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# **CPI PROFILE** JEDDAH



مستقبل المدن السعودية FUTURE SAUDI CITIES

**UN HABITAT** FOR A BETTER URBAN FUTURE

The Future Saudi Cities Programme CPI PROFILE - Jeddah

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#### Introduction

The United Nations Human Settlements Programme (UN-HABITAT) and Ministry of Municipal and Rural Affairs in the Kingdom of Saudi Arabia (MOMRA) jointly launched UN-HABITAT Saudi Arabia Programme titled "Future Saudi Cities Programme (FSCP)". The UN-HABITAT Office has been providing technical support to the MOMRA and targets 17 key cities in the Kingdom of Saudi Arabia. The cities include Riyadh, Makkah, Jeddah, Taif, Medina, Tabuk, Dammam, Kathef, Ihsa, Abha, Najran, Jazan, Hail, Araar, AlBaha, Buraydah, and Sakaka, to respond to national and local urban challenges.

UN- Habitat provides a new approach for measuring urban prosperity: which is holistic, integrated and essential for the promotion and monitoring of socio-economic development, inclusion and progressive realization of the urban-related human rights for all. This new approach redirects cities to function towards a path of an urban future that is economically, politically, socially and environmentally prosperous. The new approach or monitoring framework, The Cities Prosperity Index (CPI), is a multidimensional framework that integrates six carefully selected dimensions and several indicators that relate to factors and conditions necessary for a city to thrive and prosper. The six dimensions include productivity, infrastructure development, equity and social inclusion, environmental sustainability, and urban governance. The CPI uses the concept of The Wheel of Urban Prosperity Index (CPI) not only provide indices and measurements relevant to cities, but it is also an assessment tool that enables city authorities as well as local and national stakeholders, to identify opportunities and potential areas of intervention for their cities to become more prosperous.

Under FSCP, the UN-HABITAT, MOMRA, and Jeddah Municipality together with its Local Urban Observatory have been working on developing urban statistics and spatial information (Geographic Information System) to provide relevant urban information that strongly support decision-making process on urban development and urban planning in the city.

This CPI Profile Report applies the CPI framework and provide a summary of the basic information and urban statistics about the City and gives an overview of the city's achievements, opportunities and potential areas that contribute to its prosperity in areas such productivity, infrastructure development, equity and social inclusion, environmental sustainability and urban governance and legislation.

## **OVERVIEW OF THE CITY OF JEDDAH**

#### **Historical Background**

The history of the city of Jeddah goes back to more than 3000 years ago when it was used as a camping ground for fishermen. During that time a tribe called 'Quda'ah' settled in the area, there are stories that the name city came from the Ouda'ah tribe. The historic Jeddah wall was built by Mamluk prince, Hussain Al Kurdi in his campaign against Portuguese when he wanted to fortify the city from the attacks from the Red Sea. After the Kingdom was unified in 1932 A.D. Jeddah entered a new era but the city still remained within the 1.5km<sup>2</sup> wall until 1947 when the wall was demolished. The urban fabric of the time was traditional, the architecture included multi-storey (4-7stories) built with local materials (coral stone) walls, wooden lattice (mashrabia) covered openings. The main economic base was revenues from commerce and services offered to pilgrims to and from Makkah. During the WWII the revenues were very little due to the dwindling number of pilgrims. The situation affected all aspects of the city's development - social, educational, health, economic and consequently physical. After the Second World War (post-1945), there was an economic upturn in the country when the Kingdom of Saudi Arabia received its first oil revenue in 1946. Due to its function as a gateway to Makkah, Jeddah was one of the first cities in the Kingdom to benefit from this flourishing economy. (Makhlouf, A. 1985). By 1971, Jeddah was the diplomatic center of the Kingdom, the headquarters of the Saudi Monitory Authority (SAMA) and hence the centre of professional, scientific and skillful employment. When The Ministry of Foreign Affairs was established it was built in Jeddah and all Embassies and Consulates were built and some Consulates remained in Jeddah until today. Apart from the importance of Jeddah as Commercial Port and Gate to the Two Holy Mosques it expanded in all directions, new buildings came into existence beside the headquarters of the giant local and foreign companies. Consequently there was expansion in the services like transportation, communication and health projects, as well as expansion in the public utilities like water and electricity and all other infrastructure projects. Now Jeddah is changed from a small city surrounded by wall boundary to a big city known as the Pride of the Red Sea.

