Evaluating the impact of regional planning on social welfare from perspective of people

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Abstract

The social welfare is one of the most important issues in contemporary world. The governments and relevant organizations use different methods to develop and implement welfare programs. As a technique, the regional planning can be used to realize welfare programs. Unlike macro planning, this method is conducted in region, according to local and regional capacities. However, this study aimed to evaluate the impact of regional planning on social welfare from the perspective of people, rather than technical and quantitative aspects of regional planning. The population consisted of citizens in Zanjan. Using sampling theories in structural equation modeling method, the sample size was determined to be 1036 citizens in Zanjan. The data were collected using navigation technique as cross sectional through questionnaire. The data were analyzed using structural equation modeling method. The findings showed that the welfare demands of citizens in this city in order of importance were related to social security, leisure, education, health, housing, insurance, and population areas. Therefore, these areas are theplanning prioritiesof this region.

Keywords: Planning, Regional planning, Region, Social Welfare, Structural Equation Model.

1. Introduction

The development is one of the major issues of contemporary world. Due to lack of per capita income and many other factors, the underdeveloped countries suffer from so-called vicious circle of poverty (Eliasi, 1989, 62). Consequently, these countries endure great human and material costs. On the other hand, it should be said that the development or underdevelopment has not equal distribution in any country (Pitt & Wake Hart, 2005).

In many countries, the inequalities intensity is different in various regions and areas of country (HusseinzadeDalir, 2009). Therefore, the underdevelopment of a region or area eventually led to decreased development rate of country. Surely, the livelihood and welfare of people in these regions is one of the most important signs of backwardness. It is obvious that the maximization of economic variables such as gross domestic production, production quantitative increase, and increased per capita income does not mean the qualitative development of all members of society (Latifi, 2007). It at least may not be an acceptable criterion to prove the welfare of majority of people. So, the social welfare issue is more complicated than what is supposed to be. In particular, the ultimate goal of development is achieving to social objectives. Even economic objectives are ultimately a means to achieve social goals (Latifi, 2010). However, this question immediately arises: what kind of planning may be used to achieve social welfare?

To answer this question, it can be said that the regional planning, as a relatively new knowledge, tries to solve problems and shortcomings of central and major planning. Although this type of planning is a relatively new science, it has found its place among different types of planning during this short period of time (HusseinzadeDalir, 2009). Therefore, with considerable overlap with human and social objectives,this kind of planning may be widely used to improve the welfare and solve social problems.

The inequality is a feature in Iran. The gap between within city and inter-urban areas and regions and especially between cities and villages has always been evident and obvious. Therefore, the backward areas have attracted the attention of experts and social thinkers- due to lack of equitable distribution of resources across regions and areas. So, it seems that the regional planning is one method to remove this backwardness in areas and regions. The regional planning should always follow three steps:

(1) Knowledge of area and developing a program

(2) Implementation of program

(3) Assessment of program (Shie, 90: 1990).

In the classifications, this kind of planning is an intermediate level planning which tries to fill the gap between national and regional planning (Saifedinni, 2002: 34). Finally, it can be said that the regional planning is conducted at one or several cities at lower level than province level. In this sense, the region refers to one or more cities (Ziyari, 2009: 17).

The regional development policy in Iran, from the beginning, has followed two objectives:

1. Achieving maximum economic growth by focusing investments in regions and areas which have natural resources and development potentials (e.g. Development projects of Moghan Plain, Khuzestan, Qazvin plain, Jiroft, Gorgan).
2. Improving the living, economic, and social conditions in backward regions (and deprived regions such as Sistan and Baluchistan, southern coasts and ports, and etc.).

The social welfare includes services, institutions, and social institutions. It aims to help individuals, groups, and families to achieve a desired life situation (Plan and Budget Organization, 11: 1973). The social welfare is the result of activities which are performed by different social institutions to help individuals, groups, and communities to achieve a desired level of life, wellbeing, and opportunities which allows them to develop all their talents and solve their problems in adapting to society (Mehdi Taleb, 1989: 23).

In general, the social welfare may be defined as organized collection of rules, regulations, programs, and policies which are provided by welfare and social institutions to meet the material and spiritual needs of people and make them grow (Samt, 100: 1994. Quoted by ZahediAsl, 2009: 13-14).

However, this study aims to evaluate the impact of regional planning on social welfare from the perspective of people.

2. Research Methodology

This was descriptive-analytic study .The population consisted of all citizens in Zanjan. The sample size was calculated using sampling theories in structural equation modeling method (n= 1036).

A researcher made questionnaire was used as research tool. The first part of questionnaire consisted of 63 items. Based on ZahediAsl model, it included eight subscales: security (11 items), leisure (8 items), education (5 items), feeding (5 items), housing (7 items), health (9 items), insurance (12 items), population (6 items). The demographic items (unit name, gender, marital status, age, education, occupation, and income) were listed at the end of questionnaire to maximize the anonymity of participants.

Since the regional planning variable consists of several indices and another questionnaire is needed to examine this variable, this variable was evaluated using descriptive method, according to view of professors and experts in this study. The Likert five-point scale (1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = agree, 5 = strongly agree) was used in this study.

