

STRATEGIC ENVIRONMENTAL ASSESSMENT IN URBAN PLANNING. THE CASE OF VALENCIAN COMMUNITY: THE PROBLEM OF MANAGEMENT.

José Luis Miralles i Garcia

Urban Planning Teacher. *UDR F. Eiximenis, Department of Urbanism, Polytechnic University of Valencia, c/ Camí de Vera s/n, 46022, Spain.* jlmirall@urb.upv.es

Abstract

The Autonomous Community of Valencia (ACV) is a region of Spain with full competences both on urban and regional planning, and with complementary legislative competences on environmental matters. Between 2004 and 2006, the ACV has generated a wide range of laws on regional and urban planning that incorporate both sustainability and life quality criteria on plan edition processes. It also incorporates criteria for landscape planning and for its implementation according to Florence Landscape Convention, ratified by Spain in 2008. From 1989 on, in ACV Urban Plans are subject to environmental impact evaluation. This sort of evaluation for planning is, in fact, a form of strategic evaluation. As far as 2006, Spanish central government introduced new laws in order to implement European Directives on SEA in Spain, as well as the Aarhus Convention on citizenship environmental rights and public participation on decision taking processes. All these facts drove the ACV to abundance on laws concerning environmental matters with possible affection on land planning. These big amounts of laws with similar objectives are not coordinated at all, and thus, have many dysfunctions. An important part of normative have a complete lacks of synthesis. Sometimes it has incoherencies in itself, and others are even contradictory. Proceedings as designed by different laws to implement planning are not always compatible. This is the reason by which, despite the abundance of laws and the desires of its creators it is impossible to reach a guarantee on sustainability on land planning proposals. At the same time, there is great insecurity on its implementation. On the other hand, administration management system is temporary, and there is not any system to guarantee on the long term decisions taken for sustainable development. This paper analyzes actual situation, existing problems, and propose institutional changes on the same

organization of administration in order to guarantee the maintenance of chosen decisions on the long term (over one legislature), so that both territorial and urban planning shall be useful for a sustainable development.

Keywords: Sustainable development, urban planning, natural resource management, environmental legislation and urban governance

Introduction

In 2001 the European Commission approve the *DIRECTIVE 2001/42/EC of the European Parliament and of the council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment*. The structure of SEA (under the Directive) is based on the following phases:

- "Screening", investigation of whether the plan or programme falls under the SEA legislation,
- "Scoping", defining the boundaries of investigation, assessment and assumptions required,
- "Documentation of the state of the environment", effectively a *baseline* on which to base judgments,
- "Determination of the likely (non-marginal) environmental impacts", usually in terms of Direction of Change rather than firm figures,
- Informing and consulting the public,
- Influencing "Decision taking" based on the assessment and,
- Monitoring of the effects of plans and programmes after their implementation.

But this is a general structure for any plan or programme undetermined. Nevertheless now it exist an important experience on environmental impact for any types of plans. This is the case of urban planning. So in these cases it is necessary to adapt the general methodology in order to put into practice that experience.

Spain applies the European Directives that develop the Aarhus Convention en 2006, through the Act 9/2006 of April, the 28th, for the Strategically Environmental Assessment (SEA) and the Act 27/2006 of July, the 18th, for participation rights.

Anyway Spain ratifies the European Landscape Convention of Florence in 2000 in November, the 26th, 2007, published in official publication (BOE) in February, the 5th 2008.

At the same time, the Valencian Autonomous Community publishes some acts for urban planning and urban management regulations: three laws and two regulations between 2004 and 2006 (Miralles, 2007), before the state's acts are published¹.

Specifically the following autonomic or regional laws:

1. Law 4/2004, June 30, of Territorial Planning and Landscape Protection, published in July 2 2004.
2. Law 10/2004, December 9, of Un-Developable Land, published in December 10 2004.
3. Law 16/2005, December 30, of Urban Development Law published in December 31 2005.

