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Inner and Internal Areas in the European Cohesion Policies

Inner e Internal Areas nelle politiche di coesione europee

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Abstract. Taking as its point of reference the growth objectives of the Horizon 2020 project, the present study aims to present a new approach to identify policies for local development that are useful for promoting territorial cohesion in areas that represent spatial and/or functional peripheries. Beginning from a precise conceptualisation of these zones, based on definitions of inner and internal areas, the study first assesses the results that have been achieved with the funds that have been spent so far. It then focuses on specific indicators - mapped on the NUTS 2 and 3 levels to the end of applying the STeMA-TIA model - which are relevant to those factors of Smart, Sustainable and Inclusive Growth considered important for both geographical categories. Quantitative and qualitative analysis of these indicators, supported by pertinent graphic representations, produced a picture of local conditions which allowed us to pinpoint those objectives which still must be achieved and to identify developmental axes which should be given priority for the implementation of even more 'localised' policies. In presenting a reading that is fundamentally geographical and economic, based on place evidence, these findings have further relevance when referred to the analysis conducted on the Region of Sardinia, which was carried out by means of scrutiny of the main strategic documents adopted for the 2014-2020 programming cycle. This analysis led to policy recommendations for the efficient implementation of measures funded by EU cohesion policies.

Keywords: inner areas, internal areas, cohesion policy, Region of Sardinia.

Riassunto. Il presente lavoro, traguardando gli obiettivi di crescita della strategia *Horizon 2020*, ha l'obiettivo di proporre un nuovo approccio per l'individuazione di politiche di sviluppo territoriale utili all'implementazione della coesione territoriale in aree caratterizzate da perifericità spaziale e/o funzionale. A partire da una loro precisa concettualizzazione, approdata nelle definizioni di *inner e internal areas*, la ricerca, dopo aver valutato i risultati raggiunti con i fondi finora spesi, si è focalizzata su indicatori specifici, mappati ai livelli NUTS 2 e 3 ai fini dell'applicazione del modello STeMA-

TIA e afferenti alle determinanti *Smart, Sustainable* e *Inclusive Growth*, ritenuti significativi per entrambe le categorie geografiche. Dalla trattazione quanti-qualitativa degli stessi, supportata da essenziali rappresentazioni cartografiche, sono derivate letture territoriali che hanno permesso di evidenziare gli obiettivi da raggiungere e gli assi di sviluppo su cui potrebbe essere prioritario intervenire attraverso politiche maggiormente "territorializzate". Una lettura fondamentalmente geografico economica basata sulla *place evidence*, dunque, ancor più apprezzabile se riferita all'analisi condotta sulla Regione Sardegna, realizzata a partire dai principali documenti strategici adottati per il ciclo di programmazione 2014-2020, dalla quale sono derivate *policy recommendation* per una efficiente attuazione degli interventi finanziati attraverso le politiche di coesione dell'UE.

Parole chiave: aree interne, periferie metropolitane, politiche di coesione, Regione Sardegna.

1. Foreword

The research carried out by the Local Unit of Sassari within this PRIN, focused on the analysis of the cohesion policies implemented by the European Union in areas characterised by specific structural weaknesses, with a brief look at the Italian situation in general, before focusing on Sardinia. Through a logically targeted construction aimed at gaining knowledge of the impact of the territorialisation of the cohesion policies in the different European programming cycles, up to the 2020 Strategy, the changes introduced in the final evaluation of the interventions were taken into account, including the recourse to the ex-ante and ex-post comparison based on a set of indicators. Particular attention has been paid to those categories of geographical areas that are the recipients of targeted actions and regional and local strategies which, due to their polycentric conformation, territorial imbalances and economic development of economic macro-regions in Italy, mainly involve urban realities and the inland and southern areas. These conditions of imbalance are found not only within the cities, with pockets of malaise and degraded environmental situations where economic and social inequalities together with the disparities in accessing basic services are manifestly evident, but also between cities and other urban realities the distances of which, not only physical, penalise the territories in terms of attractiveness and competitiveness (EC 2014). Furthermore, with reference to several dynamics, despite the various interventions already carried out in the past to support the South, the latter continues to lag behind the regions of the Centre-North, forming part of a particular geographical category with a reservoir of highly underutilised human, environmental and economic resources.

In the hypothesis of a rebalancing among the different regions which could also be reached thanks to the European cohesion policies, the need to carry out so-called tailor-made interventions for territories characterised by particular specificities should stimulate the development of criteria and research models capable of correctly identifying the spatial definitions on which to intervene and at the same time reveal the effects of such decisions. In other words, scientifically based criteria and models should be devised to accurately identify those territorial categories on which to act and measure over time the variations produced by the strategies adopted. In view of these assumptions, starting from the terminological and conceptual redefinition of those (weaker) areas on which to concentrate the policies for strengthening them economically within the territorial system they belong to, this work intends to propose a new approach in the aim of suggesting targeted decisions based on quantitatively-defined and objectivelyexperimented assessments.

