

# Analysis Healthy city indicators with emphasis on demographic indicators (Case of Zahedan)

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**ABSTRACT:** In 1977, the World Health Assembly (WHA) proposed a primary social target for all governments, international organizations and the global community: "To enable all of the world's citizens to enjoy by 2000 a level of health that would allow them to lead a socially active and economically productive life". This social target of "Health for All" (abbreviated "HFA") emphasized the attainment of the highest possible level of health by societies a basic human right, and observing ethical principles in health policy making, health research and service provision. This study was conducted at the zahedan which is situated between 29° North latitude and 60° East longitude. Zahedan height at the weather station 1370 meters above sea level is reached. Age dependency ratio is the ratio of dependents--people younger than 15 or older than 64--to the working-age population--those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population. By comparing the age dependency ratio in zahedan with age dependency ratio of country suggest that Zahedan unfavorable situation than the country.

**Keywords:** Age dependency, Population growth, zahedan.

## INTRODUCTION

In the seventies of the 20th Century, the political and economic conditions of the international community were difficult. Against the backdrop of urbanization and political uncertainty, health disparities between developed and developing countries and even within countries became so great that people found them politically, socially and economically unacceptable. Health disparities became a common concern for everyone. In 1977, the World Health Assembly (WHA) proposed a primary social target for all governments, international organizations and the global community: "To enable all of the world's citizens to enjoy by 2000 a level of health that would allow them to lead a socially active and economically productive life". This social target of "Health for All" (abbreviated "HFA") emphasized the attainment of the highest possible level of health by societies a basic human right, and observing ethical principles in health policy making, health research and service provision. Formulation of policies and strategies should be guided by principles of equity and solidarity, and active attention should be given to gender-specific perspectives and aspirations. In September 1978, representatives from 134 countries and 67 international organisations participated in the World Health Organization (WHO)'s First International Conference on Primary Health Care held in Alma-Ata, former USSR. Representatives signed the Alma-Ata Declaration which reaffirmed that health was a fundamental human right and that primary health care was the key to attaining HFA. From its origins as a Europe-wide action plan to facilitate implementation of the principles identified in the WHO Ottawa Charter (WHO, 1986a), the Healthy Cities movement has spread across the six WHO regions (e.g. WHO, 2003; de Leeuw, 2009). More than 29 National Healthy Cities Networks have developed in 29 European member states (WHO, 2003b). A primary goal is to support cities in implementing policies and plans based on Health for All (WHO/EURO, 1985 & 1991) and Agenda 21 (UN, 1993). Ultimately, "A Healthy City is one that is continually creating and improving those physical and social environments and expanding those community resources which enable people to mutually support each other in performing all the functions of life and in developing their maximum. In addition to these differences, in Africa, Asia and Latin America, the Healthy City projects are encompassed within the "international aid machinery". This fact represents a fundamental distinction from the situation in high-income countries because it entails a specific kind of relationship between the projects and the participating cities. After a number of decades of international aid, a "culture

