

Explanatory Model of the Relationship between Regional Governance, Institutional Capacity and Sustainable Development in Iran

Kheder Farajirad^{1*} Gholamreza Kazemian² Abdorreza Roknoddin Eftekhari³
1.Department of Geography, Tarbiat Modares University, Tehran, Iran
2.Department of Urban Management, Allame Tabatabaei University, Tehran, Iran
3.Department of Geography, Tarbiat Modares University, Tehran, Iran

Abstract

Institutional capacity has been recognized as one of the new policies and instruments for the regional development. While, the way in which the institutional capacity affects the regional development has been discussed as a basic problem in the academic and policymaking communities concerning the regional development, and there is no specific model for explaining the problem. On the other hand, many regions of Iran, as a developing country, face the great social, economic and ecological challenges which make it necessary to consider the institutional capacity at the regional level and its effects on the sustainable development. Therefore, this research aims at responding the basic question of: what is the proper model in the framework of the regional governance for explaining the relations between the institutional capacity and the sustainable regional development, emphasizing on Iran conditions? In this research, we have used a combination of survey-quantitative and quantitative methods to study the relationships among the regional governance, institutional capacity and sustainable development based on mainstreaming it in decision-making and activities of the region's institutions. To determine the amount of the institutional capacity effect on the sustainable development through the regional governance, and with regard to the concentrated structure of the country's administrative system and to determine the effect of such concentrated system, we studied the existence of such relations at the regional level, in form of case studies in Boukan and Orumiyeh counties. The results show that there is a direct relationship between the institutional capacity and mainstreaming sustainable regional development. According to the regression analysis results, mainstreaming sustainable regional development has correlation of 0.725 with the constituent factors of the institutional capacity. In addition, the results of the path analysis reveal that the constituent factors of the institutional capacity have different share in the mainstreaming sustainable regional development; so that appropriate legal arrangements, integrated institutions, abilities of institutions, learning and knowledge are effective on the mainstreaming sustainable regional development with 0.604, 0.356, 0.354, 0.248 and 0.074, respectively.

Keywords: Explanation, Institutionalism, Institutional Capacity, Sustainable Regional Development, Iran.

1. Introduction

Regional development has become an increasingly important activity for national as well as local and regional governments across the world since the 1960s and 1970s (Pike et al, 2006: 3). From the contextual and timely evolution perspective, theories and concepts of the regional development have experienced the process of moving from the neo-classical growth theory of local and regional convergence to the latest theories such as sustainable regional development, indigenous development, learning regions and institutionalism (see for example Capello and Nijkamp, 2009: 101-297; Martin et al, 2006: 25-36; Pike et al, 2006: 62-122). However, there have been questions about the factors and elements bringing about the regional and local development. Responding the questions, the institutionalism is one of the latest approaches raised new discussions on the regional development since 1990s. Basically, institutionalism poses this fact that the socio-spatial world of local and regional development is not just a homogenous or uniform geographical plane. It is made up of specific and particular places. Each place is particular. Each has its own evolving histories, legacies, institutions and other characteristics that shape their economic assets and trajectories, social outlooks, environmental awareness, politics, culture and so on. Such particularities can be both shared and different and can be materially and symbolically important to defining regional development policies (Pike et al, 2006: 26). The important point is to achieve sustainable development at regional level; the point which has been discussed by various authors such as Amin and Thrift (1995), Healey (1998; 1997), Amin (1998), Vigar et al. (2000), Sedlaced and Gaube (2001), Connor and Dovers (2004), Haughton and Counsell (2004), Evans et al. (2005), Pike et al. (2006), OECD (2007), Sumper (2007), Malekovic and et al. (2007), Verma (2007), Hanf and Morata (2008), Capello and Nijkamp (2009), Rodriguez-Pose (2009), and Stimson et al. (2009).

Since the new institutionalism has been introduced in the areas such as public management, economy, governance, local and regional development and sustainable development, amongst the broad, rich, and diverse set of disciplinary perspectives and literatures that comprise the institutional turn, a leading concept to emerge

within economic geography and regional development studies is that of institutional thickness, institutional capital or institutional capacity (Henry and Pinch, 2001; 1169). The importance of the institutional capacity is so that various authors discuss that the successful regional development is linked to the presence of the institutional capacity within a region. Therefore, there is a continued role for public policy to help create the types of capacities that are perceived to be more conducive to regional development. In the other word, as Martin (2000) has argued, the notion of institutional capacity has rapidly moved from being an analytical concept to a prescriptive one (Gibbs et al, 2001: 103-104). Therefore, nowadays in the framework of the institutional approach in general and the sustainable regional development in particular; and among the both academic and policy making communities the institutional capacities and capabilities of localities and regions have gained considerable importance. However, despite of the importance of the institutionalism, one of the most crucial critiques is that institutionalism is a relatively new approach toward the local and regional development and much works remain to be undertaken in conceptual, theoretical and empirical arenas. Moreover, there aren't enough empirical studies to explain the effects of the institutional capacity on the sustainable regional development. Finally, it necessary to note that there isn't a distinct and clear explanatory model to explain the relation between institutional capacity and sustainable regional development.

Hence, to encounter with ecological, economic, and social challenges that many of the developing countries in general and Iran in particular are faced with, it is necessary to analyze the capacities of the regional institutions and to enhance their abilities. Therefore, this article attempts to answer this fundamental question: "what is the appropriate explanatory model to explain the relationship between the institutional capacity and the sustainable regional development with an emphasis on the regional governance?"

2. Theoretical background

During the past two decades, several fields in the social sciences have experienced a resurgence of ideas that place institutions closer to the center of their thought and work. Institutionalism, itself, is an old idea in social science, dating back at least to the early part of the 20th century (Teitz, 2007: 26), but the new institutionalism can be found in the disciplines of economics, political science and sociology, and especially in works related to issues of governance and organization (Healey, 2007: 64). The spatial level of development is one of the issues that have been influenced by the institutionalism, in past two decades. Hudson discusses that during the period from the 1930s to the 1950s geographers were active in a variety of ways in studying particular problem regions and the regional problem but much of this geographical works were cast in an empirical descriptive mould. From the 1950s, however, Geographers became increasingly concerned to explain rather than simply describe spatial patterns and they began to use the then-novel methods of spatial science to try to explain regional uneven development and its relationship to regional policy. There were, however, severe explanatory - and so policy - limitations to such approaches. This led to attempts to conceptualize and understand the regional problem in fresh ways. From the late 1960s, geographers increasingly turned to political economy, especially Marxian political economy encompassing powerful concepts of structure and the social structural relations of capitalist societies, in their search for more powerful explanations of regional inequality. Hudson discussed that these approaches couldn't explain the uneven regional development; because of inattentiveness to conditions, contexts, and properties of the localities and regions. Therefore, according to the Hudson, the new approaches such as institutional approach and institutional capacity have been considered in analysis of the regional problems since the 1990s (Hudson, 2004: 4-12). In fact, debates about local and regional development have shifted from a focus on the quantity of development to a concern with its quality. Initially, this involved a focus on the impact of economic development on the natural environment and the constraints this placed on development, but has evolved into a more general concern with questions of the quality of life (Pike et al, 2006: 3).