#### **Geography and Location**

The city of Jeddah is located on the west coast of the Kingdom of Saudi Arabia at latitude 29.21 north and longitude 39.7 East, in the middle of the eastern shore of the Red Sea, 12m above sea level. It's about 949Km from the capital city of Riyadh and just about 79 Km from the Holy City of Makkah. The urban boundary of Jeddah is approximately 1765 km<sup>2</sup> and the total area of the municipality is about 5460 km<sup>2</sup>. The city has a hot and dry desert climate with high humidity, the annual mean temperature is around 28<sup>o</sup>C but in summer temperatures can go as high as 40<sup>o</sup>C. Jeddah receives an annual average rainfall of about 54mm, usually during the winter season as well as in the spring.

#### **Demographic Background**

The population of the municipality of Jeddah is approximately 4.1 million (2015), making it the second largest city in Saudi Arabia after Riyadh and the largest city in Makkah province. In terms of population, it represents about 50% of the population in Makkah region and about 13% of the total population of the kingdom estimated at 30 million according to the 2015 estimates. Jeddah city had a population of over 4,082,184 (2016 estimates) and a population growth rate of 3.8% per annum, the city's population is growing at a rate higher than the national average. The city has witnessed a dramatic increase in population primarily due to out-migration from villages and suburbs into the city as individuals search for jobs and better standards of living. The urban population density is about 5400/km<sup>2</sup>. The average household size in the city is 5.2 the same as the regional average. Jeddah has a young population; about 41% of its population is below 24 years and half the population is below the age of 30 years whilst only about 3% are 65 years and above. The ratio of male to female is about 1.27. The population of Jeddah comprises of about 60% Saudis and about 40% non-Saudi nationals.



Figure 1: Trends in Population and Household Units (estimates-2010-2025)

Before 1970 the population in Makkah region was predominantly rural, after 1970 the region witness a sustained rural-urban migration, since then the population of the city of Jeddah has steadily increased from 1 million in 1970 to 1.4 million in 1986, passing the 2 million mark in 1993 and dramatically increasing past the 3 million mark, according to the last census in 2010 the population of the city stood at 3.4 million.

#### **Socio-Economic Background**

Jeddah city is considered the commercial and tourism capital of the Kingdom of Saudi Arabia. Its population is estimated at around 4.1 million (2015) and it is the second largest city after Riyadh.

In the last two decades, Jeddah has grown to become the commercial hub (center for money and business) of the Kingdom of Saudi Arabia and an important port for exporting non-oil related goods as well as for importing goods for the domestic market. Jeddah also has major industrial centers dealing with building materials and heavy manufacturing and has an important plant for sea water desalination. Jeddah was the original gateway to Mecca and Madinah for pilgrims arriving by ship or by air, today the city still welcomes 97% of all pilgrims arriving by sea and 98% of those arriving by air. This places heavy demands on consumer goods, building materials, hotel accommodations, and technical and administrative services, hence providing an enormous boost to the commercial sector of the city contributing allot to its economic prosperity. Like most cities, Jeddah relies on food supplies sourced nationally and internationally.

## The trend on Urban Growth and Existing Spatial Plans

The launching of the Second National Development Plan (1975-1980) of the Kingdom of Saudi Arabia coincided with the culmination and consolidation of the oil boom (1973- 1983). One of the main goals of the second plan was to develop the physical infrastructure to support the achievement of the cultural, historical, and political fundamentals, values and principles of the Kingdom. The plan, therefore, embarked upon a physical restructuring of the major centers of population, which provided the main economic bases in the Kingdom, of which Jeddah was a leading centre. Like many other cities in the Kingdom, the oil boom led to the dramatic growth of the city in many aspects.

