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### 3.3 Planning and financing Infrastructure in the city through land value capture instruments. The case of Tirana – Rinas Corridor

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#### Introduction

The demand for infrastructure in Albanian cities is growing rapidly<sup>1</sup>. Hence, accessing sufficient funding in a timely manner is crucial for the development of urban infrastructure. One innovative and increasingly accepted way of funding infrastructure needs is through Land Value Capture instruments. The goal of these instruments is the optimization of development processes on the outskirts of urban areas and the establishment of effective mechanisms for capturing the resources generated by the value increase resulting from these processes (Galeano, 2000).

This paper comes as a contribution to the discussion happening in Albania related to limited funding sources for urban infrastructure,

especially at local government level. It aims to bring some ideas on how to find sources of financing capital infrastructure investments outside general budgets, or avoiding the accumulation of additional debt for local government. The approach suggested in the paper is to first identify the beneficiaries of any proposed capital infrastructure investment / improvement and then explore methods which can involve the direct beneficiaries paying for their part of the benefits. The paper focuses on a proposal developed from a group of researcher's for the Tirana – Rinas corridor<sup>2</sup>, and uses their vision and development options to discuss on potential infrastructure financing through land value capture gains. Though the paper has some limitations in terms of the elaboration of proposals, it still can be used as a reference point or an inspiration for the search for alternative and novel financing instruments of urban capital infrastructure.

Albania, like many other developing countries, has, in the past twenty years, introduced fiscal reforms and undertaken many infra-

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<sup>1</sup> Albania has considerable investment needs, for instance in transport, environment or energy infrastructure. To illustrate: in 2011 Albania had 113 km of roads and 14 km of rail per 100 000 inhabitants which represent 13.8 % and 32% of the EU-27 average of 821 km and 43 km per 100 000 inhabitants of roads and rail respectively. A similar picture exists in other sectors requiring infrastructure investments. In particular, water treatment and waste management are at the early stages of their development. The country is susceptible to effects of climate change, in particular flooding and drought, as well as possible electricity shortages due to a high dependence on hydro-power which requires seasonal energy imports.(Commission, 2014)

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<sup>2</sup> The proposal "Tirana New Metropolis, Reinventing a New Sustainable Image for Albania" was the result of a joint PhD workshop, organized by a group of researchers of Ferrara University, Italy and Polis University, Albania during June - December 2013

structure investments in the cities. Through this paper I try to demonstrate how the fiscal reform and urban infrastructure investment concepts are significantly interlinked. Urban infrastructure investment ushers increases in land value, thus enabling the recovery of the capital costs of urban investment by capturing some or all of the “unearned” increments in land value resultant from the investment; this may be accomplished through a fiscal mechanism such as land value finance (tax, incentives, development agreements). (World Bank Staff Working Paper No. 283, 1978)

## Planning and Urban Infrastructure Needs

Policies regarding local governments and the cities they manage have to do with implementing the new territorial planning system recently restructured<sup>3</sup>; in addition, they also need to develop ways of funding the creation of infrastructure, amenities and public space<sup>4</sup>. In the area of design such policies represent a physical pattern that avoids over concentration and over-dispersion, at least, to service citizens at a lower cost. Since this means changing the distribution of land use rights and obligations, a policy of equalizing costs and benefits is needed. Instruments such as

3 Law nr. 107/2014 on Planning and Development of the Territory

4 Albanian local governments have various sources of revenue and two are related to real estate property: (i) An annual property tax, based on the value of the buildings and not the land, which during 2006 and 2008 accounted for about 20% of the local government's own revenues (2,4 to 3 billion Lekë), while in 2009 it declined sharply to only 10% of the local government's own revenue; (ii) and an infrastructure impact tax, the base of which is the value of the investment as stated in an investor's construction permit and local governments can set the tax rate at between 1 and 3% of this value (2-4% in Tirana). This tax during 2011 represented 25% of all local own revenues. (Planning and Local Governance Project in Albania, USAID , 2011). Nevertheless such revenue is used for general expenditure and not necessarily used to build the infrastructure required by authorized development. In addition, local revenue represents about 33% of total revenues of local governments since the rest are transfers from Central Government, so the said taxes represent only 4% and 5% of total local revenues.

