Landscape and urban quality in consolidated tourist areas in Alicante coastline.

Pablo Martí Ciriquián

Departament of Building and Urbanism, Universidad de Alicante, Apdo. de Correos, 99, 03080, Alicante, Spain, e-mail: pablo.marti@ua.es

Almudena Nolasco Cirugeda

Departament of Building and Urbanism, University of Alicante, Apdo. de Correos, 99, 03080, Alicante, Spain, e-mail: almunc@gmail.com

Armando Ortuño Padilla

Departament of Building and Urbanism, Universidad de Alicante, Apdo. de Correos, 99, 03080, Alicante, Spain, e-mail: arorpa@ua.es

Abstract

In the middle of 20th century the attractiveness of the coast of Alicante favoured the development of touristic activity along the province. Initially, back when the tourists lived with sailors and fisherman, the area wouldn't qualify as holiday destination, but afterwards Alicante coastline has become an important tourist attraction which has led to a significant urban growth.

Many different kind of tourism-related buildings for both Residential and Seasonal use, were developed without taking into account the major impact they would produce in many ways. This paper serves two purposes: first to examine the influences tourism has had on today's landscape of the Alicante coastline, and second, to review the level of quality that different consolidated tourist areas have achieved over the last decades.

In order to carry out the assessment, three different tourist cities: Denia, Benidorm and Torrevieja will be analyzed based on their urban quality, landscape and territorial transformation.

Keywords: Tourist development, urban quality assessment, tourist scene, Alicante, Tourism.

Introduction

In order to assess the quality of tourist destinations there are private and public institutions that have established different methods of evaluating quality of companies related to tourism activities, tourist accommodations, catering management, etc. However, tourist space, considered as urban structure that stands tourist activity, is not considered in this evaluation. The territorial scenery, urban quality, diversity of activities, mobility facilities amongst other elements have direct incidence in the final level of satisfaction of a particular tourist destination, because taking into account the quality of these factors, is to strengthen the attractiveness of tourist destinations enhancing its value and differential character.

The purpose of this paper is to describe those tangible assets as building quality, streets planning, access to beaches or commercial and leisure businesses closeness, etc. and intangible ones as atmosphere, level of congestion, urban scene, etc. which influences the quality of the tourist experience. The aim is to develop a methodology whose parameters must be related to urban quality and structure. Therefore, with this methodological approximation, it would be possible to evaluate quality of urban fabric that stands tourist activity. The assessment takes place in three consolidated tourist areas such as Denia, Benidorm

and Torrevieja in the coast of Alicante as different approaches and urban structures which stand sun and beach model of tourist activity.

These three areas have reached a huge growth on their seaside territories. As a matter of fact, studies such as "Changes in Spanish ground/soil occupation. Implications for sustainability" states that Alicante coastal territories from 0 to 5 kilometres inland has increased its artificial occupation in 92.2% within 1987-2000 period. Therefore, this consideration not only makes Alicante the city with the most occupied coastline in the whole country, but also this artificial occupation, with its urban character, represents the prevailing scene where tourist actions take place. For this reason, it is necessary to make an assessment about urban scene, occupation manners and planning in tourist areas when we are evaluating the quality of tourist destinations.

The reasons that guide us to select Denia, Benidorm and Torrevieja as samples in this paper are related to their large representativeness of the tourist models which have been developed in Alicante province and to their large experience as tourist destinations that have been extended from the mid-fifties and sixties to date.



Figure 1: Territorial location of Denia, Benidorm and Torrevieja in Alicante coast.

Denia is located in the north coast of the province. Its tourist model is representative of the Marina Alta region. It also combines two usual forms of urbanization in the Alicante coast. On the one hand, single-family housing as a part of inland urban sprawls and, on the other hand, summer apartments in coastal areas near the urban centre. For this reason, Denia represents the development of a large consolidated urban sprawl area around a large value landscape, the Natural Park of El Montgó and furthermore, other tourist areas where similar characteristics to a usual urban scene are represented near natural beach landscape features becoming itself a singular location to observe.

