning umbrella which offers "complementary means to operate under today's complex and dynamic societies" as stated by (Albertchs & Balducci, 2013),

while the traditional planning approaches and the rigidity they embed are merely designed for situations of stability.

As such the adaptive planning approach proposes some key elements that can be fully integrated by the spatial planners to address uncertainties as presented below:

1. It is necessary that during the planning process place-specific problems and opportunities to be identified
2. Mapping possibility spaces by analysing spatial-temporal conditions and constrains is a must
3. New arenas for policy formulation by identifying and mobilizing actors at different territorial scales should be created and promoted (before, during and after the planning process)
4. The territorial space (under planning) should be shaped by selective actions on strategic issues that are embedded in and justified by a long term vision.

One must say that the above mention prerequisite of the adaptive planning approach is (more or less) the same as those of the spatial planning steps (presented in the theoretical subchapter above). The main difference is that, while spatial planning approach (both methodology and tools) is mainly oriented at fostering desired changes based on a time specific given conditions (based on the analysis), the adaptive planning approach targets exactly these "conditions" as its object of intervention.

In its research work, (Rauws, 2017) states that "the adaptive behavior of cities cannot be reduced to a set of clearly distinguishable cause-effect relations, but cities are assumed to adjust, transform an innovate from within". According to this definition, growth occurs partially independently and frequently outside the purview of the planner, and the manner in which a city's trajectory develops is regarded to be both time specific and location particular, the planning process, in my opinion, cannot be absent from such transformational momentums despite the fact that such occurrences may result in changes to spatial patterns within a particular context. As Rauws points out, in order to strengthen the adaptive capacity of cities, a complexity perspective should be adopted (he bases his discussion on the complexity theory) and the drivers that shape development trajectories should be carefully considered by planners, bringing the discussion to a new level of sophistication. Moreover, it is necessary to recognize that some of the drivers may occur as a result of planning intervention (for example limiting building areas or blocking building permits, which would result in informality build areas, etc.), while others may occur independently of any human policy decision (for example, climate change) (implying natural disasters, climate change etc.)

A shifting in planning mentality occurs here, and it becomes really important for this research, while dealing with an “outdated yet presisten” planning approach as that of land use planning. In order to accept these uncertainties, the logic of constructing an ideal plan, as well as the notion that "the plan" might govern urban growth in the direction of attaining a predetermined future, must be abandoned. Consequently, preparing for all uncertain occurrences, as well as promoting techniques that theoretically minimize uncertainty, should move to a stance of embracing uncertainties, adjusting to them without impeding progress, and, above all, capitalizing on the possibilities they create.

2.1.3 Discussion and preliminary conclusion for the chapter

The theoretical discussion above aims at analyzing all possible sources of information retained by previous scholars on a long lasting discussion of, spatial planning and / or land use planning theories (and methodologies). Indeed, throughout the course of time, many ideas were put forward to this discussion, yet the basis of it remain the planning methodology (the classical one) developed by McLoughlin and afterwards emphasized and enhanced (in terms of methodological elements) by Faludi’s. While the research raises a fundamental question on the existence or no of a purely planning theory, I would answer as no (if the comparison has to be made let’s say with economic theories, or other similar sciences). More than a purely land use planning theory, there’s existence of a planning methodology (which is also fundamental part of establishing theories), and where land use planning relies as a very important component during the plan making.

As a second conclusion, while planners and decision makers, rely strongly on as accurate predictions for future land use allocations, it seems that optimization of land use based on existing conditions should be taken into consideration rather than forecasting land use based on the past process. As a result, in this research, unlike previous studies, the optimal changes in current land use should always take into account the future unknown, or uncertainties, even if ecological conditions remain constant. This is because the impact of human activities on the environment is assumed to be constant. These uncertainties, do impact planning methodologies in various momentums, especially during the “decision – making” and are strongly manifested then in the implementation process.

In this sense, ***a vague idea towards this is introducing to the land use planning methodology presented above another element which might reduce the risk of uncertainties, and that is fiscalization of land use, as an important step/ instrument to be considered in two main momentums in the linear process of McLoughling methodology: (i) during the decision making process) and (ii) in the implementation phase. The introduction of these tools / means could create momentum for presenting a new approach towards adaptive planning.***

2.2. Fiscalization of land use

Emerging economies are confronted with financial constraints that are strikingly comparable to those faced by OECD member nations. The population growth of many countries, from China and Brazil to other developing/ transition countries of the Western Balkan, is putting pressure on decision-making on land use allocation within cities and regions. When combined with weak planning policies, this will put additional pressure on decision-making on especially on land use allocation for the planning authorities and decision makers of territories. For example, in emerging economies, fiscal constraints from expanded systems of public education may be harsher than in the OECD, reflective of the need to increase basic and secondary education together with rapid development in university education. And that is only one problem/policy that may be directly related to the demand for additional land utilization in a city/region. The same could be articulated for many public services as well (waste management, water sanitation etc). On the other hand, environmental pressure is sure to persist caused by economic expansion as expected. "The strategy is to decline land based bio diversity by another 10 percent by the year 2050. 40 percent in the world is expected to live in high-water scarcity areas, 60 percent of the population will live in cities, while a significant increase in greenhouse gas emissions will likely result in disruptive climate change. “All this is to meet the management level and the demands to face the uncertainties and events of the future.

As such fiscal issues, have a very tight connection to the land use and land use planning. To deepen the discussion, the research will aim to look at the notion of fiscalization of land us, a term used interchangeably for two of the main concepts related to the issue.

As represented in the key concepts above, there’s a twofold way on defining fiscalization of land use (also because broad recognition about this term is not given yet). For this purpose, in

the following sub-chapter a theoretical review of both concepts will be analysed and provided.

2.2.1. Taxation of land – approach and processes

"The main core of economic models related to land use focuses on spatial characteristics of land" (Koomen and Buurman 2002). Lands have manufacturing constraints because of their constant features in terms of physical parameters such as soil type, slope, and water resources. As a result, the efficiency of different forms of land use allocation differs. (Koomen and Stillwell 2007; Hansen 2007a; Jackson et al. 2004; Kaiser et al. 1995). Land, on the other hand, is seen as a valuable asset because of the impact that land use has on its surrounds. Human activities in the region are based on the maximization of profits from land use change caused by spatial and non-spatial features. It is worth noting that different objective functions are taken into account by spatial theories depending on the type of land use considered. According to location theory, the most important criteria to consider in terms of agricultural development, transportation costs, and market access are, for example, (Dayal 1992; North 1955; O'Kelly and Bryan 1996; Tittonell et al. 2005). By its end, the theory of urban development focuses on the demand for goods and services, and how best to allocate resources in order to meet that need. (Martin and Rogers 1995; McCann and Sheppard 2003; North 1955; van der Veen and Otter 2001).

As such, 'Fiscalization of land use' implies that the system of local public finance exerts an influence on local land use decisions (Wassmer, 2002). Here meaning that the government activity through its taxation policies has a direct impact on possible outcomes with regard to land use allocations. This definition builds up on the practices of municipalities of countries on the US (an approach which started to be used extensively in other countries as well), which on their planning practices aim to regulate local land uses with an eye on the fiscal approaches.

2.2.2. Land base financing – Land Value capture and innovative planning instruments

The second notion on the concept of *fisclization of land use*, treated in this sub-chapter, builds on the concept of land-based financing and land value capture instruments, as a collective name given to a range of instruments by which local governments expand their revenue base and

generate funds that will help them realize their service delivery, infrastructure development, and maintenance goals and hence contribute to sustainable urbanization.

The shortage of financial resources to fund and maintain urban growth is one of the major challenges facing urban authorities in developing countries. Many city governments are under-resourced, and as a result, they are unable to meet the ever-increasing demand for essential services and new facilities, as well as maintain current infrastructure and services. The resources available to urban local governments determine their ability to provide efficient services to residents, including land services that increase access to serviced urban land and ensure tenure protection.

Land base finance (LBF) is a flexible collection of instruments that may be customized to a number of institutional and cultural contexts, including developing countries. LBF aspires to enhance the amount of money available for local economic development initiatives. Better municipal budgeting, as well as the ability to improve infrastructure and service delivery, might have far-reaching social and economic ramifications, according to some experts. Furthermore, as compared to other types of revenue instruments, LBF has fewer negative consequences on private investment and may even have beneficial spatial and social benefits in some circumstances. Due to the potential financial, economic, geographical, and social benefits of LBF, it has become a popular topic of discussion throughout the world in recent years.

Local governments that lack financial resources often find it difficult to implement land laws and regulations in their jurisdictions. They also find it difficult to expand the availability of serviced urban land and to avoid the spread of slums in cities where they operate. In order to achieve safe access to land and to accomplish the aims of sustainable urban development, land-based finance is consequently one of the strategies that must be used.

In addition, it should be emphasized that putting in place or creating land-based financing tools can be a challenging political undertaking. The participation of high-level elected officials in the debate and their contribution to constructive transformation are therefore critical. Substantive reform, on the other hand, is unlikely to occur without the explicit endorsement and participation of top authorities.

Most industrialized countries rely on a combination of central government payments, user fees, and municipal taxes to fund their sub-national government operations. It is widely accepted that taxes and fees associated with land are underused. Even if land and property taxes are employed more aggressively, they are unlikely to generate enough income to cover important

social expenditures such as education, health care, and social assistance. Therefore, land-based taxes and fees should be increased considerably; nevertheless, this will only account for a tiny portion of the entire financing package required by local governments in order to satisfy the rising demand for services and infrastructure in the coming years.

Land has a number of advantages for local leaders as a basis for raising a significant share of the revenues necessary to meet local needs.

- First and foremost, land has a fixed location, does not move and is visible.
- Administration of land-based revenues can be enhanced and revenues increased if local authorities play an active role in that administration.
- Land-based revenues are often progressive in nature as ownership is generally concentrated in upper-income groups.
- Land-based financing may enable subnational governments to become more independent by closing the gap between own-source revenues and expenditures.
- Land-based instruments tend to promote transparency and accountability in local government, and may act as a benefit tax (i.e. compensation for the broad set of benefits provided by the local government).
- Taxes based on land and property tend to have less of a dampening effect on private investments and economic activities than other common types of taxation.

But on the other hand, Land-based revenue systems in developing nations also have drawbacks, that may include as following:

1. Administration—Land-based revenue systems require strong and effective local government administration, and collaboration between multiple levels of government
2. Valuation—Methods for estimating the value of property are frequently designed to be based on some concept of a property market. While there are alternative simpler approaches to valuation, the judgments and administrator discretion necessary in many valuation systems can be a challenge for local capacity.
3. Taxpayer resistance—Many of these instruments are extremely visible compared to other taxes levied on or through businesses, and thus may provoke significant taxpayer resistance.

Though it is not in the scope of this research, the table below also provides a list of most common land financing instruments where an assessment of each of this instruments is given

with reference to (Favro, T. and Toto, R. 2016) in "Financial Instruments for Land Development".

Table 3. Short Description of main financial instruments for land development

Instrument	Description	Key requirements	Overall difficulty
Transfer of development rights	Property owners sell development rights from their land to a developer or other interested party who then can use these rights to increase the intensity of development at another designated location; transactions between buyers and sellers are voluntary	Inventory of land assets, effective market valuation and pricing, and strategic decisions about municipal growth at different locations; practical adjustments must be made as market conditions change; forceful leadership may be essential to ensure strong use and execution	Technical competence and staff resources needed for on-going valuation; may be difficult to establish appropriate prices and formulas for development rights; challenge to develop simplified approach that captures the core concept of managing growth, without overwhelming technical demands
Conditioned building intensity	Developer installs on-site or off-site "public" improvements at own expense, or provides in-lieu cash, in exchange for building at higher intensity; can accelerate private investment in important community needs	Clear and transparent regulations; planning and implementation capacity to link developer's improvements to public needs; competitive developer selection procedures become critical to fair implementation and municipal revenue generation	Simpler than most other forms of public private partnership; danger of nontransparent or corrupt deals between local government and developer
Tax increment financing	Local government taxes land value gains resulting from public improvements in a defined area and uses the funds to pay for those improvements; one of the few available financial instruments for revitalizing underperforming areas in need of development or redevelopment	Value based property tax system that is locally regulated and administered; local ability to issue public debt desirable; efficient and accurate land valuation process	Limited on-going staff resources are required; however, recovering the cost of a specific infrastructure investment requires the technical competence to carefully estimate current and future property values, and current and future program costs and revenues

Business improvement districts	Commercial property owners and tenants, through an annual assessment, pay the cost of supplemental services and improvements to public spaces to improve the physical and business conditions of their district	Majority of businesses should be successful; area with few vacancies; municipal support and agreement to work in key public spaces	Limited local government involvement; however, local governments should have a strategic and coordinated approach when working with bids; local governments may set standards for bid service delivery
Betterment fees	Charge on the increase in a property market value due to public investment or change in land use	Ability of municipality to calculate property values before and after change; dialogue with property owners to convince them that fee is not "just another tax"	May be difficult and costly to administer on a parcel-by-parcel basis
Special assessment districts	Municipality finances public infrastructure improvements by distributing the costs of a project among those property owners who directly benefit	Ability of municipality to issue debt desirable; ability of property owners to pay	Technically one of the most straightforward options; difficulties may arise on reaching agreement on the proper exercise of expropriation, if necessary
Infrastructure impact tax	Tax on value of new private investment in development; assessed at time permission to proceed is granted to mitigate impact of development on public infrastructure	Clear regulations; planning and implementation capacity to identify infrastructure cost implications of specific development	Relatively straightforward

Source: Favro, T. and Toto, R. 2016 in Financial Instruments for Land Development, Policy Paper[30]

2.2.3. Discussion and Conclusion

The history of land and the cultural norms connected with it differ drastically from one region of the world to another. It is essential that any adaptation of a fiscaziation of land usage (whether through taxes or a land-based finance instrument) to a particular environment takes into account these differences. One of the fundamental assumptions behind the fiscalization of land use is that the value of property is determined by social factors and may be affected by

[30] For further read follow: https://www.academia.edu/43093142/Financial_Instruments_for_Land_Development

public policies. Land markets are built in the same way that value is defined by society, and they require specific circumstances in order to exist and develop. Several preliminary assumptions and conclusions can be drawn here, following the discussion made in both subchapters above:

- Taxes and levies relating to land are commonly recognized as being mostly underutilized in developing countries. However, even if they were used more aggressively, land and property taxes are unlikely to generate enough income to cover the whole cost of key social expenditures such as education, health care, and social assistance. (Bahl and Bird, 2008c). Yet they might have a very substantial role in determining land use allocations.
- Bahl and Bird also say that "intergovernmental fiscal relations must be thought of as a system, with all the pieces working together. Local government revenue systems cannot be appropriately designed without first establishing clear and logical expenditure assignments to the different levels of government". The same logic should be followed with the planning system as well in order that implementation of the spatial plan in the end will ensure the expected results.
- It is possible that efforts to enhance the land market will be required if the land-based financing instrument under consideration necessitates the existence of a relatively well-functioning land market.

To conclude, the empirical research analysis, that will be introduced in the following chapter, will aim at showing weather fiscalization of land use, can improve the revenues of local municipalities, and to what extent these could boost the effectiveness of land use planning, as one of the most crucial instruments within the planning approach, and in the same time if these instruments could become a substantial tool in addressing plan's implementation in a context of rising uncertainties.

III. EMPIRICAL RESEARCH AND ANALYSIS

The first part of this sub-chapter is set up as a background and context setting on the case study of Albania, and later on the development on the specific area of Municipality of Tirana. It tries to bring to the attention of the reader, the transition steps with regard to urban development and the milestones marking the yet transitional history of Albania's planning approaches in a time span from 1990s till today. Critically going through this analysis has helped especially, in pointing out the main concerns regarding the land use planning approaches in the specific context of rising uncertainties in Albania.

Shortly as a roadmap to this part of the research thesis the chapter will address as following:

1. A detailed panorama regarding the urban development and planning approaches/ systems in Albania in its transitional steps. This part will also slightly shed light into the situation of fiscalization system in the country as well as other reforms (decentralization reform and TAR) which directly or indirectly have impacted land use transformation and approaches in Albania.
2. An empirical analysis on assessing the changes in land use patterns in the specific area of Tirana Municipality will be presented, together with a discussion on 3 main General Territorial Plans, drafted for the capital city. The main idea here would be to clearly present how different approaches on land use, combined with several social-economic events (uncertainties as of changing the context) have produced irreversible results on land resources (especially those on agricultural land).
3. The third part discusses on 2 hypothetical scenarios/ exercises the influence that fiscalization of land use might exert in future land use allocation and resources of the territory of Tirana. Two level of evidences are gathered and analysed here: a) the first case discusses on the financial outcome the current land use plan of Tirana municipality (based on the development indicators of TR30 GLTP), could produce, if the plan would be 100% implemented in the timespan of 15 years; b) the second case, through different case study areas in the city, discusses on the new development possibilities that land base financing (application of financing instruments for development processes), could bring

in a context of raising uncertainties. Both case studies build on previous work carried on during the timeframe of the PhD course[31]

4. Lastly, results from the empirical case studies are discussed and the question of whether fiscalization of land use could really boost the effectiveness of land use planning in a context of rising uncertainties is answered.