transferring development rights and obligations - mostly, but not only, in built areas, and land readjustment - mostly, but not only in peripheral areas – are the instruments needed. In addition the formation of land-developing stakeholders - public private and/or combined - are to organize this activity better, exist in an ad hoc basis and with mixed results and restricted impact<sup>5</sup>, because of the high transaction cost of consolidating land<sup>6</sup>, the instruments mentioned before substantially reduce such costs.

In addition, the local government's need to have more power to collect taxes and fees for their planning and development control activity, the value they create in terms of land is substantial and does not come back to the community in the proportion it should. Infrastructure taxation and the property tax have a poor performance and they do not capture the value of land as they could and should<sup>7</sup>.

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5 Some property assembling capabilities seem to occur with inner city redevelopment of individual plot occupied by a group of households, in cases of which a building contractor negotiates that they surrender the site to redevelop it at a higher density in exchange of 35% of the floor area to be built (World Bank , 2007)

6 They have included a lengthy permit process (up to 2 years) and cumbersome or non-existing regulations on land subdivisions, although they are expected to improve with the legislation and regulations recently enacted. In addition land in the periphery of cities still falls under the tutelage of the Ministry of Agriculture, in spite of being zoned for urban land uses (World Bank , 2007).

7 It is reported that for redevelopment of low-density sites into high-density sites, 35% of the total value of the project is paid (in kind, i.e. floor area) to those occupying the site. This payment is equivalent to the expected value of land once rebuilt to the new density (World Bank , 2007). Such land value is possible through the permit given by the municipality and the infrastructure that it is required to build. If the infrastructure fee that is paid when the municipality issues the permit is between 2-5% of the building costs - presumably the other 65% of the value of the densified property - the contribution that is done for the increment of the value of land due to government activity (permit and investment in infrastructure) is negligible. That is, the land value captured by the municipality for allowing higher density and providing infrastructure is barely between 3.7% and 9.3% of the value of land. The land occupant is able to keep more than 90% of the value of land. The investment occupants have to dedicate to the property is low-it is estimated to be between 16 and 20% of market value; this implies that any difference that needs to be compensated to the original land owner will have to be covered

Although there has been substantial decentralization of responsibilities to local governments<sup>8</sup> they are still dependent on transfers of funds from national government<sup>9</sup>. Local governments should rely more on the sources that their own activity generates. To stimulate this, transfer formulas should openly stimulate local taxation to avoid creating fiscal laziness, present formulas compensating local governments that do not perform financially well<sup>10</sup>.

by the State (World Bank , 2007).In addition the urban land is not taxed since the property tax in urban areas in Albania is applied only to buildings based mainly on their surface.

8 Responsibilities that have an impact on property values include: "...rehabilitation and maintenance of local roads; sidewalks and public squares; public lighting; public transport; ... city/village decoration; parks and public spaces; waste management...; services of water supply; sewerage and drainage (incl. flood protection canals) in residential areas" (Law 8652/2000).

9 Capital expenditures grow from 2002 (15%) to come to their maximum in 2009 (42%) and fall again after 2009, mainly due to the financial crisis and limitations set either for local borrowing, or for the draw down of the unconditional grants. At the moment, the capital investments remain the most discussed and controversial issue in the structure of the local finances in Albania. While the assignments of local government functions generally have been accompanied with the necessary financial sources or revenue raising instruments, capital investments remain, in most of cases, unfunded, although central government has experimented and is still experimenting with different instruments (competitive grants scheme, regional development fund, etc.) (Gjika, 2012)

10 Apparently the Law no. 9936 "On the management of the budgeting system in the Republic of Albania" (Art 24) and the Annual budgets specific formula (Annex 1) privileges local governments when calculating their unconditional transfers by doubling and quadrupling 70% of such transfers if they are "in need" or are mountainous. If this is associated with low property values and low development, then the law is stimulating those that have the opposite condition to depend more on their

