2014 JULY 10-11
UNIVERSITY OF ÉVORA
20TH APDR CONGRESS
RENAISSANCE OF THE REGIONS OF SOUTHERN EUROPE

MUNICIPAL FINANCE SUSTAINABILITY: A NEW TERRITORIAL MANAGEMENT INSTRUMENT TO REDISTRIBUTE SURPLUS-VALUES ACCRUED BY PLANS

Emília Malcata Rebelo

emalcata@fe.up.pt, Universidade do Porto, Faculdade de Engenharia, Portugal

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ABSTRACT

The research reported in this article fits the main goals that guide the revision of the Land, Territorial Ordinance and Urbanism Act, currently under way in Portugal. One of the main goals searched by this revision consists in the inclusion of new territorial management instruments in plans that support the economic and financial sustainability of urban development operations.

Considering that planning decisions concerning zoning delimitation and urban indexes settled in plans engender land unearned increments (surplus-values), it is legitimate that municipal powers recapture them, and reassign them later on to social purposes framed by the municipality´s urban goals, namely in urban regeneration and social housing grounds. Within this scope it is proposed the collection, by each municipality, of a 30% fee on the building capacity assigned by plans to new buildings aimed at trade, industry, tourism or services deducted by the value of non-buildable land, and respective costs on urban infrastructure and municipal development charges.

This new territorial management instrument is applied, as a case study, to the intervention area of the Urban Development Plan of the Planning Unit 11 (UP 11) of the municipality of Lagoa (Algarve), according to the following methodology: computation of (i) the non-buildable land surface; (ii) the urban infrastructure costs; (iii) the municipal development charges; (iv) the costs of non-buildable land, according to land trade market prices/m^2; (v) the concrete net building capacity of each planning and management operational subdivision, for respective profitable uses; (vi) the base value this fee falls on; and (vii) the proper value of the fee to collect.

The implementation of this new territorial management instrument is able to strengthen municipal finance, and to foster municipalities´ economic and financial sustainability; it clears up the origins and applications of municipal funds from urban development processes; and it grants that surplus-values accrued by most profitable urban operations are allocated on behalf of population´s general social interest.

Keywords: *economic and financial sustainability of urban development; land surplus-values; land taxation; Land, Territorial Ordinance and Urbanism Act; urban development plans*

1. INTRODUCTION

One of the main goals settled in the new Land, Territorial Ordinance and Urbanism Act consists in the guarantee of urban development processes´ economic and financial sustainability. Within this scope, the research reported in this article proposes a new fiscal instrument for land policy that will enable municipalities to partially recover the surplus-values engendered by urban development decisions that involve a land use change or a certain increase in land´s building capacity (settled in the Municipal Master Plan, Urban Development Plans, Detail Plans, parcelling out procedures, or other territorial management instruments). The fee herein proposed impinge on buildings assigned to trade, industry, tourist or services uses, and is applied, as a case study, to the Urban Development Plan of the Planning Unit 11 (UP 11) in Lagoa municipality (Algarve). The charged amounts are aimed at social purposes, that is to say that surplus-values engendered by plans will, thus, de partially recovered, and revert on behalf of municipal population´s social interest.

The amount of this fee to be charged by the municipality represents a percentage of 30%[1] of the concrete building capacity allowed by the enforced territorial plan, written off the acquisition value of non-buildable land, respective costs on urban infrastructure and municipal development charges.

This should support: (i) municipalities´ economic and financial sustainability, (ii) the clarification of municipal funds´ origins and applications engendered by urban development processes, and (iii) the objective quantification of concrete values achievable through this new territorial management instrument. The ultimate purpose of this new instrument consists in the social distribution of land surplus values accrued by planning decisions on behalf of the population, thus lowering land´s maximum value and preventing speculation, not turning up as an increase in taxes to the most population, neither in construction costs´ aggravation. Thus the distribution of charges and benefits between the state and private stakeholders will be cleared up, fostering social equity within each municipality.

