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An Analysis of Role and Position of Small Cities in Regional Balance and Development (Case Study: West of Zagros Macro-Region)

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Abstract: Distribution of population and activity in space, called as spatial planning in development literature, is the main factor of balance and development in national and regional scale. This paper aims to evaluate the policy of small cities in regional development, the position of small cities in the western area of Zagros in population distribution, and job creation. Research method is descriptive-analytical based on documentary data that were qualified in GIS and Excel soft wares. The results indicated that population distribution and job opportunities are imbalanced between urban classes and are not in line with regional balance. 68percent (9 percent of cities) of population live in few large and medium cities and only 32 percent of urban population live in small cities network and rural–urban commuting areas (RUCAs) forming 91 percent of urban areas. Spatial structure of urban occupation is imbalanced. As a result, urbanization system of the area confronts with maximum population and activity concentration, infrastructures, and types of occupation capacities focusing on service and industry sectors in in large and medium cities vis-à-vis maximum distribution in the majority of this area and its small cities. Even though regional development policies emphasize on small cities approach, urbanization changes of the area, unlike mentioned policies, have resulted in centralization and dominated by high levels of urban system, and the role of small cities has been less considered in reducing inequality and creating regional development and balance.

Keywords: Urban System, Population and Occupation Structure, Regional Development and Balance, Small Cities, West of Zagros Macro-Region
JEL Classification: P25, R11, N75, R13

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1- Introduction

In any country, planning and investment for the benefit of top layers of urban system and neglecting development of small towns and low hierarchy of settlements lead to imbalance and unfair distribution of economic activities and uneven distribution of population in national and regional levels as well. Today, it is one of the governments' problems in organizing national desirable spatial structure and it is one of the major obstacles to socio-economic development. Strong areas of employment -centralized hubs- are faced with the utilization of the labor force and population by absorbing more labor forces and stagnant and low peripheral areas that corresponded to small towns and rural areas.

Demographically and economically, there is heterogeneity in the urban system of western macro-region of Zagros since spatial distribution of urban population, economic activities, infrastructures, share of employment and manufacturing of cities and urban classes are unbalanced. To some extent, sectoral (among agriculture, industry, and services sectors) and regional (marginal areas and development hubs) imbalances pervade it.

Since the 1950s, this area has experienced a new model of city, rapid urbanization, and urban development with the role of government whereby it has experienced demographic and economic changes (Faraji Darabkhani, 2005) in a way that urbanization ratio increased from 37.8 percent in 1976 to 67.6 percent in 2011, and economic role of cities has been formed based on services (Statistical Center of Iran).

Local movement of population that is effective in the establishment model of populations is a reaction to imbalance and lack of coordination of functions and socio-economic structures because of imbalance distribution of facilities and opportunities to provide basic needs of all geographical areas (Tofigh, 1992). City performance and existence, as a dynamic phenomenon, appear in its mobility and dynamics of demographic index (AliAkbari, 2011). Population influences on socio-economic performance of society. Yet, it is affected by socio-economic policies (Fathi, 2002). Establishing logical relationship among population, activity, and development develops economic and social coordination and improvement of quality of life (Saei Arsi, 2010). Thus, small cities are of the most successful samples of settlement to remove regional imbalances and spatial inequalities (Blowers, 2013) since they could be almost connecting link between low levels and intermediate and high levels of settlement system. To reduce imbalances, attracting population overflows in large and middle cities, and positive direction to the movement of the rural population, have rooted particular position to itself.

Generally, this research aims to study urban, spatial, and economic (employment) morphology of west of Zagros macro-region to achieve new solutions and strategies of urban-regional balanced development based on its small cities.

Thus, research questions are:

1. Are urban system of west of Zagros macro-region and its employment capacity and urban activity balanced?
2. Did small cities of the region have successful performance in balancing urban and economic system demographically, economically, and in terms of employment and activity capacity?

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2- Literature Review

a) Foreign Researches

Hinderink and Titus (2002) argued that different theories have confirmed significant share of small cities to expand modernization, the impact on rural areas development, playing role as service center, and preventing rural immigration to large cities.

Soleyman (2004) argued that infrastructures and services are cornerstone of regional development and emphasized on the role of governmental investment on urban development.

Tacoli (2004) argued that thriving agriculture could be the foundation for the development of local small towns. Diversity of revenue resources is increasingly important for small cities and villages, and non-agriculture activities around cities that require villagers' commuting to small cities are more probable to stimulate regional economic growth.

Kamanda (2007) studied small cities of South America and argued that development and improvement of small cities have led to create employment, decentralization, and reduction of regional inequalities.

Lu and Campbell (2009) considered the understanding of ecological and economic dynamics of agriculture systems in Chinese small pioneer cities and regarded industrial and agricultural development of small cities that are used for full operation of China's rural surplus labor as main strategy of its environmental management.

Rural Economic Development Center (2006) small cities plan aimed to stimulate investment, create employment in small cities by domestic and foreign resources, and encourage small cities to active economic participation with a wide range of regional settlements.

Kwiatek-Sołtys (2011) investigated the growth barriers and factors of Poland's small towns and argued that country's development opportunity depends on small cities status. He considered that development of small cities depends on tourism economy, entertainment and recreation, developed technical infrastructures (mainly housing), sanitary, education, cultural role, proximity to large cities, economic activities, and welfare state policies with spatial changes and change in local market.

b) Iranian Researches

Khodad et.al, (2014) investigated the role of small cities in regional development planning in Golestan Province with descriptive-analytical and survey methods. The results of Entropy model indicated that small cities in studied area balanced population in Gorgan. However, the results of multiple regression method indicated descending trend of agriculture sector and ascending trend of service sector in small cities.