However, we cannot but recall the fundamental concepts that have fuelled the European vision of development for many years, such as cohesion, inclusion, competitiveness, and sustainability, in order to classify the field of national and regional action characterised by the adoption of strategies, programme agreements, action plans of varying capacities, etc., before arriving at the delimitation of the area on which to intervene. As regards the Italian territory, for example, taking into account the widespread polycentrism that characterises the country (Cremaschi 2005), the challenge could concern the identification of areas which more than others show difficulties in achieving certain conditions of socio-economic development, despite having been recipients of targeted interventions and policies, often sectorial, over the years. Based on these assumptions we started from an examination of the concept of peripherality, in a geographical and functional sense, and from the recognition of various elements, both positive and negative, that the same can refer to either directly or indirectly.

Considering the different situations of marginality attributable to different geographical areas, the analyses performed by this research unit have allowed us to conceptually delimit two distinct geographical categories, the inner and internal areas, territories which for different reasons are in peripheral conditions compared to a "centre" which provides services and functions of general interest, considered priorities for sustainable, inclusive and intelligent development, the definition of which, based on international bibliography and recent Europe-

an and national programming documents, has contributed to the structuring of a shared glossary among all the PRIN units. In short, the main concepts emerging are as follows:

- 1. Given that a centre (large, medium or small city) possesses different, economic, financial, cultural, technological functions, etc. (concentrated in what is called a pole, city centre, core, historical centre, etc., depending on the case) and provides widespread services, otherwise definable as "engine growth", those areas on its outskirts could be understood as inner peripheries, even without continuity solutions but still relatively close, connected to the same by specific functional relationships. This peripherality is both spatial (but only in part) and, above all, functional, and it is generally expressed with a negative socio-economic performance. These are therefore fragile territories, the articulation of which reaches well beyond the classical concept of the periphery, and which require specific interventions to be developed through participatory and inclusive governance.
- 2. Also in line with what is reported in the National Strategy for Internal Areas (SNAI), we can speak about internal areas as those territories that are spatially distant compared to centres of agglomeration of functions, often coinciding with cities or municipalities (or aggregates of municipalities) capable of guaranteeing a sufficient set of services, such as secondary education, hospitals, railway stations, etc. (DPS 2012; Barca et al. 2014; Lucatelli 2016). The conditions of socio-economic marginality, scarce employment opportunities, poverty and social exclusion are due to the distance, in virtue of the difficulty for individual communities to access certain essential services (EC 2011a; 2011b) and the presence of which is, instead, a precondition for development. Nevertheless, despite their geographical isolation, they could potentially provide endogenous positive responses through sustainable and smart exploitation of their territorial capital, if it contemplates landscape and identity elements capable of becoming development assets, triggering greater attractiveness and consequent competitiveness, with evident benefits also in terms of inclusion

In both categories there are however problems and strategic elements the examination of which, via the use of specific indicators, could allow for a reasoned and more contextualized reading of these territories and indicate the most appropriate policies to be implemented: and that is what is partly contemplated by this work, starting precisely from the choice of indicators.

2. Inner and internal areas: new territories in the European growth priorities

A look at the evolution of the concept of cohesion, already contemplated in the Single European Act (SEA) of 1986, provides the meaning of the territorial perspective assumed by the European programming cycles, starting from the Treaty of Lisbon (2007) and with respect to the initial economic and social declination, in a mainly spatial projection that records the assumption of the new paradigm of "territoriality" (Faludi 2002). The result is the coordination of the relative policies, directed towards harmonious and polycentric development, capable of acting transversally beyond regionalisms, conceptual localisms and physical-administrative boundaries. Thanks to a greater diversification of the intervention sectors of the European Structural and Investment Funds (ESIF), the political action is oriented towards the search for a broad convergence within which competitiveness, innovation, sustainability, education and social inclusion become priority and thematic objectives to be met by 2020 due to being functional to the permanent cooperative process, based on the principles of solidarity and equity, with the prospect of reducing the gap among regions (TFEU art. 14).

The renewed cohesion policies in fact aim to define growth which is simultaneously economic (through actions to strengthen the economic and monetary union), smart (with the strengthening of the digital single market), inclusive (with interventions in employment and the sector of justice and fundamental rights) and sustainable (favouring the energy and climate sectors, sustainable management of natural resources and low-carbon actions), while the European Regional Development Fund (ERDF) favours the realisation of projects and networks aimed at encouraging common programmes, also through new forms of functional organisation of the territory.

