

An Analysis of Residence Quantitative and Qualitative Characteristics in Old-Context Location in Dezfoul

Hamid Reza Saremi¹, Saeedeh Rashidi Asl², Zohreh Ezzati^{3*}, Mansoureh Sadat Amini Nezhad³

¹School of Art and Architecture, Department of Urban Planning, Tarbiat Modarres University, Tehran, Iran; ²Urban Planning, Science and Research Branch, Islamic Azad University, Boroujerd, Iran; ³Architecture Engineering, Science and Research Branch, Islamic Azad University, Boroujerd, Iran.

*E-mail: ezzati.202@gmail.com

Abstract

The practice of the residence sector and its structure implies its importance in each country's economy. Activities of this sector not only help fulfill people's ever-increasing need for dwelling as a human and vital need, but also it plays an important part to create employment for the growing human population of the country. The main purpose of creating a residence plan is to identify now and future in Dezfoul's old context so that a desired future could be sketched. This research relies upon field research and the data received from the Municipality, the Treatment and Rehabilitation Organization, and library in Dezfoul. This area covers around 200 hectares and it holds 6105 residential units, 29277 people, and 7588 families. Via stratified sampling without substitution of 6105 residential units, 400 were selected as the sample. Considering the goal of the study, i.e. recognition of now and future of dwelling in the old context and to obtain results, two questionnaires were devised and distributed and filled in within the population. The research findings show that in quantitative terms, dwelling had microlithicity. Family density in residential units was relatively high and it did not reach the standard extent, i.e. the density of one person in residential units of some of its localities was high and even observed to be up to 6.34, and in qualitative terms, 53.8% were being destroyed, 69.7% were tile-made buildings, the age of which are over 30 years.

Keywords: Dezfoul, old context, residence planning, quantitative and qualitative characteristics

Introduction

The topic of residence, due to its various dimensions, has a certain broadness and complexity, for which a single unit cannot be provided. Therefore, the perspective regarding dwelling differs in various communities and cultures. In some period, residence is propounded as the *life machine* (La Corbusier) or *the place of removing veils* (Mies van der Rohe), etc. In another time, dwelling was expressed as getting resident with thought, and humans were being recognized as eternal beings on earth, under the sky, and under the refugee of saints (Heidegger, 2005, 94). In contrast, there are definitions that consider a dwelling as a physical place and as a shelter, they assume it as the primary and basic need of a family (Dallal Pour Mohammadi, 2000:3). On the other hand, the concept of dwelling includes, in addition to physical places, the whole residential environment consisting of all public services and facilities required for a family's life, as well as education for individuals. In fact, a general definition and concept of dwelling is not merely a public definition and concept of a residence unit, but it includes the whole residential unit. That is, a dwelling is beyond a physical shelter and it includes all the public services and facilities required for human welfare, and there must be the right for relatively long-time and reliable possession for its user (Kapp, 1982:35). Heidegger interprets man as a perishing creature on earth, and says a human exists as long as he/she has a dwelling (Masa'eli, 2009, 28). According to this definition of

Heidegger, man for residence and dwelling, he criticizes the thoughts and theories of modern architecture, i.e. the thought and theories for which the dwelling is a machine and instrument and that assume that residence has reduced down to a mere consumption relationship (Shoay, 1996: 433). In the Second Human Residence Summit held in Istanbul, an appropriate dwelling has been defined as follows: “appropriate shelter does not mean a ceiling over everyone; an appropriate shelter means appropriate tranquility, appropriate space, physical access, and appropriate security, ownership security, durability, and consolidation, light, air conditioning, appropriate warming system, hygiene and education, appropriate place and accessibility in terms of work and initial facilities, etc. all of which must be provided according to people’s financial ability” (Shokrgozar, 2006, 39).

Statement of problem

The importance of dwelling results from the fact that it makes up 10-30 percent of the gross capital of developing countries that, by integrating direct financing in home sector and its relevant services, reaches 20-50 percent of the wealth produced in these countries. On the one hand, dwelling is a major factor for families’ saving. In addition, it affects inflation, budget shortage, and stimulation of work force, and balancing payments, and also government budgets through taxes and subsidies (Rafi’ei, 2003:14). Thus, the issue of residence mainly afflicts low-income and mid-income categories. Lack and deficiency of appropriate urban residential units in quantity and quality terms deprives a broad set of urban masses from achieving appropriate residence and also, the old context of the city of Dezfoul is an organic set with very complex relationships dominating its components. The old context of the city of Dezfoul is affected by a residence form and meanwhile, dwelling has restrictions due to being located in the same urban context. The old context mostly has one- and two-floor homes in an irregular form alongside one another, as limited by narrow alleys leading to the main city streets. These residences are not in accordance with technical standards, and they do not have the required stability against quake. Streets and passage networks also do not have an appropriate functionality. The city’s underpinning facilities also have numerous problems. There are thousands of other problems and issues resulting from incompatibility and inconformity of the existing urban context with today’s needs.

