

# Basra Urban Profile

October 2020

**UN****HABITAT**  
FOR A BETTER URBAN FUTURE



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This document presents the Basra Urban Profile. It has been prepared by UN-Habitat. This project was implemented under the supervision of: Ms Yuko Otsuki, Head of UN-Habitat Iraq a.i. and Dr. Erfan Ali, Director a.i., Regional Office for Arab States, UN-Habitat.

Lead authors: Babar Mumtaz, Ivan Thung.

A dedicated team was established for this project and included the following people: UN-Habitat: Mr. Tommaso Cossu, Mr. Ameer Hussein, Ms. Sakar Mustafa, Mr. Youssef Beydoun. Other contributors from UN-Habitat are Ms. Anna Soave, Ms. Raniah Kamal, Ms. Nathalie Garner.

The maps were drafted by the UN-Habitat project team, unless indicated otherwise. The presented satellite images were provided by Digital Globe, Nextview License, unless indicated otherwise.

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## URBAN PROFILING

UN-Habitat seeks to provide up to date, holistic documentation and analysis of the impact of the crisis in key cities, through City Profiles, synthesising information and insight from existing sources and priority sectors, supplemented by direct field research by UN-Habitat teams based in each city. This profile is part of a regional urban profiling exercise that aims to develop urban profiles for the cities of Basra, Sinjar, Derna (Libya), Mareb (Yemen) and Dara'a (Syria). UN-Habitat's expertise in urban analysis, community approaches and crisis contexts have informed the development of the City Profiling process. All City Profiles are developed in close association with the concerned governorates and municipalities.

The structure of the City Profile provides a pre-crisis baseline and data from the current situation to understand the impact of the crisis accompanied by narrative description and analysis. Furthermore, City Profiles review the functionality of the city economy and services, understanding of capacities and coping mechanisms and the identification of humanitarian or development priorities. They do not provide comprehensive data on individual topics, but seek to provide a balanced overview. The City Profile affords an opportunity for a range of stakeholders to represent their diagnosis of the situation in their city, provides a basis for local discussions on actions to be taken and helps to make local information and voices accessible to external stakeholders seeking to assist in development response.



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## LIST OF ABBREVIATIONS AND ACRONYMS

CU	Compact Units
ISIL	Islamic State of Iraq and Levant (or ISIS or Daesh, the abbreviation of the group's name in Arabic)
ISBL	Iraq State Budget Law
GDP	Gross Domestic Product
JAU	Joint Analysis Unit
LADP	Local Area Development Plan
MCNA	Multi-Cluser Needs Assessment
MOD	Main Outfall Drain
PPM	Parts per million
PDS	Provincial Development Strategy
WTP	Water Treatmnet Plants

# 1 EXECUTIVE SUMMARY

Basra has a long and celebrated history as one of the most important cities in the Middle East, especially in the Arabian Gulf, as a major port and trading centre located in the delta where two great rivers, the Euphrates and the Tigris, come together to empty into the sea. The city was once celebrated as the Venice of the East for its many canals and its elegant buildings with wooden screens and lattices that lined the streets busy with traders and merchants from India, Egypt and around the Gulf.

Basra was amongst the leading cities of the Ottoman Empire until the Governorate was incorporated into the British Empire in 1917, and thereafter as the second largest city of the Republic of Iraq. For the past 70 years or so, however, Basra has been in disarray if not decline. It has not been able to consolidate and develop, as its status as a major city with considerable financial resources and potential would suggest.

While subject to external events and interventions such as the Allied Invasion of 2003 and the rise of ISIL in 2014-17 that impacted the city of Basra, much of the greater impact and damage to the infrastructure and operations of Basra has come from internal, "self-inflicted" destruction through the reluctance to act by administrators and managers of the city. As much of the damage has been a result of neglect and inability to act than it has been as a result of willful intent. Not only has this extended and intensified the impact of external events, it led to a general protest by Basrawis against their government: National, Governorate and Municipal.<sup>1</sup> Basra is a case where the failure of urban government to manage has multiplied the impact of both external and environmental forces.

## PROBLEMS

The Basra Directorate of Planning of the Ministry of Planning, Regional and Local Development Department,

presented the following summary of the reasons for the problems in housing and urban services: except, perhaps, for the first and the 10th, all of the rest are primarily the result of Government action (or inaction).

1. High rates of population growth in Basra Governorate to more than 3% and the lack of an accurate population census for recent years.
2. (Allocated) residential lands are not serviced, which is an obstacle for citizens to build houses.
3. Suspension of government housing projects in 2014 due to the financial crisis.
4. Clear governmental (foot-dragging and continuing with) centralization and not applying the Law No. (21) on the expanding of governorates' authorities.
5. Depletion of unfinished residential projects and its exposure to vandalism and robbery.
6. Lack of clear and transparent mechanisms for the distribution of apartments when completed and not targeting the vulnerable groups for these apartments.
7. Use of outdated and traditional means and methods of construction.
8. Insufficient factories for producing different construction materials, for example those suitable for heritage conservation.
9. Weakness in planning and the absence of clear policies for the housing sector by housing policy makers in the federal government.
10. Insufficient residential lands because most of the lands are reserved for infrastructure for oil exploitation or house (underground) archeological sites.
11. Insufficient mobilisation of the private sector and poor mechanisms to activate this sector.



FIGURE 1. Basra has seen significant unplanned developments (diagram, not actual settlement locations)

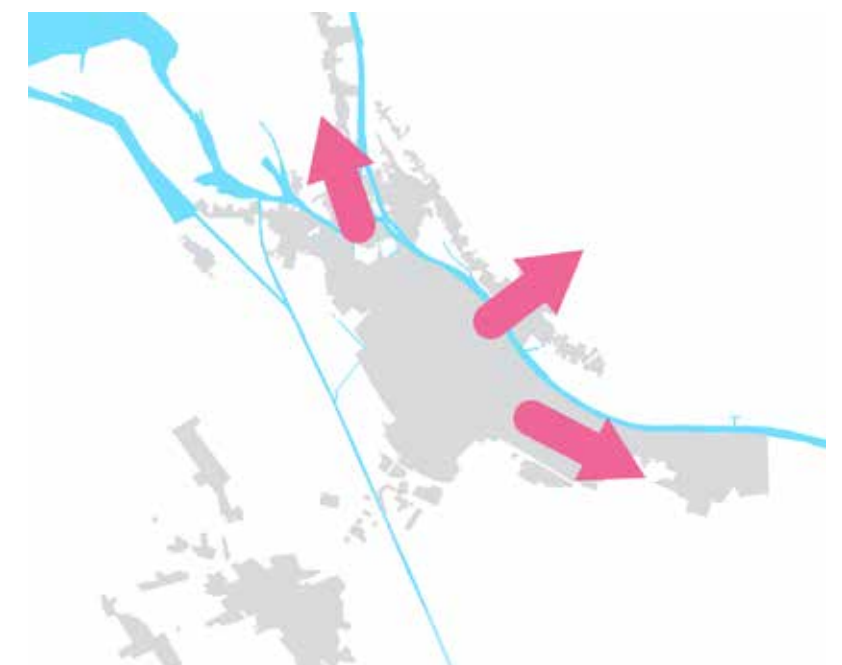


FIGURE 2. At the same time, Basra has expanded naturally along the Shatt al-Arab

1. Norwegian Refugee Council (August 2018), "Basra Fact Finding Mission Report #1"

## PROPOSALS

During the past two decades, national and international experts have put forward almost a dozen plans and proposals. Central to these have been the need for greater access to financial resources and enhanced capability for local decision-making. While the Governorate and Municipal staff and institutions have supported this, it has largely not been possible to spur local initiative and action.

While it is true that it is the National Government that has the legal authority and the financial controls, in the absence of any meaningful change in the status quo, Basra needs to take greater control over its own destiny and development. While waiting for the central government to act, there are some actions that can and should be taken now, especially those that can be carried out without additional external funds or permissions.

## REALITY ON THE GROUND

While most efforts to implement urban plans have largely been ineffective, this has not curbed the growth of the city. Unplanned settlements along streets and on public land (about 24,000<sup>2</sup> dwelling units), rapid urban expansion in neighbouring agricultural areas (about 84,000 dwelling units), and subdivision of plots and apartments has been the unregulated market response to the growing needs of housing.<sup>3</sup> Even though these developments are rarely welcomed by policymakers, they are also not easily reversed. Even not taking into consideration the social ramifications of attempting to reverse these developments, it is clear that sunk cost in these dwellings alone, which cannot be matched in terms of government investments in any foreseeable amount of time, should be a justification to incorporate these developments into any housing strategy as an asset.

2. Based on estimates using satellite imagery by UN-Habitat and figures for informal housing from Ministry of Planning (2017)

3. Based on estimates using satellite imagery (Map 8 and 9) by UN-Habitat and figures for informal housing from Ministry of Planning (2017)

## ACTIONS

1. Basra already has plans and initiatives that are waiting for funding (mostly from Central Government) and implementation. Most of these, such as the new and extended cities, will take 5 to 10 years to develop and have any impact.

2. In parallel, some additional initiatives should be undertaken that recognise current realities and incorporate existing informal settlements and houses so that there is no conflict with the likely future development of Basra:

- » Houses on “agricultural land” on the West Bank, using the proposed informal settlements law as a basis for planning (legal incorporation can await the passing of the law);
- » Houses without planning permission or authorisation;
- » Identification and planning of existing central area sites and areas that had been cleared under previous plans but have not been developed so far.

3. To assist and enhance both the short and long-term strategies, there are supporting tasks that can further facilitate the development of Basra:

- » Establishing a Public-Private task force to identify potential areas and actions for greater self-reliance and increase resilience of Basra;
- » Formulating an action plan for institutional, legal, and regulatory reforms;
- » Empowering the Municipality of Basra to increase self-reliance and resilience and to meet its obligations and fulfil its mandates;
- » Increasing civil society’s and local directorates’ involvement in local planning and decision-making;
- » Streamlining the development approval process, devolving powers to the local level;
- » Initiating a comprehensive capacity building and training programme for urban development planning and action.

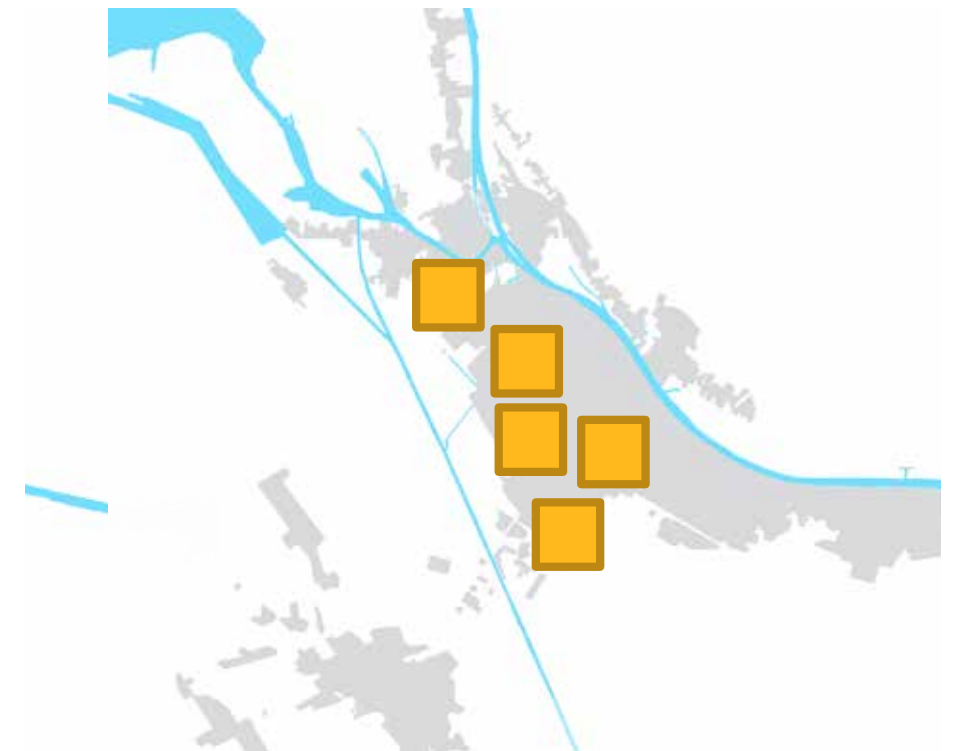


FIGURE 3. Unplanned settlement upgrading and densification -> See page 50 for proposed strategies



FIGURE 4. Management of urban growth -> See page 50 for proposed strategies





Old Basra



## 2 CONTEXT

### RECENT CRISES

The two great rivers of the Tigris and Euphrates converge into the Shatt-al-Arab which flows through Basra before emptying into the Arabian Gulf. Basra was once dubbed the “Venice of the East” for its many canals and elegant buildings that lined the streets busy with trades and merchants from around the Gulf, Egypt and India. Due to its location, Basra has a long and celebrated history as one of the leading cities in the Middle East and as a major port and trading centre.

In the Ottoman Empire, Basra was amongst the leading cities until the governorate was incorporated into the British Empire in 1917, where it then became the Republic of Iraq’s second largest city. However, for the past 70 years or so, the port city has been in a state of decline, and the once vibrant freshwater lifeline is now polluted and the canals are filled with pools of stagnant water. Basra has not been able to consolidate and develop as its status as a major city with considerable financial resources would suggest.

### EXTERNAL DISRUPTIONS

Basra has been adversely impacted by a series of events that it could neither have seen nor have prepared for.

The first of these was the War with Iran from 1980-89, which was fought essentially over the control of the oil fields straddling the border between Iraq and Iran along the Shatt Al-Arab. Basra was close enough to the border to be targeted by Iranian artillery and subjected to destruction and disruption. Moreover, to deprive the Iranian army of cover, the palm trees that were once the pride of



Basra and a mainstay of its economy were cut down. Only some 12 million trees survived from the 30 million that used to be there. For similar, strategic reasons, the great marshes were also dammed and drained. This brought in the first wave of refugees to the city.

In 2003, after the invasion of Iraq by western forces, Basra witnessed some of the fiercest fighting against the occupying British troops as well as heightened tensions and jockeying for power after they withdrew.

More refugees and displaced populations came to Basra following the attacks by Daesh, largely in neighbouring governorates.<sup>1</sup> The necessity to confront Daesh also meant a diversion of central government resources away from Basra and its needs.

### INTERNAL STRIFE

Since 1990, there have been a number of instances of disruptions due to the internal differences amongst Basrawis – essentially reflecting the differences and disruptions in the country. These range from the reprisal attacks against the Shia for their protests against the regime after the Iraqi withdrawal from Kuwait. Baghdad also blocked investment in infrastructure and turned Basra into Iraq's "poorhouse". Since then there has been inter-sectoral fighting between Shia and Sunni as well as amongst those with different political persuasions and allegiances.

1. Human Rights Watch (July 2019), "Basra is Thirsty - Iraq's Failure to Manage the Water Crisis"

In 2008, the Iraqi Army launched an operation to put an end to sectarian fighting. The city has largely remained free of internal fighting since then. However, the years of neglect, disruption and destruction of the physical and social infrastructure of Basra have taken a toll on the city. Things came to a head in 2018 with major breakdowns in urban services and infrastructure, and Basra was threatened by a cholera epidemic. While Basra has suffered from the degradation of its water sources for decades, a full-blown crisis erupted in the summer of 2018, when some 118,000 people were hospitalized due to symptoms related to the quality of the water.<sup>2</sup> Salt water mixed with fresh water resulted in brackish water and reduced the effectiveness of chlorine that would have killed bacteria.

As the water system has not been updated for over 30 years, sewage from broken pipes mixed with drinking water has resulted in a high presence of bacteria.<sup>3</sup>

An NRC field mission to Basra in August 2018<sup>4</sup> found that social unrest at the time was the "product of the intersection of longstanding grievances towards political corruption, government neglect and unemployment, as well as the socioeconomic impact of a chronic water crisis". Grievances were compounded by the additional pressures from recent migration patterns and urbanization, caused by decreased water availability and livelihood opportunities.