Jeddah has experienced rapid population growth, spatial expansion, land use changes and transportation infrastructure expansion in the past four decades. Different driving forces have triggered the city's spatial-temporal changes: the growth of the economy, population, and transportation infrastructure, as well as the development of government policies, topography, and master plans. Two types of urban growth can be distinguished in Jeddah's spatiotemporal expansion: outward expansion and sprawl development.

Land use in Jeddah went through remarkable changes from 1964 to 2007. Although all land uses changed from 1964 to 2007, five significant land use classes have rapidly and actively changed: residential, commercial, industrial, informal settlements and public spaces. Residential development in the city has dramatically increased, catalyzed by constructed transportation infrastructure, the new airport location and the government's development policies, such as land grants and interest-free loans.

Commercial land use has also changed significantly, with these changes taking place continually along highways, main roads, and significant secondary road intersections.

Industrial land uses that followed a planning scheme that took place in the locations proposed by the master plans in 1962 and 1973, has also changed drastically. As the dynamics of urban growth transformed the city, Jeddah expanded through the emergence of both formal and informal settlements

(Mandeli, 2008). As a consequence, informal settlement land use changed substantially during this period, emerging along main roads at the east of Jeddah and near the airport in the north, with the sprawl pattern of development. This expansion has affected both the spatial growth and spatial structure of Jeddah and has inflicted enormous challenges onto its Municipality. Moreover, public spaces have also considerably changed, developing in locations proposed by the master plans of 1962, 1973, 1981, 1987 and 2004.

## Figure 2: Land use and Urban Growth Limit





# The City Prosperity Index (CPI) - Assessment

Prosperity implies success, wellbeing, thriving conditions, safety and security, long life etc. Prosperity in cities, therefore, is about successfully meeting today's needs without compromising tomorrow and working together for a smart, competitive economy, in a socially inclusive society and a healthy, vibrant environment for individuals, families, and communities. Prosperity in cities is a process and cities can be at different levels of prosperity. In order to measure the level and also track how cities progress on the path to becoming prosperous, UN-Habitat introduced a monitoring framework: The Cities Prosperity Index (CPI). The CPI is a composite index with six carefully selected dimensions that captures all important elements of a prosperous city. This index along with a conceptual matrix, The Wheel of Urban Prosperity and a Global Scale of City Prosperity, are intended to help city authorities, decision-makers, partners and other stakeholders to use existing evidence and formulate clear policies and interventions for their cities.



Figure 2: Scale of Urban Prosperity and the Wheel of Urban Prosperity

The UN-Habitat's Cities Prosperity Index (CPI) allows authorities and local groups to identify opportunities and potential areas for action or adjustments in order to make their cities more prosperous. The CPI is a multidimensional framework that integrates several dimensions and indicators that are not only related but have a direct and indirect influence in regard to fostering prosperity in cities. These components are embodied in the following six dimensions: Productivity, Infrastructure Development, Quality of life, Equity and social inclusion, Environmental sustainability, and Governance and legislation. Each of the dimensions is comprised of several indicators measured differently. Since the indicators are measured in different units, the first step in the index computation involves the normalization of the indicators into values ranging between 0 and 11; the normalized values are then aggregated stepwise to create the single value called the City Prosperity Index.

The following sections apply the CPI framework, the concept of the Wheel of Urban Prosperity and the Scale of Urban Prosperity to conduct an assessment of the level of prosperity in the city. The assessment provides an indication of the strengths or weaknesses in the factors of prosperity (in reference to the scale of urban prosperity); it also provides an indication of the level of achievement towards the set prosperity goals (based on the magnitude of the CPI scores); and highlights whether there are disparities between and within the six dimensions of prosperity (based on the concept of the Wheel of Urban Prosperity-stressing balance). An in-depth analysis of the findings will help to identify which particular sub-dimensions and indicators contribute to high or low values in each of the dimensions and the CPI scores.