Institutional capacity is often considered as a vague and fuzzy concept. This concept is a moving target since the field has evolved over the years from an initial focus on building and strengthening individual organizations and providing technical and management training to support integrated planning and decision-making processes among institutions. Today, institutional capacity often refers to a broader focus on empowerment, social capital, and an enabling environment, as well as the culture, values and power relations influencing us (Segnestam et al, 2002). There appears that such a broad insight to the institutional capacity highlights the institutional capacity building concept. Brown implies that institutional capacity building is advocated by policy makers and academic literature for mobilizing the institutional changes. It extends in a range of fields including public management, collaborative planning, and urban sustainability and development studies. So far, a majority of capacity building efforts have been typically focused on the human resource development and implemented as training and education programs. They may often be based on the idea that equipping individuals with the new knowledge, skills, and professional competencies would enable them to successfully operate the sustainable measures. However, the organizational capacity and in a broader context the institutional capacity along with the inability of professionals, technicians, and ordinary people (i.e., the human resources weakness) hinder the sustainable management of the places and fulfillment of the sustainable development;

because the relationships within and across the three areas of capacity building are key determinants of the resulting patterns for the institutional practice. The changing interventions are focused on single capacity areas, regardless of the others; so they are likely to be insufficient for enabling widespread changes (Brown, 2008: 222-223).

Institutional capacity is seen as a fuzzy concept and therefore its theoretical literature is still evolving. However, concepts such as capacity, capacity building, institutional capacity, and institutional capacity building are discussed in various and multiple disciplines (see for example: Grindle and Hilderbrand, 1995; Eade, 1997; Healey, 1998; UNDP, 1998; Savitch, 1998; Farnks, 1999; Gibbs et al., 2001; Henry and Pinch, 2001; Giordano, 2001; Segnestam et al., 2002; Horen, 2002; McCall, 2003; Willems and Boumert, 2003; Imbaruddin, 2003; Cuthill and Fien, 2005; European Commission, 2005; Evans et al., 2005; Robins, 2008; Meene, 2008; and Brown, 2008), and there isn't a clear and distinctive framework to explain constituent dimensions, factors and indicators of the institutional capacity. In addition to the above mentioned problem, it is necessary to note that despite of importance of the institutional capacity in regional development in general and sustainable regional development in particular; less experimental works have been conducted on the regional institutional capacity.

Inspiring from Healey (1998), Savitch (1998), Gibbs et al. (2001), Henry and Pinch (2001), and Evans et al. (2005), our study sees institutional capacity in the context of the governing region. We define institutional capacity as the capacities and capabilities of the regional actors such as social groups, trade unions, formal and informal social networks, governmental organizations, public institutions and regulatory systems to do their duties, to solve the regional problems, and to formulate the goals and perspectives of the regional development in sustainable ways. According to our definition, this capacity includes a range of factors and indicators in individual, organizational and gregarious levels. In this study, we define institutional capacity according to the five factors of the appropriate legal arrangements, integration of institutions, abilities of institutions, learning and knowledge (table 1).

Table 1 Constituent factors and indicators of the regional institutional capacity

Factors	indicators
Abilities of Institutions	Human capital (skill, motivation, creativity, commitment, proportion of the job and expertise)
	Financial and physical resources
	Clear and compatible missions, continuous evaluation of the resources, performance and organizational development
	Incentive structure (financial or nonfinancial incentives)
	Intra-institutional relationships (participation of members /employees in decision making, trust among the members)
	Flexibility in decision making, implementation, and in encountering with unexpected circumstances
	Acceptance of the external Ideas
Integrated Institutions	Relationships among the regional institutions (coordination in decisions and actions, cooperation and collaboration in decision making for regional development, consensus in decisions through interaction and dialogue, equal opportunity for participation of institutions in decision making)
	Communal ability of institutions (common tendency of regional institutions to interactions with central government, common commitment and engagement of institutions in regional development)
Knowledge	Formal knowledge (specialized knowledge in activity field, institutions' awareness to the specialized knowledge of others)
	Indigenous knowledge (institutions' awareness to the regional circumstance and condition, Referring to the knowledge and experiences of local people)
Learning	Interactive learning (sharing knowledge and experiences of the institutions, encouraging members of institutions to share their knowledge and experiences with colleagues)
	Experimental learning (practical use of the existing knowledge in institutions, practical use of accumulated experiences within the institutions)
	Continuous learning (provision of training for members, access to learning sources)
Appropriate Legal Arrangements	Legibility of rules and regulations (clarity, lucidity, and simplicity)
	Legal background (proportion of the national laws and regulation with the local circumstance and characteristics, relative authority of the regional institutions to codify regulations and instructions, legal obligation for coordination and cooperation among the regional institutions)

Source: Authors based on literature review

More description: In our study, the regional institutional capacity has been considered in the context of regional governance; and the factors and indicators of the regional institutional capacity are defined accordingly.

Recognizing the importance of institutions and institutional capacity in sustainable regional development, a fundamental question is posed: how should institutions be involved in the quest for sustainable development at the regional level? The recent researches and studies aimed at answering this question, based on the regional governance. In fact, the new governance approaches are directly linked to the institutional capacity, but still they officially require planning and programming mechanisms, which is needed a basis for the effective

development management. Also, during the past 10-15 years, governance processes and procedures became a focal point of research in development, political and institutional economics (Sumper, 2006: 4). Moreover, as Evans et al. have discussed, within the wide and extensive discourse of the sustainable development, there has been a tendency to suggest that," firstly, governance is somehow unarguably a good thing and that it should be encouraged in most areas; secondly, government is somehow less desirable; and, finally, changes in the processes of local politics and administration can be conceptualized as a continuum moving from government to governance with a clear assumption that any movement along this continuum toward the governance is both progressive and supportive of sustainability (Evans et al, 2005: 2). Christie and Warburton have argued that the governance is central to sustainability and that the fundamental driver of sustainable development must be democratic debates – decisions based on the open discussions and consensus based on the shared goals and trust (Ibid, 13). Governance is the common arena of the institutions and sustainable development. In the other words, institutions can actually affect sustainable development in governance arena. Stimson et al. (2006) have demonstrated that capacities of the institutions are viewed as absolutely crucial components in regional development, and the key drivers for the sustainable development are participation and empowerment which embrace the governance debate (Sedlaced and Gaube, 2010: 121).

Regional governance means that governing the region's political and social affairs must be transferred to the regional institutions, practitioners and stakeholders.

In fact, this form of the governing region requires a relative authority of the regional actors in decision making. We defined the regional governance as the sphere of the public debate, cooperation, interaction, dialogue; and conflict entered by local citizens and non-governmental organizations and institutions as well as by local governments. Governing is the term that we use to describe the interaction between the two processes. According to this approach, the impacts of the constituent factors of the institutional capacity on the sustainable development will be different and as existing theoretical models have been implied, to involve the institutions in the sustainable regional development process it is necessary to form the context and framework in which various regional institutions, stakeholders and actors can express their ideas and wills during the decision and policy making processes. In this case, the capacities and capabilities of the regional institutions, actors, and stakeholders will be utilized to reach sustainable development. Moreover, regional governance will strengthen self-governing process at the regional level and involve different institutions in general and local people in particular in governing region. The above discussion has a rich theoretical background. It would be analyzed using the collaborative planning theory of Healey (1998) and the model presented by Evans et al. (2005) on explaining the relationship between civil society and local government in the sphere of the urban sustainable development, regional governance explanatory models of Hun Lee (2008) and institutional governance systems of Griffiths et al. (2007).