2. Human Rights Watch (July 2019), "Basra is Thirsty - Iraq's Failure to Manage the Water Crisis"

3. The Independent (September 2018), "The major uprising in Basra and southern Iraq is what the world should be worrying about in the Middle East right now"

4. Norwegian Refugee Council (August 2018), "Basra Fact Finding Mission Report #1"

### PRIORITIES

According to the 2013 JAU Factsheet<sup>5</sup> on Basra, by far the highest priority for Basrawis was to have a proper and functioning electricity supply (52%) followed by security (18%), water (12%) and sanitation (10%). The recent events in Basra in 2018 followed by the events in Baghdad in 2019 show that more than power-politics, and even the economy, it is the simple necessities of life that need to be high on the agenda of any action programme.

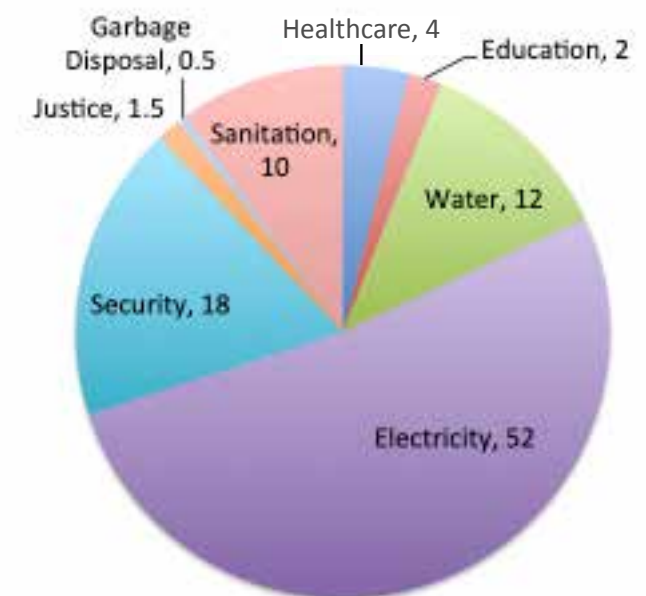


FIGURE 5. Priorities of Basrawis. Source: JAU Factsheet, 2013

5. Joint Analysis Unit (2013), "Basra Governorate Profile"

### 3 SPACE AND URBAN INDICATORS

The District of Basra has almost 50% of the governorate's population, and is one of the most urbanised in Iraq, with over 80% of its nearly 1.5 million population classified as "urban".<sup>1</sup> The district is made up of two sub-districts: Central (Markaz Al) Basra in the South and Hartha in the North. Though Central Basra is only about half the size of Hartha, almost 90% of the Sub-District's population live there. Central Basra is made up of the old city of Madina Al Basra Qadima, located along a canal off the Shatt Al-Arab as well as Al Rabaat and Al Khaleej Al Araby with the docks and shipping businesses along the Shatt Al-Arab. The layout of the streets and buildings of Central Basra owe much to the original city. Some new buildings, especially government and modern commerce have emerged, but there are numerous empty plots and dilapidated buildings, a result not only of the damage from recent events but also the abandoned urban renewal project.

Urban growth in Basra happened primarily in the south-eastern part of the city. In photographs dating from 2007, the land on the southern bank of Shatt al-Arab showed mostly scattered residences within an agricultural area. However, by 2017 these areas showed significant intensification as well as urban expansions. Development patterns show that Basra has expanded linearly following the river's curve and not in circular or radial patterns.

1. IOM (2015-2016), "Community Stabilization Handbook"

The construction took place along Route 8 between the city of Basra and the neighboring Zubair district. On the northern shore of the river, there were two entrances along the ring road, as well as a gradual bypass on the farmland towards the shore. The industrial growth center in Zubair showed a gradual expansion in the city space towards the southwest, to fill the land between the two roads leading west to the highway, and to the south to Um Qasr port. Urban expansion intensified in the triangle of land limited between the road, in addition to increase of space. Throughout a period of nine years, the area located to the north from the road leading to the highway, witnessed a great movement of new construction. The Northern Qurna center is located at the confluence of Tigris and Euphrates rivers north Basra, and it shows limited urban growth.

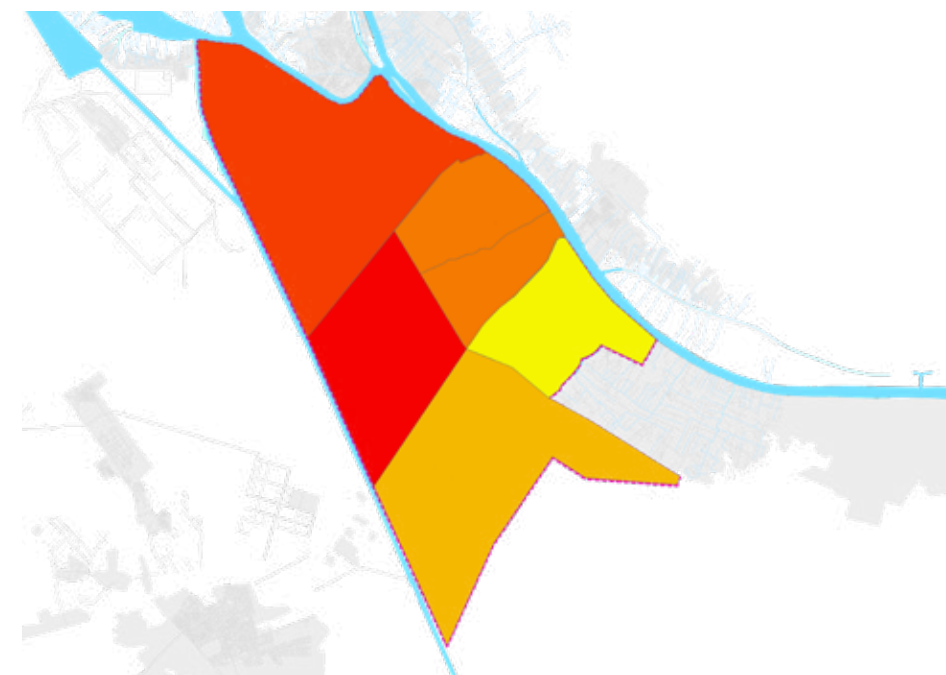


FIGURE 6. Basra population per district

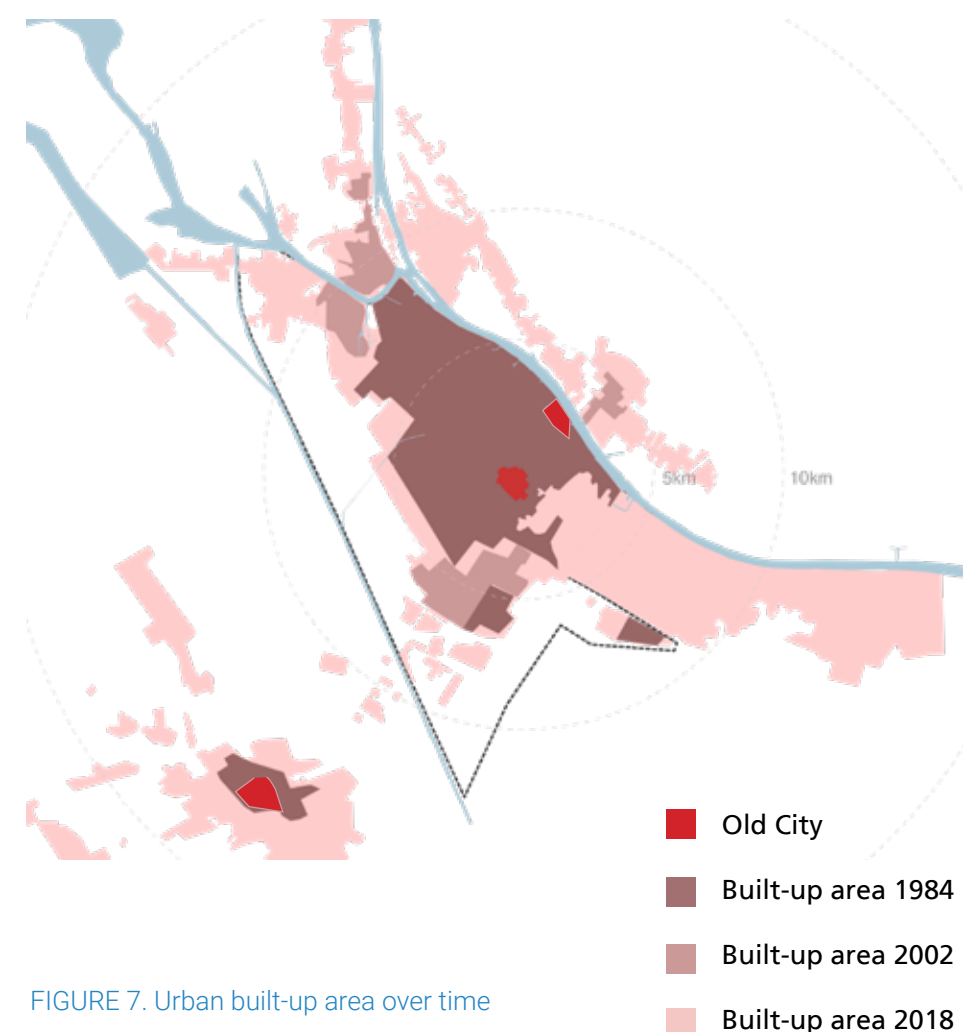


FIGURE 7. Urban built-up area over time

# 4 GOVERNANCE

## GOVERNANCE STRUCTURE

Iraq’s “governorates” have traditionally had the same name as their largest “capital” city. The governorates are divided administratively into districts or “qadha”, which are in turn divided into sub-districts or “nahia,” one of which is the Qadha Centre. Basra is the name of one of the three Nahia of Al-Basra Qadha, and is the Qadha Centre and also the capital of Basra Governorate. Moreover, within Basra, there is a part of the city called the “Medina” or original (inner) old city of Al-Basra.

While in many cases the context makes it clear as to what is being referred to as “Basra”, often it is not. Furthermore, while administrative jurisdiction and physical location may be established by such demarcations and boundaries, many of the everyday activities of people and economies are not so easily contained and there may be considerable flows across boundaries that are usually not physically demarcated. For the purposes of the Basra Urban Profile, therefore, a more nebulous definition of the Basra Urban Area will be used for activities and structures that clearly form an integral part of “Basra” though for legal and administrative purposes they may be segregated. These boundaries and divisions are shown in Figure 8.

The major spatial units of governance in Iraq are the “governorates”, and Law No. 21/2008 outlines the decentralisation of political authority to the governorates in Iraq. However, the devolution of powers has not been adequately coupled with the necessary administrative and financial decentralisation measures to the sub-national levels.

With an area of 19,070 km2, the Governorate of Basra occupies 4.4% of total area of Iraq.<sup>1</sup> It has joint administrative borders with Missan, Thi-Qar and Muthanna governorates; and it has joint international borders with Iran to the east and the State of Kuwait to the south. To the southeast is the Arabian Gulf where the Shatt al-Arab river empties the waters of the Tigris and Euphrates.

1. JAU (November 2013), “Basrah Governorate Profile”

The governorate is strategically and economically important as it is home to 7.2% of Iraq’s population (2,602,577 people in 2015);<sup>2</sup> it holds a significant proportion of Iraq’s oil reserves; and it hosts the country’s sole sea access and shipping hub. The provincial capital Basra City concentrates the majority of the urban population; Basra is located 540 km from Baghdad, 170 km from Ahwaz in Iraq, and 170 km from Kuwait City. The southwestern part of the governorate is mainly arid and almost inhabited. Basra shares part of the Al Ahwar marshland with Thi Qar and Missan, and it shares the desert with Muthanna. Basra Governorate is sub-divided into seven qadhas – Basra, Abu Al-Khaseeb, Al-Zubair, Al-Qurna, Al-Faw, Shat al- Arab and Al-Midaina – and 18 nahias, shown in the table below.

2. IOM Iraq (March 2017), “Integrated Location Assessment Part II: Governorate Profiles”

#	District	Subdistrict
1	Al Qurna	Al Thagar Nahia
2	Al Basrah	Al Hartha
3	Al Zubair	Markaz Al Zubair
4	Abu Al Khaseeb	Markaz Abu al Khaseeb
5	Al Mahmoudiya	Al Howweir
6	Al Fao	Al Bahhar
7	Al Zubair	Um Qasr
8	Al Qurna	Markaz Al Qurna
9	Al Mahmoudiya	Markaz Al Midaina
10	Abu Al Khaseeb	Al Siba
11	Al Qurna	Al Dair
12	Al Mahmoudiya	Talha
13	Shatt Al Arab	Markaz Shat Al Arab
14	Al Zubair	Safwan
15	Shatt Al Arab	Outba
16	Al Basrah	Markaz Al Basrah
17	Al Fao	Markaz Al Faw
18	Shatt Al Arab	Al Nashwa

