

## <sup>9</sup>URBAN DEVELOPMENT PLANS OF RASHT (ANALYSIS AND REVIEW)

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**Abstract.** About Six decades have passed since the preparation and implementation of the so-called comprehensive development plans in Iran and despite the fact that some positive results have been achieved; the desirable utility of experts and people has not been achieved. This article attempts to review urban development plans of Rasht by focusing on the second comprehensive plan of Rasht city as a case study and assesses the extent of realization of its objectives and its predictions. Specifically, the assessment of the results of the implementation of the second comprehensive plan of Rasht shows that there have been many mistakes in its projections and targets. Among them, the estimated population of Rasht in the comprehensive plan and its detailed plan was associated with 9.1% (46944 people) and 6.02% (33654 people) of the estimated surplus. Also, in the area of expansion and communication network of the city, the second comprehensive and detailed plan of Rasht had 13% and 22.6% of mistakes (surplus to estimate). Regarding the area and per capita of urban utilities, about 20.28% of the area of use and 24.76% of per capita at the end of the plan implementation are surplus on prediction, and in other words, the forecast of the second comprehensive and detailed plan of Rasht in this area has been in short supply. Finally, the second comprehensive plan of Rasht, such as comprehensive plans of other cities, has weaknesses and inadequacies such as non-flexibility, conducting extra studies, extensive service descriptions, and emphasis on the framework that is due to the weakness of the nature of the comprehensive plan model more than anything else.

**Key words:** comprehensive plan, detailed plan, Rasht city, assessment.

**Introduction.** The city is considered to be the greatest human habitat. Civilization and city are two indissoluble words. German historian Oswald Spengler notes in the book "The decline of Western civilization" that: "The history of the world is, in fact, the history of the cities." In the city, the commodity of civilization is multiplied and human experiences are translated into persistent signs, symbols, behavioral patterns and order devices (Mamford, 2006: 21). In the words of Philosopher "Henry Lefebvre", the well-known sociologist, human destinies will be determined in the city, not in the stars and not in the village (Abedin Derkush, 2002: 1).

Naturally, for some reason, problems arise along with the benefits and distract cities from a favorable and balanced situation, which the elimination of these problems and strengthening of the positive aspects requires the existence of precise plans that are the result of efficient urban planning. It is natural that these programs and plans with more than a century of preparation and implementation in developed countries and over half a century in developing countries have not been perfect, and have not yielded a satisfactory result especially in the Third World countries.

From this day, the assessment category to identify the reasons for this failure and pathology of prepared and implemented plans focusing on the comprehensive plan is considered to be a major issue that should always be considered by the experts.

**Statement of the Problem.** The Basis of the comprehensive Plan was the most popular urban planning model in the first half of the 20th century in developed countries (the West) and is currently being founded in developed countries by thinkers such as Patrick Geddes and Lewis Mumford, and codified by the publication of Athens Charter and was used seriously (Mahdizadeh et al, 2003: 103).

Specifically, in Iran, with the establishment of the Ministry of Planning and Development in 1963, following the predictions and objectives of the Third Development Plan (1962-1967), the preparation of comprehensive plans for the cities of the country was on the agenda of the government of the time (Rahnamaee and Shah Hosseini, 2004: 88). Unfortunately, due to the management and executive management on the planning, as well as on the planning system of the country, the implementation of comprehensive urban plans, despite some positive results, could not be effective as it should, be, and perhaps in the organization of cities, and the elimination of their problems would have had an acute and critical form from the middle of the 40<sup>th</sup> solar decade later on. The following results clearly indicate the failure of comprehensive plans in achieving their goals<sup>10</sup>.

In the field of population projections, about 70 percent of estimates have been mistaken. In the economic field in agriculture, industry and services have multiplied by a factor of less or more than projected projections. According to the distribution of the city and its directions, the surveys showed that in 40% of the samples, the expansion of the city

<sup>9</sup> This article is based on "Hamid Hodjati" doctoral thesis, directed by Professor "Mohammad Reza Pourmohammadi".

<sup>10</sup> It is worth mentioning that these results came from the study of comprehensive plans implemented in some of the cities of country until the mid-1970s.

occurred in directions other than what was the plan consider, and in 20% of the samples, only half of the development of the city was in the determined directions. In the remaining 40%, although the development has moved towards the objectives of the plan, it has not completely covered it. Finally, in almost any of the studied cities, the proposed building density and the proposed communication network were not met according to the objectives of the plan, and naturally for these reasons, building and texture of the city are in the opposite direction "(Zista, 1994: 2-4). The following article assessed the second comprehensive plan of Rasht in three important aspects of population estimates, extent of expansion and area and per capita use following a brief discussion on urban development plans in Rasht to determine the extent to which success or failure in the realization of goals of plan will be revealed in these areas and, due to the weaknesses of the plan, a substrate will be prepared to develop a more desirable plan for this important city of the country.

**Introducing Rasht City.** The city of Rasht is located in the center of Gilan province from the northern provinces of the country, between the east coast of 49 degrees and the north latitude of 37 degrees. The area of the city is now around 13000 hectares. According to the results of the latest census of population and housing in the country in 2016, the city of Rasht has a population of 679995 people. It is worth mentioning that Rasht city has the 11th rank in the country. However, in the northern region (including the provinces of Golestan, Mazandaran and Guilan), the city of Rasht is the first and most populous and functional city.

#### **History of the Preparation and Implementation of Urban Development Plans in Rasht.**

In general and in the framework of the prevailing model of the comprehensive urban plan, three designs have been prepared for Rasht, which will be followed by a brief description of them. Then, the second comprehensive plan will be investigated more accurate and more precise as a result of its completion and close proximity.

- **The first comprehensive urban plan:** The first development plan of the Rasht was completed in 1966 by consulting engineers "Sardar Afkhami" and was approved by the Supreme Council of Architecture and Urban Development on May 11, 1971. The project was provided for two five-year and 25-year periods. In fact, the city of Rasht is among the first cities for which a comprehensive plan was prepared. This plan was communicated to the municipality on April 9, 1972. The detailed plan<sup>1</sup> was also developed by Consulting Engineers "Sardar Afkhami" in 1971, and it was communicated to the municipality on October 3, 1978.

