

# Land Parcel Tax as Instrument to Fight Against Poverty and Inequality<sup>1</sup>

Jose Antonio PINZON BERMUDEZ and Beatriz Cecilia del Rosario QUINTERO  
RINCON, Colombia

**Key words:** Tenancy, Cadastre, Parcel Land Tax, Horizontal and Vertical Equity, Governance.

## SUMMARY

Currently there is a big international consensus about the ways to decrease poverty and inequality in Latin America, especially, and after multiple studies researched not only by academic community but also by important multilateral organisms such as the World Bank. The recommendations of most of those studies work the way governments should work to offer the following minimum conditions to their citizens: i) access to quality education , ii) access to infrastructure, and iii) equal access to land parcels.

This research will be focused on the analysis of the last one referring to equal access to land parcels from the cadastral point of view. To achieve this objective, we will use the data base of the Geographic Institute “Agustín Codazzi” which is the maximum cadastral authority in Colombia. With this information we will evaluate the current tenancy situation relating to both urban tenancy and rural tenancy; furthermore, we will analyze their characteristics and economic utilization.

It is also necessary to carry out a deep analysis of the main local land parcel taxes in Colombia, to mention one, the “Unified Land Parcel Tax”, which should be one of the main instruments for wealth redistribution and to decrease the concentration of property. However, currently this tax has many problems, mainly related to horizontal and vertical equity promotion inequality.

Therefore, the main propose of this paper is on one hand, to share with the academic and scientific community the problematic of tenancy in Colombia, and on the other hand, to expose some ideas that the government should take into account to improve the local tax system and carry out local tax reforms, in order to make Colombia a country more equitable. To achieve this goal, one of the main instruments for the redistribution of wealth is to design an efficient and sustainable property taxation.

---

<sup>1</sup> Special Thanks to Helena Castañeda and Erika Ortiz for their contributions and comments to this paper

# Land Parcel Tax as Instrument to Fight Against Poverty and Inequality<sup>2</sup>

Jose Antonio PINZON BERMUDEZ and Beatriz Cecilia del Rosario QUINTERO  
RINCON, Colombia

## 1. INTRODUCTION

The first part of this study analyzes in detail the cadastral information of the Geographic Institute “Agustín Codazzi” - IGAC - for 994 municipalities<sup>3</sup>. It extends in aspects such as land distribution in Colombia and its kind of tenancy. A characterization of the property is made from the cadastral point of view in order to demonstrate one of the main problems of the crisis in the Country, the inequity land distribution

In the second part, in order to formulate some recommendations that contribute to improve not only the problem of the land concentration, also the local taxation; the study analyzes which should be the main instrument to decrease the concentration of property and redistribution of wealth; Unified Land Parcel Tax - ULPT. Furthermore, it is important to take into account that the ULPT has shown some methodological problems in the design of its components, on one hand, the valuation cadastral and its conservation, on the other hand, the characteristics related with the tariff system.

## 2. RURAL TENANCY: DOMINATION OF THE LANDOWNERS

The World Bank - BM in a study made recently affirms that one of the main reasons of inequalities in Latin America is related to the access to land (Ferranti, Perry 2003). In parallel, we show with this study about the tenancy of land; that the problem is not only access to land, also the big problem is a great concentration of property (Martínez 2002) as much in the rural as in the urban zones.

With respect to the tenancy of land in rural zones, according with IGAC, there are 2'594.914 land parcels registered, belonging to 3'622.503 particular people (8.1% of the population<sup>4</sup>), which own around 67.5 million hectares of 114 million that the Country has approximately (Table 1).

---

<sup>2</sup> Special Thanks to Helena Castañeda and Erika Ortiz for their contributions and comments to this paper.

<sup>3</sup> The country has approximately 1.120 municipalities. It does not include 124 municipalities of Departments of Antioquia, neither Bogotá nor Santiago de Cali.

<sup>4</sup> Population projected for 2003 was 44'526.677 inhabitants. Census of Population 1993.

**Table 1.** Characteristics of Rural Land Parcels Belonging to Particulars

Rank (has)	Land Parcels	Owners	Surface (has)	Building Area (m <sup>2</sup> )
< 1	931.386	1.220.795	316.907,71	23.704.639
1 -3	578.708	822.818	1.000.095,35	16.722.267
3 -5	251.168	363.046	949.474,79	9.570.561
5 -10	267.782	389.652	1.868.717,09	12.831.441
10 -15	124.273	180.077	1.499.166,11	6.922.464
15 – 20	74.048	107.519	1.268.261,11	4.012.784
20 – 50	184.034	262.538	5.780.838,34	12.369.732
50 – 100	79.777	115.843	5.464.960,73	7.010.976
100 – 200	38.085	59.375	5.167.062,64	5.027.628
200 – 500	18.505	31.830	5.471.160,52	3.994.702
500 - 1000	5.290	9.025	3.761.012,71	1.356.587
1000 - 2000	2.519	3.724	3.397.448,88	667.062
> 2000	3.028	3.639	31.631.308,74	562.044
Condominiums	33.023	48.412	8.334,93	1.371.467
Horizontal Property	3.288	4.210	166,4907	166.991
Total	2.594.914	3.622.503	67.584.916,13	106.291.345