In this study, we defined the ways of the institutional capacity affectivity on the sustainable regional development, based on the regional governance. The theoretical and conceptual model of relationship between the institutional capacity and the sustainable regional development has been presented in figure 1.

Based on the above model, regional institutions wouldn't be able to achieve sustainable development separately, even if they had a high capacity. Based on the model, this achievement would be realized successfully just when the whole sections, institutions, practitioners and actors at the regional level can apply their capacities to achieve sustainable development through the integrated framework of coordination, cooperation, and collaboration, and in fact in the framework of the integrated institutional governance. In this framework, the whole relationships among the institutional framework, regional governance, institutional capacity and mainstreaming sustainable regional development would be provided in continuums.

In the regional institutional framework continuum, we observe the fragmented and integrated institutional frameworks at the two sides. According to the regional governance theory, the higher coordination, cooperation and collaboration among the regional actors and institutions, the more integrated the institutional framework and vice versa. The regional institutional framework continuum determines the institutional capacity continuum with the low and sectional institutional capacity in one side and the high and combined one in other side. The higher integrity among the institutions and actors at the regional level, the higher institutional capacity would be, and vice versa.

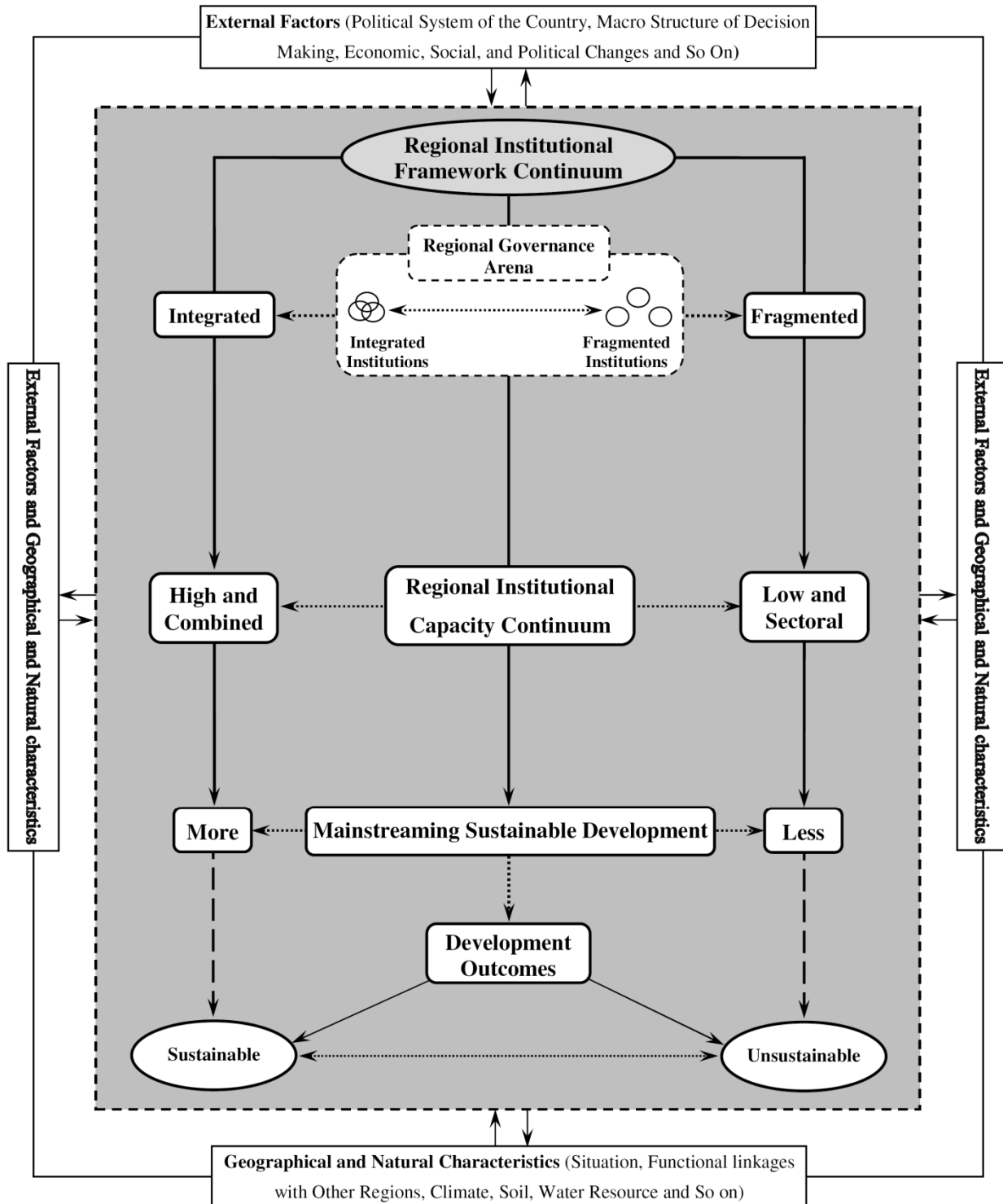


Figure 1 Theoretical explanatory model of the relationship between institutional capacity and sustainable regional development, based on the regional governance

Source: Authors' own

The institutional capacity continuum determines the amount of mainstreaming sustainable development at regional level; both sides of which are weak –low- mainstreaming and powerful –high- one, respectively based on the low and high institutional capacity. In addition, in the process of mainstreaming sustainable development and consequences of the development, we must consider the external factors such as the macro-structures of the policy making and decision making at the national level, legal macro-frameworks, economic, social and political changes happen out of the region in one hand, and the natural situation and geographical conditions including position, relations with the other regions, soil, climate, water resources etc., on the other hand.

As shown in the above model, this study considers the sustainable development with regard to mainstreaming it. In the context of mainstreaming sustainable development, OECD, inspired by the Brundtland report, believes that the sustainable development is not a statistic but a changing process in which sustainable development become a routine procedure in decisions, policy-makings, codifying regulations and even in daily activities by institutionalizing its goals, principles and basics (Strange and Bayley, 2008, 29-30). In the framework of mainstreaming sustainable development, measurement of the sustainable development is evaluated according to the policies, administrative procedures and the results of the policies and practical actions. For example, in the traditional way of measuring sustainable development, participation is considered as an index of sustainability, while in measuring sustainable development according to mainstreaming it, participation is just a means of achieving better policy results, not an indicator for sustainability. From this point of view, sustainability is not just a mere work but it is way of doing things that must become the routine and usual way of doing actions and governing the affairs (Evans et al, 2005: 31-32). In this research, we define the mainstreaming sustainable development inspired by the Agenda 21 (United Nations, 1992), Rosland (1998), Evans et al (2005), and Strange and Bayley (2008) as follow: Sustainable development is in fact the way of doing things by which the goals and principles of it become the routine and usual procedure in policies, decisions and various practical activities. By this approach, sustainable development is a process of change which by institutionalizing its goals, principles and basics, it become a routine procedure in decisions, policy-makings, codifying regulations and even in daily activities. In this process of change, the success of policies and actions must be in such a way that covers the three pillar of sustainable development – economic, social, and environmental- and achieving progress for one pillar should not harm the others. Table 2 describes sustainable development as a procedure.

