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TERRITORIAL STRATEGY OF NAVARRA. A PIONEER CASE IN APPLYING THE EUROPEAN TERRITORIAL STRATEGY.

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Abstract:

This paper presents one of the few experiences across Europe of applying the European Spatial Development Perspective. The regional government of Navarra, Spain, has produced a “Territorial Strategy” for the region accepting as the framework of reference the European Territorial Strategy. The project has taken two years and it is now ready to be approved by the regional Parliament. The paper describes and analyzes the main phases of the project. The project started with a comparative analysis of policies and regions having to do with spatial strategies. The scenario techniques were used to develop a trend scenario and a future scenario. This technique is equivalent to a SWAP analysis but it emphasizes the interrelations among all variables that characterize a given unit of analysis. The scenarios give rise to the challenges for the future. An important innovation of the project has been the production of six synthetic indicators through which objectives having to do with competitiveness, social cohesion, sustainability, polycentrism, accessibility and intelligent management of culture and nature can be quantify and used for monitoring and evaluation. The participation process, another important characteristic of the project, is described in its endeavours along all the project.

1. Introduction

The world today is characterised by remarkable technical advances and at the same time by an uncertainty that cannot easily be translated into computable risk. This gives rise to the construction of desirable futures rather than a mere extrapolation of past events. It involves pro-activity and participation. The expression of the wishes to achieve long term objectives shapes strategy.

Social scientists have for a long time considered the spatial units of their analysis to be intrinsically invariant, since they pursued the same universal principles. We now know that there is a tension between economic and social forces that operates on a wide scale, as well as the diversity of specific spaces with relation to their economy, race, demography, culture and institutions. Territorial strategy is an integral part of this tension, something which goes beyond an understanding between local and global issues, and which attempts to understand change processes in both the interior and alongside the economic and social systems of the spatial units under analysis.

These premises, derived from classical strategic analysis and modern economic geography¹, are the basis for defining the Territorial Strategy of Navarra (TSN) as the *territorialised and agreed design of the economic, social and environmental Navarra in 25 years*. A configuration agreed on by the main social-economic and institutional agents in contemporary Navarra and, therefore, a bonding contract to achieve a particular future between the different government levels, between the latter and the public, between generations and between genders.

Due to the wish of the actual government promoting TSN, the latter had to be set in the framework of the paths covered by European Territorial Strategy (ETS). The ETS presents a vision of the future territory of the Union that is supported by Member States and the European Commission. It represents a reference framework for effective spatial development policies and aims to facilitate the actions of those publicly and privately responsible for formulating policies and actions. ETS tries to promote the integration of different territorial structures and requirements into spatial development policies, as well as coordinating different administrations in accordance with their respective powers and without reducing the great diversities existing in European territory. The three main objectives for spatial development in the Union are:

- The development of a balanced, polycentral urban system and a new urban-rural relationship.
- Equal access to infrastructures and knowledge.
- Prudent management and protection of natural and cultural assets.

2. Phases in the Territorial Strategy of Navarra

The territorial strategy of Navarra lies within this reference framework and its working process corresponds to the following principles as a result of the above.

A medium and long term view, above all. This involves going beyond the daily actions of governments and introducing strategic thinking into their activities, which has two important implications. It requires the participation of all government departments and forces a political consensus. This is the case because it goes beyond the policies, actions and/or plans of one single government by designing an economic, social and environmental future in a specific territory that must be achieved through the wishes of society as a whole. Something which makes public participation a crucial need for the success of the Strategy.

Continuous participation, throughout the whole process, is the second pillar at the backbone of the whole working process. Participation still has a long way to go in current democratic systems, but the future can only be built by uniting the wishes of all participants in the social framework. In third and last place is rigorous consideration

¹ See The Oxford Handbook of Economic Geography, edited by Gordon Clark, Maryann Feldman and Meric Gertler; Oxford University Press, 2000.

from the beginning so that the strategy can be quantitatively evaluated and *continually assessable and modifiable* if circumstances so require.

Working phases are described quickly, which does not prevent one from realising that the working process took place over two years.

Two main phases –analytical and propositive- described the works undertaken to complete the Territorial Strategy of Navarra. The first one started with a benchmarking of regions and territorial policies and described the actual situation of the region. It was followed by a diagnosis about today's obstacles and problems for growth and the main challenges lying ahead into the future. All strategic processes should be based on analysis of a current situation and be able to define what we wish to achieve. There is nothing innovative in this. The innovative part consists in applying *two basic principles throughout the process: the interrelationship and interdependencies between all public and private activities and the search for futures that are desirable but possible from the start.*

The second phase had the final objective of formulating the strategy. For that was absolutely necessary an effort to define and quantify objectives and devise alternative scenarios to be discussed and chosen by all participating bodies. Finally, the document of strategy, as a result of the whole process, was obtained, approved by the regional government and exposed to public opinion before the Regional Parliament approved it.