Source: Geographic Institute “Agustín Codazzi” – IGAC. Under Directorate of Cadastre. 2003

For statistical aims and in order to make an analysis altogether, the classified rural land parcels in horizontal property and condominium were added within the rank of land parcels smaller to one hectare. Starting off this new classification, it is shown that 37.29% of the land parcels (967.697) that belong to the 35.15% of the owners (1'273.417), own just 0.48% of the rural area (325.409 has).

If the sample is extended up to 20 hectares, it is observed that 87.24% of the land parcels (2'263.676) that belong to the 86.58% of the owners (3'136.529) own 10.23% of the rural surface (6'911.124 ha), which means that 12.76% of the land parcels (331.238) that belong to the 13.42% of the owners (485.974) own 89.77% of the rural surface (60'673.793 has).

If the rank is once more extended up to 200 hectares, it can be seen that 98.87% of the land parcels (2'565.572) that belong to the 98.67% of the owners (3'574.285) own 34.51% of the rural surface (23'323.985 has), meaning that 1.13% of the land parcels (29.342) that belong to the 1.33% of the owners (48.218) have the 65.49% of the rural surface (44'260.931 ha). In other words, a great part of the country, 65.49%, is owned by 1.13% of the total population, demonstrating the inequality presented in land tenancy

In Table 2 is shown a classification of the tenancy of the rural property by the state; in this case the distribution varies slightly, but still the state remains as one of the most important landowners of the country (70.161 land parcels distributed in 28'525.911 ha). It is important to note that 50.5% of this land parcels do not have an extension superior to one hectare.

**Table 2.** Characteristics of Rural Land Parcels Belonging to the State

Rank (has)	Land Parcels	Owners	Surface (has)	Building Area (m <sup>2</sup> )
< 1	35.427	35.991	7.239,79	2.776,22
1 -3	7.282	7.591	11.811,49	481,567
3 -5	3.085	3.207	11.746,49	169,701
5 -10	4.452	4.651	31.932,54	328,524
10 -15	2.836	2.970	34.523,07	142,078
15 - 20	1.990	2.070	34.066,09	164,015
20 - 50	6.388	6.686	201.878,58	326,393
50 - 100	3.959	4.124	273.623,66	296,559
100 - 200	2.271	2.387	304.767,75	250,751
200 - 500	1.226	1.326	374.357,07	366,061
500 - 1000	465	682	327.596,71	216,937
1000 - 2000	300	319	426.265,70	72,893
> 2000	480	482	26.486.102,70	263,103
Total	70.161	72.486	28.525.911,64	5.854,80

Source: Geographic Institute "Agustín Codazzi" – IGAC. Under Directorate of Cadastre. 2003.

From this classification is possible to differentiate three groups. In the first one, the land parcels up to 20 hectares correspond to 78.5% of the land parcels that represents 0.5% of country's land (131.319 has). The second group is conformed by land parcels between 20 and 2.000 hectares corresponding to 20.8% of the land parcels and 6.7% of land surface (1'908.489 has). The last group, as can be seen in Table 2, corresponds to land parcels with an area superior to 2.000 hectares, this group represents 0.7% of the registered land parcels (480) with an extension of 26'486.102 hectares (92.8% of area).

**Table 3.** Characteristics of Rural Land Parcels by Economic Uses

Economic Uses	Land Parcels	Owners	Surface (has)	Building Area (m <sup>2</sup> )
Residential	168.847	212.258	10.070.515	7.453.432
Industrial	1.583	2.095	26.054	2.423.574
Commercial	3.806	4.605	33.569	1.492.743
Agricultural	2.381.158	3.313.370	76.835.964	95.521.468
Mining	701	882	22.731	311.383
Cultural	3.144	3.240	35.962	557.410
Recreational	26.478	37.858	18.881	2.454.004
Health Buildings	683	732	1.836	63.831
Institutional	9.790	10.196	459.743	1.992.145
Mixed Use	2.638	3.745	329.663	1.924.517
Others	20.289	27.651	244.835	157.825
N.I. <sup>5</sup>	148.130	188.231	7.691.629	3.860.505
Total	2.767.247	3.804.863	95.771.383	118.212.837

Source: Geographic Institute "Agustín Codazzi" – IGAC. Under Directorate of Cadastre. 2003.

<sup>5</sup> Without Information.

Finally, table 3 presented a classification by economic uses of rural land parcel. In this case 86.05% of the land parcels are dedicated to the agricultural activity (2'381.158) in a surface of the 80.23% (76'835.964 has), while 6.10% of land parcels are dedicated to the residential activity (168.847) with a surface of the 10.52% (10'070.515 has).