Roostayi & Baqeri (2010) investigated the performance of small cities in regional development of Razan city central part. In this research, feature index, central coefficient, coefficient of elasticity, factor analysis method, and numerical Taxonomy model were used. The results indicated that city of Razan has developed in terms of urban development and land use diversity indicators, and new and sustainable relations have been created among regional settlements leading to spatial organization.

Mohammadzadeh (2012) investigated small cities in Iran urban hierarchy during 1956-2006. The results indicated that the number of small towns increased 5.5

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times during studied period. However, the results of Entropy indicated that small cities play an important role in increase of entropy and preventing decentralization in Iran urban network.

Nazariyan (1999) investigated the role and position of small cities in national development and argued that strengthening small cities in creating regional balance and development is necessary.

Fanni (2003) argued that small cities are key rings to prevent urban network decentralization and important factor in balanced distribution of population and regional activity.

3- Theoretical Principles

Balance in the pattern of population settlement and activity depends on national and urban development strategies and policies, environmental centers, and immigration trends (Arjmandniya, 1991).

Friedman believed that economic growth relates to the emergence of a continuous and developed hierarchy regarding cities' functions. To encourage continuous growth, he considered hierarchy of cities to integrate surrounding with central propaganda effective and regarded increasing industrial centers and appropriate urban construction simultaneously (Ejlali, 1992).

According to Myrdal's discontinuity theory, to provide social justice and spatial integrity in national economy, the impacts of gradual release of growth should be used. He considered strengthening middle or small cities that are able to accept the role of development induction to their surrounding are as balancing.

According to spatial development theory, Hilhorest (1991) believed that once a slum area is not considered by central area, it would be undeveloped. He proposed four different strategies to eliminate intra-regional, inter-regional, and sectoral dichotomy in accordance with hierarchy conditions and having settlements. In scattered solidarity and concentrated expansion strategies, he regarded strengthening second-rate areas around central area directly and third-rate areas around border to solve problems.

Based on the pattern of regional networks, Douglass believed that because of mutual links, simultaneous investment in urban and rural space could help to boom economic growth potential of city and its surrounding (Taghizadeh, 2004).

The advocators of the developmental role of small cities theory and integrated development idea believe that by preparing the ground for growth and development of these cities in the entire framework of urban network system, particularly in terms of population, they can allocate a particular share and position to themselves in reducing imbalances, attracting population overflows of middle and large cities, and positive direction to the movement of the rural population, and balance state settlement system (Fanni, 2003).

Pierre Georges (1931) evaluated urban role and function by relying on the levers of economic, social, and political systems governing on cities and ranked the role of cities in country scale as follows: in less-developed countries, cities are commercial centers and local markets. In overseas countries, cities are colonial economy withers, administrative, commercial centers, and goods distribution warehouse. In some countries with capitalist economy, administrative and commercial role of cities are of great importance and industrial role depends on them. The combination of urban jobs is as follows in classical

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studies in the domain of knowledge and role of cities and Garnier and Ghabot's procedure:

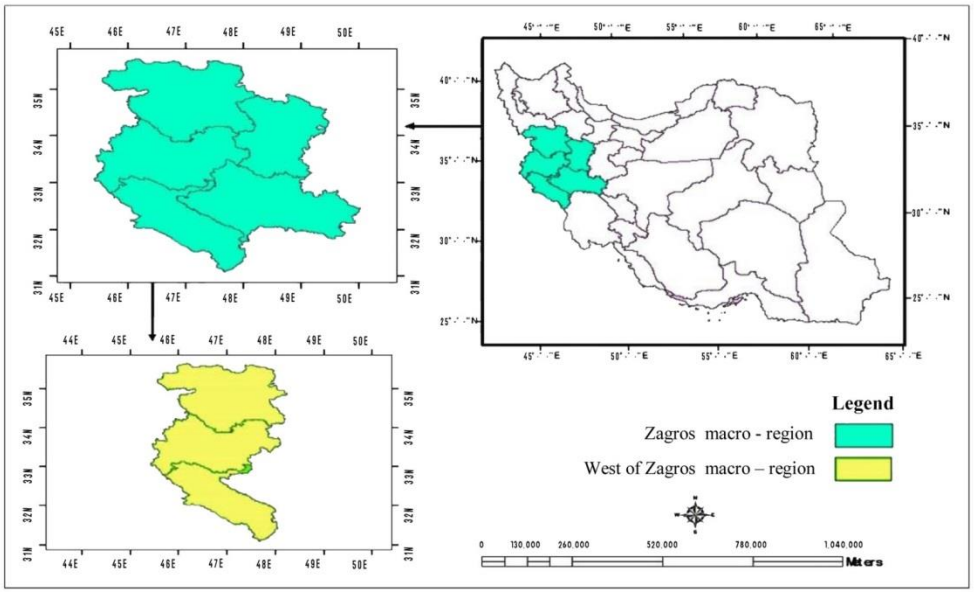
The first group of social businesses: agriculture (forestry, fishing and mining), second group of social businesses: industry (industry and construction), and third group of social businesses: human force absorbed in commercial and service sectors and all jobs that are not in the first two groups. However, in addition to three mentioned forces, it has multi-role, commercial, service, and pure industrial tasks. To determine the role of cities, the trend of cities' role, city tendency toward a certain role are displayed by a diagram. With the help of this method, the impact of development and construction plans can be evaluated in the economy of cities and areas (Farid, 2011).

4- Research Method

In terms of purpose, this research is applied and it is descriptive-analytical in terms of method. To collect data, library method was used based on detailed results of census. To analyze data, GIS software, in spatial analysis, Garnier and Ghabot model, quantitative, qualitative, and spatial analysis in economic analysis, and Excel were used to design diagrams. Demographic and urban system changes of western macro-region of Zagros (75 cities) were investigated in the form of four urban classes including large, middle, small, and village-city in a 35-year period during 1976-2011 emphasized on the role of small cities, and the impacts of these changes on urban system balance or imbalance and urban economy of the area were investigated.