of aid” has been established throughout the South. This has prompted the rise of a specific kind of behavior within the public sector (and sometimes in the population in general) vis-à-vis international agencies. This behavior sometimes creates problems, such as public authorities expecting paternalistic support from international agencies, or such agencies being suspected of interfering in internal affairs. No matter how Healthy Cities may in reality differ from other/traditional international projects, local stakeholders and partners in Africa, Asia and Latin America are often not able to make the distinctions from the start. This situation must be taken into account for the sound implementation of Healthy Cities. The remainder of this section will analyze two further issues related to the international nature of Healthy City projects and their presence in low and middle-income countries; first, how to start a participatory process top-down and, second, the place of Healthy City projects among other international initiatives. Within the Healthy Cities movement, health is conceived as a resource for living, stretching beyond the absence of ill-health in medical terms to include quality of life and general well-being (see, for example, Kickbusch, 2007). Against this approach, ‘health is a multi-disciplinary phenomenon: we must be to look at everything that impinges on the human being’ (Duhl, 2005, p.358). Thus, the healthy city focuses on the environmental and social determinants of health, and progresses inter-sectoral interventions for health. This can be seen as part of a wider move towards a ‘broad new understanding of public health’, in which ‘the orientation of health promotion began to shift from focusing on the modification of individual risk factors or risk behaviours to addressing the “context and meaning” of health actions and the determinants that keep people healthy’ (Kickbusch, 2003, p.383). In Healthy Cities, ‘health development [is placed] as central to urban policy development’ (van Naerssen and Barten, 2002, p.10), integrated with other urban policies and programmes. The Healthy Cities approach includes a strong focus on empowerment and participation, being concerned with individuals’ ability and autonomy to live a healthy life (Kenzer, 1999). This approach is seen to benefit health by ensuring expert or professional knowledges are not privileged over community knowledges (thus improving decision making), and empowering individuals (thus improving the context for health through the process itself) (Duhl, 2005). Again, this can be seen against the wider trends towards participatory governance inherent within many international and other programmes (see, for example, van Naerssen and Barten, 2002) Despite its increased popularity, research or evaluation on implementing the approach adopted by Health Cities Programmes (HCP), remains limited (Tannahill, 1997; Eklund, 1999; Strobl & Bruce, 2000; Green & Tsouros, 2007); partly due to the lack of suitable indicators but also because health promotion relies heavily on qualitative evidence, which compared to evidence from scientific paradigm, tends to be disregarded in policy decision making process. In response, the WHO has developed its own evaluation of the four phases of the European HC Network (Green & Tsouros, 2007), but evaluation at national level, including Germany, remains inadequate. The Healthy Cities movement has been a success since its inception in the 1980s. Drawing on innovations in health promotion, urban planning, ecosystem perspectives and the move towards decentralization of government services, community-based work and intersect oral action, many thousands of cities around the world have felt that the Healthy Cities conceptualization would provide added value to urban performance, including in the health and sustainable development arena. This in itself is an indicator for the accomplishment of the initial motivation to develop a programmer that would demonstrate the feasibility of locality-based health development. Birckmayer and Weiss have demonstrated that application of theory-based evaluation (TBE) yields better research information on various elements of success and failure of health promotion programs (Birckmayer and Weiss, 2000). TBE expects researchers and program directors to spell out assumptions to a micro-theoretical level, so that outcomes are not just made evident, but can also be explained. This perspective offers opportunities to integrate intra-generational ‘prevention projects’ such as Healthy Cities, drawing heavily on the approaches that Eriksson calls socioepidemiological and environment & policy-oriented, and thus unravel and analyse their various components. Birckmayer and Weiss have demonstrated that application of theory-based evaluation (TBE) yields better research information on various elements of success and failure of health promotion programs (Birckmayer and Weiss, 2000). 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The notion of utility-driven evidence(UDE) (de Leeuw and Skovgaard, 2005) is based on the observations that: the generation of evidence serves a purpose beyond mere intellectual curiosity (McQueen and Anderson, 2001); (health) policy-making takes place in complex interaction between stakeholders (McDougall and de Leeuw, 2006); the application of evidence in decision-making argumentation may transform ‘facts’ into ‘beliefs’, and ‘beliefs’ into ‘facts’ (de Leeuw, 1989). Cummins and Macintyre (Cummins and Macintyre, 2002) have described this phenomenon as leading to ‘factoids’. The Healthy Cities movement originated in Toronto, Canada, in 1984, with the conference entitled Beyond Health Care. This was driven by ‘the growing awareness of the need for “healthy public policy”