This is a new geographical construction with territorial organisation and rearrangement scenarios capable of shattering the traditional models of territoriality (Bertoncin, Pase 2008, 7-8) and creating new collaborative structures within which people and businesses can regenerate their competitive potential, rediscovering diversified interactive solutions, alternative links and revised forms of territorial interdependence. In this way, social growth and territorial interaction consequently constitute an inseparable binomial of a development project based on forms of planning able to capture the smart characteristics of geographic and geo-economic space, taking into account the uniqueness/complexity of the places and the spontaneously developed socio-spatial relations. Those

areas in which the territorial diversities are more evident become the places where the cohesion policy orientates its intervention in an effective manner, implementing the transcalarity of the partnership forms in order to implement common objectives and facilitate the exchange of information, experiences and good practices. As a result, the search for new spatial aggregations, by virtue of the systemic and functional reinforcement of the relations existing even between distant geographical areas, leads to investigate development hypotheses based on territorial models that can reach beyond administrative boundaries, giving rise to new geographical reference entities for cohesion: in other words, new spatial categories identifiable on the basis of specific quantitative and qualitative indicators. These are prevalently weak territories in socio-economic terms, for many marginal aspects, where distance and peripherality with respect to service centres sometimes constitute an anti-performing prejudice but the correct identification of which is useful for the implementation of correctly oriented policies based on place evidence. Even though the international scientific community, with different and multidisciplinary approaches, devotes particular attention to internal areas and metropolitan peripheries, these are nonetheless heterogeneous territorial categories, difficult to classify on the basis of precise shared parameters precisely because of diversity and distance (Scanu et al. 2018). Nevertheless, it is possible to isolate several "characters" which are recurrent among them, connected to the aspects of competitiveness, sustainability and social inclusion due to being strongly linked to the polysemic concept of peripherality. The findings examined on a European and national scale have in fact highlighted that those defined as internal areas or inner areas are generally conditioned by a more or less high level of peripherality, understood in a physical and, above all, functional and relational sense, underlying the disadvantaged conditions characterised by poverty, unemployment, social exclusion, and physical and environmental degradation.

What is certain is that sustainable urban development promoted and encouraged by the European Urban Agenda (EUA), approved in 2016 with the Pact of Amsterdam and the EU rural development policies tending, in various ways, to strengthen rural areas, can encourage the overcoming of their conditions of structural weakness to become strategic for relationships with the cities.

3. Methodological approach

Conceptual definitions, those related to inner and internal areas, which after being discussed and com-

pared with those provided by the other research units of this PRIN, were then merged into a shared glossary. In this regard, it is opportune to observe that during the search for an appropriate definition, several transversal themes emerged the analysis of which, through correlated indicators, was considered useful for measuring the changes recorded and to be pursued through cohesion policies. On these grounds, a list of indicators was identified (some are simple, others composite), the trend of which will subsequently be "observed" through the STeMA-TIA model, as a result of the activation of certain policies to be selected in relation to the strategic reference documents. Among all the indicators, six have been identified which are considered to be more significant for issues relating to the internal and inner areas, primarily relating to Smart and Inclusive Growth, which have been systemically viewed, also with respect to the determinant of Smart Growth. The dynamics related to energy consumption and in particular, energy selfsufficiency through the use of renewable sources, in fact appear to be fundamental for the internal areas, where there is a strong drive towards safeguarding and enhancing the environmental and landscape resources, and for the inner periphery, also depending on the fact that cities have a decisive position in the fight against climate change. These considerations can also be applied to other indicators, such as drinking-water consumption, while those relating to the total fertility and tourism rates and the number of foreign residents and childcare centres relate more to the sphere of Inclusive Growth. In both these last two categories, in fact, there are problems linked to the risk of social exclusion of particularly disadvantaged subjects, for example immigrants, who are exposed to the risk of social segregation in the inner peripheries. Instead, for the internal areas, the opposite reasoning could be applied, as these are areas that are underutilised compared to potential job offers, which are not able to compete with cities and for this reason they attract less population from outside, including foreigners. The scarce presence of foreigners is an often-underestimated problem, but it should be considered an index of the weak competitiveness of the territory and it intersects with other variables such as low fertility and the presence and distribution of childcare centres. The rate of tourism appears to be equally interesting to examine since the tourist phenomenon represents a strategic sector to focus on, not only in the internal areas, which for geographical conformation and the presence of certain resources that can be translated into assets, could lend themselves to the development of certain forms of experiential tourism, but also in the inner areas where, perhaps thanks to a possible industrial past, the proposal could be advanced to

reconvert certain sites from a cultural, tourist and environmental point of view, even by resorting to archistar¹.

Each of these indicators has been analysed, and "mapped" on the NUTS 2 and NUTS 3 scale, in order to allow for comparisons and evaluations between provinces and regions and to bring out those tendencies which, thanks to the representations, can show a "new geography" of the relationships and highlight how areas distant one from the other can be united by the same criticalities, or reveal in the same region and in a striking manner the presence of provinces at different speeds. Having a detailed picture of this type, on the provincial and regional scale, has made it possible to focus on several dynamics of the territory otherwise not identified at first reading but, above all, it has allowed for rereading the strategies and lines of intervention adopted so far from a new perspective, more focused on issues that concern the inner and the internal areas, in view of a more balanced development within the current programming period. The field of observation was therefore narrowed, with the spotlight focussed on Sardinia in order to understand the role of the topics considered within a harmonious, balanced and systemic development project that contemplates the inner and the internal areas.