2. THEORETICAL FRAMEWORK

2.1. Revision of land, territorial planning and urban development legislation

The integrated revision of the whole juridical regime associated with territorial planning and urban development aims at correcting some drawbacks and restrictions engendered by the

[1] In case of implementation of the proposal reported in this article, it is up to the Municipal Assembly to settle the specific percentage it considers most suitable (which depends on the urban characteristics and regulations specific to each municipality). Herein is considered a 30% fee as an example for the presentation and application of the proposed methodology.

enforcement of the previous legislation and tackle territorial planning and urban development challenges. It is a deep revision and includes the achievement of a new paradigm, founded on several goals that include the economic and financial sustainability of urban development processes (to be stressed for its innovative content).

This sustainability can be fostered through the creation of new territorial management instruments, based on fiscal control over urban developments, which convey the influence exerted on local general or specific urban development through taxation instruments (Correia, 1993). These instruments aim at: assuring public administration a source of income (like other fees or taxes); distribute wealth in order to warrant land social function (guided to equity and reduction of inequalities); giving back to society land surplus-values engendered by planning decisions and public investments; and increase the provision of land for urban development purposes.

2.2. Capture of land surplus-values engendered by planning decisions

Land value increases as a result of municipal planning decisions, namely engendered by changes in land use or intensity of use (Rebelo, 2009, 2011, 2012, 2013). These value increases – surplus-values – genuinely belong to population´s. But the lack of clearness, monitoring and control on the generation and distribution of theses surplus-values leads to speculative prices that favours landowners (as unearned increments), and harm building firms and real estate final consumers (Rebelo, 2009; Pardal et al., 1996).

Thus it makes sense that at least part of this accrued value should be recovered by public bodies and assigned to social purposes. That will enable them to exert control over land speculation, preventing the aggravation of building costs. Besides, it can´t be considered a tax, as it impinges on unearned increments (Smith, 1843; George, 1960; Vickrey, 1996; Folvary, 2005). These kinds of fees are already enforced in some countries (Denmark, Estonia, Russia, Singapore and Taiwan), and in some regions inside other countries (New South Wales (Australia); Hong Kong (China); Mexicali (Mexico), and Pennsylvania (United States of America)) (www.wikipedia.pt).

The easiest way for municipalities to exert control over surplus-values consist in retaining them as long as they are landowners, then charging of carrying on the urban development operations, and finally selling in auctions the public developed land (Gwin et al., 2005; Hong, 1998; Peto, 1997; R.I.C.S., 1996). These way municipalities succeed in controlling urban development, balance the operation of land markets, and prevent conflicts.

But in the current Portuguese urban planning system, private agents are in charge of most urban development works, so surplus values merge infrastructure costs and the profits of the proper promoters, thus public administration isn´t able to keep the accrued surplus-values any more (Correia and Silva, 1987; Pardal, 2006a). However, these surplus-values can be recovered through property taxes and fees (Smolka and Amborski, 2003). But it is hard to cut off surplus-values as increases in land values may correspond in part to landowners´ investments and initiatives in face of market dynamics (Arnott and Petrova, 2006). Besides, the legislation enforced up to now, didn´t anticipate any quantification procedure based on objective parameters. Thus the development of new territorial planning instruments – articulated with Municipal Master Plans, Urban Development Plans and/or Detail Plans – is justified within the framework of a fair and balanced land policy that enable monitoring and control over surplus-values creation and assignment (Rebelo, 2009; Pardal, 2004, 2006b). These instruments are aimed at supporting municipal decisions concerning land uses or land use changes and respective intensities, ensuring the economic and financial sustainability of urban operations, as well as of the municipalities where they take place.

3. BRIEF CHARACTERIZATION OF THE MUNICIPALITY OF LAGOA

3.1. Territorial planning instruments enforced in the municipality of Lagoa

The municipality of Lagoa locates in the district of Faro. It is bound in the west by the municipality of Portimão, in the northeast by the municipality of Silves, and in the south by the Atlantic Ocean (Figure 1). It has a population of 22 791 inhabitants, in spans a surface of 88,3 km^2, and is made up by the parishes of Estômbar, Ferragudo, Lagoa, Porches, Carvoeiro and Parchal.

