REGIONAL INNOVATION AS PART OF REGIONAL DEVELOPMENT AGENDA IN TURKEY: THE ROLE OF DEVELOPMENT AGENCIES

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Abstract
This paper examines the issue of regional innovativeness, by focusing on the innovative capacity of regional plans developed by 26 regional development agencies in Turkey. The purpose is to determine the degree to which these plans can be effective in defining the future innovation agenda of their respective region in various dimensions, and in finding solutions to societal needs. Adopting a qualitative research method, data collected from the regional plans of these 26 regional development agencies are subjected to content analysis. Findings demonstrate that the concept of innovation is indeed embraced in regional plans. Activities that aim to enhance the innovative capability of regions appear frequently within strategies.

Keywords: regional development; regional development agencies; innovative capacity; technological innovation; content analysis

JEL codes: R11, R58, O31, O32

1. Introduction
Against the backdrop of a world that is under significant influence of globalization, regions are increasingly recognized as important sources of competitive advantage, playing a crucial role in a country’s economic development. Corporations, policy makers and the civil society are focusing more on the term ‘regional’ or ‘glocal’ instead of ‘global’, illustrating the understanding that globalization and regionalization go hand in hand. Most sources highlight the fact that in order to compete in a global economy, localized learning processes and knowledge characterized by regional and local contexts are among critical success factors (Asheim, 1999; Cornett, 2009; Mackinnon et al., 2002; Pechlaner and Bachinger, 2010; Storper 1997).

The aim of this paper is to take a closer look at the issue of regional innovativeness in Turkey, with a brief qualitative study of the innovative capacity displayed by regional development plans of 26 regional development agencies. It is believed this is an important endeavour, not only for contributing to the growing literature in this field of inquiry in Turkey, but also for drawing attention to the regional development agenda of Turkey to be realized with the help of regional development agencies. In this regard, the regional development plans produced by

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these agencies are examined with respect to the extent to which they presented elements of innovation in various dimensions (technological, social, etc.).

Regions and the study of regional development have constituted the main focus of interest especially among scholars of economics (Mackinnon et al., 2002), since the recognition that the economic development of nations is shaped not only by material relations, but also by social and institutional dynamics. Regions have therefore become the centre of attention as the basic units that drive economic growth, through their learning, innovation, and implementation capacities. In this regard, the concepts of ‘innovative milieu’ and ‘innovation system’ have opened up a new agenda in research streams on innovativeness as well as regional development (Asheim and Gertler, 2005; Dabson, 2011; Gustavsen, 2011; Mole and Worrall, 2001), as they emphasized the bottom-up perspective that fostered the dynamic and collective learning processes in regions, as well as the importance of networks to enhance their innovation capacity (Gilbert, 2012).

Critical success factors and conditions for regions to be innovative have long been at the centre of discussions within the regional development and regional innovation research stream. There is widespread agreement on the positive relationship between knowledge, technological innovation, and competitiveness at the regional level (Oughton et al., 2002), also supported by research findings in various European countries (Cornett, 2009; Maennig and Olschlager, 2011; Mukkala, 2010; Pechlaner and Bachinger, 2010). Hence, success is sought in the interplay of these variables, built up through a region’s true characteristics.

Furthermore, regional development cannot be thought independent of social innovation. Social innovation is defined as “changes in the cultural, normative or regulative structures [or classes] of the society which enhance its collective power resources and improve its economic and social performance” (Heiskala, 2007, p. 59). Social innovation is a form of innovation that takes place at the level of social practice (Howaldt and Schwarz, 2010), such that regional actors collectively introduce changes in the routine practices of a social system to better address and solve social problems. To the extent that these changes are desirable and become permanent, innovation can be democratized and institutionalized in the society (Pol and Ville, 2009, Gustavsen, 2011). Considering the fact that regional development ought to be comprehensive and multifaceted, the innovative capacity of regions will be marked by their ability to address the social issues, in addition to equally important technological and competitive aspects.