3.1. Urban Development and Planning Approaches in Albania in transitions steps

In the history of urban developments in Albania the period 1944 - 1990 of the Socialist State (communist/dictatorial era), where everything belonged to the "state" and everything was decided by the "state", the style of Soviet-Eastern architecture and urbanism was dominating the “planning arena”. During that time, all town and villages should be equipped with some sort of Regulatory Plans. Of course the implementation of the plan at that time was quite simple, no market forces of demand and supply were present, and the central government knew exactly when, where and how much they would spend for the proper implementation of the projects. In the end of the day the government new exactly what was needed from the citizen.

In the early 1990s, like many Eastern and Central European countries, Albania changed its political regime, moving to a democratic system. The planning sector faced a major challenge, even considering that the formation of "planners", at that time, was very much related to physical urban planning (urbanistic) and took place in other conditions, mainly related to the distribution of resources and population in the territory. Before 90s, urban planning was a technical discipline, which had in its focus drafting plans for the expansion of cities, roads, industry, etc., but without the pressure of the market economy and addressing only the directives, entirely of predictable, 5-year plans, of the communist regime.

[31] The first case, comes from a previous research work carried on by the author of this thesis (Fiona Imami) and co-authored by Dr. Kejt Dhrami, in 2018 and 2019. As only a part of this research work is presented here, the full work was presented in the AESOP Conference of 2019, in Venice Italy. Full paper is not published yet.
The second case studies, are product of a long continuous process carried out by the 4th year students of Polis University in the subject lectures of PRMT (eng: regulatory planning and land management) a subject lectured by Dr. R. Toto, Dr. K. Dhrami & Z. Bajrami.

The period between 1990 and 1993, can be referred to as the grey period in planning or urban planning. The dramatic movement of populations from villages to urban areas, from mountainous areas to the western lowlands parts, were few of the very emergent reasons that would require an emergent response through planning, though the planning per se was quite a vague notion for the Albania of that time. During this first shifting period, Tirana, Albania's capital city, grew rapidly in size and population following 1991 governmental reforms. Prior to the 1990s, Tirana was a compact city with a population of 225,000, however its population doubled within the first 5 years and reached 600,000 inhabitants by 1999 (Felstehausen, 1999). The same situation was faced in other cities as wee, especially those of the Western part of the territory. Still at the beginning of the 1991, most properties were state owned. Further privatization of land and buildings opened the city to rapid development, heavy traffic, and booming construction of shops, houses, and squatter settlements.

In these 3 years, as a result of comprehensive and rapid changes, planning institutions (unable to manage demographic change and those in the territory), worked with the old urban planning legislation, inherited from the predecessor system.

Figure 18. In the left, residential building in Tirana in the early 1980s and right, starting of privatization process and illegal building in Tirana, 1993

Source: Konica.al web archive

During this time *Law 7693, of 1993 "On Urban Planning"* (1993–1998), was in place, being the first legislative document, which deals with issues of urban planning, within the new democratic system in Albania. Anyway, it should be understood that in the period of its drafting, taking into account the isolation of the country, for about 5 decades, no revolution in the planning approaches/ practices could be expected in this regard. As a result, the new legislation did not bring major changes, in the system and

in the planning process. This legislation was primarily an adaptation of the preceding law, based on a very vague experience gained, during the period 1990-1993.

"Urban Planning" or more precisely "Urbanistic", in the context of this law, expresses and sets out the general rules for the placement of architecture and constructions in the territory of the Republic of Albania, except for agricultural lands (Council of Ministers, 1993). Municipalities and Communes were defined as the first level of local government and according to this legislation, the municipalities of urban areas, with over 10'000 inhabitants, are instructed to prepare master plans, general regulatory plans, as well as partial urban studies, for their territory. In law, all these documents are defined as "Technical documents that define the legal relations in the field of urban planning". From this definition it can be understood that the very focus of the plans, in this period, had a strong technical and regulatory character and were "non-promotional" for the development of the territory. Implementation tools were missing, and the plan itself only followed the idea of a great vision, and tried to tackle main land use distributions (in a very general approach) within the "yellow line[32]" of the urban areas.

Following this law, in 1998, *Law no. 8405, "On Urban Planning"* (1998–2011) was adopted, which brought some changes in legal planning system, in Albania. However, the improvements brought in 1998, were more quantitative than qualitative, compared to the content of the previous law. In the first place, this law brought a clarification of the main planning instruments, that solved one of the problems encountered before. Also, this version of the law clarified some of the overlaps and ambiguities of the previous law, although not fully, in terms of the competencies and duties of the various authorities, of planning. The concept of the "yellow line" continued to be used and was the main point of debate between municipalities, communes and the central government, while decision-making, in both laws, it remained in collegial form. Both laws were, in principle, intended to "determine general rules for the location and architecture of structures".

In addition to efforts to improve the legal framework, in planning, during the 1990s-1998, the application of these laws continued to be weak due to two main factors of

[32] It refers to the imaginary border, a rigid planning instrument used since the central planning period in Albania to mark the border between the urban and the rural. This instrument could be considered as an example of the instrument used in containment paradigm, similar for example to the famous Green Belt. Yellow line, also called as the construction boundary line, is the border in a territory, outside of which it is not allowed to build. The concept was later removed from the legislative framework of 2009.

which the laws did not take into account the two main phenomena encountered in Albania:

1. in the first place, illegal constructions (informal), widespread in the areas suburbs of major cities. According to ALUIZNI 2015, there are 270 592 informal constructions, of registered until 2007 and 22 570 from 2007-2013. Built-up surface informally, according to the property strategy, (drafted by the Ministry of Justice), approved in 2012, is about 30,000 ha

2. the fact of passing the property ownership from state to private property (Law 7501) was neglected though this was one of the biggest reforms of government, at the time. This transfer of ownership completely changed and added to the relationship of ownership, (unknown for 50 years), which had to be considered by the system legal and practical land development.

Even the changes made to law no. 8405, up to in 2009 (about 10 times), failed to fully and efficiently address these two issues. In this context, 2 main planning periods (or urban planning phases) can be distinguished in Albania during 1990 – 2009 period.

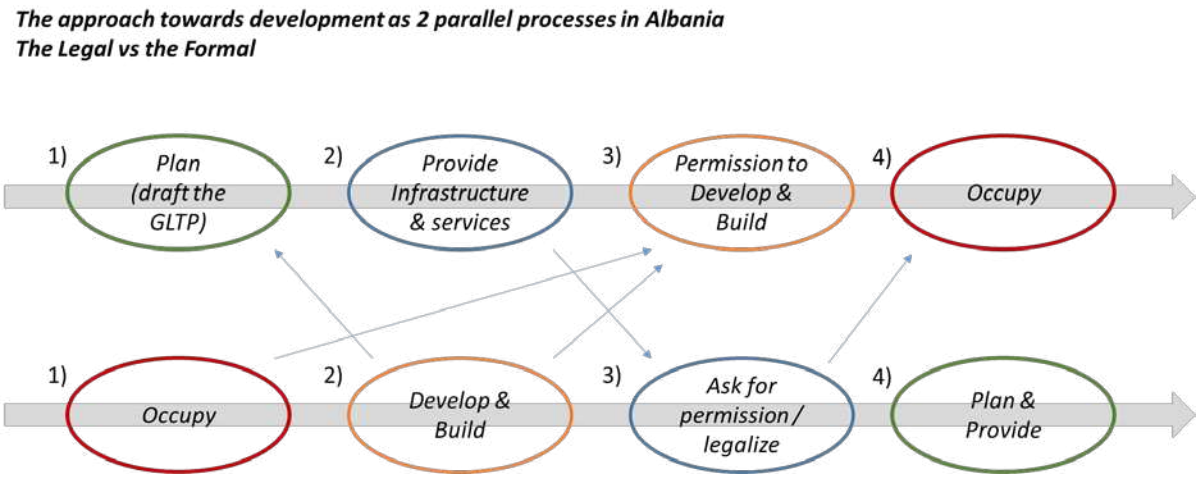
a. The first stage is that of the creation and development of the informal construction sector, starting since 1991. The change in the political system and the application of "shock therapy" in the first years of democracy, accompanied by a state withdrawal and greater market freedom free, had a very large impact on the territory. Population influx, in western areas, accompanied by uncertainties arising from reforms for land privatization and with the inability of the state to control urbanization, brought about the birth of the informal housing or construction sector in many of these urban centres.

b. The second phase of urban development coincides with the attempts to consolidate the informal sector, (establishment of law 8405 "On Urbanism" after 1998) and with the rapid establishment of formal, construction sector. The Regulatory Plan during this time was a rigid instrument and aimed to show only the location of buildings in the city and their use. This fact continued to promote informality in one way or another. The main problems of legislation and practice in planning have been the fact that the context was often overlooked. So even if there were attempts, to draw up plans various regulators, they have known very little about the implementation phase, as a result of lack of special planning instruments. This stage can be said to have reached its

peak, in the period 2004-2007, in which the number of informal constructions was greatly increased and governments took steps, with policies and legal instruments, to formalize this economy (although this practice has not yet fulfilled its mission).

In the end, the phenomenon experienced in Albania, in comparison to Western European countries or theories of land planning and growth, is the reverse order of processes. So, while in a normal situation, planning comes before land development (as seen in the diagram below), this was not the case in Albania. Initially, the construction phenomenon, in the absence of a plan was created as a result of the need of citizens, for housing and the impossibility (even in capacities) of institutions to respond to this demand. Subsequently, this phenomenon spread to the territory, as it was too simple for the citizens to build (in a context without regulation) and of course because governments at all level could not contain this development. In practice the citizens did not have to go through the institutional bureaucracy for a permit, as they could build even without it.

Figure 19. Conceptual Diagram of the Planning Process compared to Development Process in Albania in 1990-2009 period



Source: Toto, R. 2012; Aliaj, B. 2007; Allkja, L. 2019 & own graphical interpretation

Even today, the consequences of this the phenomenon in territory (and ownership) are still present and still so complex and many institutions (especially local governments) do not have the means (financial and technical) to address them in consistently.

Leaving behind the 2 periods mentioned above, the planning concept in Albania, has changed drastically following the recent years, with a paradigmatic shift from an "urbanist" approach in city planning, to a more comprehensive and integrated style.

This constitutes an emergent need to also change the mentality of perceiving the city as a rigid division of forms and functions, as was the case in the "central planning period 1950-1990" (Toto, 2012). The idea of building complexes and building blocks functioning as compositional parts of one-another, in hierarchical way, albeit theoretically very stimulating, has long been outdated in the urban realities Albanian cities (and not only).

The tendencies for having this radical shift in the urban development / planning legislation were sought after the 2000, especially because of the fact that this law being too rigid had blocked the development of in terms of sustainability to our, giving priority to individual interests, and leaving behind the public one. Of course this initiative followed the starting of the decentralization process in Albania, and was reflected in the Law no. 8652 "On the Organization and Functioning of Local Government[33]" where the Local Units were given the competence of territory management[34]. However, the initiatives remained only part of this law, not being reflected in technical amendments to the Law "On Urban Planning". The latter though suffered occasional amendments, carried many legal vacuums leaving opportunities interpretation and misuse. Seeing it today, the main reason for this vacuum created was the inefficiency of the local governments itself (which were newly created and very much unexperienced) to tackle daily issues, let aside the complicity of issues offered by development itself.

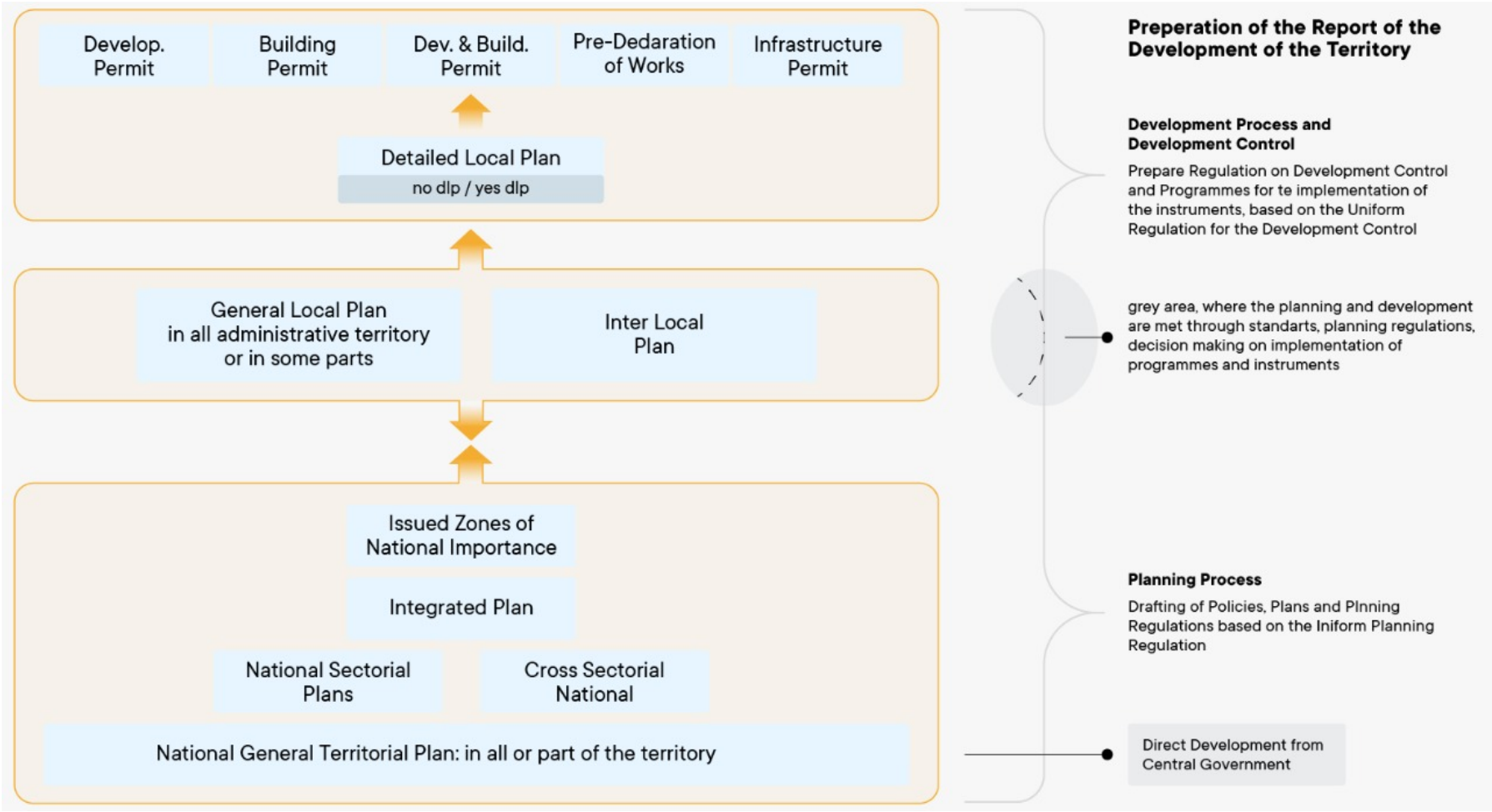
It is under these various internal pressures such as: the need to consolidate formal development, the inclusion of the "private property" factor in the land development process, the need for creating a stronger interaction and link between development and planning, strengthening the decentralization process, better coordinating good investment in the territory, creating good basis for the economic development of the country, together with the challenge of European integration, and incentives from donor - funded projects, led to the initiative for drafting a new law on territorial planning. This initiative saw the new law as an impetus for a comprehensive change of the whole planning system. As such in April 2009, Law no. 10119 "On Territorial Planning" (which had a consensus as rarely before, where 90% of parliament voted in his favour) was approved.

[33] Also known as the 'organic' law.
[34] Law no. 8652 dated 31/07/2000 article 10, letter g

For the first time (as stated in the article 3 of Law no. 10119 "On Territorial Planning "*planning was defined as an interdisciplinary activity, which aims to plan land uses and determine the necessary conditions for the development of the territory and built structures in it"*. Development should take into account the multidimensional and complex nature of the process in its whole and be based on clearly defined principles of good governance, territorial development, and development control. Consequently, the planning process would be accompanied by a considerable number of instruments, which would help the planning process, such as policies, plans and regulations. On the other hand, for the first time in Albania the drafting of the General National Plan for the Territory becomes mandatory, and at the local level the land development process (building permits) cannot occur, except on the basis of the approved General Plan of the Territory of the local unit.

To illustrate this, the scheme represented below show on the hierarchy and the interaction between planning instruments as presented in the Law.