TABLE 1. List of districts and subdistricts in Basra

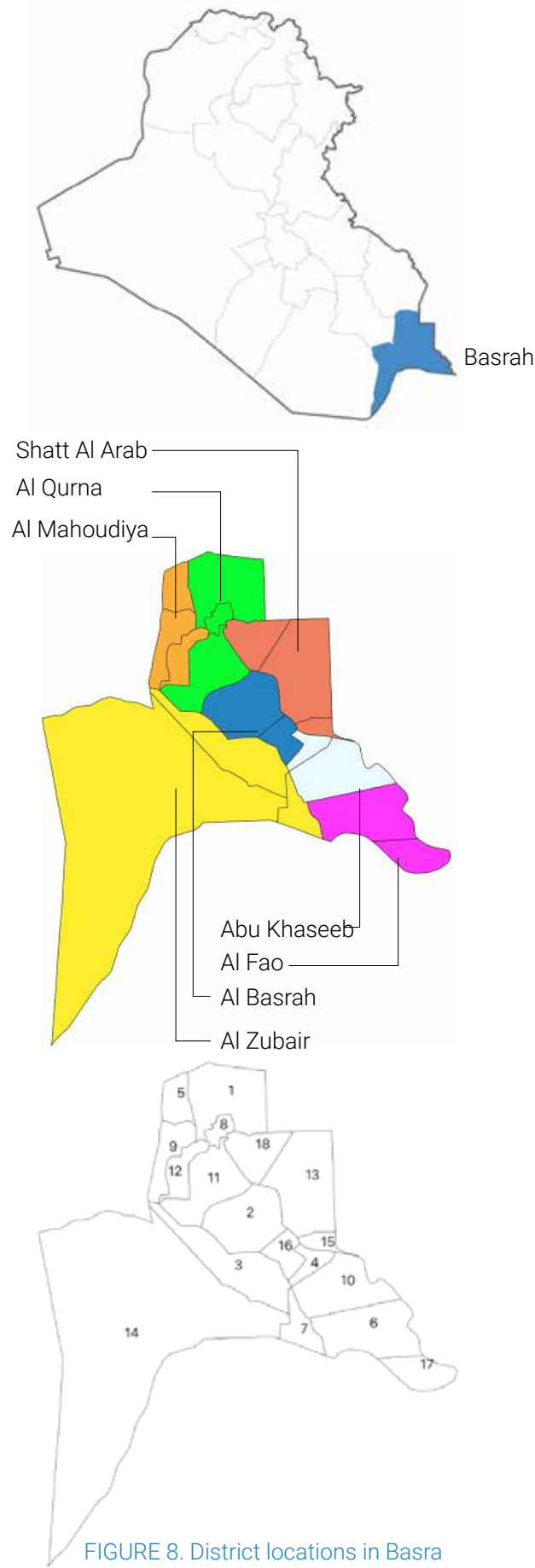
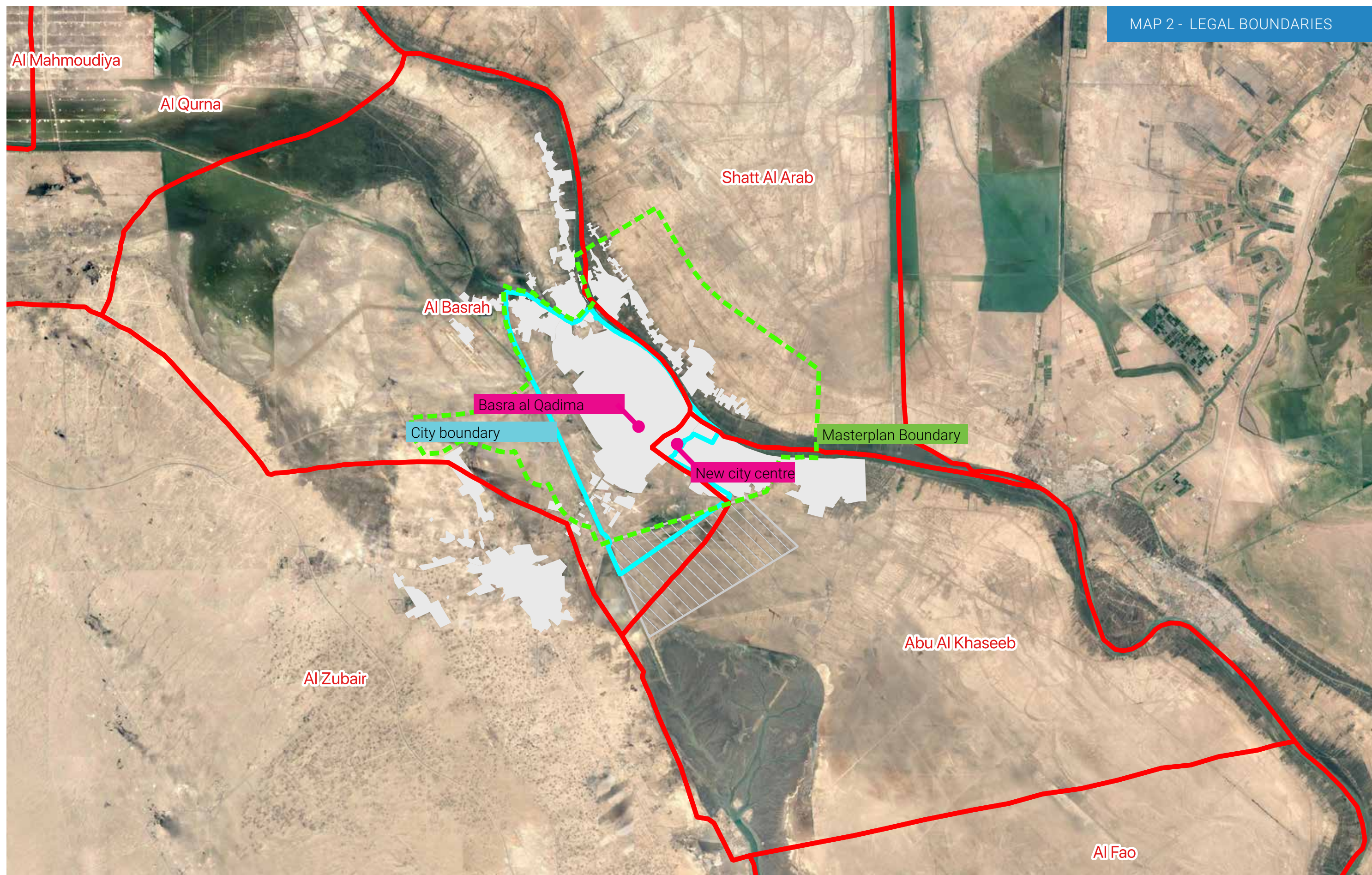


FIGURE 8. District locations in Basra



MAP 2 - LEGAL BOUNDARIES





PLANNING PROCESSES, INCLUDING MASTER PLANS

Although Iraq has long had a strong centrally planned economy, the control of urban management and development was only nominally subject to Urban Master Plans. Though few were superseded before they could be fully implemented, their impact still persists in parts of cities. Starting from the late 1950s with Master Plans for Baghdad (Frank Lloyd Wright, and later by Doxiadis), the exercise was extended to many Iraqi cities, including Basra (by PolServis). In the 1970s, a major national housing planning exercise was initiated that still provides the rationale and basis for local area plans in Iraq.

The process of plan-production has remained the same: a Plan is commissioned, increasingly through a tendering procedure and developed with varying degrees of local interaction. Once submitted, the Plan usually does not get legally adopted, but may be referred to by various agencies when implementing specific projects. Similar to the Master Plan, is the Provincial Development Strategy (PDS), and the Local Area Development Plan (LADP) that identify the medium-term and immediate priorities of Provincial/Governorate or Local Government within a particular development perspective. These have less of a spatial emphasis and focus more on identifying projects, but have the merit of greater local participation in their production.

On the other hand, there are National and Sector Development Plans that have a direct bearing on and influence planning in Basra. The extent to which Basra is impacted depends partly on the level and extent of implementation of the Plan, and partly on the degree and extent to which its scope and application are relevant to Basra.

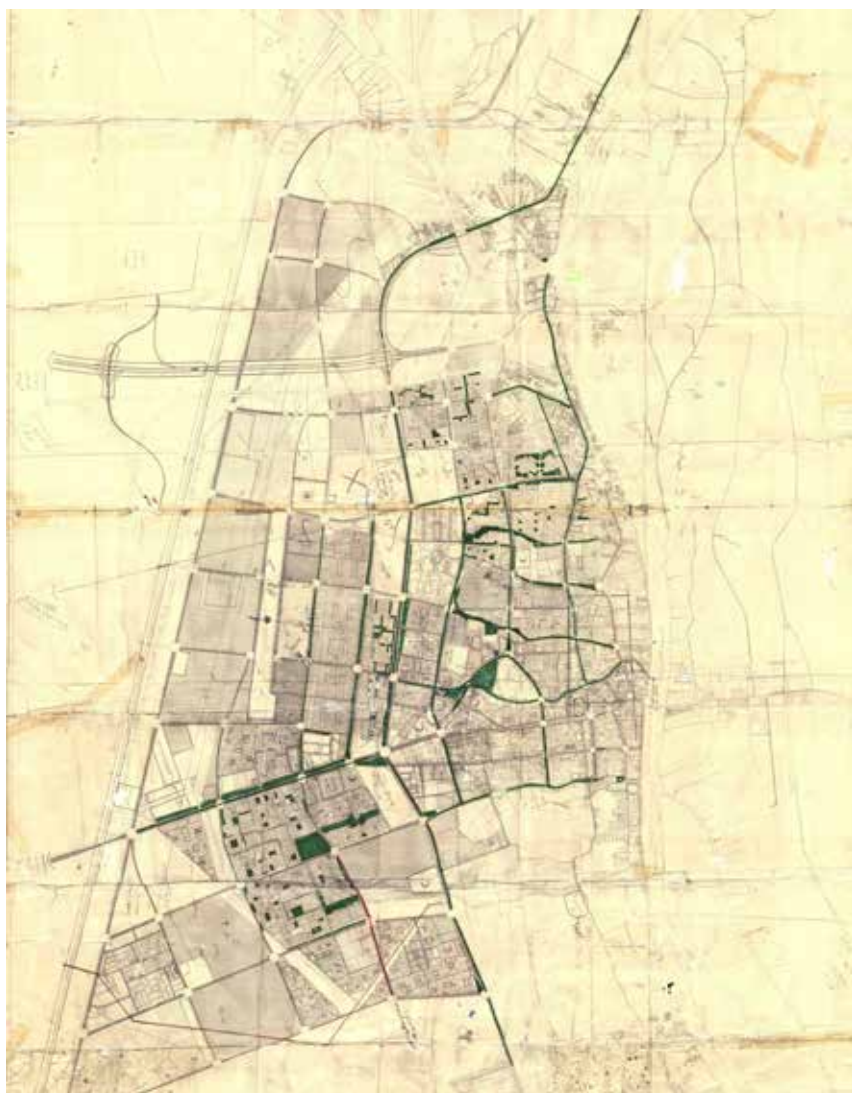
In summary, while Master Plans or Sector Plans are commonly drawn up and referred to, their efficacy as a tool for future planning, preparation or production is, at best, dubious. While little evaluation has been done regarding the utility of urban

Master Plans, on the basis of experience elsewhere, plans are more likely to be implemented if the requisite funding and legal backing is incorporated. Moreover, the more focused and localised the planned area, the greater the chance of implementation.

Partly for the above reasons and because of the continued insecurity and unpredictable conditions that are likely to prevail, at least in the short run, the more effective tool for planning action has been the Annual Budget that includes operational as well as development expenditure. Generalising on the experience, the table below suggests criteria that are more or less likely to produce successful plans.

	ASPECTS OF PLAN	MORE LIKELY TO SUCCEED	LESS LIKELY TO SUCCEED
1	Plan Objectives	Simple	Complex
2	Plan Implementation Period	Short	Long
3	Implementing Parties	Few	Many
4	Finance	Internal/Self-Financed	External/Borrowed
5	Costs	Low	High
6	Technology	Existing/Familiar	New/Invented
7	Needs	Immediate	Future

TABLE 2. Suggestions for more successful planning



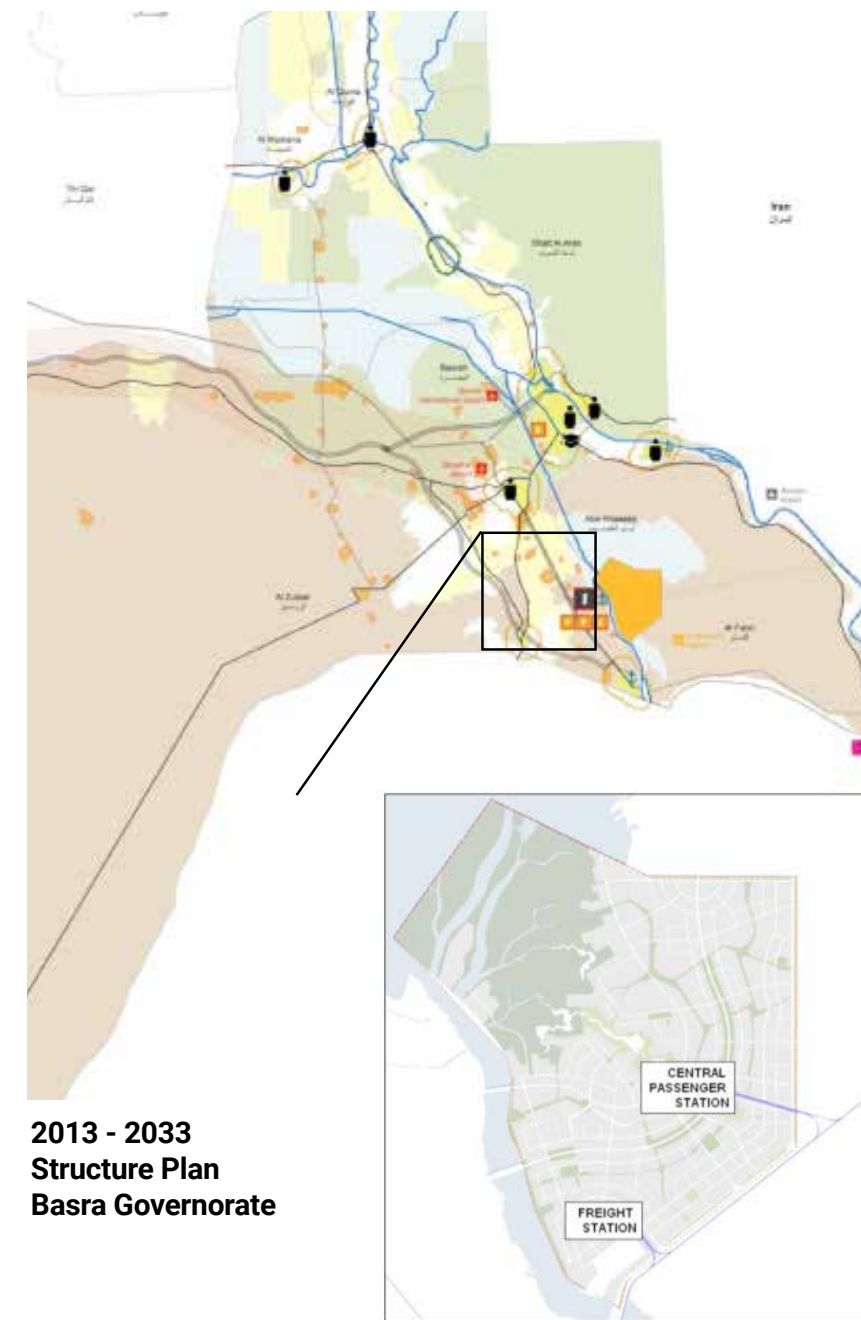
**1970 - 2000**  
**Masterplan Basra**

The 1970 masterplan of Basra expired in 2000. The masterplan only covered the area south of Basra, up until the southern canal.



**2010 - 2035**  
**Masterplan Basra**

The 2010-2035 masterplan covered the development of Basra City within the expanded city borders, notably addressing urbanization to the north of the Shatt Al Arab and to expansions in the south of the city. However, in both areas, the city is facing great challenges with implementation of the plan because of new findings of oil, clashes with existing underground infrastructure, overlapping of underground heritage sites with development areas, and the high cost of the suggested infrastructure networks. Notably, the development areas to the east of the cities are already largely urbanized, so the post-facto implementation of the suggested trunk infrastructure is unlikely to be successful as it entails expropriation of many plots.



**2013 - 2033**  
**Structure Plan**  
**Basra Governorate**

**Madinat Al Nakheel**

The structure plan for Basra Governorate covers around the same period as the masterplan. Notable here is the inclusion of a large new town "Madinat Al Nakheel" or "Palm City". This aligns with the ministries vision to deliver housing at scale in the region. However, it has been proven to be challenging to find investors for the plan as the area is hard to access, and the prohibitively high cost of realizing infrastructure.



## BUDGET AND BUDGET EXECUTION

### The financial resources of the governorate (based on Law No. 21) consist of:

1. Budget transfers to the governorate from the federal government, sufficient enough to carry out its missions and responsibilities, including development and reconstruction projects, in accordance with its population and the degree of deprivation to ensure the balance development of the different regions of the country.
2. Revenues generated in the governorate – except those from oil and gas – including:
  - Revenues generated from the governorate services and investment projects;
  - Proceeds from taxes, fees and fines imposed in accordance with federal and local regulations in force within the governorates – incl. taxes imposed by the council on companies operating in the governorate in compensation for environmental pollution and damage caused to the infrastructure, and half of the revenues accrued from border crossings;
  - Proceeds from the sale and lease of public movable and immovable assets – including rented land used by companies;
  - Donations and gifts that may be received by the governorate in a manner that does not contradict the Constitution and federal regulations.
3. Revenues of the governorate generated from oil and gas: The amount of revenue share for the governorate is determined on an annual basis through the country's state budget law (SBL) and is therefore subject to the parliament's yearly modifications and approval. Revenue from oil is combined with other revenues in the budget, but is distributed to the governorates by applying a derivation, which calculates the amount of oil revenue relative to the governorate's production levels, to determine petrodollar allocation. Other than Iraq's annually drafted budget law, there is no separate statutory system for subnational government oil revenue.

4. A share of the revenues of local authorities sufficient for them to carry out their missions and responsibilities in accordance with the governorate population.

### The procedure of preparing the annual budget is as follows:

1. The Governor submits a draft budget for development of the governorate, its Qadhas and Nahias to the Governorate Council for approval; the Council needs to endorse the draft budget;
2. The Council approves the draft depending on the plans set and submitted by the Councils of Qadhas and Nahias to the Ministry of Planning. On principle, the most affected areas within the governorate must be given priority and governorate allocations must be distributed to qadhas and nahias proportionally to their population after the exclusion of strategic projects that benefit more than one qadha or nahia, given that project cost does not exceed 20% of the governorate allocations;
3. The governor has exclusive power to implement the approved budget and the Governorate Council is responsible for implementation monitoring;
4. Following audit by the Federal Audit Bureau, and if necessary, budget adjustments are carried out in the budget of the following year.

