

Improving Urban Management in Small Cities through Evaluation of Municipality's Sustainable Revenue Sources (Case Study: in Iran)

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ABSTRACT

Among the various sectors of urban management, municipal revenue sources bear great importance because ,in the first place, such earnings have a huge impact on municipal services to the citizens, and not only does lack of proper income lead to lack of services, but it also jeopardizes all the aspects of urban programs.

In this study, based on a review of relevant literature, views of academics and experts of the field, sustainable income sources of municipality of Babol were identifies and prioritized. The 40 sub-code sources of finance were classified into 6 groups which were then prioritized through the design and distribution of a questionnaire.

For determination of the above-said issues Friedman test and Kendall's W test were used. Upon completion of the analyses, Donations from individuals and private organizations were identified as the most important sources of sustainable income in the municipality of Babol (in Iran). Service charges and the revenue form profit organizations, revenues from general taxes, municipal revenue and property income, other sources of funding, revenues from special charges (taxes) were next in rank.

KEYWORDS: sustainable revenue sources, urban management, Babol municipality.

1. INTRODUCTION

During the recent decades, urban management in Iran has been increasingly challenged by problems originated from social, cultural, political, executive, financial, and legal issues [1]. It goes without saying that one of the issues aggravating the current situation is sprawling urban development and expansion due to over-population of the cities [1]. Allocation of over 60% of the population to cities, greater urban population growth rate compared to that of overall national population, allocation of a very high proportion of the added value, and employment rate in cities all are indicative of the significance of urban economy [2].

Owing to growth of the municipalities' scope of activities and people's expectations of them and problems caused by urban over-population, increasing the number of municipalities' finance sources has become an urgent task in the domain of urban economy [3]. Among the various sectors of urban management, municipal revenue sources bear great importance because ,in the first place, such earnings have a huge impact on municipal services to the citizens, and not only does lack of proper income lead to lack of services, but it also jeopardizes all the urban programs [4].

The critical state of this issue is exposed when considering the fact that over 95% of municipal revenues comes from their local domestic income; on the other hand, dependence on governmental grants has been less than 5%. Although during inception of Baladiyah (an old urban management organization in Iran) in 1907 and development of the new municipal regulations in 1930, some regulations on supplying cities with finances were stipulated, the revenue from the internal sources has been very small which has given rise to the dependence of city management organizations on government funds [5].

In 1983, a plan was devised (in Iran) for self-sufficiency and self-reliance of municipalities regardless of the theoretical basis of financial relations between governments and municipalities. Insistence on the said policy in the following years complicated the situation of the cities and triggered the countdown for the decrease of the cities' shares from the government budget.

The fall in the cities dependence on the state funds, worsening of their problems because of the rapid urbanization resulting in high demands for urban services, and reliance on unstable income sources have intensified the problems for urban administrations [6]. Thus, as a consequence of the lack of sustainable income sources to cover recurrent city expenditure, municipal finance and budget planning and covering of the ever-increasing city expenses will become increasingly difficult in the years to come [2]. Peter Martin believes that, in the third millennium, the biggest challenge for urban management systems will be handling of expenses, and earning revenues will be the focus of their policy-makings [7]. Taking into account the significance of sustainable municipal revenue sources, this research explores the

income structure of municipalities and, employing the views of experts of the field, offers resolutions for formation of sustainable income sources aimed at rendering more satisfactory services.

2. LITERATURE REVIEW

2.1. Definition of Sustainable and Unsustainable Revenues

Securing municipal revenues to provide citizens with required goods and services is one of the weightiest issues in municipalities. The main revenue sources are as follows: taxes (rates), service charges, borrowing and government grants. It is noteworthy that, according to each country's laws and regulations, these sources may be divided into several subgroups or their relevant income might be earned under certain regulations. The modern urban management systems around the world are not merely in search of income sources; rather sustainability and satisfactoriness of those finance sources are the main concerns. Iranian municipalities cannot exclude themselves from this trend and should avert from changing and improving the current unstable revenue sources and move towards enhancement of sustainable ones. Recently, 7 main municipal revenue sources and more than 100 maintainable and unmaintainable subcategories have been introduced [8]. There is a positive correlation between income rate and stable economic development. Moreover, the reliance of city development on making use of and protecting the environmental capacities in urban areas, including water, weather, green spaces, etc. necessitates two characteristics for the city earnings sources: (a) sustainability, (b) preservation of urban environment. These two qualities facilitate budget and income planning and reliability of the finance sources.

Therefore, incomes affected by economic crises and fluctuations, and changes of laws lack both of the above-mentioned qualities. In other words, Municipal revenue policies must be reliable and must not threaten and endanger environmental qualities of cities considered as living organisms [9].

