

**Application of New Land Value Capture Instruments
in Colombia
Desepaz Case Study — Cali**

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Abstract

Applying the new instruments of land value capture in Colombia led not only to the introduction of land price regulation mechanisms and state participation in the creation of urban land value increments, it also enabled operation of the land market to be described by specific socioeconomic and political contexts. The lack of efficient and effective land value capture instruments shows us how the social goals for a city, such as providing housing for the poorest segments, are redirected by a series of factors specific to the speculative land market and by the state's inability to control them. Goals are then directed towards individual needs that reap maximum benefit for urban developers and land owners, to the detriment of the city's poor.

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Table of Contents

Introduction	1
1. Background to the Desepaz Project	2
2. Trend in Land Prices – Appreciation Process in Lands of the Desepaz Project	4
2.1. Date: December 1992	4
2.2. Date: January 1993	4
2.3. Date: February-March 1993	4
2.4. Date: August 1993	5
2.5. Date: November 1993	5
2.6. Date: June 1994	5
2.7. Date: December 1994	6
2.8. Date: February 1995	6
3. Price Variations	6
3.1. Effects of Socioeconomic and Political Context on Land Price Speculation	7
3.2. The Housing Market	7
3.3. Information Flows and Their Influence on Land Appreciation	8
4. Urban Policy Instruments Available at the Time for Capturing Value Increases	9
4.1. The “Tax on Municipal Development”	9
5. Effects of Land Prices on Desepaz Project Development	9
6. The Value-Capture Instruments Established in Colombia in 1997 and How they were Applied to the Desepaz Case	9
7.1. Amount of Participation	10

7.2	Application of Methodology for Calculating Value Increase in the Desepaz Case	10
8.	Conclusion	12
	Bibliography	13
Tables and Graphs		
Table 1	Growth in Land Prices in Desepaz	7
Table 2	Summary of Management Instruments in Law 9 of 1989 and Factors of Resistance to Their Application in Desepaz	14–15
Table 3	Summary of lots traded, with their respective prices.	11
Table 4	Participation in Value Increase According to Different Rate Scenarios	12
Graph 1	Land Price Growth in Desepaz and Economic Growth in Colombia, 1993–94	16
Graph 2.	Trend in Unmet Housing Demand by Social Class	17
Graph 3	Real Annual % Rate, Price of Urban Land for Low-Income Housing	18
Graph 4	Trend in Supply, Demand, and Land Price Indexes	18
Graph 5	Land Price and Consumer Price Indexes	19
Graph 6	LIH Budget and Tax Revenue from Value Increase	19
Graph 7		20
Graph 8		21

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Introduction

In Colombia during the nineties, it became clear that there was an urgent need for instruments that would allow for better urban land management. The goal of these instruments would be to optimize development processes on the outskirts of urban areas and establish effective mechanisms for capturing the resources generated by the value increase resulting from these processes.

A new urban policy was implemented in Colombia in 1997 as a result of Law 388. The policy established full and integrated planning of sections of the city and capture of the value increments created by land development processes.

This paper analyzes both the political and social factors that can cause an increase in land prices when there are no urban management mechanisms in place strong enough to control speculation, thus hindering the existence of a purely competitive market, according to price theory.

First, we will briefly describe the background to development of the “Desepaz” urban macroproject in the municipality of Cali, local political actions, and the factors that affected land appreciation processes while the project was being implemented. We will also analyze the land value capture instruments that were in effect in 1993, when development began in Desepaz, and their applicability.

Finally, we will apply the new land value capture mechanisms introduced in Law 388 of 1997, in order to calculate the tax revenue that would have been generated in the process and that the municipality of Cali ceased to collect while developing the Desepaz macroproject, because there were no effective land value capture mechanisms contained in existing legislation.

1. Background to the Desepaz Project

In 1989, the Colombian government issued Law 9, the Urban Reform Law, aimed at providing the necessary mechanisms for treating the urban problem as a whole. It proposed achieving overarching goals, in keeping with the image of a unified, competitive, sustainable, and spatially well-constructed city with a cultural identity. One of the adopted management instruments was a proposal to develop urban macroprojects with good potential for structuring the city so as to achieve the greatest impact from government investment. It was also intended as a strategy for implementing coordination with the private sector.

In the early nineties, municipal governments had instruments available that were intended to enable more efficient land management. In its 1991 Development Plan, the first such plan in the country, the municipality of Cali incorporated these instruments: delimitation of expansion areas and priority development areas; areas for developing low-income housing, priority construction, and development; expropriation and termination of ownership. In Cali, housing statistics showed a significant housing shortage of approximately sixty thousand units, in the poorest population concentrated in socioeconomic levels one and two.*

Several urban macroprojects were begun in various cities of Colombia to fulfill the principles and aims of the national urban policy. In Cali, an effort was made to solve its housing problem by focusing on managing one such project.

The councilmen debated where to set up a macroproject, keeping in mind two conditions in making their choice: they wanted a large area of land, enough to meet the surface area needs of a project of this size; and they would have to be able to obtain the land at low cost. Among the alternatives was a proposal for the expansion area of the city known as Poligonal E, or Zone E, which met all the conditions: an area of 380 hectares (939 acres) and an average cadastral assessment of \$82.00 m² in 1992.

Beginning in January 1993, with the adoption of Ruling 7, the city government started the largest low-income housing program in Colombia, the Desepaz housing development. The plan incorporated the Zone E expansion area, known as Navarro, into the urban perimeter. It would help 145,000 low-income people with the construction of 28,000 housing units. The size of the housing development would be comparable to medium-sized cities in the geographic department, and it would be equipped with all the infrastructure for public services, education, health, and recreation.

The Desepaz housing project became an urban phenomenon with major implications for the structure of city management. The project was developed as a local government initiative. To meet some of the objectives of the Urban Policy, the government sought participation from the private sector for its execution and to achieve a fair distribution of costs and benefits.