However, 50 questionnaires were distributed among citizens in Zanjan to assess the reliability and validity of questionnaire. The reliability of indices was calculated using Cronbach's alpha and content validity was confirmed by eight experts (two faculty members of Allameh Tabatabai University, three faculty members of ZanjanUniversity, two faculty members of Payam Noor University in Zanjan,one statistics and research methodology professor). After the survey and using factor analysis method the necessary reforms were performed in questionnaire. The results are shown in table 1.

Table 1: Testing validity and reliability of questionnaire by Cronbach's alpha coefficient and factor analysis

Index	Cronbach's alpha	Kaiser-Meyer-Elkin value	Bartlett's test of sphericity	Degree of freedom	Significance
Regional Planning	0.819	0.701	538.211	56	0.0001
Leisure	0.835	0.619	627.843	36	0.0001
Education	0.717	0.670	388.709	10	0.0001

Feeding	0.735	0.701	504.327	10	0.0001
Housing	0.863	0.634	571.173	10	0.0001
Health	0.845	0.777	926.352	36	0.0001
Insurance	0.889	0.625	911.405	21	0.0001
Population	0.752	0.615	153.368	3	0.0001
Security	0.837	0.601	225.527	78	0.0001

The structural equation model was the main analysis method which was used in this study. To use this method, the missing values were replaced through maximum possible missing data using expectation maximization technique. In the next step, the normality of data distribution was tested using Anderson - Darling normality test. It was found that the regional planning, education, housing, health, insurance, and security variables have normal distribution. The data conversion was used for leisure (p-values = 0.16), population (p-values= 0.012), and feeding (p-values = 0.046) variables. The Johnson's conversion method was used for leisure and population variables and BOX-COX method was used for feeding variable. Using lisrel software, the structural equation modeling was used to test research hypotheses and investigate the effect of independent variables. In this method, being on threshold of critical value is the acceptance criteria of path coefficient significance (-1.96> T>1.96).

3. Findings

The findings showed that men (75.9%) frequency was almost three times more than women (24.1%). The number of married people (55%) was a bit more than number of single people (44.8%). The majority of participants had a bachelor's degree (34.5%). More than half of them aged under 30 years. More than half of participants were employed and 48.3% were unemployed.

Table 2: Demographic characteristics of participants

Variable	Sub-group	Frequency	Percentage
Gender	Male	507	48.8
	Female	530	51.1
Marital status	Married	572	55.2
	Single	465	44.8
Education	Reading and writing	35	3.4
	Secondary	72	7.9
	High School	107	10.3
	Diploma	178	17.3
	Associate	179	17.2
	Bachelor	357	34.5
	Master or higher	107	10.3
Age	Under 20 years	249	24.1
	30 to 21	501	48.3
	40 to 31	178	17.2
	50 to 41	70	6.8
	Over 50 years	35	3.4
Employment	Employed	536	51.7
	Unemployed	501	48.3

The model 1 shows the standard supposed model. In this case, it is possible to compare and rank the variables. The high value of path coefficient means higher impact, positive value means
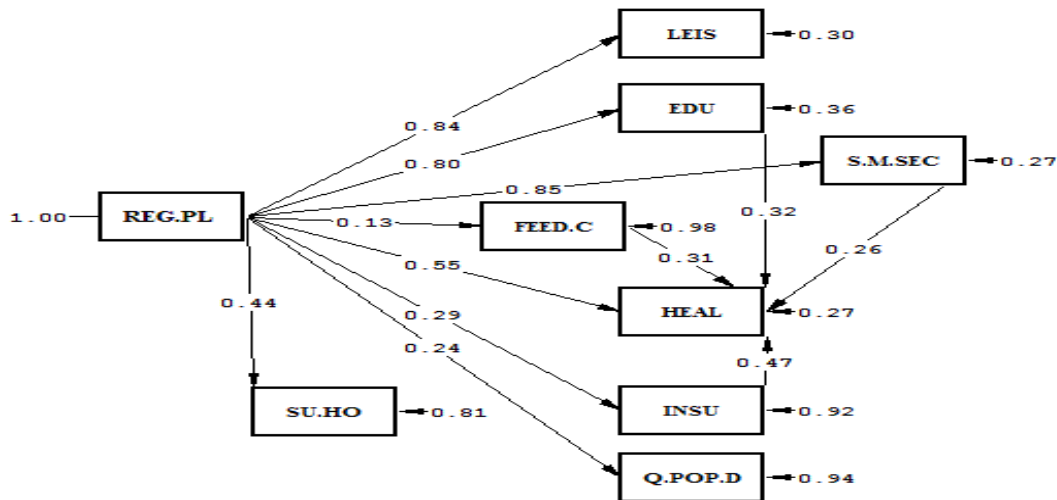
Chi-Square=44.04, df=24, P-value=0.00000, RMSEA=0.067
GFI=0.97 CFI=0.95 NFI=0.90 NNFI=0.91 IFI=0.90 RFI=0.93

positive impact, and negative value means negative impact.