The context architecture has also been performed according to the needs of residents and their traits over long centuries, and it has been respondent to its contemporary problems. A big family used to live in a residential unit and had a special space called *yard*. On the other hand, inexpensiveness of land and technological problems made it possible for one floor, or 2 floors maximally for a few of them, or maximally 5 floors to be built for units. In current circumstances, however, the high density of cities, increase in land rate and the deficiency of technological facilities, decrease in family dimension and the number of single-unit families have made it necessary to build apartment units. Now, old residential units are undergoing their trend of erosion and destruction. What has been left from the old and historical context includes structural elements, alleys, the city’s old passage, archaic residential units or those rehabilitated without coordination of adjacent residential old buildings, thus leading to the destruction of the role of the city’s locality centers.

The area under study

Historical documents and evidences show that Dezfoul was founded in ancient times. Its adjacent bridge and castle have been making the city’s oldest part and its initial core. Dezfoul, like other cities of Khuzestan, was built in the seventh century AD by Muslim Arabs. This city got different names in 11th and 12th centuries, e.g. Ghasr-e-Roonash, Ghantareh Roomi (Roman bridge) (Emam, 2003, 25).

The Safavid Period can be considered the epoch of Dezfoul's development in all aspects. In that time, Dezfoul witnessed a broad expansion and prosperity, and considered as one of Iran's biggest cities. It was then that the city found a special position in terms of architecture and creation of novel opportunities with a new practice, and it was then that civil services were spread in all parts of the city. In Safavid period, the city underwent great expansion, and General Mosque is located downtown (Musavi, 39, 2004).

The last historical enlargement of the city of Dezfoul before Pahlavid dynasty and beginning of displacement civilization is the Qajar period. After Qajar period and beginning of Pahlavi period, the old context of Dezfoul underwent a historical discontinuity. In this epoch, methods of architecture and urbanization went out of traditional area, and adopted a Western pattern (ibid, 114). Expansion of the new city in the contemporary era after 1934 along with checker streets beside the city's old context has continued until today (Na'eima, 1997, 68).

The area under study holds Dezfoul's old context in the past, which includes 27 conventional localities. Like other Iranian cities, the mentioned localities have been named based on various factors of residents such as clanship, religion, profession, environmental circumstances, etc. with each having a certain boundary.

Dwelling's general characteristics

The analysis of quantitative and qualitative topics of residence is performed via instruments that are propounded as residence variables and express different economic, social, cultural, and physical dimensions of residence. Residence criteria on the one hand are the means of identifying residence status in different dimensions mentioned, and on the other hand, are key instrument for sketching a landscape for future of dwelling and its planning. In principle, the goals of considering dwelling criteria can be categorized in the following cases:

1) Providing a framework for policy making and planning in house and monitoring it. 2) Recognition and clarification of the relationships dominating various dimensions of dwelling and evaluation resulted by different policies, 3) Founding proper relationships between different dimensions of residence that can be aimed at clarifying policies. 4) Providing proper analysis tools for policy makers and planners with complete knowledge of changes and variations (Azizi, 2005: 26).

The dimension of family and population

The dimension of family in the old context of the city of Dezfoul in 1996 was 4.2 that reached 3.85 in 2006.

Table 1 . Iranian Statistics Center, People and houses census, 1996, 2006

Locality population	1996 population	Ratio of 1996 population to the city	2006 population	2006 population ratio to the city
Old context	25256	%12	29277	12%
The city of Dezfoul	209600	100	235819	100

Number of residential units

The number of active residential units of Dezfoul's old context in 2009 was 6105. The area of middle context and *Siah-Pooshan* have the highest units of 807 and 793, respectively. The lowest number of residential units belongs to Bongashtian with 26 units.

Data from the Iranian Statistics Center, 2011, Choghazanbil Counselling Engineers, 2009

The general building density in planning studies is important due to the fact that existence of open urban spaces (non-built spaces) to a desirable extent, provides proper life facilities. According to existing regulations, a certain percentage of each building must be dedicated to open spaces. Furthermore, open spaces must be incorporated in urban designs.

All levels of the old context of Dezfoul amounts to 200 hectares (Choghazanbil Counseling Engineers). From this surface, about 1978456 m² of space has been constructed, and 21544 m² of space is not constructed yet.

Table 2. Number of residential units of Dezfoul's old context in 2011

Place	2011	
	Number of residential units	%
Kornasion	480	47.99
Se Dare	139	64.29
Sakian	74	51.4
Siah Pooshan	793	62.90
Lab Khandan	149	44.74
Kat Katan	156	57.28
Maghdamian	113	57.18
Lorian	116	48.51
Sar Meydan	108	41.49
Pooladian	168	43.27
Bongashtian	26	13.25
Morshedbakan	301	51.38
Cholian	310	53.01
Kharratan	33	19.79
Ghal'eh	249	37.64
Bazar	47	13.85
Pirnazar	59	51.35
Masjed	281	37.26
Shah Roknoddin	272	50.74
Seyed Mahmoud	65	47.93
Sahra Badr Maghrebi	297	51.37
Sahra Badr Mashreghi	504	47.53
Mian Darreh	60	19.00
Majdian	45	34.59
Mashkdouzan	95	45.68
Ali Malek	147	49.77
Kalantarian	211	663
Middle context	807	39.00

In 2011, there were 6105 residential units in Dezfoul, the area of which mounts to 903617 m². Therefore, the average part of constructed space in relation to the whole area of the old context of Dezfoul i.e. 632531 hectares is about 46.72 percent (authors, based on raw data from the Organization for Renovation and Rehabilitation).