Figure 20. Illustrative scheme of Planning Instruments Hierarchy as proposed in the Law, no 10119



Source: Toto, R. 2010 et al.; own graphic interpretation

Though the Law no. 10119 brought a series of innovations in the planning system in Albania, it was precisely this innovation, that put in front of a complex development context, with lack in financial and technical capacities, and fraught with interests, that marked its weakest point. For 4 years after its adoption in parliament, the law suffered a lot changes (the same happened also to while also being its bylaws), and these changes were far away informed by the implementation of the law in the actual context. Of course the situation damaged its consistency and increased the objections toward it, as such the law and the planning process was prone to misuse. As (Toto, R. & Favro, T. 2010) argue several reasons may be counted for this matter:

1. The bylaws, necessary for implementation, were adopted almost a year later after the adoption of the law.
2. Law no. 10119, provides that, permits are issued by the authorities, only on the basis of general local plans. Such a provision was necessary for him guarantee sustainable development, but the time needed to draw up plans, was a "barrier" for developers. Given that, this time is also impacted by financial opportunities, to draw up plans, in many cases plans simply are not drafted.
3. For the transition period, until the approval of the General Local Plan(s) (GLP), Law no. 10119 provided a Regulatory Model for the development. However, this model had several restrictions and conditions such as: a) it could only be applied to residential areas; b) it could not change the existing land use and building intensity; c) in order for its implementation the prerequisite is that the local council in each of the LGUs should draft and approve two maps (existing land use and existing indicators for development). As a result, the model was not made to satisfy the needs for investment of the business sector, rather than address urgent residential issues. In this context the majority of LGUs neither drafted the land use map, nor did undertake any major investment with regard to development. On the contrary they were just waiting for the governmental transfer to fill in their daily expenses on service provision.

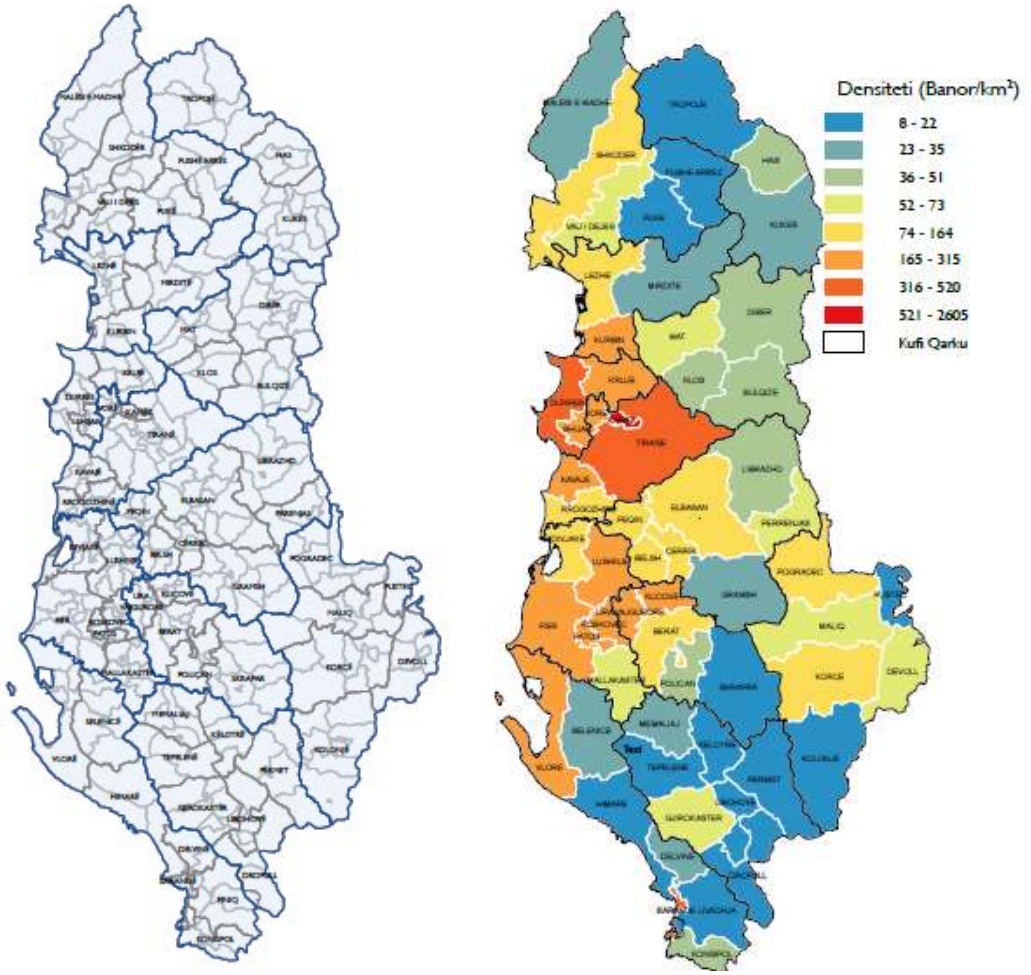
4. The developers themselves have had resistance to the law, due to changes in terminology, or procedures and deadlines and even when they were a bit proactive, the local authority was unable to issue them the building permission required (because of the prerequisite of drafting the land use plan)

As a result, from September 2011, throughout Albania, cases of application for development at the local level have been very few even for very modest investments (small houses, service units etc.). Contrary to that, at the national level 54 permits have been granted for complex or infrastructural development. And of course in parallel with the formal sector, the informal construction sector never stopped functioning.

3.1.1. Planning Approach after the TAR Reform in Albania (2014 and onwards)

Today, the planning process in Albania is shifting towards a combination of political objectives and visioning processes, combined with initiatives towards strategic and action-led planning that aims both, formulation of long-term objectives, and rapid implementation and concrete development projects. Furthermore, the change in planning systems in Albania has been introduced in parallel to several political processes, such as: The Decentralization process; the Territorial Administrative Reform (TAR), and the ongoing Europeanization process (Allkja, 2019). The issue gets more complex, when the challenge of territorial governance is accompanied by the overwhelming issue of poor local capacities, both, in human resources, and financial aspects. As far as efficient investment planning and budgeting matters are concerned, drafting a realistic planning document can be considered the most important step.

Figure 21. Transformation of administrative map of Albania after TAR and population density in 2015 as per 61 newly formed Municipalities



Source: Ministry of State for Local Affairs, 2015 and INSTAT 2015; own graphic interpretation

As a result of the amalgamation of municipalities / communes, which lead to larger territories and populations, the need for planning became more and more powerful. This led to the increase of the support of the municipalities in planning area, as well as the continuation of the initiatives at national level. With the lead of a newly formed Ministry of Urban Development, the territorial planning law and its bylaws were amended, and in parallel, for the first time, The National General Territorial Plan of Albania was drafted (together with 2 national sectorial plans, such as Cross Sectorial Plan for the Economic area Tirane-Durres and the Integrated Cross Sectorial Plan of the Albanian Coast) (NTPA, 2017). Through donor support, and MoUD open calls, 31 GLTP were drafted in a record time of 8 to 15 months. By the end of 2018, out of 61 Municipalities, 37 of them have already approved and have started to implement their

plans, 7 are in their process of approval and 16 are still being drafted (Dhrami,K & Imami, F. 2019)

In terms of procedures and methodologies, with the embracement of the comprehensive approach and the eagerness to approach Europeanisation, plan making procedures have shifted as well. In his work (Allkja, L. 2018) on Europeanisation of Spatial Planning in Albania, says that the analysis of the Europeanization of the Albanian planning system examines three dimensions: i) structures (legal and institutional), ii) instruments (spatial planning policies), and iii) planning practices. With regard to the first, the aim of the Albanian authorities has not only been to change legislation, but also to institutionalize a new planning culture (Toto, 2012), as such the Law aimed especially in establishing an entirely new planning system reflecting a more spatial, comprehensive, and integrated approach, typical of western European countries. So, the Spatial/Territorial Planning Process (as stated in the law) aims to ensure:

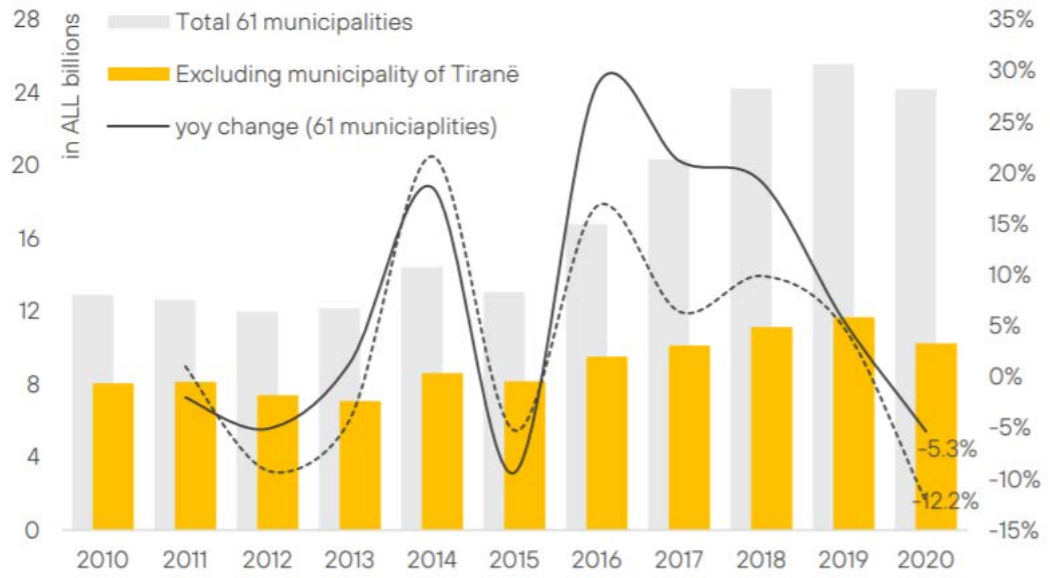
- sustainable development of the territory, through rational use of land and natural resources
- balancing the use of natural resources, economic and human needs and public and private interests
- economic, social and cultural development at national and local level;
- harmonization of the development of the territory, according to the principles of sustainability, with the preservation and protection of biodiversity and areas with special status;
- Elimination of barriers, for a safe, equal and independent use of space by all persons, including those with disabilities or special groups, for whom special technical solutions or equipment are needed.

It is also important to say that the planning process is a continuous cycle that puts in a reciprocal and interdependent relationship all the planning documents, which constitute instruments that respond to the dynamics of human activity and territory. This system, can be easily compared with the classical approach towards methodological planning proposed by McLoughlin (will be elaborated further in the theoretical framework). However, despite the good intentions these efforts in establishing new planning practices occur without prior study of potential impacts on the territory (and on territorial governance), which means that, during all planning phases (even more

highlighted in the implementation, negative / uncertain consequences can also be expected. On the other hand, the fact that the planning system and the instruments are changing quickly and continuously makes it almost impossible to observe and benchmark real results from the reform in the territory. (Co-PLAN, NTPA, USAID, 2015) Yet, development and proper implementation of plan is still far away perceived.

"On another dimension, the decentralization process in Albania has progressed at a slow pace and in waves, shifting over time in recent years in all dimensions: fiscal, administrative, political, and economic" (Ahmad, et als., 2010) in (Toska & Bejko 2019). As (Toska & Bejko 2019) argue "the completion of the legislative framework with a law dedicated to local finances was of particular importance for local governments. Nevertheless, while the available financial resources to the 61 municipalities are assessed to have followed an upward trend, their allocation seems to have had different effects on local economic development". This illustrates a new challenge to the local authorities, and hence highlights the burden of those to properly implement the spatial plan.

Figure 22. Developments of Municipalities in their own source revenues



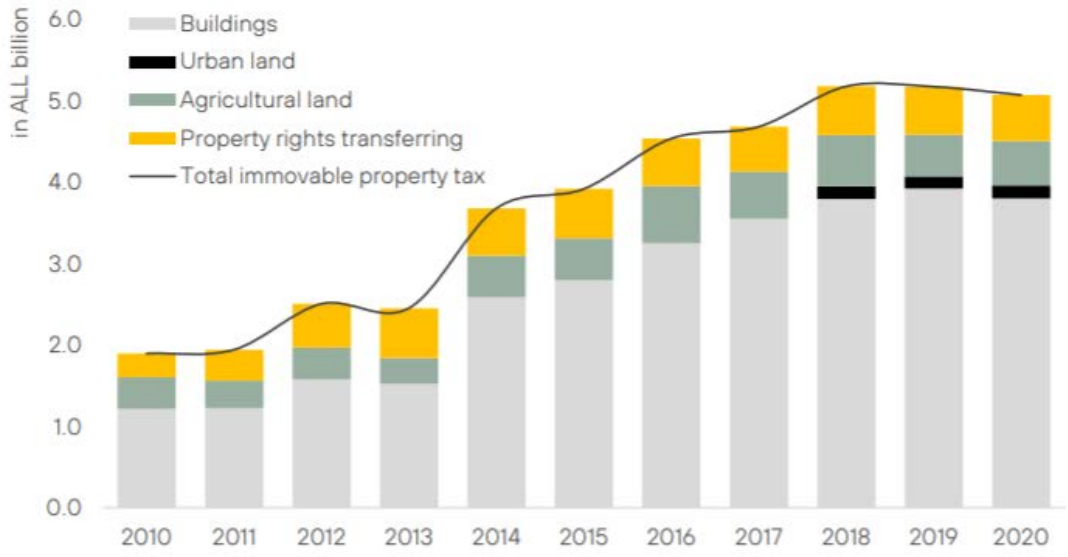
Source: Local Finances Portal www.financatvendore.al.; Graphical illustration of Toska, M., 2020

Mirroring the abovementioned situation, the fiscalization approaches have always been vague till the recent years, both in terms of the overall decentralization process that Albania was undertaking as well as to the fiscalization of land use issues for better

management of the land and territory. Until 2015, municipalities (and former communes), as the authority in charge for development of the territory, give development permits and the only income that they collect (related to land or properties) is the infrastructure impact tax (probably the easiest to collect), and in a very low level the property taxes. Even though the revenues collected over the years from immovable property tax (especially building tax) have seen an upward trend, ownership related issues and lack of cadastre registers have hindered, among others, the potential of this tax to be fully unlocked. (Local Public Finance Report, 2020)

It was only recently that government of Albania, undertook next steps in re-evaluating the property tax in Albania, shifting it from a property tax based on the surface area (for both agriculture land and buildings) to a more complex tax based on property value. Following the radical reformation of this tax through Law No. 106/2017 "On Some Addenda and Amendments to Law No. 9632, dated 30.10.2006, "On Local Tax System", as amended", 2019 was projected as the baseline year when all municipalities in the country would apply the property tax based on the new methodology, according to the Ministry of Finance and Economy press releases. Currently speaking, this step has not been taken by all municipalities, given the difficulties encountered in collecting the necessary data to apply such a methodology.

Figure 23. Immovable properties tax revenues (2010 - 2020)



Source: Local Finances Portal www.financatvendore.al.; Graphical illustration of Toska, M., 2020

Against these incomes, local authorities must provide infrastructure in the territory, the costs of which do not can only be covered by the infrastructure impact tax. In fact, according to analysis of tables, of the Ministry of Finance, for the period 2008-2011, all property taxation per person at the national level, do not cover more than 13-23% of capital expenditures, per person, by municipalities and communes.

It is yet early to observe and talk about the results the shifting has provided, as such this research does not enter to further detailing.

Box 7. Property Taxation in Albania

Until 2015, the property tax in Albania was comprised of two levies, both of which were dependent on the surface area of the property. The agricultural land tax is levied on all land that has been designated as agricultural land by the national Immovable Property Registration Office (IPRO). All other land is now exempt from taxation. The second tax, which applies to structures, is based on the entire area (in square metres) of the building, which includes any surface area below ground and all levels above ground, as well as any surface area below ground.

Building tax rates differ depending on the land use class and the jurisdiction. The rates in the more densely populated areas of Albania are greater than in other parts of the country. In addition, a difference is established between residential structures erected before 1993 and those constructed after that year. A 100 m2 residence in the capital city of Tirana built after 1993 would be subject to an annual property tax of USD 27, whereas a 100 m2 retail trade firm in the same city would be subject to a property tax of USD 360 per year, according to the current rates. Currently, the yearly tax on immovable property provides revenues of 0.13 percent of the gross domestic product (GDP) of municipalities, which is significantly lower than worldwide standards.

The existing potential property tax base in Albania varies substantially depending on where you live, with the capital Tirana accounting for a disproportionately large percentage of the country's total property value. When the Census was taken in 2011, there were somewhat more than 1 million dwelling units, however around 30% of them were recorded as unoccupied at the time. In terms of total building area, these houses account for 60.6 million m2 according to Census statistics. Apart from that,

there are 9.9 million commercial buildings, which account for 6.4 million square meters of floor space. Finally, there are 695,500 hectares (ha) of arable land available.

Since 2015, a new tax reform was undertaken in Albania. The proposed tax reform amended the law and moved to a market value approach to the taxation of all land and buildings. Municipalities across the country are trying to complete their database, yet incomplete. This has caused part of the tax calculation to be done in flat form and another part on the basis of accurate square meters for buildings. In parallel with this, is the work of the ProTax project, which aims to set up the Fiscal Cadastre system which is expected to be ready according to forecasts by the end of 2020. Currently, the tax is calculated as 0.05% of this value. For buildings built before 1993, or those considered as older apartments, the price per square meter is calculated as 70% of those references set out in the government decision. Buildings that serve economic activities, on the other hand, will be taxed at 0.2% of the market value of their property unit.

While the local government intends to use the property tax as a breathing space for its finances, with a higher possibility of its collection, the fiscal indicators of the 8-month period 2019 reflect a not so optimistic situation. At least not in relation to 2018, when the implementation of the tax started for the first time. By the end of August, ALL 3.82 billion were collected in the item of property tax (building), with a decrease of 1.8% compared to a year ago. This seems to be related to the fact that by April 2018, businesses and individuals have paid the tax with the old formula. Despite this, the 8-month period 2019 remains the period with the best performance after that of 2018 in the last ten years.