Now, I shall briefly describe the process phases by showing how those principles above referred, touch all the phases.

2.1. Comparative analysis

Comparative analysis or “benchmarking” is the first exercise in future design of the strategy. Benchmarking was carried out for “copiable” regions and policies. Benchmarking in colloquial terms means copying from the smartest, but it also *involves setting about planning possible futures.*

We selected criteria from the United Nations for human development as the first filter for determining the “smartest” regions. The second criteria consisted in seeking regions that were comparable to Navarra. And the third filter analysed the contents of these first “smart” regions with the ETS criteria. We thereby started to check whether the ETS is a desirable strategic framework and whether this leads to a series of policies/filters that the “smart” regions have carried out, or else we would see that ETS can redefine initially successful strategies (and with other strategic principles). We therefore obtained some defining elements from the benchmarking exercise for a desirable strategy in Navarra.

The comparative analysis *concluded that there are no ETS regions in the strict sense, that is, there are no regions whose development model can be framed exactly into the spatial development criteria suggested in the ETS.* The territorial strategies and territory development strategies designed in different countries and European regions have not

sprung from integrative plans for principles of sustainability and economic and spatial development. *These strategies and plans have instead been based on unconnected sectorial policies.*

And there are few regions that are comparable with Navarra in spatial and socioeconomic terms. Territorial strategies for most regions, taken overall, cannot be used in this sense as a reference mark for Navarra.

We can however identify some atypical regions, regions that in relative terms show a greater similarity to ETS criteria and which show a high degree of development. These regions are Noord-Holland (Holland), Ile de France (France) and Köln (Germany).

2.2. Sectorial policy analysis

This second aspect of the preliminary analysis is related precisely to the other principle indicated: *interdependencies*. The strategy has to be a coherent filter for sectorial policies. *Sectorial policies operate in the European Community framework and have a regional impact, but the actual policies operating in the regional framework also condition any medium-long term planning.* This preliminary analysis of sectorial policies has to be carried out with a strategic view so that they can be included in the general strategy or so that they can be modified in accordance with a new view of the future Navarra.

The European Commission's White Paper on governability identifies community policies with a clear territorial impact in the following chart. The policies having to do with agriculture, transport and transport networks, environment, R&D, education, health and regional policies were analysed as being those where a clear superimposition of powers existed with the Regional Government of Navarra, and which consequently proved relevant in the framework of the Territorial Strategy of Navarra for detecting complementary factors that might exist between the activities of different Public Administrations.

The following plans of the government of Navarra were also assessed: Navarra Integrated Waste Management Plan; 1999-2004 Navarra Strategy for Conservation and Sustainable Use of Biological Diversity and Action Plan; 2001-2008 Strategic Hunting Plan for Navarra; Salmonoid Fish-Farming Development Plan in Navarra ; Navarra Environmental Education Strategy; Hydrological Plan North III; Navarra River Cleaning Study. Global Plan Proposal; Navarra River Cleaning Study; Extension Area Study; Framework Environmental Attention Plan for Navarra Primary Health Care Teams;. Navarra Strategy for Conservation and Sustainable Use of Biodiversity; 1999-2004 Biological Diversity and Action Plan; Navarra Forestry Plan; Forest Fire Defence Plan. Cantábrica Region; Forest Fire Defence Plan. Pyrenees Region; Forest Fire Defence Plan; Ribera Region; Forest Fire Defence Plan. Tierra Estella Region; Navarra Canal Construction Project (1st section); Navarra Canal Construction Project (2nd section); 2000-2003 Navarra Technological Plan; 2000-2006 Navarra Rural

Development Programme; Information Society Promotion Plan in the Navarra Region; 1998-2005 Plan for Fighting against Social Exclusion in Navarra.

To assess plans it is necessary to complete a record-chart: *title, author, date, nature of contents; key words; summary of contents*. And it should take into account: *the time scale, the scope, the strategic sense, the aspects considered, social participation, permeability to changes and the capacity to mobilise resources and actions*.

2.3. Economic, social and environmental geography

Maps are a very important element. Not only because they *display data* but because they make spatial thinking necessary. Throughout the process of reflection and public participation in the Territorial Strategy of Navarra, maps have represented a reference item. Two types of maps have been essential in the process: *descriptive maps and analytical or design maps*. Descriptive maps are based on the best municipal databases available and illustrations range from different economic activities (agricultural, industry, services, employment) to transport, infrastructure and public services spatial distribution. Analytic maps describe the dimensions of the future Navarra without detail.