2.2. Effects of municipal problems on cities and citizens

Provision of city revenues and maintaining the status quo could not be possible without putting the natural and non-natural resources that belong to the future generations up for sale. Green spaces are sold, applications are altered, and people's shares of all the natural resources are overlooked, and, by doing so, we are depriving the next generations of some of their citizenship rights. What follows are some of the economic complications in municipalities:

1. Construction license sale affects urban infrastructure, the type and extent of services, communication networks, and give rise to over-population, and the decrease in open spaces.
2. Excessive construction expenses and high taxes (rates) have affected the publics' impression of the municipalities [10]. Surveys, conducted every year, show that this change of image is increasing.
3. In suburban areas, construction permits allow unregulated and non-technical constructions and this leads to sprawling and mushroom growth of cities. When these areas are added to the cities' perimeters, the municipalities are obliged to offer services that not only do not bring about income, but also squander city revenues.
4. The delay in submission of research and executive designs and specially detailed designs has hindered many urban development projects and caused public dissatisfaction.

Sales of suburban lands, in long turn, will lead to depletion of agricultural fields, orchards, green areas, and our oxygen sources.

3. METHODOLOGY

This applied descriptive-analytical research was conducted on urban management, in the municipality of Babol in 2014. The main purpose of this research is to explore, identify and prioritize all the sustainable revenue sources of the municipality in order to draw up a proper pattern for creation of income sources for the city of Babol. Upon review of the relevant literature, a questionnaire was handed out to the experts of the field. The management board, assistant managers, and experts of the municipality of Babol and all the members of the City Council were the population of the present research. The members of the research population were all experienced in the field of revenue earning or were members of the revenue committee. The sample, calculated using Cochran formula, was composed of 123 people. Questionnaire tool was also applied to gather information. Reliability of questionnaire was calculated 0.898, using Cronbach's alpha. The validity of questionnaires were studied and investigated by experts of municipalities and also professors of university, and their content validity was confirmed. It is noteworthy that Friedman's nonparametric test and Kendall's W test were implemented to test the hypotheses of the research. It is need to say that in this investigation SPSS-22 software has used in order to analyse data.

In the first stage, 6 main revenue sources and their sub-codes were identified. Employing the experts' opinions, 40 sub-codes were selected as potential stable revenue sources. The main sources are as follows: general taxes, specific taxes, profit organizations services, revenue and property income, individual and private organization donations, etc.

5. RESULTS

5.1. Test of research hypothesis:

To test the hypotheses of the research, each identified revenue source sub-code in Babol municipality was tested through Friedman's nonparametric test.

H₀: Mean ranks of all the identified revenue source sub-codes in Babol municipality are equal.

H₁: Mean ranks of all the identified revenue sources sub-codes in Babol municipality are not equal.

Table 1: results of Friedman test

N	400
Chi – square	987.020
Df	39
Asymp. Sig	0.000

According to the table above and the results of the test, since Asymp. Sig =0, Df =39 and chi-square=987.020, it can be claimed that H₀ is rejected.

Table 2: results of Kendall's w test related to ranking each of sub-codes

rank	sub-codes	main revenue sources	Rank mean
1	Building license fees	revenues from general taxes	33.71
2	Industrial products sale(Asphalt & construction material)	service charges and the revenue form profit organizations	32.56
3	Change of property application fee	Donations from individuals and private organizations	31.18
4	Income from construction delinquencies	Donations from individuals and private organizations	30.13
5	Contaminative industrial taxes	revenues from general taxes	29.72
6	Municipalities share of the taxes collected by ministry of interior	revenues from special charges (taxes)	28.11
7	Renovation tax(rate)	revenues from general taxes	27.84
8	Construction work termination tax(rate)	revenues from general taxes	27.69
9	Business license fees	revenues from general taxes	26.95
10	Violation of urban & construction laws fines	Donations from individuals and private organizations	25.28
11	Renewal audits	revenues from general taxes	24.14
12	Refuse collection taxes	service charges and the revenue form profit organizations	23.68
13	Establishment of businesses with the private section	municipal revenue and property income	23.74
14	Business taxes	revenues from general taxes	23.47
15	Removal of block parking taxes	revenues from special charges (taxes)	23.29
16	Factory and retail taxes	revenues from general taxes	21.82
17	Asphalt work fees	service charges and the revenue form profit organizations	21.47
18	Supervision fees & city map sales	service charges and the revenue form profit organizations	21.42
19	Transportation rates	revenues from general taxes	21.10
20	City vehicle rent	municipal revenue and property income	20.44
21	Rates on safety services, public transportation and green spaces	service charges and the revenue form profit organizations	20.34
22	Advertising fees	revenues from general taxes	20.24
23	Bank interests	municipal revenue and property income	20.13
24	Added value	revenues from general taxes	19.49
25	Pass block fines	Donations from individuals and private organizations	19.05
26	Unmovable property sales	other sources of funding	18.91
27	Movable property sales	other sources of funding	17.18
28	Insurance fees	revenues from special charges (taxes)	16.93
29	Car inspection fees	revenues from special charges (taxes)	16.62
30	Construction inspection fees	revenues from general taxes	16.43
31	Parking fees	municipal revenue and property income	15.36
32	Illegal rubbish dump fines	Donations from individuals and private organizations	15.32
33	Heavy vehicle rates	revenues from special charges (taxes)	14.61
34	Official document rate	revenues from general taxes	12.94
35	Water release taxes	revenues from general taxes	12.82
36	Citizen donations	Donations from individuals and private organizations	12.65
37	ATM taxes	revenues from general taxes	12.029
38	Club taxes	revenues from general taxes	11.82
38	Rubbish dump fees	revenues from general taxes	11.26
40	Dormitory taxes	revenues from general taxes	8.94