Geographical Location (Studied Area)

Place of work is located western macro-region of Zagros neighborhood with Kordestan, Kermanshah, and Ilam Provinces from north (map1), also, with west Azarbaijan and a part of Zanjan Provinces from north, with Zanjan, Hamedan, Lorestan, and a part of Khuzestan Provinces from east, and with Khuzestan Province from the south, located from the west more than 900 kilometers with Iraq (Bakhtiyari, 1999).



Map1. Geographical location of western macro-region of Zagros

Reference: (Iran National Cartographic Center, integrated satellite map files of Iran in GIS format, 2015)

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5- Research Findings

To understand research problem better, the findings were presented in three parts including loading process, demographic changes, and urbanization coefficient changes, the structure of employment and urban activity of the area.

According to 2011 census, the western macro-region of Zagros has 75 cities with more than 2.7 million people citizens. Among them, two cities allotted 45.4 percent of large urban class, five cities with 22.3 percent in middle class, and 30 ones in small urban class, and 38 cities are village-cities with less than five thousand people with 3.2 percent. This area has allotted 5 percent of Iran's urban population to itself (table1).

Table1. Loading process and demographic changes of urban classes in the western macro-region of Zagros during 1976-2011

Year	Urban class	Large	Middle	Small	Village-city	Total
	Demographic criterion/person	250001 - 1000000	75001 - 250000	5000 - 75000	Less than 5000	
1976	Number	1	1	19	5	26
	Percentage	3.84	3.84	73/07	19.23	100
	Population	297315	95872	308744	15353	717284
	Percentage	41.45	13.36	43.03	2/14	100
1986	Number	1	3	20	13	37
	Percentage	2.7	8.1	54.05	35/13	100
	Population	560514	374923	493131	19014	1447582
	Percentage	38.72	25.9	34.06	1.31	100
	Growth	6.54	9.57	9.03	2.48	7.2
1991	Number	1	4	28	6	39
	Percentage	2.56	10.25	71.8	15.38	100
	Population	624084	536618	589492	12508	1762702
	Percentage	35.4	3.44	33.44	0.7	100
	Growth	2.17	3.53	4.51	3.32	4
1996	Number	2	3	29	13	47
	Percentage	4.25	6.38	61.7	27.66	100
	Population	970965	323354	743194	32971	2070484
	Percentage	46.89	15.61	35.89	1.59	100
	Growth	2.38	1.94	5.59	6.3	3.75
2006	Number	2	4	30	33	69
	Percentage	2.89	5.8	43.47	47.82	100
	Population	1111725	476583	785035	70673	2444016
	Percentage	45.48	19.5	32.12	2.89	100
	Growth	1.34	2.30	1.86	3.54	1.67
2011	Number	2	5	30	38	75
	Percentage	2.66	6.66	40	50.66	100
	Population	1225392	602304	782926	87242	2697864
	Percentage	45.32	22.32	29	3.23	100
	Growth	2.37	2.15	2.18	3.51	1.99
1976-2011	Growth average	2.96	3.9	4.63	3.83	3.64
1400 forecast	Population	1640440	888134	1231070	127044	3886688
	Percentage	42.2	22.85	31.67	3.27	100

Reference: (General Census of Population and Housing, Statistical Center of Iran, 1976-2011)

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Loading process and demographic changes of western macro-region of Zagros are according to table1 as follows:

In 1976, the western macro-region of Zagros had 26 cities with a population of 717200 people. The only large city of this region i.e. Kermanshah has allocated 41.45 percent of urban population to itself. In this year, there was only one middle city i.e. Sanandaj with 13.3 percent population of this region indicating significant difference with the first city. Small cities, with 73 percent, have allotted 43 percent of urban population to themselves.

Although the number of small cities are more than large and middle ones, their population share are almost as only one large city in the region. Village-cities had only 2.1 percent of population. Generally, population share and number of cities in different urban classes were extremely unbalanced.

In 1986, there were 37 cities with 7.2 percent growth increased to 1.447 million people i.e. two times more than last decade, and city of Kermanshah had the highest share with 6.5 percent growth and 38.72 percent population. Number of middle cities increased to three ones including province centers i.e. Sanandaj, Ilam, and city of Saghez with 25.9 percent urban population. Population growth of middle cities was at the highest amount i.e. 9.57 percent that is less than country growth, western macro-region of Zagros, and Kermanshah, Kordestan, and Ilam provinces between 0.3 and 7 percent the most and2.8 percent the least respectively. The reason for this lack compared to Elam is the main formation of its urban system in this decade by changing 9 rural areas into cities by government. Small cities increased to 20 ones, but their population share decreased 9 percent i.e. 34 percent. Number of village-cities increased to 21.6 percent, but their population share declined with 2.4 percent growth into 1.31 percent (the slightest population share). Generally, the investigation of population growth changes indicates high growth of middle, small, and large cities and slight growth of village-cities that have weak economic-service and population variability foundation (tables 1&2, and diagrams 1&2).

In 1991, urban classes changed. Number of cities increased to 39 ones; small cities with 71.8 percent, the highest share, and village-cities with 15.38 percent in next rank. Middle cities increased into 4 ones. Population growth declined with 4.3 percent in Kermanshah compared to previous period, and its population share decreased 25.4 percent, but it had the highest urban population share with 35.4 percent alone while small cities with 71.8 percent and growth rate of 4.5 percent population had only 33.44 percent i.e. less that Kermanshah Prime city.