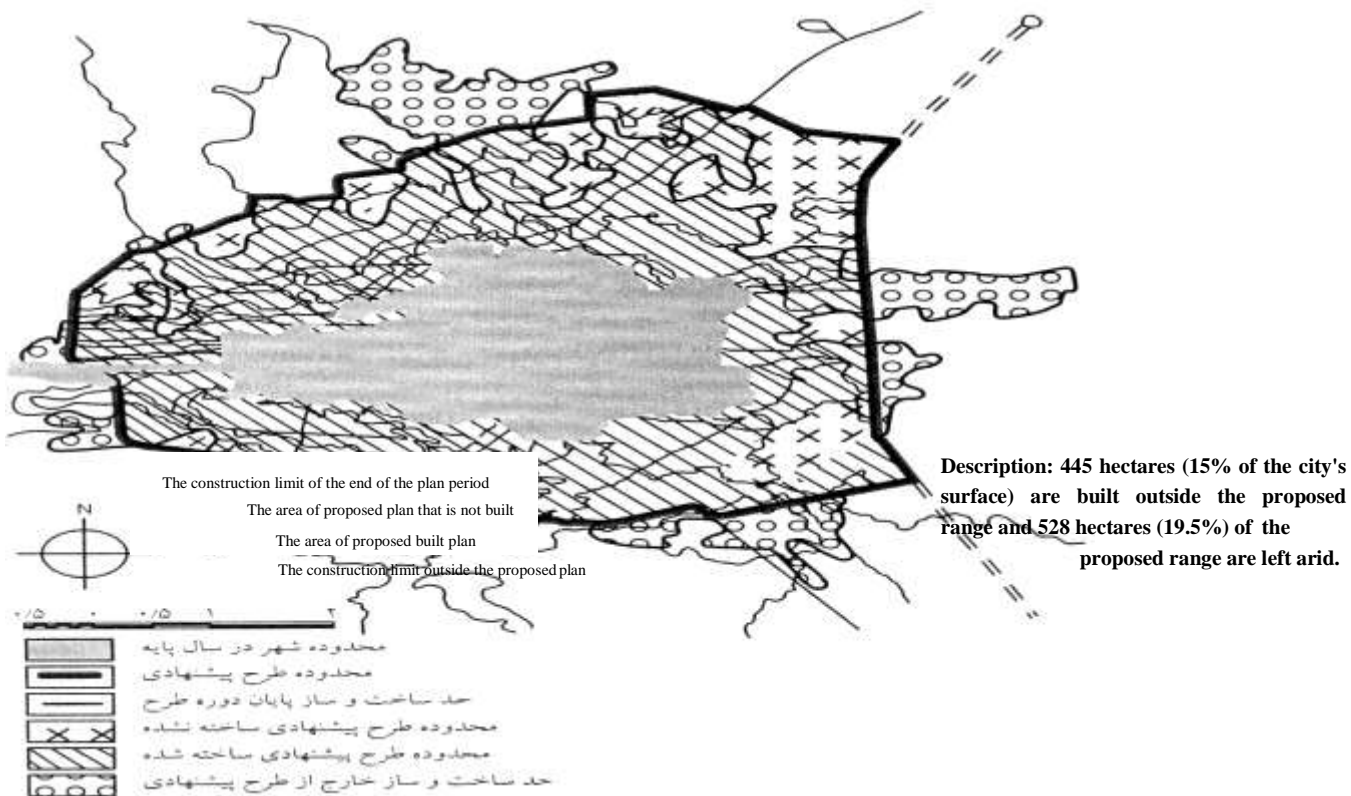
In summary, the main objectives and recommendations of this plan can be to determine the development directions of the city in the twenty-year horizons by specifying its legal scope and taking into account the radial- circular communication network, the population estimation of 241 thousand people for Rasht city for the year of the plan purpose, proposing the main expansion of the city to the north, predicting a 20% share for the agricultural sector, a 45% share for the industrial sector and a 35% share for the service sector at the end of the plan implementation period (Sardar Afkhami, 1971).

However, most of the predictions and goals of this plan were not realized. Fifty-three thousand or 22 percent mistake in estimating the population of the city, 18, 27.5, and 17.5 percent of the difference in the share of economic sectors with what was predicted at the end of the implementation period and the spread of urban definitions in all directions were defects and mistakes which focused on the first comprehensive plan of city. Other than that, in per capita, there were contradictions between the prediction of the plan and what actually happened.

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<sup>1</sup>. Of course, at that time, the law of two stages of the preparation of the comprehensive plan, in the form of a comprehensive plan and detailed plan, had not yet been ratified. However, the plan prepared in Rasht in 1971 should be called a detailed plan for its contents.

**Map 1: Comparative Comparison of the Extent of Proposed Development of the First Comprehensive Plan of Rasht and the Status quo (the Year End of the Plan Implementation)**



**Reference: Consulting Engineers of Zista (1993): page 78**

- **Second comprehensive plan of the city:** The preparation of the second comprehensive plan of Rasht city in November 1983 was aimed at helping to overcome the turbulent conditions of the city and overcoming the shortcomings of the first comprehensive plan. The preparation of this plan was funded by "Iran Amayesh" Consulting Engineers. Although the task of drafting the plan was delayed for some reasons, such as the lack of timely maps, uncertainty about remuneration, ambiguity in the description of the services of new contracts after the revolution. However, in 1986, when the problems were resolved, the plan was officially launched. The draft was approved by the city council of the province of Guilan after comprehensive reviews in the technical committees of the province on August 2, 1989, and then submitted to the State Council for Urban Development and Architecture for the final comment and approval. Finally, after detailed study in the Technical Committee on Urban Development, on November 5, 1990, the second comprehensive plan of Rasht (with the new name of the development plan, the sphere of influence and detail of the city following changes in the title and description of services) was finalized. Detailed plan of this project was also prepared by "Iran Amayesh" Consulting Engineers and was approved in 1994 (four years after the approval of the comprehensive plan of the city). It should be noted that with all efforts to complete a detailed plan based on the approvals and policies of the comprehensive plan and its approved per capita, due to the existence of some technical issues, the change of some basic numbers between the time of approval of the Comprehensive plan and preparation of detailed plan and consideration of city population in 1994 and consequently the change in per capita (and the claim of increasing the feasibility and flexibility of the plan), it did not realized, and a detailed plan found differences with the comprehensive plan (Iran Amayesh, 1994 , Fourth Chapter).
- **Third Comprehensive Plan of City:** The preparation and development of a third urban development plan in the early 2000 was initiated by the Design and Exploration Engineering Company and with the assistance of Parsumash Consulting Engineers and was launched in 2007, and was distributed to Rasht Municipality in 2010. Contrary to the usual routine, the task of preparing a detailed plan was assigned to other consulting engineering (Nagsh-e-Jahan Pars) that its preparation was began in 2011 and completed in 2015, and in fact the stages of implementation of the third comprehensive plan of Rasht have been began in 2016.