The economic tertiary sector is prevalent in this municipality (84,8%), whereas the secondary sector is responsible for 14,0% and the primary sector for 1,2%. of employment. The employment in the tertiary sector in this municipality is even higher than their homologous values in the Algarve (82,5%) and in continental Portugal (65,3%) (INE, 2012).

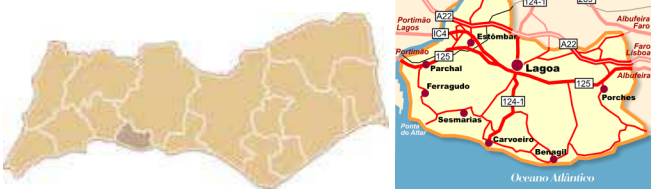

Figure 1: Municipality of Lagoa (Algarve) (Source: www.google.com)

The planning territorial instruments enforced in the municipality of Lagoa are: Municipal Master Plan of Lagoa (RCM nº 29/94; Aviso nº 26197/2008; Aviso nº 3872/2012); Urban Development Plan of the Planning Unit 1 – UP 1 from Ferragudo to Calvário (RCM nº 126/99; Edital 613/2009); Urban Development Plan of the Touristic Capacity Area of the Planning Unit 12 - UP 12 (Declaração nº 56/2008); Urban Development Plan of the Planning Unit 11 - UP 11 (Aviso nº 44845/2008); Urban Development Plan of the Town of Lagoa (Aviso nº11622/2008); Ordering Plan of the seashore of Burgau-Vilamoura (RCM nº 33/99); Regional Plan of Territorial Ordering PROT - Algarve (RCM nº 102/2007; RCM nº 188/2007); Plan of the Hydrological Basin of the Algarve Streams (DR 12/2002); Regional Plan of Forest Ordering (PROF) of Algarve (DR nº 17/2006); Natura 2000 Network (RCM nº 115-A/2008); Partial suspension of the Regional Forest Ordering Plan (PROF) of Algarve (Portaria nº 78/2013); Management Plan of the Hydrological Basins that take part in the Hydrological Basin 8 (RH8) – PGBH of the Algarve Streams (RCM nº 16-E/2013)

3.1.1. Municipal Master Plan of Lagoa

The Municipal Master Plan of Lagoa (RCM nº 29/94) (that encompasses the whole municipal surface) settles as main goals (article 3rd): (i) to implement a territorial ordering policy that warrants a social and economic balanced development; (ii) to settle principles and rules for land use occupation and occupation changes aimed at rational uses of spaces; and (iii) to promote a judicious resource management, safeguarding the natural and cultural heritage of the municipality, and ensuring its population higher patterns of life quality.

The existent built-up urban areas are made up by the urban developed and developable zones delimited in the ordering plan (article 13th of the Regulation of the Municipal Master Plan): Lagoa; Estômbar; Porches; Aldeia de Luís Francisco; Ferragudo; Corgos; Bela Vista; Parchal; Mexilhoeira da Carregação; Pateiro; Calvário; Carvoeiro; Poço Partido; Sobral; and Torrinha.

The surfaces within the municipality of Lagoa liable to land use changes are delimited within the following planning and management operational units (Article 14th): UP 1 (Ferragudo, Corgos, Bela Vista, Parchal, Mexilhoeira da Carregação, Pateiro and Calvário); UP 2 (Estômbar); UP 3 (Lagoa); UP 4 (Porches); UP 8 (Carvoeiro); and UP 9 (Poço Partido).

The land parcelling out operations located in urban developable areas assigned to public equipment and facilities, and aimed at urban growth should be preceded by Urban Development or Detail Plans (complying with the urban parameters settled in Article 17th).

The touristic occupation areas are made up by the surfaces effectively occupied by touristic undertakings or similar buildings (approved by the proper public entities), and also by the interstitial areas that, provided their aptitude, become assigned to buildings and other touristic-oriented undertakings (Article 18th).