The share of number and population of middle cities was ascending with 30.44 percent indicating regular growth trend. Village-cities were 15.38 percent with 3.32 percent population growth, and their shares declined 0.7 percent. Studying population growth changes of urban classes in 1991 indicates rapid growth of 1986 declined tangibly into the half with descending trend.

In the census of 1996, number of cities increased into 47 ones. By promoting the city of Sanandaj with 277.8 thousand people to large urban class, number of large cities increased into two ones, nearly 47 percent of population i.e. the highest population of this class in census

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periods and the highest population share of all classes for the first time. Population growth of this class was 2.38 percent indicating slight increase. Number of middle cities declined into 3 ones and their population into 15.6 percent i.e. half of last period. Number of small cities declined with 61.7 percent compared to the previous period about 10 percent that is mainly related to increase almost two times in number of village-cities because of changing village into city. Population of these cities increased into 35.89 percent indicating ascending trend both in terms of share and growth rate (5.5 percent). Number of village-cities increased into 13 ones because of official change of 7 villages into city by government (27.66 percent). Despite 6.3 percent growth, its share was slight; 1.6 percent of population indicating deep gap with other urban classes, particularly large and middle cities. The investigation of demographic growth changes of urban classes in this period indicates village-cities; small, large, and middle cities experienced the highest to the lowest growth with 6.3, 5.5, 2.3, and 1.9 percent respectively. Urban population growth was 3.7 percent compared to the last period and average population growth of urban classes was 4 percent. Even though state population growth was slightly ascending compared to last decade, this area experienced descending trend, as it is obvious in separating provinces.

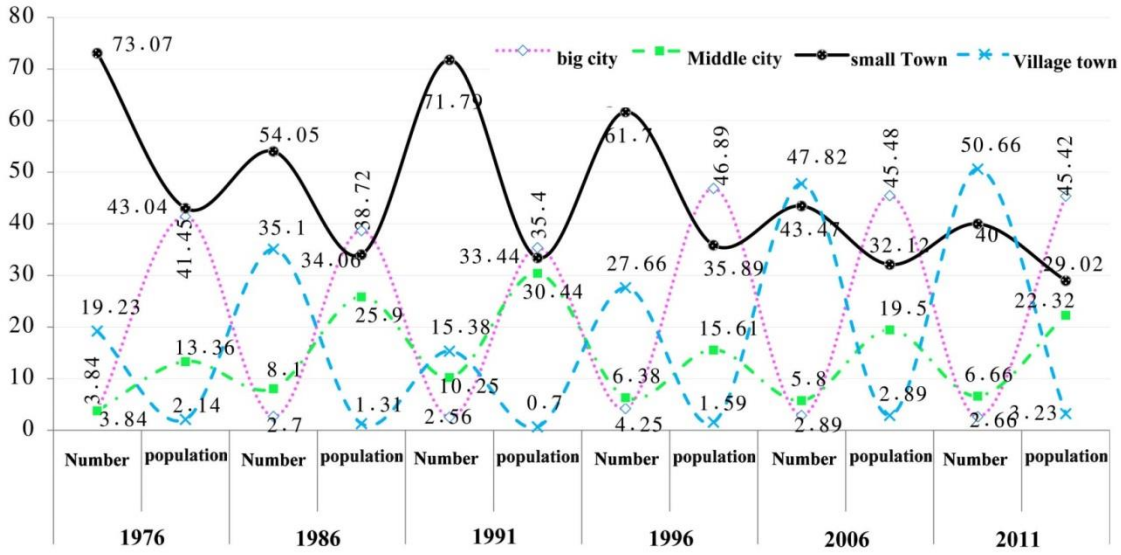

Diagram1. Changes in the share of number and population of urban classes of western macro-region of Zagros based on percentage during 1976-2011

Reference: (Statistical Center of Iran)

Table2. Comparative changes of state urban population growth, the region and provinces of the studied area during 1986-2011

Population growth- percentage						
Region/ year	**1365**	**1370**	**1375**	**1385**	**1390**	**1365-1390**
Country	2.5	1.5	1.96	1.61	1.29	2.12
Western macro-region of Zagros	7.2	4	3.75	1.67	1.99	3.72
Kermanshah	5.6	3.19	2.82	1.29	1.51	2.88
Kordestan	9.24	4.51	3.82	1.94	2.86	4.47
Ilam	12.41	6.65	3.73	2.46	1.5	5.35

Reference: (Statistical Center of Iran, 1986-2011)

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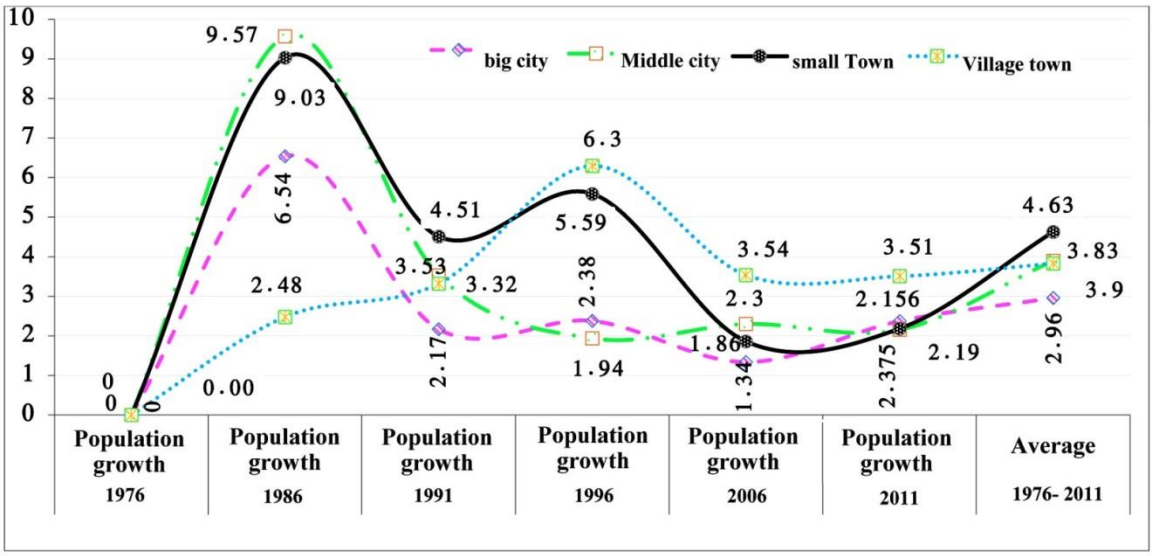