- **Second Comprehensive Plan of Rasht (Review and Assessment)**

**A. General Objectives of the Second Comprehensive Plan of Rasht:** the aim of plan designers to provide the development plan and the sphere of influence (second comprehensive plan) of Rasht according to the contents of the plan includes: to identify the existing facilities and available facilities and facilities that will be available in the future and prediction of future developments of the city and control future changes with programs that are flexible enough to prevent the creation of irregularity in construction and as a result, the city's excessive growth (Iran Amayesh, 1990, Chapter 10: 1).The main purpose of the abovementioned is to achieve the goals of providing the facilities and

equipment of the city; the accessibility of the city; the flexibility of the plan; the balance in urban transformation; the use of real land capacity; the ease of implementation of the plan, the fair distribution of the city's general wealth and proper planning; It was intended to be implemented in two short-term planning (five-year) and long-term plans. In general, the aim of the plan in the short-term planning framework was to complete the design of plan at the end of its period and to try to use the maximum capacity of existing facilities, and in the long-term plan was to increase the urban facilities.

### **B. Assessment of Second Comprehensive Plan of Rasht**

**B1. Overall Assessment:** In a general assessment, which is resulted from a multiple study of the entire plan (987 pages of comprehensive plan and 786 pages of detailed plan), problems emerged that were presented on the contents of the plan and will be presented in the following, it is necessary to note that many of these problems return to the nature of the plan itself:

- Providing extra and unnecessary material: Some of the most important drawbacks of the second comprehensive plan of Rasht are the lack of material relation with the main purpose of the subject matter. As a specific example, we can highlight many topics about the economic, social characteristics of the country and the province of Guilan, which have the least relation with the main study area, namely, Rasht city. It is worth mentioning that the volume of these superfluous materials sometimes covers up to two thirds of a chapter.
- Description of widespread services and providing plenty of topics: The extensive service description, which goes back to the nature of the comprehensive plan, has reduced the focus of the project's suppliers to accurately outline its main objectives. Many topics related to natural factors in the first chapter of the plan are among the bulky services. In other words, comprehensive studies, rather than a comprehensive approach, which is one of the general weaknesses of the comprehensive plan model, are also evident in the comprehensive plan of Rasht.
- Discrepancy and non-observance of the subject sequence in the presentation of the plan's chapters: The existence of discrete contents is considered to be a clear disadvantage of the second comprehensive plan of Rasht. So that each section (economic, social, etc.) is provided separately and without regard to their relationship with each other. It is worth noting that the reason for the existence of repetitive and repeated material is the same problem. While, integrated and related studies, in spite of differences in sub-topics, are the main steps in achieving a successful plan and achieving its goals. Also, failure to observe the sequence of a topic that is more than a formidable objection is seen in the design.

As an example, two plan chapters of five and nine are directly related to a subject (the sphere of influence of Rasht), which would have been better to integrate these two chapters together and even to each other.

- Unrealistic goals planning and overemphasis on general issues: Many of the suggestions and issues raised in the plan are unrealistic (slogan) and are not feasible. In addition, some of the main recommendations of the plan are not mentioned in the implementation mechanisms. As an example, the expression of the important goal of the flexibility of the plan is only the title and in no part of the plan is referred to how it is realized, and this goal should be considered as a slogan from the designers of the plan.

On the other hand, the emphasis is more urgent on the design of topics that, by their general nature, play a lesser role in the pursuit of the main goals.

- Compilation of the plan based on old statistics: Citation for the statistics of 1976 in some articles, as well as estimating some statistics for 1986, while the plan was approved in the late 1990 and the results of the census of population and housing in 1986 have been available, are negative aspects of the plan.
- The interval between the preparation and approval of the second comprehensive plan of Rasht and its distance from the ratification of detailed plan: the seven-year interval since the necessity of preparing the second comprehensive plan (1983) until its approval (1990) and the four-year interval from approval of the comprehensive plan to approval of a detailed plan are one of the weak points that led to the overhaul and neglect of the plan from the transformations of city and also the waste of resources due to the need to collect new statistics.
- Lack of attention to the way of executive facilities of the second comprehensive plan of Rasht: the weaknesses of the second and detailed comprehensive plan of Rasht are lack of attention to the executive aspects and the possibility and manner of realizing the objectives of the plan. This disregard for most of the time has led to the inability of the municipality and other implementing agencies to implement the proposal and eventually leads to their unwanted change. This weakness is especially apparent in non-specifying the financial resources needed to implement the plan.
- Editing and writing mistakes of second comprehensive plan of Rasht: Other problems of the plan are inadvertent mistakes in the information and the general contents of some chapters, as well as different types of expressions (in terms of typology) in different sections of the plan. It seems that these drawbacks are due to the fact that all the sections have not been re-examined after the completion and the accuracy of the correction of the words and figures has not been taken. Although these problems are not so important in comparison to other objections to the plan, they can be considered in their own right.
- Difference in per capita and area of land uses in the status quo in the second comprehensive plan of Rasht: The contradiction and the difference in statistics, especially regarding the area and per capita of the present situation, which is the basis of plan forecasts, even though these differences has not created a problem in the prediction, is very annoying and one of the main drawbacks of the plan. In fact, the existence of these differences in the various sections of the plan in a single issue in the design is very unfavorable to the credibility and importance of a comprehensive plan that is always exposed by the experts.

