

***Elements of opportunity  
for change in our cities.***

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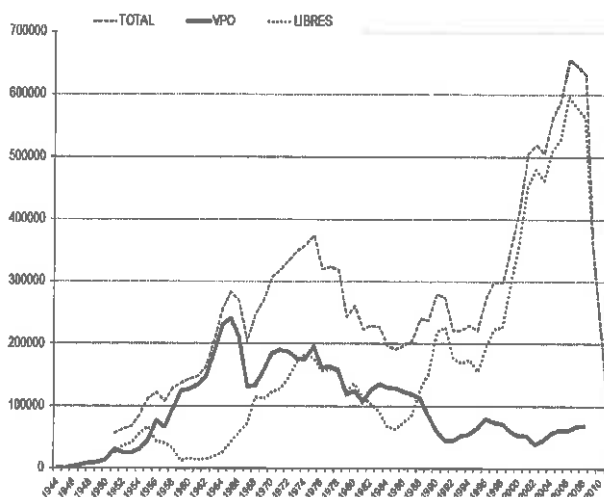


## ***New challenges facing urban versus the system crisis.***

Spanish urban policies have focused, since the 60s, in the growth of cities. This option, which could be valid to cover rural population's needs while were changing into urban population, became the only alternative used by public and private operators. Inside this process, the housing and city construction, has become the economic engine of the country, leading to an oversized and underused housing stock that does not guarantee access to the population (RODRÍGUEZ, 2010) and even expellee it, as is the case of many evictions that are taking place in Spain since the beginning of the crisis. Nowadays, in Spain there are 25.2 million homes. It gives a ratio of one house for every 1.86 inhabitants. However, 28% of the total housing stock is for homes that are not used as a residence. There are 3.4 million empty homes. This data do not includes those buildings that have been half-built as a result of the crisis (INE, 2011).

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Moreover, the last decade is characterized by a massive residential development hardly been matched with the actual population's needs. Thus, between 2000 and 2011 5.7 million of houses were built, the same amount as during 60s and 70s together. That is, the same amount as during the years of consolidation of cities, with more than 7 million people who moved from the countryside to the city (TAMAMES, 1986).





The bet for this kind of city and building model is also reflected in the statistics of unemployment and labor force. According to data from the Labour Force Survey in the period 2000/2008, between 11% and 13% of the active population was engaged in the construction sector. In the first quarter of 2013 this rate reached 6.3%, the lowest since the beginning of the time series (3rd quarter 1976).

The current economic, social and environmental crisis is an opportunity to rethink a new management model that allows the city, at least, address the following challenges: the need to rethink the urban growth boundary, the need to rethink the right to the field and the need to rethink the right to the city.

### ***Analysis fields.***

To be able to meet these challenges is essential to articulate an analytical and operational mode. We therefore propose that the analysis should be approached in two scales of interaction (see figure 2):

- **Urban scale.** The city should be understood not as an autonomous body whose development depends on the exploitation of the resources which supplies rural areas (GARCIA BELLIDO, 1980), if not as a system that integrates both worlds, field and city, and which aim is the balance of the urban metabolism. (RUEDA, 2009).

- **Neighbourhood scale.** The neighbourhood is the urban area where citizens develop their everyday life (HERNÁNDEZAJA, 1997). For this condition to be fulfilled, the neighbourhood should be able to support diverse real estate, occupational and demographic structures. That would generate opportunities to participate in various social networks and associations, would provide an urban scale capable of maintaining cognitive ability over the entire urban area, would assure pedestrian accessibility, would establish a network of facilities and public services sized and distributed to facilitate the flow of services and accessibility to them. In this way the neighbourhood could be a social reference space, having enough variety and complexity (ALGUACIL, 1998).

In addition to the challenges and scale of intervention it's necessary to define the opportunity elements and the tools that could change our cities in each of the former scales.

- **Elements of chance.** Are the physical support in which intervention will take place. In this way, and understanding the city as a system, the existing resources will be the element of chance for the urban growth limit challenge, the peri-urban land will be the opportunity for assuring the right to the field, and the urban structure for the right to the city. At a neighbourhood scale, the elements of chance are the urban environment, the urban voids and urban fringe, and the vulnerable neighborhoods.

