CPI PROFILE
Al-Madinah Al-Munawarah

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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 17 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.

Under the FSCP, UN-HABITAT, MOMRA, Madina Municipality and its Local Urban Observatory has been working on developing urban statistic and spatial information (Geographic Information System) to provide relevant urban information that strongly supports decision-making process on urban development and urban planning in the city of Madina.

This CPI Profile Report is a brief overview of the basic information and data about the City; it provides an overview of the city's profile regarding the factors that contribute to its prosperity including productivity, infrastructure development, equity and social inclusion, environmental sustainability, and urban governance and legislation.

Overview of Madina City

Al Madinah is the city of the Prophet Muhammad (peace be upon him) and also his burial place. It is the city whose people supported Prophet Mohammad (peace be upon him) when he immigrated to it from Makkah. It comprises the Mosque of the Prophet, his grave, the Islamic University, King Fahd Complex for the Printing of the Holy Quran and many archaeological Islamic features. The first mosque of Islam is also located in Madinah and is known as Masjid Al Quba.

Geography and Location of the City

Al Madinah is the capital city of Al Madina region located in the north-western part of the Kingdom of Saudi Arabia, about 250Km to the east of the Red Sea. A number of mountains surround it: Al-Hujaj to the West, Salaa to the north-west, Al-E'er to the north. Madinah city is on a flat mountain plateau at the junction of the three valleys of Al-Aql, Al-Aqiq, and Al-Himdh. The city is 620 meters above sea level and covers an area of about 700 square kilometers. The area has a hot, continental climate. The high-temperature ranges between 36-46 degrees Celsius during the summer months and cold temperatures ranges between 15- 20 degrees Celsius during winter, while the average temperature in summer is 30°C and 15°C in winter. The area receives little rain falls with an average of 94mm; the rain does mainly fall between November and January.

Demographic Background of the City

According to the General Authority of Statistics, the total population of Madina was about 1.1 million in 2010, in 2016 it was estimated at 1.278 million with an average annual growth rate of 4.5%. The population density in the city was about 5000 persons per square kilometer. The city had an estimated total number of households of about 284,000, each with an average household size of 4.5 persons. Madina region had a population of about 2million in 2013, representing about 6.54% of the total population of the Kingdom. Madina governorate which also comprises Madina city accounts for 66.6% (1.3 Million) of the total population of the region. The chart in Figure 1 shows the trend and projections of city population and the number of households.

Figure 1: Trends of Estimated City Population & No. of Households
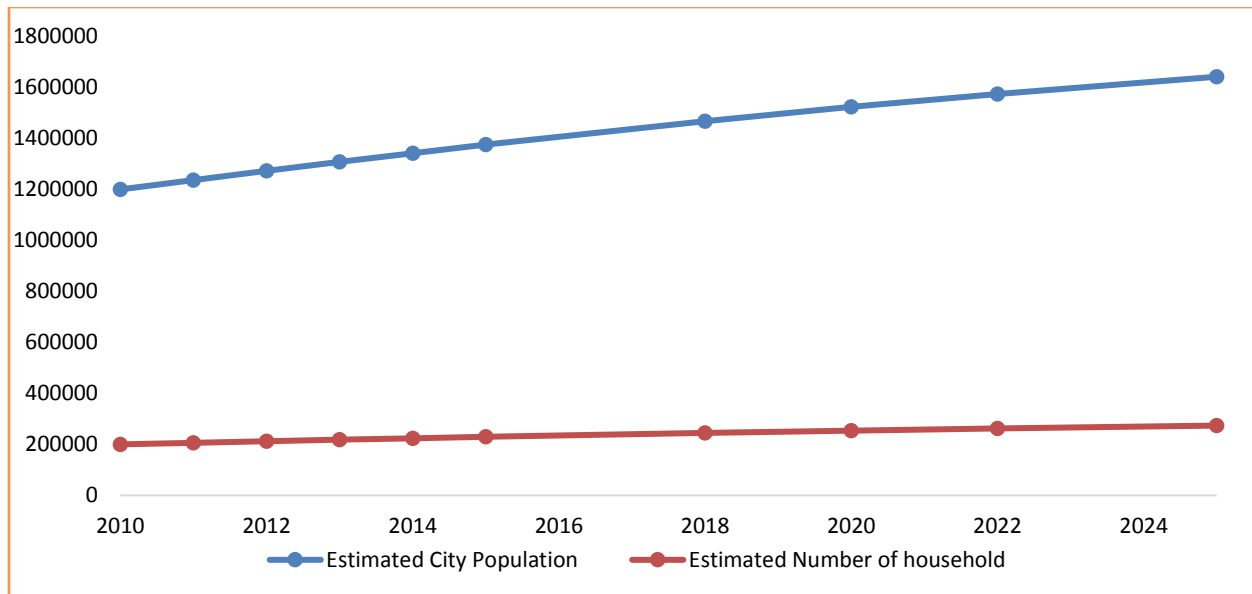
Socio-Economic Background of the City