In this respect, the mapping process remained open throughout the duration of the Strategy. Commencing in this phase as visual support to the current situation, it made it broadly possible to define the territorialised view of the future Navarra. The final strategy document shows some elements of both the former and latter cases.

2.4. Today, development obstacles and problems

2.4.1. Thematic reports.

There are many ways to study the present. In the context of the TSN it was of interest from the beginning to tackle the present from a strategic perspective. This is why we decided to use the scenario technique (current and future) from various traditional sectorial views. This allowed the subject reports to produce, from their respective variables –the economy, the environment, infrastructure, towns and settlements, equipment, social services and culture- and framed into a Spanish and European context, *the starting point and two scenarios: the trend and the desirable situation*. To establish pure trends, it is necessary for the diagnosis to be dynamic -ideally incorporating the 25 previous years-. A trend scenario is a scenario of what would happen if nothing was done and is used as a means of checking for a desirable scenario. The basic diagnoses are in addition territorialised into the different subspaces in Navarra. This allows the first public participation process in this diagnostic phase. Eight territorial boards were established in order to help configure desirable scenarios for the different subspaces and for the whole of Navarra. The basic analysis was in the end as follows:

- Basic description of the current situation and subareas. Flow description (how subareas are interconnected with respect to analysis variables).

- Detailed analysis of the basic problems.
- Analysis of trends. Trend scenario as a whole and by subareas.
- Basic change factors or variables (it must contain an analysis of current Navarra regional government plans in operation).
- Cross analysis. Effects of variables when analysing the rest and the impact of others on the former
- Future needs. Plans. Desires. The desirable scenario and according to subareas.

The creation of scenarios according to variables, as well as incorporating the views of the government, of experts and territorial meetings should contain items crossed with other variables/subjects. This requires some detail.

2.4.2. Cross elements

These involve a matrix view for preparing every subject report and, of course, for territorial reports. This means that each subject expert must think what their variable contributes to the others, or how their variable affects the others and how it is affected by each of the other variables. The following charts give examples of this. In the first case, the numbers represent a subjective view of how important the interrelationships are.

Composed of ↓	Contributes →	1 Pe	2 D	3 Ec	4 I	5 Eq	6 CI	7 SS
1 Physical environment / land uses		3		2	2			
2 Demography		2	3	2				3
3 Economy		2	1	3	2	2	1	2
4 Infrastructure				2	3	2	2	2
5 Equipment				1		3		2
6 Culture		2		2			3	
7 Social services: education, health...			2	1			2	3

PHYSICAL ENVIRONMENT / LAND USES				
	Effects of physical environment on		Effects on other subjects / variables on the physical environment	
	<i>Trend Scenario</i>	<i>Desirable Scenario</i>	<i>Trend Scenario</i>	<i>Desirable Scenario</i>
Demography				
Economy				
Infrastructure				
Equipment				
Culture				
Social services: education, health ...				

Some examples will clarify this important task.

1. The impact of human activity on the environment has two features: it usually creates external effects and economies of scale, making it usual for associations of municipalities and other forms of association and cooperation to arise. The foreseeable growing demand for increasingly rigorous environmental management will have major consequences on local bodies.

2. At the same time, and for the same reasons, citizens demand residential environments of increasing scenic and environmental quality, but after a certain point, congestion becomes excessive and the installation of additional members of the public reduces the quality of the environment previous residents enjoyed. This increased concern for the environment will influence urban design and basic infrastructure.

3. The rural environment, land use and agriculture are increasingly considered as keys from an environmental and landscape point of view. Healthy agricultural practices, therefore, not only involve considering the effects on consumers, but also on the environment.

4. Concern for the environment will lead, as we have seen, to increasing per capita demand for land for residential reasons. This will involve an increase in the distances and cost of infrastructure. An increase in the immigrant population is at the same time foreseeable, with the consequent need to integrate recent arrivals' needs for basic and essential services, and to adapt their levels of skills to employment market demands .

2.5. The foreseeable future

2.5.1. Desirable scenarios.

Interrelationships appear again in desirable scenarios (based essentially on the detection of obstacles for sustained development and according to public wishes).

For example: Will the trend continue for the population of Navarra to become concentrated in certain areas (Pamplona, Tudela, Alsasua), while others become depopulated? How will the new technology which defines the information society transform social services? In 25 years people without any user level IT skills will perhaps be digitally illiterate or even digitally destitute. How can we avoid this danger of exclusion with respect to both the people of Navarra today and in the future? This challenge requires a great effort at both an educational level and in providing infrastructure and the necessary points of connection, so that all the people of Navarra have the chance of access to new communication means (should rural post offices be replaced with cyber-rooms?). Furthermore, will it be possible to bring the administration closer to the public virtually, that is, for any person in Navarra to carry out administrative transactions from home or, at least, from their locality without needing to go to Pamplona? The physical distance will at the same time lose part of its current relevance, how will this influence population distribution in the territory,

infrastructure and social equipment? Will it favour or harm this evolution of ETS objectives with respect to polycentrism and equal access to public services?.