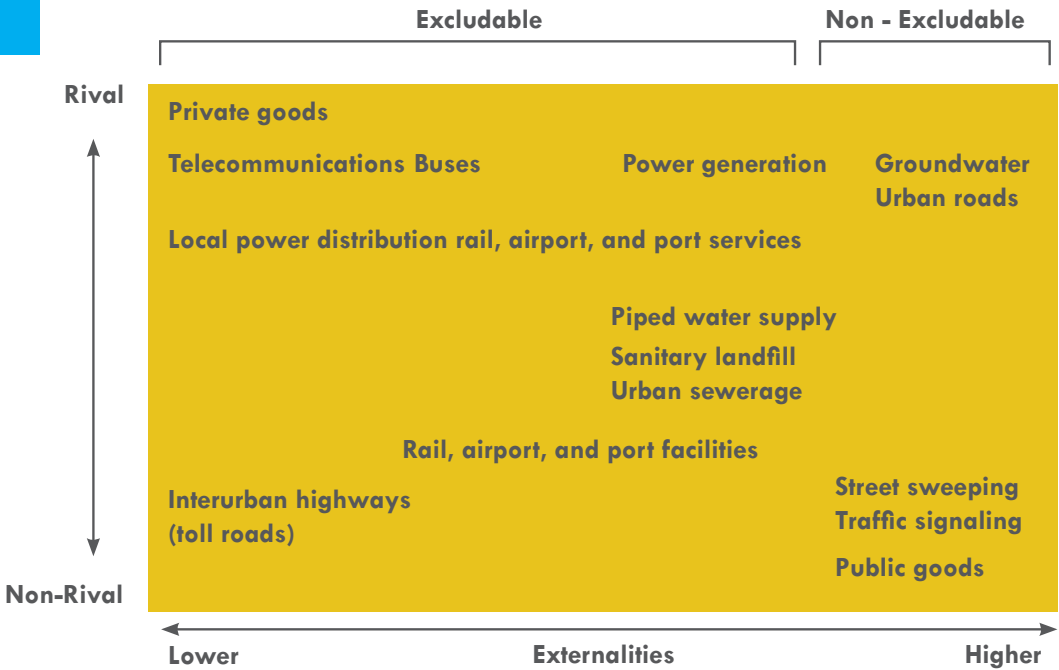
This stimulus can be increased if loans to local governments are conditioned to establish a sound land value capture scheme, which they can do it either through land and property taxation and/or through equalizing cost and benefit instruments referred to previously.

### The proposal – Connect, Integrate, Consolidate, Regenerate ...

Infrastructure and transport provisions come as the main strategies for addressing a number of challenges that the targeted area is facing: (i) how to slow down growth and accommodate development pressure; (ii) how to preserve agricultural land; (iii) how to eliminate physical and social barriers and integrate the suburb in the city; (iv) how to connect and provide services for business operators and industries in the city?

The area is extended in the northwest of Tirana for about 50 square kilometers and is surrounded by the Tirana – Kamza corridor in the east, the Tirana – Durres highway in the south and the Rinas – Fushë Krujë corridor in the west. The “Mother Theresa” International Airport is located in Rinas and, as the only airport in the country; it has a huge impact on the activities and developments established in the area. It is also considered as a core feature influencing the infrastructure proposal and land use of the area. There are about 55 to 60 thousand residents living in

own sources of revenue; nevertheless a more transparent and direct incentive could be spelled out in the law.



the area and more than 10'800 buildings, ranging from two to three storey houses to eight storey apartment buildings - 92% of which were constructed after the '90s. The area is characterized by a high concentration of businesses and services located mainly along the area boundaries. There are about 250 big businesses concentrated along the Tirana – Durres highway and a considerable number of other businesses focusing mainly in retail and service activities along the Tirana – Kamza corridor. Having such a high concentration of activities, the area hosts daily more than 20'000 commuters mainly from Tirana, but also from Durres, Kamza, Fushë Kruja and other surroundings. The existing main activities and functions of the area are: (i) agricultural land 12 sq.km; (ii) river braid [natural and urban] 6 sq.km; (iii) residential and urban agricultural area 5,8 sq.km; (iv) urban area 1,3 sq.km; (v) urban-agricultural 'transit' area 1,4 sq.km; (vi) airport and service area 2 sq.km; (vii) area for economic services 1,8 sq.km; (viii) university of agriculture and services 2,3 sq.km; and mining risk area 0,5 sq.km.