* The official stratum system goes from 1 to 6; 0 represents illegal housing, 5 to 6 are the upper middle class.

Several concerns arose during its formulation: How to develop a project of 380 hectares of property belonging to eight individuals? How to make them participate? How to maintain the leadership at the head of the municipal government? How to apply the prevailing land management instruments? How to control price speculation for the land on the market?

These questions helped the municipal government lay the foundation for developing project policies, on the basis of seven principles:¹

1. Decision not to expand the urban perimeter. Zone E would preserve its suburban character. The intent was to avoid introducing market forces to the land.
2. Restriction on change in use of the land in Zone E. Its prior rural use would be preserved, and in exceptional instances, low-income housing programs would be authorized.
3. A plan for the whole area as a housing area, disregarding plot divisions, including a road network, structuring of public space, community facilities, and various uses that complement residential activity.
4. Requirement of owners to sign fiduciary or association contracts with Invecali,² in which they would agree to accept a General Development Plan and to take care of the needs of the target population.
5. Acquisition of one of the plots by Invecali to develop an institutional housing program, and become the guarantor for the overall project.
6. Active participation of the city and surrounding area, taking on investment in all required macro works, roadways, and infrastructure.
7. Decision to make Invecali the project manager, supported by a technical committee with the participation of all municipal agencies.

With the approval of the City Council, the mayor convened the owners and the land negotiation process began.

¹ PNUD-MDE COL 93-0001 Project. "Apoyo a la Política de Vivienda y a la Gestión urbana," Liliana Bonilla, Juber Galeano. Cali, July 1995.

² Instituto de Vivienda de Cali, Cali Housing Institute

2. Trend in Land Prices Appreciation Process in Lands of the Desepaz Project

Several moments can be identified in the Desepaz land appreciation process where various pressures, including the position taken by the decision-makers in the project, caused the land price to increase.

2.1 Date: December 1992. Price: \$800.00/m²

Initially, this is the lowest value for the land, the lowest level that the price of urban land can fall to. The price reflects a piece of land in a farming district unsuitable for urban development due to its high water table. It is located on the outskirts of the city, and presents technical restrictions that prevent immediate installation of infrastructure to provide public services in the homes such as plumbing and water supply, and serious obstacles to providing electricity. For these reasons, the area is not on the marketplace. Its only buyer could be the state and therefore, its price reflects the features of a monopsony (P.H. Derycke, 1983).

So the city's main political focus was to search for solutions to the housing shortage for the poorest sector of the city, assessing urban expansion alternatives in order to develop low-income housing. Zone E entered the picture as an option, despite the above-mentioned technical limitations. The Municipal Public Companies, Emcali,³ were pressed into service, and they issued a favorable opinion of providing public services in this zone.

2.2 Date: January 1993. Price: \$1000.00/ m². One month later.

Increased development expectations for Zone E spurred the first commercial sale transaction in anticipation of appreciated value. Thus the path of the land appreciation process is laid out. Value begins to increase in response to the actions of both the municipal government, which is handling the development of a large-scale public housing program, and of the land owners, who are gathering information that would allow them to appropriate the facilities that this project produces and to place the land on the speculative market.

2.3 Date: February-March 1993. Price: \$2500.00/m² to \$2800.00/m². Two and three months later.

In order to capture the land value increments generated, the city government, through Invecali, tries to put a ceiling on the price of land in Zone E, although it lacks the necessary control mechanisms. This information is filtered to the owners, who, faced with a chance to receive a sizeable income, set this ceiling as the minimum price for transactions in Desepaz. This is how land price speculation begins. The features of a monopsonic market change to a competitive monopoly market, where there is a wide

³ Empresas Municipales Prestadoras de Servicios Públicos, Municipal Public Service Companies

range of possible buyers. These include the *Cajas de Compensación Familiar* (private agencies that pay family allowances and other sums on behalf of the state), who are required by the national government to earmark part of their resources for the construction of low-income housing. At that time, the real estate market was flooded with drug-trafficking money that fueled a large part of the construction activity in Cali involving the upper socioeconomic levels. So favorable conditions were created to prompt some urban development companies to gear their supply toward the lower socioeconomic levels, since the market would soon be saturated in other social levels.

2.4 Date: August 1993. Price: \$5000.00/m². Eight months later.

The Municipal Office of Cadastres carries out special administrative assessments as a means for capturing land value increases. A strip of the environmental belt that would have limited westward development in the zone, reducing its size from 250 m to 100 m, is rejected, and development regulations and technical specifications are defined that will guide development in the zone. The owners get hold of the information from these administrative assessments and turn it into a new base price. Negotiations continue in anticipation of the appreciation, and expectations for real estate development grow.

2.5 Date: November 1993. Price: \$7000.00/m². Eleven months later.

Construction of a perimeter road is announced. The purpose of the road is to optimize the zone's connection with the rest of the city and ensure accessibility. The work is financed with the revenue from a gasoline tax. The city government repeals rules requiring payment of municipal taxes and donations. "Development costs" go down, more developable land is made available, and financing of private and public projects is guaranteed, which reassures the developers.

2.6 Date: June 1994. Price: \$8000.00/m². Eighteen months later.

Work begins on the access road that will ensure a link with the city, the president of the republic inaugurates the Desepaz Project, a national model for the development of low-income housing.⁴ A large publicity campaign fills the media, and institutional backing is guaranteed to finance the projects. The land owners have accurate information on the decisions about their plots, giving them the upper hand in transactions. The benefit created by opportune possession of information leads to what Christian Topalov calls "Viscous Value Increases."⁵ In other words, this access to information that favors an increase in prices causes the owners to be "more focused on the nominal value than on the real value of their land."

⁴ In the National Development Plan, "low income" is defined as a maximum monthly wage of \$135.

