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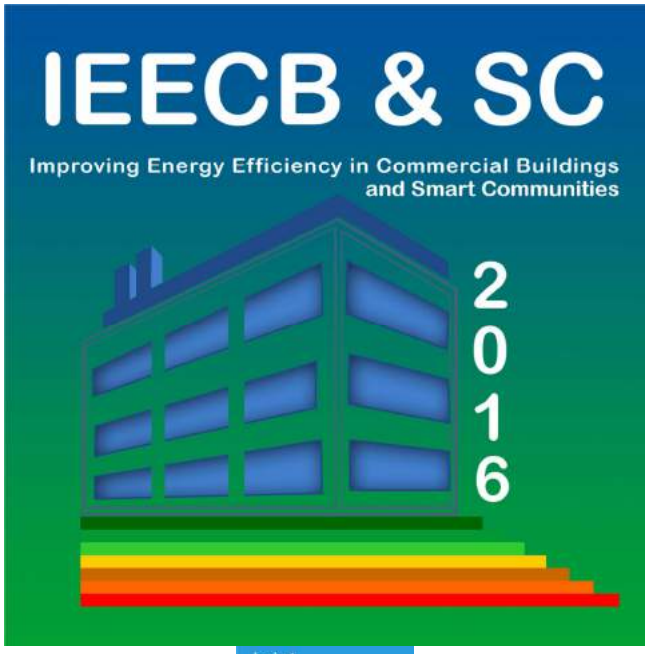
9th International Conference Improving Energy Efficiency in Commercial Buildings and Smart Communities

IEECB&SC'16

Paolo Bertoldi

2016



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Innovative approaches for retail planning. The design of territorial retail scenarios in Trentino (Italy).

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Abstract

The paper presents the recent evolution and development of Trentino retail planning policies and discusses an experimentation of a meta-evaluation methodology, namely Territorial Integrated Evaluation (TIE), for designing retail development scenarios. A research team from the Interuniversity Department of Regional and Urban Studies and Planning of the Politecnico di Torino applied this methodology experimentally to the practices of spatial planning in order to integrate *territory* and *retail* in the Trentino development policies.
The application of TIE set out to design territorial retail scenarios that integrated various topics –retail, tourism, infrastructure, nature and landscape. On the base of TIE principles and criteria, each Valley Community (VC) is now implementing to design its territorial retail scenarios assuming different approaches and visions in accord to its retail opportunities and risks. Starting from the presentation of some best practises, the paper focuses on the innovative perspective for retail planning and for retail sites designed in Trentino. The emerging regional policy is aimed at linking quality of territorial retail development with environmental sustainability, respecting attractiveness and balance among different retail sites.

1. Retail and territory

Retail is an element that characterises identity of cites beyond the simple economic dimension. Effectively, retail supply has historically added attractiveness and influence to neighbourhood stores located in urban centres in addition to economic impacts.

The recent important changes occurred in urban retail dynamics leads to a *retail revolution* essentially associated with the growing of large-scale stores mostly located outside the city centres [1]. These recent transformations changed both the retail settlement phenomena in cities and the consumers' everyday habits. In this perspective, retail is conceived as an open system operated by several actors who, in last decades, have gone through periods of intense innovation and change followed by periods of reaction and adaptation [2].

In light of this situation, European planning agendas have been generally moved towards place-based approaches, target to developing attractiveness of urban areas on a global scale through increasing leisure and retail activities [3]. According to the place-based approach, Italy has been one of the first European countries that, during 2000s, adopted region-targeted policies [4]. The first National Reform Decree in 1998 characterised the Italian retail policies by a strong territorial approach and by the decentralisation to regional governments of the construction of strategies and collaborative partnerships between public authorities, private firms and civil society. Basically, the Italian retail reform takes on two main components. The first is the modernisation of retail sector, which allowed the growth of new large-scale stores and an increasing trend of innovation among retailing groups [5], while the second is a strong territorial-based argument that entails the integration of retail development with environment, respecting attractiveness and the balance among different retail sites [6]. In this perspective, the effort of this approach to retail development is not a simple competitive relationship between retail stores, but rather a complementary relationship among retail territorial systems [7]. Briefly, retail is understood as an economic activity that can network with regional other functions which territorial dimension is the fulcrum [8].

From a regulatory point of view, the Italian decentralisation of retail competence to regions created an extremely varied situation. Regions addressed retail planning in very different ways, establishing barriers and

quantitative constraints more or less strict for the control of large-scale stores development. In most Italian Regions, despite the institutional innovation introduced by the national retail policy, the integration among *retail*, *territory* and *landscape* has been weakly pursued or even complete disregarded. In this panorama, the Autonomous Province of Trento (APT) is one of the few Italian regions that have been able to grasp fully this mutual relationship adopting innovative solutions for retail sector, strongly anchored to territorial identity and oriented to a spatial scheme of organisation and economic development.