Moreover, the local authorities, through planning, contribute to increasing the value of land and this value is used by landowners in construction processes, rather than returned to the municipality or commune. To cover these costs and capture the increased value, local authorities would need additional fiscal and financial instruments such as: property tax for urban land (preferably at market value), development obligation e land, instruments to capture the increased value of land, through financial contributions, etc. At this point, the decentralization strategy and legislation, for local government and

local taxes, has a lot of room for improvement, so that local revenues of increase significantly, capital expenditures increase and autonomy, in the sector of territorial planning and development at the local level, to be strengthened.

As a conclusion, the planning concept in Albania has changed drastically though being still in transition since the "central planning period" before the 1990s. A shift from the urbanist-approach in city planning towards a more comprehensive and integrated approach (taking in consideration broader aspects of urban-rural connections, environmental aspects, economic/fiscal issues rather than merely urban design) is slowly being imposed in the planning mentality and practices. Though the process of fully shifting to this approaches, as well as embracing new challenges imposed by uncertainties, constitute an emergent need, there are still drawbacks along the road.

3.1.2. Features of development planning in Albania – a preliminary discussion

As also described in earlier in this part of the research, during the early years of the transition, population migration was concentrated in Tirana, followed by Durres, Fier and all small towns in between them positioned in the Western lowlands part of the country. The capital remained the most favourable area, where the best employment, livelihood, and infrastructure opportunities were concentrated. Although at much lower rates, Tirana remains the only city in Albania with the best opportunities, despite the fact that it is increasingly under pressure from rising population and rapid urbanization.

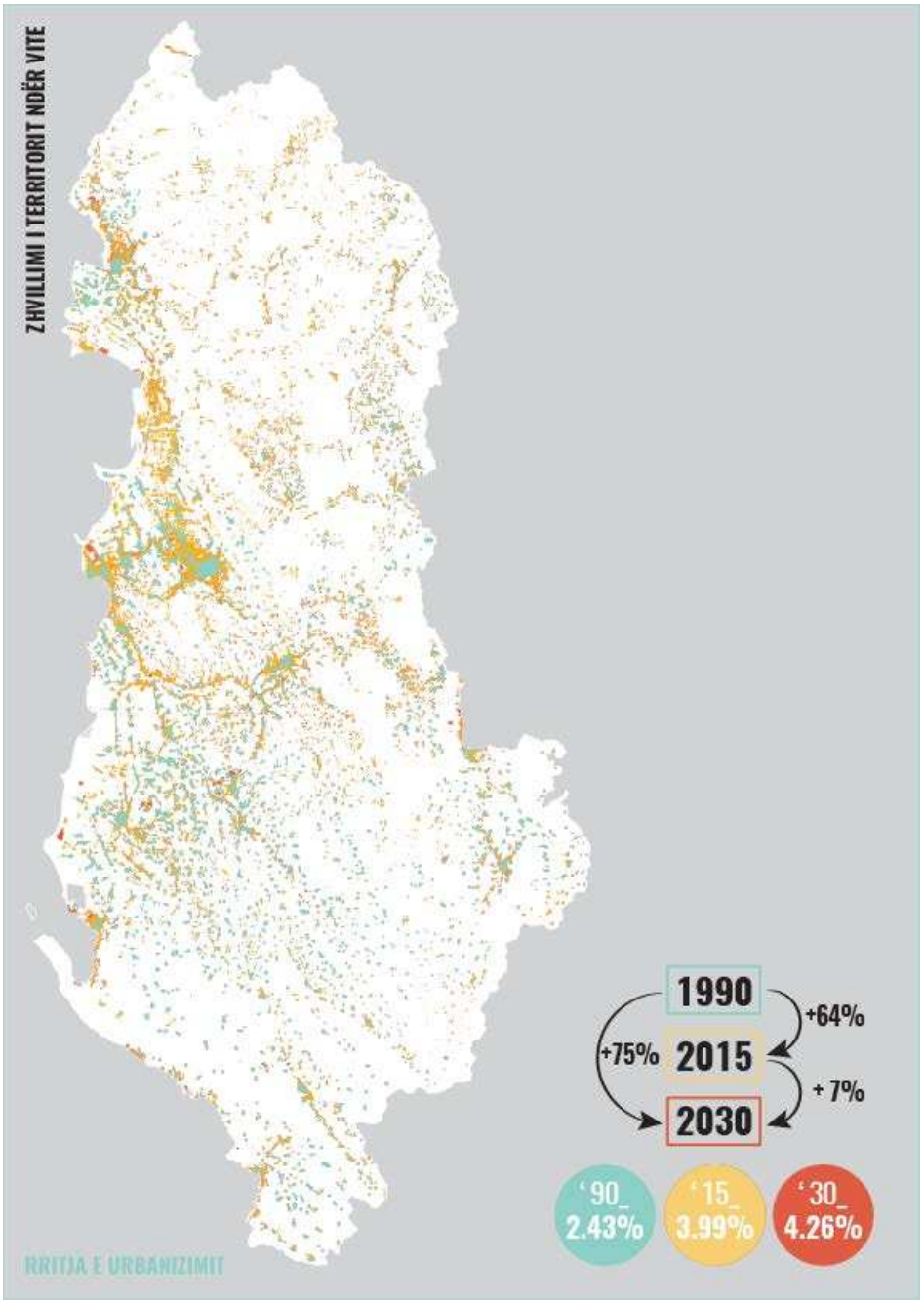
The 2011 census counts a population of 763,560 inhabitants, while today e-albania[35] data estimates the population of the capital to be 910,000 inhabitants. With a growth rate of 9% per year the housing needs were very high and the competition to enter the market was growing more and more. In very simple terms, a total of 262,000 new residents in the city within the last 20 years would require about 65,500 new housing, more schools, kindergartens, roads, greenery and other services from their municipality.

These immediate and successive changes brought, above all, radical changes in land use, mainly in the transformation of agricultural land into new urban land, unplanned

[35] Reference of the electronic portal / database of public services for Albanian citizens

territories and especially unserved land suitable for the upcoming development. Adding to these challenges, planning in Albania was much rigid in addressing these unforeseen events, and municipalities, with their embryonically decentralization level, couldn't even address half of the territorial needs. And it was in this ambiguity created that local land use plans, as the sole planning instruments in Albania, were even misused to create fictive increased land value.

Figure 24. Territorial development in Albania - urbanization growth and future prospects



Source: National Territorial Plan of Albania, NTPA 2018

Figure 25. Urbanization, population and future prospects for development as per 61 Municipalities

Source: National Territorial Plan of Albania, NTPA 2018

Before entering to the empirical analysis, this section aims at presenting in brief some of the main features of urban planning and development and planning standards in Albania, from the 50s onwards. Following the context presented in the introductory part of this research, the approach to urban planning and regulations in Albania can be defined in three different periods:

1) Centralized Planning Period (1950-1993)

Despite the fact that Tirana was the subject of numerous plans and urban studies during the first period (1950-1993), it is not the focus of this research. This is because decisions about the shape of the city during the Central Planning era were not based on market demands, housing demand, or business development trends.

2) The Urbanist Approach (1993-1998; 1998-2009)

The Urban Approach appeared in the early 1990s, when the new Law was drafted, namely Law 7693 "On Urban Planning", in 1993, which was followed in 1998 by a more detailed Law on Urban Planning: Law 8405 " For Urbanism ". The law focused only on the condition of buildings on the ground, as this was considered a key issue in the development of the city. The law was quickly followed by the Urban Planning Regulation, which would serve as a framework for all development. Among the planning instruments used were the General Regulatory Plan, the Partial Regulatory Plan, the Yellow Line, the Suburban Area and the Master Plan. These instruments were solid but easy to implement and the hierarchical division between competencies was clear and easy. The only problem with this Law was that it did not take into account the many democratic processes that were taking place in Albania. Two of these were: informal developments that spread to the outskirts of major western urban areas and the privatization of publicly owned property (Policy followers and Policymaker 2, 2012).

In terms of planning norms, specific standards were applied to different types of cities. Cities were grouped according to their population, from Group 1, with less than 1000 inhabitants, to Group VI with more than 200,000 inhabitants. Each of the groups has different elements and zoning regulations should be considered during the regulatory plan. (DCM 722, On the Approval of the Urban Planning Regulation).

Eventually, the approach to planning according to the urban approach was completely standardized and technocratic. Of course there has been a clear adoption of standards, as a means to control development and achieve a high quality of space. However, it is

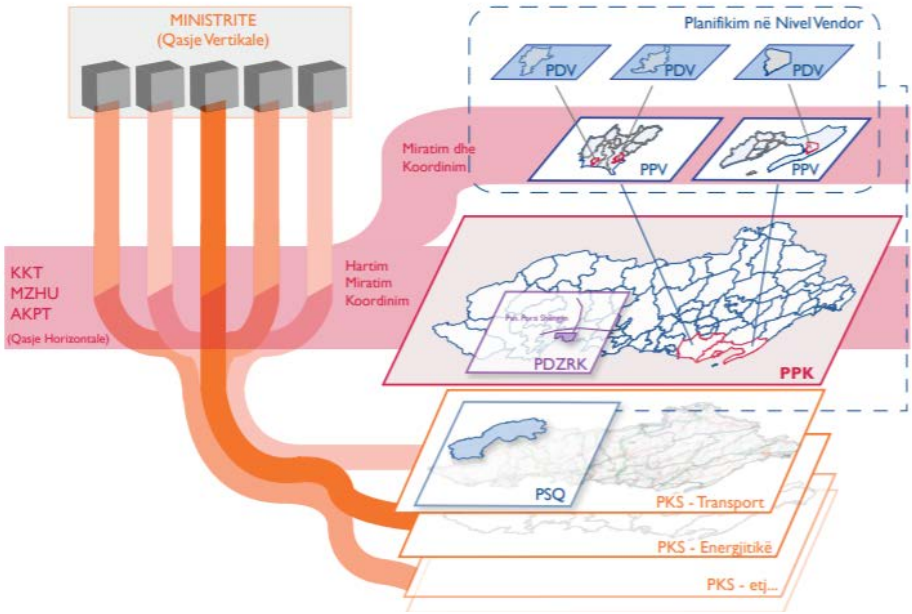
not difficult to know that this approach was outdated. In a period where the city is dynamic and has mixed use areas, you cannot base the development vision on a rigid concept of modular units. Time proved that these standards, although they should have been easily applied, not only were ignored in most cases, but even when they were implemented, they did not meet the reality of the city.

3) Comprehensive Integrated Approach (2009-2013; 2013 – till now)

The Comprehensive Planning approach, originally legitimized by Law 10191 "On Territorial Planning" (2009), was an attempt to apply a postmodernist view of planning in Albanian culture. It was based on Comprehensive European Planning, combined with several urban approaches. Planning of current instruments is based on: Policies, Plans and Regulations. They are classified into 2 categories: General and Sectoral, and at several levels: national, county, local. The instrument that deals with the issues on a smaller scale is the Detailed Local Plan, which is designed for the areas into which each city is divided, according to its Local Plan.

A conceptual image is presented below, explaining on the steps and issues dealing with the comprehensive planning as below:

Figure 26. Interdependence and relationship between planning instruments



Source: Co-PLAN, 2015 in: Territorial Planning and Development in Albania, Technical Manual[36],

[36] For further reads see: http://planifikimi.gov.al/index.php?eID=dumpFile&t=f&f=2456&token=0bb82e155e0a66fedb3a86718a24573fbbebfc09

3.2. Assessing land use Patterns in Tirana during 1990 – 2020 period

The spatial configuration of land use is an important determinant of many ecological and socio - economical processes (Lambin et al, 2001). To assess the effect of possible future developments on the environment, economy, and society at large, a better understanding of the determinants and interactions of land use spatial configuration and processes is required. As it was also set in the theoretical discussion in chapter II of this research work, land use changes (and definition of a specific land pattern as a consequence) through the curse of time in a specific territory might be described by the complex interaction and factors dealing with capacity and demand for a specific land use, policy statements with regard to planning for future developments as well as the nature and environment under study. In this sense, as (Turner et al, 1990) states "It is doubtful that a relatively simple explanation of why we transform the environment the way we do will be forthcoming."

While accepting the very implicit methods for assessing and discussing on land use patterns in Albanian context, two assessing approaches (method might be too of a big word) are undertaken to explain land use changes and pattern in Tirana's Context as described in the point ***a & b*** below. It is however necessary to say that the research assumes that the historic development of the land use pattern Tirana's context in the last 30 years, is very strongly related to the dynamic socio economic conditions (such as migration and demand for housing) as well as to inappropriate policies with regard to planning.

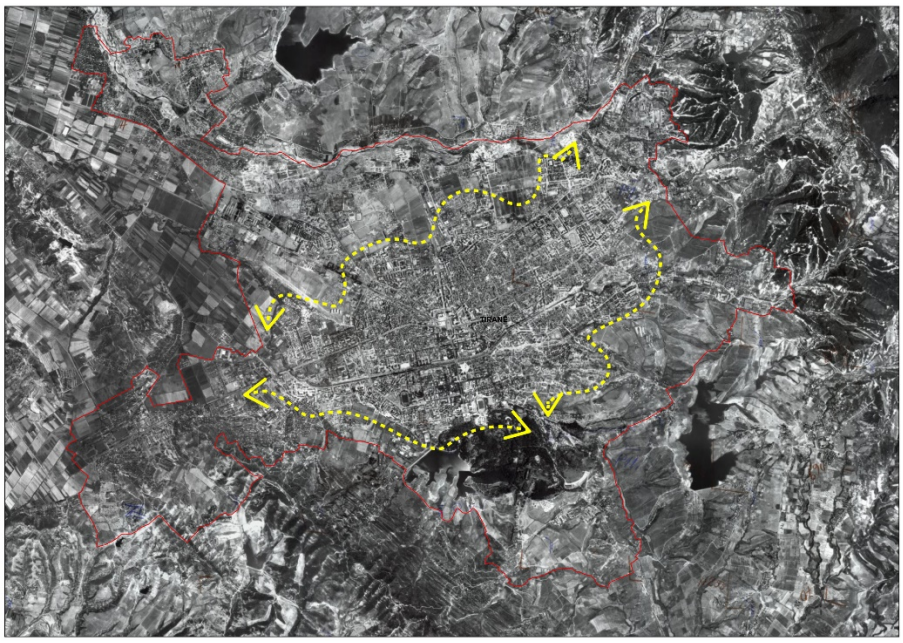
a. *Assessing the land use changes based on the aerial photos and Corine Land Cover changes 4 different years (for each)*

The very first approach in trying to understand land use changes so a pattern of land uses can be drawn is that of understanding into the dynamics of changes as a result of urbanization in Albania, and especially that of Tirana.

While assessing the maps provided next, and as well looking to the figures represented in the table below, a very high expansion of the urban areas can be seen especially during the 2000 – 2006 period. The phenomena occurred during that time was that of informality, which led to great transformation of agricultural land to urban land in very short periods of time.

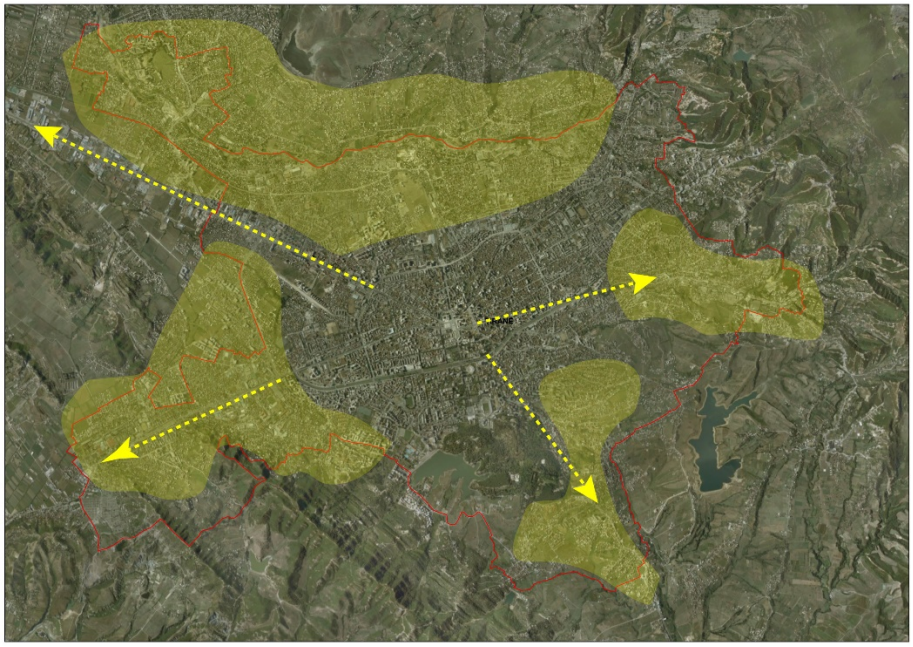
During the second period (2012 – 2018) though informality is still present in Albania, the phenomena of intensive shifting is being more evident. This led to creation of denser areas, and building permissions for high rise buildings (usually used for residential and business purposes).