The planning units correspondent to these areas (delimited in Article 19th) are: UP 7 (surface between Lageal and Carvoeiro); UP 10 (surface between Carvoeiro and Alfanzina); and UP 13 (surface between Vale do Engenho and the East limit of Lagoa municipality).

The urban parameters maximum values to observe in the construction of hotels, guesthouses, inns, and hotel-flats in touristic-occupation areas are defined in article 21st.

The Touristic Capacity Areas – Touristic Development Nuclei – are characterized in chapter VI. The location and delimitation of the planning and management operational units for Touristic Development Nuclei implementation (article 32nd) are: UP 5 (surface between Vale da Areia and Ponta do Altar); UP 6 (surface between Caneiros beach and Lageal); UP 11 (surface between Alfanzina and Caramujeira); and UP 12 (surface between Caramujeira and Senhora da Rocha).

The Touristic Capacity Areas are regarded as non-developable areas until the approval of Touristic Development Nuclei, thus adopting the land use, occupation and transformation regime settled in the ordering and conditioning plans, and in the Regulation of the Municipal Master Plan of Lagoa (point 2. of article 32nd). However, soon after the approval of the Touristic Development Nuclei, the corresponding encompassed areas are liable to what is settled in article 36th of the current Regulation, and the remaining areas liable to what is settled in the Municipal Master Plan (point 3. of article 32nd).

The Touristic Development Nuclei should occupy up to 25% of the Touristic Capacity Areas (point 4. of article 32nd).

The Touristic Capacity Area of UP 11 includes the following categories of areas (article 34th): the already existing touristic area of Benagil; surfaces occupied with scattered detached houses; level 1 natural areas[2]; and level 2 natural areas[3].

The implementation of the Touristic Development Nuclei should conform with the following rules (article 36th): (i) these nuclei mustn´t integrate parks or natural reserve land surfaces; (ii)

[2] Level 1 natural areas are made up by areas belonging to the National Ecological Reserve (including beaches, cliffs, moist land, beds of water courses and overflow danger areas, and areas of maximum infiltration waters), and by areas belonging to the National Agricultural Reserve.
[3] Level 2 natural areas include landscape attraction areas that have been used as upland farming.

the proposed undertakings should vest high quality and touristic interest, and be complemented with leisure facilities; (iii) the proposed undertakings should be exclusively targeted to touristic uses; (iv) the environmental areas mustn´t include uses or occupations incompatible with high-quality tourism; (v) the undertakings should support internal infrastructure costs and links with municipal infrastructure, and take part in general systems´ costs; (vi) each Touristic Development Nucleus may include one or more undertakings, although they should be linked together with a network of infrastructures; (vii) each nucleus can be developed in a land parcel or plot, or in a set of land parcels or plots that belong to the same Touristic Capacity Area.

Additionally, the Touristic Development Nuclei are liable to the following cumulative implantation restrictions: the developable area in each one mustn´t surpass 30% of the whole surface of that nucleus; the buildings and the urban structure should be concentrated or nucleated in order to prevent urban sprawl; and none of the nucleus should be implemented in a surface lower than 25 hectares of the Touristic Capacity Area.

3.1.2. Urban Development Plan of the Planning Unit 11

The Urban Development Plan of the Planning Unit 11 (UP 11) (Aviso nº 44845/2008) is enforced in the whole intervention area of this unit, defined in the Municipal Master Plan of Lagoa as Touristic Capacity Area (AAT), which can lodge one or more Touristic Development Nuclei (NDT) (article 1st of respective regulation). This intervention area spans a surface of about 401,6 hectares and locates in the stretch of the seashore between Marinha beach and Cabo Carvoeiro, parishes of Lagoa and Carvoeiro, municipality of Lagoa.

The general goals of this Urban Development Plan consist in settling land occupation, use and transformation in respective intervention areas, and of the correspondent building regime (namely through the definition of urban operations projects´ regulations – parcelling out procedures, construction of touristic undertakings, infrastructure, buildings and outside spaces´ works) (article 2nd).

