

***“Sustainability of Territorial Projects. A Proposal”***

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**Abstract:** This paper review efforts devoted to sustainability over the last years from different points of view. First of all, a conceptualisation and modelling of the concept is presented from a “macro” perspective. Next, some ideas of how sustainability could be implemented in a territory are given. This could be considered the “meso” vision. Finally, the “micro” perspective from the project level is tackled. In this sense, we propose a *check list* to select projects contributing to sustainability. This proposal is only one aspect for the beginning of a long way.

## 1. SUSTAINABLE DEVELOPMENT CONCEPTUALISATION

Conceptualisation of Sustainable Development is not an easy process. This broad term could lead to several interpretations. The concept was created within a changing context at the international level. A general awareness was raised about the two main problems generated by capitalism: poverty and environmental degradation. Natural resources were not included in economic analysis up until the second half of XX Century.

Sustainability implies “maintain through time”. From an economic point of view welfare is what should be hold. There are several definitions for welfare concept, but all of them include economic aspects as economic development; social aspects as quality of life not only for present generations but also for future generations; and environmental aspects as lack of pollution.

Sustainability theory focuses on two main criteria. First one concerns to natural resources. They are considered natural capital and economic analysis should treat them as any other type of capital. Natural capital should be kept to be passed on to future generations. Equity is the second aspect in Sustainability theory, both inter- and intra- generational equity.

Sustainable development is raised from two dimensions. A territorial one, focused on needs’ satisfaction of present generations living in different territories. On the other hand, a temporal dimension which regards to needs’ satisfaction of future generations. Universalism should be the starting point of intragenerational equity. In this sense, human development should achieve people generating by themselves opportunities to produce resources to live “worthy lives”, guarantying at the same time similar opportunities for future generations.

Assuming Sustainable Development is influenced by economic growth models and focused on human needs’ satisfaction; we could say it is: i) anthropocentric (natural resources preservation is subordinated to human welfare); ii) based on interterritorial solidarity (it should contribute to satisfaction of needs in every territory); iii) based in intergenerational solidarity (it should allow needs’ satisfaction of future generations). This development model is limited by the Biosphere carrying capacity. It means that sustainable development should improve human quality of life without exceeding ecosystems’ equilibrium. Ecological limits should be defined, but also criteria to preserve natural capital. Concepts integrating sustainable development could be made operational in two ways: strong sustainability and weak sustainability.

Weak sustainability assumes substitution among natural capital and manufactured capital and gives credit to technological possibilities to replace natural resources functions within the production process. On the other hand, strong sustainability presumes complementarity between natural and manufactured capital, therefore technology cannot substitute different kind of capitals. As weak sustainability cannot guarantee constant welfare through generations; strong sustainability seems to be the desirable option. In this model, thermodynamic laws are considered in production processes and in economic exchanges. Uncertainty is the main driver; therefore “precautionary principle” should guide natural capital preservation considering security margins; that is because operating in the optimum

levels of capital does not guarantee ecosystems' stability. Strong sustainability should guarantee species preservation, minimum standards for impacts on environmental quality and sustainable use of renewable resources.

Conceptualisation of sustainable development results on a specific model and moving to action means materialising it into a specific territory through sustainable policy. This should respect global environmental limits and interconnect objectives of several policies—economic, social, environmental policies and others— within the framework of institutions and actors operating in the same territory. Sustainability policy may establish goals in terms of sustainability and resources to achieve them. In other words, the aim should be rectifying the unsustainable aspects of development through policy intervention. Generally speaking, every policy should establish limits to natural resources exploitation to keep i) life functions, ii) specific level of natural resources to maintain production of manufactured goods, iii) economic welfare in terms of utility derived from the environment, and iv) equity (inter- and intra- generational) in access to natural resources.

Sustainability policy design depends on the theoretical conceptualisation of sustainable development and its derived models. It will differ if the reference is weak sustainability or if it is strong sustainability.

In order to meet environmental sustainability criteria, a global sustainability policy is needed. Local sustainability policies should not only focus on preserving natural capital located on the territory but also consider global environmental sustainability. How social and global environmental limits are materialised in a specific territory? Sustainable development actions have been led by “Think Global, Act Local” premise over the last few years. Some questions could arise in its implementation, for instance what is the “local” scale? How do we include global limits in local dynamics? What actors could make sustainable development operational? Answers are behind the concepts of governance and territory.

Active Democracy or Good Governance could give solutions considering global limits, both in environmental and human terms, but also to implement at the local level solutions achieved at the global level. Institutional framework—set of norms and rules performed by territorial actors and its organisation— is decisive to implement sustainability values in territorial development. Two levels of governance are required. On one hand, the international level at which alternatives to respect biosphere global limits should be established. On the other hand, the territory as a key level for inhabitants' needs satisfaction. It shapes dynamics of relationships among public and private actors, and those have influence on production and consumption processes of any society and on how social relationships are structured.