And there has being developed by means of the following autonomic regulations:

1. Territorial and Urban Planning and Implementation Regulations. Decree 67/2006, of May 12, published in May 23 2006.
2. Landscape Regulation approved by Decree 120/2006, of August 11, published in August 16 2006.

Based on the approaches settled down by Law 4/2004 of Territorial Planning and Landscape Protection, in 2004, the Urban Development Law of Valencia (from now on LUV) has incorporated an obligatory chapter of Guidelines with normative and linking character to all General Development Plans. These guidelines are part of the structural arrangement, having the denomination of *Guidelines settled to define the strategy of urban evolution and occupation of the territory*.

The guidelines are classified in three groups:

1. Guidelines concerning sustainability
 1. Rational land use.
 2. Efficient use of water resources, and protection of its quality.
 3. Protection of natural media.
 4. Conservation and valuation of cultural heritage.
 5. Revitalization of rural heritage.
 6. Prevention of natural or induced risks
 7. Coastal arrangement.
2. Guidelines concerning citizen's quality of life.

¹ I must remember that Spain have a hierarchy public administration for proposal legislation. Central administration has a competence for basic environmental legislation and the Autonomous Communities (17 altogether) have a competence for complementary environmental legislation and also an exclusivity legislation competence for urban and regional planning and management.

1. Improvement of urban environments.
 2. Public transport.
 3. Public facilities.
 4. Housing access.
3. Guidelines concerning land planning.

1. Fixing of substantive items for urban arrangement in Plan.

Special interests have any rules about the rational land use. Law establishes the obligatory creation of thresholds for consumption of resources and emission of pollutants and the Regulation defines a first threshold in form of percentage of land of new urbanization over the amount of already urbanized land. The limit is settled in a 15% or a 20% according to cases. Surpassing this limit in a Plan implies the payment of a quota of sustainability of 6 € for each square metre to be developed overcoming the limit. The quota shall be paid to the Autonomous Government having finalist character to finance projects and programs of sustainability and quality of life.

This sustainability quota is fixed in *Territorial and Urban Planning and Implementation Regulations*, Decree 67/2006 published in May 2006 but in this moment he hasn't applied yet.

Another interest rule is the land donation of "1x1". In urban plan it exist three types of land: urban land, urban developable land and un-developable land. Also in un-developable land Plan shall establish three types of areas: areas to be preserved of any development process; areas that cannot be urbanized but admit some constructions according to Un-Developable land Law; and areas that can be reclassified to developable land always fulfilling the sustainability thresholds or paying, if necessary, the sustainability quota to overcome them.

Reclassification of un-developable to developable land through any of the procedures foreseen in Law (mainly by the revision of the effective plan or by partial plans that reclassify floor), implies the free surrender to public administration of an amount of protected un-developable land of similar amount to the one reclassified.

These surrenders are considered natural park facilities, being additional to those of secondary level such as streets, little parks, and facilities of local character that should also be carried out to administration. The surrender of natural parks is only excepted when administration carries out developments for public housing.

And finally also is interesting the regulations about landscape for European Landscape Convention (Miralles, 2008)

The experience of Valencian Autonomous Community in environmental impact of urban planning

The Valencian Autonomous Community (VAC) legislates in environmental impact in 1989 and the act includes the urban planning in a list of projects with evaluation of environmental impact. Really urban planning doesn't a project because he is a plan. But, in fact, the urban planning is subject at environmental impact evaluation since 1989². And since 2005 it exist a regulation with a complete list of environmental values for to check³. In fact, in this moment, the urban planning must have a process of environmental impact evaluation (in function of valencians laws) and also a process of environmental strategic assessment (in function of states laws).

So the Valencian regional civil service has a long experience in environmental impact of urban planning.

The environmental impact evaluation of urban planning in Valencia is in fact similar to strategic environmental process. But it exist any differences and also any problems.