Globalization also affects our way of understanding public actions, accentuating competition between all types of institutions, economic systems, cultures, etc. Fiscal competition between States to attract investment, social dumping, etc. is increasingly real. Different regional governments must offer an increasing amount of services that lead to greater competitiveness in the local economy and, for the same reason, require less resources from society so as not to interfere in the allocation of resources from the private sector. Faced with the globalisation of the private sector, the public also needs to be globalised, but how can it be done from a local or regional perspective?.

The increase in productivity in the last half century has been unparalleled in the history of humanity, and technical progress will foreseeably accelerate at an increasing rate. This has made it possible to produce more with less effort, and this reduced effort leads to the increasing value of leisure. Increased life expectancy for the population has an effect in this same direction, it being necessary to ask what types of changes will produce this tendency, both in public and private sector action, in management of the cultural heritage and the environment, since, in the last analysis, their ultimate owners, the people of Navarra, will increasingly demand it being exploited for both their actual enjoyment and for making it profitable as a source of income.

2.5.2. *Integrated diagnosis.*

Trend and desirable scenarios can be transformed, for easing the exposition, into a list of obstacles and opportunities. This is illustrated below:

OBSTACLES:

- Reduced accessibility in some sub-areas.
- Excessive concentration of functions.
- Peripheral situation of Navarra with respect to supra-regional development hubs.
- Inexistence of intermediate towns.
- Difficulty of access to goods and services in small villages, especially in the mountains.
- Aging.
- Rural area depopulation.
- Inefficient use of housing stock.
- Increase in single parent families.
- Unbalanced sectorial development.
- Territorial imbalance.
- Primary sector ageing.
- Low female participation.
- Little knowledge society development.
- Little public transport and rail development as opposed to massive use of private transport.
- Peripheral situation with respect to major communication centres.

- Little mobility.
- Unequal connectivity.
- Little coherence between transport modes (non global design).
- Small size for full exploitation of natural resources, especially hydraulic ones.
- Worrying “ecological footprint” levels and territorially unequal.
- Excessive influence of agriculture .
- Little intermunicipal cooperation.
- Inefficient use of budgetary resources.
- Lack of suitable local development management capacity.
- Little exterior projection of Navarra culture.
- Uncoordinated sectorial policies.
- Little supply development.
- Increased degree of dependence.
- Greater social vulnerability and risk of exclusion .
- Growing child and youth care requirements.

OPPORTUNITIES:

- Immigrant population
- Lengthening of active life
- Integration possibilities in a macro-regional context.
- Capacity to attract bordering areas.
- Special relevance of the production of renewable energy.
- New social needs and new employment areas.
- Potential tourist development.
- Geographic position in one of the most dynamic hubs in the European economy.
- Good accessibility
- Relatively small areas for integral territorial cables.
- Low population density and abundant natural resources.
- Possibilities with the Navarra Canal.
- Sharing natural resources with bordering regions.
- Development of electronic government.
- Cultural assets with international projection: Camino de Santiago and San Fermín.
- Employment creation capacity and greater social cohesion through volunteers.
- Initial educational levels higher than Spanish average.
- High health level and specialities with international prestige.
- High degree of social cohesion.

Furthermore, the trend and desirable scenarios constitute the basic ingredient for integrated diagnosis of the reality in Navarra. This integrated territorial diagnosis answers six fundamental questions:

1. **What are the activities in this territory?** A question which is answered with the description of the activities of all types that are carried out in the territory.

2. **Who does it have relations with?** The location of the territory with respect to nearby or distant, material or immaterial environments that condition its activities.
3. **What is it for?** Identification of the territorial qualities and activities that can be carried out better in other territories.
4. **Who mobilizes the territory?** Identification of the actors and groups who actively intervene in territorial development.
5. **What are the resources for development?** The answer to this question will allow us to identify the strong and weak points of the territory.
6. **Where is it going?** A difficult question to answer and which summarises the future of the territory: its capacity to maintain its main features, to improve or even destroy them.

2.5.3. *The objectives or challenges and the strategic policies.*

“The modern concept of a territorial strategy does not merely consist of a combination of spatial planning and regional policy, or of rural and urban development. It covers all actions promoted by the government to promote the growth of all territorial units and to reduce disparities between them, particularly in development opportunities”. (OECD, **Territorial Outlook, 2001**)

Now it is necessary to expand on the sixth question, **Where is the territory of Navarra going?** The integrated diagnosis has given a clear view of where it would go if trends were allowed to come into play, but it has also pointed to some items that represent opportunities for change and that are desirable for building a future.