The reality of the budget preparation process, however, is that the stated objectives and intentions of Law No. 21 are not fulfilled. On the one hand, there are the larger, overall constraints and obligations of the national government and its resources, and on the other, the room for political or financial manoeuvre for city and governorate councils is so

limited, it is almost meaningless.

Basra's total expenses (in 2016, according to LADP II) excluding amortizations were twenty-one billion Iraqi dinar (around 16.9 million US\$); i.e. approximately 17,000 IQD per inhabitant (or 14 US\$). However, 73% of this amount was for salaries and wages.

The revenues from commercial activities constitute only 12% and those related to services were 31% of the total, mostly constituted of rents revenues of real estate assets. The transfers from central government equate to 48% of total revenues, but mainly cover the salaries and wages of senior staff of national ministries operating in Basra.

Income from services provided to households are either not chargeable by law, or the charge is so low as to not even cover costs. Finally, the municipalities have no direct access to residents and any dues are collected by the water service. The usual recourse for many municipalities is to sell off land, but there is very little public saleable land left in Basra, not least because much of it is protected from development for economical (petroleum production) or environmental (water catchment) considerations.

Thus, without a major change in the way services and utilities are charged, Basra has to rely on funding on development projects beyond the annual budgets – and they are dependent on either central government or private sector funding. Given the reluctance or perhaps lack of private sector investors willing to invest in urban infrastructure, some more radical approach will have to be found to upgrade and extend Basra's infrastructure.

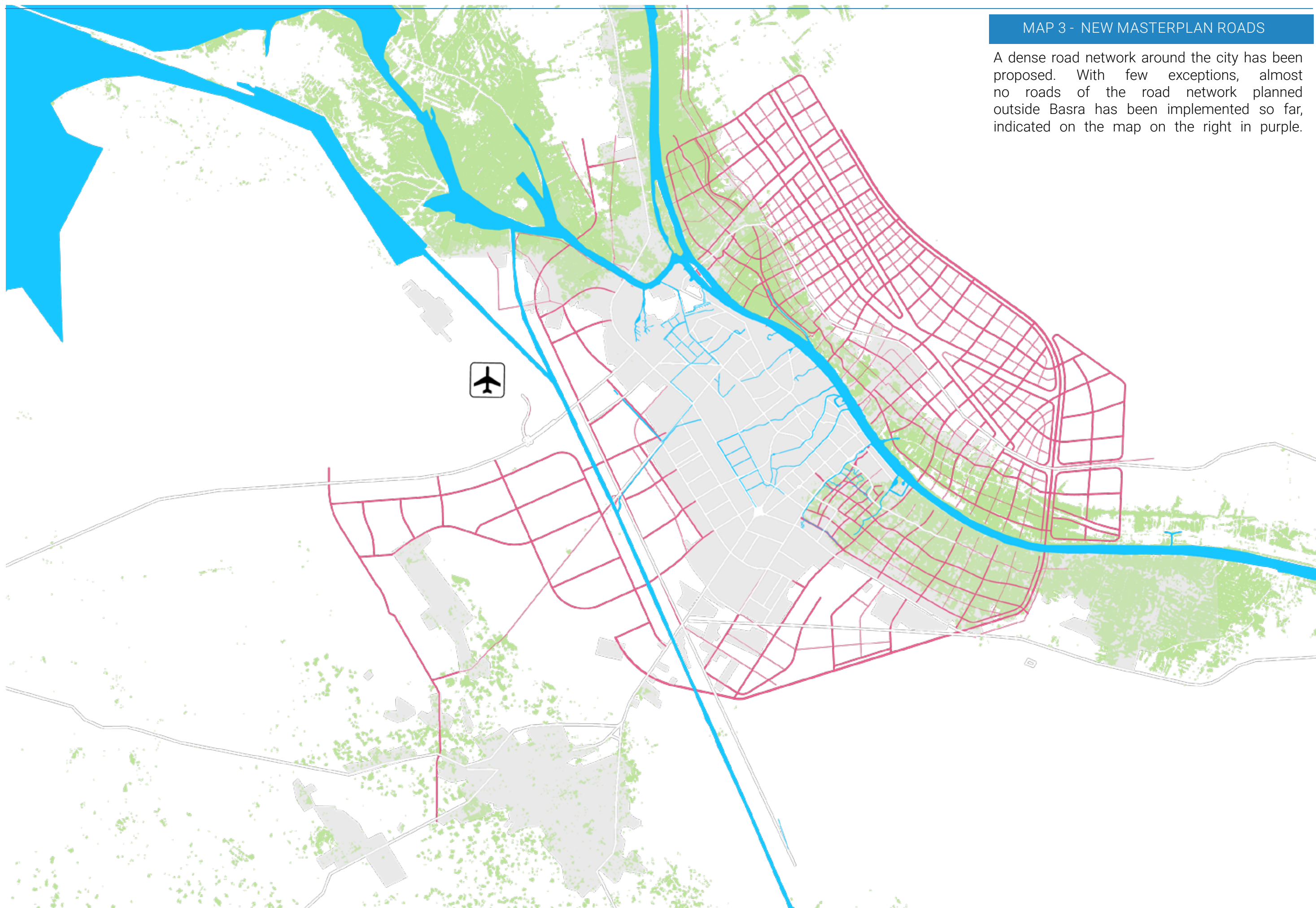
	BASRA	RUMAITHA	SHAMIYA	ALI AL- GHARBI
Population 2016	1,218,251	85,382	57,625	17,488
Expenditures IQD per individual 2016	17,290	41,071	38,459	55,592
Expenditures IQD per individual 2017	17,254		38,648	55,404
Income IQD per individual 2016	19,256	51,406	37,933	88,929
Income IQD per individual 2017	17,673		34,519	65,846
Surplus IQD per individual 2016	1,966	10,335	526	33,370
Surplus IQD per individual 2017	419		4,129	10,443
Salaries % share expenditures 2016	73	31	60	75
Salaries % share expenditures 2016	74		60	81

TABLE 3. Comparison of individual expenditures, income and surplus in IQD



## MAP 3 - NEW MASTERPLAN ROADS

A dense road network around the city has been proposed. With few exceptions, almost no roads of the road network planned outside Basra has been implemented so far, indicated on the map on the right in purple.



## 5 ECONOMY

Historically, the locational advantage of Basra at the head of the Arabian Gulf on the banks of the Shatt Al-Arab just before it empties the waters of two of the Middle East's major rivers, the Tigris and the Euphrates, made Basra one of the most important ports in the region.<sup>1</sup> With traders from around the Gulf as well as Egypt and India, Basra had a vibrant economy supplemented by agriculture (primarily dates) and pearls. With the discovery of one of the largest reserves of oil and its increasing exploitation and expansion since the last century – the economy of Basra is dominated by the oil sector and the governorate is the major producer, processor and exporter of petroleum products.<sup>2</sup>

Basra has a multitude of economic activities visible in its ports and land, oil terminals and industries, variety of industrial complexes, as well as through its agricultural and tourism potentials. However, Basra's economy has been degraded by the effects of a highly centralized and corrupt authoritarian government, by wars and sanctions, and by state dominated industry, agriculture, finance, and trade.<sup>3</sup>

The main economic issues are as follows:

- Damaged industrial sector: Basra's potentially rich economic assets including its ports, oil industries, date industries, and manufacturing companies, lay damaged and neglected and in need of major financial resources and investment plans to revitalise and support them.<sup>4</sup>
- Of the six cargo ports, only two, Khor-Al-Zubair and Umm Qasr are currently operational. A proposal for the establishment of a new port in Khor-Abdallah was initiated

in 2004. The movement of freight along the main inland waterways of the Shatt-Al-Arab and the Shatt-Al- Basra have been hindered by damaged infrastructure, ships, bridges blocking access, heavy siltation, and lack of security. In addition, the water level has decreased significantly over recent years due to the construction of dams in Turkey.

- Basra is considered the prime outlet for oil exportation, because of the existence of its ports and because petroleum refining is one of their major industries. Oil companies such as Al-Jenoub, exploration and refinery companies, oil factories, as well as their related activities, are able to generate around 7000 job opportunities within the region.<sup>5</sup>

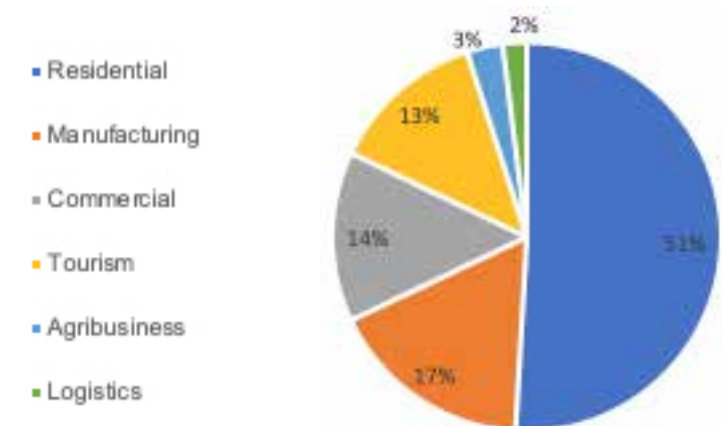
- In 1972, the Basra governorate was chosen to be one of the development nodes of Iraq. A number of industries were established such as petrochemicals plants, natural gas liquefier plants, Al-Jenoub Gas Company, iron, steel and brick factories, prefabricated building parts, asbestos pipes, and fertiliser plants in Khor-Al-Zubair.

- Two industrial areas were established in the city for public and private industries, of which only one has been developed.

### A. GDP SECTOR SHARE

The dominant sector of the economy is oil production, which makes up almost 90% of the Governorate's GDP. Agriculture has a leading role in meeting the needs of the poorest regions of the province. The share of agriculture is only 3% of GDP. The distribution of other sectors in GDP is 12% of the industry

5. UN-Habitat Iraq programme/Sahar Rassam (May 2006), Urban Sector Strengthening Project Planning and Development Control in Basra: Existing Systems and Recommendations for Improvement



Source: Basra Investment Commission June 2019

FIGURE 9. Sector share of total investment in Basra Governorate

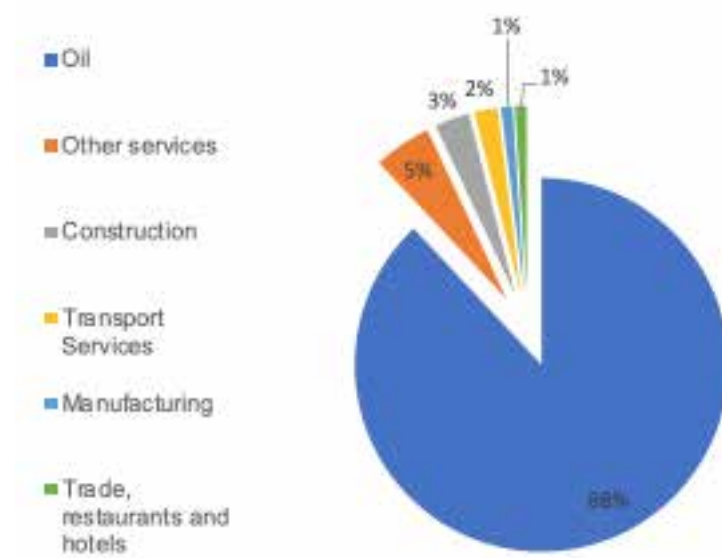


FIGURE 10. GDP sector share in Basra Governorate (2010)

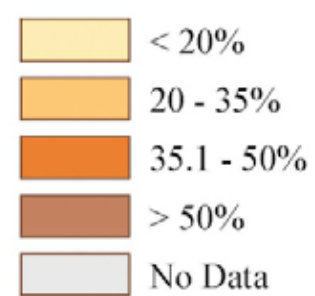
1. NCCIRAQ (December 2015), "Basra Governorate Profile"

2. EASO (February 2019), "Country of Origin Information Report: Iraq key socio-economic indicators"

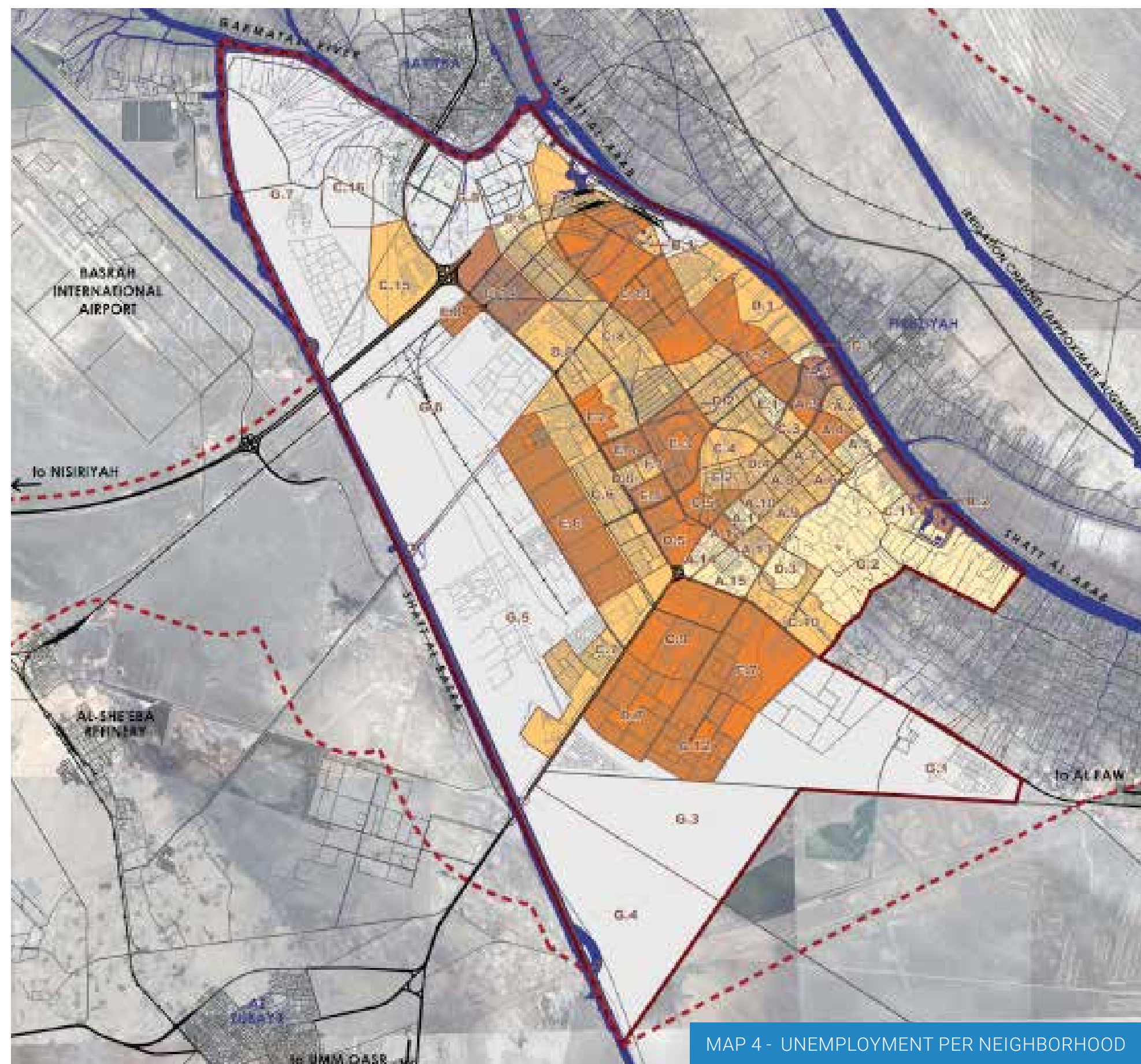
3. The Guardian (July 2016), "Basra after the British: division and despair in Iraq's oil boomtown"

4. NCCIRAQ (December 2015), "Basra Governorate Profile"





Source:  
City of Basra Strategy Development and Master  
Plan 2012  
MMPW



and 31% of the services.<sup>6</sup>

Basra has the highest values of the production indicators among Iraqi governorates. GNI PPP per capita is US\$ 44,220, and GDP per capita is US\$ 13,785.<sup>7</sup> According to expert assessments, the GDP produced on the governorate's territory is around 59% of the national total. The oil sector is also the most important in terms of value added. Basra's economy is centered on the oil sector: in 2010, the oil sector alone contributed 88% of the gross provincial product.