The emergence of regional development agencies throughout the world added more emphasis on the role of innovation in regional competitiveness (Hughes, 1998). Development agencies have been established in several waves in different parts of the world, following the growth trends of the particular region – e.g. in Europe, to aid post-war reconstruction; in today’s developing countries, to promote economic growth, etc. (OECD/Mountford, 2009). In all instances, the basic rationale behind the establishment of development agencies was the promotion of competitiveness and productivity of the region, where development agencies operated on a business-like structure, taking part within the wider regional development system. Today, regional development agencies
work in collaboration with the regions’ stakeholders to facilitate technological and social innovation within regional contexts.

Turkey has recently established 26 statistical regions at the NUTS-II (Nomenclature of Territorial Units for Statistics – Level II) level, and put Regional Development Agencies into operation for each statistical region since 2006. These development agencies ‘play a critical role in mobilizing support and funding for regional development projects’ (Lagendijk et al., 2009, p.383). The basic motivation behind this study has therefore emerged as determining the effectiveness of the plans developed by these agencies covering the period 2010-2013, especially with regard to innovativeness.

The main research question of this study was formulated as examining the potential of regional development agencies in Turkey to become enablers of regional innovation. In order to tackle this question, answers to the following three questions were sought in the regional development plans: (1) What are the main dimensions covered in the regional plans of 26 Regional Development Agencies in Turkey? (2) Do these plans foster regional innovation, and if so, how or under which dimensions? (3) How are the sources of innovation capacity defined, including efforts of social innovation? Adopting an exploratory approach, these questions are addressed through a content analysis of the regional plans.

The paper is organized as follows: Section 2 presents a literature review on regional innovation, focusing on the role of development agencies in fostering regional innovativeness. Section 3 details the research methodology and the findings of the study. Finally, section 4 concludes the paper with discussion and suggestions for further research.

2. Regional innovation and regional development agencies

During the last decade, the term ‘innovation’ has achieved a permanent place in the regional development agendas. Concepts such as innovation systems, innovation milieu, and innovation capacity are widely utilized by researchers and policy makers. Regional development agencies, as actors that bridge the gap between economic policy and other fields, play a key role in facilitating innovative activities within regions. This section will elaborate on the role of development agencies in fostering regional innovation.

Regional innovation

Regions and their critical role in sustainable economic and social growth are recognized more and more every day. Oughton et al. (2002, p. 98) state that ‘growing international competition and integration strengthens the importance of the regional dimension because there is a well-defined set of external economies that are realized at that level’. Globalization, by creating new forms of economic relations in the world, led regions to come under greater competitive pressure, which implied the need to improve innovative capacity of regions for increased competitiveness (Mackinnon et al., 2002). Therefore, the focus of regional competitiveness research and regional development policies has shifted towards ‘innovativeness’(Cornett, 2009).
Innovation can be defined as a novel and improved process, product, administrative system, or program (Damanpour, 1991). Innovation capacity or the capacity to innovate refers to the ‘capabilities of a system to convert knowledge into innovation that is able to drive long-term economic growth and value creation’ (Schiuma and Lerro, 2008, p.122). From this point of view, regional innovation capacity can be described as the capabilities of a region to produce innovation to facilitate sustainable economic and social development.

Schiuma and Lerro (2008) identify four main categories of knowledge assets building a knowledge-based capital that can foster regional innovation:

1. Human capital: the know-how characterizing the different actors within a region
2. Relational capital: the group of knowledge resources linked to the relationships characterizing a regional system
3. Structural capital: assets that are tangible in nature but play a fundamental role in the development, acquisition, management and diffusion of knowledge at regional level
4. Social capital: the knowledge assets related to the soft infrastructure of a region (e.g. values, culture, routines, behaviour).