Table 2 Sustainable development as a procedure

indicators	description
Building understanding of sustainable development	It emphasizes on understanding of sustainable development by local and regional institutions and actors. Real understanding of sustainable development by local and regional institutions and actors is the basic and primary action to reach it.
Capacity building for sustainable development	It implies that to reach sustainable development, using existing capacities of local and regional development and building new and required capacities is a necessary action.
Codifying regulations for sustainable development	Formulating legal and regulation frameworks of policy and decision making and administrative mechanisms accordance with local and regional conditions and circumstances is functioned as original context for mainstreaming sustainable development.
Practical actions for sustainable development	Practical actions aimed at sustainable development are seen as operational pattern to mainstream sustainable development. Practical actions toward sustainable development increase indicators of sustainability.

Source: Authors' own

3. Regional sustainable development in Iran and necessity of considering the institutional capacity and regional governance

Along with the establishment of the modern government in Iran and starting the development programs which devastated the traditional relations among cities and villages and regions of the country, the regional inequalities appeared as a challenging problem. Therefore, the regional development has been focused since 1970 and various policies and instrument applied to reduce regional inequalities. Despite of the long history of policy making for the regional development in Iran, it has been ignored that the country is a vast territory in which variety and plurality are prevalent characteristics. Therefore, achieving the macro goals of the national development depends on comprehensive understanding and knowing the local and regional levels. Moreover, national planning is not able to understand the regional and local restrictions and potentials without the intervening local and regional policies. In this case, the importance of changing the paradigms of the regional developments would be ignored and consequently the executive management and operation of the massive strategies of the national development and the final goals would not be achieved (Farajirad and Kazemian, 2012: 190). A review of the present approaches on the policy-making for the regional and local development in Iran shows that the process is imperative and top-down in the framework of the sectional policymaking where the specific sections development along with the construction projects as well as promotion of the services indices were emphasized. Therefore, despite of 5 decades attempt to promote the territory development on all aspects, utilization of regional potentials as well as reduction of the regional inequalities, there has not yet been any indigenized and consistent strategy for development of the regional and local levels and for utilization of the existing potentials and capabilities at this levels. The important point to note is that in addition to inequalities of

the various regions of the country, they have passed the internal structure of the region which generally leads to an unsustainable development. One of the important problems in this regard is ignoring the local levels, so that the regional development has been considered to the province level and in rare cases to lower levels. Meanwhile, most of the Iranian provinces have great ecological, economic, social, racial, and cultural variations; so that development planning according to those variations requires noting the levels under province. Moreover, it must be mentioned that definition of the goals, needs, perspectives and formulating the indigenized and compatible strategies may be realistic and operational based on involvement and participation of the local actors.

Therefore, the present research attempts to determine the present institutional capacities and their relation with the sustainable development -from the perspective of procedural aspects- at the Iranian regional and local levels through case study in Boukan and Orumiyeh Counties aiming at encountering the problems and challenges of the local and regional inequalities based on studying and considering the governmental and non – governmental institutions.

The two case counties are similar concerning the organizational structure and administration, except for establishing provincial organizations and departments in Ormiyeh, which naturally influence the county's capacity and capability. Moreover, Ormiyeh is more experienced than Boukan with regard to the official organizations -they have been established in Boukan, since 1999. In public section also there are more public institutions relative to Boukan. Since Ormiyeh is the province center, there are many private institutions and technical committees. From the social viewpoint, the social and cultural differences -in tribal, religious, lingual and historical aspects- of the two counties are distinct. Therefore, studying the two counties from the viewpoints of the institutional capacity and its relations with development would explain many problems, specifically the effects of the centralized structure of the Iran on the regional and local capacities. Therefore, in this research we have studied the institutional capacity in the two counties and its relation with the sustainable development and explaining the institutional framework, institutional capacity, status of various institutions and their relation with the sustainable development based on the regional governance theory.

4. Materials and Methods

This research has been conducted using a combination of the qualitative and survey methods. The sample population consists of the governmental and non-governmental institutions in Boukan and Orumiyeh. Considering the role and function of the institutions and their effectiveness in decisions and executive processes, some institutions were selected; so that they covered all aspects of the sustainable development i.e. environmental, social and economic ones. Then, each institution's units were assumed as criteria for determining the sample volume inside each unit, because they had different structures. In those institutions without any specific structure -such as councils, NGOs, social foundations, and unions-, their members were used as criterion. Sampling has been purposeful and their relativity with the subject was their selection criterion (table 3).

Beside the survey, we applied interviews with those who were able to state the approaches and conditions of the governmental and non-governmental institutions at the regional level. One interviewee was selected at least from each group of institutions and totally 10 individuals were interviewed; five from each county.

The indicators of institutional capacity and sustainable development based on mainstreaming it in decision-making and activities of the region's institutions was measured based on questionnaire. The documents, also, was studied to clarifying initiative activities done by local institutions in order to mainstreaming sustainable development.

Table 3 sample institutions

Main Groups of Institutions	Boukan County		Orumiyeh County	
	Number of Institutions	Number of Units or Members within Institutions	Number of Institutions	Number of Units or Members within Institutions
Governmental	29	174	28	153
Public Administrations	4	23	5	34
Social Institutions	6	37	7	41
Private Institutions	1	5	1	6

5. Findings

According to the finding of this research, the total institutional capacities were 3.04 and 2.46 for Orumiyeh and Boukan Counties respectively (figure 2).

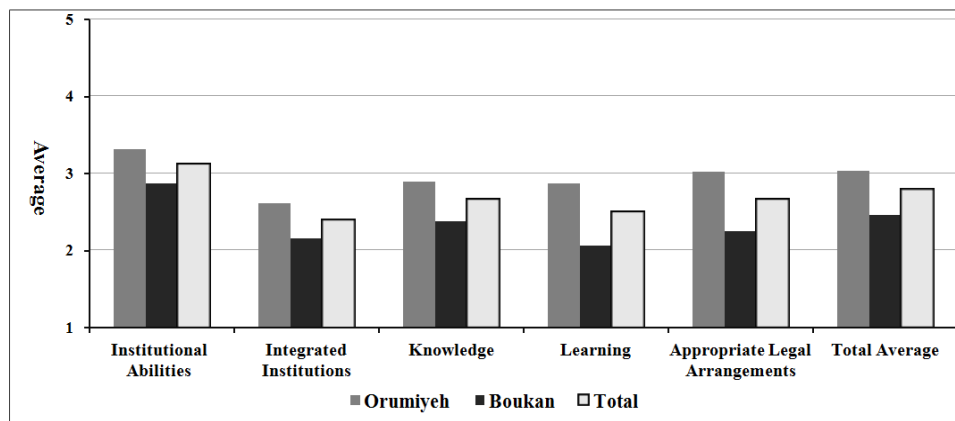


Figure 2 averages of constituent factors of institutional capacity

In addition to the quantitative results, the qualitative findings of the research reveal that factors such as being the province's center, technical committees, non-local officials, and removal approaches affect on the two counties' institutional capacities. The qualitative findings of the research were extensive, a brief of which has been presented in table 4 in the form of positive viewpoints or issues and negative viewpoints or issues.

