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VIENNA THE CITY WITH SEVEN STRAIGHT TITLES OF THE CITY WITH THE HIGHEST LEVEL OF QUALITY OF LIFE IN THE WORLD – REVIEW

Abstract: *The quality of life in the cities and urban areas are becoming increasingly important with growth of cities. The number of approaches in measurement of quality of life emerged, as well as different rank lists of cities according to quality of life. These measurements are important for providing the basis for benchmarking and improvement of quality of life in the cities and urban areas. The paper gives an overview of the criteria of the American firm Mercer for comparison and a ranking list of world cities - according to the quality of life. These are all the main criteria of evaluation. Given is the choice of examples of elements in the city-winner Vienna, capital of Austria.*

Keywords: *quality of life, ranking list, criteria, selection of examples*

1. INTRODUCTION

Quality of life of each person depends on set of personal factors- genetics, health, family... On the other hand the same importance have external factors: social environment, natural environment, educational system, personal development, employment, social and geopolitical factors, safety This is a reason why number of international, national and private organizations regularly conduct research of quality of life in specific countries and especially in the large urban areas, and set their, more or less official and recognized lists. Anyhow, in last couple of years all these lists and ratings have something in common when it comes to the rating of the world's capitals and large cities all around the world. All they have in common the rating of capital of Austria, Vienna. The ranking and measurement for their self do not have significant importance comparing to possibilities of benchmarking of the quality of life in different cities and providing directions for different cities to improve the quality of life of their inhabitants. This paper has the general idea to present basic of the concept quality of life, from empiric point of view.

2. RANKING THE QUALITY OF LIFE IN THE CITIES

An assessment and evaluation of quality of life in cities is demanding task. On the first place it is necessary to develop and adopt the set of dimensions that will be evaluated, on the second place it is necessary to develop set of indicators (economic, social, and subjective indicators) and define their values, weights and limits. Finally it is necessary to develop a comprehensive approach in order to put everything together. So it becomes clear why an evaluation of quality of the life in the cities is not the easy task. On the other hand it is clear that same approach could not be used for different types of cities. For instance there is a large difference among cities in size micro, small, medium, large, megacities. On the other hand the values of the inhabitants their cultural, religious and other believes influence a lot in their concept quality of life. Some of the dimensions could be objectively evaluated; other dimensions of quality of life are purely subjective. Different approaches have their own advantages and disadvantages but all of them are providing opportunity for benchmarking of the quality of life in different cities. This is very important because these evaluation and ranking provide basis for different cities to acknowledge their strengths and weaknesses,

and to put additional effort in improvement of quality of life of their citizens.

Different organizations provide their measurement of quality of life, developing their own lists of cities with the highest quality of life. In this paper the quality of life as well as ranking of the cities will be measured using Mercer list. [1]

3. RANK LIST OF THE CITIES WITH HIGHEST LEVEL OF QUALITY OF LIFE

Mercer (full title: „Mercer Human Resource Consulting“) is world consulting agency established in 1945 in Canada. Today (the first half of year 2016) it has 20 000 employees all around the world and making annual income of over 4.2 billion of dollars. The headquarter of the company is placed in New York, USA. Besides consulting in the field of organisational excellence, Mercer perform on of the most interesting research, today recognized in the world. They create an annual rank list of cities according to quality of life.

This year (2016) officially the Vienna, the capital of Austria, won the nomination of the city with the highest quality of life [2] of its inhabitants, seventh time in the row. The official rank list of the cities, according to quality of life, of their citizens is as following Table 1. [3,4,5]

Table 1. Ranking of the cities according to Mercer

No	City	Country	
1	Vienna	Austria	
2	Zurich	Switzerland	
3	Oakland	New Zealand	
4	Munich	Germany	
5	Vancouver	Canada	
6	Düsseldorf	Germany	
7	Frankfurt	Germany	
8	Geneva	Switzerland	
9	Copenhagen	Denmark	
10	Sidney	Australia	
141	Belgrade	Serbia	

Total number of 230 cities were evaluated (Baghdad, Iraq was placed on the last position), the Belgrade was on 141. Mercer conducts their research professionally providing to all parties insight and control of the results. It is clear, because there is a large public interest for this research as well as the consequences of this research on economy, image, tourism, political status....Mercer states their absolute independence and neutrality. It is very interesting to make an analysis of criteria used by Mercer for evaluation and ranking of the cities on this list. According to public data these criteria have their full potential when it comes to comparison of cities (benchmarking). The absolutely greatest award for this list is recognition of world wide commentators.