Schiuma and Lerro (2008) argue that these four dimensions are widely utilized in regional development plans and policies, to formulate regional objectives and strategies. They go on to demonstrate how these sources of knowledge assets help support the regional innovation capacity, by infusing into the region’s structure and functioning through a process of shared understanding and collaborative learning. Cornett (2009) holds a similar idea in emphasizing the role of various stakeholders in the regional development process, while Gilbert (2012) uses the term ‘creative destruction’ to refer to the use of resources, knowledge and skills to solve existing or future problems in new ways, thus enhancing the innovative capacity, and ultimately competitiveness of a region.

**Regional development agencies**

A regional development agency can be defined as ‘a regionally based, publicly financed institution outside the mainstream of central and local government administration designed to promote economic development’ (Halkier and Danson, 1996, p.9). Hughes (1998, p. 616) lists the following criteria for ‘model’ regional development agencies: The structure should be semi- or quasi-autonomous of government, the objectives should be sufficiently broad, there should be multiple policy instruments. Furthermore, an OECD report identified the roles played by development agencies as follows (OECD/Mountford, 2009): (1) They play an economic role by using an entrepreneurial approach, seeking to build markets, partnering with businesses, and taking on tasks that remain outside of government jurisdiction; (2) they play a leadership role by fostering a vision and a long term plan for their region, bringing together and aligning the interests of multiple stakeholders; (3) they play a governance and coordination role by acting as intermediaries among multiple parties, and keeping focus on the pursuit of the vision and the regional plan (4) they play an implementation role by putting together a dedicated team of specialists with complex management and coordination skills, to develop and employ tools and
resources to reach the goals of the region, overcome constraints, and foster cooperation among collaborating parties.

Regional innovativeness is emphasized in other large scale policies as well. The European Seventh Framework Programme supports projects to enhance research and innovation capacities throughout Europe under the ‘FP7 Capacities programme’. One of the themes covered by the programme is ‘regions of knowledge’. According to the programme ‘the “Regions of knowledge” initiative aims to strengthen the research potential of European regions, in particular by encouraging and supporting the development, across Europe, of regional “research-driven clusters”, associating universities, research centres, enterprises and regional authorities’ (European Commission, 2011).

Accordingly, networking and coalition building are defined as the key success factors for European framework programmes. As such, the integration between governments, universities, and corporations is crucial for becoming a ‘knowledge society’ (Ennals, 2004). One should add ‘civil society’ into that group as well. These four main stakeholder groups, i.e., governments, universities, corporations, and civil society, are key actors in defining problems and finding solutions to the problems of the region, as well as acting upon these solutions. Today, involvement of stakeholders in societal decision processes and benefits of collaboration are widely recognized (Mukkala, 2010; Stauffacher et al., 2008). Stakeholder involvement in developing regional plans may produce multiple benefits: on the one hand, problems of the region would be defined more comprehensively by different stakeholder groups; on the other hand, solutions offered by stakeholders would be much more easily internalized by the implementers.

Regional development agencies, therefore, integrate all these concepts and approaches together. The raison d’être of development agencies is to seek to improve innovation or innovative capacity of a region, in order to facilitate the region’s competitiveness. Development agencies try to achieve that through facilitating coalitions, networks and collaborative projects between stakeholders of the region. More specifically, they integrate stakeholder groups in developing the future strategic agenda of a region, and provide financial and technical support to prioritized projects facilitated by networks of stakeholders groups.

*Regional development agencies in Turkey*

Development efforts in Turkey date back to the early years of the Turkish Republic, and are mostly characterized by a centralized planning mindset (Lagendijk et al., 2009). Especially in the first half of the young republic’s life, development efforts are marked by policies of State control. With the establishment of the State Planning Organization (Devlet Planlama Teskilati, commonly known as DPT) in 1960, development planning was even more formalized with a permanent institution charged with producing development plans for every five years, and assisting governments in the implementation of economic and social policies (Devlet Planlama Teskilati, 2006). Although Turkish economy took a significant liberal turn from 1980s onwards, DPT continued to occupy an important position in shaping the development planning of the country.
This centralized mindset started to shift with Turkey’s candidacy to European Union (Lagendijk et al., 2009). Things started to move slowly, first in small businesses and their associations, then in universities that support small business projects, finally in non-governmental organizations, and municipalities. In a country where geographic regions were mostly seen as implementers of development policies set by the State, it was gradually recognized that regional governance is important to help development efforts reach even the most remote areas of the country. The State responded by promoting the establishment of Regional Development Agencies around the country, and in 2011, with a daring decision, turned years-old DPT into the Ministry of Development.