Table 3. The area of existing buildings of Dezfoul's old context in 2011

Number	Average buildings area (m ²)				Ratio of foundations' area to the whole land (m ²)
	All buildings with yard		Foundations		
	Whole area (m ²)	Average unit area (m ²)	Whole area (m ²)	Average unit area (m ²)	
6105	903617	148	671550	110	74.3

Interview and extraction from family and body questionnaires and the Renovation Organization, 2013 (Source: authors)

The area of apartment units in the whole context is about 148 m² and the average foundation of buildings is about 110 m² (authors' resources). The average for ratio of foundations to the whole area equals 74.3 percent.

Table 4. The area of the buildings existing in Dezfoul's old context localities in 2009

Areas	# of buildings	Average buildings area (m ²)				
		All buildings (with yard)		Foundation		
		Whole average (m ²)	Average unit area (m ²)	Whole area (m ²)	Average area	Ratio of foundation area to the whole buildings(percent)
Cornasion	480	75359	156.99	52800	70.06	47.99
Sedare	139	15058.23	108.33	15220	101.5	62.29
Sakian	74	7508.23	101.46	10956	108.41	51.4
Siah Pooshan	793	118613.11	149.57	87230	73.54	62.90
Labkhandan	149	20489	137.51	16390	80	44.74
Kotkatan	156	18989.67	121.72	17160	90.1	57.28
Maghdamian	113	14636.39	129.52	12430	85	57.18
Lorian	116	13639.41	117.58	12760	93.5	48.51
Sarmeydan	108	12286.90	113.76	11880	96.6	41.49
Pouladian	168	23596.47	140.45	18480	78.3	43.27
Bangoshtian	26	2623.29	100.89	2860	109.09	13.25
Morshedbakan	301	40408.73	134.24	33110	87.04	51.38
Cholian	310	38038.76	122.7056	34100	89.64	53.01
Kharratan	33	5100.79	154.56	3630	71.16	19.79
Ghal'eh	249	28797.69	115.65	27390	95.11	37.64
Bazar	47	4739.23	100.83	4700	99.17	13.85
Pirnazar	59	7359.55	124.73	6490	88.18	51.35
Masjed	281	39544.40	140.72	30910	78.16	37.26
Shah Roknoddin	272	37901.21	139.34	29920	78.94	50.74
Seyed Mahmoud	65	10480.09	161.23	7150	68.22	47.93
Sahrabadr Gharbi	297	43899.99	147.81	32670	74.41	51.37
Sahrabadr Sharghi	504	77736.25	154.23	55440	71.31	47.53
Miandareh	60	7693.10	128.21	6600	85.79	19.00
Majdian	45	8546.64	189.92	4950	63.70	34.59
Mashkdouzan	95	12644.38	133.09	10450	82.64	45.68
Ali Malek	147	25540.21	173.74	16170	63.31	49.77
Kalantarian	211	34637.87	164.16	23210	67	66.3
Baft Miani	807	150915.88	187	88770	58.82	39.00

Interview and extraction from data of the Renovation and Rehabilitation Organization, 2013 (Source: authors)

Also, the highest average area of foundations in middle area locality is about 150915 square meters and its least area in Bongashtian area has an average of 2623 m². Average of the ratio of

foundations to the whole building area in middle locality is the lowest, i.e. 39 percent, and in Kalantarian area it has the highest percentage of 66.3 percent.

Table 5. Whole building density and constructed residential spaces of old context of Dezfoul in 2013

Whole area (hectare)	Residential units		Residential spaces (foundations)		Ratio to the area of residential units
	Residential area (hectare)	Ratio to whole area	Area (hectare)	Ratio to whole area	
200	91.49	46.71	67.823	33.91	74.13

Prepared according to calculations and extraction of data received from Choghazanbil Counseling Engineers, 2009

Table 6. Total density of buildings and constructed spaces in old context localities of Dezfoul in 2011