**Table1: Difference in the statistics presented in different sections of the second Comprehensive Plan regarding the area and per capita of status quo (1986). Land uses in Rasht.**

Per capita and area of some uses of Rasht city in the status quo (1986) in different chapters1

Type of land use	The statistics listed in Chapter six		The statistics listed in Chapter eight		The statistics listed in Chapter ten (In the rows and tables of the middle of the chapter)		The statistics listed in Chapter ten (In the rows of the end of the chapter)	
	Per capita		Per capita		Per capita		Per capita	
	(Hectare)	(Square meters)	(Hectare)	(Square meters)	(Hectare)	(Square meters)	(Hectare)	(Square meters)
Residential	1194.8	40.6	1231	14.3 <sup>2</sup>	1194.8	40.6	1231	41.9
Educational	39.8	1.3	119.8	4	119.8	4	119.8	4
Commercial	48	1.6	72	2.4	72	2.4	- <sup>3</sup>	-
Administrative	69.2	2.3	116.5	3.8	111.3	3.7	-	-
Military	61.1	2	65.6	2.1	65.5	2.2	68 <sup>4</sup>	2.3
Industrial	65.5 <sup>5</sup>	2.2	236.3	7.9	232	7.9	236.3	8.4
Municipal facilities and equipment	9	0.3	38.9	1.3	37.3	1.2	-	-
Terminal	0.43	0.01	8.7	0.2	8.7	0.2	-	-
Warehouse	7.3	0.2	16	0.5	16	0.5	-	-
Streets and alleys	606.06	20.6	637.8	21.3	645	21.9	-	-

**Reference: Studies of writers**

Description about Table 1: 1. To see these differences in the design, refer specifically to page 24 in chapter six, page 10 in chapter eight and pages 33-58 and 85 to 89 in chapter 10 (in the volume related to the first stage of the plan).

2 It seems that this mistake is typographical and inadvertently occurred.

3. Empty houses indicate that there are no references in this section, and the same figure is true here.

4. Of course, only the per capita status quo was mentioned in this section, which the author has achieved by multiplying it in the population of the status quo.

5. Perhaps this difference arises from the failure to calculate the 20th (industrial area) area, although it is likely to be certain that, based on evidence, the tables pertaining to the per capita status quo are provided without the inclusion of areas 19 and 20.

**B2. Detailed Assessment (realization of the second comprehensive plan prediction in Rasht)**

**- Estimation of the realization rate of the second comprehensive and detailed plan of Rasht regarding the population of city:** Estimation of the population of Rasht in the second comprehensive plan was carried out with four hypotheses. Finally, one of these assumptions was selected as the basic assumption of the plan. The premise of this assumption was as follows: "Third hypothesis, the decrease in the rate of immigration: In the third hypothesis, it is based on the argument that the plans for the villages of the penetration area of Rasht city will be implemented, and also due to the merger of the two villages of "Shalko" and "Safshar" In the city of Rasht, which has 0.3 percent increase in urban population, is projected to be reduced by the demographic trends of the villages around the city. Therefore, the population growth of Rasht city will decrease from 4.3 percent in the period from 1986-1990 to 3.8 percent to reach the target year of plan (2000). Thus, the population of the city will exceed from 293881 people in 1986 to 509873 people in 2000.

**Table 2: Population Proportion of the Second Comprehensive Plan of Rasht based on four assumptions and three sections**

Assumptions	Percentage of population growth in 1986-1990	Population of city in 1990	Percentage of population growth in 1990-1995	Population of city in 1995	Percentage of population growth in 1995-2000	Population of city in 2000 (target year)
Continue of status quo	4.5	350727	4.5	437488	4.5	545712
Natural population growth	2.6	325657	2.6	370252	2.6	422090
Decrease of Immigration rate (assumed basis)	4.3	347783	4	423131	3.8	509873
Increase of immigration	4.5	350459	4.8	443041	5	565445

rates

**Reference: Iran Amayesh (1990): Chapter III, page 53**

It is recalled that according to the criterion, it is estimated that the population of the city is increased from 293881 people in 1986 (this population is about 3,000 more than the population included in the official statistics of the country) to 347783 people in the base year or the year of beginning the implementation of the plan (1990) and 423131 people within five years after the approval and implementation of the plan (1995) and ultimately 509873 people in the target year, i.e. 2000.

Of course, the target population of the year including the area of 20 (industrial area), was amounted to 515300<sup>12</sup>. However, according to the results of the general census of the country, the population of Rasht is increased from 290897 people in 1986 to 417748 in 1996 which represents an average annual growth rate of 3.7 percent. This percentage is 0.4% less than the percentage predicted in the second comprehensive plan of Rasht for this section (1986-1995). With a growth rate of 3.7 percent, the population of the city in 1990 was about 336<sup>13</sup> thousand and it was 403411 people in 1995.

Also, according to the population resulting from the census of Rasht city in 2006, i.e. 557366 people, the average population growth in 1996-2006 is 2.9 percent. As a result, the population of Rasht in 2000 was about 468356 people. The reconciliation of the population of Rasht during the years 1986-2006 with the estimations of the second comprehensive plan shows a difference of 42,000 people or 8.1 percent, and with the inclusion of the 20th area, the difference and indeed the mistake in the estimation of the second comprehensive plan of Rasht ranges from 47 to 50 thousand people or about 9 percent. In particular, the average annual population growth in Rasht city in the second comprehensive plan during its implementation was estimated to be 3.9 percent and considering the real growth rate of the city during this time, i.e. 3.3 percent, the plan has 0.6% incorrect estimate.

It is worth noting that in the detailed plan approved in 1994, the base population changed from 1990 to 1994, and the target year and population estimates in the second comprehensive plan of Rasht also changed. The population of Rasht in 1994 in detailed plan was 381743 people<sup>14</sup> and the population of city in the target year of detailed plan i.e. 2004, was estimated 558748 and according to the population of city in 1996 and 2006 and its average annual growth rate in this decade, i.e. 2.9% which resulted from the general population censuses and housing of the country, the population of Rasht in 2004 (the target year of the detailed plan) should be close to 525000 people. As a result, the estimation of detailed plan has been confused with about 34,000 people or 6%.