The principal difference is the procedure. Exactly the environmental impact assessment is in public exhibition with a complete version of plan when it is very complicate to change the decisions. So the population not participates before the decisions are taken.

And it exist a serious problem. The final official environmental impact assessment is signed for the politician responsible. This responsible consider a technical assessment of civil servant but not necessary approve it. So it not exist an independent public institution for to elaborate the final environmental impact assessment. Sometimes the final assessment depends of politician responsible. And there has a behavior in function to interest of moment but not in function to interest for longue time (sustainability).

Lack of coordination between laws

The environment is a global and integrated reality. So it is complicated a partial regulation of environment without a global vision. The city, the territory and the landscape have the same characteristics as a global reality.

In VAC it exists in this moment a long list of laws for to regulate an urban planning but the different regulations aren't coordinates between them. Any topics haves the coordination problems.

² *Act 2/1989, 3th of mars, of environmental impact* (DOGV 8th of Mars, 1989) and *Decree 162/1990, 15th of October, for to develop regulation 2/1989 Act* (DOGV 30th of October, 1990)

³ *Order 3th of January, 2005, about minimal contents of environmental impact assessment* (DOCV 12th of January, 2005). This order includes the case of urban planning.

First, the urban planning has the objective, among another, of uses localization. The land uses planned condition a propriety rights. So the contents and proceedings are much regulated in laws. The new SEA act implement a new proceeding and the valencians laws aren't modifies for to correct and to generate a new integrated proceeding.

It's important to remember that the SEA Act of state and the Landscape Regulations of Valencian Autonomous Community implements news procedures for public participation. And this news procedure changes the essentials aspects of proceeding.

So the new proceeding for urban planning must integrate:

- Access to Information, Public Participation in Decision- Making and Access to Justice in Environmental Matters (Aarhus Convention and Directives and Laws for develop it)
- Strategic Environmental Assessment
- Environmental Impact Evaluation
- Public Participation in landscape value and landscape proposal
- Information and guaranties for propriety rights
- Usually technical conditions necessary for planning process

But in Valencia it exists as well another problem. The new urbanization in Valencia on realise usually by "urbanization agent". This is a private enterprise that he can present a proposal to municipality for to realise the public works for to urbanize a land sector. The municipality select a best proposal between the different proposals of any "urbanization agents" for to realise the public works. This public works are paid by the proprieties and the final plots for build are distributed between them.

The proposal of different "urbanization agent" have an urban plan of sector with your urban design and the urbanization project. The actual proceedings for select an "urbanization agent" isn't compatible with a proceeding for public participation in Strategic Environmental Assessment or in landscape value/proposal.

In fact the "urbanization agents" realise de urban design of land sector but the SEA procedure or the landscape value procedure include a public participation for realise this design. It is impossible to realise different urban design with your public participation for each proposal of the "urbanization agent".

The urban management system of "urbanization agent" is questioned by European Commission because the proceedings for select it and the considerations about the kind of the contract (special contract or public works contract). But it is necessary remember what in Spain, habitually, the propriety pay the urbanization works of the new urban sectors.

This system is good as a source of income for municipality. With this system the municipality can obtain public streets, public parks, plots for public equipments,

plots for public houses (what it possible to sell), ... But in speculative situation as a “boom real-estate” in 2000-2006 all agents, private and public, like a big urban extension because they can have a big immediate profits. In this situation the environmental public interest for long time is ignored.

So the VAC passes any laws for to change the regulation of urban management system based in “urbanization agent” and for to incorporate guidelines of sustainable urban development (Miralles, 2007).

But remember what this important group of laws are passed between 2004 and 2006, before the state’s acts are published. So the new valencians acts not incorporates the regulation about public participation and Strategic Environmental Assessment.

As well any of valencians acts has been write a not long time and they are very extensive quantity of articles. So they have quite a lot of contradictions between articles.