The specific goals, by their turn, consist in developing and accomplishing the Touristic Capacity Area of UP 11, given that the Urban Development Plan delimits two Touristic Development Nuclei (NDT) (observing the ecological structure, and the natural, cultural and landscape values) (article2nd): East NDT and West NDT.

Land belonging to the intervention area of UP 11 can be classified as urban land (that encompasses developed land and land which urban development may be programed) and rural land (article 17th of the regulation of the Urban Development Plan of the Planning Unit 11).

Developed urban land covers the urban and touristic-urban areas outside the Touristic Development Nuclei settled in the Municipal Master Plan of Lagoa, and includes the consolidated urban area of Benagil; the touristic-urban area located north of Carvalho beach (Clube Atlântico); and both touristic-urban areas near Alfanzina, the most extensive at north and the other at south (article 36th). The building regime in the areas classified as developed land where parcelling out operations are enforced is guided by the regulation reported in respective building licence (point 1. of article 37th). In land without licensed parcelling out operations, new buildings assigned to single-family houses or to touristic uses are allowed, with or without integrated trade and services, however subject to the urban parameters defined in point 2. of article 37th and to the remaining enforced legislation.

Land which urban development may be programed covers the new touristic areas, entirely located inside either Touristic Development Nucleus: East NDT and West NDT (article 38th):

- The whole value of the land surface which urban development may be programed mustn´t surpass 30% of the value of the total surface of the Touristic Development Nuclei (point 2. of article 38th);
- The East Touristic Development Nucleus covers a planning and management operational unit that structures into N1 and N2 planning and management operational subunits (point 3. of article 38th);
- The West Touristic Development Nucleus covers a planning and management operational unit that structures into P1 and P2 planning and management operational subunits (point 4. of article 38th).

All the undertakings assigned to land which urban development may be programed concerning each Touristic Development Nucleus must fit four-star or higher category (article 39th)

The maximum number of beds to assign to touristic uses is 1 720 in both Touristic Development Nuclei, what corresponds to a maximum of 1 279 beds located in The East Touristic Development Nuclei, and a maximum of 441 beds located in the West Touristic Development Nuclei (article 40th)

As far as the building capacity is concerned (artigo 41º):

- In land which urban development may be programed in the surface covered by the Ordering Plan of the seashore of Burgau-Vilamoura (RCM nº 33/99), only buildings assigned to hotels and/or further touristic facilities are allowed (except for the surface depicted in the zoning plan as "*nonaedificandi*" area in the East NDT, where buildings are forbidden) (point 1. of article 41st);
- The land building regime in land which urban development may be programed located in Touristic Development Nuclei observes the precepts enforced to respective planning and management operational subunits, according to the classifications allowed in touristic undertakings (point 2. of article 41st).

Two execution units are settled – East NDT and West NDT - in order to implement the Urban Development Plan UP 11, according to the current specific characteristics of land occupation and environment, mastered by the need to subscribe concrete planning and management solutions guided to its preservation or transformation (article 59th).

The sum total of the surfaces assigned to both Touristic Development Nuclei (997 737 m^2) mustn't exceed 25% of the whole surface of UP 11 settled in the Municipal Master Plan of Lagoa (4 016 158 m^2) (point 2. of article 59th): indeed East NDT´s surface amounts to 741 890 m^2 and West NDT´s surface to 255 847 m^2.

The average transfer index (ICM) (point 1. of article 69th) amounts to 0,1475 m^2 per m^2 of gross building surface corresponding to the abstract building right in the East NDT, and to 0,1826 m^2 per m^2 of gross building surface corresponding to the abstract building right in the West NDT (point 2. of article 69th). The average abstract transfer surface concerning each parcel is computed through the multiplication of the average transfer index (ICM) by the abstract building right (point 3. of article 69th). The minimum transfer surfaces assigned to the Public Municipal Domain amount to 10 500 m^2 in the East NDT, and to 4 500 m^2 in the West NDT, and correspond to the surfaces assigned to the municipal road network (article 73th).