Al Madina has major historical, religious and economic importance, for its unique location and the presence of the Holy Prophet's Mosque. The Prophet's Mosque and his sacred tomb attract millions of pilgrims to visit the city every year, making Madina one of the tourism cities in the Kingdom. The large volume of the consumer market due to the large numbers of visitors to the Holy Prophet Mosque is very important. Madina Industrial city also makes it an industrial economy, the number of factory workers in Madina region was about 32,500 in 2013 representing around 3.9% of the total industrial manpower in the Kingdom which amounted to 828,000 by the end of 2013[1]. Madina region has a good network of roads and bridges connecting its major cities, industrial and commercial facilities, and linking the region to the neighboring areas. Trade is one of the key sectors in Madina because of the vital economic and productive activities in the city and they are linked to the rest of the region. The mining and quarrying is a significant sector of the economy, the exploitation of the natural resources in the region serves the needs of the construction and industrial sectors with raw materials. The agricultural sector is also one of the most important economic sectors in the region due to the presence of fertile soil around Madina. In 2011, the total crop area was about 27.5 thousand hectares, representing about 3.5% of the total crop area in the Kingdom, which amounted to 788 thousand hectares in the same year.

The trend in Urban Growth and Existing Spatial Plans

Al - Madinah city is the largest and most important urban center in the Al Madinah region. Its religious significance makes it one of the most visited places in the Islamic world, it receives over 8 million Muslim pilgrims each year. The city has been expanding rapidly since the 1970s, due to the rapid growth, the government has invested heavily in the physical infrastructure which has attracted labor from all over the Kingdom and other countries resulting into further growth of the city. The population growth exerted pressure on the boundaries creating more demand for land

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[1] Economic report, Madina region 2014 (SAGIA).

leading to an explosion in land subdivision. The land subdivision is considered the main process by which rural land is converted to urban land. The land has been subdivided with diminutive reference to the rate of development or occupancy, which has resulted in an enormous proportion of the subdivided plots remaining vacant and this has resulted into urban sprawl.

Figure 2: Land use and urban growth limits.
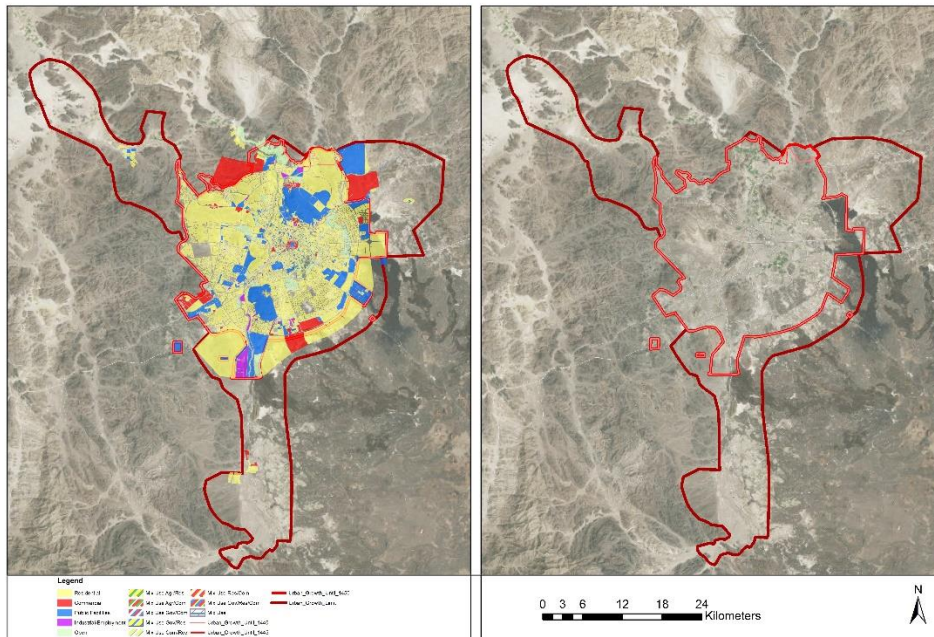
The figure above is showing the trend of urban growth limit control and land use for the city of Al Madinah.

City Prosperity Index (CPI) Assessment[2]

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 policy interventions for their cities.