Finally, remember, the VAC have a regulation by act for environmental impact evaluation of urban planning. There acts are overlapped with the new acts for Strategic Environmental Assessment of urban planning.

In conclusion, this legal situation is very complicate.

Social and economic trends

Between 1999 and 2006 we were know a speculative economic process in all world. On figure 1 we can see the evolution of free price houses in Spain. On can see the increase of price from 800 €/m² to 2100 €/m² between 1999 and 2007. This is the period of expansive real estate cycle in Spain.

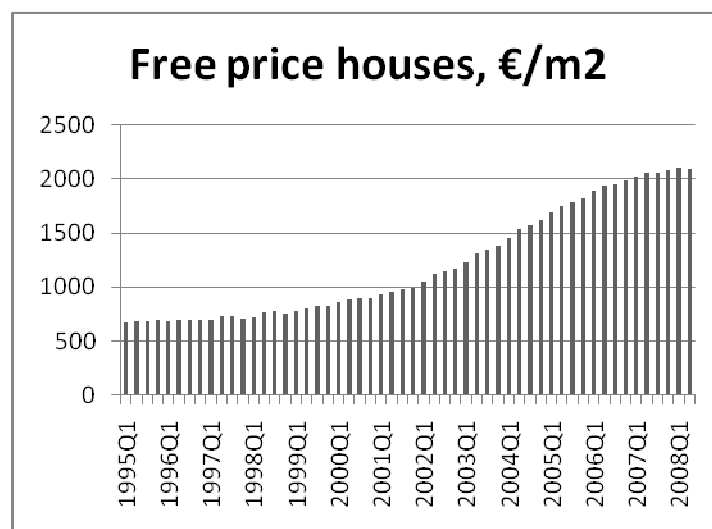


Figure 1. Free price houses evolution (€/m²). Source: Ministerio de la Vivienda

On table 1 can see the visas for new houses construction and the certificates of finished houses construction works. The maximum top for finished works is one year after the maximum top for visas construction. In the final of 2008 it is estimate, according to any different studies, about 1 million of new houses for say. In normal situation, before the expansive cycle, the houses market in Spain say about 300.000 houses for a year.

Table 1. Visas on construction works (housing number) and Certificates of finished construction works (housing completed). Source: DG Programación Económica. Ministerio de Fomento

Year	Visas on construction works			Certificates of finished construction works		
	C. Valenciana	Spain	% CV / AND	C.Valenciana	Spain	% CV / AND
2000	87.904	594.820	14,8	59.787	366.776	16,3
2001	79.422	561.186	14,2	48.940	365.663	13,4
2002	84.940	575.546	14,8	58.257	416.683	14
2003	105.989	690.206	15,4	61.998	458.683	13,5
2004	104.142	739.658	14,1	72.853	496.785	14,7
2005	106.516	786.257	13,5	84.969	524.479	16,2
2006	125.877	911.568	13,8	102.229	585.583	17,5
2007	93.607	688.851	13,6	118.227	641.419	18,4

In table 2 we can see the evolution of number of houses in Spain and Valencian Community and different indicators. Remember what in Mediterranean Spanish coast it exist a big number of persons with original resident in another European country but with temporary resident in this coast.

Table 2. Number of houses and population indicators in Spain and Valencian Community (1ft of January). Source: Ministerio de la Vivienda.