However, other than its obvious spatial and environmental impact, the economic benefits of the oil sector for the population of Basra Governorate in general and on the city of Basra is relatively limited. The relative contribution to employment, income and even other economic activity is marginal.

## B. INVESTMENT, SECTOR SHARE

Apart from oil, the economy of Basra Governorate is dominated by a very large public sector. The share of the private sector is minimal despite the efforts of local and national authorities for its development.

## C. EMPLOYMENT SHARES BY SECTOR

As in the rest of Iraq, less than half of the population is part of the labour force. The participation rate for women is among the lowest in the country at 10.1%, whereas the national average is 14.7%. The unemployment rate (10.3%) is lower than the national rate (11.3%) but differs across districts with Al-Midaina district performing the worst (15.8%). Most of the labour force is employed in the agricultural sector (38.6%), while 20% works in the building and

6. UNDP Basra PDS B Final

7. UNDP Basra PDS B Final

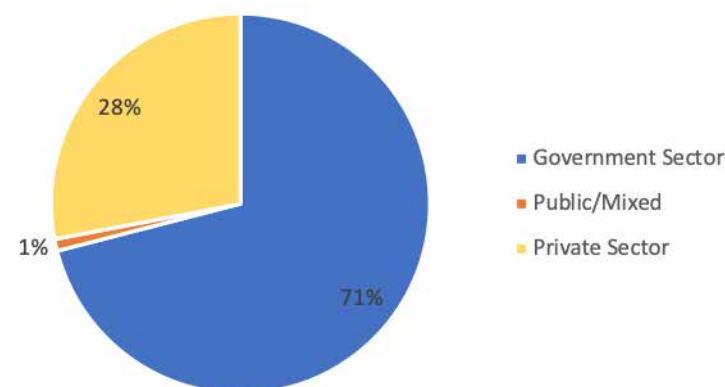
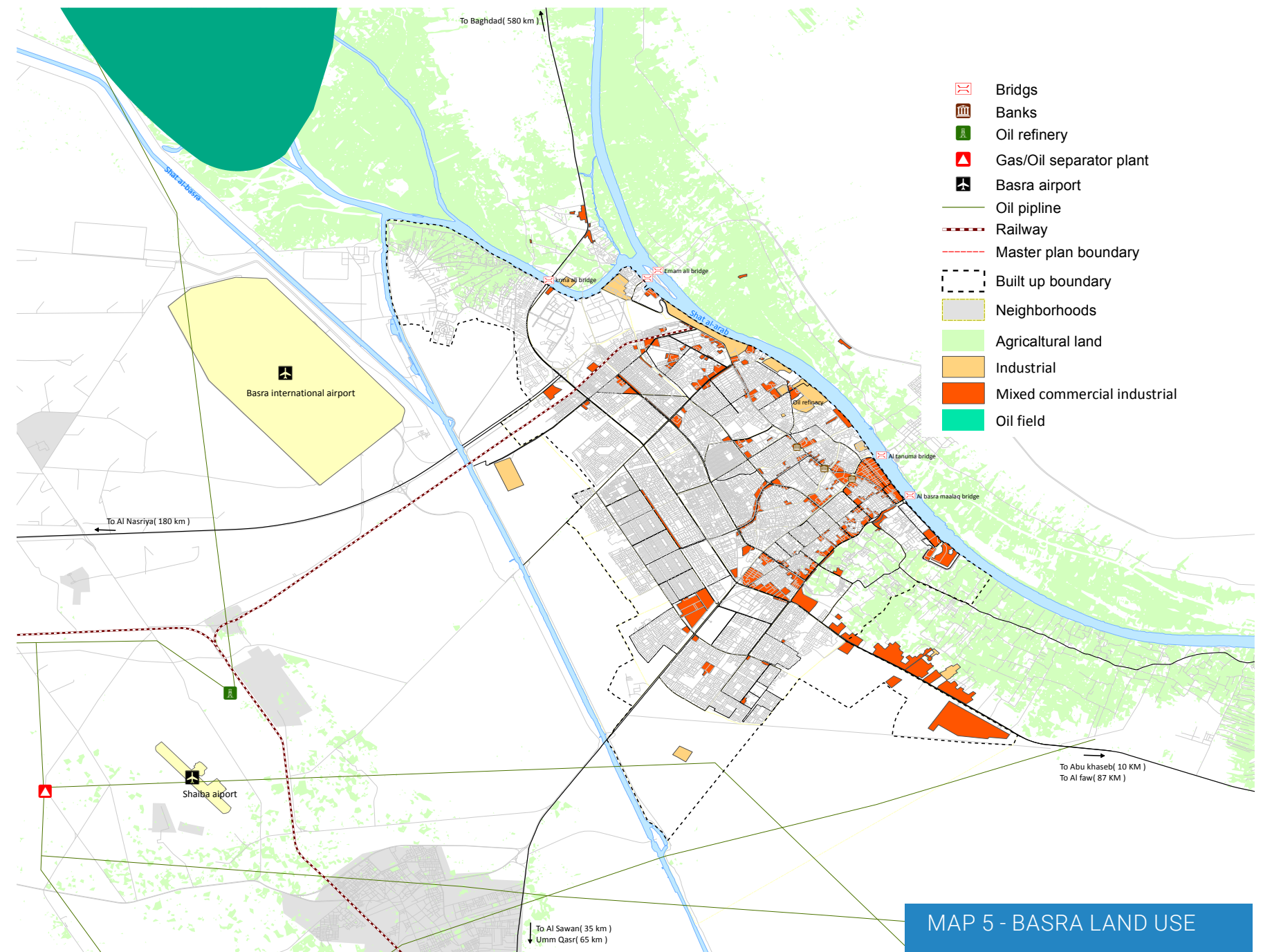


FIGURE 11. Employment Share by Sector





construction sector, 14.1% works in the wholesale, retail, restaurant, and hotels sector, and 12% works in transport, storage and communication.<sup>8</sup>

Despite the contributions of the oil sector to the economy of Iraq, annual household income in Basra stands at US\$18,065 – ranking the province 10th in Iraq. Though it contributed only 5% to the provincial GDP in 2010, the “other services” sector – including the administration but also health, social works, personal services, private households, renting, financial intermediation – has the highest labour absorption.

In Basra 27% of paid employees are employed by the private sector. The rate of paid employees to the total, aged 15 years and above by the private sector lags behind the national average (-35%), as all of the neighboring governorates present a higher incidence of the private sector than in Basra. Developing the private sector is a considerable challenge for a governorate where 71% of the paid employees are employed by the government sector or public/mixed sector<sup>9</sup>. In Basra, the government sector covers traditionally public sectors such as public administration, education and health but also part of the manufacturing and trade sectors where there are a number of public companies active in the governorate.

#### D. MAIN INDUSTRY SECTORS, LOCATIONS AND PLANS

Other than oil, the other industrial activities are the port and associated storage and transport activities located primarily along the west bank of the Shatt Al-Arab. The importance of these activities has declined from previous times, both in absolute and in relative terms, more so because of the bombings and destruction they suffered during the attacks of 2006. Many of the facilities still lie in ruins or are in bad shape – and a far cry from what they once were.

The relatively few larger-scale manufacturing, storage and distribution activities are now linked to road transportation, and are located along the Hamadan road, for example in the Mantaq Tijari Trading Area in the South of Basra. Commerce has suffered similarly, and its locations along the Shatt Al-Arab and the souks and bazaars along the East Bank of the Shatt Al-Arab, and in the Medina have lost much of their former glory. There are some attempts to attract and develop shopping malls such as the Basra Times Square Mall. But though there are plans to attract such investment, these have yet to take off. Nevertheless, the move to newer complexes built in the outer parts of Basra is likely to continue, and the trend is visible on the side of the Shatt Al Arab opposite the current city centre.

Nightlight analysis of Basra shows that the main economic centres are still around the port area and the university area. Additionally, the northern and eastern expansions show up as well as emerging activity areas. Furthermore, between 2012 and 2018, the nightlight output appears to have more than tripled, suggesting significant economic growth.

8. JAU (November 2013), “Basrah Governorate Profile”

9. Iraq Knowledge Network Survey IKN (2011)

MAP 6 - BASRA NIGHTLIGHT OUTPUT 2019

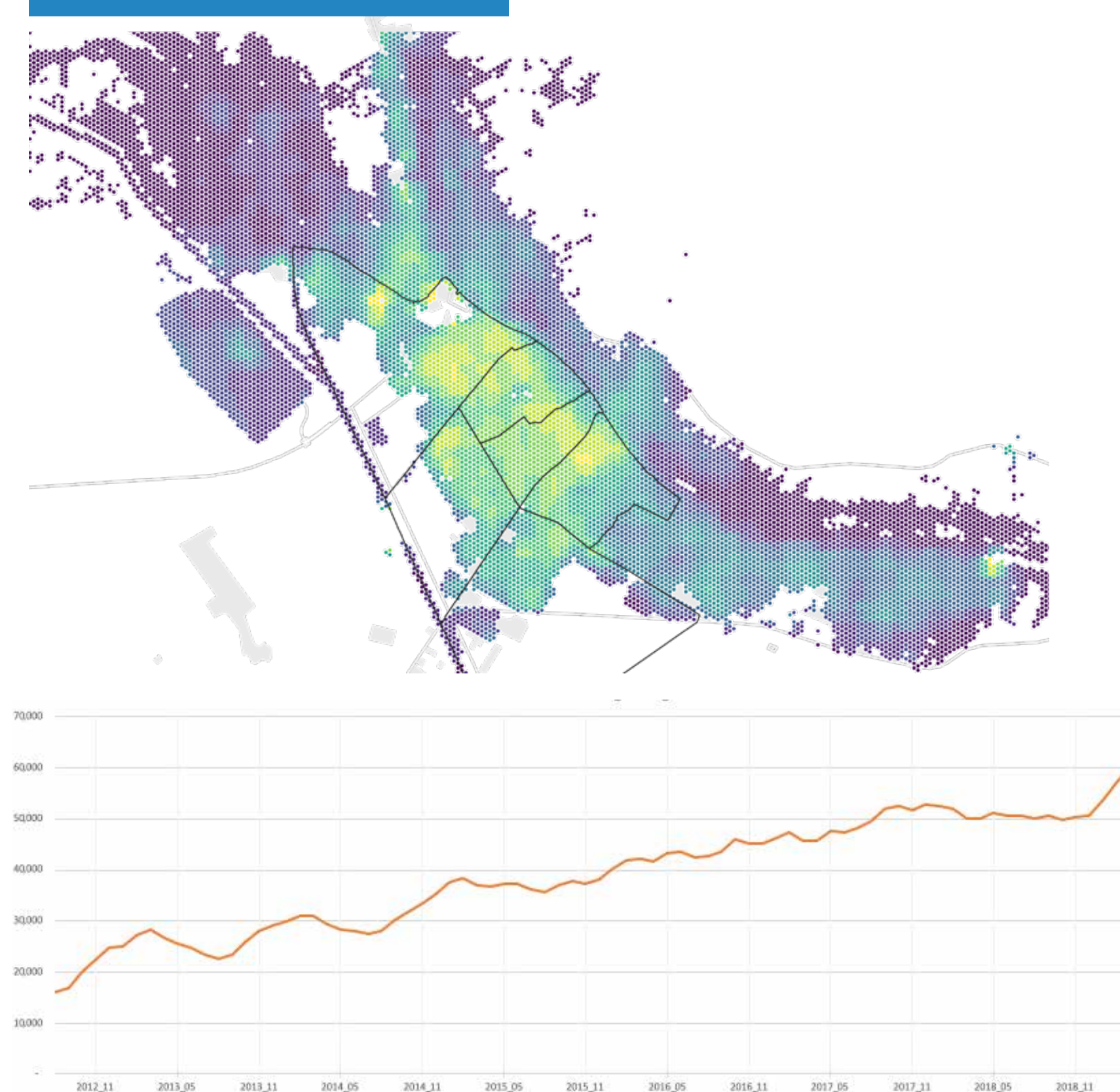


FIGURE 12. Basra nightlight output in nanoWatts/cm2/sr (2012-2018). Source: Earth Observation Group, NOAA National Centers for Environmental Information. Data processed by PNGK.

## 6 POPULATION

Iraqi population data has for the past years been based on estimates of total population. These are mainly based on a constant rate of growth, and therefore should be used with some caution, especially in dealing with planning for sub-national units. Similarly, the use of a constant household size makes these figures less reliable for housing calculations. The task is further complicated because of the large movements of population in response to political and religious strife over the past two decades, which have not been adequately reflected in official statistics.

Iraq's last census was held in 1997 but did not include the Kurdistan Region. More recent counts generally estimate population based on statistics provided by the national food ration program and have often been incomplete in disputed territories. A national population census is planned for 2020 and will help re-adjust all data to more accurate numbers.

### A. RATES OF GROWTH

For most official work, a national rate of growth between 2.6 and 3.0 has been used and for urban areas, a slightly higher figure of 3.04 to 3.4.

### B. MIGRATION

Many of Basra's problems and difficulties, especially with housing, are commonly attributed to the presence of large numbers of in-migrants. Unfortunately, the statistical evidence is rather limited, but what data is available within official statistics does not support such a point of view for the area within the official Basra boundaries. However, within the "Greater Basra Area" as described before, early analysis through building counts indicates that significant growth has occurred in recent year that may reflect these circumstances as they are being reported from on the ground stakeholders. In line with this, the 2017 Basra Development Strategy suggests "Basra's relative safety and stability have made it an attractive location for IDPs

fleeing the violence that swept north-western Iraq in 2014."

Displaced families put pressure on services, the education system and resources in the governorate, as well as affect the employment opportunities for the population. As of 31 October 2017, Basra Governorate hosts 9,576 IDPs (1,596 IDP families) from outside the governorate. While large, and allowing for more recent movements and numbers, with a total population of 3.0 million in the Governorate and some 1.5 million in urban Basra, this is a relatively insignificant figure.

Perhaps more significant is the fact that the reported intent to integrate in the community of displacement (rather than return) is higher in Basra than in Iraq on average.

### C. FAMILY AND HOUSEHOLD STRUCTURE, SIZE INCOMES AND BUDGETS

The data on family size and structure is relatively scarce. The average family size is 7.1 persons, and only 6% of households are female-headed.<sup>1</sup> By comparison, and while not comparable, the data produced by the 2019 Multi-Indicator Cluster Survey (surveyed in 2018) provides some information that is useful. Unfortunately, the figures are for Basra Governorate as a whole, though some data is disaggregated between urban and rural, such as in Figure 18.