The next step consists in studying the shape that the Navarra of the future may have. But it is necessary first to go over certain points. It should be recalled that the TSN was founded as a shared project between the government, citizens and institutions making up civil society, in order to draw the map of Navarra in 2025. It began with a diagnosis of what exists today in Navarra that was turned into reports on the different variables of interest: the economy, demography, settlements, public equipment and administrative organisation, infrastructure, social services, education and health, natural assets and cultural heritage.

The people of Navarra participated extensively in surveys, informative forums, sectorial meetings with different Navarra government departments and regional boards in the different areas that make up Navarra. *Based on this wealth of knowledge and desires we know what Navarra is today.*

From this point, it is a question of *defining what we want to achieve with greater accuracy.* To do this, we will establish *objectives with more specific outlines.* *And in this way it will be possible to plan the most appropriate strategies. The strategies, therefore, are changes at the helm and new paths for achieving the proposed objectives.*

We can define these objectives to be achieved as challenges, because this is precisely what they are. They represent difficult objectives to achieve, but they also summon public and private wishes.

As is to be expected, the actual context of Navarra society today is the European context. And Europe has clearly defined what its development objectives are and, also, its territorial development objectives. This is why Navarra advocates them, and because they are not incongruous with current reality.

Europe has opted for becoming a competitive knowledge-based economy with a cohesive society and sustainable development. And these three items have been translated into the following territorial development objectives: polycentrism, accessibility to infrastructure and knowledge and intelligent management of nature and culture. As stressed in the following chart, relations between development objectives and territorial objectives are close. It could in fact be seen in the comparative analysis study carried out in the TSN framework that there is a close relationship between development and polycentrism and between development and accessibility. There are also close relations between polycentrism and accessibility. The relationship between polycentrism and sustainability on the other hand is not positive, quite the opposite, and this is consequently the case between polycentrism-accessibility and intelligent management of nature and culture. An additional challenge with regards to growth is obviously to change the nature of the relationship between the two first objectives and the third one. It should be taken into account that we are dealing with the years to come and verified relationships are products of the past, the future thus being more open.

European development objectives	Territorial Objectives	Resultados
A competitive, knowledge based economy	Polycentrism	A competitive and socially cohesive territory
A cohesive Society	Accessibility infrastructure and knowledge	An accessible, connected territory
Sustainable growth	Intelligent management of nature and culture	A territory with a learned, high quality culture

The chart summarises European development objectives and territorial objectives, indicating the relationships between them and ending with the desired results: a competitive and socially cohesive territory, an accessible, connected territory and a new

territory culture: one that is learned and of high quality. This is the reference framework in which the challenges are situated, and whose analysis represented the main part of the strategy.

The following chart outlines the relationship between identified challenges and their positioning in the context of territorial development objectives for Navarra. This chart summarises this section through the relationship between identified challenges and the major territorial objectives in the European Territorial Strategy that Navarra has advocated as a preliminary working hypothesis. It should be remembered that the ETS is proposed as a source of inspiration for regional territorial policies by establishing three territorial objectives: intelligent management of natural and cultural resources and public access to infrastructure and knowledge. Objectives related to the challenges are displayed here (in the same colour) according to the following diagram:

Territorial strategy objectives and future challenges	
Polycentrism	• Checking population ageing and increasing the birth-rate
	• Preventing and combating rural area depopulation
	• Obtaining a modern and integrative employment market
	• Harmonising family and working lives
	• Fighting against social exclusion
	• Converting Navarra into a region for learning and innovation
	• Incorporating small and medium sized companies into the innovation culture
	• Encouraging technologically-based company development
	• Increasing the entrepreneurial spirit among the people of Navarra
	• Pamplona, gateway city, attractive and cooperative
	• From Navarra looking inwards to Navarra looking outwards
	• Towards a powerful electronic, online government
	• Developing effective and accessible governmental levels
• Making the private sector participate in regional strategies and policies	
Accessibility to infrastructure and knowledge	- Increasing tertiary sector participation in social structuring
	- Extending the health sector and the supply other health services
	- Developing socio-health care
	- Educating to "learn throughout one's whole life"
	- Educating to face social and demographic changes
	- Educating to supply knowledge
	- Making use of TIC to integrate less populated areas
- Reconciling individual mobility with group interests	

The chart stresses the link between different elements that underpins established challenges. Territorial objectives cannot lose sight of the fact that the backbone of a territory consists of the relationship existing between human activity and the physical environment that favours or supports it. This is why polycentrism is related to balanced internal development of the region, and this involves economic growth and social cohesion, the balance occurring when cooperation exists between urban and rural areas and between towns. Accessibility involves fair distribution of both the traditional infrastructure and new knowledge infrastructure. And intelligent management of nature and culture involves directly improving this relationship between humans and the environment and between humans themselves, so that following generations receive at least as much as the preceding ones.