Localities	Residential unit			Residential spaces (foundations)		
	Whole area (hectare)	Area (hectare)	Ratio to whole area	Area (hectare)	Percentage ratio to area	Percentage to whole area of residential units
Cornasion	15.70	7.53	47.96	5.28	33.63	70.11
Sedare	2.80	1.80	64.28	1.52	54.28	84.44
Sakian	1.45	0.75	51.72	1.09	75.17	145.33
Siahpooshan	18.85	11.86	62.91	8.72	46.25	73.52
Labkhandan	5.57	2.04	44.63	1.63	35.66	79.90
Kotkatan	3.31	1.89	57.09	1.71	51.66	90.47
Maghdamian	2.56	1.46	50.69	1.24	48.43	84.93
Lorian	2.81	1.36	48.39	1.27	45.19	93.38
Sarmeydan	2.96	1.22	41.21	1.18	39.86	96.72
Pouladian	5.45	2.35	43.11	1.84	33.76	78.29
Bongashtian	2.00	0.26	13	0.286	14.3	110
Morshedbakan	7.86	4.04	51.39	3.31	42.11	81.93
Cholian	7.17	3.80	52.99	3.41	47.55	89.73
Kharratan	2.60	0.51	19.61	0.363	13.96	71.17
Ghal'eh	7.65	2.87	37.51	2.73	35.68	95.12
Bazar	3.42	0.47	13.74	0.47	13.74	100
Pirnazar	1.43	0.73	51.04	0.649	45.38	88.90
Masjed	10.61	3.95	37.22	3.09	0.29	78.22
Shah Roknoddin	7.50	3.79	50.53	2.99	39.86	78.89
Seyed Mahmoud	2.18	1.04	47.70	0.715	32.79	68.75
Sahrabadr Maghrebi	8.54	4.38	51.28	3.26	38.17	74.42
Sahrabadr Mashreghi	16.70	7.77	46.52	5.54	33.17	71.29
Miandare	4.04	0.77	19.059	0.66	16.33	85.71
Majdian	2.47	0.75	34.41	0.495	20.04	58.23
Mashkdouzan	2.76	1.26	45.65	1.04	37.68	82.53
Ali Malek	5.13	2.55	49.70	1.61	31.38	63.13
Kalantarian	6.66	3.46	51.95	2.3	34.53	66.47
Middle context	33.63	15.09	44.87	8.87	26.37	58.78

Prepared based on calculation and extraction from raw data received from Choghazanbil Counseling Engineers, 2009.

Quantitative characteristics

Quantitative characteristics of dwelling or density criteria in residential units are used to evaluate the sufficiency of existing residential units, and they are typically expressed as average number of families per residential unit, mean of rooms per residential unit, density of individuals per room, etc., the use of which has certain characteristics.

Family density in residential units

This characteristic implies the ratio of families to existing residential units, and it is the most typical criterion in assessing the deficiency in number of residential units, so that by setting as standard a residential unit for a family, the number of deficient residences is determined (Sa'eednia, 2004-20112: 91). If we consider family dimension, this density in residential units of Dezful's old context is 0.60 percent for Bazar to at most 1.56 for Miandare locality. This density is 1.18 in Cornasion, 1.59 in Sardareh, 1.01 in Sakian, 1.41 in Siahpooshan, 1.14 in Labkhandagh, 1.30 in Kotkatan, 1.19 in Maghdamian, 1.11 in Lorian, 0.94 in Sarmeydan, 0.96 in Pooladian, 0.63 in Bongashtian, 1.01 in Morshedbakan, 0.84 in Cholian, 0.73 in Kharratan, 0.89 in Ghal'eh, 0.60 in Bazar, 0.89 in Pirnazar, 0.97 in Masjed, 0.98 in Shah Roknoddin, 0.96 in Seyed Mahmoud, 1.20 in Sahrabar Maghrebi, 1.04 in Sahrabadr Mashregghi, 1.56 in Miandareh, 1.45 in Majdian, 1.12 in Mashkdouzan, 0.87 in Ali Malek, 0.87 in Kalantarian, and 1.19 in middle context.

Population density in residential units

Population density in residential units means the number of persons in each residential unit that is an important criterion in amount of deficient residential units for a family and its welfare state in terms of residential spaces. In Bazar Locality, It was 2.40 to 6.34 as least and highest number of people. Population density in residential units of the city's old context is different.

This density is 4.75 in Cornasion, 6.34 in Sardareh, 4.05 in Sakian, 5.66 in Siahpooshan, 5.66 in Labkhandagh, 5.21 in Kotkatan, 4.76 in Maghdamian, 4.46 in Lorian, 3.76 in Sarmeydan, 3.86 in Pooladian, 2.53 in Bongashtian, 4.05 in Morshedbakan, 3.36 in Cholian, 2.93 in Kharratan, 3.57 in Ghal'eh, 2.40 in Bazaar, 3.59 in Pirnazar, 3.91 in Masjed, 3.95 in Shah Roknoddin, 3.84 in Seyed Mahmoud, 4.82 in Sahrabar Maghrebi, 4.17 in Sahrabar Mashregghi, 6.25 in Miandareh, 5.52 in Majdian, 4.45 in Mashkdozan, 3.51 in Ali Malek, 3.11 in Kalantarian, and 4.79 in the middle context.

The criterion of residential and urban foundation is not typically used because information relating existing foundation is not prepared, and therefore this criterion can be estimated like other criteria.