Model 1: Structural Equation Model of Research with standard values

The chi-square value on degrees of freedom df / $\chi 2$ is the first criteria to judge the fitness of model (1). This criteria is used for single dimensional structures and its value must always be less than 3. The value of this index in present model is 1.835 and this is smaller than 3. Also, the value of RMSEA= 0.067 (approximation square mean root) is less than the maximum limit of 0.08. According to model (1) data, the values of GFI (goodness of fit index) = 0.97, CFI (modified fitness index) = 0.95, NFI (softened fitness index) = 0.90, NNFI (modified softened fitness index) = 0.91, IFI (increasing fitness index) = 0.90, and RFI (relative fitness index) = 0.93 are all on threshold of fitness allowed values. Therefore, the hypotheses may safely be tested.

Table 3: Values, signs, and latent variables of structural equation modeling

Latent variables	Signs	Standard Coefficients	T-Value
H$_1$: Regional planning Leisure	LEIS	0.84	29.46
H$_2$: Regional planning Education	EDU	0.80	25.59
H$_3$: Regional planning Education Mental-physical health	HEAL	0.25	8.65

H$_4$: Regional planning ~~Social~~ –Mental Security	S.M.SEC	0.85	31.56
H$_5$: Regional planning ~~Mental~~-physical health	HEAL	0.55	8.65
H$_6$: Regional planning ⟶ Insurance ⟶Mental-physical health	INSU	0.13	5.82
H$_7$: Regional planning ⟶ Feeding	FEE.C	0.13	2.58
H$_8$: Regional planning ⟶ Housing	SU.HO	0.44	9.49
H$_9$: Regional planning ⟶Qualified population development	Q.POP.D	0.24	4.85

Hypothesis 1: According to path analysis model and values in table 3, the path standard coefficient of regional planning to leisure is 0.84 and the t-value of this path is t= 29.46> 1.96. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on leisure variable. So, one unit change in value of regional planning will increase 0.84 unit the leisure (dependent) variable of citizens in Zanjan.

Hypothesis 2: According to path analysis model and values in table 3, the path standard coefficient of regional planning to education is 0.80 and the t-value of this path is t= 25.59> 1.96. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on education variable. So, one unit change in value of regional planning will increase 0.80 unit the education (dependent) variable of citizens in Zanjan.

Hypothesis 3: According to path analysis model and values in table 3, the path standard coefficient of regional planning to health with education intermediate is 0.25 and the t-value of both of them is significant. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on physical-mental health by education intermediate. So, one unit change in value of regional planning will increase 0.25 unit the physical-mental health of citizens in Zanjan by education intermediate.

Hypothesis 4: According to path analysis model and values in table 3, the path standard coefficient of regional planning to social-mental security is 0.85 and the t-value of this path is t= 31.56> 1.96. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on social-mental security variable. So, one unit change in value of

regional planning will increase 0.85 unit the social-mental security (dependent) variable of citizens in Zanjan.

Hypothesis 5: According to path analysis model and values in table 3, the path standard coefficient of regional planning to physical-mental health by social-mental security intermediate is 0.22 and the t-value of both of them is significant. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on physical-mental health by social-mental security intermediate. So, one unit change in value of regional planning will increase 0.22 unit the physical-mental health of citizens in Zanjan by social-mental security intermediate.

Hypothesis 6: According to path analysis model and values in table 3, the path standard coefficient of regional planning to health variable by insurance variable intermediate is 0.13 and the t-value of both of them is significant. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on health variable by insurance variable intermediate. So, one unit change in value of regional planning will increase 0.13 unit the health of citizens in Zanjan by insurance variable intermediate.

Hypothesis 7: According to path analysis model and values in table 3, the path standard coefficient of regional planning to feeding is 0.13 and the t-value of this path is t= 2.58> 1.96. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on feeding culture variable. So, one unit change in value of regional planning will increase 0.13 unit the feeding culture of citizens in Zanjan.

Hypothesis 8: According to path analysis model and values in table 3, the path standard coefficient of regional planning to housing is 0.44 and the t-value of this path is t= 9.49> 1.96. Therefore, it can be concluded that the regional planning is 99 percent likely to have a positive impact on housing variable. So, one unit change in value of regional planning will increase 0.44 unit the proper housing accessibility of citizens in Zanjan.

Hypothesis 9: According to path analysis model and values in table 3, the path standard coefficient of regional planning to qualified population development is 0.24 and the t-value of this path is t= 4.85> 1.96. Therefore, it can be concluded that the regional planning is 99 percent

likely to have a positive impact on qualified population development. So, one unit change in value of regional planning will increase 0.24 unit the qualified population development of citizens in Zanjan.

4. Conclusion

The findings showed that in direct impact, the regional planning has the highest impact in order of importance on social-mental security (path coefficient value= 0.85), leisure (path coefficient value= 0.84), education (path coefficient value= 0.80), housing (path coefficient value= 0.44), insurance (path coefficient value= 0.29), and qualified population development (path coefficient value= 0.24).

In indirect impact, the regional planning has the greatest impact on physical-mental health of citizens in Zanjan (path coefficient= 0.25) by education intermediate. Then, this indirect impact is established by security (0.22), insurance (0.13), and feeding (0.13) variables.

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