The proposed development concept for the area is built around the main features and potentials and envisions connection and integration of the area with the city, reactivation of the economic potential through regional and local services, consolidation, densification and regeneration as tools for sustainable development.

To support this vision some strategic interventions were elaborated, such as the proposal of a tram line along the redesigned Tirana –

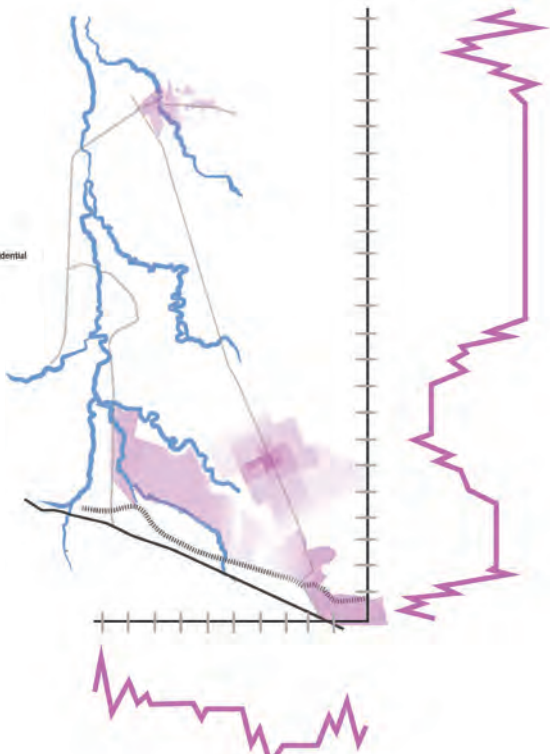
Kamza – Rinas corridor and a light train along the highway connecting Tirana with Rinas and Durres. These strategic interventions are linked to a number of smaller interventions for providing infrastructure and services within the area: like the proposed green corridors as barrier breakers and connections of public spaces and urban voids, logistic parks and economic areas – like the Berxull Node, etc.

## Designing an Infrastructure Financing Strategy

The "Henry George Theorem", widely accepted in mainstream economics, states that the value of land in a city is a function of the public investment in that city's infrastructure<sup>11</sup>. Under certain ideal conditions, aggregate spending by government will be equal to aggregate land rent; thus, 100% of a city's revenue needs could be provided by a levy on its land rent (Tucker, 1958).

The foremost characteristic of city infrastructure is a mixture of public goods and private goods. Private goods are individually purchased and consumed, suitable to be provided in competitive markets, while public goods are non-rival and non-excludable in their supplies and consumption. Being non-rival, serving particular goods to an addi-

<sup>11</sup> Widely adopted in later mathematical models by economists such as William Vickrey, David Robinson and Richard Arnott, this idea was first published by Georgist Advocate Benjamin F. Tucker in his 1958 book *The Self-Supporting City*. In a recent reprint of this book by the Robert Schalkenbach Foundation, William Batt provides an afterward comparing Tucker's analysis with modern presentations of the Henry George Theorem. ([www.henrygeorge.org](http://www.henrygeorge.org))





tional consumer only generates negligible marginal cost, so that any positive price will exceed the marginal cost and therefore is inefficient. Being excludable, it is difficult to exclude non-paying customers from consuming the good or service. As a result, it is uneconomical for the private sector to provide the goods (Trebilcock, 1994).