Diagram2. Demographic growth changes on urban classes of western macro-region of Zagros during 1976-2011

Reference: (Statistical Center of Iran, 1976-2011)

In 2006, urban population growth of the area reduced 1.6 percent and its population increased 2.444 million people; large cities had the highest share with 45.48 percent. In return, village-cities had 47.82 percent, cities only 2.8 percent of population, small cities 43.47 percent, 32 percent of population, and middle cities 5.8 percent and 19.5 percent of urban population. 22 newly established cities added to urban system in this era that 91 percent of them were village-cities. However, small city of Marivan joined middle class and two villages with more than 5 thousand people joined small cities.

Comparative investigation of state urban population growth changes of the area and provinces indicate this index declined in all levels compared to last decade. Population growth in urban classes except middle cities that increased from 1.9 percent into 2.3 percent declined in other classes as general population growth decreased compared to last decade from 3.7 percent into 1.6 percent and average growth of classes from 4 percent into 2.2 percent i.e. half.

In 2011, as the last census era, number of cities increased into 75 cities nearly with 2.698 million people in different classes. Among them, village-cities with 50.66 percent of cities allocated only 3.23 percent of population, small cities with 40 percent of cities allocated 29 percent of population, middle cities with 6.66 percent of cities allocated 22.3 percent of population, and finally, large cities with keeping number allocated 2 cities and only 45.48 percent of urban population to themselves. Urban population growth had ascending trend with 1.99 percent and average growth of urban classes increased slightly to 2.55 percent.

A comparison of state urban population growth of the region and provinces indicated that regional rate with 1.99 percent was more than state growth of 1.29 percent.

The trend of urban population growth of Kordestan that always had descending trend in all census eras increased 0.92 percent compared to last era, experienced

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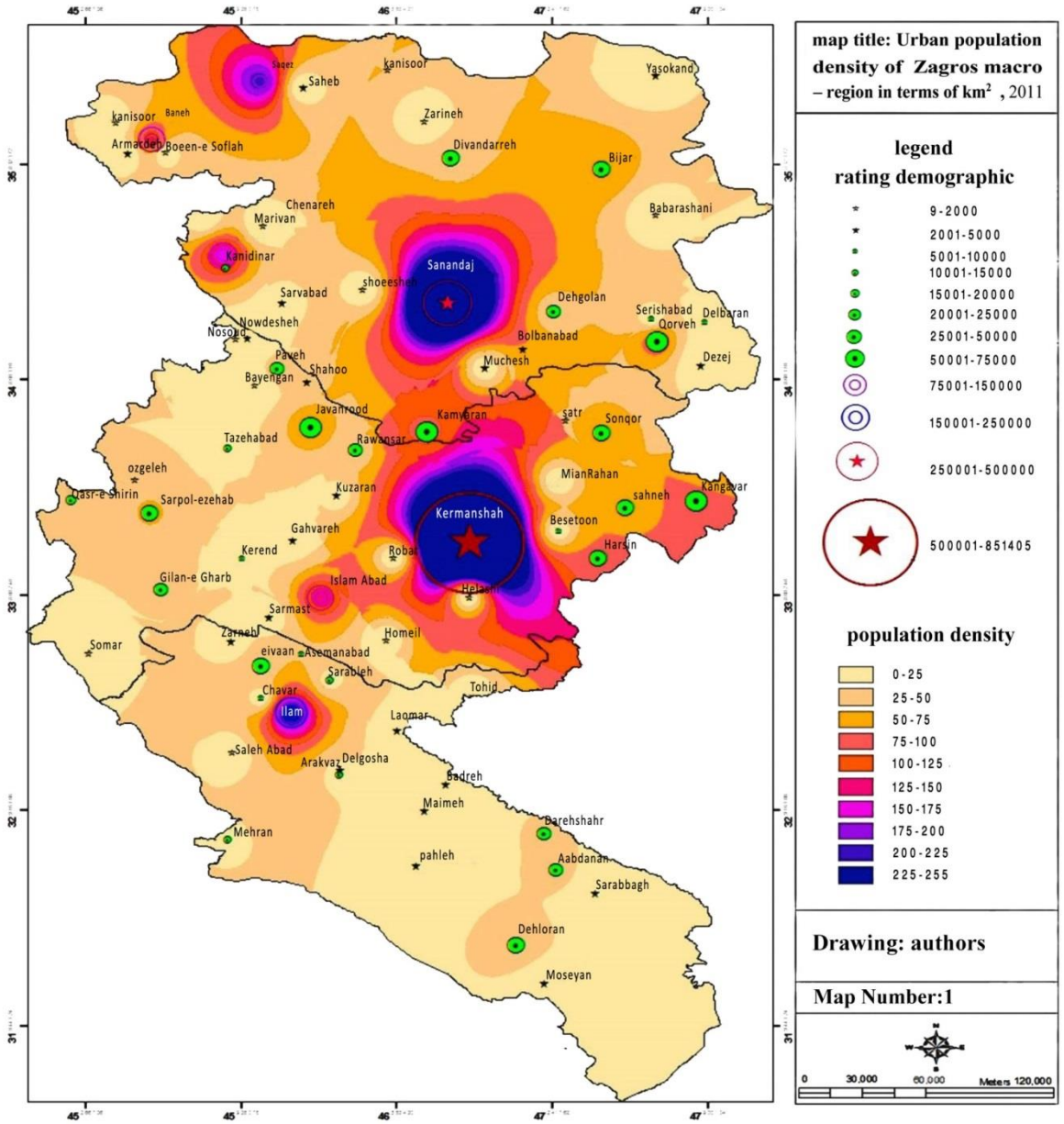
the highest growth i.e. 2.86 percent that is 1.57 percent more than state growth. However, in addition to natural growth or immigration, this event is usually for increase in its cities because of changing two Kanidiyar and Bolbolanabad villages with 14.6 thousand people into cities.