⁵ Quoted in "Economía y Planificación Urbanas" Pierre-Henri Dericke, Madrid 1983. p. 293.

2.7 Date: December 1994. Price: \$11,000/m² and \$14,000/m². Twenty-four months later.

The president inaugurates the access road, or perimeter road, and reiterates his support for the Desepaz housing development. Zone E is incorporated into the city and the city council approves a host of private projects. Sales begin.

2.8 Date: February 1995. Price: \$12,500/m² and \$15,000/m². Twenty-six months later.

Zone E is included in the urban perimeter by means of the City Council Agreement, which adopts the Development Plan. The area begins to be taxed as urban land and is intended exclusively for low-income housing. Developers begin having concerns because they did not receive the hoped-for response from the target population. Pressure is exerted to raise the low-income housing limit and reorient the project toward stratum three (working class) by developing multifamily dwellings and improving the allocation and quality of common areas. The project also runs into difficulties over the requirements placed on it by the financing plan proposed by the Savings and Housing Corporations, as well as by the demands for completion and implementation of roadway and public services infrastructure, which were part of the agreement with the city administration.

Due to misinformation about the location of projects for relocating populations⁶ with a negative social impact, the image of Zone E is affected. This in turn limits the ability to make housing available to stratum three.

3. Price Variations

Statistically, the Desepaz land price index, using December 1992 as a base of 100, increased in value by 121 percent one month later; two months later in March 1993 it was at 326 percent of its base value. From then on, prices shot up indiscriminately, ending the year 1993 with indexes above 595 percent and finishing after a two-year trend with values of approximately 1202 percent. There is no comparison between the growth in these figures and the increase in consumer prices, which varied by 56 percent over the same period under study while the price of land varied by 1102 percent.

⁶ These are populations who were living on the hillsides of Cali, that had acquired the land illegally (as squatters) and were relocated through municipal programs because of the hazardous conditions. They are very poor people, commonly stigmatized as criminals and perpetrators of violence.

Table No. 1

Growth in Land Prices in Desepaz					
Date	Land Prices \$/m² at current prices	Land Prices \$/m² at constant prices	Land Price Index Dec 92=100	% Δ over base period	% Δ in CPI⁷ over base period
December 1992	800	308	100		
January 1993	1000	373	121	21	3
February 1993	2500	913	297	197	5
March 1993	2800	1002	326	226	7
August 1993	5000	1614	525	425	19
September 1993	6000	1884	612	512	22
November 1993	7000	2138	695	595	26
June 1994	8000	2136	694	594	44
September 1994	9000	2291	745	645	51
November 1994	11050	2753	895	795	54
December 1994	15000	3697	1202	1102	56

Source: our presentation, based on Estudio Macroproyectos Urbanos - Desepaz

3.1 Effects of Socioeconomic and Political Context on Land Price Speculation

The phenomenon of runaway speculation in land prices cannot be explained by simple causes (P.H. Dericke 1983), particularly in developing countries like Colombia, with high inflation rates and low economic growth rates. In the Desepaz case, land prices grew at 5.1 times the rate of inflation and 21.6 times the rate of the gross domestic product⁸ of Colombia. This behavior, which does not conform to the natural laws of the marketplace, can be partially explained by the socioeconomic and political context in the city of Cali during this period. Some of the land was owned by drug traffickers, for whom the exorbitant value increase absorbed by the land transactions was a boon to their money laundering operations and justified “lawful” enrichment in the eyes of the authorities, assuming that the price of land in their financial statements had to be greater than the price in the original deal.

See Graph No. 1 on page 16.

3.2 The Housing Market

Initially, the pressure on land use for housing focused on satisfying the needs of the upper socioeconomic layers of society with sumptuary housing. This use was promoted by a few construction companies financed by drug trafficking. The builders flooded the city

⁷ CPI = Consumer Price Index

⁸ GDP = Gross Domestic Product

with huge and high-priced apartment buildings, stratifying the value of urban land and producing market saturation. In March 1994 there was an oversupply of 646 homes on the market.

See Graph No. 2 on page 11.

Due to market saturation in the upper levels, and the amount of money in circulation, supply was directed toward low-income housing. The low-income housing supply index grew by 256 percent between September 1991 and March 1994. During the same time period, land prices in Desepaz increased by 1143 percent.

Using historical data, the real rate of urban land supply for low-income housing showed an increase in the late eighties, growing by 29.7 percent in the period 1981–1989. Even though the geometric real rate in 7.5 years varied by -1.2 percent,⁹ the index of real demand for low-income housing was 64.8 percent. The unmet housing demand was at 70,879 units in 1991, and at 42,620 units in 1994. The situation showed how the supply of urban land for low-income housing was directly proportional to the increase in the price of land in Desepaz.

See Graph Nos. 3 and 4 on page 18

3.3 Information Flows and their Influence on Land Appreciation

The need to meet the high demand for housing for the poorest layers of society exceeded the legal limits set forth in the Municipal Agreements, so that rural farming areas began to be developed on behalf of owners and investors, who achieved their goal by pressuring some public officials in charge of monitoring and ensuring fulfillment of environmental and legal restriction¹⁰ regulations.

The price curve accelerates rapidly as the various players join the land market. In the first section of the curve for December 1992–January 1993, the information is still vague for most owners. The promoters however, who are the developers in this case, have access to firsthand information, which gives them the upper hand in negotiations.

Prices begin to spiral upward beginning in February 1993 as information reaches all the players. As a political strategy, the municipal government uses a wide publicity campaign to promote the project. The campaign is clear, easily accessible, and makes use of the prominent role the project has achieved nationally due to the support it received from two presidents when the work began. At this stage, the owners become speculators. The land is just a temporary asset forming part of their portfolio (P.H. Dericke, 1983), and ownership of it depends on the nominal value it may have.