3.2. Municipal development charges in the municipality of Lagoa

The formula underlying the computation of the municipal development charges is settled in article 73rd (Charges due in parcelling out urban procedures and in adjacent functionally-linked buildings) of the Municipal Regulation of Urbanization, Edification, Fees and Urban Development Compensations of the municipality of Lagoa (R nº 732/2010). In parcelling out operations with or without urban development works, in buildings with parcelling-out similar

impacts, or in edifications inside parcelling out operations, the fee for general infrastructure´s accomplishment, maintenance and reinforcement by the municipality conforms to the following computation formula:

$$TMU = (ci/cc) \times cc \times ab \times K0/K2/K3$$

Where:

TMU(€) – is the value, expressed in euros, of the fee due to the municipality for urban infrastructure´s accomplishment, maintenance and reinforcement

ab – is the gross surface to be licensed

ci – is the average costs of infrastructures per m^2 of surface (fixed in 50 €/m^2)

cc – is the based-value of buildings according to article 39th of the Real Estate Municipal Tax Code (482,40 €)

K – is the assignment coefficient, according to respective typology, that observes the following values: K0 (Housing – Parceling out operations): 0,08; K1 (Housing): 0,15; K2 (Trade and Services): 0,16; and K3 (Industry): 0,17

4. METHODOLOGY AND CASE STUDY

4.1. Methodological structuring of data

The data required to compute the 30% fee that impinges on trade, industrial, touristic or services´ building capacity is organized in Figure 2:

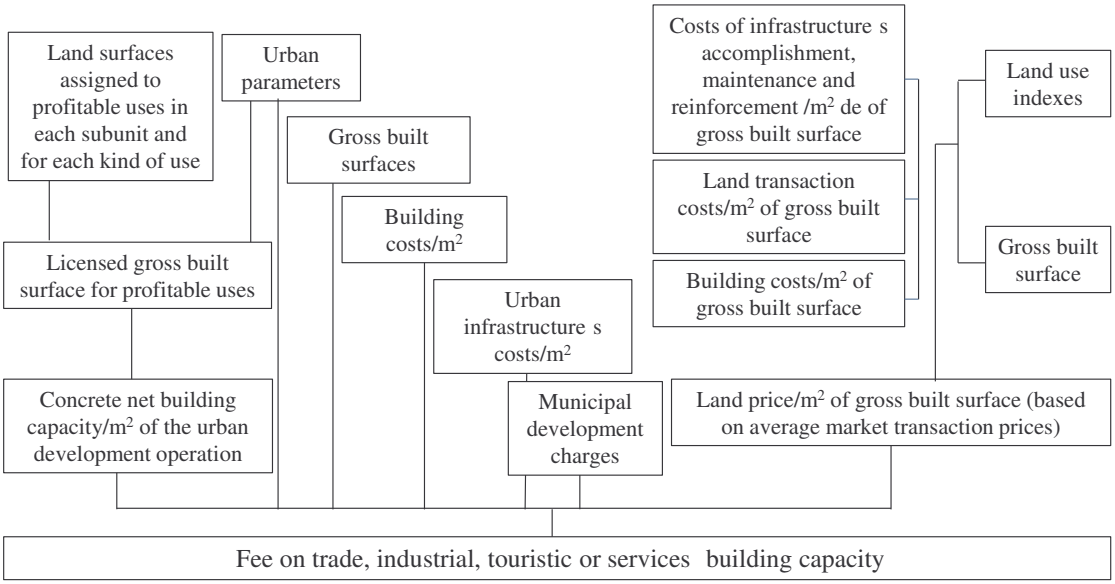

Figure 2: Organization of data required to compute the 30% fee on trade, industrial, touristic or services´ building capacity (Source: author)

4.2. Computation of the value of the 30% fee on trade, industrial, touristic or services´ building capacity in the Planning Unit 11

The following methodology was pursued to compute the 30% fee that impinges on trade, industrial, touristic or services´ building capacity – for each planning and management operational subunit and types of uses in the intervention area of the Urban Development Plan of the Planning Unit 11 (Table 1):