	VAC	TOTAL SPAIN	% VAC / Spain	VAC	Spain	% CV / Spain	houses / person VAC	houses / person Spain
2001	2.558.691	21.033.759	12,2					
2002	2.628.135	21.551.426	12,2	4.326.708	41.837.894	10,3	0,61	0,52
2003	2.692.389	22.059.220	12,2	4.470.885	42.717.064	10,5	0,60	0,52
2004	2.767.763	22.623.443	12,2	4.543.304	43.197.684	10,5	0,61	0,52
2005	2.862.658	23.210.317	12,3	4.692.449	44.108.530	10,6	0,61	0,53
2006	2.952.338	23.859.014	12,4	4.806.908	44.708.964	10,8	0,61	0,53
2007	3.037.589	24.495.844	12,4	4.885.029	45.200.737	10,8	0,62	0,54

Also it is interesting the dates of CORINE for artificial surface in VAC. In this moment we know de dates for 1990 and 2000. It not exist still official dates for

2006. We can see the important increase of artificial surface between 1990 and 2000. Probably this increase was continued between 2000 and 2006. But the perception of the artificial surface of territory is very bigger because of urban sprawl.

Really the quantity of artificial surface is little but we have any important environmental problems:

- Services limits of natural resources, especially water.
- Uses conflict between natural resources (landscape, agriculture areas, forest, free cost areas, etc) and economic interest for new urban development.
- Uses conflict between risk areas (especially risk flood areas in the Mediterranean cost) and economic interest for new urban development.

**Table 3. Artificial surface (CORINE land cover 1.1, 1.2 and 1.4).
Source: CORINE.**

	1990	2000
Urban fabric	61.670	79.612
Industrial, commercial and transport units	10.696	18.897
Artificial non-agricultural vegetated areas	1.303	3.881
Sum (ha)	73.670	102.390
% surface areas of Valencian Community	3,17	4,40

But the last period of house bubble produce a big income for propriety, enterprise building and municipalities. Oddly in this moment of economic crisis, especially real estate crisis in CAV, the municipalities expect another expansive real estate cycle. So, a lot of municipalities plan their urban development with the objective to take advantage of next expansive cycle. They plan a big urban development.

Really this is a surprising phenomenon because the return a global speculative (and irresponsibility) expansive real estate cycle is very most improbable.

This phenomenon show as a society (public local agents and private agents) attaches more importance to immediate economic interest opposite to public interest for long time.

Synthesis of problems

The problems for to guarantee territory sustainability or landscape sustainability revolves around three aspects:

1. Adaptation SEA process to urban planning.
2. To prevent a speculative real estate cycle.

3. To reform the administration for guarantee the sustainability (public environmental interest for a long time).

Now the knowledge about the function of different natural resources is very extensive and also about the landscape. Special interests are the studies of ecological footprint and their analysis of Natural Capital or natural resources. The studies of ecological footprint (I prefer the name of “ecological larder” because exactly this is the significance and function of this land and ocean surface: the planet surface necessary for produce the environmental services what we need for to live) show as this surface⁴ decrease each year. This is a worrying situation.

We have developed methodology for identify the possible land for urban development with sustainability criteria: preserving land with natural resources and preventing risk, especially flood risk in Mediterranean cost (Miralles, 1999). So technical knowledge is very big and the principal problems are problems of management.

Adaptation SEA process to urban planning

In this moment it exist an important knowledge about the impacts of urban planning in world, for example you can see Giok Ling (2005), and especially in CAV. And it exist knowledge for urban planning with sustainability criteria (Naveh Z. & Lieberman A., 1994). And also in CAV it exist any regulation about urban or regional planning with sustainability criteria.

So it haven't sense study the environmental consequences of urban planning as if not exist these extensive experience. The SEA process establishes a special important role to public participation and nongovernmental organization. That is important but this fact not justifies what the administration forget your experience and concentrate the responsibility for environmental control to nongovernment organization in a public participation process. Specially in urban planning for uses regulations in municipality territory where not always it exist nongovernment organization with professional training for efficient participation.

So it is necessary what the laws about urban planning includes in the contents of environmental analysis documents associate to preliminary version of urban plan the analysis of the more important environmental aspects accord to the experience.

⁴ You can see

http://www.panda.org/about_our_earth/all_publications/living_planet_report/ for know the last *Living Planet Report* (2008) published by World Wide Found.