- **Tools.** Understood as a paradigm shift in traditional intervention criteria, are configured as desirable scenarios in the future of phy-



sical support in order to meet each of the challenges. In this way, to limit the growth of cities we will need to work for closing cycles and for neighborhood autonomy. To get the right to the field, the tools will be local agriculture, allotments and community gardens, and urban networks. The Right to the City will require the city's urban integration and the urban regeneration of each vulnerable neighborhood.

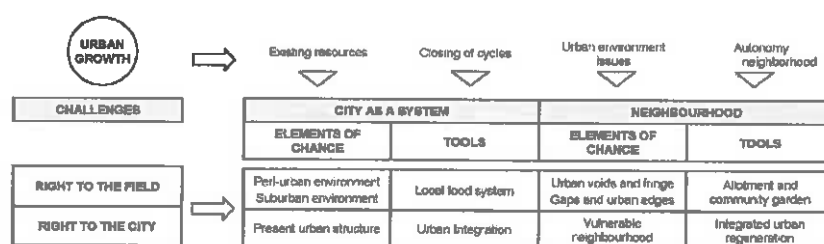


Fig 3. Framework. Source: Prepared by the authors

### First challenge: Urban growth limits

We live in an urbanized world that is gradually destroying existing resources. While in recent decades has experienced a rapid process of urbanization, it is also true that in some countries and regions, this growth has been much higher. Thus, the report "State of the World's Cities 2012/2013. Prosperity of cities" remarked that in 2010 the urban population exceeded the rural population and that this situation was not going to be reversed. The same report estimates that about 60% of the population will be urban by 2030 and will reach 70% ten years later.

The unlimited development of cities has proven useless from the perspective of social justice and perverse to the environment. The first obstacle to tackle, in the Spanish case, is the framework of urban policy. It dates back to 1956 when the first "Land Law" was approved. This was based on the growth of the city. One of the main problems is that the law does not have enough tools for intervention on the consolidated city nor in the undeveloped land. It also considers that the resources needed for the maintenance of urban life are infinite.

Considering urban growth as the only possible model leads to the abandonment of the consolidated city. In 2008, there were 3.36 rehabilitated dwellings for each 1000 inhabitants. That same year, the same standard for newly built homes was 13.6 (MINISTERIO DE VIVIENDA, 2010). According to 2001 Census data, in Spain existed 4 million homes with accessibility problems (buildings with four or more floors without lift), and 2.1 million homes whose conservation status is bad, poor or dilapidated, which represented 19% and 10% of the housing stock, respectively. Furthermore, most of the housing stock is concentrated in underserved urban areas built between 1941 and 1980 (MINISTERIO DE FOMENTO, 2013). In 2011 homes in state of subdeficiency, failure or poor conditions were 1.9 million homes, more or less 7% of the housing stock.



### ***Second challenge: The Right to the Field***

One of the most vulnerable aspects of our cities is their food system, highly dependent on global flows. In the current scenario of global change, where energy crisis will increase transport costs, this dependence on the provision of food is dangerous, as is land consumption.

A direct consequence of Spanish urban policies is the irreversible loss of arable land, due to infrastructure and urban uses. Nowadays Spain has enough compromised land to develop new urban areas for the next 45 years, as states the Explanatory Memorandum of the "Urban rehabilitation, regeneration and renewal Law" [Ley 8/2013 de Rehabilitación, regeneración y renovación urbanas] approved on 26th June 2013.

At this juncture, periurban areas are the most vulnerable to degradation. They are also the most fertile lands, because cities are traditionally located near the areas that could supply them with raw materials. This means, in many cases, the loss of high agronomic value land (HERNÁNDEZ-JIMÉNEZ, 2009). In Europe, between 1990 and 2000, 77% of new artificial land uses has been located on agricultural land (SIMÓN, 2011). In Spain, between 1987 and 2000, artificial land use has grown by 29.5%, much more intensely in the cities' surrounding areas (OSE, 2006).

Local food systems are necessary to guarantee the future survival of our cities. Therefore, urban planning reorientation and adaptation to ensure these systems is needed. "An anticipatory regional and urban planning should try to enhance resilience through policies to foster urban food sovereignty, and to focus cities efforts on achieve the highest possible degree of self-sufficiency based on local food. This aim would be pursued in two different but complementary dimensions as urban and peri-urban agriculture" (FERNÁNDEZ & MORÁN, 2012).