- Non-buildable land [5] covers the average transfer surface in each planning and management operational subunit inside East and West Touristic Development Nuclei, given by the product between the gross built area licensed for profitable uses[4] and the corresponding average transfer indexes[5] (0,1475 for the East NDT, and 0,1826 for the West NDT, respectively);
- Land plot surfaces for profitable uses [1] is given by the difference between East and West NDT´s surfaces (741 890 m^2 and 255 847 m^2, respectively) and correspondent transfer ones (10 503 m^2 and 4 501 m^2, respectively) (equivalent to non-buildable land);
- The concrete net building capacity/m^2 [4] (expressed in m^2 of licensed gross built surface per m^2 of land aimed at profitable uses) is computed through the quotient between the maximum gross built surface[6] allowed by the Urban Development Plan [2] and the surface of the plots aimed at profitable building [1].
- The infrastructure costs [6] are reckoned through the product between the total gross built surface allowed by respective Urban Development Plan [2] and the average cost for infrastructure´s accomplishment, maintenance and reinforcement (705,2 €/m^2) (computed through the quotient between the average annual investment with urban infrastructures´ accomplishment, maintenance and reinforcement (34 044 069 €)

[4] Profitable uses are considered to include housing, trade, touristic, services and/or industrial uses (in the current case study all uses are touristic ones).
[5] These values – that result from the application of article 69th were considered as they surpass the minimum transfer surfaces required for East and West NDTs, settled in article 73th of the regulation of the Urban Development Plan of UP 11.
[6] In the current case study, this whole licensed gross built surface is aimed at touristic uses.

(CML, 2009, 2010, 2011, 2012) and the average municipal annual built surface (48 278 m^2) (INE, 2009, 2010, 2011, 2012))

- Land infrastructures´ costs/m^2 [7] result from the quotient between total infrastructure costs [6] and land plots´ surface assigned to profitable uses [1];
- The infrastructure costs of non-buildable land [8] are computed through the product between land infrastructures´ costs/m^2 of land [7] and the non-buildable land surface [5];
- The municipal development charges that should impinge on non-buildable land [9] are given by the product between the non-buildable land surface [5], and the net building index of respective zone [4], and the value of the charges/m^2 (that results from the application of the formula settled in the Municipal Regulation of Urbanization, Edification, Fees and Urban Development Compensations of the municipality of Lagoa, where the unit fee value amounts to 8 €/m^2, the average cost of infrastructure to 50 €/m^2, and 0,16 was the value adopted for coefficient K2 concerning trade and services[7]):
- Land prices for each planning and management operational subunit and each type of touristic use settled in the Urban Development Plan [10] are taken in the computation of non-buildable land prices. They are based on average annual land transaction costs/m^2, computed through the quotient between the average annual value of urban plots transactions and the average gross built surface, subtracting the annual average building costs[8] (482, 4 €/m^2) and the average infrastructure costs (705,2 €/m^2), multiplied by corresponding net building index);
- The costs of non-buildable land [11] is given by the sum of the parcel concerning land costs – that result from the product between its price/m^2 [10] and the surface of the non-buildable land [5] -, and the infrastructure costs of non-buildable land [8], and the municipal development charges on non-buildable land [9].

[7] A specific K coefficient for touristic uses isn´t predicted in the Municipal Regulation of Urbanization, Edification, Fees and Urban Development Compensations of the municipality of Lagoa.
[8] Portaria nº 16-A/2008, of 9th January; Portaria nº 1545/2008, of 31st December; Portaria nº 1456/2009, of 30th December; and Portaria nº 1330/2010, of 31st December, respectively for 2008, 2009, 2010 and 2011.

- The value of the concrete building capacity [12] is, then, computed through the product between the surface of the land plot assigned to profitable uses [1], and the net building capacity/m^2 of land [4], and the value/m^2 of land[9] in respective subunit [10];
- The total value the fee impinges on [13] results from the difference between the building capacity [12] and the costs of non-buildable land [11];
- The value proper of the fee [14] in the Planning Unit 11 is, finally, given by the percentage of 30% of the total value of allowed building capacities in each planning and management operational subunit, for each kind of touristic use [13].

