





#### **VOLUNTARY LOCAL REPORT**

**QASSIM URBAN OBSERVATORY** 

for the Sustainable Development Goals 2030 for the city of Buraidah Goal No. 11

.. Buraidah attractive to live and work ...



#### ... Buraidah attractive to live and work ...



#### Introduction

The report is seeking to crystallize and formulate the perspective of the city of Buraidah through the Framework of Goal No. 11 of the 17 Sustainable Development Goals (SDG`s) issued by United Nations in 2015.

«Making cities and human settlements inclusive, safe,resilient and sustainable».. This report utilised the national and international standards as well as targets of the goal No.11 as a reference framework for analysing and understating the current situation of the city of Buraidah under the kingdom vision 2030

the report discussing the Goal 11 indicators in buraidah in 4 parts , Goal 11 and vision 2030 the current situation ,Goal 11 target the progress towards sustainability, policies and recommendation



#### An overview of the city of Buraidah:

- The city of Buraidah is located in central part of eastern of Al-Qassim which is positioned in northcentral Saudi Arabia.
- Buraidah is about 350 km away from Al-Riyadh, the Kingdom`s capital.
- Buraidah is situated on a wide plateau gradually descending from the west to the east. It is the capital of Al-Qassim province and the biggest city in the region.
- Buraidah is home for 644.4 thousand people in 2018.
- Buraidah is the main producer of bestquality dates, giving 117.7 tons in 2017 with revenues of SR 824 million.
- The administrative activities account for (45%) of the total economic sectors, then comes the service sector (15.5%) and commercial (10.3%). The agricultural sector accounts for (1.1%).
- The arable land is outside urban mass of the city.



#### The report aims at:

This local voluntary report aims at improving the efficiency of measurement and evaluation of the Buraidah situation from Goal No.11 and its targets «Making cities and human settlements inclusive, safe, resilient and sustainable» as an essential step to achieve the Kingdom's future vision by 2030 and to transform the city of Buraidah, as one of the main cities in the KSA, into modern, sustainable and attractive city which reflects on better quality of life for its inhabitants.





The First Goal

General and accurate diagnosis of the current situation of Buraidah city through its urban indicators in terms of its potential and ability to provide a sustainable urban environment, thereby determining urban issues curbing its transform to be a sustainable city.



The Second Goal

Evaluating the progress toward achieving better sustainability levels in the city of Buraidah and focusing on the current negative aspects and issues that need to be prioritized and mitigated in the near future.



The Third Goal

Formulating the initial features of the desired objectives and measures to deal effectively with these issues in the short term during the next phases of the Urban Observatory in Buraidah in light of the general targets for making the city more sustainable which reflect on a better quality of life for its inhabitants.



# The Sustainable Development Goals and its relation to National efforts in the Kingdom

According to close reading of the Kingdom's future vision 2030 were a real translation of the 17th SDG's issued by the United Nations in 2015. This confirms that the Kingdom carried out the first step in compliance with the recommendations of the United Nations on improving the quality of life for the individual and community and achieving sustainable development.













# The Role of the Urban Observatory in Monitoring SDG's

Buraidah `s Urban Observatory, in all its stages, has worked hard to provide accurate indicators reflecting a truthful image about the progress of the city towards achieving the SDG`s in general and the targets of the Kingdom vision in particular. The methodology, adopted by the Observatory, is consistency with the priorities of the development at National and International levels, as follows:



The first stage, providing the millennium indicators from 2009-2014 plus the local indicators.



The third stage, producing the SDG's indicators from 2018-2020.

2015-2017

Phase 2

The second stage, producing the city prosperity indicators from (2015-2017),plus a notice increasing in the local indicators.