2. Retail planning in Trentino

The Autonomous Province of Trento (APT) is going through a deep renewal in its spatial planning. The reasons for this on-going evolutionary process can be traced back to two basic institutional conditions:

1. The reform of APT planning legislation, initiated by the approval of the Provincial Territorial Plan (PTP) – that is the strategic framework for territorial planning within the inter-municipal policies of Valley Communities (VCs);

2. The reform of APT retail planning legislation, conducted with the enactment of the European reform regulations and national decrees on the programming of services.

In this context, the provincial government has had to face a formidable challenge, namely to orient the new direction of territorial retail development policies to fit the aims of the reform, which establish the abolition of quantitative parameters, without giving up the territorial planning and the conservation of the landscape values introduced by the PTP. Thus the provincial government has had to radically rethink its planning approach to designing the processes of retail development keeping in mind that accepting the logic of the reform decrees (liberalization of services) does not mean giving up the territorial planning. Hence the APT administration found it necessary to refer to new knowledge paradigms and instruments of governance to renew technical competences in support of public action.

It is within this concrete perspective of planning action that the APT requested the Interuniversity Department of Regional and Urban Studies and Planning of Politecnico di Torino research group to apply the Territorial Integrated Evaluation (TIE) methodology, which had already been experimented in other Italian planning contexts[1]. The goal was designing a new direction of provincial policies while harmonizing the needs of territorial development with those of conservation of landscape values. Trentino is a cross-border area characterized by a lively tourist and a retail demand that needs to be harmonized with the exceptional and internationally renowned value of its landscape, such as the Dolomite Mountains, a UNESCO World Heritage Site. This context means that TIE's approach to designing territorial retail scenarios needs to look simultaneously at different themes, such as retail, tourism, territorial infrastructures, environment and landscape. The example of Trentino has allowed us to apply and redesign the TIE methodology with the aim of setting up territorial retail scenarios which meet both the need for economic growth (in the retail and tourist sector) and the need for landscape conservation values, which are very much being fostered at the international level.

The application of TIE led to design territorial retail scenarios. In these, several of the leading economic factors in the provincial development – especially tourism and retail – are able to work together as factors for regeneration, enhancement and development, under certain circumstances, in synergy with the conservation of environmental and landscape values. The assumption underlying this experimentation is the idea that retail planning cannot go on without a territorial perspective and that this perspective includes shared qualitative criteria of urban and landscape renewal in harmony with specific local characteristics.

TIE results are the design of territorial retail scenarios in which local economy, in synergy with the conservation of landscape values, could become factors contributing to urban renewal and territorial development. The proposed operating processes have to do with two specific aspects of territorial planning:

1. The definition of principles and criteria to bring out elements of territorial opportunities within the regional development framework;

1 TIE methodology is the result of a research programme coordinated by Grazia Brunetta and conducted from 2004 to 2008 for Piedmont Region. The research had to do with the designing and preliminary experimentation of this methodology to support the planning of the retail territorial development, in particular large retail areas [9]..

2. The definition of proactive territorial partnerships for integrating sector-focused policies (retail / tourism/ landscape) in territorial retail scenario design.The territorial retail scenarios were projected as multi-level and multi-sector systems of governance, or clusters of guiding visions, that could activate the implementation of integrated policies for the development and enhancement of local resources and local potentialities to be articulated in the institutional design of Trentino [10].

The TIE territorial retail scenarios are not forecasts of horizons to reach but potential routes to be charted by local action, routes towards territorial enhancement. Hence the process of evaluation leads to visions, updated periodically, of the development dynamics and perspectives in each territorial context. These visions would then be supports for the territorial planning choices that the VCs must make when they are designing the Community Territorial Plans (CTPs). The TIE principles and criteria at the basis of the construction of territorial retail scenarios have become the language of each local discussion, in every VC, finalized at working out its own territorial development strategy. This process is oriented to a decentralized approach to regional planning, where local administrations enjoy full responsibility in making decisions about the design of future territorial retail development strategies.