Generally, despite establishment and geographical-spatial distribution of cities occurred in almost a balanced area, mentioned urbanization changes pervaded strong population concentration and density in limited parts of area, particularly in central areas against wider demographic distributions of the area. As a result, urban system was out of balance (map2).



Map2. Urban population density of western macro-region of Zagros based on person in each square kilometer in 2011

Reference: (Researchers' findings)

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Table3. Changes in the country's urbanization rate, western macro-region of Zagros and regional provinces during 1976-2011

Variable	Urbanization rate					
Region/year	**1355**	**1365**	**1370**	**1375**	**1385**	**1390**
Country	47.03	54.3	57.1	61.3	68.5	71.4
western macro-region	37.83	49.05	53.57	57.47	63.9	67.58
Kermanshah	46.08	56.17	59.43	62.13	68.22	69.78
Kordestan	31.03	41.91	47.5	52.41	59.42	66
Ilam	19.75	42.48	50.23	54.4	61.12	64.6

Reference: (Statistical Center of Iran, 1976-2011)

According to table3, investigation of urbanization rate changes of western macro-region of Zagros is as follows:

In 1976, urbanization rate of the region was 37.83 percent, nearly 10 percent less than state coefficient. This coefficient was 46.08, 31.3, and 19.75 percent respectively in Kermanshah, Kurdistan, and Ilam provinces.

In 1986, urbanization rate of the region and provinces was considerably higher than state coefficient growth indicating great role of government as main vector of urban development in this region.

Regional urbanization rate in 1991 increased 4.7 percent reached to 53.75 percent indicating higher growth compared to similar state rate. The turning point of the period is crossing urbanized population of this region from 50 percent while the turning point in Iran and Kurdistan Province that had urbanization rate of slightly slower at this time it occurred in 1996. In provincial scale, urbanization of Kermanshah passed 50 percent in 1986 and in Ilam in 1991.

Regional urbanization rate reached 57.47 percent in 1996 that is less than state rate of 3.8 percent. In provincial scale, only Kermanshah that regional prime city located in it with 62.13 percent was more than state rate. The superiority has existed since 1986. This rate increased in Kurdistan and Ilam provinces to 52.4 and 54.4 percent respectively.

In 2006, regional urbanization rate was 63.9 percent that is 4.6 percent less than state rate. This figure was 68.2, 61.1, and 59.4 percent in Kermanshah, Ilam, and Kurdistan provinces respectively. Kermanshah enjoys the highest rate, but Kurdistan had the highest growth with 7 percent increase.

In 2011, with 3.68 percent increase, regional urbanization rate increased to 67.58 percent that is 3.82 percent less than state rate that is 71.4 percent. Ilam Province, with 64.6 percent had the least and Kermanshah the most regional urbanization rate with 69.78, but the highest urbanization rate was related to Kurdistan that reached 66 percent.

Generally, during 35 years of study, regional urbanization rate increased from 37.83 in 1976 to 67.58 percent in 2.11 (equal 1.8 times) (table3).

According to table4, the structure of employment system and activity of western cities of macro-region of Zagros are as follow:

In 1996, more than 431 thousand people of urban population employed in major economic groups that 4.8 percent in agriculture sector, 29 percent in industry sector, and 66.2 percent were in service sector. In 2006, there were 595.9 thousand employed people, but there was no

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significant change in employed people's share.

In 2011, there were 604.3 thousand economic activists that 10.3 percent was in agriculture sector, 26.3 percent in industry sector, and 63.4 percent in service sector. The importance of agriculture role increased 5.5 percent. The share of industry and service sectors declined 1.9 percent and 3.7 percent respectively. Although the major activity of the region is service, it has moved toward commercial activity.

Generally, there is high loading of cities' activity and employment in service sector and major cities' activity is service. Although the importance of service sector and industrial role of cities decreased for the benefit of agriculture sector in the last census i.e. 2011, and there was no tangible change in employment and activity from service sector to commercial sector, the share of service sector was significantly high in all periods in a way that it was always more than 63 percent leading to weakening productive system in in basic agriculture and industrialized sectors and make economic sustainability of the area vulnerable (table4, map2).