In short, despite that Colombia is an eminently agricultural country, which is positive, the main problem remains on the distribution of wealth, understanding this as the concentration of property; the data has shown an inadequately distribution of land generating therefore lack of opportunities, inequality and poverty.

### 3. URBAN TENANCY: PROPERTY OF FEW...

In Table 4 for statistical purposes, urban land parcels in horizontal property will be add to land parcels with land area lower than 100 m<sup>2</sup>, and land parcels in condominium will be add to the rank of land parcels between 300 and 400 m<sup>2</sup>. Starting off these assumptions, 3 categories can be identified, first, the land parcels with an urban area lower than 400 m<sup>2</sup> represent 86.3% of the total (3'034.037) corresponding to 86.2% of owners (4'441.757) in a surface of the 16.6% of land (457'028.230 m<sup>2</sup>).

**Table 4.** Characteristics of Urban Land Parcels Belonging to Particulars

<b>Rank (m<sup>2</sup>)</b>	<b>Land Parcels</b>	<b>Owners</b>	<b>Surface (has)</b>	<b>Building Area (m<sup>2</sup>)</b>
< 100	1.075.082	1.430.054	7.693,96	54.958.586
100 - 200	1.012.907	1.350.390	14.263,13	76.932.176
200 - 300	479.802	632.964	11.545,23	45.078.296
300 - 400	250.933	331.161	8.558,15	26.872.439
400 - 500	138.710	182.699	6.154,52	15.841.635
500 - 750	160.357	211.636	9.649,58	19.866.859
750 - 1000	65.155	86.968	5.591,20	8.824.579
1000 - 2000	81.346	109.857	11.090,31	11.793.470
2000 - 3000	25.117	35.329	6.075,17	4.261.495
3000 - 4000	12.407	18.035	4.267,41	2.673.839
4000 - 5000	7.488	10.642	3.334,44	1.826.828
5000 - 10000	16.505	23.583	11.446,39	4.694.469
> 10000	23.817	34.432	171.360,75	13.904.273
Condominiums	54.628	74.829	1.717,06	3.932.395
Horizontal Property	466.246	622.359	1.925,29	28.940.522
<b>Total</b>	<b>3.870.500</b>	<b>5.154.938</b>	<b>274.672,58</b>	<b>320.401.861</b>

**Source:** Geographic Institute "Agustín Codazzi" – IGAC. Under Directorate of Cadastre. 2003.

The second category is given by land parcels between 400 and 10.000 m<sup>2</sup>, which have a weight within the total of 13.1% (368.375) representing 13.2% of owners located in an area corresponding to 21% (514'544.956 m<sup>2</sup>). With this information is possible to demonstrate an unequal distribution of urban land, however if the analyzes is even deeper it would be seen that 0.6% of the land parcels are owned by 0.7% of the owners (land surface of 62.4% representing 1.713'607.456 m<sup>2</sup>), which, without doubt and as in the rural case, demonstrates the unfair and inequity degree of concentration of property in Colombia.

**Table 5.** Characteristics of Urban Land Parcels Belonging to the State

<b>Rank (m<sup>2</sup>)</b>	<b>Land Parcels</b>	<b>Owners</b>	<b>Surface (has)</b>	<b>Building Area (m<sup>2</sup>)</b>
< 100	110.000	110.736	776,4436	1.659.927
100 - 200	123.681	124.341	1.761,42	1.180.411
200 - 300	74.457	74.702	1.798,31	710.043
300 - 400	35.417	35.538	1.212,00	588.365
400 - 500	19.881	19.948	882,6116	541.583
500 - 750	22.729	22.826	1.376,47	1.113.299
750 - 1000	11.053	11.096	948,2839	957.553
1000 - 2000	16.054	16.127	2.238,99	2.479.432
2000 - 3000	6.611	6.626	1.612,73	1.509.749
3000 - 4000	3.820	3.836	1.316,24	1.163.971
4000 - 5000	2.513	2.520	1.123,94	937.026
5000 - 10000	5.186	5.287	3.588,18	2.388.470
> 10000	5.379	5.446	46.253,03	7.017.742
<b>Total</b>	<b>436.781</b>	<b>439.029</b>	<b>64.888,65</b>	<b>22.247.571</b>

**Source:** Geographic Institute "Agustín Codazzi" – IGAC. Under Directorate of Cadastre. 2003.

In Table 5 is shown that similar to the rural case, the state has a great number of urban land parcels, (436.741 that represent the 10.1% distributed throughout 64.889 ha). This tenancy in proportion with the total of the registered urban areas in the IGAC corresponds to a surface of the 19.1% of land. The composition of the land parcels are heterogeneous within the land parcels up to 10.000 m<sup>2</sup>, which represent 98.8% of the land parcels (431.402) with an surface area of 28.7% (18.636 ha), while the other 1.2% (area superior to 10,000 m<sup>2</sup>) represents the 71.3% of the urban surface property of the State.(46.253 ha).