Criteria for evaluation and ranking introduced by Mercer are [http://www.mercer.com/newsroom/western-european-cities-top-quality-of-living-ranking-mercer.html:

1. Political and social environment (political stability, crime, law enforcement, etc.).
2. Economic environment (currency exchange regulations, banking services).
3. Socio-cultural environment (media availability and censorship, limitations on personal freedom).
4. Medical and health considerations (medical supplies and services, infectious diseases, sewage, waste disposal, air pollution,).
5. Schools and education (standards and availability of international schools).
6. Public services and transportation (electricity, water, public transportation, traffic congestion, etc.).
7. Recreation (restaurants, theatres, cinemas, sports and leisure, etc.).
8. Consumer goods (availability of food/daily consumption items, cars, etc.).
9. Housing (rental housing, household appliances, furniture, maintenance services).
10. Natural environment (climate, record of natural disasters).

4. QUALITY OF LIFE IN CITY OF VIENNA: CASE STUDY

Basic statistics and short overview of characteristics of Vienna:

1. **Political stability**, criminal and safety. Vienna did not have any political

problems since the declaration of independence of Austria at 1956. The spectrum of political parties is very wide starting from the right wing, over the centre up to far left (communist party of Austria). In last 60 year there was no murder crimes among people they had not know each other. During the 2015 21 persons lost their lives in traffic accidents (In the Belgrade that number was 100 in the same time) and so called “dangerous neighbourhoods” do not exist in Vienna.

2. **Water.** Vienna receives drinkable, clear spring water from two main springs that 180 km away (protected water area with size of 600 km²) in amount of 400.000 m³ per day without any chemical treatment. Vienna will invest from 2010. to 2020. In water supply and canalisation network (of total length of 2400 km) over 1,3 billion of euros. The stated goals is water supply of 100 of households (today, march 2016, that percentage is 99%).

3. **Canalisation and waste water.** In Vienna not a single drop of waste water goes to river Danube. Facilities for purification of water, beside industry and other similar entities, are designed for the needs of 4.5 million of people (today Vienna has 1.8 million inhabitants). The size of facility is 40 ha with processing capacity of 500.000 m³ of water per day (purified water is theoretically drinkable, but this water is partly used as technical water, and partly is returned to nature). In summer 2016 two new systems will be started for management of rain water and storage of additional 86 million m³ of water (reservoirs of 90 x 45 x 7 m below the residential area). The hard waste extracted from water (1,8 million tons per year) are used for production of electrical energy, gas and hot water (brining on 800 – 900 °C), The parts that could not been burned are compressed and used in building.

4. **Electrical energy.** Beside connection on two state and one European energetic network and its own energy production Vienna has (on the Danube, Leopoldau) hydro plant of 140 MW electrical and 170 MW heating energy for hot water and heating of facilities. This hydro plant has a special facility for preserving the enabling the migration of river fish.

5. **Waste management.** In the Vienna the number of facilities for collecting, processing of waste exist. Considering house communal water there is a 7 (seven) different types of street containers for recycling of the communal waste. One of the places (among 3)

for processing (burning) of the waste is placed in the middle of Vienna and it produces 60 MW electrical and heating energy, and hot water for 60.000 households. This place is place of interest for school visits and excursions (from school students up to world experts).

6. **Green areas.** Vienna is officially the city with the largest number of parks and green areas in the world. Without the world famous Vienna’s forest and Lobau (two national parks in the city) there is 120 m² of green areas per person. Over the half of the Vienna are parks and green areas (35% objects, 45,5% green areas, 4,6% water areas, 13,3 % traffic areas). Officially there is 45 parks in the city.