An in-depth study on the structuring of the various regional operational plans has finally made it possible to focus on the financial framework of the available resources and the allocation of the same to the different programmes, finally arriving at advancing policy recommendations in view of the next programming, in the hypothesis of continuing to invest in the strengthening of peripheral areas aimed at implementing the level of cohesion.

4. The indicators considered

The "intrinsically multidimensional nature of the potential effects, both direct and indirect, of European

policies" (Camagni, Lenzi 2011, 159) makes the evaluation of their territorial impacts extremely complex. In particular, the measurement of the effectiveness of policy strategies aimed at developing territorial cohesion comes up against the complexity generated by the plurality of elements that contribute to its definition. Through the application of the STeMA-TIA model it will in any case be possible to carry out such assessments, by defining a distributed analysis on the three determinants considered, Smart, Sustainable and Inclusive Growth, which incorporate an 'n' number of variables capable of synthetically describing the temporal and spatial change of the areas of study. The choice of the variables to be investigated and the indicators to be used therefore represents a strategic moment of the research, since the soundness of the analysis is correlated to the ability to identify topics and elements which, when assumed individually or in aggregate form, know how to interpret the multiform and mutable realities of the territories observed (for the Sassari Unit: inner and internal areas). After carrying out an evaluation on the issues worthy of further study and the diriment elements in defining the role or positioning of the areas under study in the national context, it was decided to analyse the following indicators:

- consumption of drinking water;
- energy efficiency rate;
- total fertility rate;
- foreign residents;
- nurseries:
- tourism rate.

The first two belong to the Sustainable Growth pillar, while the other four are part of the Inclusive Growth determinant. For all of these, we proceeded with the collection of the most recent data available and processed the respective indexes using special algorithms. Maps were created for each indicator at the level of NUTS 2 and NUTS 3, capable of making it possible to visually restore and immediately perceive the extent of the phenomenon investigated at time t0, divided territorially on the basis of the administrative units assumed as the basis of the analysis, following a homogeneous typological setting for the entire PRIN. Following are the results of the geo-economic elaboration of the aforementioned indicators.

Consumption of drinking water- This indicator, expressed by the following formula:

$$\begin{aligned} & \text{Mainly regional} \\ & \text{Drinking water=} & & & & \text{water} \\ & & & \text{Regional} \\ & & & \text{Population} \end{aligned}$$

¹ In Italy and in Europe, there are increasingly more experiences of functional reconversion of disused industrial sites for tourism and cultural purposes, often present within the perimeters of cities or in suburban and peri-urban areas. Included among the most successful cases there is certainly that of Bilbao, where the creation in 1997 of the Guggenheim museum designed by Frank Gehry marked a path of cultural regeneration of the entire area, as well as that of the Tate Modern in London, designed by Herzog & De Meuron which since 2000 has been open to the public in the spaces of the former thermoelectric power station, and the redevelopment of the Zeche Zollverein in the Ruhr, started in 2001 under the guidance of architects Rem Koolhaas and Heinrich Böll. Likewise in Italy important experiences of conversion of former industrial areas have been recorded in different cities such as Milan, Bologna or Turin.

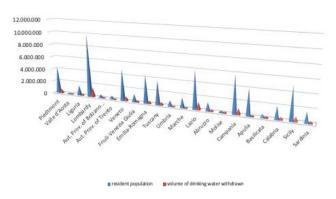


Figure 1. Relationship between drinking water consumption and the resident population 2015. Source: authors' elaboration on ISTAT 2015 data

was calculated by using the data from ISTAT (National Statistics Institute) (2015). It was decided that the Drinking water indicator should be included in this analysis in view of the fundamental importance of water as a resource, its exhaustibility, the growing increase in demand, and the simultaneous reduction in the quantity globally available for human requirements. Drinking water plays a strategic role in sustainable growth policies, making it mandatory to monitor its consumption, conduct analyses in terms of the water footprint and implement practices for improving the use and distribution of water resources, applicable in both the domestic and corporate dimensions. The analysis of this indicator on a national scale shows a balanced scenario, where a higher consumption of drinking water corresponds to a greater demographic intensity (Fig. 1).

The cartographic representation of the Drinking water indicator (NUTS 2) highlights the greatest consumption, in absolute terms, on the northern part of the peninsula and indicates Apulia as the most virtuous region in terms of consumption (Fig. 2). For a better understanding of the phenomenon, it would be a good idea to investigate the difference between the degree of dispersion of this resource in the network and the volume of the final consumption.