**Table 6.** Characteristics of Urban Land Parcels by Economic Uses

<b>Economic Use</b>	<b>Land Parcels</b>	<b>Owners</b>	<b>Surface (has)</b>	<b>Building Area (m<sup>2</sup>)</b>
Residential	4.068.313	5.215.931	200.701,85	295.540.303
Industrial	10.323	13.262	6.448,41	6.954.009
Commercial	246.210	303.949	8.450,48	27.516.810
Agricultural	77.841	104.880	33.880,82	6.728.905
Mining	3.147	3.588	350,5441	158.487
Cultural	6.217	7.325	1.393,35	2.844.147
Recreational	10.208	13.490	3.078,57	1.360.404
Health Buildings	6.729	7.514	564,9462	1.239.237
Institutional	82.776	86.809	12.151,64	11.048.796
Mixed Use	37.707	53.127	6.127,89	12.885.157
Others	237.478	303.746	52.304,25	6.785.199
N.I.	83.653	97.997	9.206,98	6.510.685
<b>Total</b>	<b>4.870.602</b>	<b>6.211.618</b>	<b>334.659,73</b>	<b>379.572.139</b>

**Source:** Geographic Institute "Agustín Codazzi" – IGAC. Under Directorate of Cadastre. 2003.

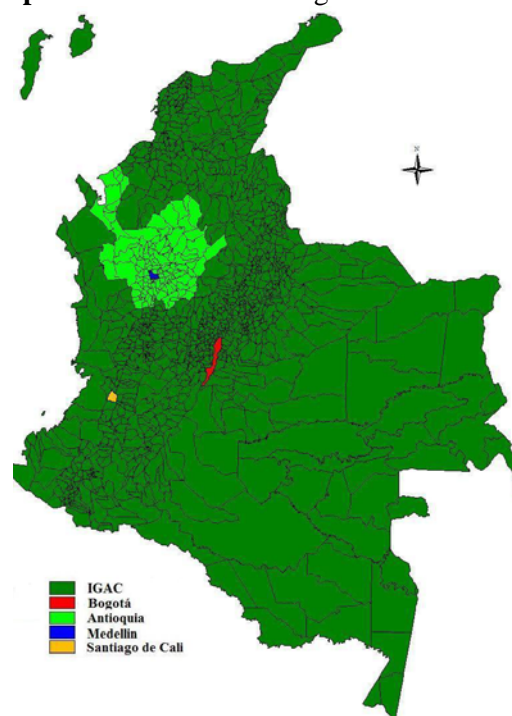
With respect to the economic use of the urban land parcels, table 6 shows that the higher percentage is managed by residential uses with 83.53% of the land parcels (4'068.313), this proportion represents 83.97% of the owners (5'215.931) with a occupied surface of 59.97% (200.701 ha).

To conclude, it is really discouraging the result of concentration and tenancy of the property. This situation that only can be solved through agrarian reforms, and a progressive and equitable unified land parcel tax, that allows in Colombia a true redistribution of wealth and reduce the concentration of property.

#### **4. THE UNIFIED LAND PARCEL TAX: INSTRUMENT OF DECONCENTRATION OF PROPERTY AND REDISTRIBUTION OF WEALTH?**

In Colombia, the ULPT is a real tax that is applied to land parcels located within the jurisdiction of municipalities and districts (local), without possibility of exonerations and exemptions established by laws and actual agreements. The passive subject of ULPT is a natural or legal person acting as owner or possessor of the building, who has the obligation of paying the tax per periods of time on a year.

**Map 1.** The Cadastral Management in Colombia



**Source:** Geographic Institute “Agustín Codazzi” – IGAC. Decentralized Cadastres. Own elaboration.

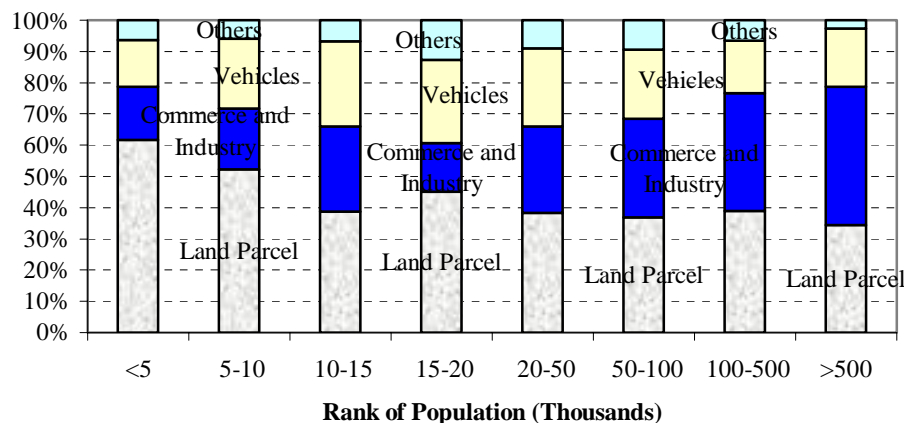
The estimation of ULPT, has two components, the cadastral valuation of land parcels and the tariff system. The cadastral valuation is established by the IGAC in all the country with except of municipalities of the Department of Antioquia, the municipalities of Medellín, Santiago of Cali and the Capital District of Bogotá, Map 1. The reason of this exemption is because these territorial organizations have their own cadastre systems, of course, taking in account all directives emanated by the IGAC which is the maximum cadastral authority in the country. With respect to tariff system, at the present time are regulated by the municipal councils.