Table 7. Population density in residential units

	Area (m ²) ³	Residential area (m ²)	Gross density ^(1,2) (person per hectare)	Pure density (person per hectare)	Urban land per capita ⁽²⁾ (m ²)	Residential land per capita ⁽²⁾ (m ²)	Population as in ⁽¹⁾ 2006
Cornasion	157045	75359	147	304	65.84	33.03	2281
Sedareh	28090	18058.23	317	493	31.63	20.33	888
Sakian	14567	7508.23	214	428	48.55	25.05	300
Siahpooshan	188560	118613	239	381	41.93	26.38	4496
Labkhandan	45791	20489	151	341	67.14	30.04	682
Kotkatan	33141	18982.67	246	452	40.71	23.32	814

Maghdamian	25599	14636.39	384	384	47.58	27.20	538
Sarmeydan	29614	12286.9	140	339	72.76	30.18	407
Pouladian	45427	23596.48	144	282	69.99	36.35	649
Bongashtian	19801	2623.29	34	253	300	39.74	66
Morshedbakan	78641	40408.73	157	307	63.99	32.78	1229
Cholian	71762	38038.76	147	274	68.74	36.43	1044
Kharratan	25770	5100	38	206	265.67	52.57	97
Ghal'eh	76499	28797.69	117	318	85.86	32.32	891
Bazar	34230	4739.29	33	282	302.92	41.94	113
Pirnazar	14331	7359	151	294	67.60	34.71	212
Masjed	106121	39544	110	282	96.34	35.94	1100
Shah Roknoddin	74692	37901	145	291	69.35	35.19	1077
Seyed Mahmoud	21865	10480	119	250	87.46	41.92	250
Sahrabadr maghrebi	85456	43899	168	333	59.58	30.61	1434
Sahrabadr Mashregi	167065	77736	125	272	79.48	36.98	2102
Miandareh	40498	7693	93	535	107.99	20.51	375
Majdian	24711	8546	109	327	94.32	32.61	262
Mashkdouzan	27679	12644	158	355	64.82	29.61	427
Ali Malek	51319	25540	101	206	99.46	49.49	516
Kalantarian	66607	34637	100	195	100.46	52.24	663
Middle context	366381	150915	105	258	94.67	38.99	3870

Sources: (1) Counseling engineers, 2008

(2) Authors, according to raw statistics of Iranian Statistics Center, 2006

(3) Authors, according to AutoCAD maps

Qualitative characteristics

Residence quality, in terms of its effects on health, safety, and environmental conditions, has a directly affects people's financial ability and income. This criterion includes such factors as the type of materials, quality and lifespan of the building, a building's lifetime, technology methods used for construction and the required equipment.

Type of building materials

One of the major elements in building construction, is the materials used that affect their quality and durability considerably. Selection of materials according to climatic conditions and production state of materials and its architectural style considerably affect construction of residential units. The type of materials used in façade and the manner of their transaction and distribution in context, helps identify better in the context. Number of buildings differs from metal skeleton to adobe. Results obtained for the materials used in Dezfoul's old context are as follows.

Table 8. Types of major materials used in Dezfoul's old context

Type of material	Tile	Combinative	Cement	Stone
Percent	54 percent	22 percent	23	5 percent

Field and bodily implications (Source: Authors)

In old-context localities of Dezfoul, the number of adobe buildings are different. According to Naeema, Dezfoul can be called *the city of tile*. In Sardareh area, tile rows have been placed on each other with calculated measures. Figure 1 in Shah Roknoddin and Kharratan is seen as Goosh-Phili (elephant's ear) buildings (Goosh-Phili is one of the most important construction methods that is used in coverings of ceilings at the corners) (figure 2).

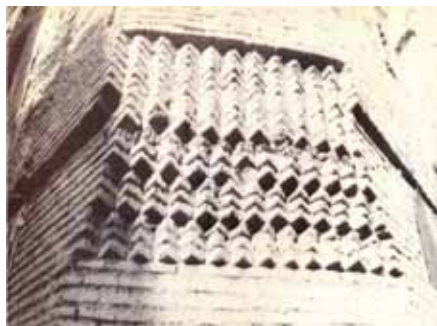


Figure 1. Goosh-Phili (elephant's ear) buildings



Figure 2. Goosh-Phili (elephant's ear) buildings



Figure 3. Sahrabadr Maghrebi



Figure 4. Gereh-Kari

In another type of tiling, Khuvon Chini can be mentioned. In this tiling, different tile components are used by putting them to create various ornamental knots (figure 3). In addition to Khuvon Chini, there is also a type of tiling called Gereh-Kari (meaning knot-work) or tile carve (figure 4).

Average lifetime of buildings

One of the criteria that is important in qualitative consideration and evaluation of a building is its lifetime that shows what percent of current buildings can be used and what percent go out of existing capitals due to the finishing of a building's useful lifetime. This criteria is different in the old context of Dezfoul. In Dezfoul's old context, 1.59 % of buildings are being built or repaired, 9.08% have a history less than 15 years, 19.58% have 15-30 years of age, and 69.74% have age over 30 years of age.

Quality of buildings

One of the criteria used in considering residence quality in terms of quality to an acceptable extent, is a destructive repair with separable value. In old context of the city of Dezfoul, from among the existing 1.4% valuable, 37.7% are acceptable, 53.8% are destructive (lack of stability), 4.8% are destructive and 2.2% are ruins.