Benidorm is probably the extreme example of the hotel industry. It is a city of skyscrapers, many of which are hotels and apartments that receive short-term foreign visitors. This tourism economy pattern is based on the one or two week rotation of visitors. Thus Benidorm, whilst occupying only a relatively small surface area, receives 6 million visitors per year. In fact, Benidorm is Spain's most efficient tourist destination, receiving 11% of the total country visitors. This gives Benidorm an urban image that intends to justify the territorial impact caused by the consolidation of its urban development. Due to its condition,

the city is supposedly able to qualify its urban spaces adequately, as urban planning has guided its development since 1956 at the beginning of tourist activity in Benidorm.

Finally, Torrevieja represents the paradigm of suburban residential tourism occupation model. Despite the fact that housing complexes are physically continuous, they show a fragmentary distribution where the relation to each other is only given by the common access road. Moreover, all this growth is affecting the natural scenery of the La Mata and Torrevieja Lagoons Natural Park. This residential tourism occupation model is profoundly influenced by national tourist demand and also by an increasing interest from international demand on these residential tourism areas near the coast were consolidated in the eighties.

The study of the diversity of these three cases gives an interesting outlook about the present of tourist urban areas in the Alicante coast where this activity has been widely established.

Denia

Denia meets two well differenced areas where tourist activity takes place: one near the coastline and the other one adjoining the Natural Park of El Montgó.

Firstly, near the beach at the north coast of the urban centre, a tourist settlement has developed since the seventies. Its building typologies are represented by summer apartments in four or five-storey buildings and some single-family houses which were built in that place before the tourist activity began to be enhanced and regulated through urban planning. This area occupies a parallel strip alongside the beach which width is near 500 metres from seaside what favours good pedestrian access to the beach as 300 metres is the distance considered as walk able within five minutes by anyone.

This settlement strip bases its connectivity on a unique linear road parallel to de coastline where private vehicles are used frequently to reach any other near activity. There are little constructions with different use from accommodation. Just some leisure businesses and counted grocery stores or petrol stations are placed on this area. This condition reinforces the idea that this is a seasonal used area and almost exclusively touristic, because of the lack of public facilities such as schools, hospitals, etc. In order to reach quality urban spaces and sustainable cities in future it is necessary to promote that tourist areas must coexist with common urban structures and functions to make an efficient use of territory.

The beach is the most significant open public space in the area. The natural character of its dunes continues in private plots as they conserve 70% of ground clear from constructions and full of natural vegetation that provides natural atmosphere in the middle of urban structure. Unfortunately, paths among these plots have not been constructed adequately. In many cases, supplies and fittings look obsolete, there is no urban fitment and there is no public lighting either. For this reason, although finishes of most roads and paths are not appropriate its character matches with the natural boundary at the beach. This way, urban structures fit into natural beaches with an unadulterated seafront.

For these reasons quality of this tourist area in Denia lies mainly on its good conditions about pedestrian mobility, the diversity of its building typologies and the natural treatment of public and private open spaces which grants a particular scene to this area between urban and nature.

Other significant tourist area in Denia, is located at the boundaries of Natural Park of El Montgó, climb on to the slope of Montgó Mountain. The urban sprawl of single-family housing, that represents its building scene, remains a characteristic part of the landscape in Denia. It can be thought that discontinuous urban fabric causes a major impact on both the land and the landscape but, in this case, low density and orography allow natural greenery grow and play a leading role in this tourist area scene. On this slope, roads and plots were adapted to the orography. Furthermore, the size of plots allow the perception of geographical relief to be maintained, on the one hand, and, on the other, provide a large free surface area (usually areas of greenery) that reduce the visual impact of what has been built.

Residential usage is mainly found in this area. There are no public facilities and no pedestrian paths or pavements at the roads either. Accesses to the plots and mobility have been planned in order to be produced exclusively by vehicles. Pavements and finishes are meagre and as there is no public space there are no people on streets either. Thus, even though, the pleasant scene of greenery that goes with routes would invite to leisurely walks, they only can be taken inside the boundaries of Natural Park.

Therefore, the attraction of this area actually lies in its calmed atmosphere and its green and natural scene produced by the natural landscape and vegetation which is cultivated in private gardens. However, this tourist area has no near public facilities and its buildings have been constructed, in many cases, without some basic public services such as drainage installations.