5.2. Ranking Sustainable revenue sources

In order to rank the identified income sources in the municipality of Babol, Kendall's W test needs to be carried out.

Hypothesis of Kendall's W test:

H₀: Mean ranks of all the identified revenue source sub-codes in Babol municipality are equal.

H₁: Mean ranks of all the identified revenue sources sub-codes in Babol municipality are not equal.

Table 3: results of Kendall's w test

N	123
Kendall's w	0.164
Chi – square	68.810
Df	5
Asymp. sig	0.000

Ranking of the identified income sources in the municipality of Babol was done through Kendall's W test.

According to the table above and the results of the test, Asymp. Sig=0, Df=5, Kendall's W=0.164 and chi-square=68.810. Since the coefficient turned out to be less than the assigned alpha level, it can be claimed that H_0 is rejected.

Also, in the following table, we can observe ranks mean of each identified sub-codes with their rank.

Table 4: Results of Kendall's w test related to ranking Sustainable revenue sources

Rank	Main revenue sources	Mean Rank
1	Donations from individuals and private organizations	10.64
2	service charges and the revenue from profit organizations	9.52
3	revenues from general taxes	8.21
4	municipal revenue and property income	5.29
5	other sources of funding	5.19
6	revenues from special charges (taxes)	4.04

6. Conclusion and recommendations

Earning revenue sources is one of the most significant tasks of urban management organizations. Although there are various sources of income, not all of them are sustainable. Such revenue sources must be maintainable and should not threaten and endanger the environmental qualities of cities. Municipalities must take into consideration the relevant experiences of the developed countries and attempt to increase the stable finance sources with the purpose of rendering better services and goods to the citizens; otherwise, they will encounter great challenges and the structure of the cities will be critically damaged. According to the relevant studies and analyses, service charges and the profit organization income are the main finance sources of Babol municipality. Donations from individuals and private organizations, revenue and property income, taxes (rates), other funding sources, and general and specific fees come next. Consequently, municipalities shall prioritize these sources as well as applying the following resolutions:

- Reviewing the current municipal regulations and developing a new set of regulations and laws in order to assign more sufficient authority to municipalities;
- Moving towards earning more sustainable income sources through using development funds and introduction of income-yielding projects in industries and services;
- Making use of people's potentials in profitable development projects;
- Rectifying the income structure of municipalities;
- Improving the urban planning and management systems;
- Enhancing on-job training courses;
- Enabling municipality personnel (structural modification if necessary);
- Making use of people's potentials to improve negotiations on independence of urban organizations and collaborations between municipalities and other organizations;
- Increasing supervision over all municipal activities through improvement of current quality management system and using modern quality management systems;
- Encouraging people to participate in organizing local activities;
- Using urban lands owned by the municipalities, introduction of proper application, and land sales;
- Updating information on properties and lands and their relevant income;
- Levying taxes on production potentials of cities;
- Controlling the urban land within city limits by the municipalities;
- Streamlining decision-making processes, removing parallel organizations and establishing an independent urban management body;
- Changing applications of donated land for more effective usages;
- Taking into consideration the laws and regulation in order to maintain public justice and satisfaction, and to reduce the dependence of municipalities on land and housing income;
- Developing the tourism industry through effective ads;
- Improving and implementing an effective urban management system;
- Investing on entertainment businesses; such businesses are in correlation with public municipal duties and can become useful sustainable sources of income;
- Establishing businesses in local service centers and envisaged projects;
- Establishing educational, sports, arts, and cultural institutions

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