# The progress towards achieving the targets of the Sustainable Development Goals in the city of Buraidah

| Goal no. | Target & Aims  | Global Indicator              | Buraidah | Achievement |
|----------|--|-------------------------------|----------|-------------|
| 1        | Reducing the proportion of poor Saudi families   | 9.60%                         | 2.20%    |             |
|          | Reducing number of families headed by woman  | 19%                           | 6.70%    |             |
| 3        | Termination of neonatal mortality  | 12 death/1.000 live births    | 14.1     | •           |
|          | Reducing under five mortality  | 25 death/1.000 live births    | 15.96    |             |
|          | Reducing low birth weigh   | 110 child/1.000 live births   | 36.6     |             |
|          | Reducing maternal mortality  | 216 death/100.000 live births | 0        |             |
|          | Reducing the number of death and injuries resulting from traffic accidents to half by 2020 | 2 death /10.000 person        | 13       | 0           |
| 4        | Reducing illiteracy rate for adults  | 1/.                           | 3.80%    | <b>O</b>    |
|          | Increasing number of children, under 6 years, in nursery                                   | 81%                           | 27.40%   | 0           |
|          | Increasing number of students reaching the universities by 2020                            | 75%                           | 47/.     | 0           |

| Goal no. | Target & Aims  | Global Indicator             | Buraidah | Achievement |
|----------|--|------------------------------|----------|-------------|
| 5        | Increasing the representation of women in government departments | 50%                          | 47.30%   | •           |
|          | Reducing unemployment rate among Saudi women                     | 6.20/.                       | 34.90%   | 0           |
| 6        | Reducing water consumption per capita to sustainability levels   | 120 L/person/day             | 277.8    | •           |
|          | Increasing percentage of house access to water                   | 100%                         | 95.80%   | •           |
|          | Increasing percentage of houses access to sewage                 | 98%                          | 72.50%   | •           |
| 8        | Reducing overall Saudi unemployed                                | 5.8/.                        | 15.60%   | 0           |
|          | Increasing the percentage of wages from total budget             | 12%                          | 8.60%    | •           |
| 16       | Reducing the murder rate   | 1 murder/100 thousand people | 1.6      | •           |









#### **GOAL 11:**

Make cities and human settlements inclusive, safe, resilient and sustainable









01



#### **First Target**

**Ensure Access for All to Adequate, Safe and Affordable Housing and Basic Services.** 

This target focuses on improving and developing the urban environment and raising the standards of quality of life especially in slums, In addition to the need to provide suitable accommodation and basic services for all at a cost commensurate with their financial capabilities.

# The Overall Situation for the Indicators of Assurance of the Access for All to Adequate, Safe and Affordable Housing and Basic Service



By presenting and analyzing the current situation, it was found that the relative weight of the number of positive indicators reflecting the improvement towards achieving the targets in the city reached 55.6% of the total number of indicators reflecting the first target of Goal No. 11.



The number of negative indicators represented 16.7% of the total number of indicators, reflecting the failure to achieve the targets of the first target which must be considered in the near future to ensure that everyone has access to adequate, safe and affordable housing and basic services and thereby improving the levels of sustainability and quality of life in the city of Buraidah. They include, in particular, the citizen's ability to access adequate housing, as the percentage of housing fund from REDFL decreased.



The moderate indicators that did not affect the achievement neither positively nor negatively of the target recorded 27.7% of the total number of indicators.

