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[2] UN-HABITAT, **CPI Methodologies**, Nairobi,2015

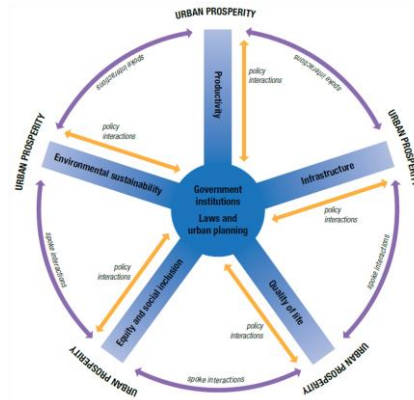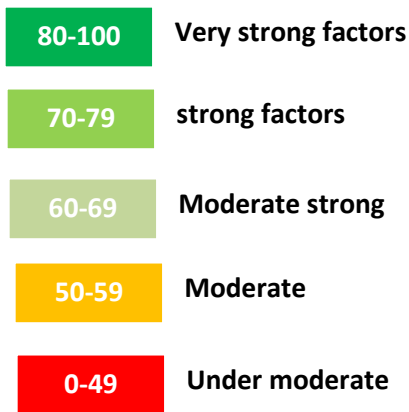|	
80-100	**Very strong factors**
70-79	**strong factors**
60-69	**Moderate strong**
50-59	**Moderate**
0-49	**Under moderate**

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 on 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 13; 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.

The Overall City Prosperity Index for Madina

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[3] Can also be expressed in percentages so that values range between 0% and 100%, as used in this report.

The overall CPI index is the aggregate of the six dimensions. The radar chart in Figure 3 shows the scores for each of the six dimensions as represented by the blue line. The city of Madina has an overall index score of 58.3%, according to the global scale of urban prosperity the city is having a moderate factor of productivity. In the chart, it is represented by the orange line. The shape of the blue line indicates the presence of disparity between the dimensions, cities are better off with high scores and fewer disparities between and within the dimensions. The observed weakness is an indication that the city has some under moderate factors within its dimensions, these factors should be identified and improved.

Figure 3: City Prosperity Index Dimensions
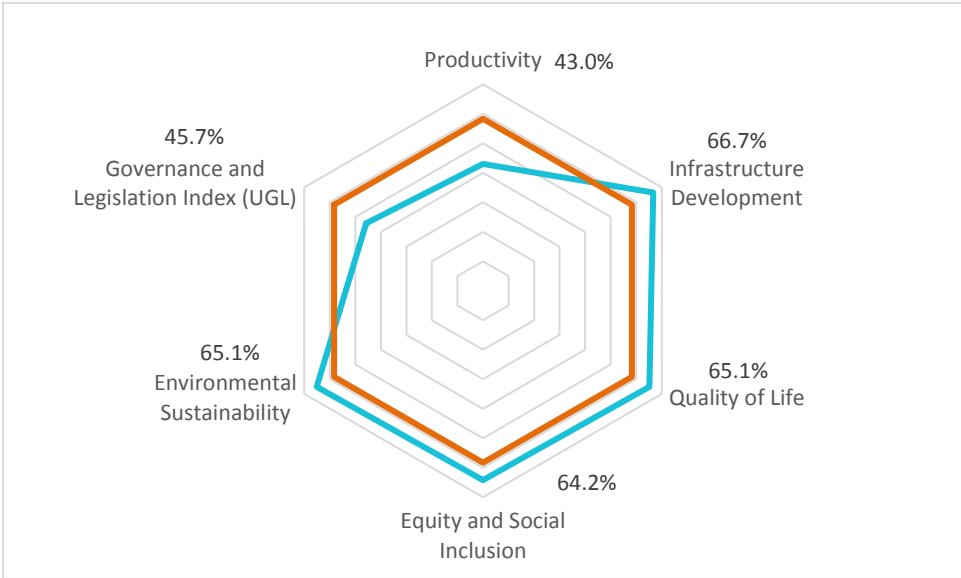
The analysis in the following sections will dig deeper into all the six dimensions individually to identify areas of strengths and weaknesses to enable the design of appropriate interventions.

The Productivity Dimension

Productivity is about how cities generate income or create wealth. The productivity dimension measures how a city contributes to economic growth and development, employment creation and availability of equal opportunities to the city dwellers. The findings show that the productivity index for the Madina City is 43.0% which is under moderate according to the global scale of prosperity. The rating implies that some of the city's productivity factors are under moderate. The table below shows that only economic growth sub-dimension (63.7%) is moderately strong, all the remaining sub-dimensions such as employment (48.4%) and economic agglomeration (16.9%) are under moderate. Economic agglomeration measures the spatial distribution of the outcomes of productivity or the benefits of prosperity.