initiatives as compared with the tendency toward victim-blaming lifestyle approaches to health promotion' (Ashton et al, 1986, p.319) and the realization that new risks posed to health by the urban environment, such as violence and accidents, were not being adequately addressed (Kenzer, 1999). Trevor Hancock and Leonard Duhal were key figures in setting this up. Ilona Kickbusch, the World Health Organization (WHO) European Regional Officer for Health Promotion, attended the Toronto conference, following which she convened a group to discuss a European Healthy Cities project the same year (Hancock, 1993). Two years later, the Ottawa Charter on Health Promotion was adopted, subtitled the move towards a new public health (Kickbusch, 2007), and the WHO held the first Healthy Cities symposium in Lisbon, Portugal to launch the European Healthy Cities Project (Tsouros, 1990). The role of the WHO was to act 'as a catalyst and facilitator in the process of agenda setting, consciousness raising and establishing models of good practice'; the project was seen as a test bed for the theoretical ideas of the new public health movement and a part of efforts to revive public health advocacy (Ashton et al, 1986, p.321). The project proved extremely popular, expanding from 11 formally designated cities to some 35 within the first five years of the project (Hancock, 1993).

## MATERIALS AND METHODS

### **Methods**

This study was conducted at the zahedan which is situated between 29° North latitude and 60° East longitude. Zahedan height at the weather station 1370 meters above sea level is reached. Sistan and Baluchestan Province is one of the 31 provinces of Iran. It is in the southeast of the country, bordering Pakistan and Afghanistan and its capital is Zahedan. The province is the largest in Iran, with an area of 181,785 km<sup>2</sup> and a population of 2.5 million. The counties of the province are Chabahar, Qasar-qand, Dalgan, Hirmand, Iranshahr, Khash, Konarak, Nikshahr, Saravan, Sarbaz, Soran, Zabol, Zaboli, Zahedan and Zehak.



Figure 1. Location of Sistan and Baluchestan within Iran

The province comprises two sections, Sistan in the north and Baluchestan in the south. The combined Sistan and Baluchestan province today accounts for one of the driest regions of Iran with a slight increase in rainfall from east to west, and an obvious rise in humidity in the coastal regions. The province is subject to seasonal winds from different directions, the most important of which are the 120-day wind of Sistan known as Levar, the Qousse wind, the seventh (Gav-kosh) wind, the Nambi or south wind, the Hooshak wind, the humid and seasonal winds of the Indian Ocean, the North or (Gurich) wind and the western (Gard) wind.

**Common factors in the development of the city of Zahedan**

Table 1. Common factors in the development of the city of Zahedan

Social and cultural	Tendencies of people
Economic	The price of land, industries and workshops
Natural Geography	Farmland, gardens, underground water, wind
Political	giving land to people
Physical Space	Railways, inter-city road

Zahedan before the modern era, a small village that has arisen due to favorable natural conditions and according to the construction of the railway line was extended in all directions to encourage policy of settlement in the city, the provincial capital, to encourage the ownership of land city, lack of natural obstacles had growth. These factors were also causes of informal settlements.

**Age pyramid**

Table 2. Population distribution of the city of Zahedan based on age groups and sex in 1956-2006

Age groups	1996			2006			2011		
	woman	Man	Woman + Man	woman	Man	Woman + Man	woman	Man	Woman + Man
Sum	203682	215836	419518	275874	291575	567449	284236	290880	575116
0-4 years old	30386	32467	63153	34969	36934	71903	36538	39625	76163
5-9	37598	39375	76973	35096	37807	72903	31876	34580	66456
10-14	32983	34189	67172	33550	36569	70119	28285	30766	59051
15-19	24072	24403	48475	38062	39220	77282	28988	29781	58769
20-24	17397	17634	35031	36834	36829	73663	36060	34564	70624
25-29	15254	14608	29862	25611	25750	51361	31922	30927	62849
30-34	12938	12630	25568	17571	18086	36657	24253	22729	46982
35-39	10219	11541	21760	15029	15443	30472	16571	17277	33848
40-44	6622	8604	15226	12013	12492	24505	14242	14101	28343
45-49	4461	5280	9741	9279	10551	19830	10891	10644	21535
50-54	3421	4167	7588	6157	7415	13572	8812	9185	17997
55-59	1986	2742	4728	3764	4230	7994	5114	5942	11056
60-64	2438	3248	5686	2952	3605	6557	3570	3512	7082
	3607	4948	8555	4987	6644	11631	208708	209428	418136

Population age pyramid in 2011 indicative widening based on age groups 15-19, 20-24 and 25-29 years old.