|                        |  | SA.                     |  |  |  |                               |   |
|------------------------|--|-------------------------|--|--|--|-------------------------------|---|
| Indicator<br>evolution | Indicator<br>average                                     | Buraidah                | Other Saudi<br>cities                              | Kingdom's<br>average<br>indicators   | Internation  | al standard                   | Evaluation of current situation   |
| <u>+</u>               | 62.8 m2/<br>person                                       | 62.5 m2/<br>person      | Medium   |  | N  | /A                            | Negative  |
| + -                    | 1 person/<br>room  | 1.10<br>person/<br>room | Medium   | 1.2 person/<br>room  | 5-1<br>person/<br>room   | Less than<br>the mini-<br>mum | Moderate  |
| +                      | 3%.  | 4.05%                   | Low  |  | N/A  |                               | Positive  |
| +                      | 0.93   | 1                       | N/A  |  | N/A  |                               | Moderate  |
| -                      | 5.2 years  | 4.2 years               | Medium   | 10 years   | 3  | high                          | Positive  |
| -                      | 7.50%  | 5.90%                   | Medium   | 19.20%   | N  | /A                            | Positive  |
| + -                    | 14.50%   | 13.50%                  | Medium   |  | N  | /A                            | Positive  |
| +                      | 61.50%   | 62.50%                  | High   | 47′/.  | Less than  | 647.                          | Positive  |
| -                      | 38.30%   | 22.10%                  | Medium   | 13.03%   | N/A  |                               | Negative  |
| +                      | 2.70%  | 2.20%                   | Medium   | 1.60%  | Less than  | 9.60%                         | Positive  |
| <u>+</u>               | 29.50%   | 26.20%                  | N/A  |  | N  | /A                            | Positive  |
|                        | Indicator evolution  + + - + - + + - + + - + + - + + + + | Indicator evolution     | Indicator evolution   Indicator average   Buraidah | Indicator evolution         Indicator average         Buraidah cities         Other Saudi cities           + 62.8 m2/ person         62.5 m2/ person         Medium           + 1 person/ room         1.10 person/ person/ room         Medium           + 37.         4.057.         Low           + 0.93         1 N/A           - 5.2 years         4.2 years         Medium           - 7.507.         5.907.         Medium           + 61.507.         62.507.         High           - 38.307.         22.107.         Medium           + 2.707.         2.207.         Medium | Indicator evolution         Indicator average         Buraidah cities         Other Saudi cities         Kingdom's average indicators           + 62.8 m2/ person         62.5 m2/ person         Medium         1.2 person/ room           + 1 person/ room         1.10 person/ moom         Medium         1.2 person/ room           + 3/.         4.05/.         Low           + 0.93         1         N/A           - 5.2 years         4.2 years         Medium         10 years           - 7.50/.         5.90/.         Medium         19.20/.           + 14.50/.         13.50/.         Medium         47/.           + 61.50/.         62.50/.         High         47/.           - 38.30/.         22.10/.         Medium         13.03/.           + 2.70/.         2.20/.         Medium         1.60/. | Indicator evolution           | Indicator evolution         Indicator average         Buraidah cities         Other Saudi cities         Kingdom's average indicators         International standard           + 62.8 m2/ person         62.5 m2/ person         Medium         N/A           + 1 person/ room         1.10 person/ moom         Medium         1.2 person/ room         Less than the minimum           + 37.         4.05/.         Low         N/A         N/A           + 0.93         1         N/A         N/A         N/A           - 5.2 years         4.2 years         Medium         10 years         3         high           - 7.50/.         5.90/.         Medium         19.20/.         N/A           + 14.50/.         13.50/.         Medium         N/A         N/A           + 61.50/.         62.50/.         High         47/.         Less than         64/.           - 38.30/.         22.10/.         Medium         1.60/.         Less than         9.60/. |