Table 2: Productivity Index (43.0%)[4]

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Economic Growth (63.7%)	City Product per Capita	26,570.67	USD (PPP)/Inhab	71.9%	Strong
	Mean Household Income	20,482.66	USD(PPP)	36.8%	Under moderate
	Old Age Dependency Ratio	4.65	%	82.2%	V. Strong
Employment (48.4%)	Employment to Population Ratio	33.50	%	6.7%	Under moderate
	Informal Employment	17.40	%	90.0%	V. Strong
	Unemployment Rate[5]	7.80	%	48.4%	Under moderate
Economic Agglomeration (16.9%)	Economic Density	144,990,717	USD (PPP)/km2	16.9%	Under moderate

Figure 4: Productivity dimensions
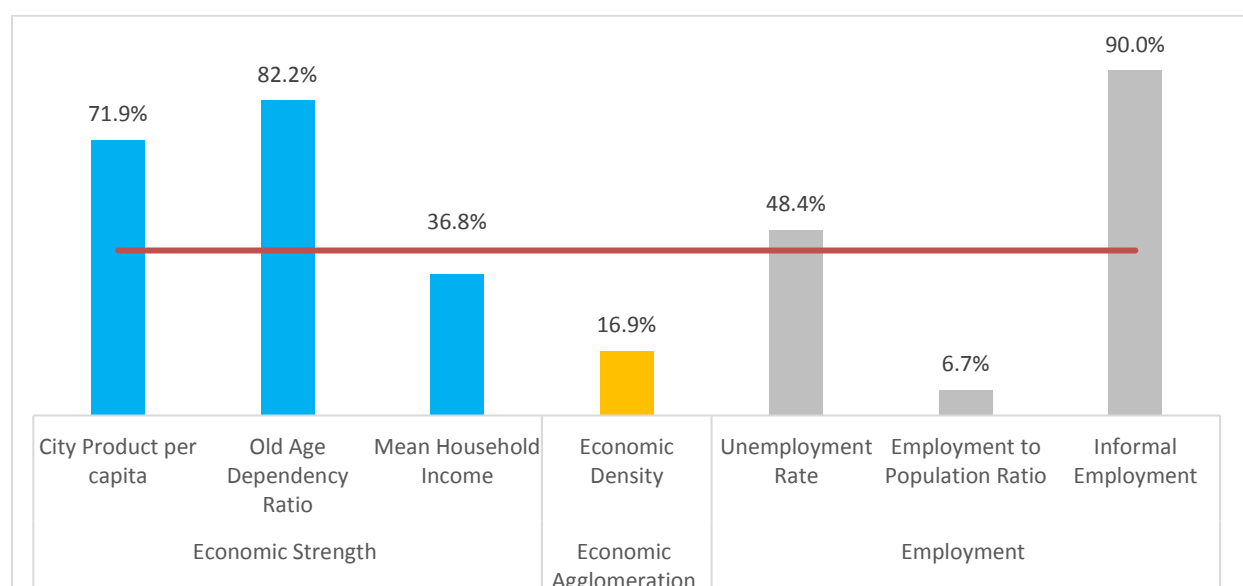
The Infrastructure Dimension

Urban infrastructure plays a central role in the proper functioning of a city and community. Infrastructure ensures delivery of public health services, safety and security, supports the local economic development and contributes toward the delivery of other basic public services to the community. The benefits of a functional basic urban infrastructure, therefore, are overwhelmingly community-wide. The infrastructure dimension measures how a city uses available resources to provide a functional and efficient basic infrastructure, physical assets and amenities. Basic services such as piped water, sanitation, power supply, road network, and information and communications technology are required to sustain the population, for economic development, and a better quality

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[4] Madinah Municipality, **Madinah Urban Observatory Report**, Madinah Local Urban Observatory, Madinah, 2016
[5] **This indicator is approximated based on regional data**

of life. The statistics in table 3 indicates that the city has a moderately strong infrastructure development index score of 66.7%. Among the under moderate and moderate sub-dimensions are social infrastructure with 27.4% and ICT with 59%. Nevertheless, the city enjoys a strong housing infrastructure with 76.2%, Urban Mobility infrastructure with 87.4% and street connectivity infrastructure with 83.3%. The urban mobility infrastructure with 87.4% excludes the mass public transport system and the use of public transport which are still unavailable in the city (0%), however, if the two indicators are included the urban mobility infrastructure score reduces to 53.2%. This clearly shows how important mass public transport system is. Mass transit system refers to public shared transportation, such as Trains, BRT, etc. that can commute a larger number of passengers from origin to destination.

**Table 3: Infrastructure Development Index (66.75%)**

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Housing Infrastructure (76.2%)	Access to Electricity	100.00	%	100.0%	V. Strong
	Access to Improved Sanitation	57.80	%	57.8%	Moderate
	Access to Improved Water	85.90	%	85.9%	V. Strong
	Access to Improved Shelter		%		-
	Population Density	5,583.87	Inhab/Km2	37.2%	Moderate
	Sufficient Living Area	100.00	%	100.0%	V. Strong
Social Infrastructure (27.4%)	Number of Public Libraries[6]	0.07	#/100,000 inhab.	0.0%	Under moderate
	Physician Density[7]	2.46	#/1,000 inhab.	54.8%	Moderate
ICT (59.0%)	Average Broadband Speed[8]	9.55	Mbps	44.8%	Under moderate
	Home Computer Access	77.20	%	77.2%	Strong
	Internet Access	55.00	%	55.0%	Moderate
Urban Mobility (87.4%)	Average Daily Travel Time	19.80	minutes	100.0%	V. Strong
	Affordability of Transport	2.10	%	100.0%	V. Strong
	Length of Mass Transport Network		Km/1M Inhab.	-	-
	Road Safety (traffic fatalities)	12.36	#/100,000 inhab.	62.1%	M. Strong
	Use of Public Transport	-	%	-	-
Street Connectivity (83.3%)	Intersection Density	153.80	#/km2	100.0%	V. Strong
	Land Allocated to Streets	27.19	%	70.6%	Strong
	Street Density	15.85	Km/KM2	79.3%	Strong