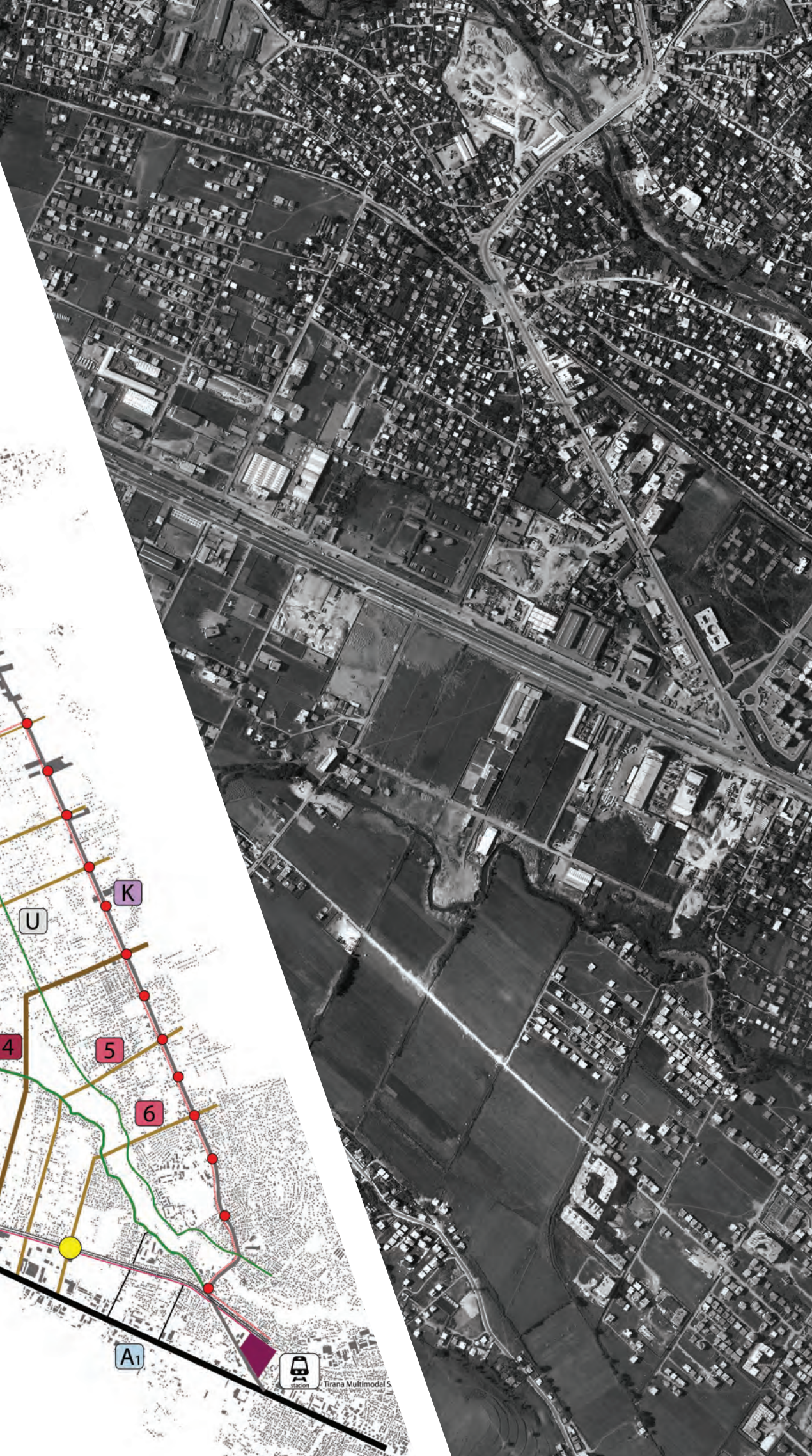
Another possible feature of infrastructure provision is that of a natural monopoly. The provision of these networks involves economies of scale, where large-scale consumption could enhance quality and lower cost of providing such goods. The introduction of competition leads to unnecessary duplication of network systems and this is considered a waste of resources. Public ownership of natural monopolies is justified on the ground that a private monopoly would lead to the exploitation of consumers. However, a natural monopoly may be broken up for competition, such as in telecommunications, power industries and some railroads that are owned and operated privately, under the supervision of certain regulating agencies (Hulten, 1993).