<sup>+</sup> Indicator is increasing

<sup>-</sup> Indicator is decreasing

<sup>†</sup> Indicator is fluctuating















|  |                        | <b>1</b>             |                      |                       | <b>***</b>                         |             | <b>H</b>           |                                 |
|--|------------------------|----------------------|----------------------|-----------------------|------------------------------------|-------------|--------------------|---------------------------------|
| Indicator                                    | Indicator<br>evolution | Indicator<br>average | Buraidah             | Other Saudi<br>cities | Kingdom's<br>average<br>indicators | Internation | al standard        | Evaluation of current situation |
| Water consumption per capita                 | <u>+</u>               | <b>271.7</b> L/p/day | <b>277.8</b> L/p/day | Medium                | <b>263</b> L/p/ day                | 120         | high               | Negative                        |
| Percentage of wastage of water               | +                      | 14.80%               | 15%                  | Medium                | 25%                                | Less than   | 10%                | Moderate                        |
| Percentage of drinking from public network   | -                      | 61.90%               | 80.30%               | Medium                | 70.70%                             | N           | /A                 | Positive                        |
| Percentage of houses access to water         | +                      | 95.60%               | 95.80%               | Medium                | 87′/.                              | Less than   | 100%               | Moderate                        |
| Percentage of house access to sewage network | +                      | 68.40%               | 72.50%               | Medium                | 60%                                | 98%         | Less than the max. | positive                        |
| Percentage of electricity coverage           | +                      | 100%                 | 100%                 | High                  | 99%                                | 100%        | Equal              | positive                        |
| Percentage of internet users                 | +                      | 63.20%               | 79.90%               | High                  | 64/.                               | 87.90%      | high               | positive                        |

<sup>+</sup> Indicator is increasing



<sup>-</sup> Indicator is decreasing

<sup>†</sup> Indicator is fluctuating





#### **Second Target**

Providing Access to Safe, Affordable, Accessible and Sustainable Transport System for All.

This goal focuses on the need to provide environmentally sustainable, safe and affordable transportation for all, especially for people with special needs such as women, children, the elderly and the disabled in addition to improving roads` safety through safe integration of multiple means of transport.

# The Overall Situation for the Indicators of Providing Access to Safe, Affordable, Accessible and Sustainable Transport Systems for All.

By presenting and analyzing the current situation, it was found that all the indicators are positive and are willing to contribute in achieving the second target of Goal No. 11.

|                                    |                        |                                       |                                       |                       | Į.                                 |                         |                                   | 0                               |
|------------------------------------|------------------------|---------------------------------------|---------------------------------------|-----------------------|------------------------------------|-------------------------|-----------------------------------|---------------------------------|
| Indicator                          | Indicator<br>evolution | Indicator<br>average                  | Buraidah                              | Other Saudi<br>cities | Kingdom's<br>average<br>indicators | Internation             | al standard                       | Evaluation of current situation |
| Average time of daily trip to work | + -                    | 16.10<br>min                          | 14.2<br>min                           | Low                   |                                    | N                       | /A                                | Positive                        |
| Expenditure on road construction   | +                      | 263<br>SR/p/year                      | <b>249.3</b> SR/p/year                | High                  |                                    | N                       | /A                                | Positive                        |
| Road length/1000 people            | + -                    | 9.95<br>Km/1000<br>people             | 10<br>Km/ 1000<br>people              | High                  | 3.2<br>Km/1000<br>people           | N                       | /A                                | Positive                        |
| Road density                       | + -                    | 19.51<br>Km/Km2                       | 19.51<br>Km/Km2                       | High                  |                                    | _                       | .0<br>Km <b>2</b>                 | Positive                        |
| Road intersection density          | +                      | 115.01<br>cross roads/<br>Km2         | 115.01<br>intersec-<br>tion/Km2       | High                  |                                    | 100<br>intersection/Km2 |                                   | Positive                        |
| Road accidents rate                | -                      | 24.9 accidents/ 1000 persons          | 17.3<br>accidents/<br>1000<br>persons | Low                   | 16.7 accidents/ 1000 persons       | N/A                     |                                   | Positive                        |
| Road accident death rate           | -                      | 17.40<br>deaths/<br>100000<br>persons | 13<br>deaths/<br>100000<br>persons    | Medium                | 27<br>deaths/<br>100000<br>persons | High                    | 2<br>deaths/<br>100000<br>persons | Positive                        |



<sup>-</sup> Indicator is decreasing



<sup>+</sup> Indicator is fluctuating





#### **Third Target**

Reducing the Adverse per Capita Environmental Impact of Cities

This target focuses on the need to significantly reduce the negative impacts of unsustainable behaviour of individuals and communities for using natural resources, which in turn lead to environmental degradation and climate change and then to a sharp decline of quality of life standards.