See Graph No. 5 on page 19

⁹ Data for urban land prices was unavailable for the analysis period, so we have taken the historical period 1981-1989; from the Cali Realtors Association study of urban land value in Cali.

¹⁰ PNUD - MDE 1995 - Análisis de Macroproyectos Urbanos - Desepaz , Liliana Bonilla - Juber Galeano. Cali, 1995.

4. Urban Policy Instruments Available at the Time for Capturing Value Increases

The urban policy instruments contained in Law 9 of 1989 were not sufficiently developed and regulated. Therefore, it was impossible to apply urban management mechanisms in Desepaz. The city council's attempts at capturing the enormous value increases created by the project all failed.

4.1 The "Tax on Municipal Development"

The main capture mechanism considered in the land management instruments of Law 9 is the "Tax on Municipal Development." This is a rate applied to property that benefits directly from an administrative decision, whether by incorporation of rural land into the urban area, or by changing use and density categories. The tax is 30 percent of the difference between the initial property assessment and the final assessment, in constant pesos. Invicali was in charge of project coordination. They set the cost to developers at \$30,000 per square meter, as a value capture mechanism, which differed conceptually from the provisions of the law. Developers rejected this "cost," arguing that it would be passed on to the end users. Application of the tax mechanism ran into legal and operation difficulties, and it was brought before the court of administrative litigation.

Table 2, on pages 14–15, summarizes the management instruments in Law 9 of 1989 and the factors of resistance to their application in Desepaz.

5. Effects of Land Prices on Desepaz Project Development

The most obvious evidence of the impact land prices had on the process of developing the Desepaz Project can be seen in the high costs of development, which were much higher than average costs for urban lots aimed at strata 1 and 2. As a result, the lands became out of reach for the target population, strata 0 and 1, and the market turned toward stratum 3. In the end, sale prices on the market were not competitive with other urban developments in better locations. Therefore, developers caused an increase in the ceiling price for low-income housing and tended to build multifamily dwellings.

6. The Value-Capture Instruments Established in Colombia in 1997 and How they were Applied to the Desepaz Case

The Political Constitution of Colombia (1991) established the requirement for public authorities to share in the value increases that their development activities created. Law 388 of 1997, the Law for Territorial Development, was subsequently issued. Its guiding principles are the social and ecological function of property and equitable distribution of the costs and benefits created by urban development. This law modified the provisions of Law 9 of 1989, the Urban Reform Law, concerning the Municipal Development Tax. The national government issued *Decreto Reglamentario* 1599 (regulation having the force of law) in 1998, establishing which events generating value increases would lead to

collection of the public participation in land value increases, the methods for calculating the participation, and payment.

Generating events that require public participation in value increase are:

1. Incorporation of rural land into urban expansion land or classifying part of rural land as suburban.
2. Establishment or alteration of land use zoning or systems.
3. Authorization to make better use of built-up land, either by raising the occupancy index or the construction index, or both at once.
4. In accordance with Article 87 of Law 388 of 1997, execution of public works provided for in the Territorial Structuring Plan or in its enacting legislation that create higher value for property due to the works, where the appreciation tax has not been used to finance them.

7.1 Amount of Participation

The mayor would request that the councilmen set the amounts (rates) to apply to homogeneous zones or subzones, in accordance with the development features and socioeconomic conditions of the owners. These amounts may vary from 30 to 50 percent of the greatest value generated.

7.2 Application of Methodology for Calculating Value Increase in the Desepaz Case

The procedure outlined in Law 388 of 1997 was applied using the instruments created in the law in order to assess the amounts of the value increase generated by development of the Desepaz macroproject.

For case one (1), as follows:

a) The commercial price per square meter of land will be established for the areas with homogeneous geoeconomic conditions in each of the zones or subzones being developed, prior to the development activity that generated a value increase.

This price will be set once the administrative deed defining the new classification for the corresponding lot is issued. This price is called the initial price (P_i).

b) Once approval is obtained for the plan for local development parcels or for the specific regulations assigning uses, intensities, and zoning for the zones or subzones to be developed, the new commercial price for the lands included in the corresponding zones or subzones will be determined using the price per square meter of land with similar zoning, use, intensity of use, and location features. This new price will be called the reference price (P_r).

c) The greater value generated per square meter of land will be estimated as the difference between the new reference price and the commercial price prior to

development, according to the outcome of paragraphs a) and b), above. The total value increase (E.P.) for each individual plot of land will be equal to the greater value per square meter, multiplied by the total surface area subject to value increase.

$$E.P. = Pr - Pi$$

For each property, the total number of square meters that would be considered to be subject to participation in value increase (PP) would be equal to the total area of the property intended for the new or improved use, minus the surface area corresponding to land transfers required for public areas within the city, as well as the area of any expropriations on the property for roadways or other public works.¹¹

The mayor determined the participation in value increase (PP) for each homogeneous zone or subzone by applying the corresponding rate approved for him by the city council to the value increase effect provided by the experts.

$$(E.P.) \times (\text{Rate}) = PP$$

The 380 hectares comprising the area of study had similar features: flat land, for agricultural activity, pastures, with a commercial price established according to transactions that ranged from \$800.00 to \$1000.00 in January 1993.

To determine the reference price, the zone chosen for analysis due to its similar features in the areas of use and location was the far eastern edge of Settlement 14, which had developed areas as well as undeveloped lots.

The reference price in January 1993 was \$3200.00 per square meter. The table 3 below summarizes the lots that were actually traded, with their respective prices.