Table4. Changes in employment share of urban classes of western macr0-region of Zagros in activity groups during 1976-2011

Urban classes	1375						1385						1390					
	Agriculture		Industry		Services		Agriculture		Industry		Services		Agriculture		Industry		Services	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Large	5234	2.5	58988	28.2	145146	69.3	6110	2.2	77767	28	193764	69.8	14901	5.45	75989	27.7	183320	6.85
Total	209368						277641						274210					
Percentage	48						46.6						45.37					
46.6 percent (total average employment of large cities 1996-2011)																		
Middle	2586	3.9	20998	31.7	42633	64.4	3349	2.9	35198	30.3	77561	66.8	9710	7.3	38246	28.5	86058	64.2
Total	66217						116108						134014					
Percentage	15.36						193.48						22.18					
19 percent (total average employment of middle cities 1996-2011)																		
Small	12011	8	43714	29.3	93509	62.7	14397	7.7	51220	27.7	119812	64.6	29481	17	40554	23	104284	60
Total	149234						185429						174319					
Percentage	34.62						13.12						28.85					
31 percent (total average employment of large cities 1996-2011)																		
Village-city	875	14	1178	19	4169	67	4255	25.5	3766	22.5	8654	52	8065	37	4418	20.63	9279	42.7
Total	6222						16675						21762					
Percentage	1.45						2.8						3.6					
2.6 percent (total average employment of large cities 1996-2011)																		
Total classes	0706	4.8	124878	29	285457	66.2	28111	4.7	67951	28.2	399791	67.1	62157	10.3	159207	26.3	382941	63.4
	431041						595853						604305					

Reference: (Statistical Center of Iran, 1976-2011)

Employment Structure and Economic Role of Urban Classes

In 1996, 2006, and 2011, large cities loaded 46.6 percent, small cities 31 percent, middle ones 19 percent, and village-cities 2.6 percent of total employed people in three economic sectors in themselves. In other words, large cities that include only 2.6 percent of cities including 13 percent more than total small and village-cities of the area i.e. 90.6 percent of cities created employment or total large and middle cities that are nearly 9 percent of cities have loaded 65.6 percent of employment that is 32 percent more than total share of small cities and village-cities.

It is worth mentioning that activity and employment system, generally economic system of the region, is

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confronts with some inconsistencies in terms of activity distribution and loading among urban classes by dominating large cities. In other words, large and superior cities of urban system have allotted maximum facilities, activities, and employment capacities dominated by service sector to themselves after middle ones. In return, small urban classes, particularly village-cities, enjoy the least capacities, employment, and facilities despite their 90.6 percent share of cities. Thus, village-cities and major part of small cities face economic unsustainability in economic area that it has negative impact on demographic, spatial, and economic balances (table4). In fact, there is a direct relationship between imbalance in loading activity and employment capacity and imbalance in loading population and its spatial distribution. As cities are bigger and more important, they have more employment capacity and higher service and production levels.

Investigating the situation of activity and employment of urban classes based on three economic sectors indicates that between 1996 and 2011, small cities allocated 52.2 percent, large ones 23.6 percent, middle ones 13.3 percent, and village-cities 10.7 percent to agriculture sector. In industry sector, large cities loaded 47 percent, small ones 30.3 percent, middle ones 20.6 percent, and village-cities 2 percent in themselves among urban classes. This means that two large cities of Kermanshah and Sannadaj allotted 93 percent of cities to itself alone including all small cities, village-cities and a number of middle cities by creating capacity for activity and employment in industry sector as one of the major attraction and population factor. It can be considered as one of unsustainability factors or slow growth of urbanization and population of mentioned cities in imbalances and lack of employment ground in general and industrial employment in particular leading to direct migration from small and rural cities to large urban centers.

In this period, large, small, middle and rural cities allotted 49, 30, 19, and 2 percent to themselves respectively as the highest and the least share of total activists in service sector in census eras.

Generally, although some changes and balances have been occurred in employment and activity of the region to improve middle cities and village-cities very slightly, the problematic matter is imbalance in loading employed people of economic sectors among urban classes indicating inappropriate and imbalanced distribution, infrastructures, industrial-production and service employment opportunities and centralization of employment and activity in the region (table5).

Table5. Comparative changes of employment share of urban classes based on three economic sectors 1996-2011

Urban Classes	1996			2006			2011			Average of periods		
	Agriculture	Industry	Services	Agriculture	Industry	Services	Agriculture	Industry	Services	Agriculture	Industry	Services
Large	25.27	47.23	50.85	21.73	46/3	48.46	24	47.75	47.87	23.6	47	49
Middle	12.5	16.82	14.94	11/92	20.95	19.5	15.6	24	22.47	13.34	20.6	19
Small	58	35	32.75	51/22	30.5	29.96	47.4	25.5	27.23	52.2	30.3	30
Village-city	4.22	0.95	1.46	15/13	2.25	2.16	13	2.8	2.43	10.78	2	2
Percentage	100	100	100	100	100	100	100	100	100	100	100	100
Total	20706	124878	285457	28111	167951	399791	62157	159207	382941	36991	150678	356063

Reference: (Statistical Center of Iran, 1996-2011)

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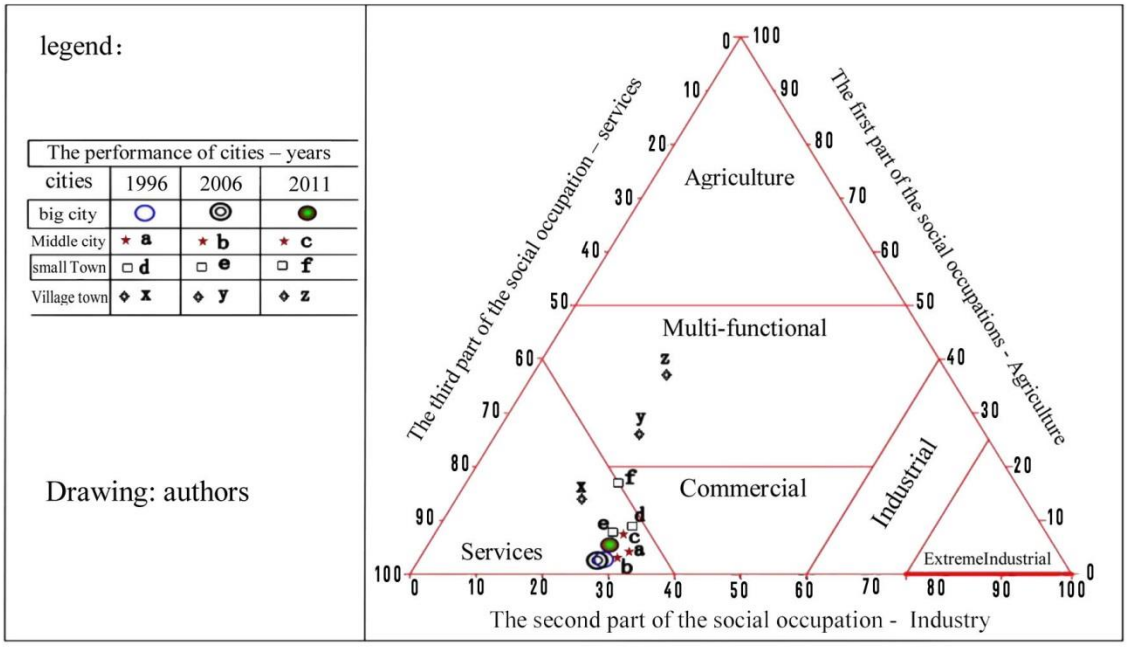