Local level is the territory where policies designed at national or regional levels are implemented. Territory is conceived as a complex dynamic system, an open space socially built interchanging networks, strategies and interdependences among actors operating in that specific territory (Leloup, Moyart and Pecqueur, 2004). This complex system evolves and regulates itself. Its autonomy depends on its identity, its history and its specific dynamics. The evolution of territories should be coherent with sustainable development

principles. In addition to global environmental limits, the key to achieve global sustainable development is the sustainability of every territory and their population.

## **2. MODELLING: APPLICATION TO A TERRITORY**

Conceiving the territory in this way, next question to arise is: What elements need to be considered to guarantee sustainability in a territory?

Key factors highlighted by the theory of sustainable development are natural capital maintenance and equity. In this sense, what is the natural capital to be preserved at the local level? How to achieve equity? How do they relate at the local level? Answer to the first question could be given by studying ecosystems, not only those located in the municipal territory, but also the ones located in surrounding areas. Identification of ecosystems and their interconnections give us an idea about capital to preserve and its functions. Basic indicators are critical natural capital, ecosystems carrying capacity and minimum security standards.

Besides this, policies with impact on territory should be studied and the model guiding local development determined. Our choice is strong sustainability, in which sustainability principles should lead local decision making. Reality becomes complex when numerous administrations have different competences managing sustainability principles. Moreover, actors (enterprises, associations, scientific community, etc.) not always operating in the same territory are also involved in their implementation. Institutional dimension plays a key role in territorial management.

One of the problems of restricting the analysis to a local area is that it is not an autonomous system in terms of resource use, since most of the consumed resources come from outside. Furthermore, when human settlement is not big, it is neither autonomous in terms of generated resources and it does not usually constitute an employment basin; therefore inter- and intra-municipal transport system is decisive for sustainable development. In this sense, the study of policies and actors with territorial influence is one of the keystones for sustainable territorial management. It would also shape the structure of the territorial information system supporting policy making, including indicators for municipal sustainable development.

Equity application as second sustainability key factor has a twofold dimension. Intergenerational equity is raised by preserving natural capital, among others, as a bequest to future generations. Intragenerational equity is suggested from universalism, focusing on people's ability to generate opportunities to "live worthy lives". At a global scale, consumption decisions and development aid influence global consequences of local decisions, from the social sustainability point of view. At a local scale, attention must be put on satisfactors. Culture by values, environmental and sustainability education and transparency in information induce responsibility in consumption and production patterns; which could be fostered by administration.

Educational level given to population and the typology of employment (mainly job posts) created in the territory will have great influence on inhabitants' ability to generate quality

of life opportunities. Balance between human capital and employment opportunities generated should be achieved. From this point of view, two types of studies are required to build a sustainable local development model. On the one hand, social policies with local impact; on the other hand, institutional framework and actors networks.

Relationship between natural capital and equity in local area is based on policy coordination and the sustainability policy design —or introducing sustainability as a transversal factor in every policy implemented in the territory. Agreement among territorial actors on sustainability policy or sustainability of territorial policies is the successful factor, but we are aware of the difficulties of implementing it in reality.

Studying territorial policies and sustainability policy requires a broad and detailed information system to analyse real policy effects on territory, their contradictions, incentives or behaviours they promote in the long run. Local information system should be connected somehow to information systems of superior levels: regional, national, European, etc. It should feed decision making regarding to policies territorially implemented with results and side effects, not only in local territory, but also at the global level.

Territorial information system should be the common framework to include information regarding to the progress made by a territory in sustainability terms, but it is not always possible to design or maintain such system. A policy counts on indicators, sources, methodologies and objectives; different from the ones of another policy implemented in the same territory. Despite of existing important information groundwork in almost every territory, it should be fitted in a model integrating all sustainability dimensions.

### **3. OPERATIVISATION: SOME GUIDELINES FOR PROJECTS**

Considerable efforts have been done in theoretical conceptualisation and modelisation of sustainable development since the sixties— twenty years before the term was coined. Those progresses have been mainly developed from a “macro” point of view, for instance, sustainability modelisation based on general models of optimum consumption paths to find “sustainable yields”, although other models have also been elaborated from individual welfare maximisation (micro view).

However, studies to implement sustainability modelisation to a territory are less abundant. Works produced in this sense are related to modelling dynamics with influence on regional or local sustainability. Design of sustainability strategies and policies at international, national, regional, and even local scales; is another example of works developed over last years.

Fewer efforts have been given to the “micro” scale. From the business point of view, there have been elaborating sustainability reports and stock-exchange indices; both representing somehow the business’ sustainable management. Resources have also been assigned to environmental education of families and citizens. But, tools to analyse sustainability of territorial projects have not been elaborated so far. In our opinion, this field is very likely to restrain unsustainable trends of territorial development.

Assuming development as a broader term than economic growth, community development is not only boosted by business activities, but also by changes in institutions, norms and citizens' attitudes; achieving integral welfare of population. In this sense, a great variety of actors actively work in the development of social projects resulting in a common welfare increase. Those actors implement projects within territory directly or indirectly influencing community development, not only growth.