#### **Overall City Prosperity Index for Jeddah**

The city has an overall prosperity index score of 54.2%, meaning it has moderate prosperity factors. Prosperous cities should have a good balance of all the indicators of prosperity, cities with a combination where some indicators are too low while others are too high are undesirable. The observed weaknesses can be linked mainly to under moderate dimensions such as environmental sustainability with 29% and urban governance with 42%, However, the city has some dimensions which are moderately strong such as Productivity with 63%, Equity and Social Inclusion with 63.5%, Infrastructure development with 60% and Quality of life with 68%. The blue line in the radar chart in figure 3 has an irregular shape which depicts the level of imbalance between the dimensions.

<sup>&</sup>lt;sup>1</sup> Can also be expressed in percentages so that values range between 0% and 100%, as used in this report.



#### **Figure 3: City Prosperity Index Dimensions**

The analysis in the subsequent sections will dissect all the six dimensions of prosperity and identify areas of strengths and weaknesses that can inform appropriate interventions.

#### **The Productivity Dimension**

The productivity dimension measures how cities generate wealth and contribute to economic growth and development, how they generate individual income, employment and equal opportunities that advance adequate living standards for the entire population. The city of Jeddah has productivity index of 63%, therefore according to the prosperity scale, it is rated as moderately strong. This rating implies that the city has some strong productivity factors that need to be strengthened; they include employment indicators (76%) and strong economic growth factors (71%). On the other hand, the city has under moderate economic agglomeration especially its economic density (14.1%). To increase economic growth in the city, there needs to continue strengthening all the indicators, but priority should be given to increasing economic densities. The city has low old-age dependency ratio and low informal employment at 4.5% and 13.2%, respectively; which can be maintained or reduced further. The employment sub-dimension is rated as strong, and this could imply that an unemployment rate of 3.93% and employment to population ratio of 58% are not good enough for the city and therefore they still need to be improved.

Sub-Dimension	Indicator	Actual	Units	Standardize d	Comment s
	City Product per Capita	22,434.67	USD (PPP)/Inhab	68.6%	M. Strong
Economic Growth (71.2%)	Mean Household Income	29,823.01	USD(PPP)	61.1%	moderate
	Old Age Dependency Ratio	4.46	%	83.9%	V. Strong
Employment (75.70/)	Employment to Population Ratio	58.08	%	62.0%	M. Strong
Employment (75.7%)	Informal Employment	13.20	%	96.6%	V. Strong
	Unemployment Rate	3.93	%	68.6%	M. Strong
Economic Agglomeration	Economic Density	121,140,790	USD (PPP)/km2	14.1%	Under moderate
(42.1%)	Economic Specialization	0.07	Dimensionless	70.0%	Strong

 Table 2: The Productivity Index (63.0%)





#### The Infrastructure Development Dimension

The infrastructure dimension measures the level of achievement in infrastructural development in a city; it shows how a city uses its resources to deploy a good functional and efficient infrastructure. Physical assets and amenities such as tapped water, sewerage, power supply, road network, information and communications technology are required to sustain the population, improve the economy and ensure a high quality of life. The infrastructure dimension index for Jeddah is 59.9% and its rating is moderate. The strength of the city's infrastructural development is in the housing sector and street connectivity infrastructure with scores of 76.8% and 75.5%, respectively. All the other sectors (social infrastructure with 29.0%, ICT with 59.6% and urban mobility with 58.5% range between under moderate to moderate.

Under housing infrastructure, there are some under moderate indicators such as access to improved sanitation with 46.3% and population density with 36.9%. The low level of improved sanitation indicates that some households in the city could be living under deprivations. The ICT sub-dimension is at the border of transiting to moderately strong, this is attributed to high internet access (80%) diluted by the low access to home computers (52.3%) and low broadband speed (46.4%). Street connectivity is strong but not without an under moderate link; the low proportion of land allocated to streets (56.1%). Like many cities in Saudi Arabia, social infrastructure has very poor scores particularly due to lack of adequate public libraries and medical personnel in the cities. Urban mobility in Jeddah is generally moderate mainly due to lack of proper public mass transport system and low use of the available public transport system - phenomena that are present in all cities in the Kingdom; the other problem is poor road safety.