**Population Zahedan in 2011**

Table 3. The population of Sistan-Baluchistan province in 2011

	woman	Man	population	family
province	1265579	1268748	2534327	588447
Urban areas	615353	627726	1243079	290183
Rural areas	648694	639466	1288160	297599
non resident	1532	1556	3088	665

Population Zahedan in 2011 Increased. Population growth momentum in zahedan more from accelerated population growth. Population according to the census 2011 Show a rising trend to 2534327 people.

**RESULTS AND DISCUSSION**

**Population growth rate**

The percent change from one period to another is calculated from the formula:

$$PR = \frac{(V_{Present} - V_{Past})}{V_{Past}} \times 100 \quad \text{Where:}$$

- PR = Percent Rate
- V<sub>Present</sub> = Present or Future Value
- V<sub>Past</sub> = Past or Present Value

The average annual percent change in the population, resulting from a surplus (or deficit) of births over deaths and the balance of migrants entering and leaving a country. The rate may be positive or negative. The growth rate is a factor in determining how great a burden would be imposed on a country by the changing needs of its people for infrastructure (e.g., schools, hospitals, housing, roads), resources (e.g., food, water, electricity), and jobs. Rapid population growth can be seen as threatening by neighboring countries.

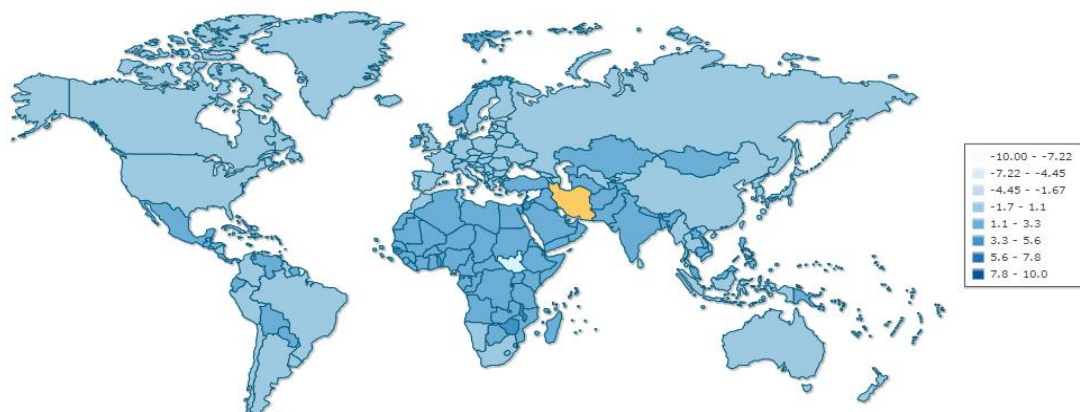


Figure 2. Map of population growth rate in world

Table 3. Iran population growth rate in 1996 to 2011

year	1991-1996	1996-2001	2001- 2006	2006-2011
population	2.95	2.81	2.74	2.14

Zahedan population in 2006, 477698 people were that in 2011 the city's population has grown to 660575. There for the population growth rate is equivalent to 3.82.

Table 4. Zahedan population in 1996 to 2011

year	1996	2006	2011
population	295456	477698	660575

By comparing the results of tables 3 and 4, you can see the status of zahedan population growth rate is much higher than the country.

**Age dependency ratio (% of working-age population)**

Definition: Age dependency ratio is the ratio of dependents--people younger than 15 or older than 64--to the working-age population--those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population.