Against this background, Turkey has established Regional Development Agencies in 26 NUTS-II regions. Legislation on regional development agencies in Turkey (Development Agencies’ Establishment, Coordination, and Deployment Act), dated 08/02/2006, cites the main objectives underlying the foundation of development agencies as: (1) to develop cooperation between the public sector, private sector and non-governmental organizations, (2) to ensure proper and effective use of resources and mobilize local potential, thereby accelerate regional development in harmony with the principles and policies envisaged in the national development plan and programmes, (3) to ensure the sustainability of regional development; and to reduce inter and intra-regional development disparities. Each agency has an Executive Board, a General Secretariat, and a Development Council which acts as an advisory board. The Development Council is composed of a maximum of 100 members representing universities, corporations, public authorities and the civil society in the region. All 26 development agencies have developed regional plans for the 2010-2013 period through a participative process that included stakeholders of the region, and are currently providing financial support to the region’s actors (e.g. universities, local authorities, corporations, non-governmental organizations) to realize the main strategic priorities defined in these plans. The regional plans are formed on the basis of competitiveness, sustainable development and participation principles.

3. Data analysis and findings

Twenty-six regional plans developed by each region’s development agency have therefore constituted the focus of interest in this study. In this section, the research methodology is described, and the findings of the study are presented. After giving a step-by-step account of the qualitative method used in the study, findings are discussed on the basis of main conditions for sustainable regional development, as well as regional innovation.

Research methodology

This study adopted a qualitative approach, and made a content analysis of the regional plans of the 26 regional development agencies to uncover the extent to which regional plans emphasized innovation or innovativeness. First of all, the official web addresses of the 26 development agencies were examined, and the regional plans published on these web sites were downloaded. Due to uniformity and comparability concerns, the first three levels of the regional plans, i.e., vision statements, development axes, and main strategies (See Figure 1), were considered for the content analysis, as these levels were consistently covered in all plans irrespective of depth or content.
Vision Statements: Two authors independently examined the vision statements to group the content in broad categories, and to see what main themes (or perhaps, priorities) tend to emerge from the vision statements, with an eye on innovation or innovativeness. Evaluations of the authors were brought together and their level of agreement was assessed using Cohen’s Kappa statistic (Cohen, 1968). Cohen’s Kappa was calculated as 83%, which can be accepted as ‘good agreement’ for content analysis. Joint evaluations were then re-assessed by another independent judge, who examined the vision statements and made correctional comments.

Development Axes: The first author examined the development axes presented in the 26 regional plans, and grouped them into 15 broad categories. Then, two different coders independently coded the development axes into these 15 categories as 1-0. Evaluations of the two coders were brought together and their level of agreement was assessed using Cohen’s Kappa statistic (Cohen, 1968). Cohen’s Kappa was calculated as 81%, which can be accepted as ‘good agreement’ for content analysis. Joint evaluations were then re-assessed by another independent judge, who examined the development axes and made correctional comments.

Main Strategies: Main strategies were examined to answer the following two questions: (1) Is innovation mentioned in a strategy statement? If so, how and under which development axis? (2) What are the terms that are related to social issues/problems?