3. The TIE territorial retail scenarios

TIE methodology comes to an operational proposal for three types of territorial retail scenario (Figure 1) characterised by the different role played by retail in accord to opportunities and capacities of local rehabilitation:

1. Scenario 1 Retail – designing the territorial retail system;

2. Scenario 2 Marketing – designing the integration of retail / tourism/ territory;

3. Scenario 3 Landscape – enhancing the landscape identity of territorial system.

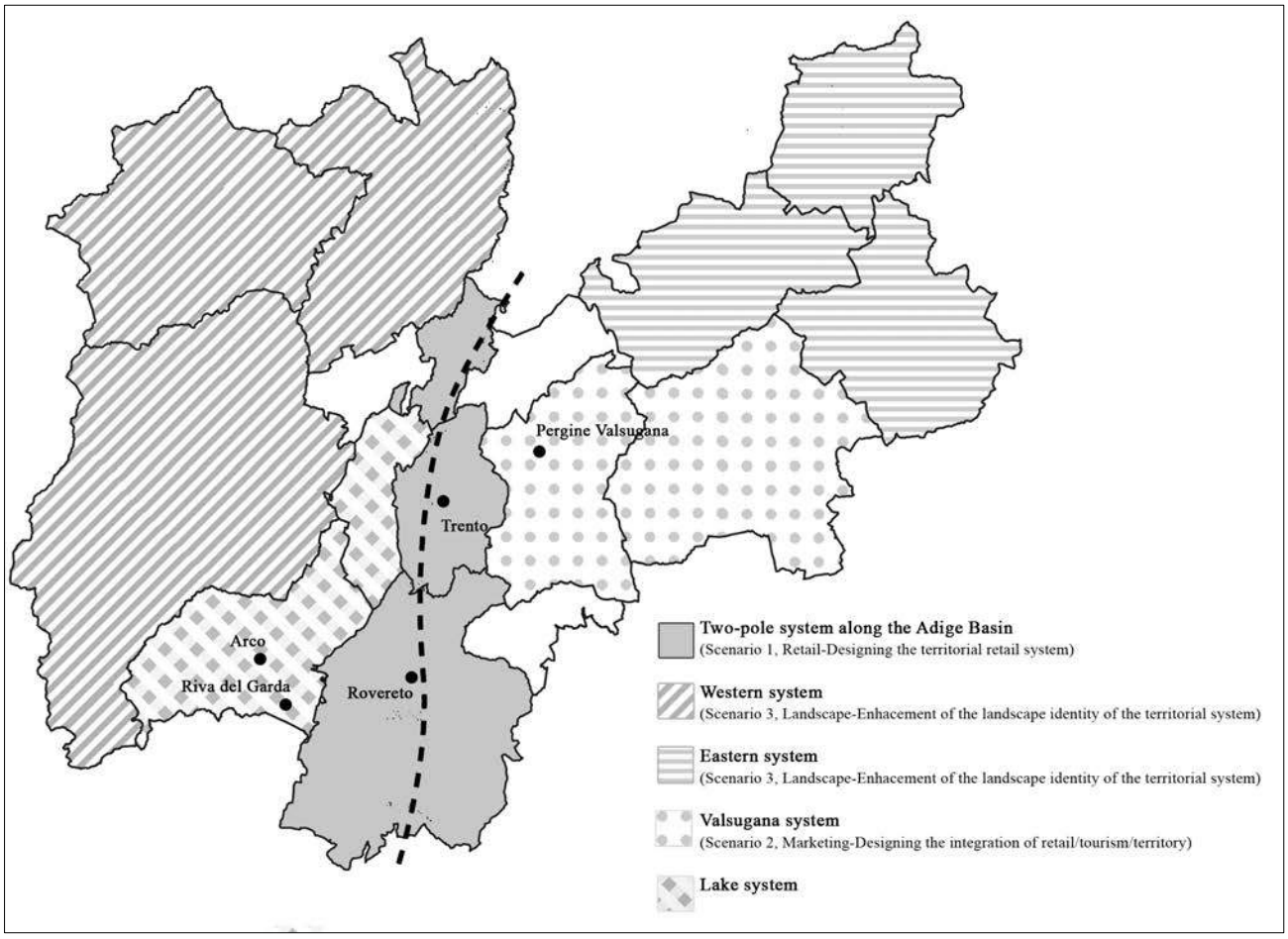

Figure 1 The TIE terrritorial retail scenarios

These scenarios are potential pathways for the valorisation of VCs that are anchored in a set of shared principles and criteria. This is a process that is primarily based on proactive local territorial policies. In other words, this process is sensitive to respect of ethical choices in relation to economy, environment and landscape. These are proposals that are addressed to the VCs, who are assigned the project of their CTP. Any proposal for strategic actions is made to design the territorial retail scenarios and hence it is a proposal that is very far from the standard model that the placement of retail large-scale stores has followed.