Table No. 3

Lot	Total Area	Area Transferred	Area subject to Participation in Value Increase	Commercial Price	New Reference Price	Value Increase Effect	
	m ²	m ²	m ²	\$/ m ²	\$/ m ²	\$/ m ²	Total (\$Milli)
A	296,109	44,416	251,693	1000	5000	4000	1,006.8
B	133,299	19,995	113,304	1000	5000	4000	453.2
C	621,405	93,211	528,194	1000	5000	4000	2,112.8
D	415,170	62,276	352,895	1167	5376	4209	1,485.3
E	68,857	10,329	58,528	1223	5677	4454	260.7
F	287,762	43,164	244,598	1310	6216	4906	1,200

Source: Our own presentation, based on *Análisis de Macroproyectos Urbanos-Desepaz*

¹¹ Article 8 of Decree 1599 regarding regulation of value increase states that these expropriations must be mentioned in the Land Use Plan or in the instruments developing this regulation.

Note: A change in the commercial price and the new reference price is assumed under normal conditions, in accordance with historical trends.

Assuming an average value increase effect on the order of \$4390 per square meter, the total value increase generated for the 380 hectares of Desepaz would hover around 16.165 billion 1994 pesos. This figure equals 26.1 percent of tax revenues for the city of Cali.

The following table shows the participation in value increase according to different rate scenarios.

Table No. 4

Lot	Value Increase	Participation in Value Increase Scenarios for Various Rates					
		\$ /m ²			Millions \$ per lot		
		30%	40%	50%	30%	40%	50%
A	4000	1200	1600	2000	302.0	402.7	503.4
B	4000	1200	1600	2000	136.0	181.3	226.6
C	4000	1200	1600	2000	633.8	845,1	1056.4
D	4209	1268	1683	2105	447.4	594	742.8
E	4454	1336	1782	2227	78.2	104	130.3
F	4906	1472	1962	2453	360	480	599.9

Source: Our own presentation

Collections for a 50 percent rate participation for the entire area would produce tax receipts of nearly \$8.341 billion, which equaled approximately 13 percent of tax revenues for the city of Cali in 1994. It is also four times the investment budget for low-income housing (\$2 billion). It would mean solving the housing problem for approximately 1179 poor households in the city.

See Graph No. 6 on page 19.

8. Conclusion

Urban legislation in 1997 provided new instruments for capturing value increase that controlled rampant land market speculation. Graph 8, on page 21, shows us the magnitude of speculation on land values without any effective capture instruments, and a reduction in speculation of up to 43 percent when the new value increase capture mechanisms are applied. The absolute value of the value increase fell from \$28 billion to \$16.1 billion nominal in 1994.

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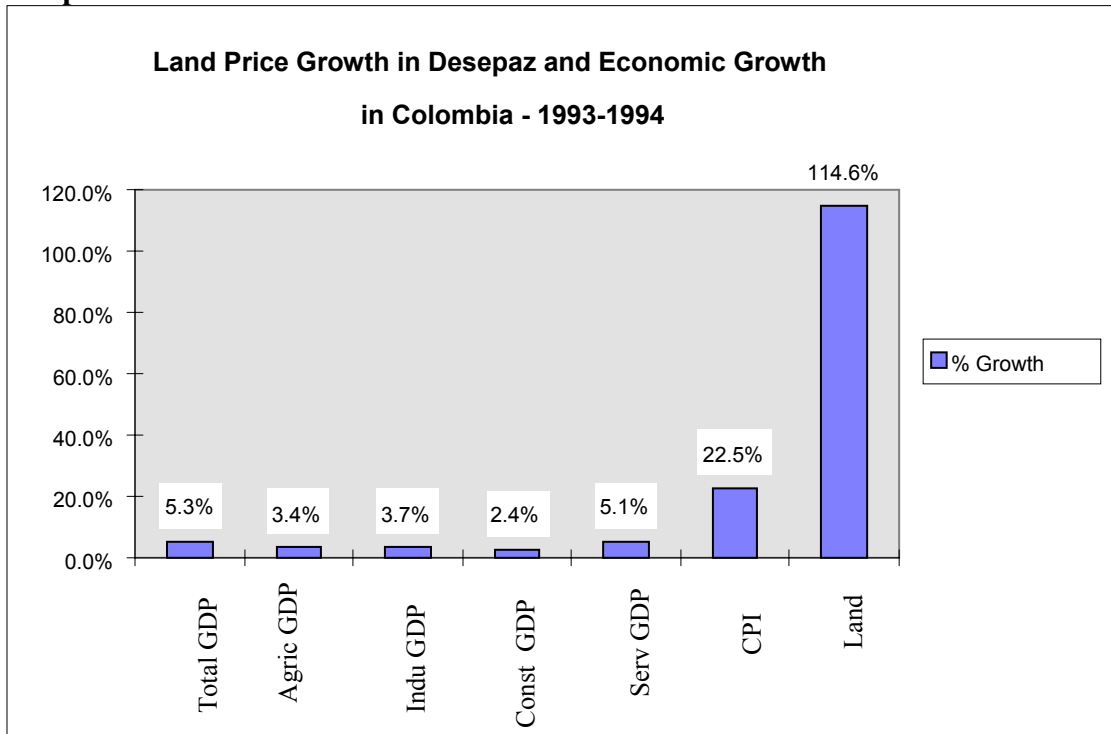
Table No. 2