Sub-Dimension	Indicator	Actual	Units	Standardize d	Comment s
	Access to Electricity	98.87	%	98.9%	V. Strong
	Access to Improved Sanitation	46.32	%	46.3%	Under moderate
Housing Infrastructure	Access to Improved Water	86.48	%	86.5%	V. Strong
(76.8%)	Access to Improved Shelter	92.24	%	92.2%	V. Strong
	Population Density	5,533.63	Inhab/Km2	36.9%	Under moderate
	Sufficient Living Area	98.00	%	100.0%	V. Strong
Social Infrastructure	Number of Public Libraries	0.02	#/100,000 inhab.	0.0%	Under moderate
(29.0%)	Physician Density	2.74	#/1,000 inhab.	58.1%	moderate
ICT (59.6%)	Average Broadband Speed	10.36	Mbps	46.4%	Under moderate
	Home Computer Access	52.34	%	52.3%	moderate
	Internet Access	80.00	%	80.0%	V. Strong
	Average Daily Travel Time	21.40	minutes	100.0%	V. Strong
	Affordability of Transport	9.90	%	73.2%	Strong
Urban Mobility (58.5%)	Length of Mass Transport Network	-	Km/1M Inhab.	-	-
Croan Woomty (58.5%)	Road Safety (traffic fatalities)	16.99	#/100,000 inhab.	46.7%	Under moderate
	Use of Public Transport	14.00	%	14.3%	Under moderate
Street Connectivity	Intersection Density	125.70	#/km2	100.0%	V. Strong
Street Connectivity	Land Allocated to Streets	22.83	%	56.1%	moderate
(75.5%)	Street Density	14.08	Km/KM2	70.4%	Strong

The city's housing infrastructure is generally strong but can be made stronger by holding all other indicators constant and focus on enhancing access to improved sanitation and higher population densities especially in residential areas. Social infrastructure is generally under moderate but can be made better by increasing the number of public libraries and the number of medical personnel in the health sector. The ICT sector is on the verge of transiting from moderate to strong, this is because it has very strong internet access base but watered-down by low access to home computers and slow internet speeds; addressing these two problems may fix the ICT sector. Urban mobility in the city of Jeddah is inadequate due to poor road safety and low usage of the available transport system; addressing these two areas may lead to remarkable improvement in the sector. Street connectivity in the city is good but can be made better and more efficient by increasing the proportion of land allocated to the streets wherever possible.



#### **Figure 5: The Infrastructure Development Indicators**

#### The Quality of Life Dimension

Quality of life is the general well-being of individuals and the society. It's the embodiment of life satisfaction, including everything from physical health, family, education, employment, wealth, religious beliefs, safety and security, finance and the environment. The quality of life dimension measures the city's achievements in the provision of the essential ingredients that promotes a high quality of life. The high quality of life enables people to maximize their individual potentials and to lead long fulfilling lives. With a quality of life index of 68%, it can be said that the city has a moderately good quality of life. The good quality of life in the city can be associated with the good healthcare system (77%), moderately good education sector (60%) and very good safety and security (96%). However, these are watered down by lack of adequate public spaces in the city particularly in relation to the low green area per capita (37%). The health sector is strong as a result of high life expectancy rate (74%), reduced the maternal rate and U-5 mortality rate which are both rated as moderately strong, and lastly a very strong vaccination programme.

The education dimension is rated as moderately strong mainly because it combines one set of very strong indicators (literacy rate -82% and mean years of schooling -88%) and another set of under moderate indicators (Early childhood education -17% and Net Enrolment in higher education -55%). Safety and security is rated very strong because all its indicators are up above 90%.