In this regard, the right to the field would be the right to have access to fresh, high-quality and local food, but also to enjoy the cultural landscape, to protect and to have access to traditional territorial management knowledge, and to determine how land and resources should be used.



### ***Third challenge: The Right to the City***

Cities understood as systems must be set up as physical support that guarantees real access of all citizens to tangible and intangible assets (jobs, human capital, education, housing, neighborhood and domestic relationships, social capital). This requires addressing the city configuration and proposing appropriate urban policies to deal with social, economic and environmental crisis, which will affect more intensely the most vulnerable areas. Urban imbalances and linkages between urban and social vulnerability are visible in these areas. Risk to downward mobility can be increased by the lack of access to the city and to urban assets that can ensure the right to the city on equal terms. These urban assets can be mobilized and managed by individuals, households and communities to decrease their vulnerability, especially in times of need. Therefore they are an opportunity to meet the challenge of acquiring a full right to the city.

Therefore, as set out in "The right to the city" (HARVEY, 2008): "The democratization of that right and construction of a wide social movement to make it real are essential if the dispossessed are to regain control of the city which for so long have been deprived, and want to institute new ways of urbanization"

Spanish cities changed considerably with democracy from the late seventies and, more particularly, during the following decade. These years settled the regional and administrative foundations for the restructuring and transformation of the major Spanish cities.



Fig 3..Neighborhood demonstrations during the 70's and 80's in Spanish cities Sources: [www.vallecastodocultura.org](http://www.vallecastodocultura.org), [www.revivelatrininova.tk](http://www.revivelatrininova.tk), [www.contraindicaciones.net](http://www.contraindicaciones.net).

In the origin of these urban transformations we find (in the most neglected areas of the city) grassroots movements reclaiming their right to the city, their neighborhoods and to be involved in decision-making. With those demonstrations they were able to consolidate a basic public services network covering the whole city. Nevertheless, there has been an absence of policies aimed at effectively integrate these areas as functional parts of the city. On the other hand, as a result of speculative processes in the real estate market in the former years has triggered, not only urban growth and localized speculation (accumulation), but also abandonment of many of the areas that improved their situation in the eighties (dispossession). These circumstances have increased



urban inequality in Spain; this has meant first the growth of urban vulnerability in the major cities (HERNÁNDEZ AJA, GARCÍA, MATESANZ & MORENO, 2010), and second the appearance of new areas potentially vulnerable in the future.

## ***Urban growth through scales.***

***The city as a system: opportunities and tools. Existing resources as an opportunity.***

Nowadays, almost a quarter of the world's population consumes two thirds of the planet's resources. The fertile land is occupied by buildings or swept away by floods. Renewable resources are overexploited, precluding their recovery, and extreme events caused by climate change will soon be seen in areas where soil moisture decreases (IPPC, 2007). Cities are artificial systems that need their environment to survive, extracting resources to construct and inhabit, using the services of water and air purification, and also dumping their waste. Therefore, the city has a paradoxical relationship with the environment: it is an effective form of human organization, but also the main exploitative of ecosystems and responsible for the global unsustainability. It does not produce, recycle or remove. It only consumes and distributes. Its real production is neither material nor biotic, is social and cultural. This requires an enormous effort of supply and consumption of resources, and generates a lot of waste and pollution.

Despite the current situation and what we have done with the resources, the existence and possible recovery of some of them is considered as a great opportunity to rethink the city at this time turning.

### ***Closing cycles as a tool to limit urban growth***

Urban metabolism includes numerous input and output flows. It has four main inputs (water, food, materials and fuels) and three outputs (waste water, waste and atmospheric pollutants).

The balance of these flows is completely open, with a big difficulty to be a closed cycle. But it is also highly unstable because the production factors and cumulative factors prevail against balancers. The reason that urban systems escape to the natural control is the pressure on the territory of urban uses and activities that exceed the capacity natural systems have to provide goods and services, and to assimilate the wastes from such activities. Urban environment is itself unsustainable, unless



its design is totally changed. It can only be maintained if the city and the environment are considered. Nowadays the extraction area of resources tends to grow more and more in most cities of the world, so that the destructive effects are expanding over more territories.