### The Overall Situation for the Indicators of Reducing the Adverse per Capita Environmental Impact of Cities

By presenting and analyzing the current situation, it was found that the elative weight of the number of positive indicators in the city was **71.4**% of the total number of indicators related to the third target of Goal No.**11**.

The negative indicators were 28.6% of the total number of indicators. They effect aspects of failure to achieve the targets of the third target, including particularly those associated with recycling solid waste and treating wastewater.

| - 1 | _ | _ |
|-----|---|---|
|     | _ |   |
|     |   | П |
|     | ш |   |













|                                   |                        | _                    | 457      | _                     | •                                  |              |             | _                               |
|-----------------------------------|------------------------|----------------------|----------|-----------------------|------------------------------------|--------------|-------------|---------------------------------|
| Indicator                         | Indicator<br>evolution | Indicator<br>average | Buraidah | Other Saudi<br>cities | Kingdom's<br>average<br>indicators | Internationa | al standard | Evaluation of current situation |
| Regular collection of solid waste | +                      | 94.80%               | 95.80%   | Medium                | N/A                                | 10           | 00%         | Positive                        |
| Solid waste recycling             | +                      | 6.13%                | 5.30%    | Medium                | 3.60%                              | N            | /A          | Nigative                        |
| Percentage of treated wastewater  | -                      | 79.10%               | 76.20%   | Medium                | 17%                                | High         | 20%         | Nigative                        |



<sup>-</sup> Indicator is decreasing

+ Indicator is fluctuating





04



#### **Fourth Target**

Providing Universal Access to Safe, Inclusive and Accessible, Green and Public Spaces.

This target focuses on sustainably utilizing green and public spaces as a basic mean of entertainment and community interaction, especially in slums. This leads to improving the quality of life and monitoring the phenomena of violence and harassment that is preventing the utilization of these spaces.

# The Overall Situation for the Indicators of Providing Universal Access to Safe,Inclusive and Accessible, Green and Public Spaces

By presenting and analyzing the current situation, it was found that all the ndicators are positive and contribute to achieving the fourth target of Goal No 11.















|   |                        | 3                                       | 134                                       |                          | 100                                      |             |   |                                 |
|---|------------------------|---|---|--------------------------|--|-------------|---|---------------------------------|
| Indicator   | Indicator<br>evolution | Indicator<br>average                    | Buraidah                                  | Other<br>Saudi<br>cities | Kingdom's<br>average<br>indicators       | Internation | al standard                             | Evaluation of current situation |
| Green and public spaces per capita                      | + -                    | 12.5 m2/<br>person                      | 13.27<br>m2 /<br>person                   | High                     | 2.6 m2/<br>person                        | Low         | 15 m2/<br>person                        | Positive                        |
| Population density                                      | +                      | 549.8 per-<br>son/ Km2                  | 705<br>person/<br>Km2                     | Low                      | 15 Person/<br>Km2                        | Low         | 15000<br>person/<br>Km2                 | Positive                        |
| murder  | -                      | 2.4<br>Murders/<br>100,000<br>person    | 1.6<br>Murders/<br>100,000<br>person      | High                     | 1.6<br>100,000<br>person                 | High        | 1 murder/<br>100,000<br>person          | Positive                        |
| Robbery   | -                      | 58.2<br>robberies/<br>100,000<br>person | 26.8 rob-<br>beries/<br>100,000<br>person | Low                      | 114.4<br>robberies/<br>100,000<br>person | High        | 25.4<br>robberies/<br>100,000<br>person | Positive                        |
| Percentage of victims of physical and sexual harassment | N/A                    | N/A                                     | 21 Cases                                  | Low                      | N/A                                      | N           | I/A                                     |                                 |





+ Indicator is fluctuating



### Priority Urban Issues within the Indicators of Goal No. 11

Some of the urban issues have been identified which negatively affect the levels of sustainability and quality of life in the city of Buraidah, as their continuation without reducing can greatly hinder the progress towards full achievement of Goal 11. These issues can be classified into three categories to understand and realize their nature during the previous period. The basis of this classification is the chronological evolution of the issue and whether there has been any improvement or not during the previous stages of the urban observatory. At the end of this part, the issues will be classified again according to the priority of intervention to mitigate their negative effects.