Figure 2: Upper image. Denia, scene near the coast area. Lower image. Denia, landscape in area adjoining Natural Park of El Montgó

PLANNING QUANTIFIABLE PAKAMETERS							
	NEAR THE COAST	BUILT-UP DEN	ISITY	47 hectare dwelling			
		ABSOLUT CON	IPACTNESS	0.59 metres			
		CORRECTED C	COMPACTNESS	66.91metres			
		AVERAGE PLC	OT OCCUPATION	25%			
DENIA	ADJOINING NATURAL PARK OF EL MONTGÓ	BUILT-UP DENSITY		8 hectare dwelling			
		ABSOLUT COMPACTNESS		0.11 metres			
		CORRECTED COMPACTNESS		no calculable (nonexistent open public space)			
		AVERAGE PLOT OCCUPATION		12%			
LOCATION	ANALYZED AREA	FEATURE	PARTICULAR FEATURE	EVALUATION/ASSESSMENT			
DENIA	NEAR THE COAST	LANDSCAPE PERCEPTION	URBAN QUALITY OF SIDEWALKS	Inadequate finishes and scarce urban fitment or public lighting among others			

		LANDSCAPE QUALITY	Natural landscape in plots. Well integrated with beaches			
		URBAN QUALITY OF RESIDENTIAL AREAS	Provided with basic public services			
		BEACHES	Good wide beaches. Natural treatment at boundaries with adjoining buildings			
	ACTIVITIES AND LAND	COMMERCIAL AND LEISURE BUSINESSES	Scarce of close commercial and leisure uses			
	USAGE	PUBLIC FACILITIES	Lack of near public facilities			
		PUBLIC TRANSPORT	Easy implementation of public bus routes because of settlement structure			
	MOBILITY	PEDESTRIAN PATHS/PAVEMENTS	Adequate dimension. Frequently used for access to beaches			
		BICYCLE LANE	No specific space for bicycle use			
		TRAFFIC ACCESS	Easy motorized access from linear road. Traffic congestion			
	LANDSCAPE PERCEPTION	URBAN QUALITY OF SIDEWALKS	Lack of sidewalks at residential area			
		LANDSCAPE QUALITY	Good quality of natural landscape inside plots and at boundaries			
		URBAN QUALITY OF RESIDENTIAL AREAS	scarce basic public services as draining installations and refuse collection			
ADJOINING		BEACHES	scarce basic public services as draining installations and refuse collection No near beaches. Residential tourism used. No near commercial or leisure			
NATURAL PARK OF EL	ACTIVITIES AND LAND USAGE	COMMERCIAL AND LEISURE BUSINESSES	No near commercial or leisure activities			
MONTGÓ		PUBLIC FACILITIES	No near public facilities			
		PUBLIC TRANSPORT	Lack of public transport routes and difficult implementation			
	MOBILITY	PEDESTRIAN PATHS/PAVEMENTS	nonexistent			
		BICYCLE LANE	nonexistent			
		TRAFFIC ACCESS	Only manner of access. Inadequate routes			

Source: author's own

Benidorm

Contrary to what might be thought, Benidorm occupies a relatively small surface area of land if it is taken into account that, it is one of the most efficient destinations in Spain.

Benidorm, as a tourist destination that has successfully trialled a model of high-rise housing (linked to the provision of hotels and apartments), features major growth including the ongoing skyscraper model, low-density developments and the inclusion of major new activities in the area. Traditional land use close to the coast, where skyscrapers have been built, combines with new activities such as theme parks (Aqualandia and Mundomar), and with areas between the coastal part of the town and the motorway being developed with new low-density buildings and a new golf course.

Firstly, the tourist area near the coast can be identified as two different settlements which are located in both sides of the traditional urban centre: Poniente Beach and Levante Beach. Both areas have been developed with the construction of high-rise buildings but there are some differences between them. Whilst Levante Beach owns a good provision of hotels and apartments in big plots where other commercial or leisure activities in open spaces take place, Poniente Beach is defined by its apartment high-rise blocks with big plots where open green space with swimming pools and tennis or paddle courts define the common scene. Thus, the main difference between these areas lies in the amount of leisure and commercial businesses that are located on ground floors. The first one bases its activity on commercial and leisure ground floor businesses, wide pavements which favour walking routes and an urban scene where proper finishes, public lighting and trees which provide mild shadow over the sidewalks enhance the city usage. The second case, Poniente Beach streets are only used for necessary displacements and its urban scene is made up of narrow pavements with public lighting but scarce urban fitment, along the plot limits which are built with walls or fences which suggest the greenery that grows inside the plots in big open private spaces.