Energy efficiency rate- This indicator, expressed by the following formula:

relates the total energy production to that from renewable sources. The analysis of the energy efficiency rate

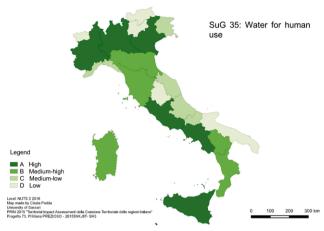


Figure 2. Drinking water – Withdrawal of drinking water 2015 (NUTS 2). Source: authors' elaboration.

acquires particular value if we consider that: i) a good part of the interventions aimed at relaunching and redeveloping the inner areas are centred on the implementation of projects aimed at the conversion of the production models in a perspective of green and circular economy, where energy consumption and production acquire a symbiotic bond (ESPON 2019); ii) for the internal areas, the strategic planning aims to adopt measures capable of ensuring responsible management of resources in order to counteract the erosion of the environmental assets and promote protection of the landscape and biodiversity; iii) looking at the EU space, the Euro-Mediterranean region is characterised by a high photovoltaic potential (ESPON 2010), still under-utilised today.

From the analysis of the data the pre-eminent position of Piedmont emerges as the largest producer, in absolute terms, of energy from renewable sources (Fig. 3) but as regards the composite indicator that relates the production of green energy with the global one, the most virtuous areas are those included in the Val d'Aosta, Umbria, Marche and Basilicata regions, in addition to the Autonomous Province of Bolzano (Fig. 4).

Total fertility rate – The TFR expresses the average number of children per female of childbearing age (15-49 years). The figure assumed is the one calculated by ISTAT and refers to the national performance of 2016. In the analyses conducted here it acquires relevance if is read in relation to its optimal value (established in the threshold of x > 2.1) and associated with the analyses relating to the demographic decrease and the changing population structure that can be found in internal areas. In Italy there is a tendency for the standards to decrease in terms of fertility, which in the period observed, stands at an average value of 1.3 children per female. The

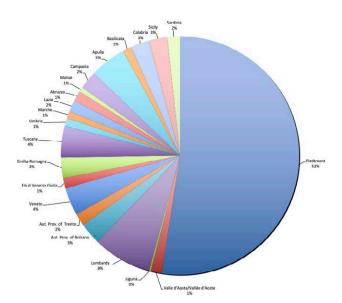


Figure 3. Gross national production of energy from renewable sources 2016. Source: authors' elaboration on TERNA 2016 data.

North-East sector, with the Province of Bolzano in the lead (TFR = 1.76) shows the highest performance in the country (Fig. 5). The results furthest away from the optimal value are recorded in Molise and Sardinia (respectively: TFR 1,15 and 1,7).

Foreign residents – This rate makes it possible to measure the incidence of the foreign population on the total number of residents in order to understand how the demographic structure of the studied areas is evolving. The indicator is calculated on ISTAT data from 2015. The choice to include this indicator in the analysis is linked to an inductive reasoning that considers the areas most affected by the migration phenomenon as

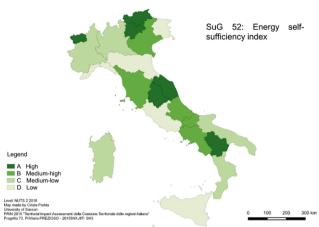


Figure 4. IauEN Indicator of energy self-sufficiency 2016 (NUTS 2). Source: authors' elaboration.

those which are most attractive from a job point of view. The map at the NUTS 2 level (Fig. 6) shows an Italy divided in two parts. This subdivision is also recurrent in the macro-economic analyses that denote the existence of an imaginary boundary between the central-northern and the southern sectors of the country.

In fact, the north consists of a very dynamic territory with a strong attraction capacity, while the southern part has a low appeal, also confirmed by the values assumed by the rate examinated.

Nurseries – The nurseries indicator is given by the summation, in algebraic terms, of authorised public and private structures present in the Italian regions and provinces, responsible for the provision of socioeducational services for children. The values, calculated by ISTAT, show the number of active nurseries in 2015

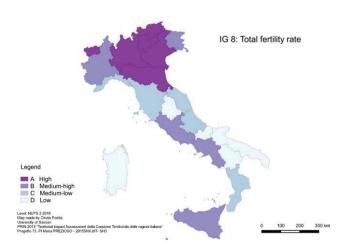


Figure 5. TFR – Total Fertility Rate 2016 (NUTS 2). Source: authors' elaboration.

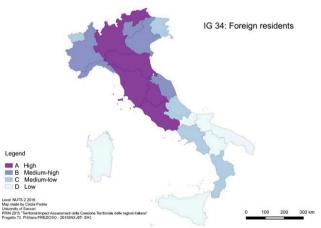


Figure 6. Foreign residents 2015 (NUTS 2). Source: authors' elaboration.

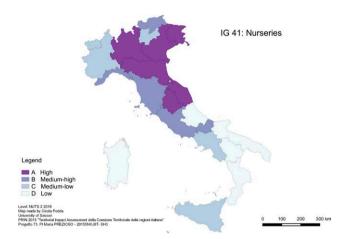


Figure 7. Nurseries 2015 (NUTS 3). Source: authors' elaboration.

compared to the resident population of children (0-3 years). The indicator was included in the analysis since in the inland areas the phenomenon of depopulation over the last decade has recorded ever increasing trends, mainly due to the lack of essential services and welfare policies. In Fig. 7, a two-speed Italy is stridently evident, with the northern region responding more efficiently to the demand for welfare policies. A gap is revealed in the supply of nurseries which, if added to other disparities, contributes towards defining different standards in the quality of life of those born and living in the less performing areas of the country.