Figure 27. Orto-imagery of Tirana in 1994



Source: Google Earth imagery, Authors' own interpretation

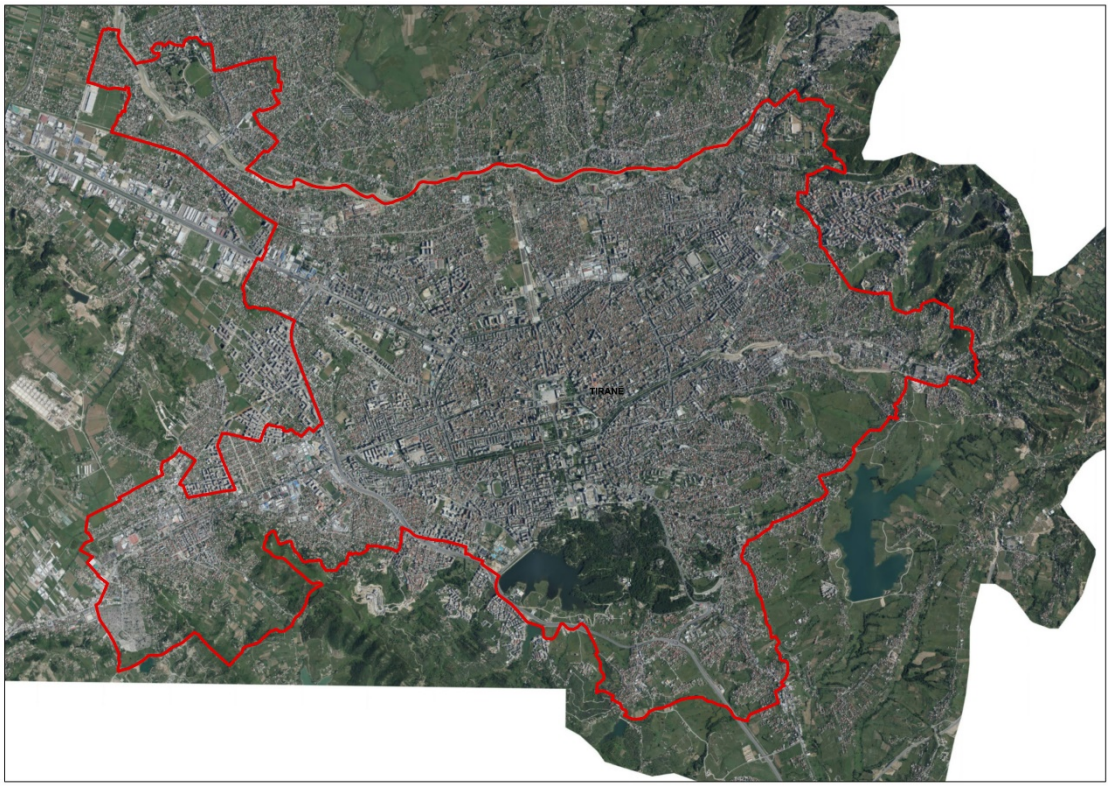
Figure 28. Orto-imagery of Tirana in 2007 - Emerging of the Informal city in the peripheral area



Source: Google Earth imagery, Authors' own interpretation

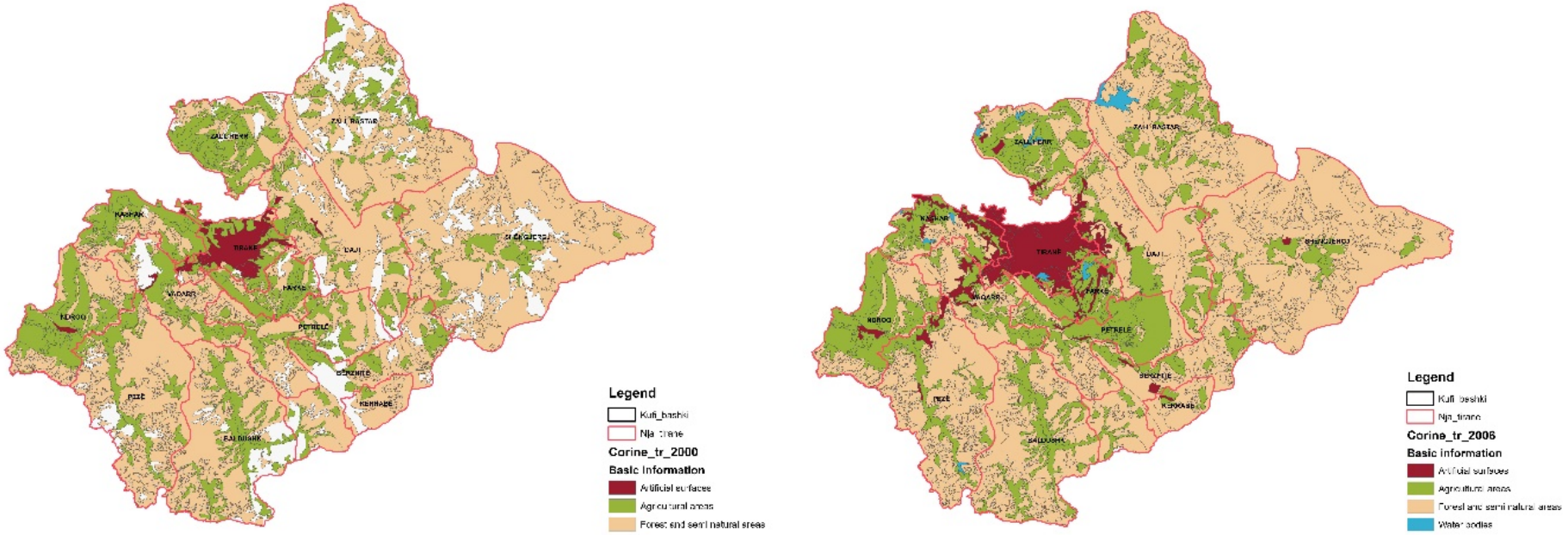
Yet the above mentioned shifts are difficult to be assessed only using the land change information though the time, and no distinctive pattern of land use can be drawn out of that. The changing in approach from extensive shifte (urban land claimed from agricultural/natural one) towards intensive shift, is definitely linked to the institutional and governance changings in Albania through these 2 periods, which of course was influenced in the planning regulations following 2009 and onwards.

Figure 29. Orto-imagery of Tirana in 2018 - the consolidated city



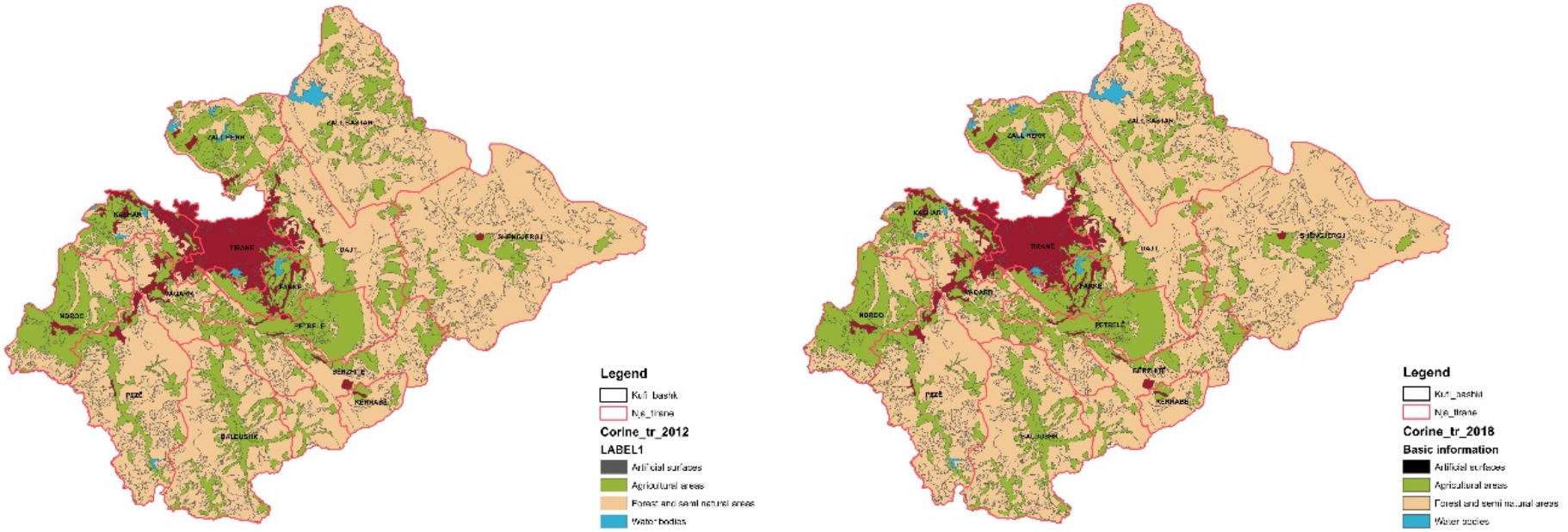
Source: Google Earth imagery, 2020

Figure 30. Changes in Land use in Tirana Municipality calculated in GIS (2000 and 2006)



Source: Corine Land Cover, and GIS Calculations by the Author

Figure 31. Changes in Land use in Tirana Municipality calculated in GIS (2012 and 2020)



Source: Corine Land Cover, and GIS Calculations by the Author

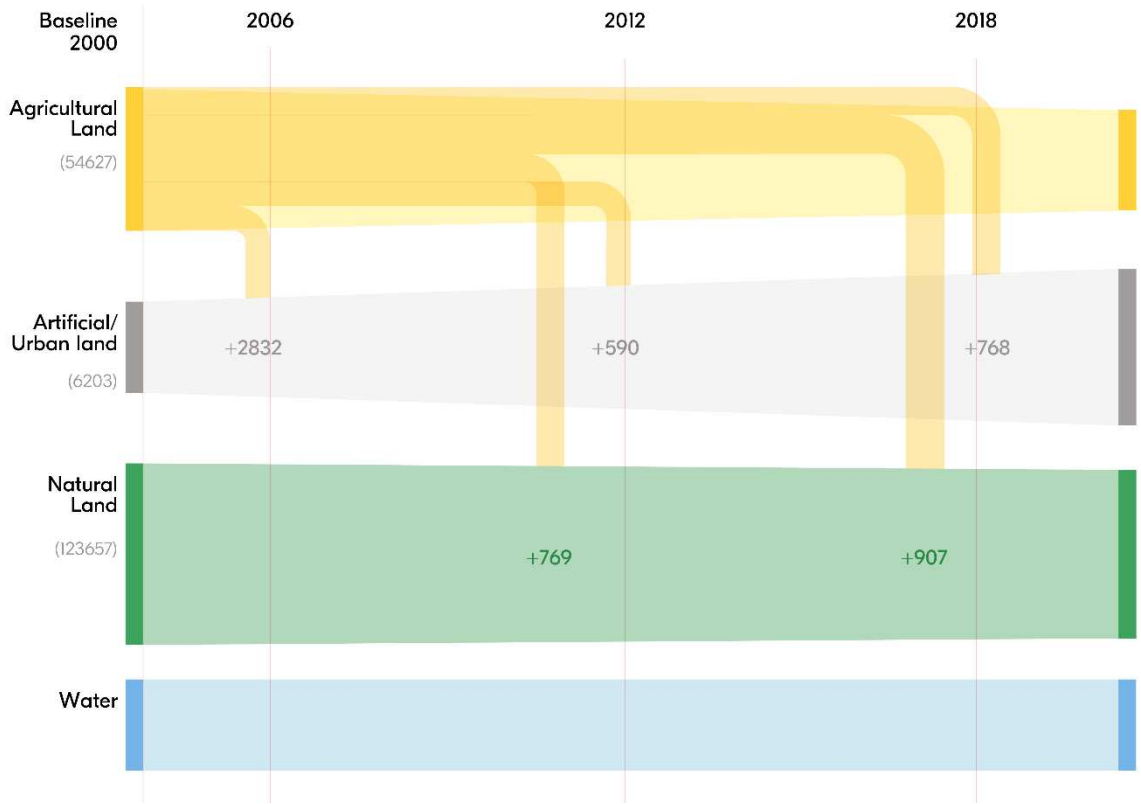
In order to analyze and to be able to better asses land use patterns in Tirana, the research will look into details in the 3 main drafted planning documents through the study period (see subchapter below)

Table 4. Calculated changes in Land Use Changes using Corine Database (2000 - 2018)

	2000	2006	2012	2018
Agricultural Land	54627.09	54364.79	53009.52	51334.04
Decrease in agricultural land		*-262.3*	*-1355.27*	*-1675.48*
Artificial /Urban	6203.19	9035.21	9625.96	10394.32
Increase in urban land		*2832.02*	*590.75*	*768.36*
Natural	123657.35	121087.63	121852.15	122759.27
Changes in natural areas		*-2569.72*	*764.52*	*907.12*
Water Bodies	851.39	851.39	851.39	851.39

Source: Authors' own calculations

Figure 32. Illustrative image of land use changes based on Corinne dataset for 4 main periods in Tirana Municipality, Albania



Source: Calculations based on Corrine Database for the given years and Author's own representation

As it can be observed both by the orto-imagery evidences as well as calculations made based on corine-land cover changes, Tirana had lost a tremendous amount of agricultural land (especially in the peripheral part of the city) especially during 2007 – 2018. This period is characterized, as also shown in the previous subchapter above, by an increase in building activity (usually as an informal practice), and though no properly documented, at a large extent of changing of land usages in the city. Two main reasons can be accounted for this : i) changing in land use due to demand of the new residents in Tirana for residential land (as caused by changing of dynamics in population and need for residential services) and ii) because the planning system in Albania, though not directly supporting these changes, shifted in away in adapting this phenomenon. How planning practice in Albania, through drafting of territorial plans, will be shown in point b) of discussion below.

b. *Discussion on the basis of approved territorial plan for Tirana municipality, if some land use pattern can be distinguished*.

The First Regulatory Plan of Tirana was drafted in 1923 by Austrian architects and engineers. In 1926, the Second Regulatory Plan of Tirana was drafted. The Third Regulatory Plan as a chronology, but the first of the period when Albania became a Kingdom, is the one of 1928 designed by the Austrian architect Kohler. The Fourth Regulatory Plan of the period of King Zog is that of 1929. The most complete and well-studied Regulatory Plan was that of 1942. Work on this Plan began in 1939 and ended in 1941. Regulatory Plans of 1957 and 1990 were drafted on the basis of the existing condition of the city.

A. Regulatory Plan of the Municipality of Tirana (2008)

The 2008 Regulatory Plan is the first of the pluralism period, drafted on the basis of a decentralized and comprehensive process. It is the fruit of an intensive 6-year work of the Municipality of Tirana in cooperation with European experts in various fields. The regulatory plan for 2008 was drafted by the Swiss studio URBAPLAN in cooperation with the Municipality of Tirana. The document was never fully approved, remaining a theoretical and unapplied study.

The primary objectives of this plan were:

- City development based on the concept of Greater Tirana and its expansion along the Tirana-Durrës urban corridor;
- Affirmation of the role of Tirana as the capital of the country, through strengthening the existing central functions and creating new attractiveness;
- Integration of informal peri-urban settlements and integration of their inhabitants in the city.

The 2008 regulatory plan sought to limit the city's reach through its densification. The development of high-intensity blocks would require the completion of the existing road network, to cope with the growing demand for mobility in the urban area.

The study proposed rehabilitating existing apartment blocks, limiting new construction and providing community services. The city proposed the creation of several poles, located in the former industrial spaces, where combined activities would be concentrated. These poles, the development of which was divided into four phases, would play an important role in the perspective structuring of the city.

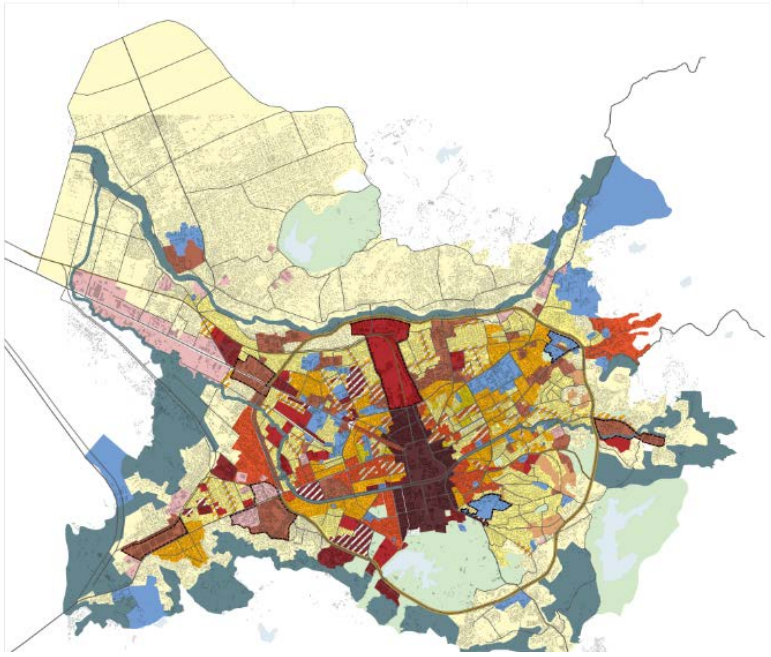
Urban development of economic and social areas according to the plan:

- The western area of the city presented good opportunities for densification, being quite well connected with the main road axes.
- The southern area, which offered less space for new developments, had to undergo an important intervention for the whole city, which was the construction of the southern segment of the ring road;
- The northern area offered great development potentials especially in the areas around the train station and in the former industrial areas along the Tirana River.
- In the eastern area, although there was room for development, poor accessibility made large, immediate investments impossible. The construction of the eastern segment of the great ring road proved necessary for the integration of this part of the city.