Figure 3: Left image. Benidorm, Poniente Beach scene. Right image. Benidorm, Levante Beach scene.

This model with high-density tourist hotels and apartments has been strengthened along the more inland strips where public facilities have been developed lately to make up for its deficiencies at near coast line strips. Thus the high-rise model began its activity focused essentially in seasonal tourism but at present its development has produced a complex city prepared to assume vacation or city functions throughout the year.

PLANNING QUANTIFIABLE PARAMETERS						
	LEVANTE BEACH	BUILT-UP DEN	ISITY	120 hectare dwelling		
		ABSOLUT CON	IPACTNESS	5.67 metres		
		CORRECTED C	COMPACTNESS	70.94 metres		
DENIDODM		AVERAGE PLC	OT OCCUPATION	33%		
DENIDORIVI	PONIENTE BEACH	BUILT-UP DEN	ISITY	125 hectare dwelling		
		ABSOLUT CON	IPACTNESS	3.58 metres		
		CORRECTED C	COMPACTNESS	155.57 metres		
		AVERAGE PLOT OCCUPATION		21%		
LOCATION	ANALYZED AREA	FEATURE	PARTICULAR FEATURE	EVALUATION/ASSESSMENT		
BENIDORM	LEVANTE BEACH	LANDSCAPE PERCEPTION	URBAN QUALITY OF SIDEWALKS	Adequate finishes and urban fitment or public lighting among others		
			LANDSCAPE QUALITY	Urban landscape extended to beaches		
			URBAN QUALITY OF RESIDENTIAL AREAS	Provided with all sort of basic public services		

Table 2.	Summary	of the e	evaluation	of tourist	areas in	Benidorm.

			BEACHES	Good beaches. Adequate urban treatment at boundaries and seafront.	
		ACTIVITIES AND LAND	COMMERCIAL AND LEISURE BUSINESSES	Abundance of commercial and leisure uses	
		USAGE	PUBLIC FACILITIES	Public facilities located near first coastline buildings	
		MOBILITY	PUBLIC TRANSPORT	Efficient public transport and connectivity	
			PEDESTRIAN PATHS/PAVEMENTS	Adequate dimension. Pavements used for displacements and go for walks	
			BICYCLE LANE	Discontinuous space for bicycle use.	
			TRAFFIC ACCESS	Good traffic access. Easy traffic congestion during season vacation	
		LANDSCAPE PERCEPTION	URBAN QUALITY OF SIDEWALKS	Adequate finishes but scarce urban fitment far from seafront	
	PONIENTE BEACH		LANDSCAPE QUALITY	Urban landscape extended to beach	
			URBAN QUALITY OF RESIDENTIAL AREAS	Provided with all sort of basic public services	
			BEACHES	Good beaches. Adequate urban treatment at boundaries and seafront	
		ACTIVITIES AND LAND USAGE	COMMERCIAL AND LEISURE BUSINESSES	Abundance of commercial and leisure uses near seaside.	
			PUBLIC FACILITIES	Public facilities located near first coastline buildings	
		MOBILITY	PUBLIC TRANSPORT	Efficient public transport and connectivity	
			PEDESTRIAN PATHS/PAVEMENTS	Adequate dimension near seafront but narrower along residential plots. Pavements frequently used for pedestrian displacements	
			BICYCLE LANE	Discontinuous space for bicycle use.	
			TRAFFIC ACCESS	Good traffic access. Easy traffic congestion during season vacation	
.1 .					

Source: author's own

Torrevieja

Torrevieja has experienced a strong pressure from low-density urbanisation for residential tourism purposes. The surface area of traditional town centre has increased and inland areas close to the coast have become consolidated as alternative land for low-density housing developments. The lagoons have been also affected by urban activity, as on the narrow strip of land between the two lagoons that form part of the Lagunas de Torrevieja y la Mata nature park, there is a large residential development that has had a major impact on the land on the landscape. Thus, two different settlements can be distinguished: one near the coast as low-density development of city centre, and the other inland, between or at lagoons edges.

The first one, near the coastline arises from a low-density expansion of the urban centre where fabric develops a very little quality single-family housing in terms of town planning and architecture. In most of these cases, the grid is very small and tight for single-family housing or adjoining dwellings that do not provide any free areas (so no areas of greenery), for this reason, what has been built shows an artificial character in contrast with natural landscape in close beaches.