Tourism rate – This rate is expressed by the following formula:

$$TxTOUR = \frac{Tourists}{Resident population}$$

and allows for detecting the tourist pressure at time t0, in a given location. For the purposes of this research it was chosen in consideration of the fact that the internal and inner areas adopt tourism strategies for territorial relaunching and the regeneration of urban contexts. Not infrequently, in fact, from a tourism perspective there are processes of reconversion of abandoned sites. The data reported refer to the year 2016, the source used is ISTAT. Tourism has been evaluated as a sector of opportunity for Italy, not only in relation to the territorial vocation of the country but also for the compatibility of the activities associated with the same and with the pillars of sustainable and smart development. The NUTS 3 map shows the results produced by the TxTUR calculation for the entire peninsula, with the provincial details (Fig. 8).

The analysis highlights a territory with a strong and widespread tourist vocation connected to a variegated

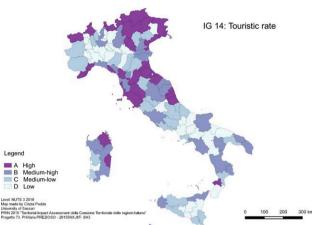


Figure 8. TxTUR Tourist Rate 2016 (NUTS 2). Source: authors' elaboration.

territorial heritage. To fully understand the phenomenon, it is recommended to re-read the map in reference to the various tourist destinations in the light of past political choices. For example, in Sardinia the rate recorded an increase in correspondence with the major infrastructural investments (the TxTUR increases where the main hub for access to the island is located, the airport of Olbia) where a strategic pricing policy was carried out capable of penetrating the market.

5. Inner and internal areas in the 2014-2020 programming. The case of the Region of Sardinia

In the light of the recommendations of the European Council to our country about the competitiveness and the development of the internal areas subject to depopulation and structural weakness, the Uniform Strategic Document for the programming of EU funds 2014-2020 (USD, 2013, p. 110) of the Sardinia Region reinterprets the complex dynamics of the island and proposes differentiated challenges and interventions for urban areas and rural and internal areas, based on an "integrated approach to development" to be implemented systemically through Regional Operational Plans (ROPs). An approach that is also found within the Regional Development Programme of Sardinia (PRS 2014-2019) which, in the wake of an analysis of the economic and social fabric from which various criticalities emerged (increase in families in poverty, depopulation, problems related to the territorial continuity of goods and people, and insularity), proposes six lines of action oriented towards:

- valorising people;
- creating job opportunities;

- promoting participation and social inclusion;
- managing the collective heritage in a sustainable manner;
- adapting the infrastructures;
- increasing the quality of the institutions.

The objectives to be pursued principally concern the redesigning and modernisation of the services, also through new technological solutions, targeting literacy and digital inclusion for favouring the acquisition of advanced skills by companies, developing material and immaterial actions to support the urban environment, promoting social inclusion, enhancing the value of local segments of global production chains, and improving multi-level governance (PRS 2014-2020, 146-147).

As regards the strategy for urban development, its technical architecture shifts from the selection of the main large cities/areas of Sardinia, distinguished by their size and function and coinciding with the conurbations of Cagliari, Sassari and Olbia, capable of providing services relevant to the entire regional community, especially with regard to transport, education and health. It is in fact in the degraded quarters of these cities that the implementation of Integrated Territorial Investments (ITI) is expected, the financial structure of which is mainly based on the ERDF and the ESF².

The strategy provides clear indications regarding the system of the ITI and their scope of application, but it is not as explicit with respect to the complexity of the inner peripheries, a typology that conceptually reaches beyond the urban peripheries commonly intended to embrace broader and more diversified territorial areas, where there are significant pockets of malaise, economic decline and degraded environmental conditions³.

If the perimeter of the areas assigned to the ITI derives from the previous plans and integrated urban development programmes (PISU) for everything concerning the internal areas instead, the reference is to the methodology developed by the National Strategy for internal areas (SNAI) promoted since 2012 by the then Minister for territorial cohesion, Fabrizio Barca. The general criteria proposed by the Department of development of development of the previous series of the series of the previous series of the series of the previous series of the pr

opment and cohesion policies, focused mostly on the distance between the "internal" municipalities and the centres holding the essential services, has undergone different adaptations in the case of the Sardinia Region in order to allow for a more "territorialised" identification of the internal areas, with a selection process honed by the introduction of additional quantitative and qualitative indicators. This has given rise to 13 project areas, the boundaries of which are drawn by the respective Unions of municipalities, and two of which were selected for the application of the strategy⁴.