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[6] Ministry of Culture and Information, **Survey for Numbers of Public Libraries in 17 Cities**, Riyadh,2016.
[7] Ministry of Health, **Survey for Physicians Density for 17 Cities**, Riyadh, 2016.
[8] Authority of Communication and Information Technologies, **Broad Band Speed Survey in 17 cities**, Riyadh, 2016.

Figure 5: Infrastructure Development Indicators
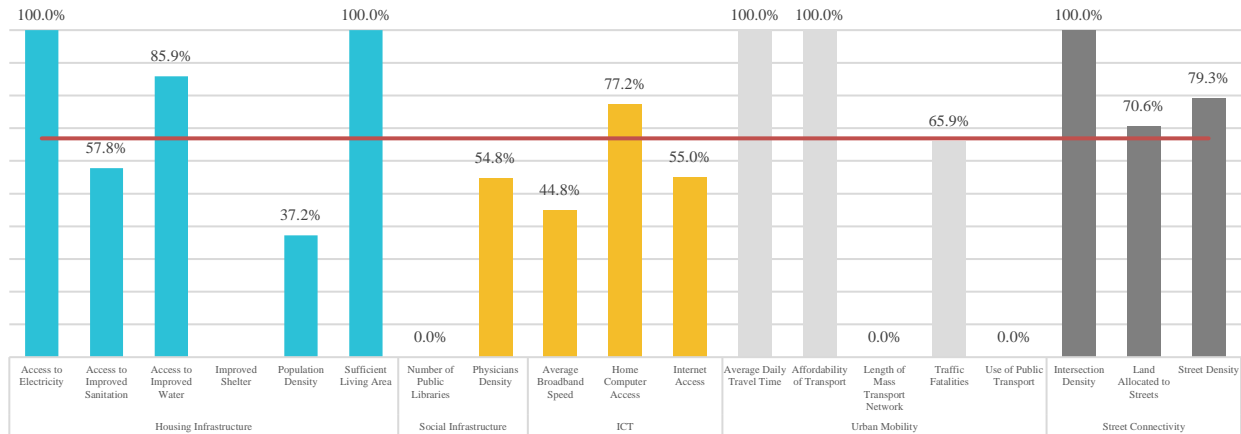

The Quality of Life Dimension

The quality of life is about happiness, well-being and a sense of security in the society, the quality of life index is a measure of the level of achievement a city has made in the provision of important services and facilities that directly affect the well-being of individuals and the society at large. Such services and facilities may include social services, education, health, recreation, safety, and security, etc. Although the quality of life index for the city is moderately high (65.1%), it has some elements of moderate factors especially in the education and public spaces sub-dimensions whose scores as shown in table 4 corresponds to moderate and under moderate ratings respectively. Conversely, the main sources of strength in the quality of life dimension are the healthcare provision with 72.2% and the safety and security with 98.7%.

Table 4: Quality of Life Index (65.1%)

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Health Care (72.2%)	Life Expectancy at Birth	74.30	years	73.4%	Strong
	Eradicate Maternal Mortality	12.05	#/100,000 live births	64.4%	M. Strong
	Eradicate Under-5 Mortality	17.70	#/1000 live births	52.8%	moderate
	Vaccination Coverage	98.10	%	98.1%	V. Strong
Education (59.4%)	Early Childhood Education	4.78	%	4.8%	Under moderate
	Net Enrolment in Higher Education	45.10	%	45.1%	Under moderate
	Literacy Rate	93.00	%	91.9%	V. Strong
	Mean Years of Schooling	13.40	%	95.7%	V. Strong
Safety and Security (98.7%)	Homicide Rate	1.10	#/100,000 inhab.	100%	V. Strong
	Theft Rate	34.20	#/100,000 inhab.	97.3%	V. Strong
Public Space (30.4%)	Green Area per Capita	4.56	m2 / inhabitant	30.4%	Under moderate
	Accessibility to Open Public Space	-	%	-	-

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ncreasing the level of quality of life would require that focus be directed to extremely under moderate indicators such as the early childhood education programmes, Under-five mortality, net enrolment in higher education and access to public spaces especially the green area per capita. Figure 7 shows the levels for each indicator and line for the dimensional index.