Collective Appropriation Mechanisms Attempted	Potentially Usable Collective Appropriation Mechanisms - Law 9 of 1989	Factors Resisting Application or Limits on Current Collective Appropriation Mechanisms
January 1993		
<p>Implementation of the “Exceptional use to create low-income housing in Zone E without expanding urban perimeter” instrument. Mechanism to ensure plan reaches target population and doesn’t place approx. 300 hectares of land on the speculative market without restrictions. Agreement 07.</p>	<p>Administrative assessments are made, the urban perimeter is expanded, and the zone is structured for the cadastre.</p>	<p>Accumulation of value increases and real estate speculation exceed the local administration’s capacity to intervene in the price of the land. The mechanism is ineffectual. Owners and developers continue to pay property taxes on a rural zone.</p>
<p>Requirement to sign association agreements with Inivali as a means of guaranteeing control over the whole project, in terms of development, overall consistency, compliance with regulations, preservation of existing tree-planting, provision of community equipment, and rationality of infra-structure, also as a commitment to low-cost construction and reaching the target population. Mechanisms to increase supply by increasing the developable area via public-private cooperation. Inivali handles coordination.</p>	<p>Declare development a priority. Strengthen legal aspects of associative mechanisms.</p>	<p>Pressure from owners and developers to avoid Inivali control and intervention. Inivali lacks operational and management capability. Difficulties with financial control. Tendency to move away from target population.</p>
June 1993		
<p>Inivali asks the Colombian Planning Society to draft the Master Plan – Self-Sufficient City of high environmental quality, fully equipped with public spaces and community services. The development plan for all of Zone E is created, disregarding property lines.</p>	<p>Lands readjusted Physical Organization Plan drafted, compliance required</p>	<p>Pressure from owners and developers to respect boundaries and adjust general development plan to them. Increase usable area for housing, decreasing roadways, Green Zones, community and complementary facilities (bedroom community). Colombian Planning Society plan rejected.</p>
July 1993.		
<p>Agreement 17. Value-capture mechanism: Stipulates that Inivali will be given 5% of gross area of property and 10% of unassigned area in environmental zone free of charge, to relocate families from high-risk areas.</p>	<p>Contribution to municipal development by categorizing land or changing use.</p>	<p>Owners and potential developers react, arguing that any additional cost added to the price of housing would be passed on to end user. Rules of the game change. Case brought before dispute court. Mechanism ruled unenforceable due to lack of authority on subject and procedural defects. No knowledge of how to implement mechanism.</p>

Collective Appropriation Mechanisms Attempted	Potentially Usable Collective Appropriation Mechanisms - Law 9 of 1989	Factors Resisting Application or Limits on Current Collective Appropriation Mechanisms
August 1993		
As a value capture mechanism, and by request from Invicali, the Municipal Cadastre created special administrative assessments for all plots of land in the zone. These were not registered or paid for by the owners. They were trying to set the commercial price for possible subsequent negotiations.	Special administrative assessments recorded in the office of public deeds. Cadastral structuring of the area. Payment for value increase at notary's office upon signing purchase and sale documents.	Pressure from owners and potential developers to avoid registering land, citing tax and occasional earnings problems. Sales recorded in notary's office at much lower value than actually agreed. No knowledge of how to make mechanism effective.
September 1993		
As a means of ensuring the social goals of the program, and capturing the value increase, authorities attempt to declare the zone an area of priority development and expiration of ownership, using the special administrative assessments as a basis.	*Declared an area of priority development. Independent settlement for each plot. Owners notified. Clear definition of regulations to assure availability of public services. *Expiration of ownership declared. Independent settlement for each plot. Owners notified. Terms of negotiation on administrative assessment defined.	Flood of requests for mayor to declare expiration of ownership for large number of plots previously defined as priority development. Procedural problems in declaration. Confusion over how to implement mechanism.
March 1995		
Draft Agreement, Development Plan: Include Zone E in urban perimeter. Exclusively for low-income housing, individual lots, as main use. Exception: nonpolluting industry located in outskirts. Zoned for cadastre. Taxed as urban plots. Declared as priority development area – mechanism to guarantee consolidation of the area, harmonious development of the sector and to ensure meeting the program's social goal – avoid unused lands held for investment. Request authorization from city council plan committee to charge developers according to assessment for EMCALI macro works.		Pressure from some developers to change low-income housing regulations. Multifamily – go up a level to limits of low-income housing Urban property tax will be payable by end user. Owners and developers will pay property tax on rural assessments. Values were agreed on in advance with developers. These were included in sale prices.

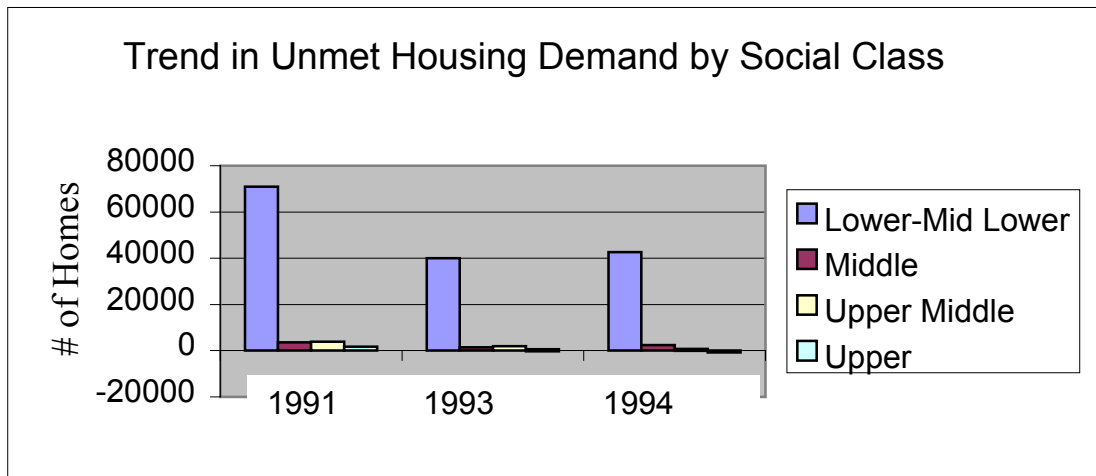
Source: *Análisis de Macroproyectos Urbanos* - DESEPAZ - PNUD-MDE- 1995.
Liliana Bonilla - Juber Galeano.