We must find ways to close as much as possible these cycles within the system of the city, on its different scales. At the same time we must find a balance between the economic, social and environmental aspects to ensure the satisfaction of the needs of future generations.

In Spain, we find a best practice of closed cycle as a tool applicable at different scales. We are talking about the city of Vitoria-Gasteiz, in the Basque Country. Its municipal policies have made a green infrastructure that makes up the city and its suburban environment one of its leading exponents. They called it Green Belt.

The role of Vitoria-Gasteiz's Green Belt plays an essential role closing the cycles. It not only does the carbon sink functions, but also reduces emissions from private motor vehicles by increasing the network of public transport infrastructure and the promotion of sustainable mobility through pedestrian and bicycle paths. Also, thanks to the tempering climate produced by the trees, green and bioclimatic facades, municipal energy consumption has been reduced significantly.

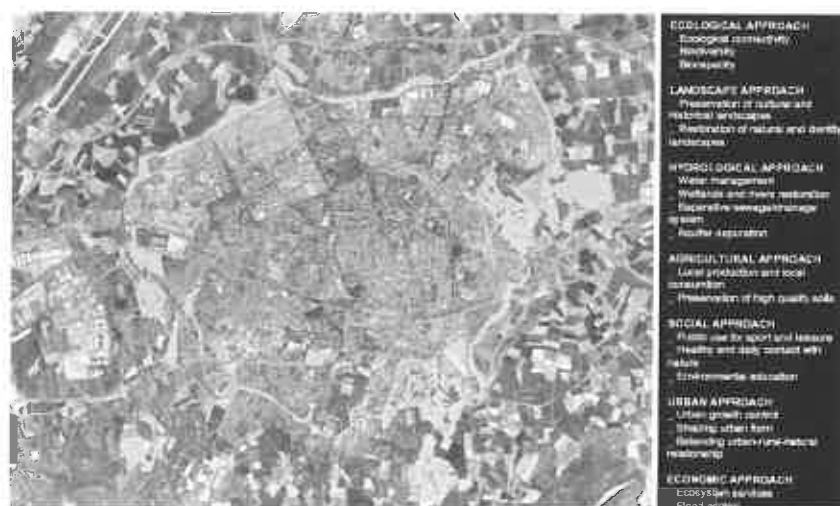
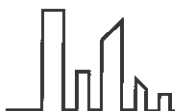


Fig 4..Vitoria-Gasteiz's Green Belt. Source: <http://vitoriagasteiz.portaldetuciudad.com>



***The neighborhood: opportunities and tools***  
***Urban environment as an opportunity element.***

The intermediate scale of the city, between the buildings and the whole, can be a great ally for closing cycles and get the sought sustainability. The actions in this scale are central elements because they can afford in a small scale, small challenges.

The addition of these actions, local or neighborhood, are able to generate significant impact on a larger scale. Through them, we seek to develop vibrant communities, diverse, opened and integrated, in themselves, with other neighborhoods and at a city level, promoting cohesion, social interaction and participation in both, decision-making processes, such as in maintaining the environment. We could speak of three strands:

- Increased connectivity: Stressing places with reduced dependence on the automobile, bike lanes and promoting closeness between workplace and residence.
- Design Implementation: Promoting pedestrian streets lined design, compact urban development, mixed uses, economic diversity and access to public and civic spaces.
- Reducing consumption: Kindling the reuse of existing buildings, taking into account the energy and water efficiency and waste management.

Neighborhood autonomy as a tool to ensure urban growth boundaries  
As noted in the second point, it is understood that the neighborhood is the smallest unit of the city, where you can still find some complexity and urban variety, where there are also social networks of trust and cooperation being an identifiable unit by the citizens. Physically a neighborhood might be one area where distances do not exceed the 500m and the population varies between 3,500 and 15,000 inhabitants.

In urban contexts, the neighborhood is usually the framework for the organization and conduct of citizenship, because that's where it is considered that their participation may have a greater impact on the transformation of reality (HDEZ. ZAPATA, 2013).

Based on that definition, the neighborhood autonomy approach as a tool, involves bringing local processes as elements for improving the urban condition at any given time, primarily by taking factors or elements, and cooperation between trusted networks, essential to articulate and implement those community proposals.

At this scale raises two types of actions, those that seek autonomy and neighborhood organization in terms of resources (energy, water, soil) and wastes, and those that include these pieces in the sustainable man-



agement of resources and waste city as a whole.