Table 4 Qualitative results obtained by interviews

Factors	Positive viewpoints or issues according to the County	Negative viewpoints or issues according to the County
being center of province	<ul style="list-style-type: none"> - More financial resources (1*) - instructions proportionate to the county's conditions (1) - knowing the regions situation well by the provincial officials (1) - decisions based on the more knowledge (1) - higher access to the provincial officials (1) - more attention of the provincial officials to problems and difficulties of the region (1) - possibility of more activities for the non-governmental institutions (1) 	<ul style="list-style-type: none"> -interfering duties of provincial and county institutions (1) -reducing the role of county institutions (1) - discrimination in financial resources distribution (2) - Non-conformity of the provincial instructions with the local conditions. (2) - provincial decisions without enough knowledge about the local conditions (2) - lack of access to the provincial officials (2) - high degree of feeling that all points are dictated from upper authorities (2)
individuality	<ul style="list-style-type: none"> - as leaders of the local society (both counties) - Acquiring people's confidence (both counties) - forming the public moral (both counties) - leading and providing new ideas (both counties) - restating the people's needs and wants (both counties) - mobilization of people and potentials (both counties) 	<ul style="list-style-type: none"> - instability in affairs because of continuous change of individuals (both counties) - intervening of the influencing individuals in various affairs (both counties) - presence of personal differences among officials and wasting resources (both counties) - lack of proportion between the responsibility and responsiveness (both counties) - individualism in decisions and activities (both counties)
Local or Non-Local Officials	<ul style="list-style-type: none"> - higher accountability of the local officials (2) -belonging to the region (2) -higher knowledge of the local authorities about the region (2) - modifying the provincial instructions and orders by local officials (2) 	<ul style="list-style-type: none"> - not belonging to the region (2) - lack of enough experience and ability among the non- local officials (2) -unconditional implementation of the higher ranking authorities' orders to make the satisfied (2) -low responsiveness (2) - lack of enough knowledge about the region (2) -short term management period of the non-local managers (2) -not attention to the people's wants and needs (2) -reduction of people's confidence to officials (2)
Technical Committees	<ul style="list-style-type: none"> -more integrated and orderly (1) - decisions and ratifications based on the expertise (1) - considering the problems in more detailed (1) - evaluation of the decisions and activities in technical committees (1) 	<ul style="list-style-type: none"> - Vague and holistic decisions and ratifications. (2) -irregular and non-integrated decisions (2) - distinguished role of individuals in workgroups and councils (both counties, but Boukan is more distinguished in this regard) - non participation of the NGO (both counties) - the least role the private section (both counties)
Other Factors	<ul style="list-style-type: none"> - existence of the medias reflecting the regions problems (1) 	<ul style="list-style-type: none"> -widespread displacements and changes among the officials (both counties) - lack of any critic and discussion on the officials performance (2) - lack of interest in the conducted decisions and activities (both counties) - domination of the government over all decisions and activities (both counties) - Poor position of the NGOs and private section in decisions and activities (both counties)

* 1= Orumiyeh 2 = Boukan

In mainstreaming sustainable development, the results reveal that the total efficiency indicator of the institutions which has been measured based on the amount of sustainable development understanding and conducted activities toward sustainable development are 2.91 and 2.23 for Orumiyeh and Boukan, respectively (figure 3).

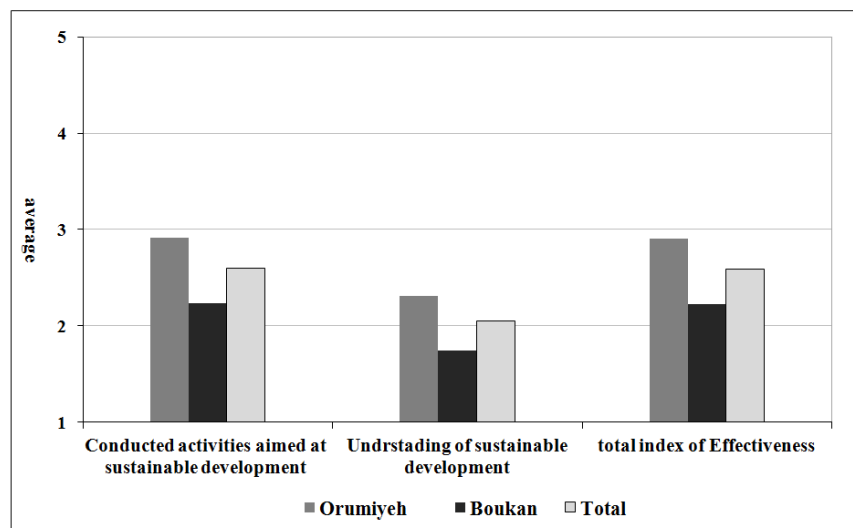


Figure 3 Mainstreaming sustainable development

The qualitative findings related to the mainstreaming sustainable development, also reveal that in Orumiyeh the initiative and practical activities have been numerous and the regional institutions attempted in this regard. The initiative and practical activities by regional institutions in Orumiyeh cover all three aspects of the sustainable development – ecological- economic, and social. Concerning the environmental aspect activities such as trash recovering inside the institutions (28 out of all institutions), holding the training workshops for farmers' improvement in mountainous lands utility or providing EIA forms and presenting them to the great industrial units have been conducted both in rural and urban areas. In social dimension, also the local institutions have conducted a variety of plans which consist of different activities, from establishment of the strategy making committee in the city council and municipality for attracting the local elites' attention and consulting to help the poor families, specifically their children and students. Finally in economic arena, the local institutions have fewer initiatives relative to the two other aspects. Of course they have implemented some considerable supportive plans for the local producers, in entrepreneurship sections (table 5).

The local institutions' initiatives are narrower in Boukan. They lack any pioneering activities in relation with sustainable development, despite of Orumiyeh. In Boukan, NGOs have been more active. Concerning the environmental aspect, the pioneering plans were at primitive level i.e. trash recovery and limited to just eight institutions. Other environmental initiative activities of the region consist of holding demonstrations, informing about environment preservation and its importance, preserving biodiversity, public participation in environment cleaning programs etc. Concerning the social aspect, Boukan has emphasized mostly on education; so that in the county mission for 2014 there must be no illiterate person. This may be assumed the most initiative activity conducted by the Literacy Movement Organization. Moreover, five libraries were established in five villages by a non-governmental association and participation of local people along with workshops for improving the skills of householders women, the handicaps and the addicted who have got ride if it, in Boukan. The county's economic aspect has been less noted and no specific activity was mentioned in interviews, questionnaires or documents (table 5).

Table 5 Institutions' capacity building and practical and initiative actions toward the sustainable development

County	Ecological	Social	Economic	Sum
Orumiyeh	31	16	10	57
Boukan	9	20	0	29

6. Discussion and Conclusion

The findings of the research suggest that there are differences concerning the institutional capacity and mainstreaming sustainable development in the two counties under study. Also they show that there is a direct relationship between mainstreaming sustainable development and the institutional capacity. In order to determine the presences of relationship between the institutional capacity and mainstreaming sustainable development as well as the efficiency of the constituent factors of the institutional capacity in mainstreaming sustainable

development, we conducted regression analysis and path analysis. According to the regression analysis results, there is a 0.725 R between mainstreaming sustainable development and constituent factors of the institutional capacity; and the Adjusted R Square reveals a 0.518. In other word, 51.8 percent of changes in mainstreaming sustainable development are explained by linear combination of constituent factors of the institutional capacity such as the abilities of institutions, integrated institutions, knowledge, learning and appropriate legal arrangements. In addition, the calculated values for F show that the linear combination of the independent variables is significantly able to explain and predict the changes of the dependent variables. Finally, regarding the standardized coefficients of the effects of constituent factors of the institutional capacity on the mainstreaming sustainable development, there is a significant relationship (table 6). Also, regarding the direct effect coefficient of the factors on the mainstreaming sustainable development, the abilities of institutions with coefficient of 0.354 has the highest effect on this process and then is appropriate legal arrangement, integrated institutions, learning and knowledge with coefficients of 0.240, 0.147, 0.121 and 0.053, respectively.