**Table3: A comparative comparison of population estimates of the second comprehensive and detailed plan of Rasht with what was practically realized.**

Estimation of the population of second comprehensive plan of Rasht for the year of destination (2000), excluding 20th area	509873	people
Estimation of the population of second comprehensive plan of Rasht for the year of destination (2000) with 20th area in eighth chapter of plan	519288	people
Estimation of the population of second comprehensive plan of Rasht for the year of destination (2000) with 20th area in tenth chapter of plan	515300	people
The population of Rasht city in 2000 based on the results of censuses in 1996 and 2006 and the average urban population growth rate in this decade	468356	people
The difference between the actual population of Rasht with the estimation of the second comprehensive plan for 2000 (excluding 20th area) in terms of amount and percentage	41517	people 8.1%
The difference between the actual population of Rasht city with the estimation of the second comprehensive urban plan for the year 2000 (including area 20th) in terms of amount and percentage	46944	people 9.1%
Estimation of population of the second detailed plan of Rasht for the year of destination (2004)	558748	people
The population of Rasht city in 2004 based on the results of censuses in the years 1996 and 2006 and the average urban population growth rate in this decade	525094	people
The difference between the actual population of Rasht with the estimation of detailed plan	33654	6.02%

<sup>12</sup>. This number has been inserted 519288 people in one chapter of plan (Chapter VIII). However, in the main chapter, in other words, the most important chapter in the second comprehensive plan of Rasht (Chapter 10) is 515300 people.

<sup>13</sup>. Of course, according to the census of the Iranian Statistics Center of 1991, according to which the population of Rasht in 1991 was 340638, the population of Rasht in 1990 should be slightly less than 336 thousand people. However, this figure has been calculated with respect to the average population growth rate of the city. But the important point is that the population of Rasht in the 1991, one year after the year estimated the population of the plan, was about eight thousand people less than the estimation of the second comprehensive plan for 1990 (the year of the beginning of the plan implementation).

<sup>14</sup>. It should be noted that this number was presented based on the contents and statistics presented in the final line of the detailed plan with the title of final conclusion of all features of the detailed plan of Rasht city. Unfortunately, in a detailed plan, in some chapters, there are differences between numbers in a single subject. As an example, the population of Rasht in 1994 in parts of the second chapter of the plan is 383790 people.

	for 2004 in terms of amount and percentage	people
The population of Rasht according to the census results of 1996		<b>417748</b> people
The population of Rasht according to the census results of 2006		<b>557366</b> people
The average population growth rate in Rasht in the 1996-2006		<b>2.9%</b>

**Reference: Studies of writers**

**- Estimation of the realization rate of the second comprehensive and detailed plan of Rasht regarding the extent and direction of the city expansion:** According to the second comprehensive plan of Rasht, the expansion of the city took place in two stages. In the first stage that its duration was consistent with the duration of the plan implementation (ten years), it is developed continuously and more with the aim of using the arid spaces in the city, and in the second stage (development after ten years), due to the obstacles to the continuous expansion of the city such as the airport, Astara-Gorgan(two city in Iran) crossing, agricultural lands and other reasons, development has been discontinuous, that the main direction of this expansion was south side of the city.

In general, this section (the southern side of Rasht) was recognized the favorable side for discontinuous expansion of the city in the second comprehensive plan with its rich underground lands, and due to the lack of any restrictions for expansion.

The plan also predicted that the area of city is exceeded from 2782.95 hectare (including the airport's limited area: 2994.07hectares) in 1986 to 6443.85 hectares in 2000 (the year of the plan's destination). Of course, this area has changed in the detailed plan. In this way, it was predicted that the area of Rasht city in the early 2001, i.e. from 2004-2005 would reach to 7579.05 hectares (excluding the airport's limited area: 6749.37 hectares).