The emerging territorial retail scenarios are based on the following features:

1. The relationship with the infrastructure system - networks of primary accessibility, pedestrian and bicycle paths, and public transportation network in order to reduce the growth of traffic and production of pollution from emissions;

2. The relationship with the urban context – historical city /rural areas/ high-quality areas – that implies the return to cities and the search for new models and formats marked by logic of re-use and recycling rather than by of consumption of territorial resources;

3. The relationship with the territorial and the local-landscape system leads planners to define an unified project for a diversified mix of retail and other functions – diversification / integration / short supply chain.

4. Principles and criteria for designing territorial retail scenarios in Trentino

The principles and criteria of TIE methodology helped the APT to reorganize its regional retail policy. The reform is based on two principal elements of innovation that pursued harmonisation between retail development and the conservation of landscape values. In particular, TIE used:

1. Three principles for designing territorial retail scenarios that intend to promote the integration between the regional retail policies with the landscape-related policies (APT Resolution 1339/2013, section 4.3.4).

2. Five criteria for designing retail areas no longer founded on quantitative parameters but addressed to promoting the quality of territorial development processes (APT Resolution 1339/2013, section 5).

Firstly, the three principles for designing territorial retail scenarios are pathways to follow for the retail territorial development in which land use, landscape and retail are combined. The three different types of scenarios are characterised by the different role that retail is called to play in relation to the specific potentialities of development of every VC (Figure 2).

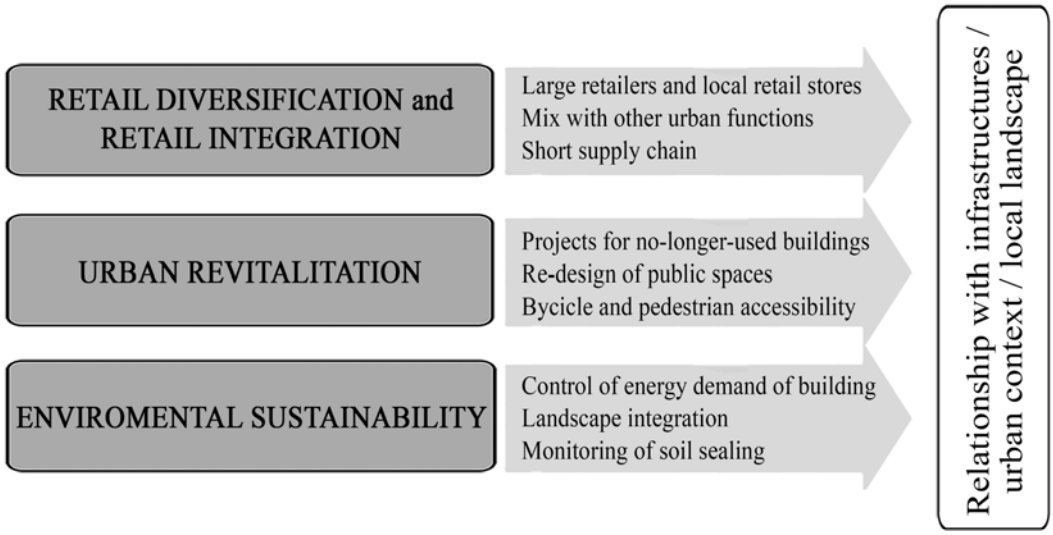

Figure 2 Three principles for designing territorial retail scenarios

The first principle - *Retail diversification and retail integration* - is generally defined as the interrelation between retail development and local framework. Here, retail diversification is intended not as the entry of a business unit into new lines of activity [11], but as the mutual relationship between large-scale stores and

neighbourhood stores. Traditionally, these are in opposition because of, historically, superstores in decentralised locations are replaced the shops located in city centres. This new perspective entails that, under certain conditions, large-scale stores and neighbourhood stores can create mutual advantage for the local economy development. In some situation, therefore, this interaction can trigger a virtuous circle of improvement of local competitiveness growing the quality of the retail system. On the contrary, retail integration is conceived as a unified retail project in which retail is mixed with other urban functions related to territorial characters, as tourism, leisure, local production and landscape resources. Finally, this principle arises a new innovative logic in which retail is not interpreted as a sectorial element but as one component of a joint and diversified urban functions project. In this perspective, territorial dimension is the fulcrum in which retail, understood not only as an economic activity, works with other territorial functions for the VCs development.