To prevent a speculative real estate cycle

The speculative real estate cycle generates especial negative effects for an urban sustainable development. It knows what the price of houses determine the land price for building.

In CAV the biggest price of land for building reaches to 180 euro per square meter. Specifically he arrives to 180 euro/m² (1,8 million euro par ha) of local protected agricultural areas with expect to change a land urban sector.

This price exists because the house bubble and this situation is very much negative for territorial sustainability. It's very difficult to promote environmental protection areas, with a very little price of market, when it exist demand of land sectors for buildings with those price.

Also this situation is negative for economic progress. Actually financial crisis prove the negative consequences of speculative real estate. But the environmental impact produces in speculative situation because of transformation land are irreversible. For example, the agricultural areas transformed in urban areas are unrecoverable. So the immediate economic interest of public local administration and private agents impose opposite to environmental public interest for a long time (sustainability). But after, when the transformation is unrecoverable, the society pay the cost if it is necessary the environmental services of natural resources destroyed for daily social and economic activities.

The building activities generate an increase of GDP (Gross Domestic Product) but only for a short time.

In this situation the role of private propriety of land is evil because he promotes an inefficient land market for to direct the best use of land.

Administration reform

This is another important problem. When on the History it was produced essentials changes it was necessary to create adequate organization for to make possible the new wishes.

In this moment as a rule the democratic administration isn't prepared for guarantee the environmental public interest for a long time. But the European Union was creates any institution for guarantee any interest for a long time: the European Central Bank. This institution guarantees the monetary balance. With this system each State of European Union haven't liberty for to issue money when they have immediate financial interest. This system helps to support a rigorously economy.

But it not exist a similarly institution for guarantee the environmental public interest for a long time. It not exists in any of different administration level for CAV: european, state, regional or local administration level.

So the land protected now can to change to non protected land tomorrow when change the politic responsible or the parliament.

The history of “21 Agenda” of Calvià (Mallorca) is very illustrative. This is a good “21 Agenda” with the objective of not more expansive building in municipality of Calvià for tourism. When the politic responsible change in elections, finish the “21 Agenda” and continue the urban expansion.

It exist the same situation with de municipal urban planning. The local protection on plans changes when the new local government likes urban expansion. So the land protection areas are temporary but the new urban expansion is irreversible.

Proposal actions

For integrate the new SEA process in urban planning only is necessary a correct technical vision. It is absolutely possible to design a methodological process of SEA for urban planning with integration all experience and knowledge. This is only a technical work.

Very difficult is resolve the management problems.

For guarantee the environmental public interest for a long time it is necessary a reform of administration. It's necessary create a independent public organism for correct identify environmental impacts and for to block the protected areas. In actual situation the responsible of administration regional and local have trend to priority the immediate economic interest opposite the interest for a long time. For that reason it's necessary to block the areas protected because their natural resources.

Already in 2002 I propose a Natural Capital Bank (Miralles & Gaja, 2002) as a system of urban sustainability management. An actually diagram of proposal can see in figure 2.

The society needs the services of natural resources for their activity but the land market is inefficient for orient a correct use of land. In fact the price of land for urban development always is very biggest what the price of same land for natural resource use.

So it's necessary to block the land with natural resources and retire him of land market. But the society acknowledges the services and pay to propriety by “land stewardship contracts”. This is a translation of private contract for land stewardship to environmental services acknowledged by public administration and a way of to fix a price for him.

¿Who decides what lands must be protect?: Public administration. But when the protection is decided an independent institution, the Natural Capital Bank, make the responsibility for to administer and stewardship this protected area. This area can to be private. And the public administration lose the possibility of unprotect this area. The possibility of unprotect the area is translate to institution of Natural Capital Bank. We can to enunciate this rule as a *principle of politic protection and technical stewardship*.