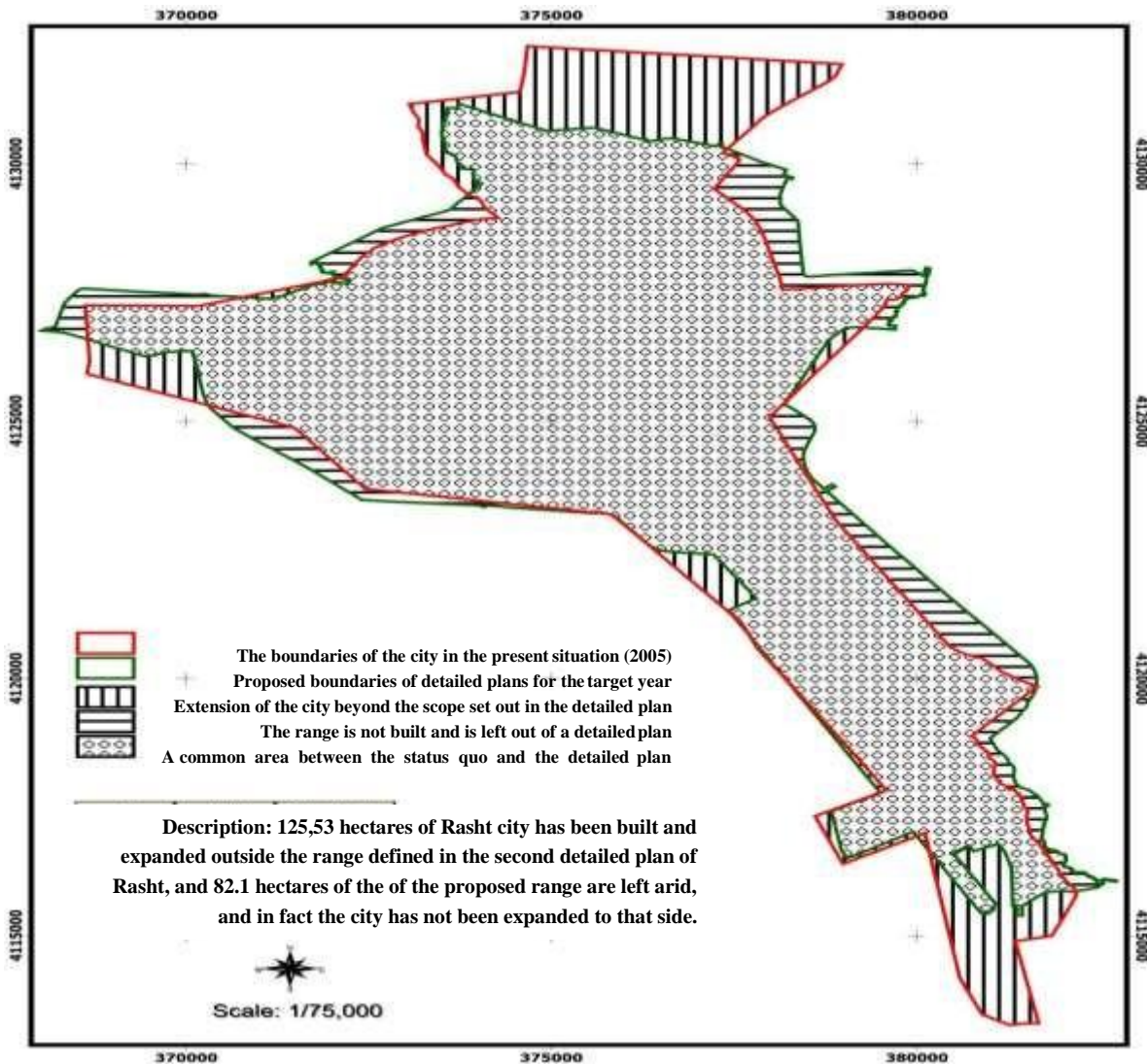
However, these predictions were faced with many problems. First, despite the fact that many of the southern side of the city have been under construction during these years, in accordance with the goals of the plan, there is still a lot of wasteland in this part of the city. Unfortunately, dispersed constructions that were detached and connected on the southern side of the city and were considered as the most important part for the expansion of the city in the plan, due to the failure to consider the necessary arrangements for the construction of the necessary facilities and equipment that is part of this negligence that is related to the weakness of the plan, partly to mismanagement and the lack of financial resources, lead to the emergence of marginal neighborhoods in the south of the city, especially around the neighborhood of the Lacan Gate.

Another important issue is the great difference between the expected area and the actual area of the city. The area of the present condition of the city (2006) was about 9250 hectares, that its comparison with the projected area of a detailed plan of 7579.5 hectares indicates 1670.95 hectares of the surplus expansion on the prediction of plan, in other words, 22 percent of the mistake in estimating plan. However, for a more precise assessment, it was necessary to have a plan drawn up in 2004 or 2005 based on the current status of Rasht, that is to say, the years which correspond to the target year of the detailed plan, in order to precisely determine the level of the realization of the plan's prediction with adaptation of this map with the map taken from the detailed plan that represents the extent of the expansion of Rasht in the target year of plan.

The results of this comparison are as follows: the area of Rasht in late 2004, in other words, in 2005, was about 6551.37<sup>15</sup> hectares and its comparison with the proposed area of the detailed plan (7579.05 hectare) indicates 102.75 hectares or 13% difference, in other words, 13% mistake in forecasting a detailed plan. It is noted that, in particular, 125.53 hectares of urban area was expanded out of the determined area in the expanded detailed plan in the target year and 82.1 hectares of the proposed area was remained as arid and in fact the city did not expand to that side.

<sup>15</sup>. This figure, according to the area of 9250 hectare of Rasht, in 2006, suggests the expansion of the uptown for about two years.

**Map 2: The comparative comparison of the proposed expansion range of detailed plan of Rasht with what has been practically realized.**



**Reference: Drawing from the authors using the map drawn from the detailed plan and the present situation in Rasht in 2005**

**- Estimation of the prediction realization of the second comprehensive and detailed plan of Rasht per capita and the area of urban use:** The main objectives of the second comprehensive plan of Rasht regarding urban uses in two general objectives is the use of maximum capacity of uses in the current state (the stage of plan preparation) during first five years of implementation of the plan and the subsequent assignment of lands to increase the capacity of the urban uses in order to meet the current and future needs of citizens. Based on the second goal, the area and per capita utilization of Rasht were projected for the target year in the second comprehensive plan. Of course, these predictions was metamorphosed followed the changes made in the base year and the goal of the detailed plan. Thus, the proposed area and per capita uses of Rasht are increased from 6454.29 hectares and 126.59 square meters in the comprehensive plan to 7579.05 hectares and 135.64 square meters (including airport area).

**Table 4: Proposed area and per capita of comprehensive and detailed plan of Rasht for urban uses**

Type of land use	The area and per capita proposed in the second comprehensive plan of Rasht for urban us		The final proposed area and per capita approved by the City Council for Urban Use		The area and per capita proposed in the second detailed plan of Rasht for urban use	
Residential	1625.25	31.88	1373.18	26.93	1630.62	26.18
Educational	445.74	8.74	439.02	9.67	397.1	7.11
Commercial	184.3	3.61	161.63	3.17	135.39	2.42
Administrative	121.35	2.38	121.35	2.38	244.07	4.37
Religious-	29.34	0.58	39.73	0.78	35.58	0.63



cultural						
Therapeutic-Sanitary	102.34	2.01	81.58	1.6	55.04	0.98
Tourism	35.9	0.7	35.9	0.7	33.83	0.61
Industrial	277.1	5.44	289.61	5.68	261	4.67
Urban facilities and equipment	43	0.84	83	1.63	37.65	0.67
Sports	93.8	1.84	64.24	1.26	60.98	1.09
Green space (park)	412.24	8.08	412.24	8.08	402.05	7.19
Streets and alleys	1038.98	20.38	1038.98	20.38	1862.63	33.34
Warehouse	73.09	1.43	73.09	1.43	93.24	1.66
Terminal	19.8	0.39	19.8	0.39	9.03	0.16
Parking	69.92	1.37	69.92	1.37	50.99	0.9
Cemetery	98.07	1.92	98.07	1.92	70.75	1.27
	Population included: 509873 people		Population included: 509873 people		Population included: 558748 people	

**Reference: Studies of writers based on the contents of the second comprehensive and detailed plans of Rasht**

Before assessing the per capita realization and the area of the plan uses, it should be point to a relatively large difference between the area and per capita of the existing status of the Rasht city in a detailed plan (1994) with the predictions of the comprehensive plan in the same field after completion of the short-term program (1995). The difference indicates the major errors in estimating comprehensive plan. It should be noted that the one-year difference between the years 1994 and 1995 or the difference in the estimated population of the comprehensive plan in 1995, that is, 423131 people with the population of the present situation in Rasht in 1994, i.e. 381743 people, according to the authors of the detailed plan (which naturally added to this number in 1995 and this population is closer to the estimated population of the comprehensive plan) is not an acceptable justification for the difference shown in Table 5.