Method of dwelling possession

Quality and manner of possessing residential units by families resident in them is another criterion used in evaluation of residence state. Changes reveal that a sheer tendency is observed towards possession of residential units. In Dezfoul's old context, from all residential units 78% are possessive, 19% are rented, and 0.50% and 2.50% are free.

Type of residential units

By type of residential units, conventional units and apartments are meant that were used in the old context. In Dezfoul's old context conventional homes make up 85% , and apartments make up 15% of residential units.

Data analysis

An overview on circumstances of dwelling in different societies shows that almost no country claims to have solved dwelling problems in its country. Problems of some countries are not quantitative and are not due to deficiency of dwelling, population growth, migration, and economic bottleneck, and it mainly includes developing countries. In contrast, problems of developed countries are mostly qualitative and deal with changes of population and social structures. Residence landscapes on the one hand are means of identifying residence condition in different dimensions, and on the other hand, they are key tools to sketch prospective perspective of residence and its plan making (Azizi, 2005:25). Here, the aim of analyzing problems and issues of residence in Dezfoul's old context is to determine the level of welfare for population, population size in the city, in contrast to lack of welfare of the population resident in the old context, so that by awareness regarding the amount of difference between city subsets and identifying backgrounds and fields of problems and deficiencies, priority of rehabilitation and renovation in context is determined. Findings of the research show that residence criteria in Dezfoul are affected by two elements of external and internal factors. External factors affecting residence such as population factors, economic and social ones, have led to residence stagnation, and residence plans have rarely been successful in general condition of residence and improving its criteria. Internal factors of residence are mainly affected by the process of home planning, and they shape residence condition in certain dimensions, as they form residence condition in certain dimensions. One of the important internal factors in residence is the view regarding criteria of urban residence and the manner of employing them in residence plans. It is necessary that the position of residence criteria in plans be determined in scientific terms comprehensively and their role in economic, social, and bodily frameworks be studied. Clarifying the relationship between cause and effects of residence criteria and other factors can, besides revealing the cause of changes and variations of residence criteria of Dezfoul, lead to residence planning and urban development in Dezfoul's old context.

Social issues of residence

Given characteristics of the old context, population changes occurred in it are in accordance with table 9. As we know, Dezfoul's old context has formed over hundreds and thousands of years. Generation by generation buildings of the past were preserved and little population displacement occurred.

According to the studies conducted, these changes were performed during the recent several decades, and they have been unprecedented in the past 1500 years. It is an organic context that has gradually become harmonious with climate and natural-environmental conditions, economic, social, and certain cultural conditions, which suddenly undergo fundamental identification and practice changes. For this reason, it is not anymore suitable for new life and gradually it undergoes erosion from within, and accurately for this very reason, everyone who has power to create other conditions

outside of the old context, leaves it at once, and in these incidents, the value of the old context is degraded in terms of life quality, and low-income families only seek to find residence and shelter.

Table 9. Residence duration of residents in the locality

Residence duration	Number	%
Less than 5 years	17	27.9
5-10 years	7	16.3
10-20 years	12	17.9
Over 20 years	23	37.5
Lack of response	1	0.4
Total	60	100

A: Migration: migration of families in Dezfoul's old context is increasing. This expansion expresses migrants' rush to this part of the city. Those migrants who, in many of these cases, choose this locality as a place for achieving a reliable job, are not only uninterested in preserving and keeping their temporary home, but are also effective in increasing destruction and annihilation of their residence place. According to the prepared questionnaire most people who migrate to this context have seeking residence in mind (table 10).

Table 10. Reasons for migrating to this area

Reason	Number	%
Economic problems	23	4.5
Finding residence	80	89.5
Education and dormitory	21	1.5
Else	23	4.6
Total	146	100

B: Insecurity: in addition to the rush of individuals who tried to find residence, destruction or hollowness of some localities led to insecurity and presence of punks that in turn cultivated addiction and crime.

C: lack of participation: variation of the population-social structure had the result that neighborhood relationships reached its minimum. The context under study that was once the center of relations and celebrations, now the results obtained from the questionnaire are as follows:

Table 11. Relationship and correlation between residents of locality and neighbors

Relationship with neighbors	Number	%
High	14	24.6
Average	23	37.9
Low	15	23.7
Without relationship	8	13.8
Total	60	100

D: variation in social behaviors and norms: destruction of past social structure and its replacement with new ones, have led to change variation of basics of past collective life. Removal of the culture of repair that has a long history, lack of people's tendency to renovation and rehabilitation of old buildings, forgetting cultural and native norms, etc. are among instances that have brought the problem of inconformity to the old context, thus questioning its repair.

Economic problems of residence

- a. Lack of financial ability: 30% of residents are among poor people and placement of 9 percent of residents is within first to fifth boroughs (Choghazanbil Counseling Engineers, 2009). Those residents who are located in the old context do not have the financial ability required for renovation and rehabilitation of their dwelling. Nearly 68% of interviewees announced their support for renovation and rehabilitation. In other words, their stay in urban area has direct relationship with lack of human wealth. If they had appropriate financial ability, they would embark on migration to wealthier places. Therefore, one of the major conditions of repair and renovation, is direct participation of residents in financing for renovation and repair, which have not been realized.
- b. Lowness of land value: Low attraction of the old context and lack of financing in that have had the result that financing in modernly built places of Dezfoul have diminished. Therefore, lack of financing and erosion in most areas of the old context has led to diminishment land cost in this part of the city.