There are scarce leisure and commercial businesses near this area and no public transport either, thus, private motorized vehicles are used frequently for usual displacements as those to reach public facilities or any other usage different from accommodation. Fortunately, beaches are in many cases walking distance and these displacements take place along narrow pavements which reinforce the priority that cars have over pedestrians. Finishes are of mediocre quality and cleaning and maintenance are inadequate. At the second settlement, inland low-density developments have been added with no clearly defined road structure or urban articulation. This low-quality, high-quantity urban sprawl is widely conditioned by road accesses and the only use of private vehicles as mean of transport. Housing developments have been built in little groups connected to a general road where traffic congestion increases on vacation season. Distances between houses and leisure or commercial businesses can not be covered walking as there is a vast sprawl-artificialized extension of residential constructions with the resulting visual impact on the land near a nature park.

At this area there are scarce of public facilities and also there are some difficulties in counting with basic public services such as a close point of refuse collection or drainage installations, on occasion. There has not been special care in building a limit with natural landscape of lagoons Nature Park. Thus, a great contrast is visible between urban development and natural landscape where a dividing line with no particular treatment defines urban artificiality side and natural untreated side.



Figure 3: Left image. Torrevieja, scene at near the beach area. Right image. Torrevieja, Scene at inland tourist area

I LANNING QUANTIFIADLE I ARAMETERS					
NEAR THE BEACH AREA	BUILT-UP DE	NSITY	11 hectare dwelling		
	ABSOLUT CO	MPACTNESS	1.03 metres		
	CORRECTED	COMPACTNESS	no calculable (nonexistent open public space)		
	AVERAGE PL	OT OCCUPATION	21%		
INLAND AREA	BUILT-UP DE	NSITY	61 hectare dwelling		
	ABSOLUT COMPACTNESS		1.51 metres		
	CORRECTED COMPACTNESS		689.01 metres		
	AVERAGE PL	OT OCCUPATION	34%		
ANALYZED AREA	FEATURE	PARTICULAR FEATURE	EVALUATION/ASSESSMENT		
NEAR THE BEACH AREA	LANDSCAPE PERCEPTION	URBAN QUALITY OF SIDEWALKS	Lack of sidewalks or public open spaces at residential area		
	NEAR THE BEACH AREA INLAND AREA ANALYZED AREA NEAR THE BEACH AREA	NEAR THE BEACH AREA INLAND AREA ANALYZED ANALYZED AREA NEAR THE BEACH AREA INLANDSCAPE BEACH AREA	NEAR THE BEACH AREABUILT-UP DENSITYABSOLUT COMPACTNESSCORRECTED COMPACTNESSAVERAGE PLOT OCCUPATIONBUILT-UP DENSITYABSOLUT COMPACTNESSAREACORRECTED COMPACTNESSAVERAGE PLOT OCCUPATIONAREAAVERAGE PLOT OCCUPATIONANALYZED AREANEAR THE BEACH AREALANDSCAPE PERCEPTIONVERAGE PLOT OF SIDEWALKS		

Table 3. Summary of the evaluation of tourist areas in Torrevieja.

		LANDSCAPE QUALITY	Artificial landscape, limited open space. Natural landscape inside community plots perceived.		
		URBAN QUALITY OF RESIDENTIAL AREAS	Mediocre quality. cleaning and maintenance are inadequate		
		BEACHES	Near beaches with inadequate urban treatment of boundaries		
	ACTIVITIES AND LAND	COMMERCIAL AND LEISURE BUSINESSES	Really scarce commercial or leisure activities		
	USAUL	PUBLIC FACILITIES	No near public facilities		
		PUBLIC TRANSPORT	Near public transport routes but inefficient structure		
	MOBILITY	PEDESTRIAN PATHS/PAVEMENTS	Narrow pavements. not frequently used for pedestrian displacements except from beach access		
		BICYCLE LANE	nonexistent		
		TRAFFIC ACCESS	Principal manner of access.		
		URBAN QUALITY OF SIDEWALKS	Lack of sidewalks at residential area		
	LANDSCAPE PERCEPTION	LANDSCAPE QUALITY	Inadequate quality of natural landscape inside plots. Unsuitable treatment of boundaries with natural lagoons		
		URBAN QUALITY OF RESIDENTIAL AREAS	Scarce basic public services as draining installations and refuse collection		
		BEACHES No near beaches. residential tour used.			
INLAND AREA	ACTIVITIES AND LAND USAGE	COMMERCIAL AND LEISURE BUSINESSES	No walking distance commercial or leisure activities		
		PUBLIC FACILITIES	No near public facilities		
		PUBLIC TRANSPORT	Lack of public transport routes and difficult implementation because of population density and road structure		
	MOBILITY	PEDESTRIAN PATHS/PAVEMENTS	Narrow pavements. not frequently used for pedestrian displacements		
		BICYCLE LANE	Non-existent		
		TRAFFIC ACCESS	Only manner of access.		