The second principle - *Urban revitalisation* - concerns the role of retail in urban regeneration. Traditionally retail, along with infrastructures to which it is intrinsically linked, contributes to delineate spatial planning defining the perception of historical centres and suburban areas creating, in some cases, new amenities, shopping and amusements. In this perspective, the role of retail development is recognised as substantial in supporting urban regeneration [12]. Retail, then, turns out to be an element that can support the project of urban regeneration in the VCs, not only from a purely economic point of view, but also from a social and territorial standpoint by providing jobs, services, investment and a focal point for community activities. Practically, retail-led regeneration [3] entails the development of new retail areas located in no-longer-used buildings avoiding soil sealing and re-designing public spaces and local accessibility.

The third principle - *Environmental sustainably* - is primarily links to landscape integration, here intended as the preservation of the high naturalist, ecological and scenic values of each VC, and the monitoring of soil sealing avoiding the dangerous propensity towards the use of natural, semi-natural and agricultural land. In addition, this principle is related to retail buildings high-performance achieving a better balance between occupants' requirements and energy demand. As other types of new generation buildings, also retail stores should be designed following a mix of environmentally-friendly materials and technologies ensuring that all energy-consuming equipment is efficient as possible. In this perspective, new retail areas should be designed according to some basic principles as the use of natural light or the use of highly efficient artificial lights, where needed, and the use of natural ventilation to flow in and out in order to reduce the air-conditioning.

In addition to these principles, the APT retail planning introduced five criteria for designing retail sites that are no longer based on quantitative parameters but on the quality of territorial development processes of each VC. In particular, the principles are the following:

1. Enhance the relationship with the urban context, and in particular with the city centre, improving the attractiveness and the quality of retail system in a logic of retail diversification and retail integration, as allowed above[2];

2. Guarantee a good level of accessibility and a rapid connection with the primary roads infrastructure system along with pedestrian, bicycle and public transportation network in order to reduce any growth in traffic or pollution emissions;

3. Rethink the traditional supply models integrating retail with other urban function as tourism, leisure and local production[3];

4. Reduce the dynamic of soil sealing and support the reuse and the renewal of no-longer-used buildings in a perspective of retail-led regeneration[4];

5. Use an environmentally-friendly approach for design, materials and technologies[5].

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2 The *Plaza Shopping Mall* (Pasadena – USA) is a new retail area that aims to developed synergetic and shared actions by the shops in city centres and large-scale stores, by non-material actions, such as the promotion of coordinated events, and material actions, such as sharing parking lots.

3 The *Decathlon Village Oxilane* in Bouc Bel Air (Marseille/Aix - France) is a new retail area where the purchase is combined with a *shopping experience* in which consumers can buy a product, perform their favourite sport and spend their free time.

4 The *Gazometer City* (Wien – Austria) is a new retail area in which four-abandoned gasometer are re-design. Each gasometer was divided into several zones for living (apartments in the top), working (offices in the middle floors) and entertainment and shopping (shopping malls in the ground floors). Shopping mall levels in each gasometer are connected to the others by sky bridges.

In respect to local potentialities, the new APT retail approach was meant to link the quality of the territorial retail development of each VC with the environmental sustainability. Such sustainability can be articulated in terms of enhancing territorial resources, containing environmental pollution, and integrating other sectors with the landscape-related context of accessibility.

Starting from this theoretical framework, some best practices that implemented this new retail approach directly on the VCs retail development are been identified.

5. Best practices

The Trentino territorial retail supply system is characterised by a complex and varied structure [13]. On the one hand, the five most populous VCs in Trentino, located along the main roads, are characterised by a solid retail system. On the other hand, the rest of the Trentino VCs are marked by low retail consistency. Yet, they have a higher number of neighbourhood stores than large-scale stores. So, in the first case retail is a factor of opportunity for the development of VCs, while in the second one retail systems are weak. At the same time, Trentino is generally characterised by a lively tourism, both in the mountain VCs and in marginal territories where tourism of eno-gastronomy and excursions are promoted, and by a high variety of landscape values alternating between mountain - protected areas, the resources of the Dolomites, forests and glaciers - and valley areas.

On the basis of the provincial retail approach, each VC is starting to rethink its retail system according to its main local characters in order to orient retail development to the three principles and the five criteria introduced by the APT Resolution 1339/2013. In this perspective, each VC must analyse its retail ambition and design a territorial retail scenarios helped and supported by the TIE results. To date, the sixteen VCs are definitely implementing, in their territorial plans, territorial retail scenarios assuming different approaches and visions in relation to their specific retail potentialities.