For acknowledge to propriety the environmental public services can sign a “land stewardship contract”. ¿Who pay this contract?: all people by personal income tax or sustainability tax. ¿Why?: because all people generate an ecological footprint or need an ecological larder for your activity. ¿When on pay?: each year. Because of each year we need the environmental services. People pay your income to public administration, the Natural Capital Bank administer this incomes for the land stewardship.

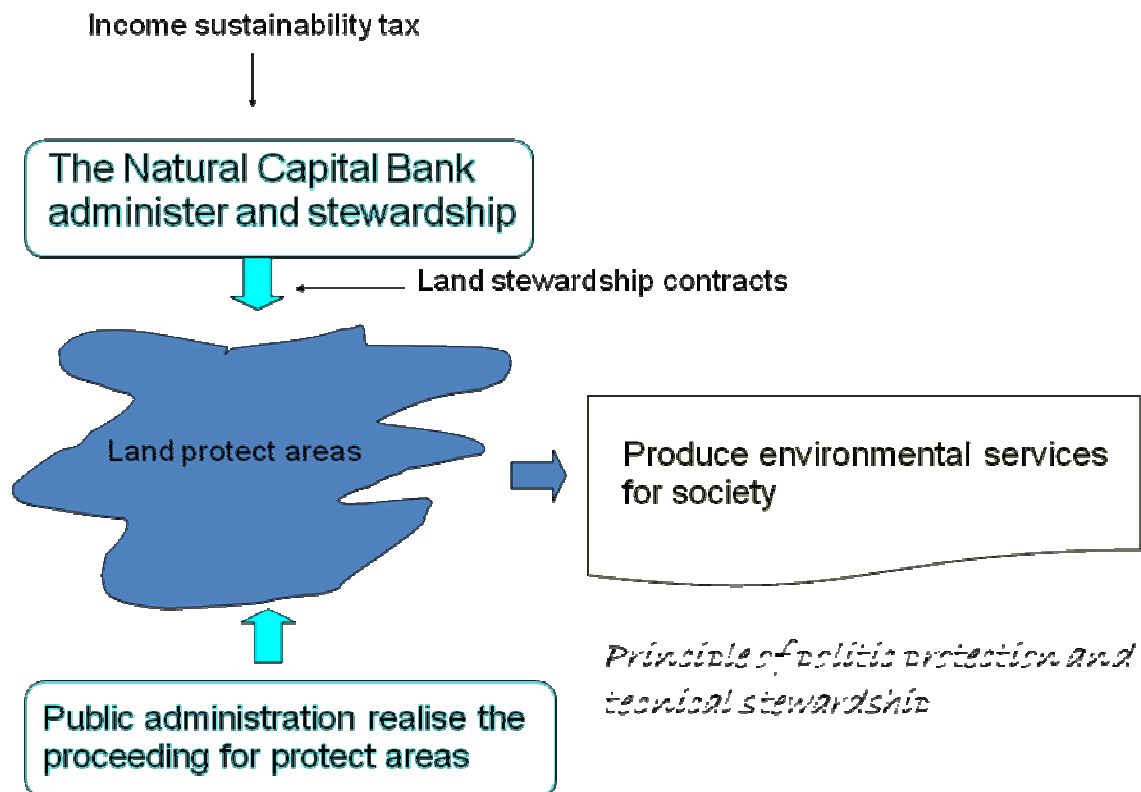


Figure 2. The natural resources as a environmental services

¿Which is the propriety obligation?: to maintain the environmental service and to renounce of urban development. So if the contract is breached, for example because the same administration promote a publics works in the area, the propriety must return the quantities paid and this cost must to be paid for the

agent which caused the breached. This is a way of internalize the cost of sustainability.

So the Natural Capital Bank has the objective of to save the natural resources with public acknowledgement.

Finally is necessary to revise the land propriety theory. The last speculative real estate cycle prove what the absolute land propriety is opposite to the progress because the land market for urban development breaches the law of supply and demand and is absolutely inefficient for save the natural resources for a long time.

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