For terms regarding innovation, two independent coders examined the main strategies in the 26 regional plans and came up with a list of items, and their level of agreement was 100%. For terms related to social issues, the first author examined the main strategies in the 26 regional plans, and grouped the items related to social problems into eight broad categories. Then, two different coders independently coded the items related to social issues in strategy statements into these eight categories as 1-0. Evaluations of the two coders were brought together and their level of agreement (Cohen’s Kappa) was 75%, which can be accepted as ‘good agreement’. Joint evaluations were then re-assessed by another independent judge, who examined the strategies and made correctional comments.
Findings

Vision statements

The first part of the content analysis focused on identifying the main themes that emerged from the vision statements, with special attention to innovation or innovativeness. Vision statements are guiding principles in prioritizing decisions for organizations (PETERS, 1993). Vision is the first and the most important step in strategic planning studies. As for development agencies, a vision statement is a tool to guide and control the projects to be supported for the sustainable development of the region. Therefore, it was important to examine the vision statements of 26 agencies, and to observe the extent to which innovation was emphasized within the statements. Table 1 shows that the vision statements of 26 development agencies could be categorized under seven main themes.

It was observed that a large majority (96%) of the vision statements emphasized competitiveness, followed by environmental sensitivity and sustainable development (62%), and human/social capital and social dynamics (58%). It was also observed that only 46% of the vision statements referred to innovation or innovativeness (mostly coupled with entrepreneurship). The categorization of the vision statements was thought to reflect the future agenda of the region, and innovation did emerge as one of the basic components, although not at the highest priority.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage (N=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitiveness</td>
<td>25</td>
<td>96%</td>
</tr>
<tr>
<td>Environmental sensitivity &amp; sustainable development</td>
<td>16</td>
<td>62%</td>
</tr>
<tr>
<td>Human/social capital and social dynamics</td>
<td>15</td>
<td>58%</td>
</tr>
<tr>
<td>Quality of life</td>
<td>14</td>
<td>54%</td>
</tr>
<tr>
<td>Cultural and natural heritage</td>
<td>12</td>
<td>46%</td>
</tr>
<tr>
<td>Innovativeness and entrepreneurship</td>
<td>12</td>
<td>46%</td>
</tr>
<tr>
<td>Strategic position/location</td>
<td>11</td>
<td>42%</td>
</tr>
</tbody>
</table>

Development axes

In the second part of the analysis, development axes (also referred to as thematic axes, development tracks, etc.) were examined and grouped into categories as follows.

The categorization shows that more than half of the regional plans prioritize competitiveness, environmental sustainability, and social/human capital in their plans. Interestingly, this trilogy is compatible with the three domains of sustainable development put forward by United Nations for the millennium (Von Schirnding, 2005; United Nations, 2005), where sustainability is located at the intersection of the environmental domain (‘environmental sustainability’), the economic domain (‘competitiveness’), and the social domain (‘social and human capital’).
Table 2. Categorization of development axes defined in regional plans.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage (N=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitiveness</td>
<td>19</td>
<td>73%</td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td>17</td>
<td>65%</td>
</tr>
<tr>
<td>Social capital/structure and human capital</td>
<td>15</td>
<td>58%</td>
</tr>
<tr>
<td>Infrastructure improvements</td>
<td>12</td>
<td>46%</td>
</tr>
<tr>
<td>Social development, integration and social inclusion</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>Quality of life and place</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>Rural development</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>Improving tourism</td>
<td>7</td>
<td>27%</td>
</tr>
<tr>
<td>Improving employment</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>Improving transportation, logistics and communication</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>Improving industry and trade</td>
<td>5</td>
<td>19%</td>
</tr>
<tr>
<td>Improving the investment environment</td>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>Knowledge-based learning economy</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Strengthening the institutional structure</td>
<td>2</td>
<td>8%</td>
</tr>
<tr>
<td>Branding and innovativeness</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>

Innovation and social issues covered within main strategies

The third stage of the analysis involved examination of the main strategies listed in regional plans, with an eye on innovation and social issues being emphasized. As part of the analysis, development axes were examined and grouped into categories earlier. With regard to innovation, it was found that strategies and actions to improve innovativeness appeared under the development axes ‘competitiveness’, ‘knowledge-based learning economy’ and ‘branding and innovativeness’. Development agencies have consistently mentioned ways or tools to increase innovativeness within their strategies. Actions to improve innovative capacities of regions mentioned within the regional plans are listed in Table 3.