In order to reinforce its territorial retail system, *Val di Sole VC* prefers to activate a retail strategy principally based on two aims. First, the territorial strategy tries to guarantee the permanence of retail stores in urban areas avoiding retail desertification. Second, the territorial strategy tries to integrate the retail system inside or near urban areas in view of enhancing the historical city centres. Therefore, the *Val di Sole VC* strategy is oriented to the conservation of present landscape values which are exceptionally high ecologically and scenically – thanks to the Adamello Brenta Park and the Stelvio Park - through monitoring the potential spread of urbanized areas and therefore of soil sealing. The VC is established policies for the development of new retail stores – both small and large – that follow the principles and the criteria of new provincial retail approach. In this perspective, it is interested to analyse the development of a new shopping area, with a sales area of 1,800 sm^2, located near the centre of the city of Malè (Figure 3).

Figure 3 The new retail area in Malè

5 *Tesco zero-carbon stores* is a long-term retail programme. Tesco – a British multinational grocery and general merchandise retailer the third largest retailer in the world measured by profits and second-largest retailer in the world measured by revenues - has a goal to become a zero carbon retailer by 2050. Tesco stores use 66% less energy than a typical store of a similar size and employ renewable energy on-site using sources including photovoltaic (PV) roof panels and cladding, solar hot water generation, alternative fuel combined heat and power (CHP) and ground-source heat pumps. Actually, Tesco have seven zero-carbon stores across the Group – four in the UK and one in Ireland, Thailand and the Czech Republic. The stores are all operating at a zero-carbon level, and some are generating excess energy. In 2012/2013, the four zero-carbon stores in the UK generated nearly 7% more renewable energy than they required. In addition, Tesco exported this excess electricity to the national grid where it reduced the need to produce electricity from fossil fuels.

This retail area, recently opened on December 2015, is based on two main innovation elements that are able to fully grasp the new provincial approach to the design of retail sites:

1. The shopping area is characterised by a high-specialized offering that is correlated with local products – in particular agricultural – and with sports activities and events organized in the VC, in order to avoid competition between the new large-scale store and the existing shops [14]. In particular, the promotion of a specialized supply of products correlated to the local ones is be made through special forms of promotion and distribution in the large store, such as corners and temporary stands of farmer producers;

2. The retail building uses an environmentally-friendly approach for design, materials and technologies using natural ventilation - by wind catchers on the roof that let air flow in and out - efficient artificial lighting, and fridges and freezers with natural refrigerants, as carbon dioxide, that avoid energetic losses.

Following a similar logic, the *Alta Valsugana-Bersntol VC* aims to activate a retail strategy in its territorial plan that primarily works on avoiding the risk of retail desertification in scarcely populated areas and the enhancement of the short supply chain specialising retail offerings, such as sales of local agricultural and dairy products. In this direction, the territorial plan recognises territorial vocations of each area of the VC (Figure 4) and the main local peculiarities as fruit farms and rural farmhouses, where forest-wild fruits were produced, viticulture and beekeeping.