#### 4.1 Unified Land Parcel in Numbers

Analyzing all local taxes<sup>6</sup> and their relation with population we found that there are three very important, Unified Land Parcel Tax - ULPT, Commerce and Industry Tax - CIT and Vehicle Motor Tax; in the municipalities with minus of 500.000 inhabitants, the ULPT is the most important local tax. Over this population the Commerce and Industry Tax – CIT is the most important.

The figure 1 show an inverse relationship between the population and the participation of the ULPT in the municipal income. Whereas for the municipalities with inferior population to 5.000 inhabitants the unified land parcel tax has a weight superior to 60% of the tributary income, for the municipalities with population superior to 500.000 inhabitants it is inferior to 40% (Main Capitals).

**Figure 1.** Participation of the Local Taxes by Rank of Population



Source: National Planning Department - DNP, DDT. Own Calculation.

#### 4.2 Collection by Unified Land Parcel Tax

For the approximated estimation of the collection of the unified land parcel tax (Table 7) was taken from on the one hand, the cadastral valuation reported by the offices of cadastre and, on the other hand, the tariff average of 7 by 1.000, which was calculated from the quotient between the cadastral valuation total and the collections by unified land parcel tax<sup>7</sup>. We use tariff average for two reasons: i) only is possible know information sent annually to the National Planning Department – DNP<sup>8</sup> and not all municipalities report this information, and ii) there are different tariff systems.

<sup>6</sup> There are approximately 13 Local Taxes.

<sup>7</sup> Numbers of municipalities are same.

<sup>8</sup> The Directorate of Territorial Development – DDT applied the survey



**Table 7.** Fiscal Collection by Unified Land Parcel Tax

Statistics/Entity	IGAC	Antioquia	Medellín	Cali	Bogotá	Total
<b>Urban Zone</b>						
Land Parcels	5.022.249	588.242	613.872	513.396	1.708.852	8.446.611
Cadastral Valuation (\$000.000)	77.516.545	7.494.931	6.820.946	12.026.616	76.771.279	190.630.318
<b>Rural Zone</b>						
Land Parcels	2.660.007	387.808	31.026	24.584	16.310	3.119.735
Cadastral Valuation (\$000.000)	26.348.937	4.157.338	508.710	670.590	1.863.151	33.548.727
<b>Total</b>						
Land Parcels	7.682.256	976.050	644.898	537.980	1.725.162	11.566.346
Cadastral Valuation (\$000.000)	103.865.483	11.652.270	17.329.657	12.697.206	78.634.429	224.179.045
<b>Unified Land Parcel Tax</b>						
Collection (\$000.000)	727.058	81.566	121.308	88.880	550.441	1.569.253

**Source:** Geographic Institute "Agustín Codazzi" – IGAC. Decentralized Cadastres. Rate applied 7\*1.000. Own Calculation. 2003.

The 11'566.346 land parcels formed in the country have a cadastral valuation of more than \$224.1 billions, of which 8'446.611 are urban (73%) with a cadastral valuation of \$190.6 millions (85% of the real estate wealth of the country<sup>9</sup>) whereas 3'119.735 rural land parcels have an estimate of \$33.5 billions (15% of the wealth). Therefore, under the enunciated assumptions, in Colombia by concept of unified land parcel tax \$1.5 billions are collected annually which represents near 0.75% of the GDP.

### 4.3 Problems of Horizontal and Vertical Equity

Finances Public defines horizontal equity when subjects with similar levels of wealth pay taxes in a similar way, whereas it is understood by vertical equity when subjects with different levels of wealth pay taxes of different way. Consequently it is violated the principle of horizontal equity when two equally rich subjects pay in different ways. In the same way, vertical equity is infringed when agents with different levels from wealth pay in a similar way (Musgrave 1992).

Because of legal emptiness, cadastral valuations do not reflect in a similar way the commercial value of the land parcels of the country. Cadastral valuations, depending of the municipality can vary between 40% and 100% of land parcel's commercial value. This situation generates problems of horizontal and vertical equity under if the assumption that tariffs remains constant; these last will be analyzed later on the paper.