### D. HOUSEHOLD INCOMES AND BUDGETS

There is very little data available on the levels of income or household budgets of Basrawis – at best, there is some assessment at the governorate level, but without any

1. UN-Habitat/Haitham Obeid (August, 2018), Overview of the Housing Sector in Iraq and Basra Governorate

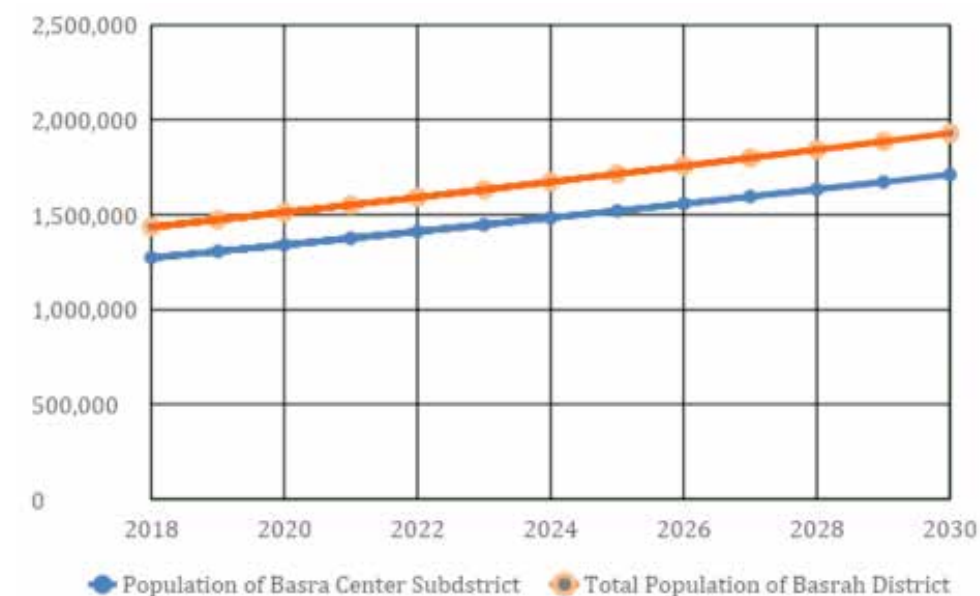


FIGURE 13. Comparison of Basra centre subdistrict and total population of Basra District

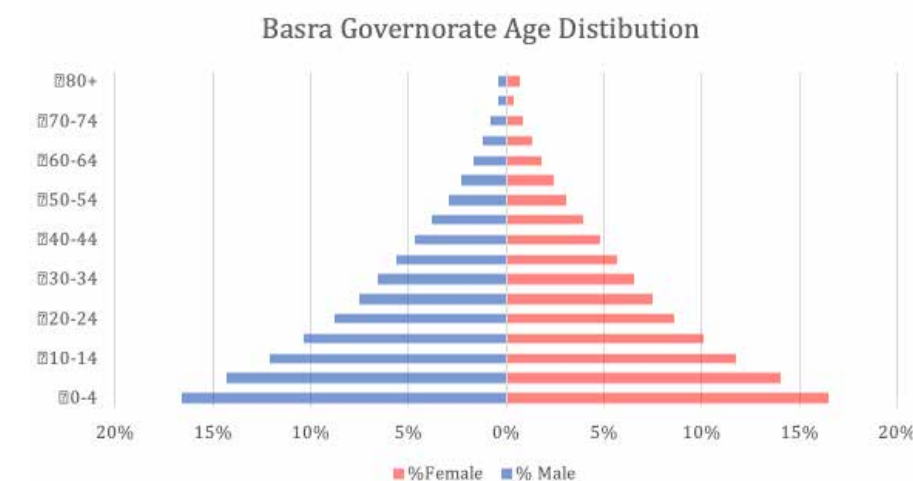


FIGURE 14. Age distribution in Basra Governorate

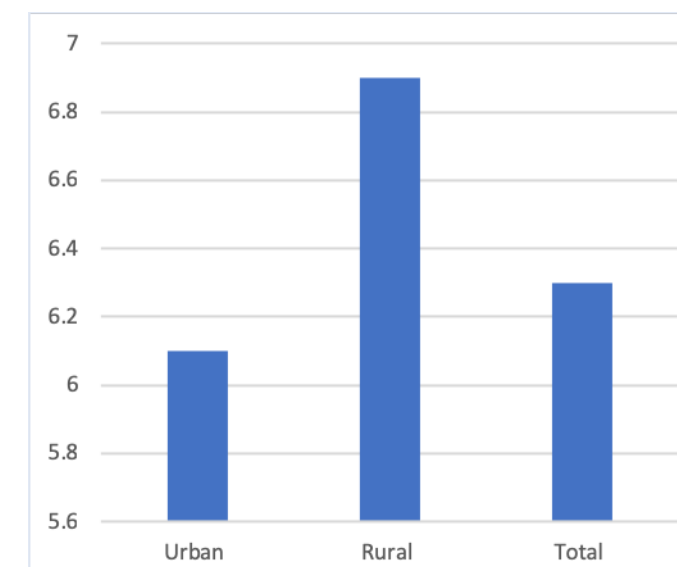


FIGURE 15. Iraq mean household size. Source: Iraq MICS, 2019



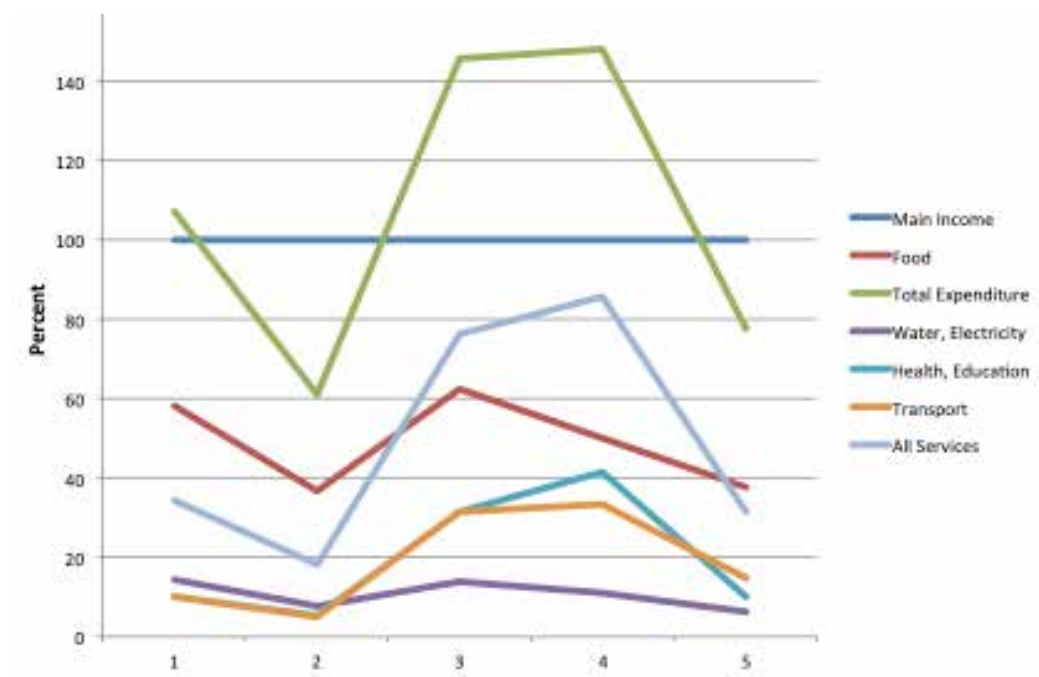


FIGURE 16. Household expenditure by service type

urban-rural distinctions. In many of the surveys, such as the MCNA (multi-cluster needs assessment) the coverage of Basra is almost superficial – perhaps because of the greater needs of displaced and conflict-affected persons in other governorates.

What data is available would seem to suggest that poverty is a major problem for Basrawis. For example, according to the JAU (2013), 16.1% of the population of Basra has below-average income levels compared with 11.5% for the whole of Iraq.<sup>2</sup> However, Basra Qadha has 8% of its population below poverty level, and presumably, the city of Basra has even fewer. Nevertheless, the level and extent of poverty in Basra, as in the whole of Iraq, is a major concern. The fact that Basra is known to be the major source of the country's income through oil and associated sectors, makes it even more of an issue and difficult to understand for the people of Basra. Similarly, the very small numbers of people employed in the oil sector is a point of contention for Basrawis.

According to a very small spot-check, the expenditures of three out of five households exceeded their incomes. Most households had more than one income earner (likely to be a grown-up son) or the head of the household had multiple jobs. About 50% of household income was on food, while social services and transport made up almost 30%. Water and electricity, despite being supplied “free” as a public service, still required some 10% of the income to make good shortages in supply or quality. On the whole, most households were able to meet their expenditures by having more than one income source, and perhaps more importantly, by having no expenditure on housing with over 80% either owning their accommodation or having it rent-free.

2. Joint Analysis Unit (2013), “Basra Governorate Profile”



FIGURE 17. Informal constructions within the built-up area of Basra. Source: UN-Habitat.

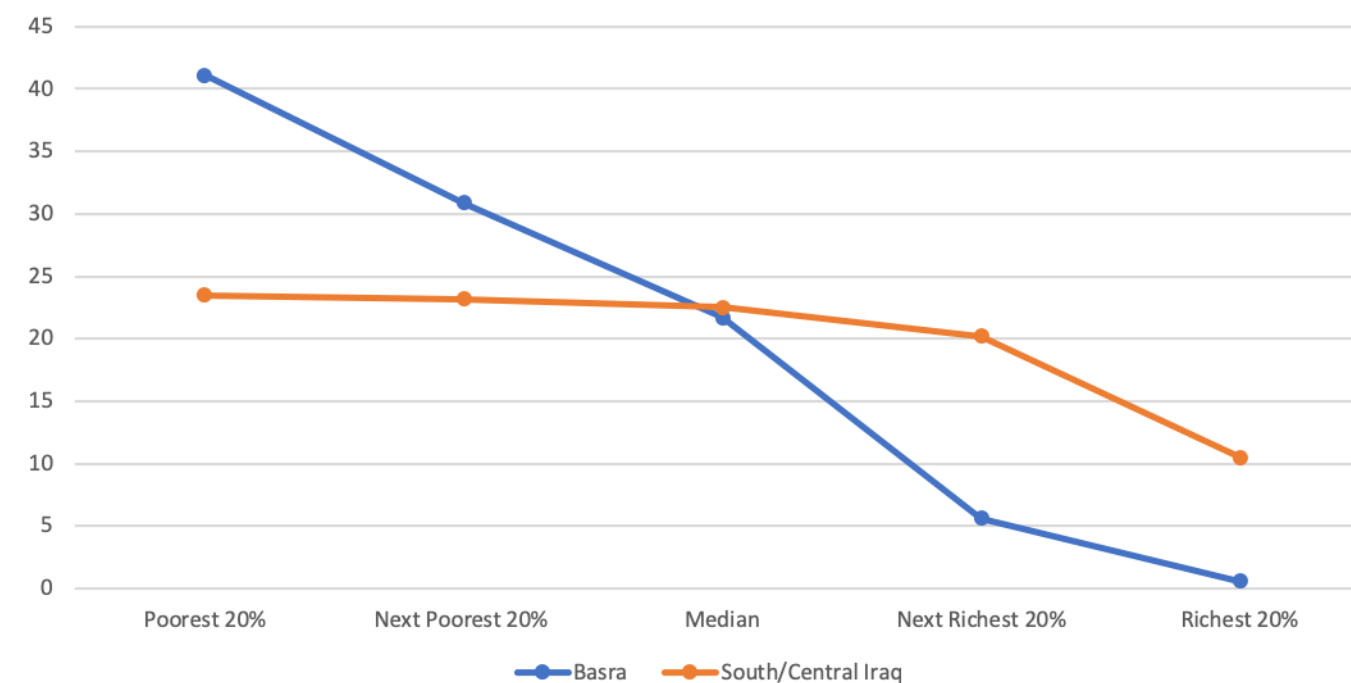


FIGURE 18. Household income comparison between Basra and south/central Iraq. Source: Iraq MICS, 2019.



## 7 HOUSING, LAND & PROPERTY RIGHTS

### A. LAND TENURE, DEVELOPMENT AND MANAGEMENT

- There is not much variation in residential plot sizes or prices between housing types.
- Plot sizes are considerably larger in Basra than in other Iraqi cities, especially in the historic center (380 m<sup>2</sup>) and semi-detached housing (314 m<sup>2</sup>) areas.
- Average Land Price Multipliers for infrastructure access are similar to other Iraqi cities.
- Basra markets show particularly high capacity for recovery of shelter-related infrastructure investment costs
- The shortage of developable land is the single biggest constraint on the housing and real estate sectors in Basra.
- Private developers have undertaken very little residential land development, despite considerable funding and encouragement by the Government. Many large-scale publicly assisted or financed projects started by the private developers remain unfinished and uninhabitable.
- Major sources of vacant land for residential development: vacant plots within built-up area, incomplete peripheral subdivisions, and agricultural land at urban periphery.
- Subdivisions of plots into smaller plots are widely reported.

### B. PRICE OF LAND AT DIFFERENT LOCATIONS

The primary source of land for most households (+90%) has been the government or through the transfer (by sale, gift or inheritance) from previous owners, many of who would themselves have originally acquired their land through the government. The price of land from the government has always been very low and dependent on “need” more than value. Thus, for example, land has been regularly distributed to public servants or deserving households at much lower than market rates at more-or-less fixed prices with very few and minor differences on the basis of classification (of either buyer or the land). The prime purpose of government policy

has been and continues to be to provide “affordable” land and secondly to counter the “unaffordable” prices demanded by the market. However, more recently, government land takes the household’s relative affordability into account and has added a “service charge” to the total cost of a plot. See table on Map 7.

However, this still does not take into account the price that the market puts on land to reflect its actual location, surrounding, environmental qualities, security, transport and access to various commercial services, employment opportunities as well as whether it has planning permission and the quality of infrastructure services. Figure 25 shows the impact of distance from the centre on plot prices. Naturally, the nearer the plot is to the centre, the higher its price.

### C. AFFORDABILITY, ACCESSIBILITY

Previously, the public sector was ultimately the source of all urban land. Under that regime, the decision to release a specific area of land for housing would be taken by the Ministry of Municipalities and its predecessors. Local governments would then auction off the plots or distribute them to selected target groups. Once passed into private possession, however, land plots became tradable in Iraqi urban land markets, and were bought and sold among private parties. Most prospective landowners therefore obtained their plots from either the government or private parties. See Figure 28 which is from a survey in 2006, however, the overall situations are still relevant.

The promise and therefore expectation of government land, supplied at very low prices makes it the option of choice and many households wait patiently, in anticipation. Others have made use of available opportunities to occupy vacant public spaces, especially along highways and adjacent to existing housing areas, to construct informal housing. According to local government officials, plot sizes in informal settlements in Basra range from 150 m<sup>2</sup> to 450 m<sup>2</sup>.