Given the fact that urban infrastructure investments tend, at least in part, to generate an increase in land value in the area around a system improvement, planners consider it economically and financially sensible to design tools that can be used to facilitate the provision of the needed urban infrastructure. Arguments to that effect may be found on both ends of the political spectrum. The political right often makes the marginal cost argument on grounds of economic efficiency, as in the prevention of the use of public money to finance 'white elephants' or as a mechanism to close the gap between social and private marginal urbanization costs. The left makes a similar argument in favor of value capture but based on the equity based benefit principle. Distribution of the benefits from the money collected becomes more important to the left when the funds are used for redistributive purposes, which may be the case with bonus zoning, inclusionary zoning, and linkage fees (Smolka, 2000).

The approach of land value capture finance has a wide and comprehensive literature and numerous applications around the world (Meda and Modelewska, 2011; Fensham and Gleeson, 2003; Smith and Gihring, 2006; Bowes and Inlannfeldt, 2001; Andelson, 2000). Land value capture in general is a mechanism by which the agency responsible









for the development of the urban transport infrastructure captures part of the financial benefits gained by land developers or the community at large. This benefit is reflected in an increase in the real property values, which can be regarded as a comprehensive index of all the benefits generated by the development, including improved accessibility and an increase in business opportunities (Medda, 2011).

Both theoretical models and practical experience lead to the conclusion that value-capture instruments can help make urban infrastructure investments self-financing (Tucker, 1958). Furthermore, they provide economic incentives to help reverse urban sprawl (Gihring, 1999), compact development, by utilizing existing infrastructure, conserve natural and financial resources and promotes walking, cycling, and public transit. Zoning and other land-use controls must be coordinated to ensure appropriate development and the establishment of public open space within urban areas.

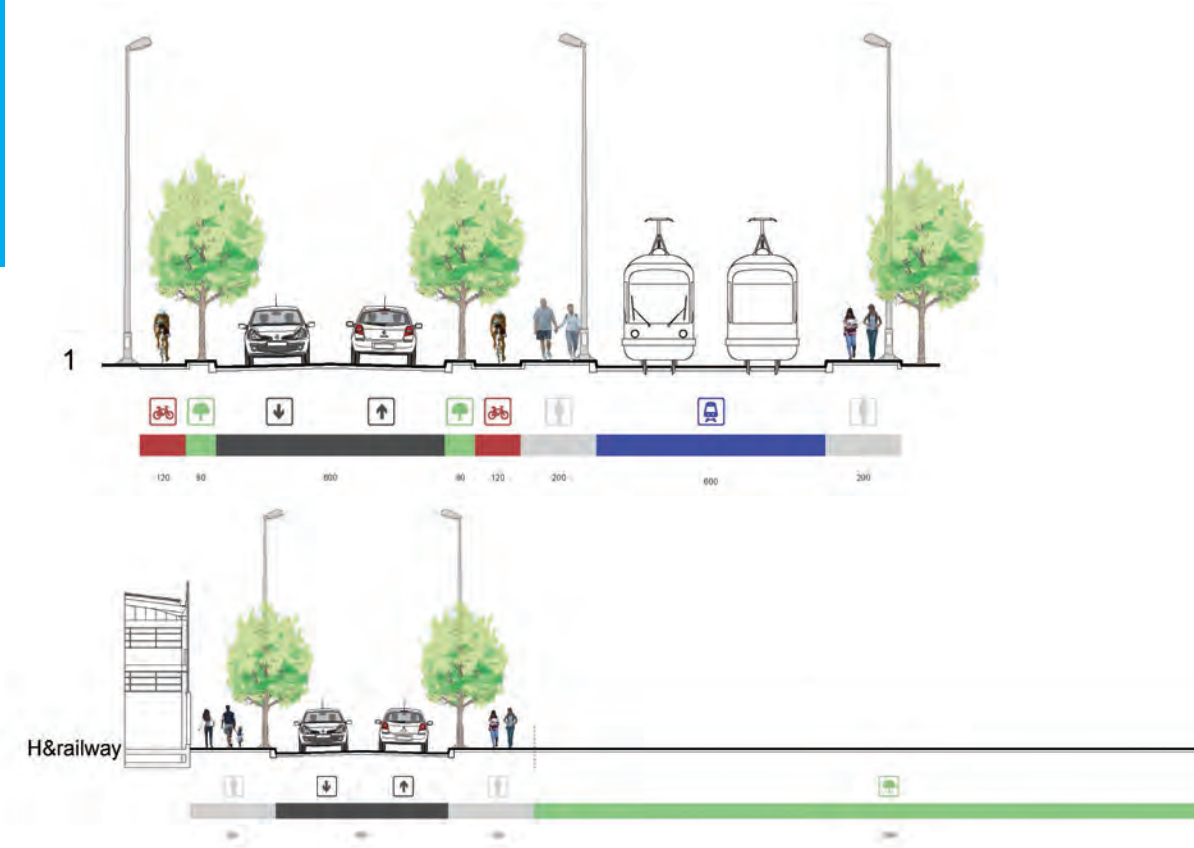
Last, but not least, a value based property tax should be introduced first in Albania, not only as the instrument that can guarantee real local autonomy, but also as a precondition for applying other land value capture instruments. We can mention some of the most applied ones that could also be explored in the broad Albanian context: betterment charges/fees; tax on the increment on the value of