Figure 6: Quality of Life Indicators
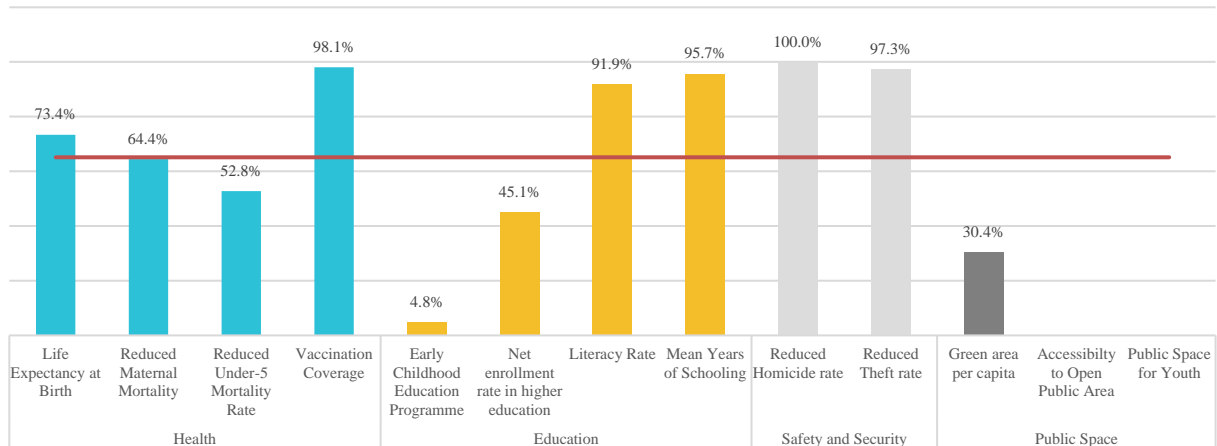


The Equity and Social Inclusion Dimension

Cities which care about people who are most at risk of exclusion, including the youth, children, women and poor people from diverse backgrounds, are said to be inclusive cities. They work for everyone. The equity and social inclusion dimension measures the level of achievement of cities in the distribution or sharing of 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 Madinah has a gender inclusion sub dimensional index of 64.2%. This is indicative of a fairly gender inclusive city.

Table 5: Equity and Social Inclusion Index (64.2%)

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Gender Inclusion (64.2%)	Equitable Secondary School Enrollment	0.89	0 - ∞	89.0%	V. Strong
	Women in local government	40.30	%	80.60%	V. Strong
	Women in the workforce	11.50	%	23.0%	Under moderate

The main source of strength within the gender inclusion sub dimension is equitable secondary enrolment and women in local government with 89.0% and 80.60%, respectively Nonetheless, the city should increase the number of women in the workforce. Figure 7 shows the levels of each indicator in the gender inclusion dimension.

Figure 7: Equity and Social Inclusion Indicators
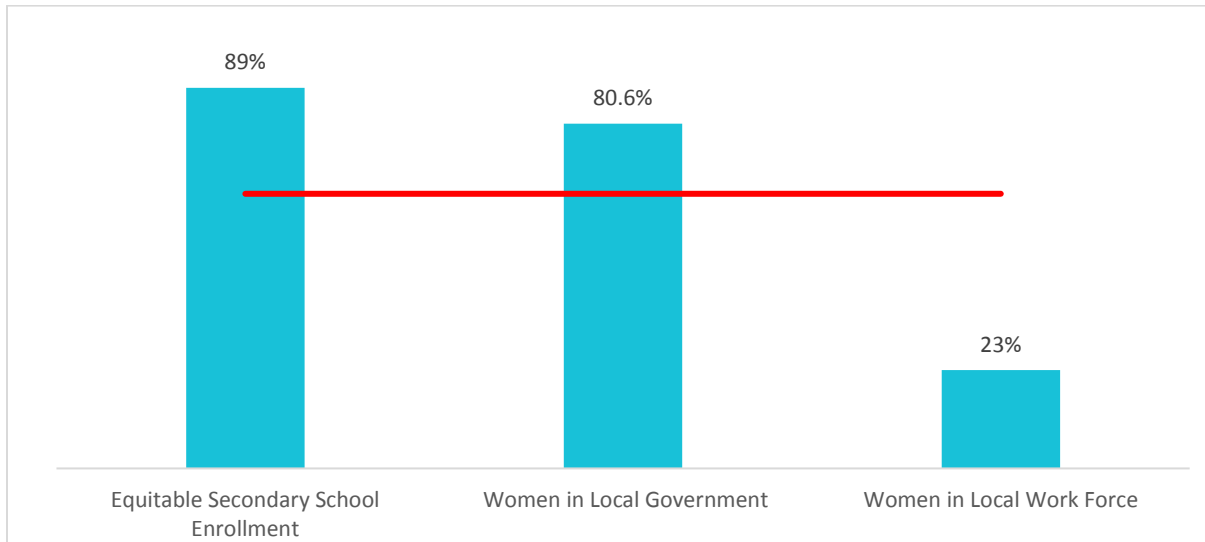
The Environmental Sustainability Dimension