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
	Life Expectancy at Birth	74.50	years	74.0%	Strong
Health $(76.00/)$	Eradicate Maternal Mortality	10.30	#/100,000 live births	66.7%	M. Strong
Health (76.9%)	Eradicate Under-5 Mortality	8.62	#/1000 live births	69.1%	M. Strong
	Vaccination Coverage	97.70	%	97.7%	Very Strong
Education (60.4%)	Early Childhood Education	17.30	%	17.3%	Under moderate
	Net Enrolment in Higher Education	54.91	%	54.9%	moderate
	Literacy Rate	84.18	%	81.5%	V. Strong
	Mean Years of Schooling	15.70	%	87.9%	V. Strong
Safety and Security	Homicide Rate	1.94	#/100,000 inhab.	91.1%	V. Strong
(95.5%)	Theft Rate	13.12	#/100,000 inhab.	100.0%	V. Strong
D. 11: S (27.20/)	Green Area per Capita	5.60	m2 / inhabitant	37.3%	Under moderate
Public Space (37.3%)	Accessibility to Open Public Space	-	%	-	-

 Table 4: The Quality of Life Index (67.5%)

The health sector has strong indicators but there is still room for improvements especially addressing the mortality rate of mothers and children U-5 years. The education sector mainly suffers from low enrollment rate in pre-school and higher education. Safety and security in the city is very good but there is still big room for improvements especially by further reducing the homicide rates to the 100% mark. Public space is mainly affected by low green area per capita and may be accessible to the public spaces. By addressing these areas of weakness, the city can considerably improve the quality of life of its people.



#### The Equity and Social Inclusion Dimension

Cities which are socially inclusive and economically equitable are more likely to be more productive and have higher living standard and quality of life. The equity and social inclusion dimension measure how a city distributes the benefits of prosperity among its inhabitants. Due to data unavailability problems only one of the three sub dimensions of equity and inclusion was used, the gender inclusion sub dimension. Based on the available data, the city of Jeddah has a gender inclusion sub dimensional index of 63.5%. This is indicative of a fairly gender inclusive .

The city ensured a moderately high level of gender inclusion (63.5%) particularly in the areas of secondary school enrolment and women employment in the local government. However, the number of women in the general workforce (24.6%) is still very low, calling for prioritization of policies that promotes more participation of women in the workforce.

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Gender Inclusion (63.5%)	Equitable Secondary School Enrollment	0.96	o - ∞	95.7%	V. Strong
	Women in local government	35.14	%	70.3%	Strong
	Women in the workforce	12.30	%	24.6%	Under moderate

Table 5: The Equity and Social Inclusion Index (63.5%)



**Figure 7: Equity and Social Inclusion Indicators** 

## The Environmental Sustainability Dimension

Environmental sustainability is about harvesting the renewable resources, reducing pollution, and nonrenewable resources depletion that can be continued indefinitely. Prosperous cities ensure that as they grow and develop both economically and socially, the city's environment is not degraded and remains healthy and liveable; the city's natural assets are preserved for the sake of sustainable urbanization. With an environmental sustainability index of 29.1%, the city of Jeddah generally has an environment that is not sustainable and needs an appropriate intervention, especially in the areas of renewable energy with 0% and solid waste recycling with only 6%, these two are general problems that affect all cities in the Kingdom. Although the city has an efficient solid waste collection system, its ability to recycle the waste is too low therefore the city risks having landfills which are a source of environmental population.

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Energy (0.0%)	Share of renewable energy consumption	0.00	ug/m3	0.0%	Under moderate
Waste Management (58.2%)	Solid Waste Collection	100.00	%	100.0%	V. Strong
	Solid waste recycling share	2.88	%	5.8%	Under moderate
	Waste water treatment	68.97	%	69.0%	M. Strong

To make the city environment sustainable for the future, there is a need to begin embracing other sources of renewable energy such as the wind and solar energy. The city also needs to invest in solid waste recycling to help reduce environmental pollution.



Figure 8: Environmental Sustainability Indicators

#### The Governance and Legislation Dimension

A city can only achieve the full potential in the five dimensions of prosperity in an environment with appropriate legislation and good governance; an environment where instruments of power, urban planning, laws, regulations, and institutional frameworks, all creates conditions for the control and effective functioning of all dimensions of prosperity. Based on the available information the governance and legislation index for the city is 42%. This is an indication that governance and legislation system in Jeddah particularly in relation to municipal finance and public participation is still under moderate. The low rating can be associated with the poor municipal own revenue collection (30%), and voter turnouts (34%). Otherwise, the municipal efficiency in local revenue expenditure is good (80%).