Source: author's own

Conclusions

It is observable that tourist destinations are widely affected by urban conditions that stand tourist areas. These destinations on the coast must qualify and specialize as much as possible in order to satisfy an increasingly demanding and specialized tourist class. Therefore, it is important to evaluate the features that have been detected through the description of areas as significant points in the characterization of the scene and the use of tourist destinations.

As can be seen, the assessment has been developed over three diverse coastal locations where beach and sun is the principal tourist model developed. There are enough differences among them to assure that the features obtained are complex and complete enough to be considered as basis parameters for the development of a methodological tool which make possible/permit to evaluate the urban quality of coast tourist areas for a wide amount of locations and specialized tourists.

Although it is not possible to collect all the variables that influenced urban quality in tourist areas it has been resumed in this paper some urban conditions that directly affect to attraction produced by the quality of tourist destinations.

These conditions have been grouped by mobility features, perception of landscape and other quality features about urban layout and, finally, land usage conditions. At this groups have been assessed questions such as public transport, pedestrian paths quality, bicycle lane existence, traffic access quality, and proximity of leisure and commercial activities which are common in tourist areas. The evaluation about the existence of public facilities at tourist areas is related to the possibilities of these areas to be used throughout the year and not only seasonally.

All these variables can be completed with other recently published urban indicators which have been defined to achieve sustainable cities such as those related to mobility, location and quantity of green open spaces or urban complexity, among others.

To summarize, it is necessary to take into account features such as mobility, mixture of usage between tourist areas and common urban fabrics and consider quality of landscape and scene they offer, not only to qualify tourist areas, but also to improve coastal cities urban planning. As a priority, it is necessary that coastal destinations continue attracting visitors year after year and that this essentially tourist areas achieve fitting in present urban structures as part of sustainable development of Alicante coast territories.

References

- Anfitriones Turismo. Destino en Detalle. (2009). "Buenas Prácticas para el embellecimiento de destinos turísticos" Ministerio de Industria Turismo y Comercio. Madrid.
- Martí Ciriquián, P., García Mayor, C.; (2008) "Tourism in Alicante: developments form the 60's to the present day" en Exploring the public city. Universidad de Alicante, pp 62-67. Alicante.
- Navalón García, M.d.R.; (1995) *Planeamiento urbano y turismo residencial en los municipios litorales de Alicante*, Instituto de Cultura "Juan Gil-Albert", Alicante.
- Observatorio de la Sostenibilidad en España. (2006). "Cambios de Ocupación del Suelo en España. Implicaciones para la sostenibilidad". http://www.sostenibilidad- es.org/sites/default/files/_Informes/tematicos/suelo/suelo-esp.pdf
- Vera Rebollo, J.F.; (1987) *Turismo y urbanización en el litoral alicantino*, Instituto de estudios "Juan Gil-Albert", Alicante.
- Vera Rebollo, J.F. & Baños Castiñeira, C.J. (2010), "*Renovación y reestructuración de los destinos turísticos consolidados del litoral: las prácticas recreativas en la evolución del espacio turístico*", Boletín de la Asociación de Geógrafos Españoles, no. 53, pp. 329-353.
- Vera Rebollo, J.F., Baños Castiñeira, C.J. & Jiménez Rodríguez, A. (1995), "Elaboración de un plan para la cualificación de asentamientos en municipios consolidados por el turismo". Investigaciones geográficas.1995, nº 14, pp.31-57.
- Zúñiga Portillo, A.A. (2009), "Indicadores para la evaluación de la calidad ambiental del hábitat urbano ", Nexo revista científica, vol. 22, no. 1, pp. 23-31.