It does also appear that a competitive territory depends on something more than traditional production factors: land, work and capital. It is increasingly necessary to distinguish between physical and human capital, which is provided by skills and worker training. While physical capital is in abundance today and a region may have easy access to it on the financial markets, human capital requires an extensive maturing period and it cannot be separated from the individual possessing it, that is, it is not transferable through the market. Human capital, therefore, is increasingly becoming the “scarce” resource in the economy, which causes more mobile factors – physical capital and unskilled work – to be displaced to where it is located.

Institutions are also an increasingly important determining factor in the competitiveness of a territory. In an economy where knowledge is increasingly important, relations between individuals become the main source of transmitting skills and, as a result, regional competitiveness. Many of these relationships occur through the mediation of institutions: companies, unions, public administrations, etc. The fluidity and intensity of these relations consequently depends on the quality and density of the institutional networks that channel them. Stiglitz² has also highlighted the role of “organizational capital” and “organizational technology”, which determine this institutional network and produce a certain degree of social cohesion. Institutions cover individual agents in this way from risk and the latter are willing to assure a greater level of activity and to commence activities knowing that part of the risk is borne by society through its institutional framework. The clearest example would be that of risk-capital funds used as instruments to encourage innovation, even when much subtler mechanisms exist³.

² J. Stiglitz recent Nobel Prize Winner for Economy.

³ So, for example, the belief exists in all countries, groundless or otherwise, that beyond a certain size companies are too important for the State to allow them to go bankrupt, that professional organisations and associations ensure certain ways of doing things and that, for example, crises cannot pass certain thresholds without the State intervening.

⁴ That is, the aggregate production function would depend on relations between individual production functions, relationships dependent on organisational capital and technology

The competitiveness of a region, therefore, depends much more on the competitiveness of its economic agents considered in isolation and social systems are, also from an economic point of view, rather more than the mere sum total of its parts, due to interrelations between its members. In more technical terms, while company production functions depend on capital, labour and technology, the aggregate production function depends on other factors, since it is not merely the sum total of individual functions⁴. This view is reflected in modern, regional policy that, as opposed to the more traditional version, doubtlessly valid in the first stages of industrial capitalism, considers variables such as social cohesion or innovative capacity together with more classical factors such as existing infrastructure, for example, determining and trying to influence the competitiveness of a region.

Taking this basic approach into account, the various **challenges** were analysed, whose transformation into objectives to achieve means greater adaptation of the region to the aforementioned ETS criteria.

2.6. Measurement. Indicators

The Territorial Strategy of Navarra is a participatory exercise in spatial planning to shape the desired map of Navarra in 2025. This design has been based on the basic European development objectives proclaimed at the Lisbon Summit, which are related to achieving a *competitive, knowledge-based economy, a cohesive society and sustainable development*. And the objectives of the Territorial Strategy of Navarra are expressed as achieving a *polycentral territory, equal access to infrastructure and knowledge and intelligent management of nature and culture*. With this reference framework, the next step is to build synthetic indicators that are quantitatively approximate to the stated objectives.

Take into account that “only measurable things can be changed”, which means that a quantitative expression of these objectives is of maximum interest. This will make it possible to express what we want to achieve in a clear, transparent and measurable way. And this is the only way to be certain that the changes occurring are heading in the desired direction.

We start out from weak bases, however, because no strict agreement exists about how to measure these objectives. The task here, therefore, consisted in *translating the theoretical or reasoning tradition of these principles into measurable objectives, with the capacity to be monitored and assessed over time*.

It is necessary to take into account that the aim with these indicators is to measure complex phenomena and intersections not initially well-defined. **Competitiveness, sustainability, social cohesion, polycentrism, accessibility or intelligent management of nature and culture** are, therefore, phenomena that still do not have a single definition totally shared by analysts. It is precisely in these cases, and based on partial primary information, when the construction of indicators to bring us quantitatively “closer” to each phenomenon in question acquires more meaning,

summarising statistical information about specific aspects of the above that are available in a dispersed form. These indicators can also be considered as dynamic constructions insofar as they are subject to review if the basic information or phenomena characteristics are altered.

Two synthetic indicator groups are thereby constructed:

- Indicators of a *general strategic* character, bringing us closer to the phenomena of *competitiveness, social cohesion and sustainability*.
- Indicators of a *territorial strategic* character, according to the three European Territorial Strategy (ES) objectives: *polycentrism, access to infrastructure and knowledge and management of natural and cultural wealth*.