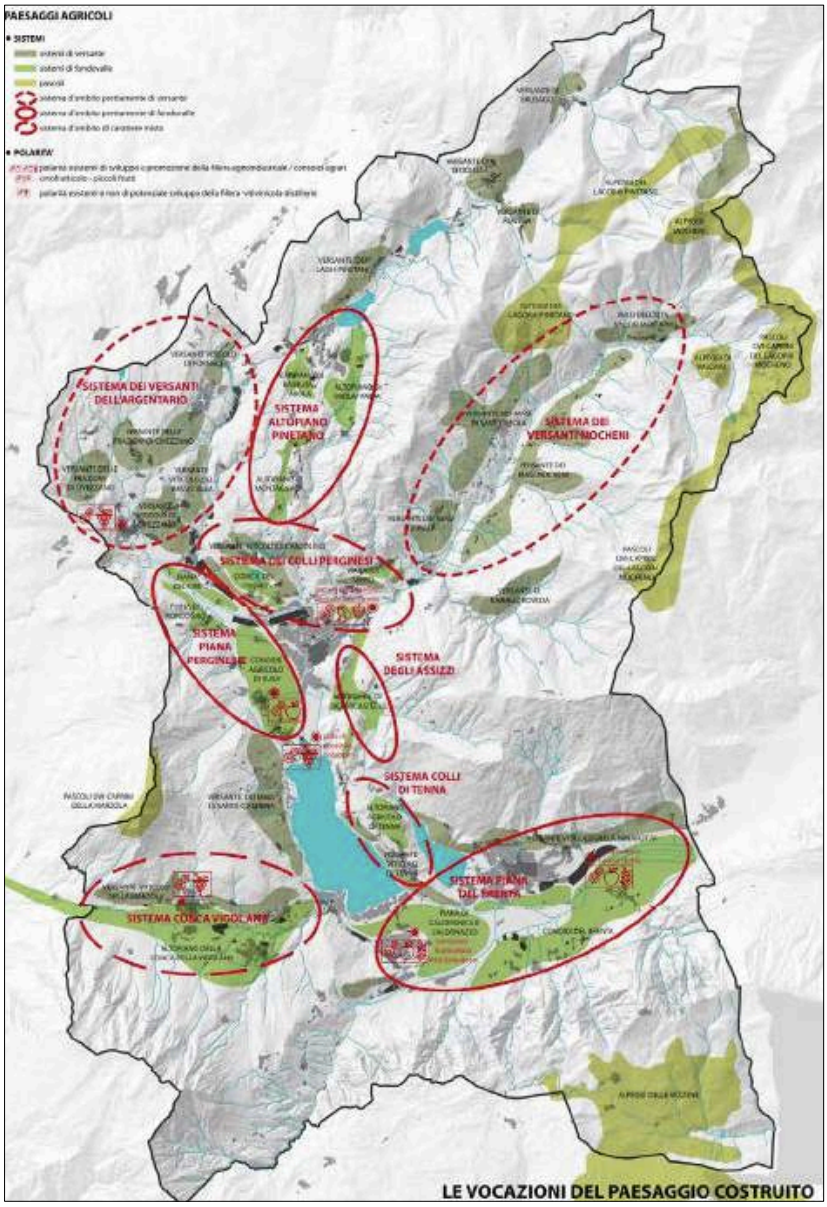

Figure 4 Territorial vocations of Alta Valsugana-Bersntol VC

On the contrary, *Trento* and *Rovereto* – the two poles and the most populous cities in Trentino – have to orient their retail development directly in the local plans. The two cities demonstrate a high index of attractiveness because it is endowed with excellent conditions of inter and intra-provincial accessibility - motorway and railway - and with good conditions of functional integration.

Trento pursued the creation of new retail areas, even for large-scale stores, through the reuse of no-longer used urban areas and buildings. In particular, the new retail areas must address themselves to new formats appropriate for the integration of various urban functions, for example, entertainment and free time. Moreover, they must be characterized by a retail offer diversified and complementary to the offer already existing. In particular, the local plan is focused on retail-led regeneration of Trento Nord, a commercial strip that is leading to the suburb in which underperforming large-scale stores are located (Figure 5). In this strip, vacancies are high, sales per square meters are low and money to reinvest in aging structures is scarce. Following the revitalisation of this commercial strip, the local plan aims to reinforce retail activities encouraging street life by:

1. Creating an active street life designing shops, cafes, restaurants and community services at the house ground-level inviting pedestrian-oriented streets, squares and public spaces;

2. Providing a central focus as a public space such as a town square;

3. Designing pedestrian streets;

4. Locating parking for support walking. For visitors who drive to the centre, a park-once-and-walk experience should be the most appealing and practical way to visit.