## Table 7: Legislation and Governance Index (42.1%)

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Participation and Accountability	Municipal Voter	33.73	%	33.7%	Under
(33.7%)	turnout		%0		moderate
	Own revenue collection	30.31	%	21.1%	Under moderate
Municipal Finance (50.4%)	Days to start a business	-	Days	-	-
	Local expenditure efficiency	79.62	%	79.6%	Strong

Although the data on governance and legislation was insufficient to draw any reasonable conclusions, it gives a glimpse into the governance and legislation situation in the city.

Good governance and legislation is vital to the success of any city. Increasing space for more citizen participation in electoral processes, access to information and strengthening public institutions tha ensures proper accountability, checks, and balances will go a long way in making the city more and more prosperous. All processes of governance and legislation need financing. Therefore, the city needs to put measures in place to improve the management of municipal finance, especially by increasing the level of own revenue collection and ensuring higher expenditure efficiency and financial accountability.

#### **Figure 9: Governance and Legislation Indicators**



# SWOT Analysis based on City Prosperity Index Assessment

This section attempts to analyze the findings of the CPI and use it to identify areas of Strength, Weaknesses or challenges, Opportunities for growth and possible Threats that the city may have so that appropriate recommendations and actions can be designed.

# **Table 7: CPI Based SWOT Analysis**

STRENGTH	WEAKNESSES
<ol> <li>Good economic growth factors such as high economic productivity, high household income, low old-age dependency ratio.</li> <li>The city has good housing infrastructure with access to basic services and utilities especially electricity, water, sanitation and living area.</li> <li>Street connectivity is good, particularly on street density and intersection density.</li> <li>High literacy rate: the youth and women have untapped potential to contribute allot to economic growth. There is allot of unutilized skilled manpower (human capital), especially among women.</li> <li>Good safety and security, as well as political stability, provide a conducive environment for growth and development.</li> <li>There is good healthcare provision in the city: a healthy population is productive, happy and peaceful.</li> <li>Equitable secondary school enrolment is a very strong point towards achieving gender balance and inclusion.</li> </ol>	<ol> <li>Low economic density- possibly due to many undeveloped lands may call for re-examination and further investigation to establish the need for increased densification of economic or commercial activities within the commercial, industrial and even residential areas in the city.</li> <li>Low access to sanitation facilities – reduces the quality of housing and quality of life in the city.</li> <li>Few public libraries – libraries promote learning and access to information and provide empowering knowledge.</li> <li>Low broadband speeds – hinders efficient and cost-effective use of the internet. Coupled with low access to home computers stifled development and innovation in the ICT sector.</li> <li>Use of public transport is very low and there is over- dependence on private cars for transport even for short distances, not good for the environment and lack of physical activity is not good for health.</li> <li>Low women in the workforce – literacy and education level among Saudi women is considerably high, this is a critical economic resource in terms of manpower.</li> </ol>
OPPORTUNITIES	
<ol> <li>Good and Stable economic fundamentals create a good environment for growth and development in many areas of the economy. Eradication of the informal employment is a big advantage.</li> <li>High internet access present good opportunity to encourage higher speeds and promote innovation in the ICT sector especially among the youth with young creative minds.</li> <li>High street intersection density and street density which should encourage alternative means of transport such as walking and cycling especially early morning and evening.</li> <li>High productivity, good economic fundamentals, good safety &amp; security and political stability in the city provide a conducive environment for attracting foreign investments.</li> <li>Low women in the workforce – literacy and education level among Saudi women is considered high now, this is a critical economic resource in terms of manpower that can be used to fill the gaps of skilled manpower that the economy needs.</li> <li>For the environment – the high level of solid waste collection is a good starting point for recycling and ensuring a clean environment.</li> </ol>	

## **Local Urban Observatories**

Global Urban Observatory Network (GUO-Net) is a worldwide information and capacity-building network established by the United Nations Human Settlement Programme (UN-HABITAT) to help implement the New Urban Agenda at the national and local levels. The GUO-NET consists of national and city-level institutions that function as National and Local Urban Observatories.