Rapid urbanization can lead to social instability, undermining the capacity of cities to be environmentally sustainable and economically successful. Cities should ensure that as they grow and develop economically, the city environment is not destroyed or degraded. The ES dimension accounts for the achievements or measures put in place to ensure that the city environment is conserved and preserved. Due to data unavailability, it was not possible to include the Air Quality and Energy sub-dimensions, nevertheless, they remain very important indicators. The environmental sustainability index, therefore, comprise of the waste management indicators only. The findings in table 6 show that the Holy City of Madinah is doing moderately well particularly in waste management, notwithstanding the weakness associated with the rate of solid waste recycling, which is low, 10%.

Table 6: Environmental Sustainability Index (65.1%)[9]

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Waste Management (65.1%)	Solid Waste Collection	90.20	%	90.2%	V. Strong
	Solid waste recycling share	5.00	%	10.0%	Under moderate
	Waste water treatment	95.00	%	95.0%	V. Strong

Although the management of solid waste collection is very good, there is insignificant solid waste recycling. The city collects 90% of all the solid waste generated and only 10% of the collected solid waste are recycled.

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[9] Madinah Municipality, **Madinah Urban Observatory Report**, Madinah Local Urban Observatory, Madinah, 2016

Figure 8: Environmental Sustainability Indicators
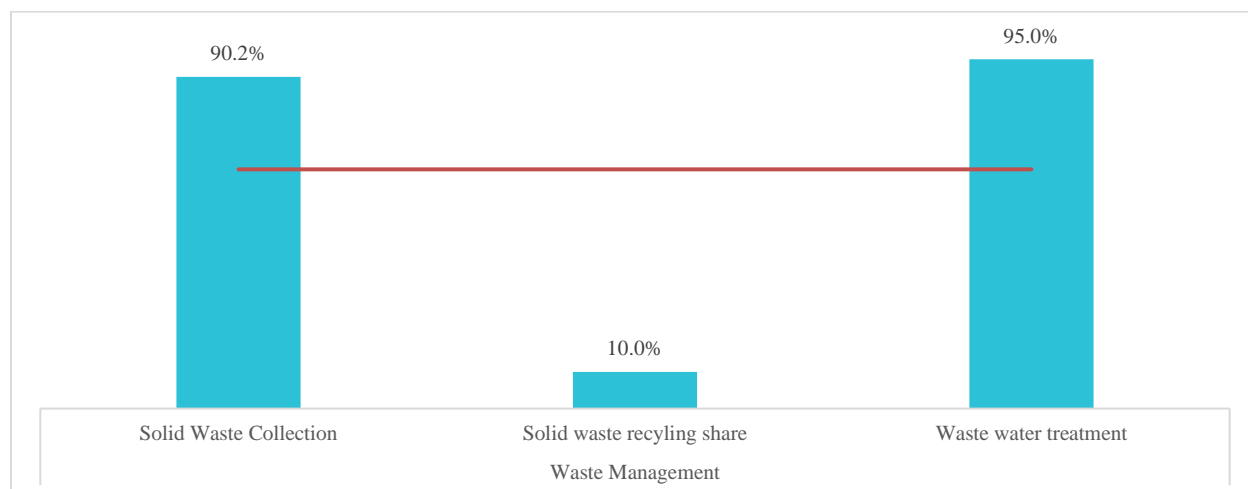

The Governance and Legislation Dimension

Good governance and appropriate legislation are prerequisites for sustainability and growth; it's only through good urban governance and accountable leadership that a city can be able to deploy practical and effective policies, laws and regulations, and create adequate institutional frameworks required for growth and prosperity. Due to data unavailability, only the municipal finance and participation accountability sub-dimensions were used in the computation of the index. Based on the available data, the average score for the governance and legislation is 45.7%, the Holy City of Madinah can be said to have a under moderate governance and legislation system. The city's strongest aspect of good governance and legislation is the number of days required to register and start a new business. On the other hand, citizen participation in municipal elections as a measure of participation and accountability aspect of good governance is under moderate, with 30.5%.

Table 7: Governance and Legislation Index (45.7%)

Sub-Dimension	Indicator	Actual	Units	Standardized	Comments
Participation & Accountability (30.5%)	Municipal Voter turnout	30.49	%	30.5%	Under moderate
Municipal Finance (60.9%)	Own revenue collection	-	%	-	-
	Days to start a business	12.30	Days	60.9%	Strong
	Local expenditure efficiency	-	%	-	-

To forge ahead in the prosperity path, the city needs to improve by opening more space for citizen participation and more accountability in its leadership and improve some aspects of municipal finance management.