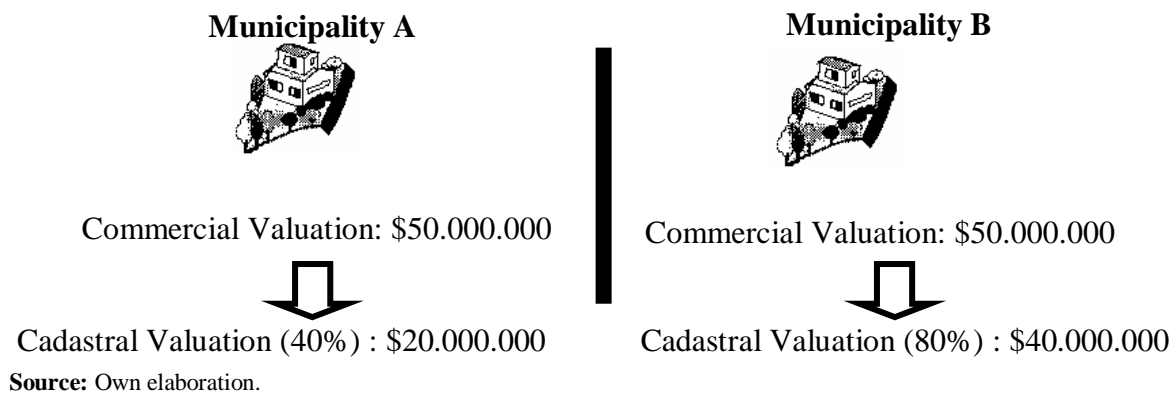
#### 4.3.1 Problems of Horizontal Equity in Cadastral Valuation

With respect to the problem of horizontal equity, it could be possible that a land parcel X having a commercial valuation of \$50.000.000 is registered cadastrally in a municipality with an cadastral valuation of \$20.000.000, if an assumption of 40% commercial was taken. Whereas, a land parcel with same characteristics in a different municipality is registered

<sup>9</sup> Bogotá, Calí and Medellín have a weight of 25% over the total of land parcels and a participation of 48% on the total of the cadastral valuation.

cadastrally with an cadastral valuation of \$40.000.000, when an assumption of 80% commercial was used<sup>10</sup>.

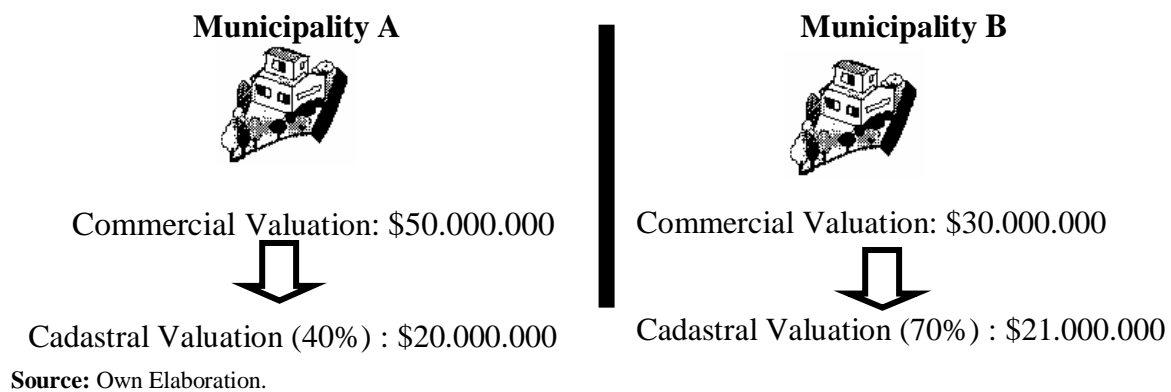
**Figure 2. Two Agents with Equal Level of Wealth Pay Different Taxes**



Therefore, a clear problem of horizontal equity is observed when two individuals with the same level of wealth (\$50.000.000), are taxed in different ways; for one them the base taxation was established in \$20.000.000, whereas for the other, in \$40.000.000 (Figure 2).

#### 4.3.2 Problems of Vertical Equity in Cadastral Valuation

**Figure 3. Two Agents with Different Level of Wealth Pay Similar Taxes**



In relation with the problem of vertical equity (Figure 3), it is possible when individuals with different levels of wealth, pay similar taxes, for example, the subject A that owns a land parcel whose commercial valuations is \$50.000.000, and a subject B has a land parcel whose commercial valuation is \$30.000.000; then they could be pay taxes in a similar way, if in the first case the cadastral valuation was around 40% of the commercial valuation, and for the latest around 70%, because as is observed they will pay about \$20.000.000 and \$21.000.000 respectively.