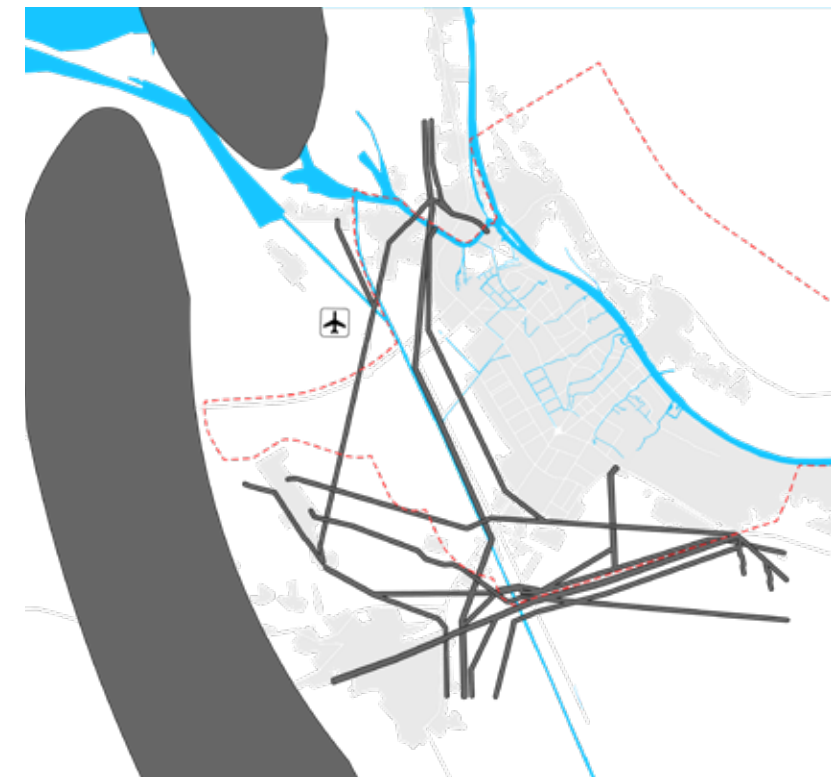


FIGURE 19. Development constraints from oil and infrastructure

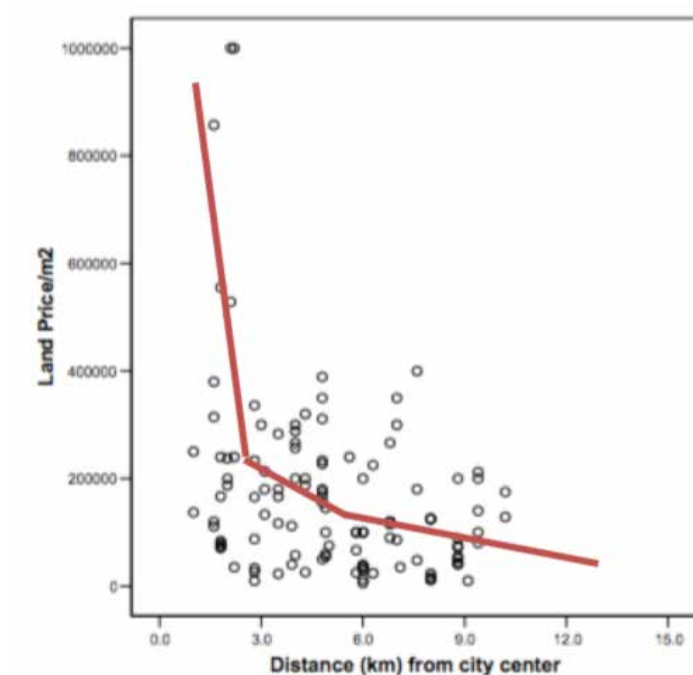
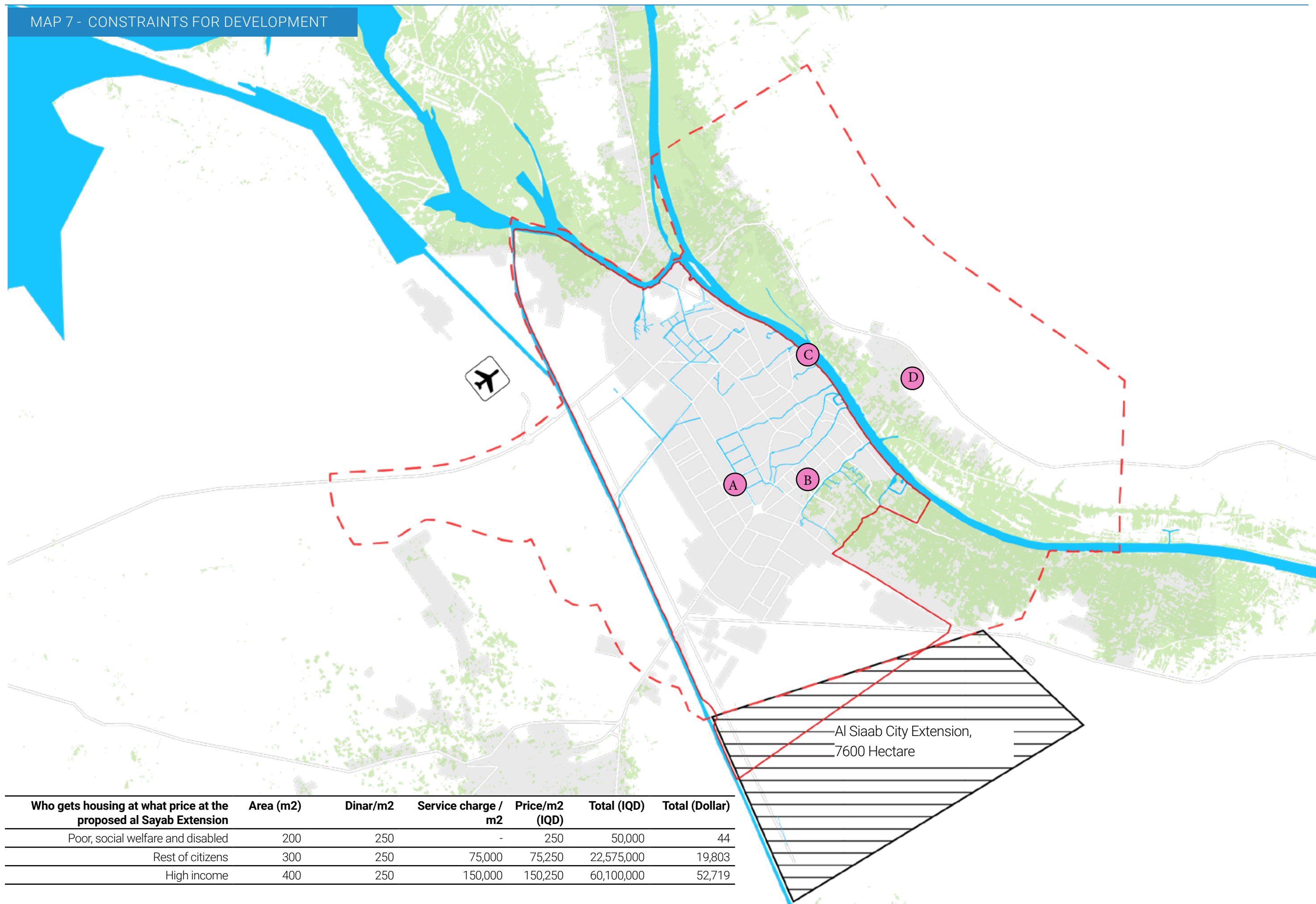


FIGURE 20. Price related to distance from city centre

MAP 7 - CONSTRAINTS FOR DEVELOPMENT





The increasing pressure for housing has been driving individual households to acquire land directly from agriculturists, primarily on the West Bank of the Shatt Al-Arab – even when it is inadequately serviced and may lack planning or development permission. The numbers of this type of housing has increased rapidly and probably exceeds 80,000 units. In response, the Basra Governorate has made considerable attempts to involve private developers to invest in housing – a process successfully pioneered in KRG, but which has been less successful in Basra. The high levels of investment required, with long return periods and low rates of return, especially for low or middle-income housing, have not attracted many investors.

#### D. HOUSING ASPIRATIONS, OPTIONS

Other than renting or sharing, there are five main ways for a household to acquire a house, and in all but the first, the design, land and infrastructure comes along with the house.

1. By building by the household;
2. By inheriting from family;
3. By purchasing from a developer or owner directly or through a broker;
4. By buying from or being given by the government;
5. By acquiring from the co-operative.

The diagram on the left is from a 2006 survey, but given the fact that few if any government schemes for housing have been implemented, and nor have any of those under construction by private developers with government facilitation, the current situation is probably very similar.

What is striking is the large proportion of houses built or acquired without direct “government” intervention – nearly 80%, were in categories 1, 2 or 3. This is in sharp contrast to the official housing strategies that have been the mainstay of housing policy in Iraq. Similarly, only 23% of the land was obtained through government allocations and sales, and only 7% of the funding was through government or institutional loans – the remaining 93% came from the households’ own savings or through family “loans.” See Figure 24.

#### ROLES AND SHARES IN HOUSING IN IRAQ

This highlights the need to have a more updated understanding of housing. The current “understanding” of most officials and even professionals in Basra as it is in Iraq, is that the government is the main provider, if not of housing, then of “affordable housing.” Given this view, the government’s role as housing provider is not only stressed, but no support, or provision is made for other providers – and these are not just ignored but prevented from participating in housing production and provision.

#### CRITICAL ISSUES

The critical issues for housing, as seen by the Directorate of Housing, Basra are:

1. The lack of availability of residential lands;
2. High prices of construction materials;
3. Inadequate investments and weakness in the role of the private sector in housing;
4. Lack of services and infrastructure provision on residential lands;
5. High rates of infringement on residential land due to multiple reasons, including frequent migration from nearby areas.

#### PROPOSED STRATEGIES OF THE HOUSING DIRECTORATE

1. The Government must give a high priority to housing provision:
  - Endorse housing-sector related laws by the Iraqi Council of Representatives
  - Focus on developing the housing sector through public and private sectors
2. The restrictions on land should be reviewed in order to provide land for housing:
  - Review the Law of Protecting Hydrocarbon Resources and Protecting Antiquities;
  - Resurvey and determine the extent oil fields in Basra
  - Resurvey and determine the extent of agricultural lands in Basra
3. Lower the cost of land for housing to make it affordable:
  - Land prices have increased faster than the annual income of Basra citizens; this requires the adoption of resolutions and instructions to reduce and control the increase in the price of land
  - Introduce the use of modern and faster methods of construction
4. Attract and direct investments to housing development:
  - Activate the role of investment in the right way by attracting companies and increasing government control over ongoing projects
  - Determine the investment amounts of companies

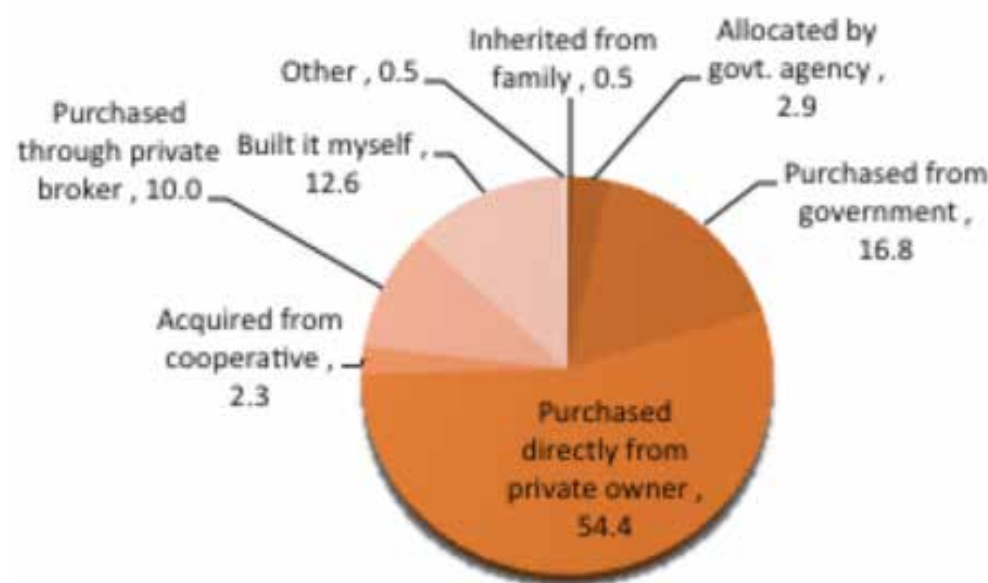


FIGURE 21. How did you acquire your house? (2006)

and encourage them to rapidly build a reasonable number of good quality affordable housing for the low-income households

5. Implement a planned infrastructure provision programme for Basra Governorate:

- The absence of a general policy for Basra Governorate to programme and implement strategic plans for infrastructure development (which should determine the annual executive programs) of the governorate. Instead, there has been a random implementation of projects annually

6. Enact and enforce regulations to control migration and the type of housing:

- Approve strict laws to reduce the phenomenon of infringement on state and public lands and work to implement these laws

- Adopt laws and regulations necessary to reduce the phenomenon of migration from other governorates to Basra Governorate, which leads to an excess of land and construction of slums which have overloaded the infrastructure and services' provision for the citizens of Basra

- Activate and encourage vertical construction to accommodate the increasing population growth in the governorate

Partly as a reflection of the difficulties with trying to institute similar strategies and projects in the past, the Housing Directorate's current strategy is to forget Basra and to concentrate on creating housing in "new cities." These will be either new, self-contained towns, or "satellite cities" located some distance away from the existing built-up areas of Basra. The actual process will still rely on attracting private sector investment and expertise to large areas of hitherto rural (not necessarily agricultural) land that can be more easily acquired, planned and developed under the guidance of the Housing Directorate.

## ASSESSMENT

More than proposed strategies, the above is a wish list based more on optimism than on actual experience and outcomes. While the above strategies might bring

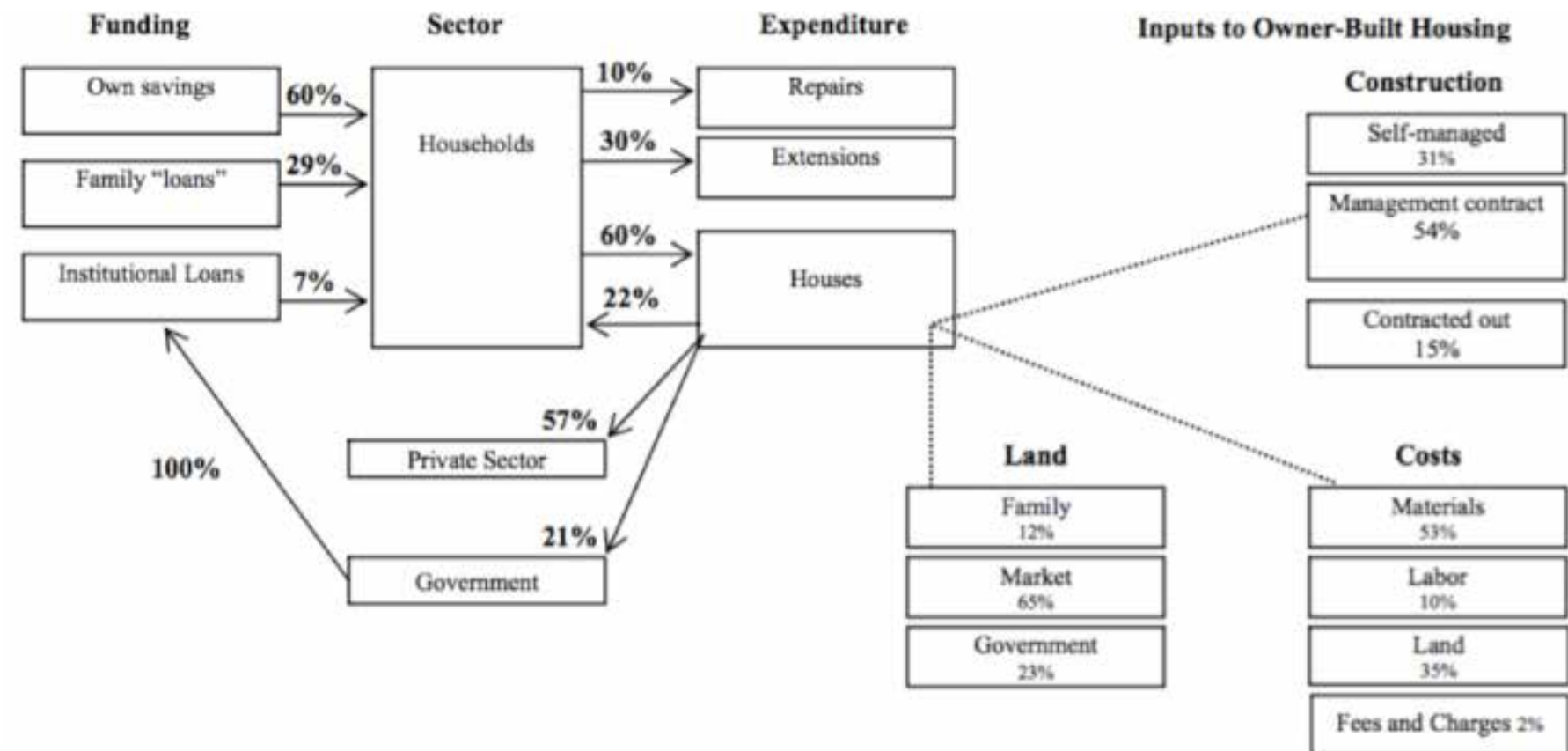


FIGURE 22. Roles and shares in housing in Iraq

about the desired outcomes of eliminating squatting and encroachment and bring in large investments from the private sector as in Dubai, there is nothing in the past experience of Iraq or Basra to suggest that they can actually be realised in the immediate future. As Figure 25 shows, the attempt to involve the private sector has not been very encouraging. The general socio-political situation also does not demonstrate that the current state of centre-governorate relationships is going to change or that devolution and inter-directorate co-ordination will happen any time soon.

In the meantime, despite all the difficulties and obstacles, housing is being built. With a better understanding and appreciation of what is happening, a more supportive government policy could transform the housing and indeed the urban landscape with relatively little investment in technology, materials or finance.