Description: The map below shows how Age dependency ratio (% of working-age population) varies by country. The shade of the country corresponds to the magnitude of the indicator. The darker the shade, the higher the value. The country with the highest value in the world is Niger, with a value of 111.46. The country with the lowest value in the world is Qatar, with a value of 17.15.

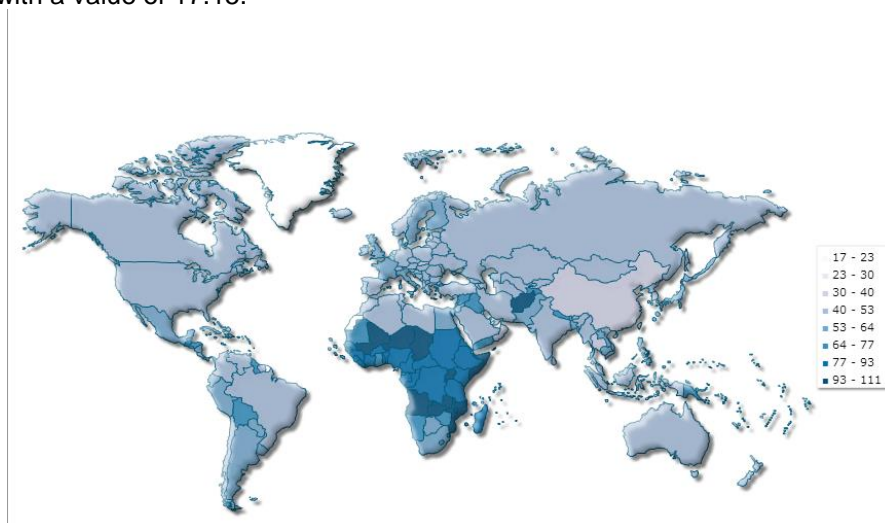


Figure 3. Map of age dependency ratio in world

The latest value for Age dependency ratio (% of working-age population) in Iran was 41.04 as of 2013. Over the past 53 years, the value for this indicator has fluctuated between 95.48 in 1988 and 40.40 in 2010 (Source: World Bank staff estimates from various sources including census reports, the United Nations Population Division's World Population Prospects, national statistical offices, household surveys conducted by national agencies, and ICF International).

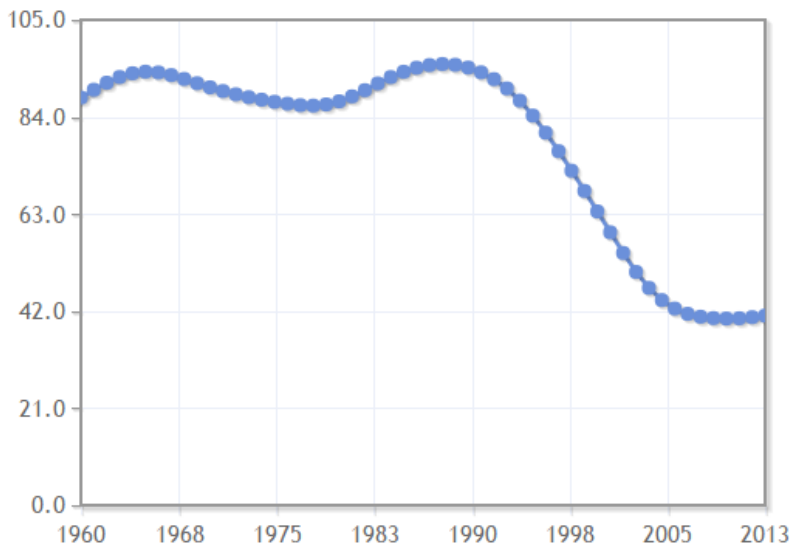


Figure 4. Age dependency ratio in iran

Table 5. Age dependency ratio in zahedan

Age dependency ratio	Active population	In active population	people younger than 15	people older than 64
63.09	405023	255552	239087	14665

By comparing the age dependency ratio in zahedan with age dependency ratio of country suggest that Zahedan unfavorable situation than the country

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