Table 6 the coefficients of the affectivity severity of the constituent factors of institutional capacity on the mainstreaming sustainable development

<i>Coefficients^a</i>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.691	.130		5.332	.000
<i>Abilities of Institutions</i>	.265	.057	.354	5.639	.000
<i>Integrated Institutions</i>	.124	.039	.147	3.175	.002
<i>Knowledge</i>	.036	.016	.053	1.374	.041
<i>Learning</i>	.121	.047	.121	2.137	.030
<i>Appropriate Legal Arrangement</i>	.184	.048	.240	3.799	.000

a. Dependent Variable: *mainstreaming sustainable development*

To achieve the path analysis diagram and to determine the affectivity coefficients of the independent variables on each other as well as to specify the indirect affectivity coefficients of the dependent variables and finally to calculate the total affectivity coefficients of the variables, we determined the coefficients of the independent variable affectivity on each other. It must be noted that, with regard to the goal of discovering the path diagram and the effects of each factor on the others concerning the above mentioned procedure in one hand and with regard to the fact that the cause and effect relations among the independent variables are not clear and there is no precise theoretical framework for the expected relations of the independent variables and the severity of the effects on the other hand, we drew the path diagram based on the first regression analysis output. Following the determination of all coefficients of the distinct paths, the achieved diagrams were combined (figure 4); then the indirect and direct effects and consequently the total effects of the independent variables on the main dependent variable were calculated (table 7).

Table 7 Direct and indirect impacts of constituent factors of institutional capacity on mainstreaming sustainable development

Constituent Factors of Institutional Capacity	Direct Impacts	Indirect Impacts	Sum
Ability of Institutions	0.354	0	0.354
Integrated Institutions	0.147	0.209	0.356
Knowledge	0.053	0.021	0.074
Learning	0.121	0.127	0.248
Appropriate Legal Arrangement	0.240	0.364	0.604

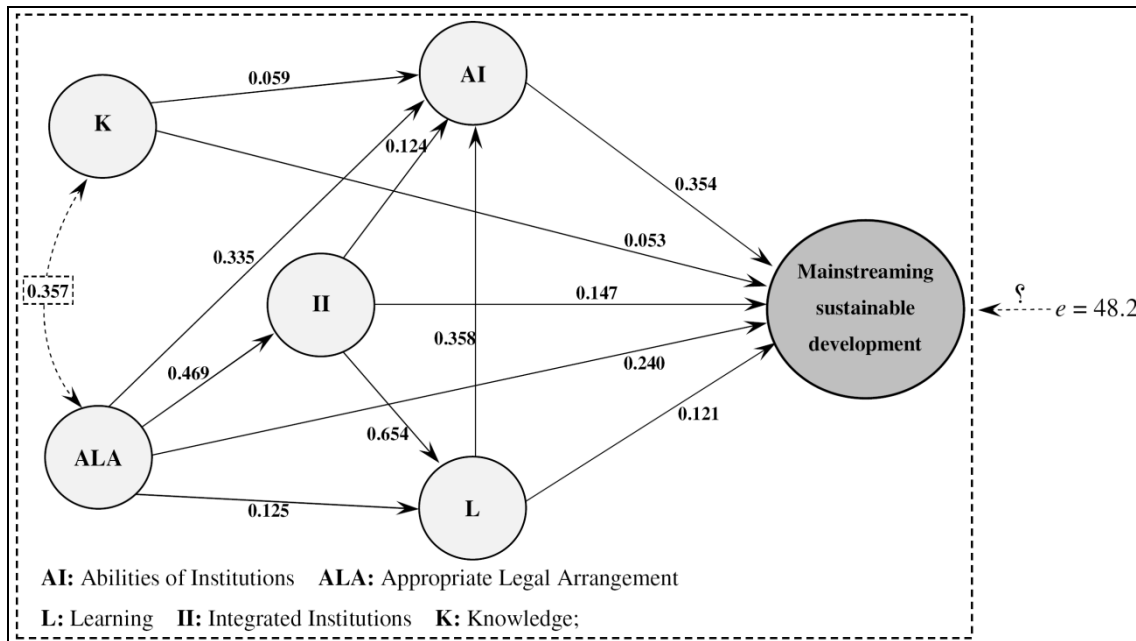


Figure 4 Path analysis diagram

Based on the experimental findings of the research and according to the results of regression and the path analyses, the relations among the constituent factors of institutional capacity and the way they affect on the mainstreaming sustainable development which is realized through the channel of institutional performance, is depictable in the form of conceptual diagram. Although, There is no specific and precise model of the cause and effect relations among the constituent factors of institutional capacity, based on the theoretical discussions, according to the analyses based on the selected method -multi-variable regression and path analysis- and with regard to the values calculated for the affectivity of the factors, the cause and effect relations among the factors and with mainstreaming sustainable development have been depicted in figure 5.

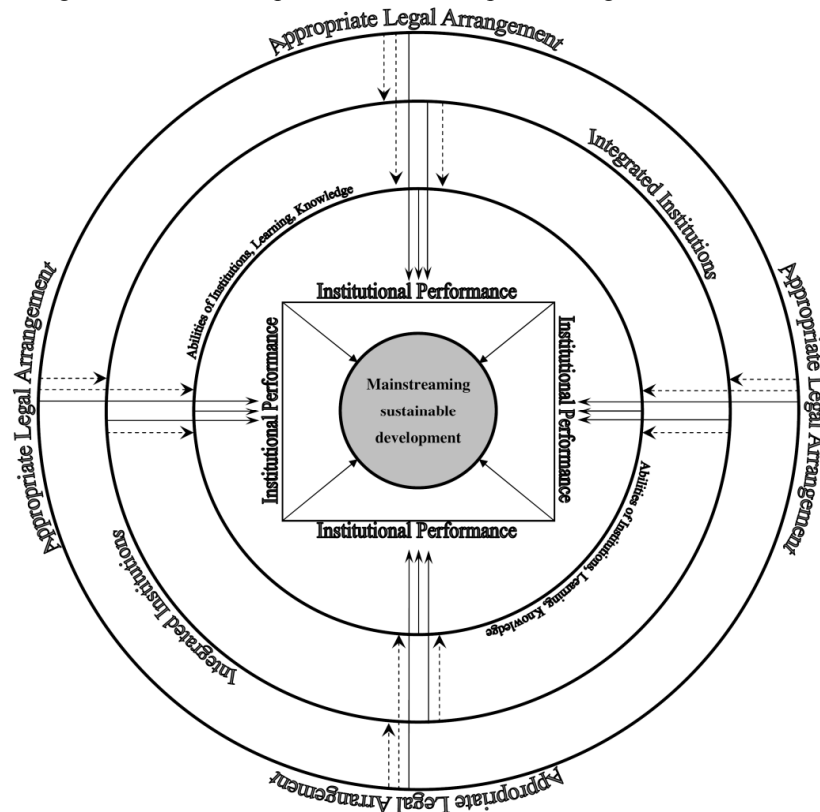


Figure 5 Relationships among the constituent factors of the institutional capacity and with mainstreaming sustainable development, according to the path analysis results