Completing the road system with multiple rings was the most important aspect in the development of the road system in Tirana. The completion of the Great Ring Road was a necessary condition for exploiting the potential of developing areas, as well as for controlling urban sprawl. The plan sought to follow a new multimodal mobility trend, which would limit motor vehicle traffic and improve the quality of the environment in

central urban areas. The movement of residents and frequenters of the city had to be based mainly on the public transport network by bus and tram.

Figure 33. Approved Regulatory Plan for Tirana in 2008

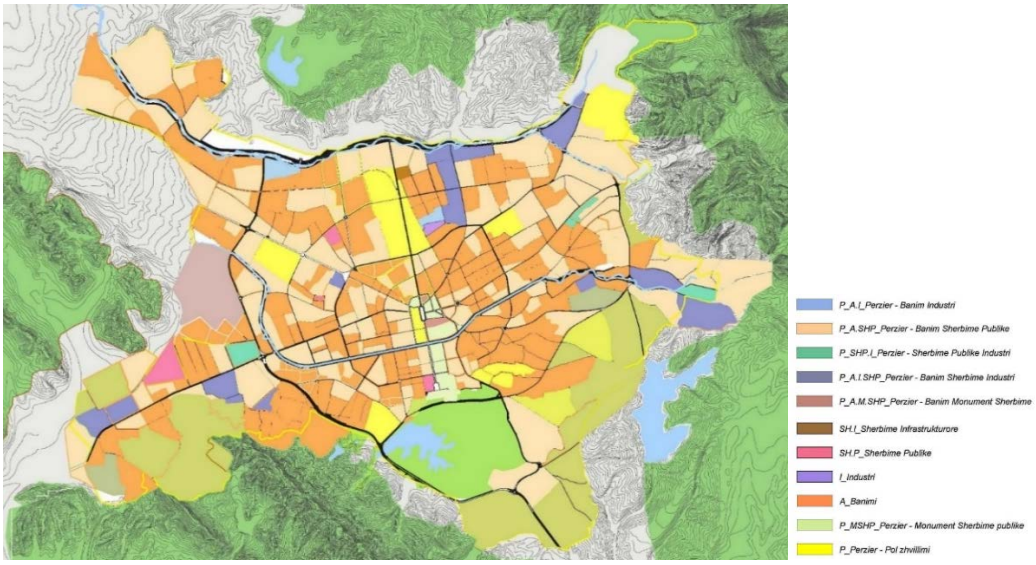


Source: Regulatory Plan of Tirana, 2008

B: General Local Plan of the Municipality of Tirana (2012)

This plan was among the only planning instruments drafted according to the new legislation in planning, both conceptually and in principle of planning, as well as in terms of content, based on the respective bylaws.

Figure 34. General Local Plan of the Municipality of Tirana, 2012



Source: GLP of Tirana, 2012

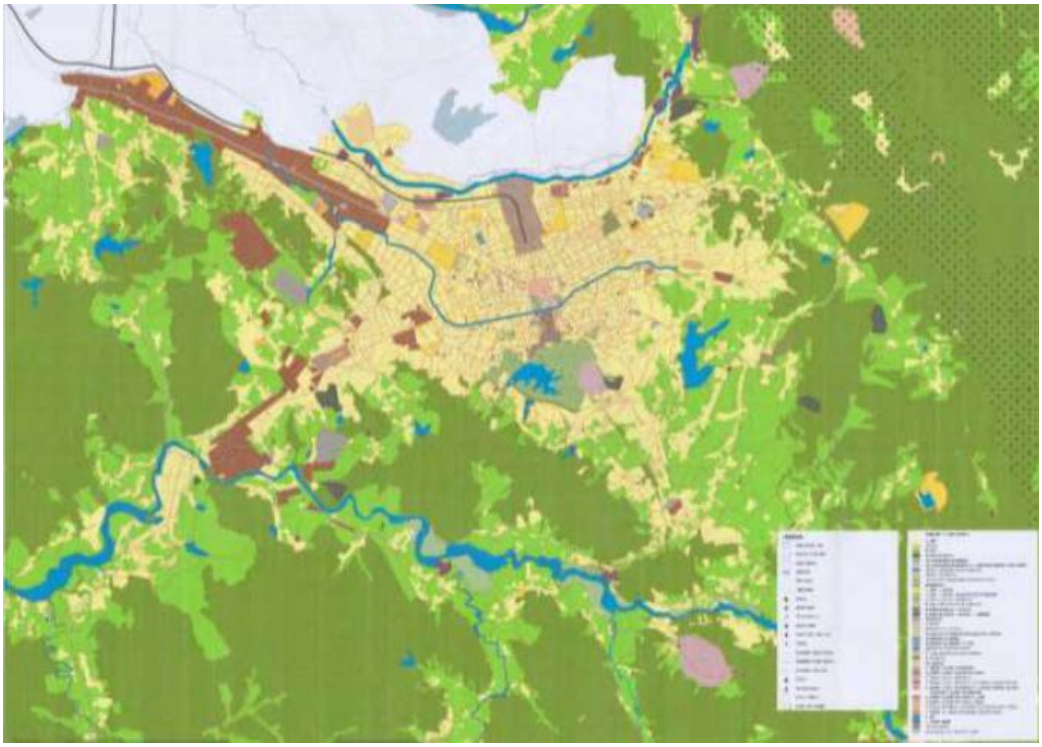
C: Tirana 2030 (General Local Territorial Plan drafted in 2016

The General Local Plan 'TR030' is the first drafted for the municipality after the territorial reform. It was prepared by Stefano Boeri Architetti, UNLAB, IND in cooperation with the Municipality of Tirana, funded by the Ministry of Urban Development and the National Agency for Territorial Planning. At the moment, this plan is the orientation document of the territorial development policies in the Municipality of Tirana, and is implemented for the period 2016-2030. In 2016, the general local plan of Tirana shows the future of a polycentric and kaleidoscopic metropolis, which will host in each of its parts a balance found between the city and nature. The vision has identified ten strategic objectives aimed at guiding urban development, economic and social development of Tirana in the next 15 years.

TR030 proposes the division and hierarchy of the territory into three basic categories: urban, periruban, rural. The urban territory includes all urbanized areas, almost completely built and composed of compact urban spaces with medium and high density where urban residential, tertiary and commercial services predominate. The suburban territory includes all areas of medium density built which consist of informal residential buildings, industrial and commercial buildings scattered in different ways and the presence of the main infrastructure in the service of the city. Rural territory includes all areas located outside sub-urban areas and includes urban units (poles) and agricultural and natural areas characterized by the presence of scattered buildings with mainly agricultural and residential destination.

In addition to these three perimeters, a fourth is added that identifies the historical center of Tirana, where the central axis and the historic center of the city of Tirana are declared "ensemble monument-culture".

Figure 35. Proposed land use at city level, Municipality of Tirana, TR2030



Source: Tirana 2030, Municipality of Tirana, 2016

The proposed land use allocations presented in all the maps above, show for a systematic land use allocation of greater services and residential buildings across the centre of the city, where important development poles that of the main boulevard in the north, central cultural area and the stadium in the south are seen as the main development *katalizators* of Tirana. This approach is reflected by the land market as well (though in Tirana a well-established market is still non-existent), where higher land values and higher rent prices are registered. The idea of increasing land prices in these areas, is not merely a reflection of the supply and demand forces, but is sustained, and somehow pushed forwards by institutional decisions. Several decisions of the Prime Minister (throughout the period) show of a continuous increase of the reference land and value prices in specific areas. Some of these prices, are gathered to show of this phenomena, a reflect the proposed reference land values in the respective DCM following the approval of the territorial/ spatial plan in Tirana. To better compare and highlight the terrible increases in land values, as comparison land market values for the same areas are put as well. (data from real estate agencies are gathered and assessed).

Table 5. Assessment on land values in Tirana Municipality areas through 2012 - 2020 period (DCMs and Real Estate data gathering)

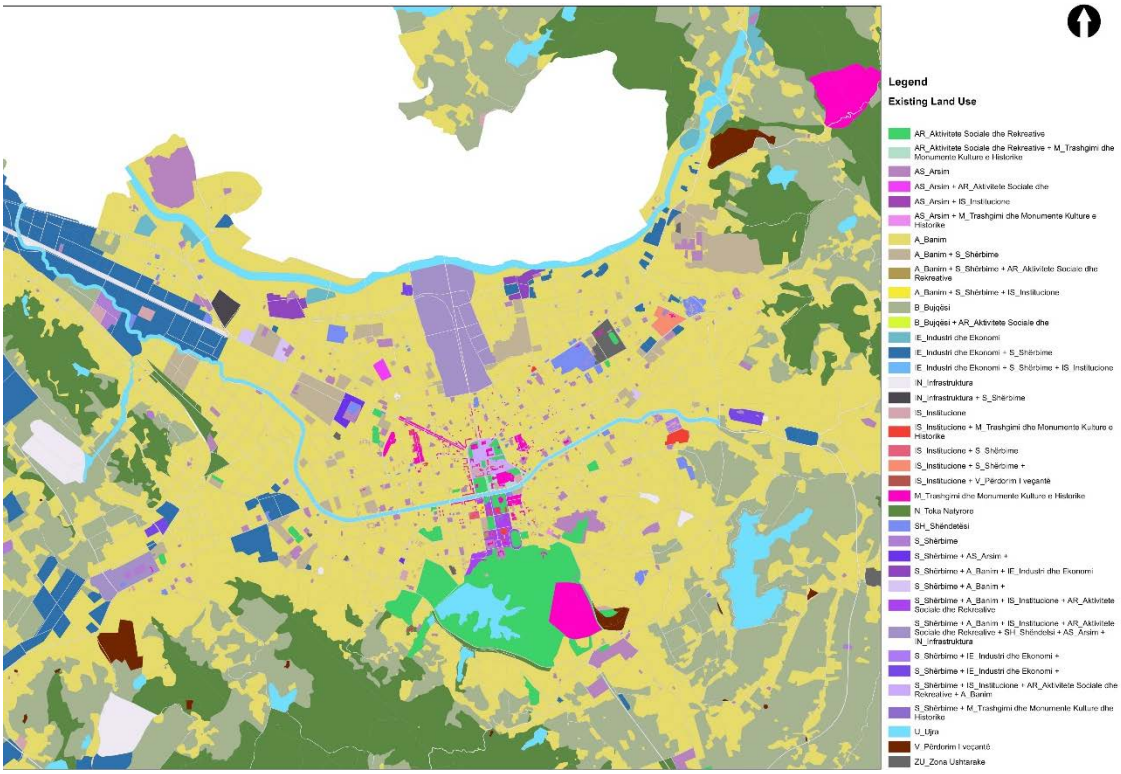
Urban Areas in Tirana	**Baseline (2020)**	**2019**	**2016**	**2012**
	Real estate sector (Euro)	*DCM no.42 27/03/2019 (ALL)*	*DCM no.89 3/2/2016 (ALL)*	*DCM no 72 28/09/2012 (ALL)*
Fresku	650	65000	60000	55000
Yzberisht	600	65000	65000	50000
Astir	750	65000	65000	61000
Pallati me Shigjeta	1200	85000	82000	70000
Spitali Ushtarak	1000	80000	71000	65000
Don Bosko	1100	100000	77000	72000
Rruga e Durrësit/ e Kavajës	1500	102000	102000	95000
Rruga "Myslym Shyri"	1600	139000	139000	124000
Ish-Blloku	2000	190000	190000	175000
Sheshi "Wilson"	1700	132000	190000	135000
Rruga "Komuna e Parisit"	1400	107000	135000	117000
Liceu Artistik	1500	187000	110000	90000
Rruga e Elbasanit	1300	134500	110000	115000
Tregu Elektrik	900	78000	75000	71000
Brryli	1300	95000	90000	85000
5 Maji	1100	72000	67000	60000
Stacioni i Trenit	1400	130000	100000	80000
Liqeni Artificial	1650	135000	135000	116000
Liqeni i Thate	1400	95000	135000	95000

Source: Author's Own data collections

Continuing with the argument, the newly proposed plan in Albania, and proposals done by the land use itself, surpass in a very high level the expected number of population, by proposing very high indicators for development. In this way the land use plan itself is prone to manipulation and miss usage, giving the impression that demand for land and new building is higher (so prices will go up) while the future scenarios of possible population living in Tirana is quite low. The following maps are extracted from the plan, and future calculations are made in order to reflect the phenomena.

In the first map below existing population and existing land used are shown:

Figure 36. Existing Land use in Tirana Municipality



Source: Tirana 2030, GLTP – GIS Calculations

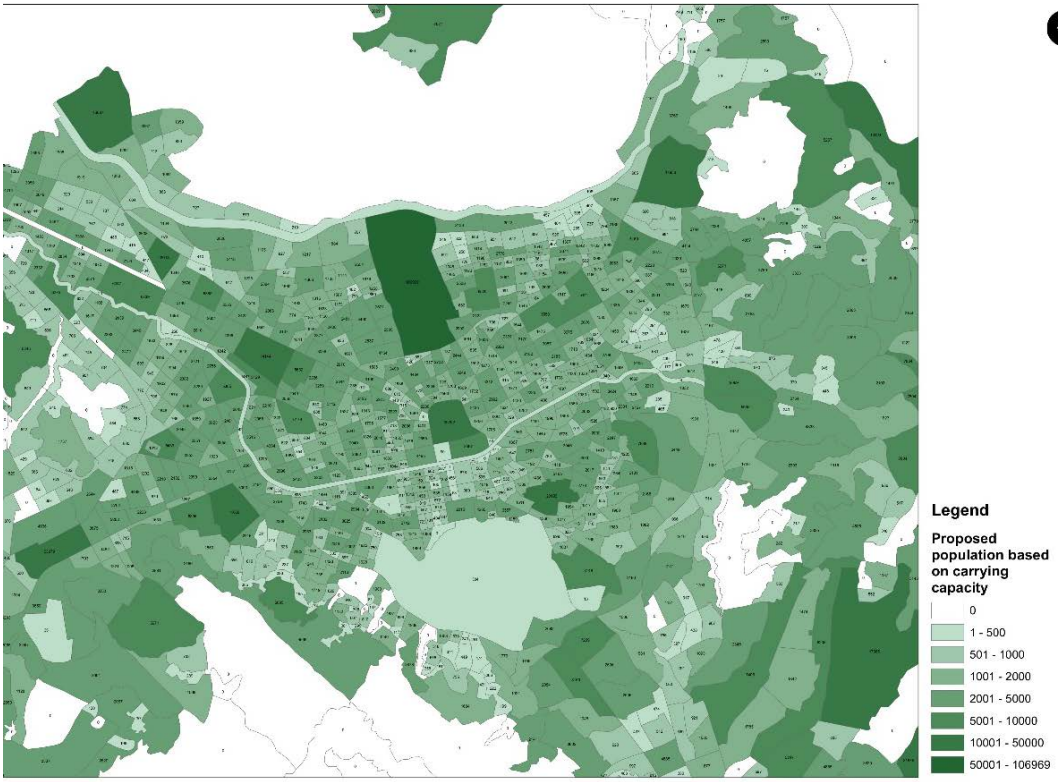
Figure 37. Existing population for each structural unit in Tirana municipality

Source: Tirana 2030 GLTP, Own GIS Calculations

Figure 38. Future calculated raise in population in Tirana for each structural units

Source: Tirana 2030 GLTP, Own GIS Calculations

Figure 39. Carrying Capacity of land, for each structural unit in Tirana (calculated based on the proposed indicators of the spatial plan Tirana 2030)



Source: Tirana 2030 GLTP, Own GIS Calculations

3.2.1. Discussion on findings from the assessment of land use patterns and land use allocations

Results from both models represented above show that the historic land use pattern in Albania can be explained by the conditions created as a result of the socio – economic and policy factors, as land use conversions are without doubt related to the biophysical properties of specific areas (refers to the conversion of agricultural land in the outskirts of Tirana). As a conclusion, accessibility to services and employment centres, spatial policies and fictive increased land values are much more important determinants of current land use changes. As a result, recent land use changes are the result of a self-organizing process in which centripetal forces drive the expansion of existing residential centres.

While no explicit attention is given in research studies to planning policies affecting the land use patterns (mainly because this correlation is difficult to be assessed), the

result of this analysis indicated that they have a great influence on land use patterns. A clear example of that are the residential areas around the centre of Tirana. As represented by each of the Regulatory Plans of Tirana, assignation of very high development indicators (FAR and PCR) has pushed towards the idea that not only a specific land use has to occur in this units, but also that the value of land is much higher compared to the other parts of the city.

However, it is impossible to say if the above findings are a direct result of policy intervention or a result of all social processes that result in a concentration of residential and industrial/commercial areas.

3.3.Fiscal autonomy in Tirana - an overview

Catchphrases such as "metropolitan areas are the engines that pull the national economy" turn out to be fairly accurate. But the same comparative advantages of metropolitan areas that draw investment also draw migrants who need jobs and housing, lead to demands for better infrastructure and social services, and result in increased congestion, environmental harm, and social problems. Roy W. Bahl, *et al.* 2013.