In response to neighborhood actions, a first aspect is the consideration of pedestrian and bicycle mobility as the neighborhood's main mobility, with special emphasis on the daily needs, which must be met in a range accessible by foot, bike or in last instance, in public transport.

In relation to energy and water consumption, the neighborhood also means the minimum unit of complexity, favoring the introduction of centralized community management facilities, including management of solar energy to provide inputs to the facilities of the neighborhood; from public lighting, heating and central cooling, or pumping water. The same can actually play in the management of solid waste or water management, which can introduce solutions for the community infrastructure.

Therefore it is necessary to define actions from the neighborhood level, contribute to limit growth through reducing consumption, resource optimization and closing cycles.

## ***The right to the field through scales.***

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Food system is one good example of nowadays urban dependency on faraway territories. Food sovereignty will be a primary issue in post carbon sceneries, so it's crucial to lay the foundations for an urban structure that allows the development of local food systems, this requires a physical support but also a social recognition of its importance. This can only be achieved acting in several scales, from neighborhood to bioregion, in order to reconnect people to food production.

### ***Periurban spaces as opportunity areas (for guaranteeing food sovereignty)***

Urban sprawl has produced periurban areas characterized by a disorganized mixture of urban uses pressuring traditional agricultural uses. Across Europe periurban landscapes are very similar, because advantages over city centre (land price, regulation, environmental quality in selected areas), attract low density residential suburbs, malls, industrial and technological estates, logistic areas, airports, sewage treatment plants, landfill sites... linked by dense transport networks (PIORR ET AL, 2011).

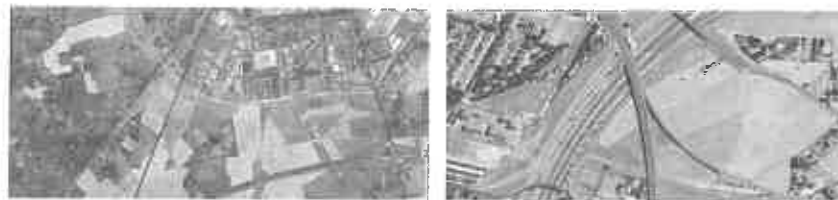
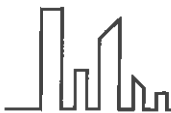


Fig 5. Ciudad Real, medium sized city, periurban fragmentation by infrastructures and urban uses.

In Spain periurban agriculture spaces have been particularly affected by urban pressure, directly: territorial fragmentation by urban uses; or indirectly: revaluation expectations that cause abandonment of agricultural practices, increase land prices, and obstruct new farmers' access. In addition to this, lack of generational take-over, territorial specialization, and socially undervalued agricultural activity, make usual the substitution from human food crops to extensive crops (SIMÓN et al, 2012). In this context, despite the degradation of periurban spaces, they can be an opportunity space for recovering resources.

#### ***Local agriculture as a tool***

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Periurban agricultural spaces, and abandoned cultivated land which can be recovered, are high strategic for the city. They can help redefine and reorganize the urban system, acting on different dimensions.

- Economic dimension. Fostering local food systems, agricultural parks, CSA (Community Supported Agriculture), farmers' markets, agreements with institutions (school, hospital, and other public centers)... These practices can increase agricultural income and job creation. These production and distribution models aren't usual in Spain, they can be further developed.

- Ecological dimension. Energy saving in food transport and preserving. Use of urban organic waste for composting and fertilizing local crops. Biodiversity sensitive agricultural practices: protection and use of local varieties of seeds, agrosystems that house birds, insects and other animals. Agro-ecological transition spaces...

- Cultural dimension. Preserving cultural landscapes, not only as "scenery", but as a complex mixture of cultural territorial management practices. Revaluing farmers' role and knowledge.