This group of synthetic indicators brings together those indicated in the TSN proposal relating to territorial strategy, and goes further by penetrating the magic triangle of European development proposals: a competitive economy, a cohesive society and sustainable development.

2.6.1. *What are synthetic indicators?*

A synthetic indicator is a statistical instrument that allows us to quantitatively measure a phenomenon in a summarised form, and which, in the areas in question, is of an economic, social, environmental and/or territorial type. Its greatest advantages are the capacity to tackle any phenomenon, however wide its scope may be, and the flexibility in its construction, use and interpretation, depending on what we wish to measure.

A synthetic indicator must identify the essence of the problem and have a clear and accepted legislative interpretation, be statistically robust, sensitive to political intervention but not liable to be manipulated, comparable between different countries and according to international standards. To be a reference measure of a phenomenon, but not to involve an excessive burden for states, companies and/or citizens, be balanced between its various dimensions and transparent and accessible for all types of users. (Atkinson, 2002)

Taking these principles into account, there are six phenomena we will measure with synthetic indicators. *Three of them have a general strategic character, such as competitiveness, social cohesion and sustainability, and the other three are of a strategic-territorial character, such as polycentrism, access to infrastructure and knowledge, and management of natural and culture assets.* All of these are multidimensional, that is, they cover several economic, social and environmental areas that also have the peculiarity of not exactly being well-defined. This is a disadvantage on the one hand, because it hinders measurement of the phenomenon in a homogenous and standard fashion, but it also involves the challenge of trying to approach them both theoretically and empirically. The exercise is obviously new, taking into account the few attempts made at summarised measurements of these phenomena.

The process for building a synthetic indicator is explained below.

2.6.2. *Defining and measuring synthetic indicators*

The construction of a synthetic indicator is the result of a process consisting of two phases, content definition and measurement in a strict sense.

In the first place, given the complexity of each phenomenon analysed, a **theoretical approach** is offered at the same time, taking the references offered by some international bodies, such as the EU, the OECD and/or the UNO and independent experts.

Secondly, it proposes an **optimum indicator composition**, indicating all areas related to the phenomenon analysed that have to be taken into account to calculate the best indicators possible. This proposal, without ceasing to be essentially reasonable, is also subjective, since it brings together what authors understand to be the most suitable in this respect.

To calculate a synthetic indicator, two items are necessary: statistical information about the basic or partial indicators available for measuring each of the “theoretical” areas proposed above, and a calculation method.

The **synthetic indicator method** has three parts: standardisation of basic indicators, **transformation** of basic indicators that inversely affect the analysed phenomenon, and **adding together** data to obtain the final value for the synthetic indicator. This involves marking out values, ensuring the suitable symbol for the relationship between each piece of data and the indicator and “adding up” the data so that any bias in the analysis with relation to the weighting of each piece of data is minimal.

2.6.3. *Contributions of synthetic indicators:*

1. Delimit and quantitatively measure every phenomenon analysed.
2. Monitor every phenomenon in question, it being possible for them to be interpreted, therefore, as monitoring indicators.
3. To be used as a reference for establishing future objectives. These objectives can be established for the synthetic indicator as a whole (overall objective), or for its basic component (partial objectives), facilitating the possibility of simulating future simulations, which may prove useful for (re)directing economic policies.
4. Comparing phenomena, which may prove useful on a political level for establishing priorities.
5. Comparing the situation of the Navarra Region with other territorial areas (regions, countries, etc.) for every phenomenon analysed.

2.7. *Participation – Alternative scenarios*

The preliminary task of the indicators, as well as converting objectives into quantifiable elements, had an important value added. The indicators summarise an objective and a quantifiable reality. That is, it permits *further integrated diagnosis*. This time *from the objectives to achieve and, therefore, from a future angle*. Consider that the indicators

“complete” the reality in the context that concerns us, one of territorial development that is competitive, cohesive, sustainable, polycentral, accessible and intelligent in dealing with cultural and natural assets. This reality has 6 intersections that also acquire quantitative values today and which make up quantitative objectives for tomorrow. With this very powerful instrument, we can establish 4 scenarios of territorialisation. A *first view imagined Navarra being totally concentrated into one single area; a second one was limited to the development of two basic areas; a third one that deconcentrated all activities and functions to the utmost and a fourth one, which scattered development from a central area.* These extreme cases or hypotheses also served to go back to the public and once more ask for their participation. Since they are extreme cases, the discussion was easier. Furthermore, it was not a question of choosing one but of indicating the specific points of the four hypotheses that we wanted to preserve and the others we wished to avoid. And we also had the reality shaped and measured through 6 perspectives of the indicators that completed any territorial view by providing it with human content. By means of forums, consulting experts and public petitions it was possible to assess the implications of “purely” territorial scenarios with relation to the six objectives stated. The result of this process was the creation of a fifth territorial scenario which is the one that ultimately forms the final document for territorial strategy in Navarra.