This part aims to understand and realize the nature of urban issues related to each of the four targets of Goal no.11. These issues have been classified into three groups

| 01 | Issues that emerged during this stage of the Urban Observatory. |
|----|---|
| 02 | Issues that have been observed without any improvement.         |
| 03 | Urban Issues that have been improved over the past period.      |

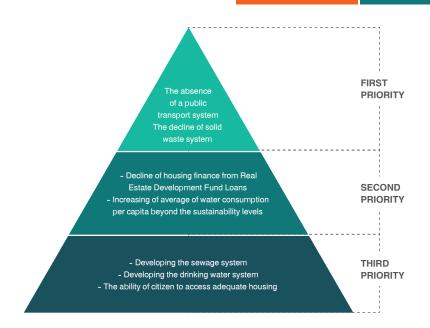
Though the understanding of the nature of these issues and its evolution during the previous period. It has become clear that it is difficult to deal with all these issues at the same time. So, they should be prioritized according to its importance and urgency of intervention to reduce their negative impacts on the quality of life in Buraidah. Thus, make a tangible progress toward improving the levels of sustainability and quality of life and the ultimate full achievement for the Goal 11. In this context, the issues have been classified into three levels (First / second / third priority) based on the following factories:

The level of decline in the values of indicators related to the issues during the previous period.

The level of relative improvement in the issue during the previous period.

The level of achievement, whether full or part of future targets.

The value of numerical gap between the current situation and target.





# **Issues that emerged during this stage** of the Urban Observatory.



Decline of housing finance from Real Estate Development Fund Loans (REDFL)

General and accurate diagnosis of the current situation of Buraidah city through its urban indicators in terms of its potential and ability to provide a sustainable urban environment, thereby determining urban issues curbing its transform to be a sustainable city.

#### 02

# Issues that have been observed without any improvement.

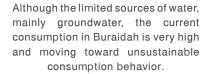


The Decline of Solid Waste System

The situations of the solid waste system in Buraidah have declined during the past five years as a comprehensive system ends with recycling operations. The waste buried in Buraidah in 2017 represents 94.7% of the total disposal of solid waste, which is considered a major waste of the resources that can be dealt with in a more economically way. Currently, the municipality has already taken effective measures against this declining and the recycling rate is expected to increase in the coming years.



Increasing the Average of water consumption per capita beyond sustainability levels



This consumption contravenes with the future development goals and the Kingdom's vision for 2030. So, the government need to put a huge effort into rationalizing the rate of water consumption.



The Absence of Public Transport System

There is a complete absence of a public transport network in Buraidah despite its importance, as was highlighted by Urban Observatories several years ago. The consequences of reliance on private means of transport in the last monitoring are not clear, it inevitably emerges with increasing the population sizes in Buraidah and its tendency to be a million city.



03

# Urban Issues that have been improved over the past period.



The Ability of Citizens to Access Adequate Housing

The decline in poverty rates and the percentage of families below the level of sufficiency in Buraidah during the previous period indicates a relative improvement with around one-third of the ability of these families to access adequate housing. However, there is an absence of more detailed indicators about per capita GDP growth in the city. As well as the development of inflation indicators at the local level will hinder the role of urban administration in following up and monitoring the achievement of Goals for 2030 and then improve the well-being of families and ensuring they access adequate housing. While the poverty indicator is no longer enough to assess the targets for this purpose.



Developing the sewage system

The sewage sector in Buraidah achieved remarkable success, while its achievements surpasses the target rates for 2023.

This success will be directly reflected in the improvement of the general environmental conditions in the city. While the untreated wastewater sources have always seen a direct threat to groundwater and soil.