As seen in the fig. 5, the relations between the factors and mainstreaming sustainable development have been shown by the rings and concentric circles. The outermost ring is the appropriate legal arrangements with the total effects of 0.604 on the mainstreaming sustainable development. It means that the appropriate legal arrangements and background factor is not only the most crucial factor in the region's institutional capacity, but also is the most effective factors in mainstreaming sustainable development and it affects directly and indirectly the process. The reason is that the clear and non-disparity and non-vague laws and regulations facilitate the role of the institutions. Moreover, the high level of proportion of the national and provincial laws and regulation with the local circumstance and characteristics would increase the confidence level among people and overcomes any barrier in this regard and finally provide the proper background to enforce them. Authority of the local institutions in codifying the regulations and instructions proportionate to the local conditions, beside their relative authority in adjustment the national and provincial regulations proportionate to the local conditions - considering the national laws, policies and frameworks- increases the self reliance among the local institutions in long term and improves their capacity to take the local affairs responsibility and more important increase the local people's reliance and confidence to such institutions which is in turn prerequisite for mobilizing the local's social, economic and natural resources to realize development. The point would be more important when it is considered in the framework of the sustainable development; because in doing so, we have to consider the realistic situations concerning the regional and local's social, economic and ecological realities.

The second ring is the integrated institutions with the total effects of 0.356 on mainstreaming sustainable development. It refers to the fact that formation of an active, orderly and sustainable process capable of involving the institutions in the governing affairs of the region would firstly make it possible to utilize the existent capacities of the governmental and non-governmental institutions in order to achieve developmental goals. Then, the integrity would promote possibility of inter-institutional learning and transferring the knowledge and experiences processes and lastly it plays the role of facilitator in promotion of the institutional capacity; because it applies all institutions capacities and resources holistically. The importance of the integrity ring would be more obvious and sensible, especially in relation with the sustainable development which emphasizes on the interdependence relationships among the ecological, social and economic dimensions; because any weakness in integration mechanisms of the institutions would lead to a fragmented framework in which each institution acts separately, and so their capacities would be concentrated and applied in specific sections; while by formation of mechanisms to strength the integrity of institutions, it is possible to combine their capacities and promote their capabilities. Therefore, all capacities would be applied in the framework of interactions, cooperation and institutional relationships toward the sustainable development.

Finally, there is the ring of abilities of institutions which consists of inter-institutional capabilities as well as the knowledge and learning factors which affected the mainstreaming sustainable development with total effect values of 0.354, 0.248, and 0.074 respectively. Abilities of institutions are in fact their internal capabilities including human resources, financial resources and assets, decision making structure in institutions, intra-organizational relations, and so on. Of course, here we have pointed to learning and knowledge as well as their indicators in the form of institutional capability. Institutional capability is effective both in individual and communal situations of the institutions; however such capabilities may finally be applied for realizing the sustainable development in the form of inter-institutional interactions and relationships. The rings pointed here determine the institutional performance -both individually and communally- which in turn specifies the amount of the mainstreaming sustainable development. In this way, the results of the study and the relations among the institutional capacity factors and with the mainstreaming sustainable development, based on the experimental findings have been depicted in figure 5 and the research's empirical model along with the related scores are depicted in figure 6.

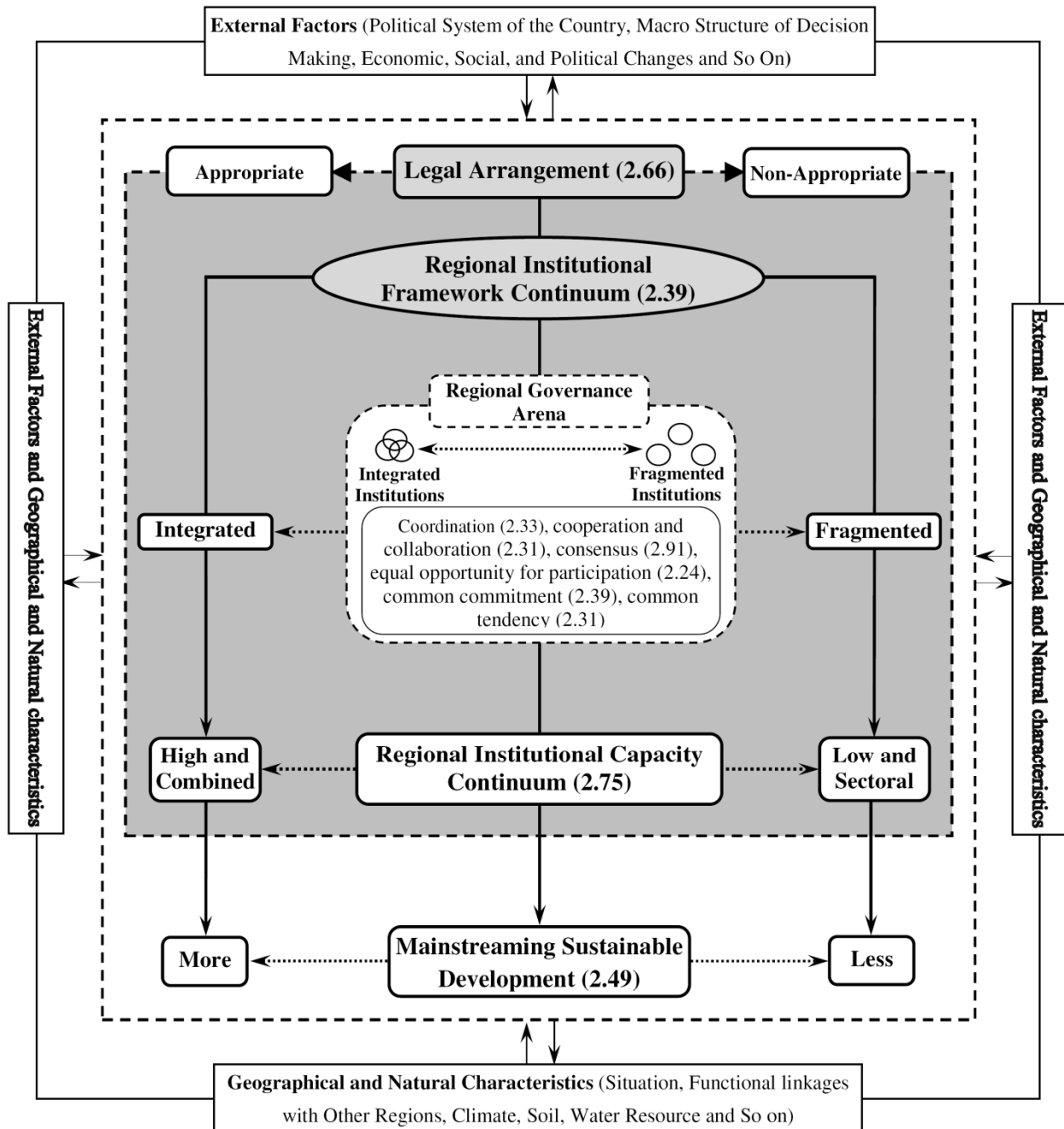


Figure 6 Empirical explanatory model of the relationship between the institutional capacity and mainstreaming sustainable development, based on the regional governance