land; inclusionary housing, land assembling and land readjusting, and tradable development rights. For all of them in Albania, a substantial revision in the fiscal/public finances legislation is needed, given the fact that the relevant planning and development of territory legislation has already introduced such instruments<sup>12</sup>. To conclude with the legal part, not only the Law on Planning and Development of Territory, but also the Constitution of Albania, the Civil Code, the Law on Organization and Functioning of the Local Governments, the Expropriation Law; all provide clear space for introducing value capture instruments. The latter are also in line with EU practices and the EU legislation on human rights.

## A “diversified” financing strategy and the way forward

In deciding a particular approach on financing strategy for urban infrastructures through land value capture finance, authorities should start by defining a policy objective, whether the objective is cost recovery and whether the direct beneficiaries can be identified. Special Assessment District: As mentioned above, transportation infrastructure invest-

<sup>12</sup> Law nr. 107/2014 on Planning and Development of the Territory, Section II, Art. 30 – 36





ments often confer property value benefits that are geographically limited. In our proposal, the type of infrastructure proposed varies from the light railway that connects both Tirana with Rinas and Tirana with Durrës; to the tram line that serves both to the targeted area and urban area of Kamza; to urban infrastructure and green corridors that are mainly used from the area residents. Considering this, one of the proposals for financing infrastructure would be through creating a “special assessment district” – sometimes also referred to as a benefit assessment district. Within the ‘district’, it is assumed that the property owners will obtain a special benefit from the new infrastructure investment. An additional tax or fee is levied within this area to help pay for the infrastructure.