The structure of financial resources for municipalities can be used as an indirect indicator to assess their financial capacity, the ability to undertake investments independently and meet community service requirements. While Local Government Units (LGU) revenues in Albania are made up of its own revenues, governmental transfers and separate taxes, *local own source revenues* are essential for an efficient, effective and autonomous local government. Yet the financial performance of the municipalities in Albania remains still, while investment needs become more and more urgent. On average, for the 61 municipalities in the country, revenues from its own resources accounted for only 25.4% of total resources at the end of the first half of 2018. On the other hand in 2020, Revenues from local taxes contributed by about ALL 15.2 billion into the local budget, down by about 4.8% compared to the previous year. (Local Public Finance Report, 2020)

The view that local governments have little capacity to deliver services (or collect revenues) is, however, too broad a generalization, after almost 20 years in decentralization process. Especially when considering that, over the last three years,

revenue collected from local taxes has been largely defined by two types of taxes: infrastructure impact tax for new construction and immovable property tax (building, agricultural land, urban land etc.). While the latter's weight has shrunk, the share of infrastructure impact tax revenues from new construction has grown at an accelerated pace. In 2020, these two types of taxes represented 85.7% of total local tax revenues.

Tirana Municipality reports significant improvements in urban public management. And the quality of public services delivered in the metropolitan area is far better than that provided in the rest of the country. The financial resources available in the Municipality of Tirana have followed an upward trend in recent years. In 2017, the available resources were about Albanian Lek (ALL) 16.7 billion, up by about 16.2% in annual terms. This performance was largely determined by the increase in local source revenues, the increase in infrastructure impact tax and property tax. In 2020, the municipality of Tiranë collects nearly 45.5% of revenues from property taxes, given the high - level concentration of buildings and facilities in this territory.

The second most important item of revenues from local taxes is the infrastructure impact tax from new construction. Revenues[37] from this tax represent an important and significant source for the local budget (higher than revenues from property tax). Namely, the transition from 600,757 ALL in 2015 to 3,466,070 ALL in 2017, taxes collected from the infrastructure impact tax, clearly demonstrates the increase of the construction activity in the Municipality of Tirana, which is directly related to the increase of the number of construction permits after the approval of the Plan.

The performance in revenues from this tax suggests the continuation of development pressures measured by the number of construction permits. However, this pressure is mainly concentrated in the municipality of Tirana (about 24.2% of the total permits issued in the first half of 2020)[38]. The situation is portrayed as dynamic and fast-paced in terms of revenues generated and construction permits issued. (Local Public Finance Report, 2020)

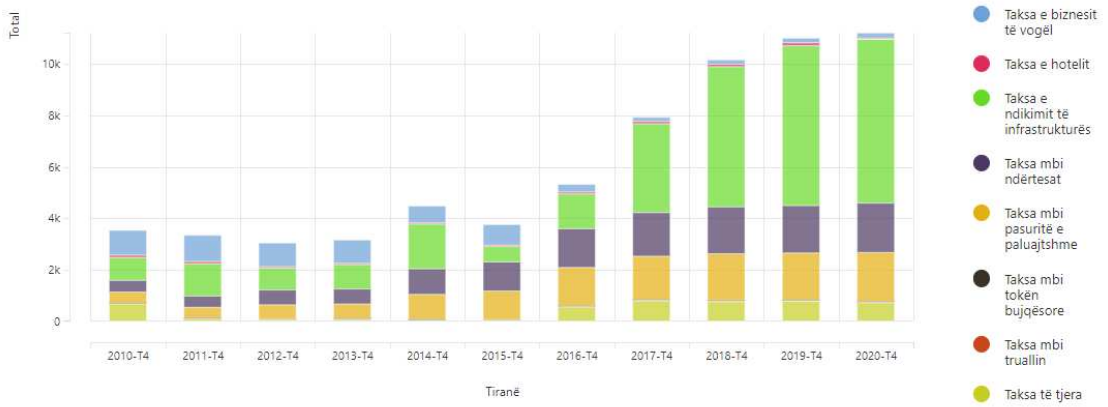
Even though many may justify the potential of allocating revenues from property tax by the fact that only in June 2018 the property tax would have started to be applied on

[37] The increased importance of this item in the local budget has been affected by the implementation of General Local Plans (GLPs) through construction permits for new buildings, particularly over the last three years: about 1,194 permits were granted in 2018; 1,094 permits in 2019; and 393 permits for the first six months of 2020.1

[38] Source: www.instat.gov.al

the basis of its value, (and that before this period it is very difficult to estimate the potential of property tax in a context where data on taxpayers are still missing), this reform is not really fundamental. The property tax reform in Albania remains still much generalized, calculating the tax burden, on the basis of several macro-zones with a fixed estimation of the property values on the whole area, rather than apprising the real property value regarding the real estate market. This shift in the way this tax is calculated, has only increased the tax burden by 0.05%, thus making really small difference in terms of lump sum allocations in one hand, and not really making the differences between well-serviced and high valued properties with the lesser ones.

Figure 40. Distribution of local own revenues through the years, Municipality of Tirana (respectively green color representing the infrastructure impact tax and in yellow-orange tax on buildings)



Source: Local Finance Portal in Albania, 2020 (www.financatvendore.al)

Though the Municipality of Tirana is one of the few municipalities in Albania that show a positive balance in terms of government dependency, the potential to further improve its performance fiscal policy has not yet been captured. The challenges of Tirana metropolitan public finances are to capture a share of the economic growth, as a consequence of new developments, that is adequate to finance the new and growing expenditure needs and to organize governance so that services can be delivered in a cost- effective way. At the same time, care must be taken to avoid over densification, over taxation and short term financial resources, which will hamper the successful implementation of the planning instrument.

All this is well-articulated in the principles of GLP TR030 (will be examined in the end), but there's an evident missing of any instrument/ tool which ensures the implementation and the monitoring of these principles.

3.4.Measuring fiscalization of land use: Calculating profit

3.4.1. Hypothetical case of TR2030 and existing fiscal policies

From a methodological standpoint, this part of the research is of a comparative and empirical nature. Specific areas of distinguished typology have been extracted from the General Territorial Local Plan, Tirana 2030 and analysed accordingly. Based on the theoretical framework set out above, this study attempts to calculate, in a simplified and general way, the level of local tax revenues that may be collected by the Municipality of Tirana, based on these proposals and development indicators, as to understand the impact of the proposals on the possible fiscal autonomy of the municipality.

This research takes into account all the limitations set out in the study, such as the lack of an accurate database on land use, lack of information on potential investments carried out in the study area as part of the plan projections, or lack of the precise indicators of monitoring the implementation of the plan. On the other hand, taking into account the complexity of both the planning and the tax burden estimates, the study is limited to the calculation of the 4 potential taxes that represent a more direct link to land use and development, which are:

a) Tax on agricultural land

b) Tax on Infrastructure Impact for the new buildings

c) Residential property tax

d) Commercial property tax

In order to validate this hypothesis, in an imbalanced real estate market situation with the inability to generate enough revenues and a shortage of taxpayers, the study raises a simple matrix to answer the above question. The study also tries to give an assessment based on the legislative and territorial context where the respective plan is implemented, to understand how land development and the implementation of local plan directly affect the fiscal situation, and can have a greater contribution to growth management in

Tirana Municipality. However, land value after development varies from many factors, such as distance to the centre, vicinity to main services, etc. In the same way, the reliability of various revenue sources (considering here taxes) likely will vary with factors such as the rate of urban growth or decline, the national legal structure, etc. Therefore, this value will be rather generalized.

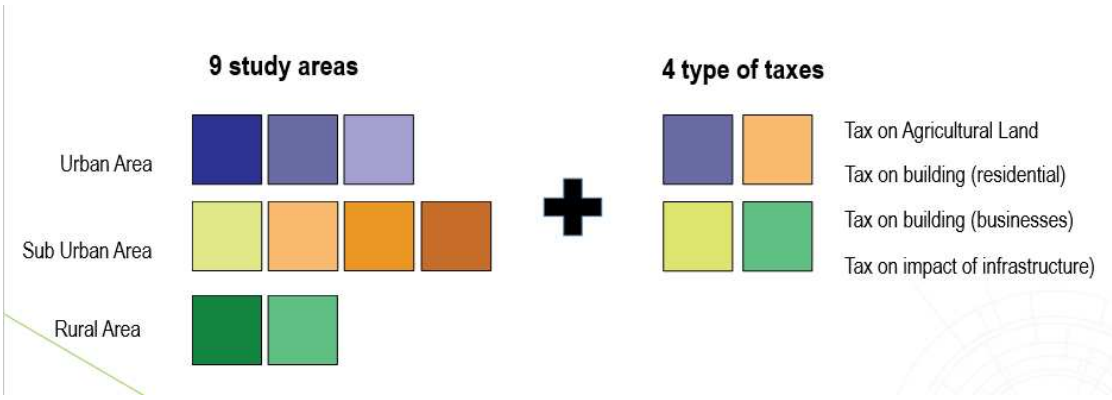
Table 6. Assessing fisclization of land use - indicators and measurements necessary for the hypothetical case

	Area A (urban) 3 samples	***Area B (periurban) 3 samples***	***Area C (rural) 3 samples***
General Local Plan Proposals			
Area of the sub-unit			
% of land use categories			
Development indicator			
Area of agricultural land			
Area of residential urban land			
Area of commercial urban land			
proposed Built area			
Potential revenues as per taxable base			
Tax on agricultural land			
Tax on residential building			
Tax on commercial building			
Tax on Impact in Infrastructure			
Estimated total Revenues			

Source: Imami, F. & Dhrami, K. 2018

The selection of the case studies (or samples) has been done strategically based on the categorization of spatial typologies assessed in the TR030 Plan (see annex 1 on the schedules of each sample) and the methodological approach on how to assess the hypothetical case is presented as below:

Figure 41. Methodological approach in assessing fiscalization of land use



Source: Imami, F. & Dhrami, K. 2018

Below the main finding are shown in a conclusive table:

Table 7. Calculations made for each indicator, on all selected territorial samples

Unit	***TR372***	***TR317***	***TR363***	***TR412***	***KA252***	***DA75***	***KA158***	***TR69***	***FA30***
Code	T1	T2	T3	T4	T5	T6	T7	T8	T9
Category	urban	urban	urban	suburban	suburban	suburban	suburban	rural	rural
Typology	Communist blocks	Mixed central	Historic	Informal area	Tower buildings	Mountain areas	Economic areas	Urbanized villages	Areas along infrastructure
Area (m2)	77,100	47,200	33,300	188,400	43,300	140,900	76,300	115,900	524,700
Existing FAR	1.99	0.95	1.54	0.42	2.36	1.07	0.56	0.51	0.09
Proposed FAR	3.5	2.95	4	0.6	2.5	1.6	2.6	0.6	0.6
% of categories of land use (existing)	A (73%);	A (82%);	A (73%);	A (62%);	A (73%)	A (85%)	IE+S (83%);	A (73%);	B (92%)
	AS (9%);	AS (7%);	IN (15%)	IE (22%);	B (21%)	N (6%)	A (9%)	B (12%);	A (5%)
	IN (9%)	IN (11%)	AS (12%)	B (12%);	IN (6%)	S (5%)	B (5%);	S (2%);	IN (3%)
	S (4%)			IN (4%)		IN (4%)	IN (3%)	IN (12%)	
	AR (5%)							AS (1%)	
% e of categories of land use (proposed)	A (78%);	A (89%);	A (82%);	A (97%);	A (70%);B	A (78%)	IE+S (98%);	A (93%);	B (52%)
	AS (9%);	AS (7%);	S (5%);	IN (3%)	B (14%)	N (16%)	IN (2%)	IN (3%);	A (46%)
	IN (4%); S	IN (4%)	IN (7%);		S (10%)	B (4%);		AS (3%);	IN (2%)
	S (5%)		AS (6%)		IN (6%)	IN (3%)		B (1%)	
	AR (2%)								

Total revenue from TII	3,428,123,476	8,574,646,667	5,896,235,846	287,841,046	23,340,400	1,141,630,688	nn	109,065,810	1,148,780,819
Total revenues from tax on agriculture	0	0	0	-7,941	-1,055	2,029	-1,437	-4,450	-76,605
Total revenues from tax on residential property	3,390,254,644	10,718,308,333	6,599,066,808	359,801,308	1,215,699,500	1,427,038,360	0	662,281,100	2,487,699,950
Total revenues from tax on commercial property	3,579,598,800	0	4,627,368,000	0	4,979,500,000	0	80,682,086,016	0	0

Source: Dhrami, K. and Imami, F. 2019

Legend/ Acronyms of land use categories:

A	**B**	**IE**	**AS**	**IN**	**S**	**N**	**AR**
Residential use	Agricultural use	Industry & Economy	Educational	Infrastructure	Services	Natural use	Recreational activities

3.4.2. Findings on the case study analysis

As it seems, in the 9 typologies studied there are different models of land use changes. Mainly, the trend has been the expansion of the residential area both in the parcel and in the densities. Five of the areas require the detailed local plan (DLP) instrument, accompanied, where appropriate, by conditional intensity instruments. This means that redevelopment and alienation of most of the existing typologies is proposed and, in some cases, of the land uses.

It is estimated that classifiable typologies such as urban areas (including historic areas, state-owned and mixed-use areas) may generate a total of tax revenue of approximately 45,000,000,000 ALL, based on plan proposal. Of these, the TNI, which is only collected once, in the process of obtaining the construction permit, is estimated at about 17,899,000,000 ALL. The rest are revenues that would be generated periodically every year. These areas, at the level of interventions proposed by the local plan, mainly undergo significant densification, and a small increase in the percentage of occupied services.

Suburban areas, including informal areas in northern Tirana, and peripheral housing blocks (see case of Kashar and Dajti) and the Tr-Dr economic zone[39], may generate revenues of about 103,821,000,000 ALL in the first year, out of which 17,589,229,337 are only one time beneficial from TNI, and the rest are generated year after year in addition to the existing one. The suburban typology is considered as a predominant relative to the urban territory of the Municipality of Tirana (with about 57% of it), therefore the tax values are considerably higher.

Finally, rural areas, represented by village centres and developed areas along the roads, represent about 12% of the urban terrain of the Municipality of Tirana, and usually experience very small changes in intensity but major changes in land use: agricultural territory replaced by urban territory at 50%. Thus, the taxes generated from these areas by TII are around 218,130,000 ALL, while other periodically collected taxes amount to 3,149,981,000 ALL (additional to the existing ones). Of course, in these areas, from the conversion of agricultural land, they lose about 81,056 ALL each year.

[39] Referred in the table above as the sample alongside infrastructure

3.4.3. Land base financing – It is possible!

As also repeated several times in the chapters above, Albanian local governments are struggling to provide basic services and infrastructure to meet people's demands. The unplanned nature of growth and development and the limited financial resources available for local government funding present two major challenges. Much of Albania's buildings are characterized by illegal construction, especially on the outskirts of the towns, with relatively low public services. The result is largely the absence of a legal and institutional framework to ensure that communism, corrupting and inadequate funds are utilized and developed at both national and regional levels in a comprehensively planned manner.

In order to evaluate if land base financing is possible, the following examples are taken into consideration. They come as a contribution from student's work done in the Polis University under the Urban Regulatory Planning Lecture. For the purpose of this study, for each case study below (structural units) will be applied the Financial Instruments for Land Development (LIPT) which aim to generate additional revenue to achieve the goals of public development and to balance the cost-benefits between the various actors involved in the process. These instruments are numerous, so the focus will be on those instruments that are present in the Albanian legislation: Transfer of Development Rights (TDR), Bonus Intesity (BI) and Land Readjustment (LR).

Case study: Structual Unit 322/323 _ Tirana Municipality

The study area lies along the historic axis of the city of Tirana, Rruga e Dibrës, in the North - East of the city, within the main ring. In the reference terminology of the inhabitants, the area is known as "Selvia Neighborhood" due to the presence of a Selvie tree at the main intersection of the area for a long time. The study area is limited to the North by Dibra Street, to the South by Rr. "Tafaj" which intersects in the west with Dibra Street and in the east is bordered by Rr. Thanaz Ziko. The area with an area of 39 414 m2, consists of two structural units with number 322 with an area of 17 624 m2 and 323 with an area of 21 790 m2. In a radius of 800 m - 1000 m, or 10 minutes on foot, there is a range of public services for the benefit of the inhabitants of the city and consequently of the area.

Figure 42. Case study of Tirana's Stadium Center, evolution of the urbanization process in the area

Source: Muka, R; Gjyzeli, E.& Imaku, E., PRMT 2019

Based on the General Local Plan of Tirana, structural units 322 and 323 (2 main structural units of the area) are seen as high intensity units between the range 2.6 - 3.3 m2 / m2. This fact means that a densification of the area is intended through new investments for housing and services.

Figure 43. Proposed development intensity and infrastructure in the GLTP-TR2030

Source: General Territorial Plan of Tirana, 2030

With regard to the ownership of the land, TR322 located in the south-western part of "Rr.Ali Pashë Gucia", has a public area of 35.7% where 15% is educational structure and 20% infrastructure. The remaining 64.3% is privately owned land. TR323, on the other hand, located in the north-eastern part of "Rr.Ali Pashë Gucia" where 80.8% of the area belongs to the private and 19.2% of the area is public consisting only of infrastructure.