References

- Amin, A. (1998), an Institutional Perspective on Regional Economic Development, Paper Presented at the Economic Geography Research Group Seminar of Institutions and Governance, Department of Geography UCL, London.
- Amin, A., and Thrift, N. (1995), Globalization, Institutional Thickness and the Local Economy, in P. Healey, S. Cameron, S. Davoudi, S. Graham and A. Madanipour, *Managing Cities: the New Urban Context*, Chichester: Wiley.
- Brown, R. (2008), Local Institutional Development and Organizational Change for Advancing Sustainable Urban Water Futures, *Environmental Management*, 41.
- Capello, R., and Nijkamp, P. (2009), *Handbook of Regional Growth and Development Theories*, Edward Elgar Publishing Limited.
- Connor, R., and Dovers, S. (2004), *Institutional Change for Sustainable Development*, Edward Elgar Publishing, Inc.

- Cuthill, M., and Fien, J. (2005), Capacity building: Facilitating Citizen Participation in Local Governance, *Australian Journal of Public Administration*, 64, (4).
- de Meene, S. (2008), Institutional Capacity Attributes of a Water Sensitive City: the Case of Sydney, Australia, 11th International Conference on Urban Drainage, Edinburgh, Scotland, UK.
- Eade, D. (1997), *Capacity-Building: An Approach to People-centered Development*, Oxfam Publication, London.
- European Commission (2005), *Institutional Assessment and Capacity Development: Why, What and How?*, Europe Aid.
- Evans, B., Marko J., Sundback, S., and Theobald, K. (2005), *Governing sustainable cities*, Earthscan, London.
- Franks, T. (1999), Capacity building and Institutional Development: reflections on water, *Public Administration and Development*, 19.
- Gibbs, C., Jonas, A., Suzanne, R., and Spooner, D. (2001), Governance, Institutional capacity and Partnership in Local Economic Development: Theoretical Issues and Empirical Evidence from the Humber, *Transactions of the Institute of British Geographers, New Series*, Vol. 26, No. 1.
- Giordano, B. (2001), Institutional thickness', political sub-culture and the resurgence of (the 'new') regionalism in Italy -a case study of the Northern League in the province of Varese, *Transactions of the Institute of British Geographers, New Series*, Vol. 26, No. 1.
- Griffiths, A., Haigh, N., and Rassias, J. (2007), a Framework for Understanding Institutional Governance Systems and Climate Change: the Case of Australia, *European Management Journal*, Vol. 25, No. 6.
- Grindle, Merilee S., and Hilderbrand, E. (1995), *Building Sustainable Capacity in the Public Sector: What Can Be Done?*, *Public Administration and Development*, Vol.15.
- Hanf, K., and Morata, F. (2008), Institutional capacities for sustainable development: experiences with Local Agenda 21 in Spain, In Baker, Susan and Eckerberg, Katarina, *In Pursuit of Sustainable Development (new governance practices at the sub-national level in Europe)*, Routledge.
- Houghton, G., and Counsell, D. (2004), *Regions, Spatial Strategies and Sustainable Development*, Routledge.
- Healey, P. (1998), *Building institutional Capacity through Collaborative Approaches to Urban Planning*, *Environment and Planning A*, Vol. 30.
- Healey, P. (2007), Planning and the new institutionalisms, In *Institutions and Planning*, Verma, N., Amsterdam: Elsevier.
- Henry, N., and Pinch, S. (2001), Neo-Marshallian Nodes, Institutional Thickness and Britain's Motor Sport Valley: Thick or Thin?, *Environment and Planning A*, Vol. 33, 2001.
- Horen, B. (2002), Planning for institutional capacity building in war-torn areas: the case of Jaffna, Sri Lanka, *Habitat International*, 26.
- Hudson, R. (2004), Addressing the Regional Problem: Changing perspectives in Geography and on Regions, Paper Presented to the Conference of Irish Geographers, 7-9 May, Maynooth.
- Hun Lee, J. (2008), *Regional Governance and Collaboration: a Comparative Study on Economic Development Policy Process in Minneapolis and Pittsburgh Regions*, Ph.D Dissertation, Faculty of Graduate School of Public and International Affairs, University of Pittsburgh.
- Imbaruddin, A. (2003), *Understanding Institutional Capacity of Local Government Agencies in Indonesia*, Ph.D Dissertation, the Australian national University, Canberra.
- Farajirad, Kh., Kazemian, Gh., (2012), *Local and Regional Development: an Institutionalism Perspective*, Jahade Daneshgahi Publication, in Persian.
- Malekovic, S., Jaksap, P., and Mario, P. (2007), Institutional Capacity for Regional Development in Croatia on the County Level, *UDC 332.1(497.5)*.
- Martin, R., Kitson, M., and Tyler, P. (2006), *Regional Competitiveness*, Routledge.
- McCall, T. (2003), Institutional Design for Community Economic Development Models: Issues of Opportunity and Capacity, *Community Development Journal*, Vol. 38, No. 2.
- OECD (2007), *Institutionalising Sustainable Development*, *OECD Sustainable Development Studies*, OECD Publishing.
- Pike, A., Rodriguez-Pose, A., and Tomaney, J. (2006), *Local and Regional Development*, Routledge.
- Robins, L. (2008), Perspectives on capacity building to guide policy and program development and delivery, *Environmental Science and Policy II*.
- Rodriguez-Pose, A. (2009), Do Institutions Matter for Regional Development, Available at <http://personal.lse.ac.uk/PODRIGU1>.
- Roseland, M. (1998), *towards Sustainable Communities: Resources for Citizens and their Governments*, Stony Creek CT: New Society Publishers.
- Savitch, H.V. (1998), Global Challenge and Institutional Capacity: Or, How We Can Refit Local Administration for the next Century, *Administration & Society*, 30. 3., ABI/INFORM Global.
- Sedlacek, S., and Gaube, V. (2010), *Regions on Their Way to Sustainability: the Role of Institutions in*

Fostering Sustainable Development at Regional Level, Environment, Development and Sustainability, 12.

- Strange, T., and Bayley, A. (2008), Sustainable Development (Linking Economy, Society, Environment), OECD Publishing.
- Sumpor, M. (2007), is there any Institutional Capacity for Integrated Regional Development? Application of New Governance Approaches in Croatia, 47th Congress of the European Regional Science Association, Paris, August 29th to September 2nd.
- Teitz, M. (2007), Planning and the new institutionalisms, In Institutions and Planning, Verma, N., Amsterdam: Elsevier.
- UNDP (1998), Capacity Assessment and Development in a Systems and Strategic Management Context, United Nations Development Programmes, New York.
- United Nations (1992), Agenda 21, United Nations Conference on Environment & Development, Rio de Janeiro, Brazil.
- Verma, N. (2007), Institutions and Planning, Elsevier.
- Vigar, G., Healey, P., Hull, A., and Davoudi, S. (2000), Planning, Governance and Spatial Strategy in Britain: an Institutional Approach, London Macmillan.
- Willems, S., Baumert, K. (2003), Institutional Capacity and Climate Actions, OECD.

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