In Spain there are several agricultural parks, and this tool is being proposed from academic and social fields (Baix Llobregat, Elche, Malaga, Granada are examples of this concern). Several municipalities in Andalusia and Extremadura and the trade union CCOO, have carried out training projects on organic agriculture, under the TREDAR-CNETICAS program. The Municipality provides land and water inside the town, the union provides the practical and theoretical training on agroecology; afterwards those who have successfully fulfilled the training may become



producers, the municipality lends them larger lots in periurban areas and the technicians support them to organize a group of consumers (members of the union, or local residents) for direct sale and CSA models. (SIMÓN et al, 2012b)



Fig.5. Parc Agrari Baix Llobregat, Barcelona. Crops and farmer's market poster. Sources: <http://www.gastroteca.cat>, <http://www.portadeldelta.cat>

### ***The neighborhood: opportunities and tools***

#### ***Urban fringe and urban voids as opportunity areas***

Urban voids could be the physical support for an agricultural system going through the urban fabric, from urban fringe to compact centers. Each area's characteristics and peculiarities would be suitable for a diversity of productive areas playing several roles: environmental, research, training and demonstration, enjoyment, social cohesion, community projects, artistic & landscape experimentation...

- Urban fringe. Real estate bubble has left in Spanish cities a landscape of undeveloped or partially developed areas. Conceived for industrial or residential use, in many cases few or none buildings have been constructed, but there are infrastructures (roads, lighting, water, sewage, electricity...). These areas could shape the city limits, creating an agricultural green belt of commercial gardens, allotment gardens and urban farms, training gardens, environmental research and field trial (ecological cycle, composting, seed banks, organic management...)

- Urban voids. At a neighborhood scale, there are also public plots that are not going to be developed because of the crisis. Categorized in the master plan as green zones or public facilities, they can be used for community gardens.

- Other open spaces, as those belonging to public institutions (hospitals, schools, health and care health centers...), or private areas (courtyards, common areas, gardens, balconies and rooftops) would complete the garden-diversity of the city. (FERNÁNDEZ y MORÁN, 2012).



Fig.6. Vallecas PAU (urban development action plan), Madrid. Partially developed residential areas in the urban fringe, buildings construction will not be completed. Source: <http://www.todoensanche.com>

### ***Allotment and community gardens as a tool***

Insertion of agricultural spaces within the city makes accessible the field to urbanites, especially in a neighborhood scale, giving people the opportunity of community involvement in planning and managing public spaces, allowing self-reflective development of professional knowledge and skills (FERNÁNDEZ y MORÁN, 2012b), and building alliances and local mutual support networks between community groups, schools, day care centers...

"Urban agriculture diversity, regarding its aims, management, design, practices, etc. is a way of urban intervention that can be understood as what Christopher Alexander calls slow way of building, where the transformation of places is made as an adaptive process, proceeding piecemeal and from a deep knowledge of the context. This way allows improving the urban whole." (FERNÁNDEZ y MORÁN, 2012b).

There are several projects in Spanish cities of allotments and community gardens, and they continue multiplying, the first community gardens networks have been created the last years in cities as Madrid, Barcelona or Seville. Nevertheless a regulatory framework is still needed, to fully recognize them as urban uses.



Fig.7. "Esta es una plaza" community garden, Madrid. Before and after community intervention Source: <http://estaesunaplaza.blogspot.com.es/>



## ***Conclusions. Proposals for the present city.***

City without public economic funds. Financial crisis in Spain is leading to privatization of public lands, goods and services. But this is not the only possibility. An appropriate management and social focused policies could better solve nowadays problems. In the urban planning field this means a radical change in our urban model, that requires both the citizen participation and the adaptation of urban planning tools.

Urban model. The economic crisis has highlighted the exhaustion of the current urban model, based on the expansion and ignoring physical, economic and social problems of the consolidated city. The future of cities will necessarily pass for the conservation and improvement of the existing fabric, incorporating a comprehensive vision of urban processes. Therefore, and to seek a solution in this regard, we propose a series of measures to carry out:

- Think about potential, rather than in trouble. Any area, despite its difficulties, has its own structure (social, economic, environmental or urban) with their own strengths, so could be integrated into the overall structure.

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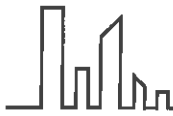
### ***Urban planning and management***

- The solution goes through a change of vision and model of land management, without this being an increase of budget. It is necessary to redefine the priorities in urban policies and the tools to use.

- This change of model, must go through changing the planning system in Spain with the aim of developing tools to achieve balance between country and city, new tools for the protection and enhancement of rural land and to allow improving the consolidated city

- As has been explained, this change of model, involves moving away from the vision of the city as static and unitary, to understand it as a set of parts, integrated in a constantly changing system, so that the tools must be regulated but also be flexible.