**Table 5: Comparative comparison of the prediction of the second comprehensive plan of Rasht for 1995 regarding the area and per capita of urban uses with the present status (1994) of these areas and per capita according to the detailed plan provisions**

Type of land use	Prediction of the second comprehensive plan for 1995 after the completion of its short-term program regarding the area and per capita utilization of Rasht.		The current state of the area and per capita utilization of Rasht (1994) according to the detailed plan provisions		The amount of scarcity or excess in predicting the design	
	Area (hectare)	Per capita (Square meters)	Area (hectare)	Per capita (Square meters)	Area (hectare)	Per capita (Square meters)
Residual	1493.84	35.3	1382.76	31.45	+111.08	+3.85
Educational	344.22	8.13	212.72	4.84	+131.5	+3.85
Commercial	131.92	3.12	52.99	1.21	+78.93	+1.91
Administrative	106.62	2.52	115.72	2.63	+9.1	+0.11
Religious-cultural	22	0.52	11.55	0.27	+10.45	+0.25
Therapeutic-Sanitary	70.3	1.66	45.6	1.04	+24.7	+0.62
Tourism	16.32	0.76	3.7	0.08	+28.46	+0.68
Industrial	206.81	4.89	190.45	4.33	+16.36	+0.56
Urban facilities and equipment	41.23	0.97	16.36	0.37	+24.87	+0.6
Sports	45.5	0.96	7.76	0.18	+32.74	+0.78
Green space	220.87	5.22	24.73	0.56	+196.14	+4.66
Gardens	66.52	3.94	244.72	5.56	-78.2	-1.62
Military	67.81	1.6	71.03	1.62	-3.22	-0.02
Streets and alleys	951.5	22.49	749.64	17.05	+201.86	+5.44
Warehouse	46.79	1.11	59.81	1.36	-13.02	-0.25
Terminal	19.8	0.47	0.54	0.01	+19.26	+0.46
Parking	63.92	1.51	6.06	0.14	+57.86	+1.37
Airport and its surroundings	231.12	5.46	211.11	5.53	+20.01	+0.07

Cemetery                      **66.07**                      **1.56**                      **60.86**                      **1.38**                      **+5.21**                      **+0.18**

**Reference: Studies of writers based on the contents of the second comprehensive and detailed plan of Rasht**

However, despite a more detailed forecast in the detailed plan relative to the comprehensive plan, the area and per capita use of Rasht in the present situation indicates no correctness of the predictions of the detailed plan in this regard. Table 6 confirm this.

**Table 6- Comparative comparison of the prediction of the detailed plan (II) about the area and per capita utilization of Rasht for 2005 with what actually occurred.**

Type of land use	Proposed Area and per capita of Detailed Plan (second) of Rasht for Urban Use for the Target Year of the plan (2004-2005)		Existing land use in Rasht (2005)		The amount of scarcity or excess in predicting the design	
	Area (hectare)	Per capita (Square meters)	Area (hectare)	Per capita (Square meters)	Area (hectare)	Per capita (Square meters)
Residual	<b>1630.62</b>	<b>29.18</b>	<b>3535</b>	<b>65.6</b>	<b>-1904.38</b>	<b>-36.42</b>
Educational	<b>192.9</b>	<b>3.46</b>	<b>91.71</b>	<b>1.7</b>	<b>+101.73</b>	<b>+1.76</b>
Higher Education	<b>204.2</b>	<b>3.65</b>	<b>536.71</b>	<b>9.96</b>	<b>-332.51</b>	<b>-6.31</b>
Sanitary	<b>0.81</b>	<b>0.01</b>	<b>1.64</b>	<b>0</b>	<b>-0.83</b>	<b>-0.01</b>
Therapeutic	<b>54.23</b>	<b>0.97</b>	<b>52.7</b>	<b>1</b>	<b>+1.53</b>	<b>+0.03</b>
Urban facilities and equipment	<b>37.65</b>	<b>0.67</b>	<b>27.67</b>	<b>0.5</b>	<b>+8.98</b>	<b>+0.17</b>
Sports	<b>60.98</b>	<b>1.09</b>	<b>32.66</b>	<b>0.6</b>	<b>+28.32</b>	<b>+0.49</b>
Park and green space	<b>402.05</b>	<b>7.19</b>	<b>355.31</b>	<b>6.6</b>	<b>+46.74</b>	<b>+0.59</b>
Gardens	<b>19.37</b>	<b>0.34</b>	<b>54.5</b>	<b>1</b>	<b>-35.13</b>	<b>-0.66</b>
Administrative	<b>244.07</b>	<b>4.37</b>	<b>170.55</b>	<b>3.2</b>	<b>+73.52</b>	<b>+1.17</b>
Military - disciplinary	<b>1.21</b>	<b>0.02</b>	<b>49.4</b>	<b>0.9</b>	<b>-48.19</b>	<b>-0.88</b>
Tourism	<b>33.83</b>	<b>0.61</b>	<b>4.53</b>	<b>0.1</b>	<b>+29.3</b>	<b>+0.51</b>
Cultural	<b>27.78</b>	<b>0.5</b>	<b>2.73</b>	<b>0.1</b>	<b>+25.05</b>	<b>+0.4</b>
Religious	<b>7.8</b>	<b>0.13</b>	<b>9.6</b>	<b>0.2</b>	<b>-1.8</b>	<b>-0.07</b>
Industrial	<b>261</b>	<b>4.67</b>	<b>367.8</b>	<b>6.8</b>	<b>-106.8</b>	<b>-2.13</b>
Commercial	<b>135.39</b>	<b>2.42</b>	<b>8.78</b>	<b>0.2</b>	<b>+126.61</b>	<b>+2.22</b>
Streets and alleys	<b>1864.63</b>	<b>33.34</b>	<b>1440</b>	<b>26.7</b>	<b>+422.63</b>	<b>+6.64</b>
Warehouse	<b>93.24</b>	<b>1.66</b>	<b>117.44</b>	<b>2.2</b>	<b>-24.2</b>	<b>-0.54</b>
Parking	<b>50.99</b>	<b>0.9</b>	<b>7.21</b>	<b>0.1</b>	<b>+43.78</b>	<b>+0.8</b>
River and its surrounding	<b>318.32</b>	<b>0.57</b>	<b>266</b>	<b>4.9</b>	<b>+52.32</b>	<b>+4.33</b>
Cemetery	<b>70.75</b>	<b>1.27</b>	<b>28.57</b>	<b>0.5</b>	<b>+42.18</b>	<b>+0.77</b>
	Population included: <b>558748</b> people		Population included: <b>538639</b> people			