Graph No. 1



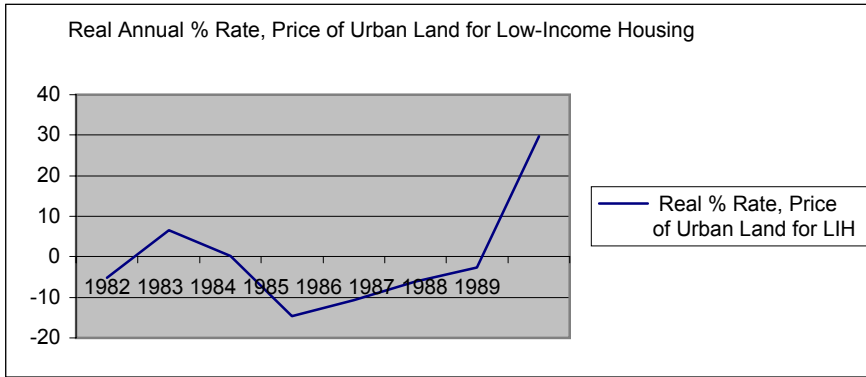
Source: our own presentation, based on DANE statistics

Graph No. 2



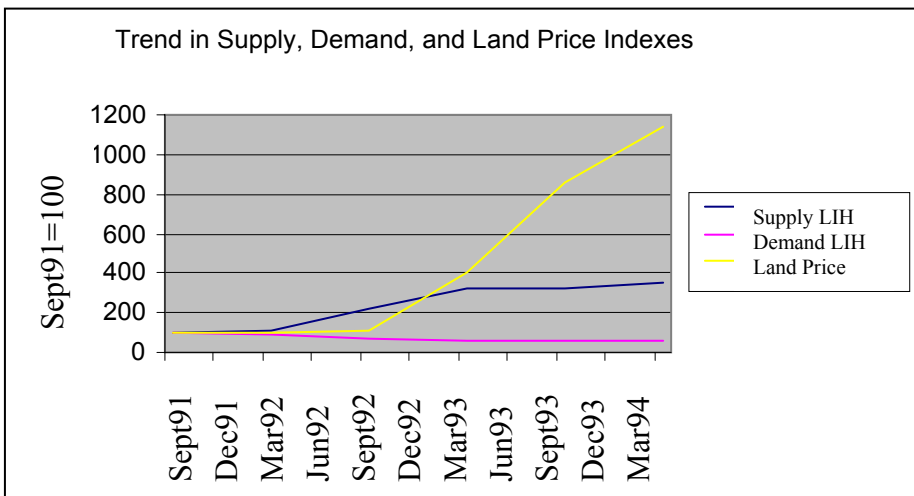
Source: our own presentation, based on CAMACOL. statistics

Graph No. 3



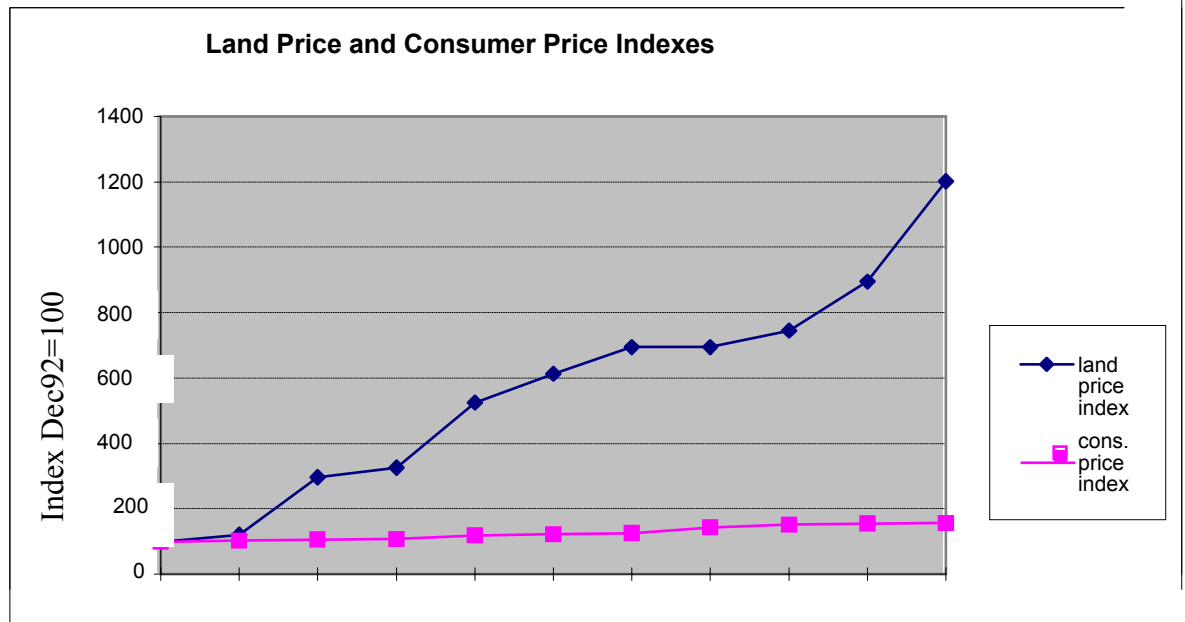
Source: Based on data from Study of Land Value in Cali 1980-1989. Cali Realtors Association.