2.8. Strategic document

This is the final document, which contains the desirable, assessed territorial model, and explaining the major strategic policies for achieving it. It could be summarised into two maps. The first one describes the current territorial model and the second one describes the territorial model in 2025. The maps would shape the distribution of economic activities in the territory, environmental areas, connecting infrastructure, urban and rural areas and the system of towns, the distribution of cultural heritage, localised equipment and, furthermore, territorialised social services (including health and education). This would not obviously be well appreciated on one single map but the idea is to represent this series of variables before and after, so that the changes can be appreciated graphically. The strategic document is at the same time the document that quantitatively expresses the objectives to achieve and, therefore, permits continuous monitoring and assessment.

The structure of the document follows legal requirements. Throughout the process of producing the territorial strategy, a new regional Law for territorial and urban development was approved, regional law 35/2002, which is completely impregnated with the TSN process and objectives.

The final strategic document contemplates the following aspects:

- 1 Description: The Navarra Region. Current situation.
 - 1.1 The competitiveness of Navarra
 - 1.2 Social cohesion

- 1.3 Sustainability
- 1.4 Settlement model
- 2 Description and interpretation: The Navarra Region. Future situation.
 - 2.2 Competitiveness
 - 2.3 Institutions
 - 2.4 Social cohesion
 - 2.5 Culture
 - 2.6 Sustainability
- 3 Description and interpretation: The Navarra Region. Determining a Model for Future Territorial Development.
 - 3.1 Territory structure
 - 3.2 The future territorial development model
 - 3.3 Integrating Navarra
 - 3.4 Areas for territorial development on an intermediate scale
 - 3.5 Guidelines for territorial and urban cooperation and coordination
- 4 Strategies, guidelines and measures.
 - 4.3 A competitive territory: strategy for human settlement system development, areas for locating economic activities and development in the territory
 - 4.3.1 A learning and innovative region
 - 4.3.2 Development of technologically-based sectors
 - 4.3.3 Increasing entrepreneurship
 - 4.3.4 Government: institutions promoting social capital
 - 4.3.5 A balanced territory based on several regional and urban subsystems
 - 4.3.6 Using local elements to reinforce the Atlantic calling of Navarra
 - 4.3.7 Stimulating the Ebro Valley as a cooperation centre
 - 4.3.8 Configuring the central polynuclear town
 - 4.3.9 A cohesive territory
 - 4.3.10 A modern and for the future labour market
 - 4.3.11 Taking advantage of population ageing
 - 4.3.12 Immigration as an opportunity
 - 4.4 An accessible, well-connected territory: strategy for territorial connection of Navarra.
 - 4.4.1 Pamplona: gateway to Navarra
 - 4.4.2 The Navarra knowledge society
 - 4.5 A new territory culture: quality, balance and environmental sustainability. Strategy for the development environment and natural resources.

- 4.5.1 The Pyrenees
- 4.5.2 Rural area and country-town relations
- 4.5.3 Environmental sustainability
- 4.5.4 Sustainable tourism

5 Indicators for monitoring the territorial development of Navarra.

5.4 TSN Continuity

2.9. *Monitoring and assessment.*

Unlike traditional territorial plans, the strategy does not impose through legislation very specific territorial measures (these will be developed later under the strategy as the framework of reference), but is on the other hand aimed at action, creating challenges, proposing alternatives and suggesting strategic paths, **This is why monitoring and assessment are important. Article 32.5 lays down the creation of indicators for monitoring TSN (incorporated into the TSN strategic document) and, in addition, outlined in article 33.6 and 7 are the administrative processes ensuring periodic assessment of how TSN plans are applied and put into practice.**

The summary of the strategic document and its monitoring can be quantitatively translated in the following chart:

	Current	Objective	Alert	Difference in points	Difference in %	Effort
Output Competitiveness Synthetic Indicator	5.1	7.6	4.7	2.5	50.1	***
Input Competitiveness Synthetic Indicator	32.5	52.9	29.4	20.4	62.9	***
Social Cohesion Synthetic Indicator	71.1	90.9	68.1	19.8	27.9	*
Sustainability Synthetic Indicator	39.1	78.8	33.1	39.7	101.6	****
Polycentrism Synthetic Indicator	48.3	69.9	45.1	21.6	44,6	**
Access to Infrastructure and Knowledge Synthetic Indicator	36.0	70.8	30.7	34.9	96.9	****
Natural and Cultural Asset Synthetic Indicator	49.2	69.6	46.2	20.3	41.3	**

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