**Reference: Second Detailed Plan of Rasht, Design and Engineering Company and ParsMash Consulting Engineers**

In general, there is a 1369.03 hectares difference in areas and 29.91 squares meter difference in the per capita between a total of areas<sup>16</sup> and per capita of land uses of second detailed plan which are 6749.37 hectares and 120.79 squares meter, with the total of areas and per capita of landuses of Rasht in the status quo, i.e. 8118.4 hectares and 150.7 squares meter that indicates 20.28% of mistake in predicting detailed plan regarding the area of land uses and 24.76% mistake in predicting it about per capita of land uses.

Accordingly, it should be acknowledged that the predictions of a detailed plan of area and per capita of land uses have been met with a major failure. Regardless of the relative failure, the goal of the optimal use of capacity utilization for reasons such as failure to provide a specific solution in the second comprehensive plan, inefficiency and maladministration, executive problems, etc., all of which indicate the inability of the plan's suppliers to understand the future of the city and, of course, in the preparation stage of the plan, sets its prominence in the plan of unrealistic and unreasonable goals of the city.

<sup>16</sup>. It is worth noting that in Table 6, only the most important land uses of the city, both in the plan and in the current situation, is mentioned. Thus, the total area and per capita table will be less than the total area and per capita land uses of Rasht.

**Conclusion.** Ahmad Saednia, a urbanization planner in Iran, raises the following criticisms about the inefficiency and effectiveness of comprehensive plans: intersectional non-coordination; comprehensive comprehension rather than focusing on the major problems of city; the unilateral decision-making system; the closure of urban planning after Preparing, approving and communicating the plan; Lack of realism in the objectives of the plan and its lack of consistency with the real scenes of the city; the practical ineffectiveness of the plan and the obsolete of its theoretical model (Moradi Masihi, 2005: 149). Charles Lindblom, a major urban planning expert and first critics of the comprehensive planning model, also commented on this plan: " The general idea of this model is not consistent with the human intellectual limitations, it is not prepared to adapt to the lack of available information and probable failures and it does not matter the extent of the variables that must be faced with it in the city and the coherence between the facts and values in the decision-making process due to the general method governing it"(Faludi, 1977: p151). These problems, along with deficiencies such as static structure, comprehensive studies instead of comprehensive review in the study, overemphasis on quantitative criteria, a strong tendency towards geometric and physical thinking, etc., have caused the implementation of even a comprehensive urban plan cannot lead to a perfectly desirable outcome for the city and cannot combine with the specific problems of developing countries such as maladministration, lack of financial resources, lack of qualified personnel, lack of necessary facilities, etc.

Like most other metropolitan cities of Rasht, Rasht has experienced high growth over the past half century. The area of Rasht has increased by 20 times over the course of sixty years and its population has increased by 6 times during the same period. Naturally, this undeclared growth has caused problems for the city since the beginning and the preparation of three comprehensive plans one in 1967 and the other in 1990 and the other in 2006, in fact, is an attempt to contain and overcome these problems. However, the implementation of two first and second plans of the city has not been successful. The 22 percent mistake in estimating the population of the first comprehensive plan for the target year, 18, 17.5, 35.5 percent difference between the prediction of the plan and the situation in different sectors of the economy and the misplaced prediction for the expansion of Rasht, as well as 6.02 percent mistake in estimating (surplus estimation) population of the second detailed-comprehensive plan of Rasht, 13% mistake or surplus in predicting city expansion, 22.6% mistake or surplus in prediction of communication network, and finally 24.76% and 20.28% mistake or lack in the prediction of per capita and area of land uses are indicative of this failure. Despite the obvious problems with the master plan model, Lake, this model should not be considered a finished pattern in the country. All of the capacities of this plan have not been used in the development of cities of the country. It can be stated with certainty that if the necessary financial resources are provided for its full implementation in the country and some modifications are made, in spite of a small amount, in the way of urban management of the country, implementation of plan can have much more efficiency than the current situation for the cities of country including Rasht. But at any rate, the pace of developments and the current acute problems are less likely to allow plans such as a comprehensive plan to meet the current needs.

In developed countries, despite having all the facilities, the model of the comprehensive plan is obsolete and the strategic plan model replaces it. Of course, it should be kept in mind that the mechanism and the necessary framework for the preparation and implementation of new plans in the country are not provided in a desirable way. Moreover, it should not be forgotten that the main part of the success of the strategic model in advanced countries is due to the existence of a suitable platform that is achieved through the implementation of comprehensive plans. This platform has not been provided in our country until now (Hojjati, 2008: 309). Of course, this is not about preparing a comprehensive plan in the same way as before, and it is imperative that even before the adoption of appropriate platform for new plans, comprehensive plans will be revised and their services reviewed.

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