- Social function of property is on the basis of the thought of an urban model which guarantees the right to housing, to the city and to the field. By contrast, a model away from citizens, as is the present, has its origin in the protection of private property in its maximum expression.



### ***Citizen participation***

- The change of vision and model, involves the redefinition of the role to be fulfilled by all agents in the management of the territory.
- High citizen participation in land management as part of the decision-making, starting from the analysis and diagnosis of problems and opportunities, and until the execution of the plans or programs.
- Social responsibility within the actions and proposals of private agents, so the priority will be not only economic returns not related to the social objective of each of the actions undertaken in the city.

## ***Bibliography.***

Alguacil, J. (1998) Calidad de Vida y Praxis Urbana. Nuevas iniciativas de gestión ciudadana en la periferia social de Madrid, en <http://habitat.aq.upm.es/cvpu/>

Córdoba Hernández, R. and Fernández Ramírez, C. (2013) 'Las ciudades pueden ser un buen sitio donde empezar a hablar de sostenibilidad', Revista Española de Desarrollo y Cooperación: Desarrollo urbano sostenible: hacia la nueva agenda urbana del Siglo XXI, no. 31.

Córdoba Hernández, R. (2011) 'Crisis medioambiental: en deuda con el territorio', Apuntes Ciudadanos, no. 1. Available: [http://aavvmadrid.org/index.php/aavv/Minisitios/Apuntes-Ciudadanos/\(language\)/esl-ES](http://aavvmadrid.org/index.php/aavv/Minisitios/Apuntes-Ciudadanos/(language)/esl-ES)

Córdoba Hernández, R. (2011) Incidencia de las competencias municipales en el Cambio Climático', Boletín CF+S [Electronic], no. 47/48, Available: <http://habitat.aq.upm.es/boletin/n47/arcor.html>

Fernandez de Casadevante, J.L. and Morán, N. (2012) 'Cultivar la resiliencia. Los aportes de la agricultura urbana a las ciudades en transición'. Papeles de Relaciones Ecosociales y Cambio Global, 119. 131 - 143. 06/2012.

Fernandez de Casadevante, J.L. and Morán, N. (2012) 'Nos plantamos! Urbanismo participativo y agricultura urbana en los huertos comunitarios de Madrid', Habitat y Sociedad, no. 4, May, pp. 55-71.

García Bellido, J. and González Tamarit, L. (1979) Para comprender la ciudad. Claves sobre los procesos de producción del espacio. Madrid: Nuestra Cultura.



Garrido Peña, F. and González de Molina, M. (1997) 'La Cuestión Nacional desde la Ecología Política', *Ecología política*, no.13, pp. 125-155.

Hernández Aja, A. (2011) *Análisis urbanístico de Barrios Vulnerables*. Madrid: Ministerio de Fomento. Available: <http://habitat.aq.upm.es/bbvv/> and [http://www.fomento.gob.es/MFOM/LANG\\_CASTELLANO/\\_ESPECIALES/SIU/OBSERVATORIO/Analisis\\_urba\\_Barrios\\_Vulnerables/](http://www.fomento.gob.es/MFOM/LANG_CASTELLANO/_ESPECIALES/SIU/OBSERVATORIO/Analisis_urba_Barrios_Vulnerables/)

Hernández Aja, A. Alguacil, J. Medina, J. and Moreno, C (1997) *La ciudad de los ciudadanos*. Madrid: Ministerio de Fomento.

Hernandez-Jimenez, V. Ocón, B. and Guillen, V. (2009) 'Espacios peri-urbanos. Transición de la ciudad al campo', *Ecosostenible*, no. 49, pp. 5-12.

Magnaghi, A. (2011) *El proyecto local*. Barcelona: Ed. Universitat Politècnica de Catalunya.

Magnaghi, A. (2010) 'Ecosistema territoriale e bioregione urbana', *Il Valore de la Terra. Teoria e applicazioni per il dimensionamento della pianificazione territoriale*. Milano: Ed Franco Angelli.