<sup>10</sup> Municipalities that could be compared in localization, area and population

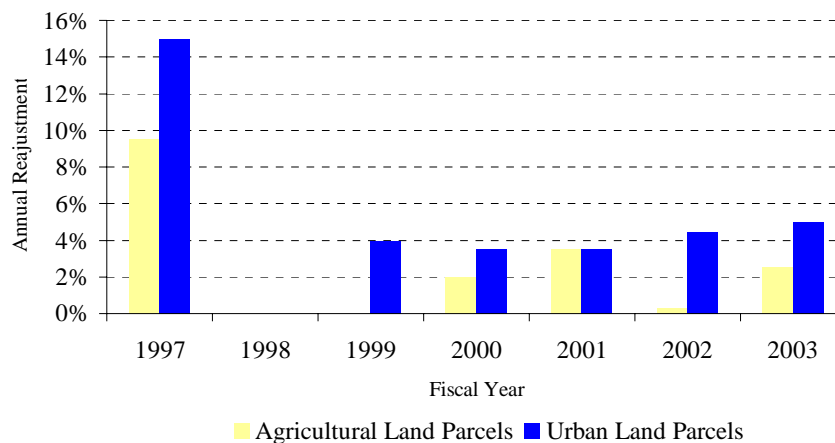
Consequently, and with the assumption that taxpayers who have a greater capacity to pay taxes by their greater level of wealth should pay greater taxes, is not taking in account.

#### 4.4 Conservation of Cadastral Valuation

Another factor that generates distortion is the conservation of the cadastral valuation. At the present time, the readjustment of the cadastral estimates is done by the Law 242 of 1995, which establishes that “*the readjustment of the cadastral valuation for land parcels formed could not be superior to the goal of inflation rate corresponding to the year for which this increase is defined*”. If the land parcels have not been formed, the increase could be until 130% of this goal.

For the case of the rural land parcels dedicated to farming activities the Law 101 of 1993 established that the readjustment must be based on the “Index of Prices to the Farming Producer” - IPPA -, when its annual increase (in percentage) is inferior to the inflation goal.

**Figure 6.** Readjustment of Cadastral Valuation



Source: National Planning Department - DNP, DDUPRE. Own Calculations.

It is worth to note, that as the law is expressed, it exists the possibility of not conserve cadastral valuation in a technical mode. These readjustments should reflect the behavior of the land parcel price that not necessarily follows the behavior of the goal of inflation. This situation causes serious problems of equity that do not allow a right distribution of wealth.

In the last years, rural land parcels used to agricultural activities have been readjusted below the readjustment applied to the urban land parcels. (Figure 6). This can be explained, by the lack of information on the behavior of the prices for the rural sector, the crisis in the countryside and the fall of the IPPA<sup>11</sup>

<sup>11</sup> For the fiscal year of 1998, the National Government decree the no readjustment of the cadastral valuations due to the crisis that the housing and construction sector.

## 4.5 Tariff System

The law 44 of 1990 establishes that Municipal Councils determined the tariff and this will oscillate between 1 and 16 by 1.000 of the respective cadastral valuation. The tariffs would have to be established in a progressive and differential way in each municipality considering:

- The socio-economic stratum
- The uses of land in the urban sector
- The age of formation or update of the cadastre

To the lowest housing and small rural property destined to the agricultural activity it will be applied the minimum tariff. The tariffs applied to land parcel urban does not have been built yet, will be until 33 by 1.000.

The DNP realized a survey over the totality of municipalities<sup>12</sup>, in order to obtain a deeper knowledge of the tariff system applied in the country, the survey was answered by 260 of municipalities; the results obtained demonstrated several equity problems.

It is important to clarify that in this analysis, was taken into account just the information reported by Municipal Agreements, due to the municipal councils has in charge to establish the tariff system in their territories.

### 4.5.1 Problems of Equity

Starting off of the assumption to maintain constants the levels of wealth, the study shown that the system tariff does not be in function of wealth but in function of physical characteristics, and the problem is that physical characteristics are included in the cadastral valuation. For example:

- Tariffs in rural sector higher than in urban sector, or vice versa,
- Tariffs based on the altitude above sea level,
- Tariffs based on the topography,
- Tariffs based on the area of the land parcel,
- Tariffs based on the building area,
- Tariffs based on its distance from the main park,
- Tariffs based on the cadastral update,
- Over tariff that applied surpasses the maximum tariff of 16 by 1.000, established by the Law.

Each one of situations enunciated evidence serious problems that must be attended and probably could be solved by the local authorities in coordination with the National Government through the Directorate of Fiscal Support of the Ministry of Finance and with the collaboration of the regional offices of the IGAC.

---

<sup>12</sup> In 2001

In short, as has been shown, the unified land parcel tax is not the instrument it is meant to be; in fact it presents several problems of equity, low collection and stimulating the concentration of property.

## 5. CONCLUSIONS AND RECOMMENDATIONS

Colombia is a country of great landowners; the data without doubt are discouraging where they stand out that 1.13% of the owners own 65.49% of the rural surface of the country. With respect to the urban ground, the situation is quite similar, 0.7% of the owners own 62.4% of surface of the land, demonstrating without a doubt the high degree of unfair concentration and inequity of the property that therefore generates the observed inequalities in the country.