Graph No. 4



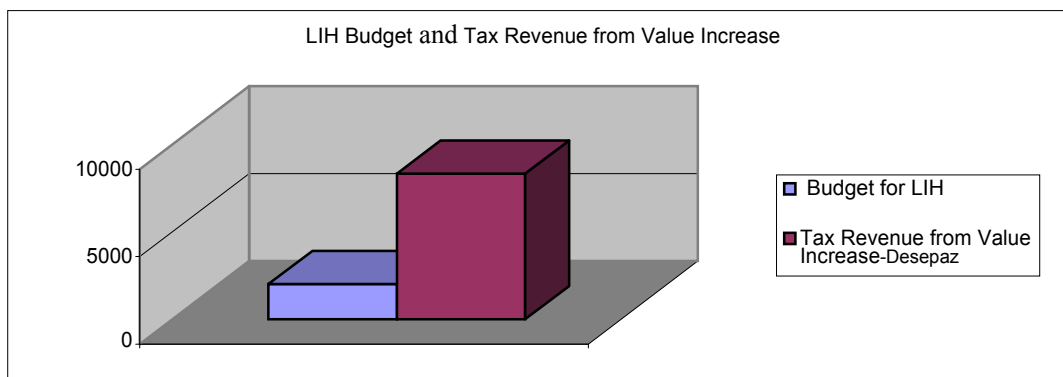
Source: our own presentation

Graph No. 5

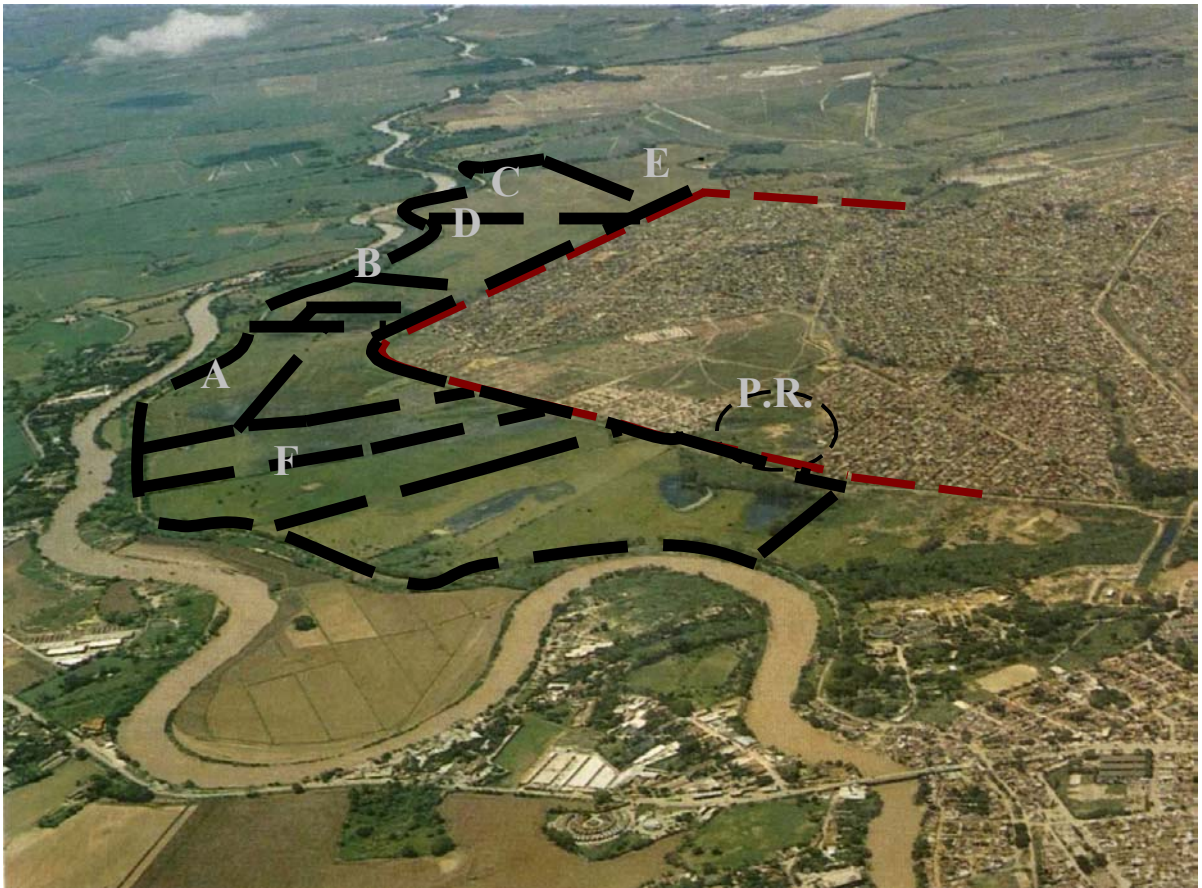


Source: our own presentation

Graph No. 6



Graph No. 7



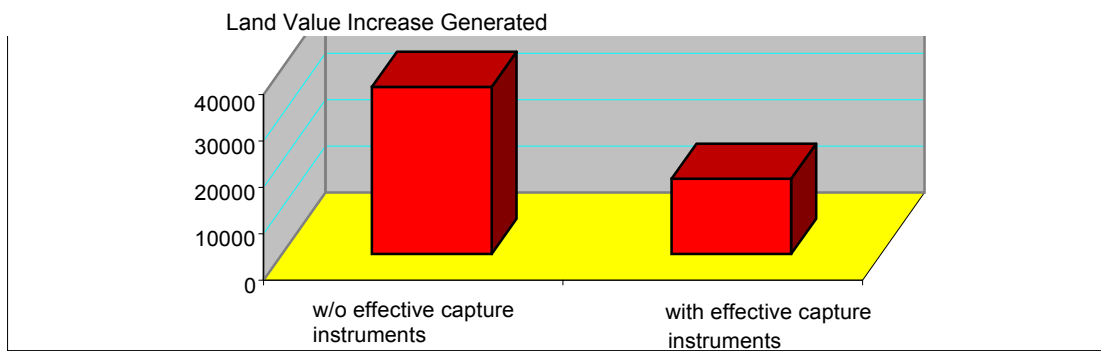
***A, B, C, D, E, F:** Plots for which reliable information exists regarding sums for commercial transactions.

****P.R.:** Plots inside urban perimeter in similar states of development, used as reference prices.



Urban perimeter, as of 1993

Graph No. 8



Source: our own presentation