Ministerio de Medio Ambiente y Medio Rural y Marino (2009) *Estrategia Española de Sostenibilidad Urbana y Local*. Available: [http://www.ateneonaider.com/sites/default/files/documentos/2009\\_dic\\_EESUL.pdf](http://www.ateneonaider.com/sites/default/files/documentos/2009_dic_EESUL.pdf)

Ministerio de Fomento (2013) *Análisis de las características del parque residencial en España*. Available: [http://www.fomento.gob.es/MFOM/LANG\\_CASTELLANO/\\_ESPECIALES/SIU/OBSERVATORIO/ATLS\\_EDIF\\_RESI/](http://www.fomento.gob.es/MFOM/LANG_CASTELLANO/_ESPECIALES/SIU/OBSERVATORIO/ATLS_EDIF_RESI/)

Ministerio de Vivienda (2010) *La Rehabilitación del parque residencial existente en la Unión Europea y otros países. XVII Reunión Informal de ministros responsables de vivienda*. Available: [http://www.fomento.gob.es/NR/rdonlyres/282E44DB-0824-496A-BFD0-BE-034647BA0F/111524/2\\_rehabilitacion\\_parque.pdf](http://www.fomento.gob.es/NR/rdonlyres/282E44DB-0824-496A-BFD0-BE-034647BA0F/111524/2_rehabilitacion_parque.pdf)

Naredo, J.M. and García Zaldívar, R. (2008) *Estudio sobre la Ocupación del suelo por usos urbano-industriales en la Comunidad de Madrid*. Available: <http://habitat.aq.upm.es/oscam/>

Orive, L.A. (2006) 'Relaciones ciudad-naturaleza: hacia modelos de planificación territorial más sostenibles en Vitoria-Gasteiz', *Boletín CF+S: Arquitectura del siglo XXI: más allá de Kioto* [Electronic], no. 38/39. Available: <http://habitat.aq.upm.es/boletin/n38/aland.html>



OSE (2006) *Sostenibilidad en España 2006*. Madrid: Observatorio de la Sostenibilidad en España.

Panel Intergubernamental Sobre Cambio Climático – IPCC (2007) 'Cambio Climático 2007: Las Bases científicas y físicas. Resumen para Responsables de Políticas', Cuarto Informe de Evaluación del IPCC. Approved X Meeting Working Group I, IPCC, París, February, 2007.

Pierr, A. (ed) (2011) *Peri-urbanisation in Europe. Towards European Policies to Sustain Urban-Rural Features. Synthesis Report*. PLUREL Project, 6th Framework Programme. May, 2011.

Tamames, R. (1986) *Introducción a la economía española*. Madrid: Alianza Editorial.

Renes, V. (2000) 'Dimensión territorial de la pobreza e intervención social', *Documentación Social*, no. 119.

Rodríguez Alonso, R. (2010). 'La política de vivienda en España en el contexto europeo. Deudas y Retos'. *Revista INVI*, Vol. 25, no. 69, August, pp. 125-159. Available: <http://revistainvi.uchile.cl/index.php/INVI/issue/view/74>

Rueda Palenzuela, S. (Dir.) (2009) *Libro Verde del Medio Ambiente urbano*. Tomo II. Available: <http://www.ecourbano.es/imag/libroverde2.pdf>

Simón Rojo, M. Zazo Moratalla, A. and Morán Alonso, N. (2012) 'Nuevos enfoques de planificación territorial para re(con)ducir la vulnerabilidad de los espacios agrarios periurbanos', *Ciudades, Monográfico: Ordenación del territorio: fundamentos y práctica de una disciplina en construcción*, no. 15.

Simón Rojo, M. Morán Alonso, N. and Zazo Moratalla, A. (2012) 'Urban agriculture in distressed urban areas. Implications for urban regeneration policies', *Agriculture in an urbanizing society. International Conference on Multifunctional Agriculture and Urban-Rural Relationships*. Wageningen, The Netherlands, April 2012.

UN-HABITAT (2012) *State of the World's Cities 2012/2013: Prosperity of Cities*. Available: <http://www.citiesalliance.org/sites/citiesalliance.org/files/UNH-SOWC-2012-13.pdf>

Zapata Hernández, V. (2013) 'Tejiendo redes en el barrio para el desarrollo comunitario', *Congreso sobre Participación Ciudadana de la ciudad de Santa Cruz de Tenerife*, Santa Cruz de Tenerife, 11-12 January, 2013.



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