Table 3. Actions to improve innovative capacities of region (as defined in regional plans).

<table>
<thead>
<tr>
<th>Actions Proposed for Innovativeness</th>
<th>Frequency</th>
<th>Percentage (N=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increasing innovativeness in various industries (agriculture, tourism, trade, manufacturing)</td>
<td>10</td>
<td>38%</td>
</tr>
<tr>
<td>Improving R&amp;D capacity (improving R&amp;D culture, university-industry cooperation for R&amp;D, subsidizing R&amp;D activities, establishing R&amp;D labs)</td>
<td>6</td>
<td>23%</td>
</tr>
<tr>
<td>Becoming a knowledge society, creating an innovation culture</td>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>Investing in human resources to improve their innovative capability (technical training and education, increasing creativity of human resources)</td>
<td>3</td>
<td>12%</td>
</tr>
<tr>
<td>Supporting high-tech industries</td>
<td>2</td>
<td>8%</td>
</tr>
</tbody>
</table>
With regard to social issues, the aim was to find out whether the regional plans had a potential to support social innovation efforts in Turkey. Increasing awareness of social problems has been forcing governments, businesses, and civil society to take action on working together for social development. For this purpose, people, groups, and institutions form inter-organizational collaborative platforms. The social value created by these platforms is defined as social innovation. Examining the social issues addressed in the strategies of development agencies helped to see if there was any room for social innovation in the regional plans. To the extent that the social problems/issues addressed in the strategies are solved through innovative products, services, processes, or business models, development agencies may well be enablers of social innovation in Turkey. Table 4 shows the main categories regarding social issues.

The table shows that the highest ranked social issues for the regions were social inclusion (81%), and public education and employment (81%). The list of social issues in Table 4 can be said to reflect the priorities of regional stakeholder groups. Projects that will aim to solve these issues will most likely be produced by these same stakeholders, therefore one should expect that these regional plans may facilitate the realization of social innovation efforts provided that development agencies provide technical, organizational and financial support to well-developed projects.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Frequency</th>
<th>Percentage (N=26)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social inclusion</td>
<td>21</td>
<td>81%</td>
</tr>
<tr>
<td>Public education and employ</td>
<td>21</td>
<td>81%</td>
</tr>
<tr>
<td>Health services</td>
<td>15</td>
<td>58%</td>
</tr>
<tr>
<td>Environmental sustainability</td>
<td>13</td>
<td>50%</td>
</tr>
<tr>
<td>Social solidarity</td>
<td>9</td>
<td>35%</td>
</tr>
<tr>
<td>Reducing poverty</td>
<td>4</td>
<td>15%</td>
</tr>
<tr>
<td>Disaster management</td>
<td>1</td>
<td>4%</td>
</tr>
</tbody>
</table>

4. Discussion and further research

The main question at the beginning of this study was: ‘do regional development agencies in Turkey present any potential to become enablers of regional innovation?’ This study attempted to answer this question through a content analysis of regional plans with respect to innovativeness, which could give a clue as to their regional innovation potential. Specifically, the examination focused on: (1) the degree to which innovation or innovativeness takes part in the regional development agenda as reflected in the regional plans, and (2) the degree to which the regional plans put forward strategies to improve the innovative capabilities of regions, and to find innovative solutions to societal problems. Based on the findings, it is possible to argue that development agencies definitely show the potential to become enablers of regional innovation, as reflected in their current regional plans. More specifically, it was found that competitiveness, sustainability, and human/social capital were the main themes that emerged under the vision statements, as well as the development axes. It is
Therefore possible to conclude that regions have defined their development priorities along these main guidelines. Further, it was also found that the strategies and actions regarding innovativeness are consonant with these themes, more specifically with competitiveness, learning, and branding, where the latter two can easily be thought as the outcome of effective usage of human/social capital. It is therefore believed regional plans demonstrated that regions are well aware of their priorities for development, and are keen on working towards achieving those ends.