Fig1. Changes of economic role of urban classes of western macro-region of Zagros during 1996-2011

Reference: (Researchers' findings)

The investigation of changes in three economic sectors in any urban classes during 1996-2011 indicates that among employed people of large urban class, 3.3 percent were employed in agriculture sector, 28 percent in industry, and 68.6 percent in service sector on average. Because of large city of Kermanshah, service sector allotted the highest and agriculture the least amount to themselves compared to other urban classes. However, the role of industry is of great importance after service sector. However, the importance of agriculture sector increased by reducing the share of service and industry sectors, but extreme dominance of the service sector is evident in big cities (fig.1).

Number of major activists of middle cities increased two times compared to last decade in 2006 and cities' service role has been tightened in light of the declining share of agriculture and industry, but the importance of this sector increased by 4.2 percent rise in agriculture sector in 2011. The role of middle cities has changed from service sector in 2006 to multi-task in 2011. Generally, among employed people in middle cities, 4.7 percent were in agriculture sector, 30 percent in industry, and 65 percent in service sector, the role of these cities is servicing.

Small cities of the region had service role in 1996 that was increased in 2006 and the importance of other sectors reduced. In 2011, the importance of agriculture sector increased 10 percent compared to previous era, and their economic role has changed from service sector in 1996 and 2006 to service-commercial border in this year.

From total employed people in three economic sectors, 11 percent of them were employed in agriculture sector, 26.6 percent in industry sector, and 62.4 percent in service sector in the studied small cities (table4 & fig1).

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However, more than 11 thousand people of economic activists went out of small cities in 2011 because of overflow of employment capacity in small cities that were mainly administrative-political ones in the region affected by structural requirements of main driving force of development of these cities. Their employment capacity has been completed after changing these areas from village to city particularly in service sector (mainly administrative-commercial). It is followed by economic unsustainability and immigration to middle cities, particularly national metropolises and large cities to obtain better employment and revenue opportunities.

In 2011, 37 percent of people employed in agriculture sector, 20.3 percent in industry sector, and 42.7 percent in service sector. The share of employed people in service sector decreased 24.3 percent in the studied years since their economic role changed from high service in 1996 to multi-task one toward agriculture sector 2011. Agriculture sector increased 23 percent with growth of 2.6 percent times compared to 1996 indicating ascending and significant trend in comparison with other classes. However, 25.5 percent employed in agriculture sector, 20.6 percent in industry, and 54 percent in service sector on average in these cities of census periods. In fact, economic role of rural cities is partly against economic role of large cities in three mentioned sectors (table5 & figure1).

6- Conclusion and Suggestions

Western macro-region of Zagros has particular urban system. With the exception of a few large and middle cities (9 percent of cities), 91 percent of urban areas are a network consisting of small and rural cities that established harmoniously in geographical context of the region. In addition, these cities have appropriate capacities to create balance. As a result, it is a regional equality and development in current centralization model. Despite balanced establishment, capacities, and development priorities, it did not have such good performance in regional balanced development and changes of population and employment indicators of small cities confirm it. Inattention to the role and actual position of small cities led to continuation of past trends of centralization in high level of urban system and thereby regional development policy with an approach to small cities that are mainly because of changing rural areas to city, could not create a successful and efficient model of regional development and balance without strong link between urban economy with regional economy to activate domestic potential.

The following guidelines are suggested as priorities for action for urban development of western macro-region of Zagros based on small cities strategies:

- The entity of small cities should be considered and organized as social settlement centers to meet various needs of human groups. Planning for small cities, as administrative and political centers or formal order of elements in space transforms limited growth opportunities to small cities. Therefore, creating and strengthening service, welfare, and public infrastructures of second, third, and fourth level cities that are usually small cities of newly established cities, county, and village are counted as a key need and measure for demographic capacity, development competition, and adjusting dominance in urban system.

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- Creating and strengthening communication, production, and employment infrastructures in industry and agriculture sectors to use potential border and custom capacities of the region, 900 kilometers common border with Iraq and existing and under construction border terminals (Mehran, Parvizkhan, Bashmagh terminals and building new border terminals in Dehloran, Soomar, Baneh, and Marivan), and promoting existing custom terminals to free trade zones are some of border capacities to activate small cities as population and regional activity centers.

Transferring development flows and arteries to small towns should be accompanied by creating investment limitation, new industrialization and centralization in larger cities to strengthen economic and demographic foundations of small cities. It is obvious that access to regional development and balance would not be achieved by resorting to the strategy of small towns and without changing in development resources, dominance flows and current centralization existing in economy concepts and national surplus.

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