Table 1: Value of the 30% fee that impinges on trade, industrial, touristic or services´ building capacity (Source: author)

Touristic undertakings	Planning and management operational subunits	Planning and management operational subunit East NDT				Planning and management operational subunit West NDT				Total in UP 11
		N.1	N.2			P.1	P.2			
	Classification	Hotels	Hotels, Serviced flatas or inns	Complementary lodging ways (holiday villages)	Total (East NDT)	Hotels	Hotels, Serviced flatas or inns	Complementary lodging ways (holiday villages)	Total (West NDT)	
Land plot surfaces (profitable uses) (m^2) [1]		731.387			731.387	251.346			251.346	982.733
Maximum gross built surface (m^2) [2]		15.000	56.210		71.210	5.000	19.650		24.650	95.860
Implantation surface (m^2) [3]		4.500	28.658		33.158	1.500	10.013		11.513	44.671
Concrete net building capacity/m2 (m2 of gross built surface/m2 of land plots surface) [4]=[2]/[1]		0,0205	0,0769		0,0974	0,0199	0,0782		0,0981	0,0975
Non-buildable land surface [5]		10.503			10.503	4.501			4.501	15.005
Infrastructure costs (€) [6]=705,2x[2]		10.578.000	39.639.292		50.217.292	3.526.000	13.857.180		17.383.180	67.600.472
Infrastructure costs/m^2 of land [7]=[6]/[1]		68,7			68,7	69,2			69,2	68,8
Infrastructure costs of non-buildable land (€) [8]=[5]x[7]		721.172			721.172	311.297			311.297	1.032.138
Municipal development charges on non-buildable land (€) [9]=8,00x[5]x[4]		8.181			8.181	3.531			3.531	11.713
Land prices/m^2 based on market transactions	Market price in each subunit (€) [10]	43,2	162,0		150,0	41,9	164,8		153,2	150,8
	Costs of non-buildable land (€) [11]=[5]x[10]+[8]+[9]	2.304.875			2.304.875	1.004.215,4			1.004.215	3.309.090
	Values of building capacities (€) [12]=[1]x[4]x[10]	648.000	9.106.020		9.754.020	209.500	3.238.320		3.447.820	13.201.840
	Total value the fee impinges on (€) [13]=[12]-[11]	7.449.145			7.449.145	2.443.604,6			2.443.605	9.892.750
	30% of the total value the fee impinges on (€) [14]=0,3x[13]	2.234.744			2.234.744	733.081,4			733.081	2.967.825

It can be noticed that the 30% fee that impinges on trade, industrial, touristic or services´ building capacity amounts to 2 967 825 €.

5. CONCLUSIONS AND RECOMMENDATIONS

The study herein reported was applied to the Urban Development of the Planning Unit 11, in Lagoa. It supports municipal decisions, as it enables parameter setting and the definition of objective indicators to compute the values the municipality could potentially collect in the

[9] That is to say the product between the total gross built area [2] and the price of land/m^2.

different planning and management operational subunits, for the different kinds of touristic uses in the intervention area of the studied Urban Development Plan. Besides, it can be further extended to other municipal territories and to other intervention areas of Municipal Master Plans, Urban Development Plans, and Detail Plans, as it founds on data available from different municipalities and on national and regional statistics, and on parameters and methodologies replicable at the municipal level.

This new territorial management instrument – that consists in the partial recovery of surplus-values on trade, industrial, touristic or services´ buildings -: (i) reinforces municipal finance and supports the economic and financial sustainability of municipalities; (ii) clears up the origins and applications of municipal funds that accrue from urban development activities; (iii) ensures that surplus values engendered by urban development operations are allocated for population´s general interest and not for specific private interests; and (iv) predicts a more balanced and fair justice in the distribution of benefits and charges that accrue from urban development among the whole population.

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