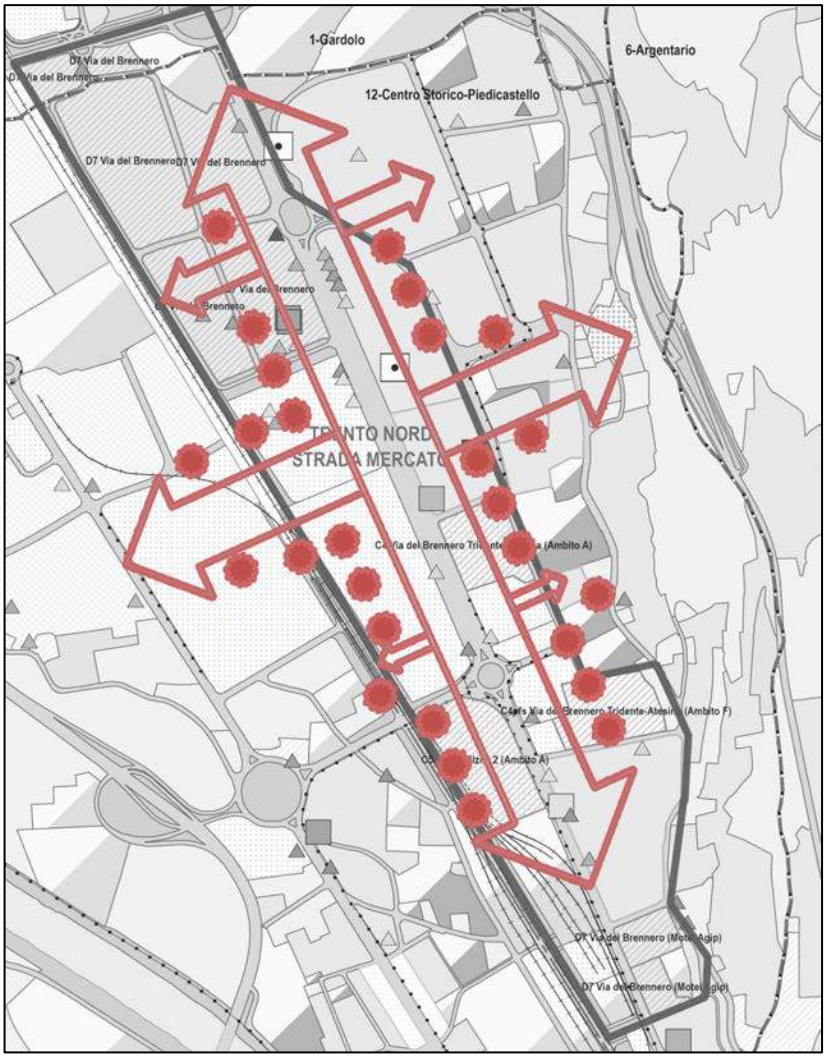

Figure 5 Commercial strip in Trento Nord

In according to the territorial plan of *Vallagarina VC*, the primary need for the city of *Rovereto* is to activate a strategy that aims to integrate the existing retail supply, maintaining today's level of quality in terms of retail varied typology and specialization, and to regenerate the urban periphery. In this direction, Rovereto decided to improve its retail system opening a new large-scale store in urban periphery as one of the element of urban revitalisation in a comprehensive vision. In particular, the project of this new retail area is focused on three main points:

1. Guarantee a good level of accessibility, in particular by pedestrian, bicycle and public transportation network (Figure 6);

2. Integrate the large-scale store offer with local products, in particular viticulture;

3. Design the relationship with the urban context, in particular with high quality agricultural areas located near the large-scale store and the cultural offer located in the city centre.

Figure 6 Existing and future bicycle paths between the new large-scale store and the city centre

6. Some final remarks

This paper has presented the recent evolution and development of Trentino retail policy. This exceptionally institutional dynamic context has allowed us to experiment with some emerging concepts in retail planning, such as integration, regional development paradigms and institutional capability. In addition, TIE methodology, based on the harmonisation of retail development with the conservation of landscape values through territorial retail scenarios, allows us to underline basically two themes of work.

The first element is focused on the perspective for planning that the Trentino retail policy presented. In particular, APT Resolution 1339/2013, adopting TIE principles and criteria, introduced in the Province a new rational paradigm for territorial retail planning, that was no longer founded on quantitative parameters of retail development. Instead, it was addressed to promoting the quality of territorial development processes [10]. In respect to potentialities and special features of each VC, Trentino retail policy was meant to link the quality of territorial retail development with environmental sustainability – as the enhance of territorial resources, the containment of environmental pollution and the integration of other sectors with the landscape - respecting attractiveness and balance among different retail sites. More generally, Trentino retail legislation introduced a new paradigm for sectorial policies in which territorial opportunities could emerge when forms of integration among policies of different sectors are implemented, making the competitive characteristics of areas emerge. More generally, TIE methodology has introduced in the regional retail planning a flexible approach in which territorial retail scenarios are anchored to shared criteria that every VC have to perform in according to the formulation of the CTP. In this perspective, TIE territorial retail scenarios are not closed vision but the starting point for VCs retail strategy. Since almost three years from this retail planning reform, to date the

sixteen VCs are completing the discussion and the sharing of TIE results and they are implementing them in their CTPs in relation to their potentialities and special features.

The second element is focused on the implication for designing retail sites. In Trentino retail policy, urban areas assumed a leading role as actors fundamental for effective activation of regional strategies. In particular, the city is becoming a great attractor of new retail projects that overtake conventional retail formats characterised by low-quality offer and localised outside the city centres. Instead, these proposals envisage the reuse of city areas and buildings, distinguishing retail as engine of urban revitalisation and an attractor for initiatives of enhancement and requalification. As opposed to what happened in the preceding decade, in Trentino retail policy new retail activities are more and more oriented towards seeking out the highest level of spatial, formal, typological, and functional integration with their urban contexts. In this perspective, retail becomes a strategy to build urban resilience, here intended as the overall goals of an effective retail policy to attain the economic, social, and environmental goals of urban sustainability and to diminish the negative impacts of suburban retail development [15]. More generally, retail urban resilience is essential to understand retail system's evolution, after threats or shocks, helping local authorities and other stakeholders to maintain and improve the urban commercial areas. Therefore, adopting a resilience perspective means a focus on retail change, trying to understand the performance and the capacity of different retail areas to transform both in city and regional dimension considering that retail might contribute to a community's image, identity, satisfaction and cohesion [2].

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