Main conclusions of the study can be listed as follows:

(1) Innovativeness is related to competitiveness. Within the 26 regional plans, nearly all strategies regarding innovativeness or innovation are placed under the ‘competitiveness’ development axis. This is compatible with extant research that relates innovativeness to competitiveness (e.g. Cornett, 2009; Maennig and Olschlager, 2011; Mole and Worrall, 2001; Oughton et al., 2002; Schiuma and Lerro, 2008; Shearlock et al., 2000). It is possible to conclude that development agencies in Turkey seek to improve innovativeness to facilitate regions’ competitiveness.

(2) Regional plans aim to increase innovative capacity. Strategies such as improving R&D capacity, supporting high-tech industries, improving the innovative capacity of human resources through technical training and education, and creating an innovation culture were identified within regional plans. Obviously, these actions are closely related to improving the innovative capacity of regions (provided that they are actually implemented within the region).

(3) Regional plans aim to ensure sustainable development. The main development axes formulated within regional plans mostly involve themes related to economic, social and environmental sustainability. These are the three domains of sustainable development widely recognized throughout the world. It can be said that the regional plans are designed so as to ensure compatibility between economic and social development and the environment.

(4) Development agencies may become enablers of regional innovation in the future, including social innovation. Regional development based on the innovative capacity stemming from the region’s own stakeholders may have tremendous social implications. The solutions offered by stakeholders would be much more suited to the region’s requirements, much easier to implement, and keenly embraced by the implementers. It was observed that the regional plans cover many social issues (e.g. social inclusion, education and health services, employment, reducing poverty); the solutions that address these issues may therefore lead to social innovation, in case these solutions bring innovation in some sense.

(5) Development agencies may be the solution to the regional innovation paradox. The regional innovation paradox ‘refers to the apparent contradiction between the comparatively greater need to spend on innovation in lagging regions and their relatively lower capacity to absorb public funds earmarked for the promotion of innovation and to invest in innovation related activities compared to more advanced regions’ (Oughton et al., 2002, p.97). ‘Innovation in agriculture’ appears in regional plans of various development agencies; by supporting innovation in agriculture and rural development, development agencies may overcome the regional innovation
paradox: the capacity of lagging regions to absorb public funds for innovation will increase.

(6) Regional plans reflect the ideas and future agenda of the regions’ stakeholders. As the regional plans formulated by the 26 agencies reflect the collective output of a participative process, their contents offer great insight into the stakeholder point of view regarding development of a region.

Limitations of this study can be addressed by the following suggestions for further research: First, an analysis of the process through which the plans are written down can reveal important insights into the time and effort put in by the contributors. It is possible to examine the contributions of each stakeholder, and learn more about their priorities, their concerns, and even the time span it takes to arrive at a plan mutually agreed upon. Secondly, the details of each regional development plan would inevitably vary, and different regions would have different requirements and priorities to put forward. It would be interesting to compare those priorities in order to develop a better understanding and provide a better allocation of resources to regions. Another interesting comparison would be to see the degree to which different regions attach importance to innovativeness, or the different tools and objectives they add into their strategies regarding innovativeness.

The present study only focused on what’s written in the plans, as the ‘ideal’ state still underway to realization. It would also be an interesting follow-up to take a deeper look at the implementation process, and whether the objectives are indeed realized, which would feed into an in-depth analysis and corrective action (if necessary) of the plans by each region’s stakeholders.

5. Conclusion

The importance of ‘region’ increases, and it seems regional development agencies will remain among the key facilitators of regional competitiveness in the future. The ultimate aim should be to boost competitiveness through creation of an innovative environment, within the framework of sustainable development through economic, social, and environmental development. The regional plans of the 26 development agencies examined in this paper reflect strong intentions to improve regional innovative capacity; bringing these plans into life is now the big challenge that remains in the development agenda of Turkey.

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