Their actions change institutions, creating entities or infrastructures to achieve social goals; for instance, building hostels or refuges. They also stimulate changes in customs through education and training; ease insertion through inclusion projects; fight for Human Rights; defend justice and equal opportunities in resources access; etc. All those projects contribute to the social dimension of sustainable development from the intragenerational solidarity angle. But actors do not usually count on tools to assess their actions from an integral conception of sustainability.

Other actors modify customs through environmental education promoting respect to the environment; or customs related to public health through nutritional campaigns; or develop actions focused on the preservation of natural resources located within a territory (spaces, flora or fauna); or modify society consumption or production patterns. Those entities work in favour of environmental dimension of sustainability; but they do not always take into account in their projects the other sustainability dimensions.

It may be appropriate to reckon on tools to integrate all sustainability dimensions through every phase integrating a project: needs diagnosis, project design, implementation and assessment of results. In this paper, we will focus on emphasizing the importance of developing tools to ease project selection process considering sustainable development from a holistic view.

Due to complexity and multidimensionality, sustainable development cannot be conceived from only one discipline or field. In the same way, the sustainability of a project or a strategy, cannot be defined exclusively by a type of actor: neither scientific community vision, not social entities or environmental organisations vision. Common work is needed to provide for every aspect included in all dimensions of sustainability: technical, conceptual, administrative, community or strategic features. Real effective participation of actors operating in the same territory at different levels with different visions and interests is an essential requirement to set solid basis to build projects favouring territorial sustainable development, or at least, not diminishing it.

We are referring to participation that drives a consensus on materialising basic pillar of sustainable development in the shared territory. That is, natural capital maintenance and equity. Common objective should be development sustainability, recognizing different paths from which achieving it. Results of this common work may have positive consequences on actions developed by every territorial actor.

Form this premise, and descending to a project baseline, it is necessary to consider the great variety of needs and projects identified by every actor and the scarce resources to face them. Elements considered for prioritising projects to be finally implemented depend on manifold factors, interests and people. At this point, considering one more element in

the selection of resources and projects to implement will be necessary. That is, the contribution of the project to sustainable development, at a territorial and/or global level.

It is not our aim to develop this tool because our vision is biased by our profession and our activities. We pretend to state the need of generating tools to support sustainable management of territorial projects. A tool to test the contribution or reduction of the project to the main elements of sustainability would be desirable. Every project implemented by each actor has specific nature, different objectives and diverse strategies to achieve them. In spite of this, basis for a common check list could be settled for projects with economic nature, or social objectives, or environmental character, or even institutionally focused.

In terms of sustainability, there are common aspects to any kind of project: transversal features. In this sense, questions could be raised related to the following aspects: project consequences in other sustainability dimensions, trade-offs among different capitals influenced by the project (human, natural, manufactured or social capital), or the participation of other territorial actors in the project. For instance, we could ask: how does the project consider its effects on the environment (natural resources exploitation, pollution generation, territorial pressure, etc)? and, its effects on customs and behaviours of local population?

Another questions set of the check list could be oriented to the way in which the project contributes or decreases preservation of the natural capital located with the territory where the project is implemented. Questions as: do we enter in books the energy expenditure by the project?, and the energy consumption by the organisation we belong to?, what are the products we recycle?, how is our policy related to materials reduction?, are non-renewable resources taking into account in decision making?

As is to be expected, we cannot forget questions related to the social dimension of development, as inter- and intra-generational solidarity. Some examples could be: what kind of jobs are generated or promoted by the project?, are all dimensions quality of life of project beneficiaries considered?, and the ones for other inhabitants?, how are interests of other generations included in the project?

Those questions are just few examples to conjure up a mental picture of some transversal aspects of sustainability for any kind of project implemented in a territory. Our suggestion is to build a questionnaire to select projects based on sustainable development conceptualisation and modelling in a territory by actors operating in it. Once reached a consensus on the themes and questions to be included in the questionnaire, punctuations, intervals and diagrams could be established to show how close or far away is the contribution of the project to any dimension of what all actors have understood by sustainability of their territory.

As a tool, its use by the greatest number of actors would be desirable. This is why its development cannot be conceived without a real participatory process targeting a real increase in quality of life of people staying or that will stay in a territory.

#### 4. CONCLUSIONS

There is a need to conceptualise sustainable development before its implementation due to its holistic nature and it should be tackled from a multidimensional perspective. Two are the main criteria of sustainability theory: preservation of natural capital and inter- and intra-generational equity. Both aspects could be understood differently depending on who, how and when is interpreting, therefore features and consequences of the interpretations of both criteria should be made explicit.

Sustainability policy —or the sustainability of every policy— depends on its conceptualisation and implies moving to action in a specific territory. In this context, territory is conceived as a complex dynamic system, an open space socially built interchanging networks, strategies and interdependences among actors operating in it. A great variety of actors implement their actions in a specific territory and they have not always a guide to assess their contributions to sustainable development, in its multiple dimensions. A check list at the project level could be a suitable tool to integrate various dimensions of sustainable development within projects only focused on one sector or dimension of sustainable development.

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