Framework issues

- a. Erosion: this category of problems is resulted by extreme erosion of buildings and destruction of organization and frame appearance of the context. Chaos of the city's appearance, either due to abandoning of the context or due to extreme erosion in old localities, is to the extent that it looks like a mass of ruins. Abandoning of buildings, many spaces' being abandoned, extinction of the culture of preservation and conservation, looseness of the ground, etc. have reached this state (table 12).

Table 12. Distribution of buildings in terms of quality

Quality	Number	%
Valuable	148	1.4
Acceptable	3891	37.7
Destructive (lack of stability)	5551	53.8
Barren	226	2.2
Ruined and abandoned	490	4.8
Total	10306	100

Data received from the Organization of Renovation and Rehabilitation

- b. Inappropriate use of land: residential usage in developed countries occupies about 40 percent of the whole area of cities. In its old context, 46.2% are dedicated to this usage. On the other hand, from the whole surfaces of the old context only 12% are allotted to general welfare, 2% to facilities and equipment, where the level of general welfare and facilities and facilities per capita have been lower relative to standard quota. Therefore, the major problem in this regard is the deficiency of general welfare services.
- c. Limited functionality of usages: the importance of recognizing practice scale of usages is due to the fact that the amount of service providing and people's reference to usages are specified, for example, the Bazar locality in the old context or historical buildings such as the shrine of Imamzadeh Sabz Ghaba have practice in regional, national, and extra-national level. Although there are usages with regional, national, and extra-national practice in the old context, disregarding the renovation and rehabilitation of the context has threatened some historical and valuable areas of it.
- d. Incompatible usages: considering incompatibility and compatibility of usages is important due to the fact that it causes disturbance for adjacent localities. In the old context of the city,

incompatible usages that might cause disturbance are not existent so that when one enters this area, the row of fabric sellers, cloth dealers, and gold sellers are seen separately from each other. Commercial and official usages, whether in one level or adjacent have relative compatibility in floors of a building. In general, current usages often have relative compatibility, and there is not any incompatible usage in the area. But, in some cases, unconventional constructions and lack of a parking have resulted in unconventional traffic in this area.

Problems related to services, facilities, and equipment

Lack or deficiency of urban services: preservation services are very limited in the context. Services provided in it do not have enough coverage to fulfill the residents. Lowness of the services provided on the one hand and high level of destructions and ruins on the other hand have had the result that general health of the context has been threatened, and descend to an unacceptable extent in terms of biological criteria. Inappropriate status of the sewage network and discharge of surface waters is seen.

Facilities and capabilities

Investigation and analysis of facilities and social, economic, and skeletal capabilities are important due to the fact they provide the possibility of developing the context.

Social facilities of residence: Remnants of collective life are a major haven for residence renovation. Use of social correlations, although it may seem hard in the beginning, might have the result that many of issues are mentioned as social facilities that were important in renovation of the old context.

Legacy: directional and support helps from the side of the historical area's municipality and their interference in construction can prevent segmentation of the land. Purchase of the land from heirs, aristocratic division and not field division of the land, with a new plan among heirs are among cases that might relieve the issue of inheritance from complexity and reorganize the context.

Participation: residents of the old context, whether those who have migrated or those who stayed, still have their hearts in past memoirs and they are ready to take part in renewed construction of the old city. They request direction rather than support. Therefore, it is better that in the old context, cooperatives, creation of social networks and local Islamic Counsels would practically lead to the ascent of local correlations, tightening the migrants' place and lack of security. Results of interviews reveal that 73 percent of people want renovation and repair by themselves.

Variation of social behaviors and norms: shrinking of family dimensions, need to live independently, etc. have the result that urban design can be propounded in smaller, more tangible, and more humane dimensions. Collecting these small families in building sets derived from ancient and strong architecture of the city around a yard that used to belong to a wide family will have the result that basics of collective life be revived and a new approach be unleashed not based on a wide patriarchal family, but based on core independent families in separate spaces, but in a single body. Creation of collective spaces in locality level, sub-locality level, and neighborhood unit have the result that independent families achieve a hierarchy for their social encounters, and result in social correlations in bigger scales.

Economic facilities

Dezfoul has a CBD placement in the area. In other words, the old context has many potential facilities that makes financing economic. The most important facility is the geographical and managerial orientation that this part has versus other parts of the city. Existence of the bazaar in the old context in addition to locality and area, has an extra-areal role. Placement of the bazaar in geometrical center of the context, presence of commercial streets such as Shariati, Taleghani, Emam

Khomeini, etc. imply productiveness of commercial financing in this part of the city. Very high value of commercial units in this part of the context, imply economic, and exchange capability in this area, which is not possible in any other part of the city.