To impel a territorial tributary reform that eliminates the equity problems related to cadastral valuation, conservation of cadastral valuation and tariff system in order to advance in the construction of a more a fair and equity society.

To punish with the maximum tariff, the properties concentrated on few owners, in order to achieve a reform that allows a better distribution of wealth and property in Colombia.

To recommend to the Directorate of Fiscal Support of the Ministry of Finances to advance in programs of fiscal education in order to enable the human resource of municipalities in the knowledge and correct application of the law.

To establish as a referent for fiscal effects, the commercial valuation of the land parcels, in order to decrease the gap between cadastral and commercial valuation from 60% to a 0% as is at present. The negative impacts of this policy, in beginning, it can be answer tariffs way.

Equally, the Ministry of Finance could give incentives to municipalities that have been advancing in the respective programs of cadastral update. These programs have been created in order to eliminate all the economic disparities both positive and negative; and that could affect the level of wealth of individuals.

It is necessary realize researches about the society's loss of welfare due to serious problems of concentration of property.

## REFERENCES

- Bird, R. and Snack, E. 2002. Impuestos sobre la Tierra y la Propiedad: Un Estudio. World Bank. Washington, USA.
- Castellanos, R. 2001. Apuntaciones Conceptuales y Metodológicas Sobre Avalúos de Bienes Inmuebles. Universidad Distrital. Bogotá, Colombia.
- De Cesare, C. 2003. Impuesto Predial: Instrumento de Desarrollo Fiscal, Económico y Social de las Ciudades. Lincoln Institute of Land Policy. Brazil.
- De Ferranti, D., Perry, G. 2003. Desigualdad en América Latina y el Caribe: ¿Ruptura con la Historia? Banco Mundial. Washington, USA.

- Demsetz., H. 1967. *Hacia una Teoría de los Derechos de Propiedad*. Traducido de *American Economic Review*. Washington, USA.
- Deininger, K. 2003. *Políticas de Tierras para el Crecimiento y la Reducción de la Pobreza*. World Bank. Washington, USA.
- Departamento Nacional de Planeación - DNP. 2002. “Reajuste de los Avalúos Catastrales para la vigencia de 2003” Documento Conpes No. 2731.
- Instituto Geográfico Agustín Codazzi - IGAC. 2000. *El IGAC como soporte de las finanzas públicas para el desarrollo municipal*. Informe Consejo Directivo. Bogotá, Colombia.
- Iregui, A. y otros. 2003. *El Impuesto Predial en Colombia: Evolución Reciente, Comportamiento de las Tarifas y Potencial de Recaudo*. Banco de la República. Bogotá, Colombia.
- Iregui, A. y otros. 2004. *El Impuesto Predial en Colombia: Factores Explicativos del Recaudo*. Banco de la República. Bogotá, Colombia.
- Martínez, Y. 2002. *La Tenencia de la Tierra en Colombia*. Instituto Geográfico Agustín Codazzi. Bogotá, Colombia.
- Musgrave, R. 1992. *Hacienda Pública: Teórica y Aplicada*. McGraw-Hill.
- Pinzón, J. 2004. *El Impuesto Predial Unificado en Colombia: ¿Instrumento para la Redistribución de la Riqueza?*. Publicacions Universitat de Barcelona. Barcelona, España.
- Smolka, M. 2003. *Funcionamiento del Mercado de Tierra Urbano en América Latina*. Lincoln Institute of Land Policy. Peru.
- Steiner, R., Soto C. 1997. *Impuestos: Cómo son en Teoría y Cómo son en Colombia*. Fedesarrollo. Bogotá, Colombia.
- World Bank. 2004. *Colombia: Una Política de Tierras en Transición*. Documento CEDE. Bogotá, Colombia

## **BIOGRAPHICAL NOTES**

Cadastral and Geodetic Engineer. MSc. Natural Resources and Environmental. Former Advisor of Directorate of Urban Development and Special Programs Regional of National Planning Department - Republic of Colombia. Lecturer University. At present PhD Student in Territorial Planning and Regional Development of Barcelona University

Cadastral and Geodetic Engineer. Geographic Information System Specialist. Former University Professional at Geographic Institute “Agustin Codazzi” Republic of Colombia. At present PhD Student in Territorial Planning and Regional Development of Barcelona University

## CONTACTS

Jose Antonio Pinzón Bermúdez  
University of Barcelona  
Canigo 96 Esc. A 2-4. (08031)  
Barcelona  
Spain  
Tel. + (34) 600362185 – (34) 934287120  
E-mail: ja\_pinzon@yahoo.com.mx ; jpinzobe7@docd1.ub.edu

Beatriz Cecilia Quintero Rincón  
University of Barcelona  
Canigo 96 Esc. A 2-4. (08031).  
Barcelona  
Spain  
Tel. + (34) 637099735 – (34) 934287120  
E-mail: beatriz\_quintero\_r@yahoo.es ; bquintr8@docd1.ub.edu