The purpose of GUO-Net is to support governments, local authorities and civil society:

- To improve the collection, management, analysis and use of information in formulating more effective urban policies;
- To improve information flows between all levels for better urban decision-making;
- To stimulate broad-based consultative processes to help identify and integrate urban information needs;
- To provide information and analyses to all stakeholders for more effective participation in urban decision-making;
- To share information, knowledge, and expertise using modern information and communication technology (ICT);
- To create a global network of local, national and regional platforms for sharing information about the implementation of the New Urban Agenda;
- To share some tools and benefits provided by the GUO network;
- Training on using the urban indicator toolkit for data collection and analysis;
- Training on how to use the results of the urban indicators data for fundraising activities;
- Conferences of the network members for information exchange and city-to-city networking;
- Access to internet resources available at UN-Habitat's website including urban indicators databases and Urban Info system;
- Data used for evaluations done for the World Cities Report published biannually by UN-Habitat.

UN-HABITAT achieves these objectives through a global network of local, national and regional urban observatories and through partner institutions that provide training and other capacity-building expertise.

The UN-Habitat and MOMRA have previously established Local Urban Observatories in the 17 cities covered by the FSCP. A rapid survey conducted by UN-Habitat-KSA in June 2015 targeting the 17 LUO/cities, found out that only 15 LUOs existed. The findings also showed that 88% of Local Urban Observatories are under Municipal Departments while 12% are under Authority for Development within Municipality. It also revealed that 71% of the Local Urban Observatories were active while the operations of 23% of them were suspended due to unaccomplished staff/contractual arrangements.

Some of the data the Local Urban Observatories are required to collect in collaboration with the Municipals are GIS-related, so there is a need to have collaborative work relations between the LUOs and the GIS departments within the Municipalities. The survey revealed that in terms of connections with the GIS departments, 59% of the LUOs have work relations with the GIS department while 18% do not. There was evidence that 71% of the LUOs have GIS data while 6% do not have.

The Local Urban Observatory for Jeddah was established in 2006 (11 years) under the Jeddah municipality. Some of the main goals of the observatory includes the following: Determine urban indicators status and main development issues; develop the capabilities to generate, analyse, manage and publish information; Provide decision and policy makers with the required information; assist in understanding the interaction among the social, economic and cultural forces in the city; interact with the national, regional and international initiatives in the indicators production; provide early warning signals for the presence of any deficiency or phenomenon that may transform to future problem. Jeddah Observatory has a vision of striving to achieve the highest possible standards of sustainable urban development by conducting a scientific assessment and practical evaluation to make Jeddah the best urban city on the Red Sea coast. As such knowledge will be the decisive factor in our decision making.

Based on its vision and goals, the observatory strives to achieve the following: monitor the actual urban status of Jeddah province, produce indicators and determine the city's primary development challenges such as pollution; provide scientific methodology for collecting and presenting indicators and ensure their validity and representation of the actual situation; produce indicators and determines the city's primary

urban development highlights through approved scientific methodologies for collecting and presenting urban indicators and feed decision makers with urban development information; cooperate with the National and International Urban Observatories in exchange of information and experience; assists government officials in clarifying the social, economic, structural and environmental activities in the city and helps them in preparation of effective plans for the urbanization process.

Jeddah Local Observatory council member consists of the following, it's headed by the Governor of Makkah province as the Head of the higher council of the urban observatory and the Governor of Jeddah as the Vice-president of the higher council of the urban observatory. They are followed by the Mayor as the Head of the executive committee assisted by the Chief Supervisor as the Vice-president of the executive committee and the secretary of the urban observatory committee. It also has government departments, civil community and the private sector representatives as members..

Jeddah LUO has produced 5 rounds of urban indicators and now working on the sixth round, and so far they have produced more than 125 urban indicators.

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