Nevertheless, as we have seen, even though the concept of internal area differs from that of rural area, the two types are often treated jointly in the regional political documents. Internal areas are recognised as having an interesting potential of development that could allow them to offer better life and work opportunities based on a different, innovative and sustainable exploitation of environmental, cultural and landscape resources. The objective is linked to the capitalisation of successful experiences in rural areas achieved in the past, for example with the LEADER method, and coordination with the interventions of the RDP 2014-2020 for a more efficient and effective strengthening of the fragile territories.

Consequently, the two ROP ERDF and ESF translate, in the form of operational objectives accompanied by appropriate financial resources, the political will to intervene in internal and rural areas in a synergistic manner in order to smooth out, or to eliminate, the structural weaknesses attributable to a demographic decline of the population, infrastructural deficiencies, productive sectors unable to exploit the opportunities of the networks for taking advantage of economies of scale and activate positive externalities with the enhancement of the territorial capital existing, also, if not above all, for tourism purposes. Specifically, in the internal areas of Sardinia the ESF ROP intends to implement two types of actions: 1) interventions to adapt to the quality/quantity of the offer of essential services; 2) local development projects for focusing on the protection of the territory and local communities, with the enhancement of

² As regards the metropolitan area of Cagliari, the intervention of the ITI is added to the framework of initiatives to be implemented with the PON Metropolitan City.

³ In Sardinia, similar territories could coincide with some crisis areas, such as the industrial one of the Sulcis Iglesiente, where in addition, interventions of revival and productive reconversion and regeneration are being implemented within the extraordinary Plan for the Sulcis promoted by the Region in agreement with different ministries, or like that of the industrial area of Porto Torres, defined by Ministerial Decree dated 8 February 2017, an area of complex crisis where remediation interventions of polluted sites and consequent re-launching of production in a green and sustainable key are envisaged.

⁴ In the remaining areas excluded from the experimentation, development and relaunching is instead dictated by the territorial planning tool, an approach that tends to enhance internal areas and brings to the fore local vocations and potential, to be achieved through the integration of funds and with the participation of local communities through the direct involvement of Unions of Municipalities and mountain communities. The latter are in fact asked to advance expressions of interest to the Regional Centre of Programming which, having assessed the feasibility and consistency of the proposals, is starting up a co-planning cycle that flows into the final approval of the project and its implementation.

natural resources, cultural and sustainable tourism, agrifood systems and local development, renewable energy chains, and artisan know-how.

The choices of the strategic sectors in which to invest are certainly connected to the areas of development identified by the Region through its Intelligent Specialisation Strategy (S3) which defines the territorial excellences in terms of research and innovation, identifying the potential for growth. Some of these "areas of specialisation" can be developed in internal areas, for example those related to Tourism, culture and the environment and to ICT. In the same way, urban areas and the territories targeted by the ITI also lend themselves to the experimentation of sustainable approaches based on tourism regeneration, as well as on the implementation of "smart networks for efficient energy management".

6. The prospects of the new programming period

Within the framework outlined above, based precisely on the analysis of the key themes of sustainable territorial development dealt with in the political documents and guidelines of the Autonomous Region of Sardinia adopted for the current programming period, the indicators analysed turn out to be perfectly correlated to the same: just think, for example, at the indicator about tourism for the evaluation of the tourist appeal of the different geographical regions or the total fertility rate which, with the indicator of nurseries helps to better frame the dynamics of depopulation of the internal and rural areas. While on one hand the action of governance is aimed at reinforcing the general competitiveness of the regional system, on the other hand, it aims to strengthen specific strategic territorial areas, characterised by specific critical socio-economic and environmental conditions, such as rural areas and urban peripheries. With the start of the 2014-2020 programming period, the Sardinia Region, despite having passed from the "Phasing-in" status to the "in transition" status, was still afflicted by numerous critical issues, the negative effects of which went towards feeding the circuit of low competitiveness of the regional system (Scanu, Lampreu 2015).

As pointed out by all the policy documents adopted, especially those already mentioned, the most problematic issues concerned above all the economic, social and infrastructural areas with specific attention to environmental and sustainability issues. The weak, fragmented and small-sized entrepreneurial fabric of the island was incapable of exploiting possible economies of scale descending from more intense collaborative

processes and from the ICTs. Moreover, this "unfavourable environment" was not the prerogative of the business world but also of the public administration, which was involved with technological modernisation and de-bureaucratisation. Low investments in R&D and the geographical conditions, linked to insularity, affected exports and traffic, contributing to defining a stagnant labour market, with low employment rates and high unemployment rates, especially with young people, which had to be added to an increase in the NEET, young people between the ages of 15 and 29, completely outside of any study and work circuit, as well as a growing propensity towards emigration of qualified figures.