7. **Cycling paths.** In the last 25 years Vienna invested a lot in becoming the city with the most cycling paths in the world. In 1990. Vienna had 190 km of cycling paths. In December of 2015 Vienna had 1.298 km of cycling paths. Vienna has a rich rent-a-bike park (city bike) available at 54 spots in the city.

8. **Health insurance.** Health insurance is obligatory for all services. Citizens have services of public and private doctors. There are 13 large hospitals in Vienna (with a large number of ambulances and number of first aids services). The largest hospital is AKH (Allgemeines Krankenhaus or General hospital) and it is considered as one of the largest hospital complexes in the world. According to data from 2015 AKH has 9300 employees (1900 medical doctors and 2900 medical personals from nurses to laboratories, other employees cover additional services such: maintenance, ICT, transportation, security). With external associates and patients the number of the people in the hospital is over 12 000. There is 27 clinics, 10 medical institutes, 330 special ambulances, 82 stations for medical care, 21 stations for intensive care, 51 surgery rooms, 1990 beds in the hospital with 373.696 m², the value of the property and buildings is 1,825 billion euros, 43 million euros of equipment and 32 in other supply. AKH has its metro station, parking, garages.

9. **Tourism.** Austria had 48,8 billion of income from tourism in 2015. In 2015 Vienna had 14,3 million of stays with income of 15 billion of euros.

10. **Permanent museum exhibitions and other exhibitions.** Vienna has 10 large museums, 10 museums managed by Austrian state, 4 museums managed by city of Vienna, 4 private museums protected by state, 9 objects

on the public property under state protection (starting from Cathedral, Royal castle, City Zoo, Aquarium and Planetarium).

11. **Theatres.** Vienna has 38 theatres, 11 of large, national, (5) (Austrian) and (6) city importance.

12. **Public transportation.** Vienna has, according to Mercer, the most quality city traffic in the World (trams, metro, busses, trains, taxi, bicycle, city electric cars for rents, airport, river traffic). The speed, accuracy, comfort, interconnections, lack of jams, and accident were taken into account. City cart for citizens for all means of transportation is 365 euros per year.

13. **Education.** Elementary schools and high schools in Vienna in 2015 were attended by 227.049 pupils, and higher schools and Universities 189.897 students. Education is free of charge, except private and foreign schools. The free public institutions are also nursery with 10.985 places and kindergartens with 36.118 children.

14. **Gross product.** City Vienna in 2013. Hass gross product of 82,833 billion of euro. City of Vienna in 2005 reached gross product more than 83 billions of euros according to estimations.

15. **Swimming pools.** Vienna has covered swimming pools (7), combined swimming pools covered and opened (8), saunas (6), water parks (9) and public swimming areas (3), special beach for nudists and special beach for dogs.

16. **Connection with world.** Vienna airport (renewed) provide services for Boing

747, Airbus 380 i Antej AN-24 and many other types of airplanes. City has four train stations (one of them is the most modern in Europe, and it will be finished in 2017). Connection with airport and train stations is provided by taxi and metro lines. Two floor passengers' trains travel up to 200 km/h, having connections for electricity, Internet.... Vienna has 3 traffic rings, while the third ring is connected with highways.

5. QUALITY OF LIFE IN CITY OF VIENNA: CASE STUDY

The goal of this paper is not tourist presentation of Vienna. The data have been presented without any comments in order to provide statistical and proven facts. Maybe the most important the fact is that presented data is only a small part of benefits that shows the quality of life in the city, number of the qualities could be observed in the city itself. Here the many things have not been mentioned, foods, sports events and facilities, recreation and leisure, libraries, care for the people with the special needs, quality of life of elders, national and international cultural events...

The main purpose of this review to give the brief introduction in quality of living and quality of cities and urban areas in the worlds. The set of indicators as well as existing list could be used as the basis for benchmarking and improvement of quality of life in other cities in the world.



Figure 1 - Postcard from Vienna

Legend: Up left - Bridges on Danube, Up right - City theatre, Down left - General hospital (AKH), Down right – Waste processing facility, Up in the middle – Coat of arm of Vienna, Down in middle – Coat of arm of Austria

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