Figure 9: Governance and Legislation
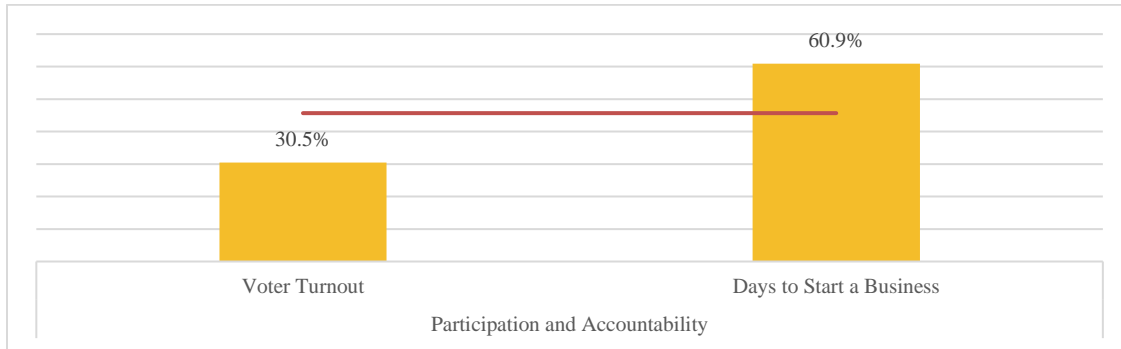
SWOT Analysis based on City Prosperity Index Assessment

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 8: CPI Based SWOT Analysis

STRENGTH	WEAKNESSES
1. *Good economic growth factors such as moderately, low old-age dependency ratio and good employment factors are good for the city economic stability.* 2. *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 educated women and youth.* 3. *Good safety and security,, provide a conducive environment for growth and development.* 4. *There is good healthcare provision in the city: a healthy population is energetic and productive.* 5. *The housing infrastructure is good* 6. *Urban mobility is good* 7. *Street connectivity is good, the city can take advantage of it to promote walking and cycling.* 8. *Waste management is good especially on collection of waste.* 9.	1. *The employment situation in the city is bad especially job creation and availability of job opportunities* 2. *Provision of education especially early childhood and enrolment in higher education are important..* 3. *Low access to improved sanitation – connection to sewerage system reduce diseases.* 4. *Few public libraries – libraries promote learning and access to information and provide empowering knowledge.* 5. *ICT is moderate and it is very important in supporting growth. Internet access and speeds is too low.* 6. *Few women in the workforce despite the fact that literacy and education level among Saudi women is considerably good* 7. *Poor availability of public spaces in the city – limiting recreation and better quality of life.* **9**. *No source of renewable energy like solar and wind.*
OPPORTUNITIES 1. *Good and Stable economic growth factors create a good environment for growth and development in many areas of the economy.* 2. *High access to home computers presents great opportunity to expand the use of internet and to encourage higher speeds and promote innovation in the ICT sector especially among the youth with young creative minds.* 3. *High connectivity index presents good opportunity to promote or encourage alternative means of transport such as walking and cycling to reduce excessive use of private cars.* 4. *Good safety & security and political stability in the city provide a conducive environment for attracting foreign investments.* 5. *For the environment – the efficient solid waste collection is a good starting point for recycling and ensuring a clean environment.*	**THREATS** 1. *Very Low employment to population ratio together with high youth unemployment is not good in a country with generally young population; bulging youth population mean high labour force in near future. Demographic phenomenon.* 2. *No renewable energy sources – complete dependence on fossil fuel which is not renewable source may not be the best for the future of the city. Investment in other renewable energy sources such as the solar and the wind is advisable.*

LOCAL URBAN OBSERVATORY

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 fund raising 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 need to have a 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 of Madina was established in 2004 (operational 11years) as a department located within the municipality to be responsible for developing tools, collecting and analyzing urban indicators at the city level. Madina LUO has produced four rounds of indicators and now working on the fifth round of urban indicators, so far they have produced a total of 113 urban indicators.

References

- Madinah Municipality, **Madinah Urban Observatory Report**, Madinah Local Urban Observatory, Madinah, 2016
- Ministry of civil services, **survey for the local government employees for 17 cities**, Riyadh, 2016
- General Authority of Statistic, **Labor Force Survey**, Riyadh, 2016
- Ministry of Health, **Survey for Physicians Density for 17 Cities**, Riyadh, 2016.
- Ministry of Culture and Information, **Survey for Numbers of Public Libraries in 17 Cities**, Riyadh,2016.
- Ministry of Justice, **Crime Rate Survey for 17 Cities**, Riyadh, 2016.
- Authority of Communication and Information Technologies, **Broad Band Speed Survey in 17 cities,** Riyadh, 2016.
- Saudi Electricity Company, **Survey for Access to Electricity in 17 Cities**, Riyadh, 2016.