Such a "buffer" model could not fail to have effects on depopulation too, especially in the internal and rural areas, where it assumed the characteristics of an emergency and where the conditions of demographic fragility (low fertility rates and high old-age indexes), combined with the depletion of essential services and the underutilisation or non-exploitation of the territorial capital. However, it is precisely in these internal areas that cultural, landscape and historical resources of absolute value are found, the innovative enhancement of which, in a production or tourism key, could generate new jobs whereas the abandonment of which, on the contrary, would entail risks in terms of loss of capital, identity and biodiversity. In this regard, the S3 of the RAS identifies as strategic sectors for the strengthening of territorial competitiveness those relating to the development and strengthening of tourism in combination with the enhancement of the cultural and environmental assets and the ICTs. Sardinia is in fact seen as an "island of knowledge and innovation" with a strategy capable of acting positively on "environmental enhancement and quality of life, in the knowledge that [its] competitive positioning (...) can be based on the concept of a 'circular economy' through the sustainable use of the available resources" (S3 2016, 9). This is linked to the efficient use of energy, the strengthening of bio-productions, agricultural and agro-industrial productions and green building, as well as investments in chemistry and the green industry.

In a systemic logic, the integrated development approach contemplates the relaunching/strengthening not only of internal and inner areas but also of urban areas, suburbs and those territories that are experiencing situations of socio-economic periphery. The development promoted is therefore inspired by the improvement of the quality of life, not only of the people who live in the cities and in the suburbs, but also of those who live in inland areas. Tools like the ITI, the CLLD approach, the implementation of the SNAI and the SRAI (regional dec-

lination of the national strategy for the internal areas), as well as the territorial planning itself are heading in the direction on the one hand of favouring participation from the bottom and the development of endogenous forces, and on the other hand of giving life to new synergies capable of fostering the circuits of competitiveness and territorial attractiveness.

7. A final summary: suggestions for a Policy recommendation

In line with the smart, inclusive and sustainable growth priorities of the EU, the RAS, within the ROP ERDF and ESF, has translated the needs emerging from the territorial analyses into actions and measures to be implemented through Axes linked to specific Thematic Objectives. In particular, as regards the ROP ERDF 2014-2020 the challenges of which relate to the strengthening of territorial competitiveness, promotion of innovation, investments in human capital, realisation of sustainable development, promotion of policies for social inclusion and strengthening of institutional capacity, it is highlighted how the same is articulated in eight strategic axes which, overall, rely on over 930 million euro.

The ROP ESF 2014-2020 concentrates on five strategic axes to deal primarily with employment, social inclusion and the fight against poverty, education and training, institutional capacity and administrative efficiency. The allocated resources amount to almost 445 million euro but only half of them are engaged. The RDP 2014-2020 also shows situations of delay as regards the financial aspect. The same, which benefits from resources amounting to 1,308,406,205 euro, is divided into six priorities focused on knowledge transfer, innovation and the green-oriented economic transition.

The realisation of the strategic priorities of the RDP could also generate positive effects on other geographical areas, for example the internal areas, given the frequent overlapping between the two territorial categories. Precisely with regard to the implementation of the SRAI and the SRAI, at the moment the *iter* has been concluded and the strategy is in the start-up phase in both the selected areas of experimentation; in the same way, the urban development strategy through the ITI is already started.

An analysis of the policy documents and measures undertaken over the years has shown that the choice of strategic axes, the allocation of resources, and the measures proposed by the regional policy appear to be in line and consistent with the initial needs emerging, some of which have been partially satisfied, as was also

revealed by the analysis of the indicators. An element to be strengthened in this sense is the one relating to the reduction of the times of the certification processes of the expenditure connected to the implementation of interventions. With the prospect of optimally closing the current programming period and in view of the imminent post-2020 cycle, in the light of the research activities conducted with this work, the following policy recommendations can be suggested:

- there must be continuity in pursuing investment choices in strategic sectors for regional competitiveness, regardless of the regional governance structure;
- 2. the monitoring of target objectives in quality and quantity terms and the streamlining of processes, including bureaucratic issues, underlying the achievement of objectives in terms of the results to be achieved and the use of resources. If in quantitative terms these aspects are more easily measurable, as regards the qualitative aspect, the start of a systematic monitoring activity could be considered capable of evaluating the performance of the policies implemented with reference to specific geographical areas receiving the resources. The STeMA-TIA model, developed and tested within this project, should aim to fulfil this task.
- 3. the strengthening of the degree of interaction between the regional network of political actors and that of local actors and stakeholders directly involved in the territorial development processes, so that the incentive policies can effectively respond to the desires and needs of the communities, shortening that distance, real or merely perceived, between supra-local and local subjects.

The policy recommendations, the result of the complexity of the analyses carried out, are linked to the leitmotiv of the entire research, the objective of which is also that to overcome the difficulties that can be found in the timely evaluation of the repercussions of the policies through a measurement system capable of allowing for an immediate comparison. To this end, the analysis and systematic collection of data is fundamental, and valid both for monitoring and for the processes of adaptation of policies to sudden changes that affect contemporary society in general, with a pro-active approach.

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