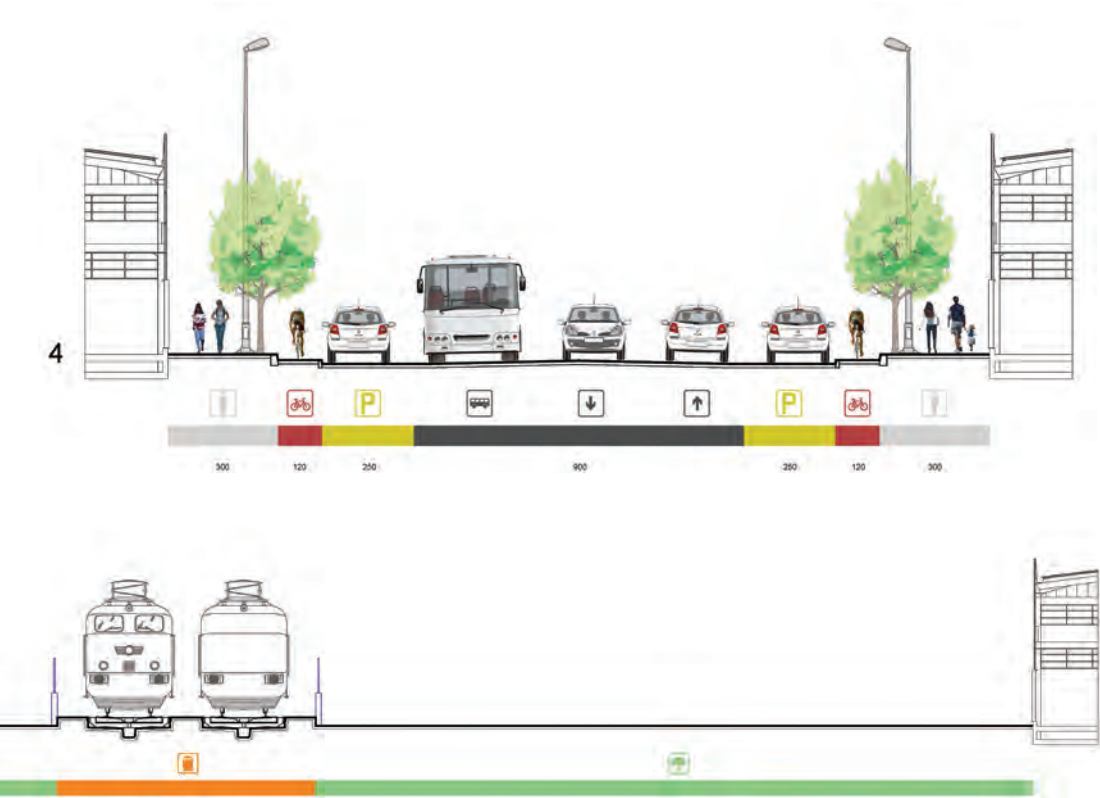
The benefits from a new infrastructure investment, as reflected by land values, are most typically pronounced immediately adjacent to a new facility and taper off as the distance between the facility and an individual property increases. Special assessment districts are much less precise than the market in measuring the level of benefits that accrue to each property (Rybeck, 2004). For this reason we should make a somewhat arbitrary decision about where to draw the boundaries and regarding which type of infrastructure. Either a property is inside the special assessment district or it is not. To define a ‘reasonable’ boundary for the ‘district,’ consultations

with real estate professionals can take place. Typically, the special assessment charge for properties inside the district does not directly relate to the benefits each property owner receives from the new infrastructure. But, if officials based the charge on land values, then it would directly relate to benefits received (Rybeck, 2004).

Tax Increment Financing (TIF): has become a relatively well-known technique worldwide for financing new infrastructure. It assumes that in the absence of new infrastructure, new private investment in real estate will not occur. Therefore, within a defined area, revenues from one or more taxes are benchmarked. By legislation, any revenues within this area above these benchmarked amounts are diverted from a jurisdiction’s general fund and dedicated to a special fund used to finance new infrastructure (Rybeck, 2004).

Based on this questionable assumption about private investment, TIF makes it appear that this infrastructure investment has no cost to the public treasury (because supposedly in the absence of the new infrastructure investment, property, sales, and income tax revenues would remain static). Therefore, the investment of public funds can be made without appearing to cut spending on existing programs or raise tax rates. As with the special assessment district, the boundary of the TIF district will be somewhat arbitrary.

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As a final thought, it should be highlighted that both the two proposed instruments for financing urban infrastructure in the targeted area, are likely to succeed only to the extent that some preconditions are fulfilled: that there is a good database of property titles in place and the property registry system is solid; a value based property tax is introduced; and the instruments proposed are understood and accepted from the broad public, and, especial, from the beneficiaries. Of course, such acceptance requires good central and local administration capacities, fair and transparent administrative practices and broad public participation in the decision-making process.

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