Developing the drinking water system

Efforts and strategies to develop the drinking water system in Buraidah have been very successful over the past period.

The coverage of drinking water facilities has increased in 2017 to 80.3%. Although water wastage is equal to the target for 2023, the competent authorities need to cooperate in order reduce this wastage and then to reach the target of 2030 (10%) during the coming period which is possible to occur in shed light of the proposed initiatives.







| 01 | Issues that emerged<br>during this stage of the<br>Urban Observatory. | Decline of housing<br>finance from Real Estate<br>Development Fund Loans                    |  |                                 |
|----|---|---|--|---------------------------------|
| 02 | Issues that have been observed without any improvement.               | Increasing the average<br>of water consumption<br>per capita beyond<br>sustainability level | The absence of a public transport system | The decline of solid developing |
| 03 | Urban Issues that have<br>been improved over the<br>past period.      | The Ability of Citizens to<br>Access Adequate<br>Housing                                    |  | the sewage waste system system  |



### Policies of Urban Development to Achieve the GoalNo. 11

Policies of the urban development for Buraidah have been formulated to reduce issues that affect the sustainability and quality of life in the city. This part of the report will discuss the proposed policies, to reduce these issues, in its entirety to represent the future development perspective of Buraidah.



The Integration between government and civil society efforts to improve the ability of citizens to have the appropriate housing.



Transition to Public Transport System.



Expansion of the housing fund from the Real Estate Development Fund Loan.



Developing the system of solid waste management.

#### **The Proposed Technical Studies**

Recommendations and Technical Studies for Improving
Sustainability and the Quality of Life in the City of Buraidah in the Future Stages of the Urban Observatory

Preparing a number of technical studies related to the issues that will contribute to improving the quality of life and achieving a qualitative leap towards the SDG's in general and Goals No 11 in particular. In this respect, there are two technical studies needed to be conducted by the competent authorities:

How to activate the non-profit sector institutions to integrate with the role of the government in improving the citizens` ability to access adequate housing and alleviating the urban issues suffered by society in general and poor families in particular.

How to translate and activate the proposed initiatives related to the provision of adequate housing to be doable in the city of Buraidah in order to alleviate the burden on poor families.



#### **Teamwork**

| Teamwork of Al-Qassim Region Municipality |   |  |  |  |
|---|---|--|--|--|
| Arch. Mohammad bin Mubarak Al-Mejally     | Mayor of Al-Qassim Province   |  |  |  |
| Arch. Khaled Ibrahim Al-Hudaib            | Deputy Mayor for Urban Development  |  |  |  |
| Arch. Abdulhakeem Abdullah Alreshoodi     | Director of Urban Planning - Rapporteur of the executive committee of the Urban Observatory |  |  |  |

| Consultant Teamwork                  |   |
|--------------------------------------|---|
| Dr. Aref Attia Alshamandy            | Director of Al-Qassim Region Projects – Sustainable<br>Development Expert in UN |
| Arch. Mohamed Mubarak Elsharif       | Project Manager   |
| Arch. Haddaf Abdullah Mahmoud        | Specialist of Geographic Information Systems (GIS)                              |
| Arch. Mostafa Solieman AboAlazm      | Urban Designer  |
| Mr. Abdulrahman Alsheikh Sayed Ahmed | Typist for two languages  |

| Experts of Short -time working |   |
|--------------------------------|---|
| Dr. Emad Hemdan Kenawy         | Urban Planning & Development Expert– Post-doctoral researcher in the University of Liverpool – UK |
| Dr. Hosny Mohamed Sayed        | Urban Observatories Expert in UN  |
| Eng. Hany Mohamed Emara        | Design and Presentation Expert  |

| Editor technical advisor               |   |
|--|---|
| Prof. Dr. Sulaiman Salamah Abu Kharmah | Chief Technical Consultant in United Nations<br>Development Program |









www.afm.sa