In 179 precious usage, most of which have been registered by the Cultural and National Legacy, residential-historical usages such as home of Muhammad Reza Ghasri, home of Semsar Nattaj, Safavi home, etc., historical mosque (e.g. general mosque, Labkhandagh mosque, Kajbafan mosque, etc), shrines (e.g. shrine of Bugh'eh Savar Gheyb 1, shrine of Bugh'eh Savar Gheyb 2, Seyed Sabour shrine, tomb of Bugh'eh Shah Khorasan, shrine of Magham Ali, shrine of Pir Kohang, etc.) and bath (Shah Roknoddin bath, etc.), schools such as Shah Roknoddin School, Ayatollah Mo'ezzi School), Sabbaths such as (Ghaforian Sabbath, Bidel Sabbath, Caravan Sabbath, Kucheh Nahid Sabbath, and Prohan Sabbath, etc.) and stairs such as Bachilon Stairs, and furnace tile cooking furnace can be mentioned, by repairing and renovating which a new life can be bestowed to the old context.

Skeletal facilities

The continuity of the erosion trend of the context and lack of renovating and rehabilitating, threatening skeletal-spatial, historical, and cultural values of the context have led to extreme erosion of old localities and destruction of a large area of ruins in the context so that 54% are ruins, thus making possible municipality's interference in this area and giving more freedom of action to the designer. Barren lands in the heart of the context and capability of using them to provide required services can be employed to create green urban space and welfare services. Lack of street framing has the result that with further certainty urban design and street framing can be addressed. Having a pattern of open space, depending on ratios makes it possible and is placed within the designer's agenda. Using this pattern will have the result that more emphasis could be placed on urban scale.

Infrastructural facilities and equipment

In general appropriate fulfillment of urban facilities and equipment is seen (Choghazanbil Counseling Engineers), but without ambiguity, some old parts of the city enjoy facilities network and infrastructural facilities (water, electricity, telephone, etc.) less than other parts of the city, for example, people in Loran and Sarmeydan localities do not have gas.

Conclusions and recommendations

The topic of residence in economic, social, and skeletal dimensions is considerable and analyzable, and different factors are effective in its quantity and quality. In this regard, dwelling criteria must be considered as key tools of planning and its main foundation visible in economic, social, and skeletal (Azizi, 2004:40). In economic dimension, dwelling criteria can be considered in both micro and macro dimensions, and awareness of the effect of economic criteria in any of economic sectors will help effectively the planners in the way of recognizing and providing solutions. In economic dimension, also the problem can be investigated in two aspects. In quantitative dimension, degree of responsiveness to needs, without considering its quality is intended, and in qualitative dimension, type and shape of the need is propounded. Different reception of producing groups, different consuming sectors, planners, and policy makers of residence and giving different definitions are thinkable. In skeletal dimension also the topic of residence can be investigated in two aspects: a, attention to residence's skeleton individually, and separate from its surrounding context and b, its relationship with residential environment, it is required that skeletal dimensions be addressed in the form of its surrounding environment and with attention to economic and social dimensions of human life. In general, the criteria of residence are assumed key determinative tools in description, analysis, and decision making, which can be used as manual in planning of residence sector by policy makers and macro planners of the residence sector,

on condition that their recognition is complete, and investigation and analysis of them is performed by basic and practical researches and studies, and correctly used in programs.

Table 13. Suggested strategic plans

Approach	Policy making fields	Title of the general plan	Developmental	Program production		
				Local	Behavioral	Activity
Preservation and conservation of valuable historical spaces	Unrecognized values	Identification and expression of potential values			Recognition and categorization of elements based on historical periods	Offering cultural values to space by cultural heritage
Renovation and repair of eroded spaces	Usage of old houses	Change of house usage to coordinate them with today's needs		Usage change of old homes to governmental offices, and usage switch to cultural and artistic centers		
Increase in the level of services, facilities, tourism, and revival of the context	Touristic facilities	Increase of traditional reception center within the old context			Creating touristic spaces in old houses	
Social structure correction	Participation morale	Enforcement of persuading policies			Persuasion to return native residents of the context and lowering side-effects for renovation	
			Improving the level of per capita urban services		Bestowal of baking facilities	

The old city is urban heritage of our past. This old legacy has preserved fundamental concepts of the city and architecture raised from a social bed according to environmental factors. In this study, it was attempted to, by expressing quantitative and qualitative traits, consider and analyze Dezful's old context. To achieve this aim, compression, quotas, type of materials, and quality of buildings, and the manner of occupying residence were investigated, results of which show that given a wide range of the context as eroded and problematic, and there is still a high

population capacity in it and by establishment of the bazaar, commercial activities, historical and cultural identity, touristic attractions of the unique buildings and existence of Dez River's bank that is highly potential area in terms of attracting residents to this area, can create opportunities to renewed attraction of native residents who have old emotional attachment to the context and have the ability of renovation and rehabilitation.

Nonetheless, with appropriate and required plans, correction of residence structure in the context and optimum tapping of its existing spaces can be attempted. Suggested plans to improve residence structure and residential space are in accordance with the description of table 13.

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