Based on the General Local Plan of Tirana, structural units 322 and 323 are seen as high intensity units between the range 2.6 - 3.3 m2 / m2. This fact means that a densification of the area is intended through new investments for housing and services.

With regard to the development indicators the following can be distinguished in this area:

	I	KSHP	KSHR	KSHT
Existing	9.5	15%	20.3%	61%
Proposed	9.5	30%	20%	45%

Based on existing state indicators, proposed indicators and carrying capacity, six management schemes have been proposed: SM2 in structural unit 322; SM4, SM5, SM6, SM10, SM16 in structural unit 323. To understand if the management schemes are functional for all three actors are constantly monitored: developer profit (30%), land cost (40 - 50% of land owner), land value added (potential profit for the Municipality through financial instruments). Also to understand the number of owners or the area that can be part of the management scheme a simple inequality is used:

Owner's Profit (% of Sold Value)> Market Value + Demolition Cost + Construction Market Value

• the minimum% owned by the owner is 40%

• The value of land in the market is 700 Euros

• The cost of demolition is 180 Euros

• Construction value in the market 917.4 Euro

Application of land management instruments.

In structural unit 322, where the complex "Halili" is located, it is intended to apply the instrument "Conditional Construction Intensity" (INK) which allows the developer to build with a higher intensity, in certain areas, provided that provide public investment or part of the added value of construction. The management scheme where INK will be applied is SM2 located in the South of unit 322 with an area of 3290.7 m2. INK in this case will be applied based on the table below:

Sip. SM2	Basic I	Earnings	Added value	Bonus I	Earnings	Added value	Value captured by municipality
3290.7 m^2	2	900 809.4 E	478 703.2 E	0.5	1 779 456.9 E	2 132 250.7 E	841 205.3 E

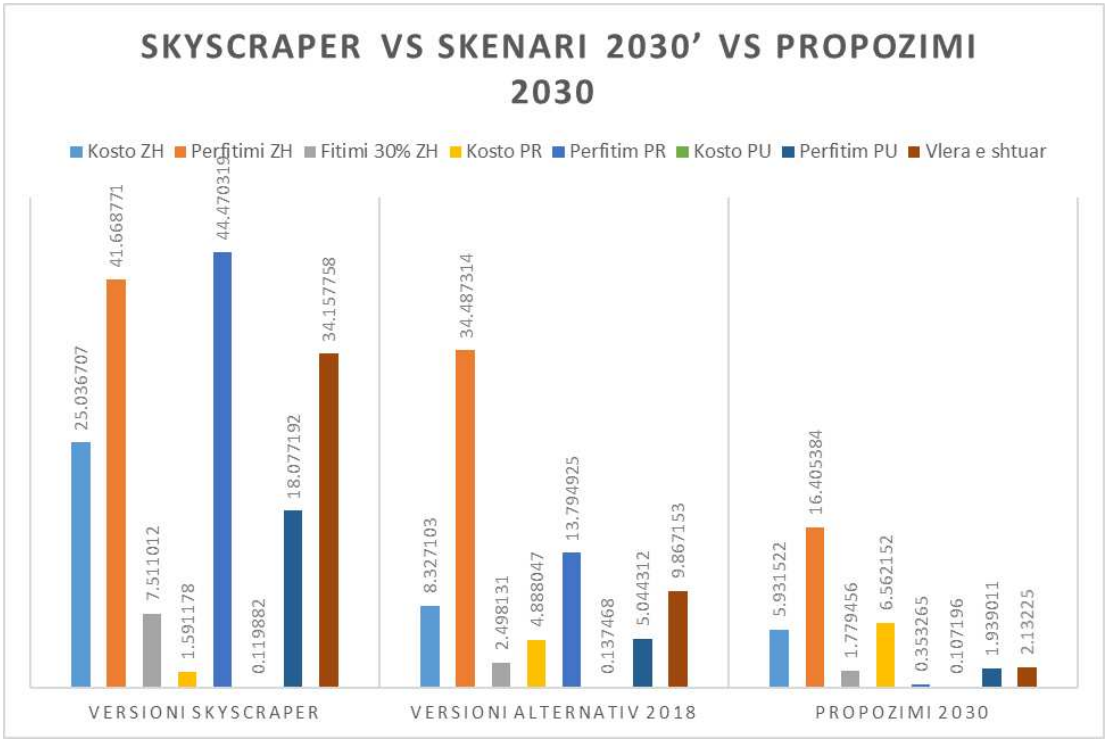
Through INK the developer is able to build three additional floors reaching a maximum height of 30 m or otherwise 8 floors, where the first 3 floors are intended for services and the other 5 are for housing. For these additional floors the added value turns out to be 1 682 410.5 Euro. In this case the condition is set to be that the developer will give the municipality 50% of the value added that comes from the application of the bonus Intensity, a value that turns out to be 841 205.3 Euros which will be used for the construction and maintenance of public spaces in the unit 322. But we must not forget that this instrument, like many others, is based on voluntary participation. The main reasons that can push the developer to participate in this management scheme are:

• Higher profit

• The construction of public spaces near its investment has a positive effect on increasing the value of land

• Impossibility to build in this area in other ways due to existing massive constructions

To understand all 3 versions of structural unit 322 a comparison was made between scenarios over the years. We see that the first scenario is "Skyscraper version", the second scenario is "Alternative version 20301" and the third scenario is "Proposal 2030".



In the case of the first scenario "Skyscraper version" from where the skyscraper version is based on the construction area of "Halili Complex" as it is the most intensive construction in 2018 in the area. The cost-benefit comparison is clearly seen, where we see and from the graph below the version of skyscraper brings a greater profit for the developer, the residents of the area and the local authority compared to the other scenarios. Although the first scenario brings big revenue it can be argued that it is an unachievable scenario for the time as it is a very intensive construction for the area and also the time spread of the project will be very large. Clearly the construction of the skyscraper could also affect the image of the city, as such an intensive construction could not fit the area in those years.

In the case of the second scenario “Alternative Version 20301” is a feasible scenario for the time and also the revenue is good among the actors involved in the development process. We see that the developer and the owners benefit from this development scheme and we also see that the local authority receives a maximum of 50% of the value added from the development area. This scenario also has better quality of public spaces in the area as it offers about 8.8m2 / inhabitant. Having said that, we understand that the second scenario "Alternative Version 20181" is the best and most suitable scenario for area 322.

IV. CONCLUSIONS

As far as efficient investment planning and budgeting matters are concerned, drafting a realistic planning document can be considered the most important step. In the absence of proper financial analysis (Capital Investment Plan being one as such), the actual GLP for Tirana misses the linkage between its strategic objectives to foster future urban growth with its actual efforts (and possibilities) for implementation.

The empirical analysis above has shown that the building proposals of the GLP can generate a high immediate value from Impact on Infrastructure Tax (20 billion ALL). But this tax, remains a one-time tax, which partially justifies the need for investments needed for including these new buildings to the city. In the other hand, maximizing the efforts for improving the system for collecting the property tax on buildings might result in a collection of considerable budget of 184 billion ALL, each year. These values together, exceed the actual municipal budget, highly rising the opportunities for better services to its residents.

Figure 44. Quick Reflections on empirical findings

Source: Own Conclusions

As a consequence of the above discussion, it is necessary to improve the system of asset registration, tax collection, etc., so that this potential is not untapped. Adapting new and innovative financial instruments for land development as well, remains a highly considerable solution to foster future urban growth, while ensuring public goods to the community.

On the other hand, it is important to link the taxation (purpose, base, etc.) to territory through land use instruments and normative. The first one, with the requirement of being more flexible, might help better planning and better projections of financial resources that can be allocated from the differentiation of the tax types.

In addition, in the way the rules for structural units have been drafted, this study highlights some of gaps as follows:

- Often the proposals on land use categories (in percentage) do not really reflect the reality (the existing land use situation).
- On the other hand, the Kshp and Kshr proposals contradict the Surfaces in% estimated for Infrastructure, Education, Recreation and Similar uses as well as the greening areas specified in the passport. In any case, the document becomes speculative as far as the standard you can refer to in each case.
- With regard to the proposals, taking into account unit holding capacity, the expected population in the Municipality of Tirana for the next 15 years will increase by an average of 421,000 people, i.e. by almost 50%. This does not reflect the real growth trends of the city.

Finally, it is certainly worth mentioning that this assessment takes into account the ideal situation, where any Local Plan is implemented. This is not realistic in the long run. However, it should be borne in mind that the planning function is to predict the country's socio-economic, territorial, environmental, etc. dynamics as precisely as possible, and to precede it with instruments and orientations to enable development and increase prosperity.

I am however, optimistic for the future of land use planning. It is not a flawless organization, but it performs better than the alternatives. We agree that land use planning will continue to be a mainstay of urban change management initiatives in the twenty-first century since it has successfully adapted to this century's turmoil and become stronger in the process.

The research argues that we should move away from market and governance understandings that provide a strong distinction between states and markets, proposing a radical reformulation in which states and markets are seen as a state-market 'ensemble of governance,' or 'condominium,' rather than as separate entities.

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ANNEXES

1- Urban Development and Management in Albania (1991 – 2018)

Year	Decentralisation and Local Governance	Property and Land Rights	Demographic Changes	Land Development	Territoral / Spatial Planning
1991		• Law on Provatisation of Land (7501)			
1992	• Political Decentralisation	• Informal constructions to fulfill the housing needs	• Emigration (-3.6% of the population left the country) • Internal Migration – Urbanisation rate from 39,5% to 51,4%	• Informal Settlements • Soucial Housing through National Housing Enterprise (NHE)	
1993					• Law on Urbanism, No. 7693
1994		• Law on Property Registration, No. 7843			
1995		• Law on Urban Land Selling, No. 7980			
1998	• The Albanian Constitution, Law No. 8417 • European Chart on Local Autonomy				• Law on Urbanism, No. 8405
1999	• Decentralisation Strategy				
2000	• Law on Local Self Governance No. 8652 • Law on Territorial Administrative Reform No. 8653	• Informal Developments		• Consolidation of Contruction Industry	

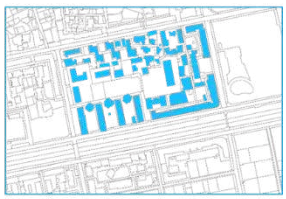
2001		• Law on Property Transfering, No. 8744	• The culmination of internal migration of population		
2002	• Fiscal Decentralisation Reforms				
2004	• Fiscal Instruments start to be used from LGUs	• Informal Development and settlements became part of the political agendas • Law on Land Compensation No. 9235			• Law on Social Housing No. 9232
2006	• Law on Local Taxes No. 9632	• Law on Legalisation No. 9482		• Social Housing is provided from Local Government	
2007					• Law on Construction Inspectoriate (decentralised), No. 9780
2008	• Law on Local Borrowing nr. 9869 • Law on Management of the Budgetary System, No. 9936			• Construction continues, there is a decline in selling appartments, increase in the number of empty houses	
2009					• Law on Territorial Planning No. 10119 and DCM on NTPA
2010					• 2 DCMs on Planning Register
2011					• Law on Territorial Planning and 3 DCMs enter in force

2012					• 3 ammendments on the TPL and DCMs
2014	• IMF report on the need to revise the Property Tax, as a value base PT • Tax on Small Businesses Repealed				• Establishment of the Ministry on Urban Development •
2015	• Territorial Administrative Reform • Law on Local Self Governance • Decentrsalisation Strategy • Increased funds for local capital investments through RDF mechanism			Land Development Instruments in Place, Cases	• Preparation of the three sectorial Plans • Preparation of 5 General Local Plans • Preparation of the National Territorial Plan • Initiation of the new territorial plans (of xx LGUs)
2016	• Formula on Unconditional Transfer • Law on Local Finances				• Establishment of the Agency for the Development of the Territory • Initiation of the new territorial plans (of 61 LGUs) • First 5 GLTP's approved
2017	•				• Reorganisation of the government institutions, MoUD dismanteld. • NTPA in charge for monitoring and evaluating the territorial planning in Albania

2- Territorial Samples of the Hypothetical Case study (1)

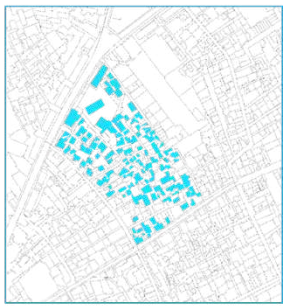
1. Building complexes of the communist period

This typology is represented by apartment blocks, constructed by the state in the period 1945-1990. Some general characteristics of these areas are: the densification of the area after the fall of communism; good access to services, poor quality of public spaces. The typology occupies about 9% of the urban areas in Tirana.

2. Historical urban tissue

This typology is comprised of villas constructed in the early 20's and 30's, mixed with high-rise buildings, constructed after the 90's. The oldest villas date back to the ottoman period and are part of very small plots. These plots are merged eventually to make room fo high-rise dwellings, which make for a lack of public space. The road network is not regular, but is well-connected with the center. This typology makes up 3% of the urban area in the city.

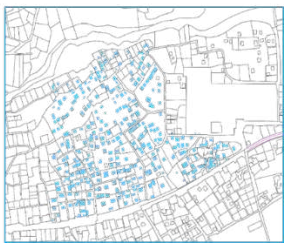



3. Mixed central areas

This typology represents a mix of form and function, from villas to longitudinal buildings and high rise buildings. They are characterized by a rapid densification, a quadratic road network and a good access to public services. This typology makes up 5% of the urban area in the city.


4. Informal area

The informal typology is comprised mostly of 2-3 storey buildings, constructed after 1990. These areas usually have a quadratic road network, poor access to services, and tend to be densified in height. These areas make up 41% of the cities urban area.

5. New residential blocks

This typology is represened by the new residential blocks, constructed in the periphery of the city in the recent years. These areas are characterized by a linear road network and poor access to services, as well as relatively high density. This typology is found in 6% of the urban area of Tirana.


6. Urbanized village centers

These areas are located in administrative units around the Tirana urban center, and differ in mixing between old structures of villages and new housing. Usually have poor or medium access to public services, road system in irregular networks, and gradual densitization. Typology constitutes 3% of the residential area and 2% of the population (TR030).

7. Areas developed around rural infrastructure

This typology includes all urban areas developed along the connecting roads between small centers. They predominate an individual home, with a height of 2-3 floors, with significant deficiencies in infrastructure and public services. This typology occupies about 13% of the inhabited area (TR030). To represent this typology, Unit FA30 was selected in the Farkë administrative unit.

8. Areas developed in mountain relief

This typology refers to high-rise areas, built in recent years. Occupy about 5% of residential areas in Tirana (TR030).

9. Area developed along main economic stripes

These are mainly industrial zones, with mixed economic and commercial functions, extending along the Tirana-Durres interurban road. This typology occupies about 5% of urban territory (TR030).

ENDNOTES - Additional information for the reader

[i] For instance, Alexander the Great's property taxes Alexander the Great (356-323 BC) provided detailed instructions on how to administer land and property taxes across Persia, India, Egypt, and other regions of the world. Before his conquest, the people were severely taxed, and the money gathered went to the king's treasury, not public improvements. Alexander's plan was to lower taxes and utilize half of the money collected for public works (water systems, roads, ports, etc.) while retaining the other half for himself. People were less inclined to protest against his administration since they paid less taxes and got greater perks. (Carlson, 2005)

[ii] The ancient Hebrew laws stressed ethical behavior in all aspects of life, including the building and construction industry. For example, Deuteronomy 22:8 (about 700 BC) mandated that new homes have two cubits of parapets (approximately three feet) high to avoid accidental falls. Numerous Jewish laws and legal problems pertaining to property, privacy in the construction of houses and yards, and other related issues were codified throughout the Talmudic period (around 200 AD). There were limitations on the amount of a yard that may be divided and shared between adjacent neighbors, as well as regulations requiring sunshine and seclusion. Walls and windows have been constructed. Several locations have rules restricting access to alleyways; e.g. legislation bans domestic firms from operating on the ground floor (bakeries and dye shops). Proto-Euclidean regulation mandated that cemeteries and tanneries be kept far away from people's houses (50 cubits and only on the east side of a town). In the Late Antiquity period and the Middle Ages, the Christian-Byzantine Empire created laws to address concerns that were related to issues from the Near East, Greece, and subsequently Roman legislation. Islamic cultures followed the prior history of dynamic design and legal frameworks, creating more complex systems to meet the development and change in the built environment. For more information read (Pava, 2019)

[iii] Circular flow land use management, also known as CircUse, is a term that refers to a specific method that involves repurposing unused land in metropolitan areas for better use. In order to be successful, CircUse as a concept must be merged with existing structures and uses, and it must be implemented on a large scale. The idea also aspires to decrease the use of undeveloped land by prioritizing inner development over outward development in the construction of buildings. For more information, see: Garvin, Alexander (2002). The American City: What Works and What Doesn't. New York: McGraw Hill. ISBN 978-0-07-137367-8.

[iv] George Smith Patton Jr. (November 11, 1885 – December 21, 1945) was a general in the United States Army who commanded the Seventh United States Army in the Mediterranean theater of World War II, and the Third United States Army in France and Germany after the Allied invasion of Normandy in June 1944. Its quotation presented in this research work is accessed in unknown free website in the internet.