#### E. INFORMAL SETTLEMENTS

Informal settlements – the establishment of poorly constructed housing on land that has not been planned, nor legally given, for them – are visible evidence of:

- the relative success of the city (people do not go to a place worse than their own);
- the failure of the legal planning systems to adequately prepare and provide suitable land for housing;
- the failure of building legislation and of the construction industry to respond to the demands and realities of affordable housing;
- the willingness and ability of lower-income households to invest in housing and other amenities even under threat of expulsion and demolition.

Viewed in this way, slums and squatter settlements can be seen as the start of a process that can be built upon to provide acceptable housing rather than needing to be demolished and eradicated. Recognising and facilitating the settlements and their housing could be transform them into acceptable housing in formal urban areas at much lower costs and at a faster pace.

The data on housing is largely missing, out-dated or based on simple projections from 10 to 15 years ago. For

Source of Plot	Baghdad	Basrah	Hilla	Mosul	Najaf	Sulaimaniya
Government	12.2	40.8	12.8	12.8	23.7	18.4
Cooperative	2.6	4.5	0.0	0.0	6.9	0.0
Private owner	63.3	50.8	69.5	71.6	58.8	80.9
Gift/inheritance	21.8	3.4	16.3	12.8	9.9	0.7
Other	0.0	0.6	1.4	2.8	0.8	0.0

TABLE 4. Population How landowners obtained their plots

Informal and unplanned settlements	Population	Source	Date
Informal settlements in Basra Governorate	62,602	Ministry of Planning	2017
Informal settlements in Basra District	How landowners obtained their plots (5000)	Ministry of Planning	2017
Informal settlements in Basra City	15000	Minsitry of Planning	2017
Unplanned in Basra, Haritha and Al Khaseeb on Agricultural land	80.000	Satellite imagery analysis	2019 (not verified)
Unplanned and informal settlements in Basra City	24755	Satellite imagery analysis	2019 (not verified)

TABLE 5. Population size of informal and unplanned settlements

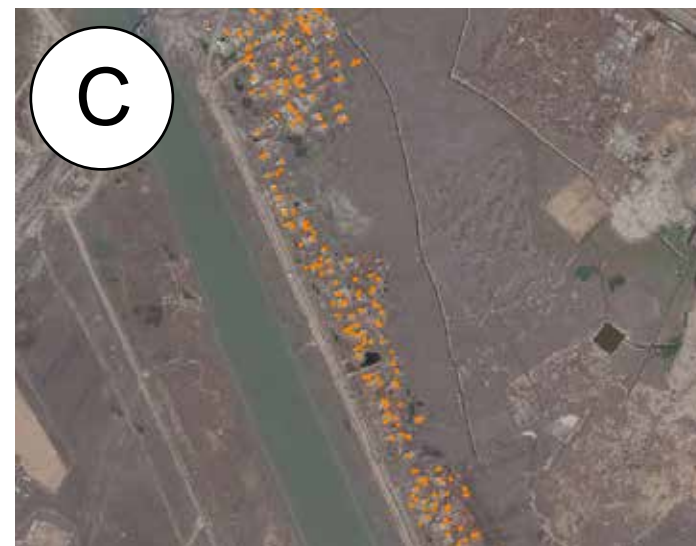
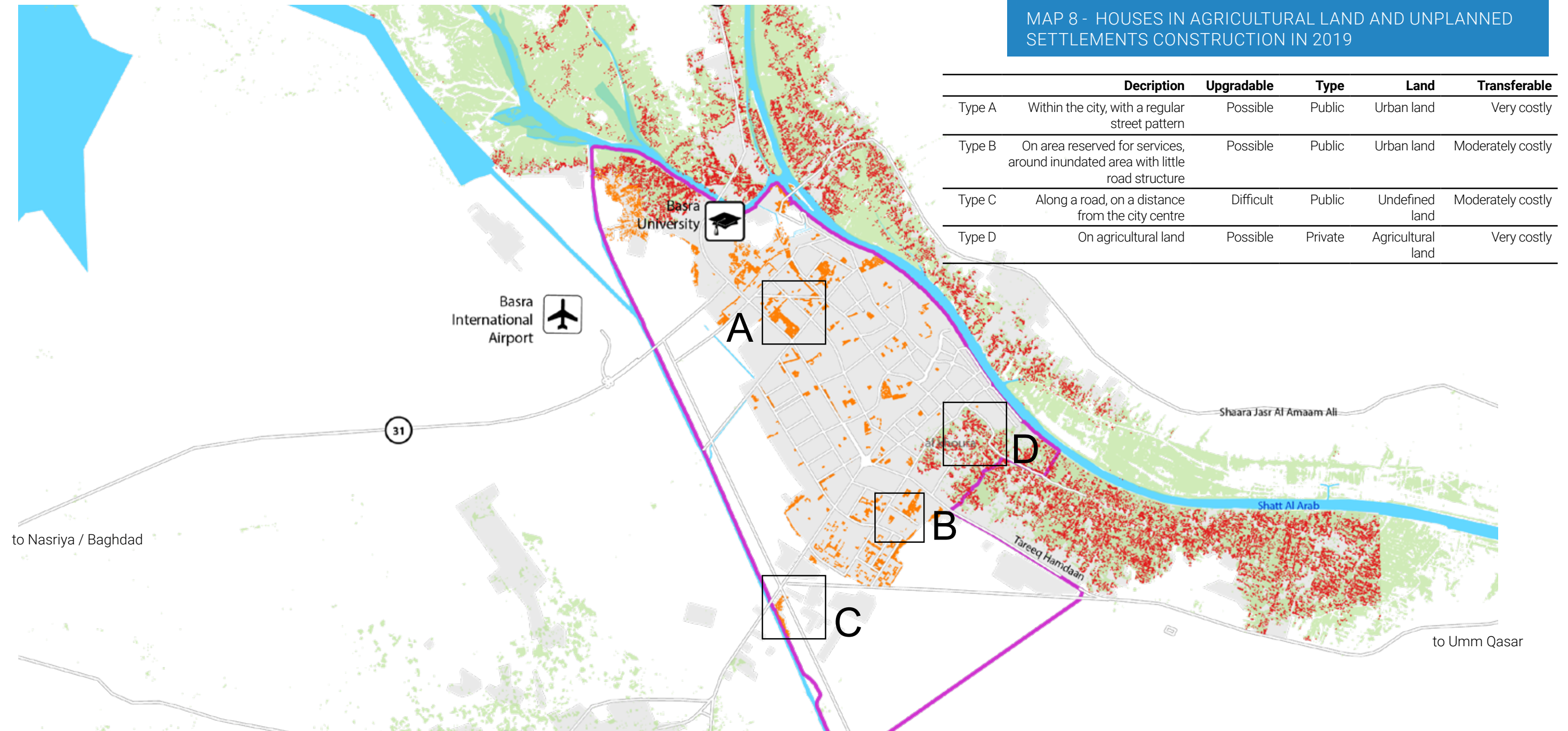
example, the commonly stated “housing shortfall” is based on a straight 3% annual growth divided by the “average family size” of 6.6 on the basis that each “family” should have a house rather than that each “household” (with an average of 7.1 persons) should have a house. The numbers are often based on Basra Governorate totals, and even where Basra Qadha is used, it is often presumed that only 50% of the population is in “Basra City.” No account is taken of likely on-going production, and even the figures for “informal” housing are often based on a fixed share of national estimates.

The current approach is that “housing” consists only of “formal” or officially sanctioned houses, and that “housing need” is defined as the difference between their number and the number of “families.” In Iraqi society, “household” would be a better concept than “family,” with married children and parents often living together by choice and not only by force of (economic) circumstance. Similarly, economic realities should be recognised. “Housing” is increasingly

a process that can take years, as Iraqi experience has shown. Government policy should acknowledge this and facilitate rather than frustrate this process. The provision of appropriate financial products and technical guidance could not only make the process faster but more successful and less wasteful than it is now where households have to cope with the added burden and fear of demolition and removal.



MAP 8 - HOUSES IN AGRICULTURAL LAND AND UNPLANNED SETTLEMENTS CONSTRUCTION IN 2019





Under such an approach, rather than housing being formal (acceptable) or informal (unacceptable), would be viewed as formal (accepted) or forming (being assisted). In other words, the informal processes by which a household usually upgrades and completes its housing would be recognised and financially and technically facilitated to ensure that the transformation is faster and more successful.

Using satellite imagery and on-ground verification and spot checks, the tentative number of houses just in the “agricultural area” on the West Bank of the Shatt Al Arab that do not conform to formal housing standards may be as many as 84,000. At 7.1 persons per household, they provide housing for some 600,000 people or some 30% of Basra’s total.

Even at a modest per m<sup>2</sup> construction of 250,000 IQD, a house of 200m<sup>2</sup> (2 floors of 100m<sup>2</sup>, which is conservative) is about 50 million IQD (US\$42,000). Meaning that private (individuals) have invested at least US\$3,5 billion (42k\*84k) in the houses in the agricultural areas! The scale and numbers in the other “informal” or “slum” areas of Basra could easily increase these numbers by at least 50%.

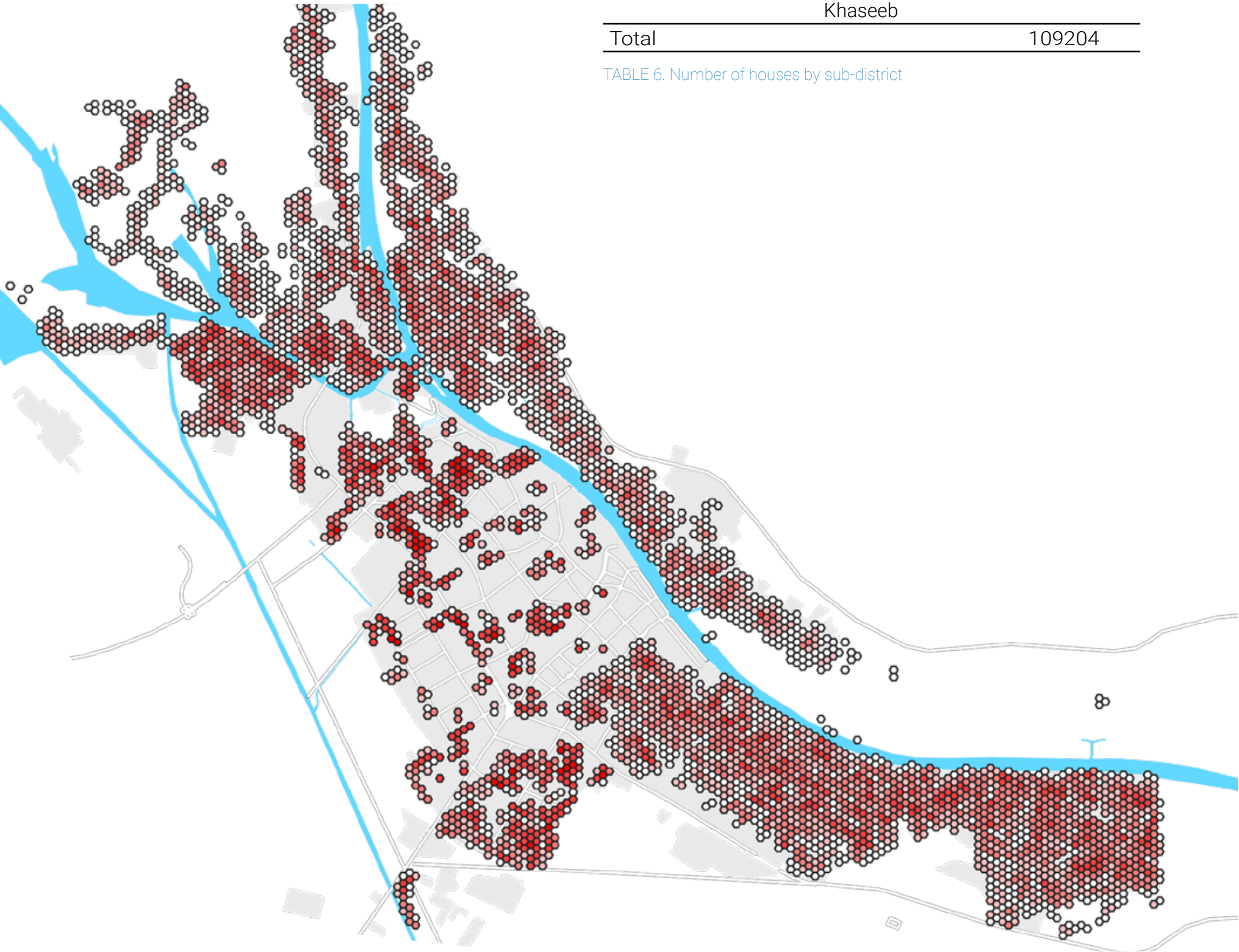
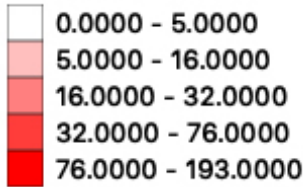
To suggest that these “investments” (which compare favourably with what the Investment Board is working so hard to attract to Basra) should be demolished, does not seem very sensible. Moreover, if this scale of investment was made despite official barriers and obstacles, imagine what might be achieved if government could facilitate this energy and enterprise.



FIGURE 23. Recent urban developments in Yaseen Kharebat, Basra (30.522989, 47.763087). Source: UN-Habitat.



MAP 9 - UNPLANNED CONSTRUCTIONS



District	Sub-District	# Houses
Shatt Al Arab	Outba	3976
Shatt Al Arab	Markaz Shat Al Arab	19663
Al Basrah	Al Hartha	20019
Al Basrah	Markaz Al Basrah	23770
Abu Al Khaseeb	Markaz Abu al Khaseeb	41776
Total		109204

TABLE 6. Number of houses by sub-district

The need for a strategy to address informal settlements was acknowledged by the Council of Ministers in 2015. Subsequently, Legislation has been drafted and discusses but the Law has been delayed by other events and concerns. The Draft Legislation addresses the legal status of informal settlements according to the following principles:

- Legislation does not imply encouraging the continuation of this phenomenon and includes restrictions to prevent its recurrence in the future.-
- Legislation and facilitation applies only to informal housing settlements and is directed to poor families.
- Addressing the legal status ofw settlements is linked to the requirement to upgrade the settlements to conform to the fabric of the city and should not be contrary to the limitations and uses of a Master Plan.
- Legislation includes mechanisms to provide sustainable financing that allows for the development of approved slums and service delivery.
- Legislation includes implementation mechanisms, a time and spatial framework, and guarantees that future abuses will not be allowed.
- The mechanisms for implementing the legislation include the means of involving the local community in setting priorities and rehabilitation and development projects required for the development of the settlement.

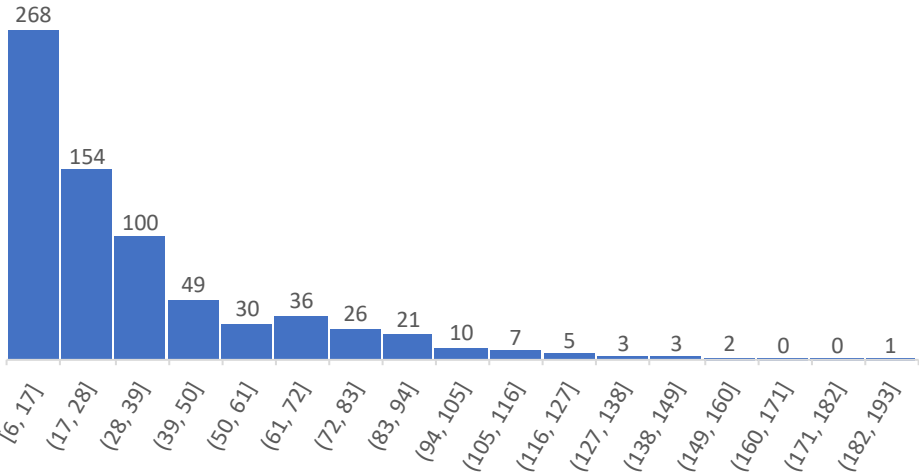
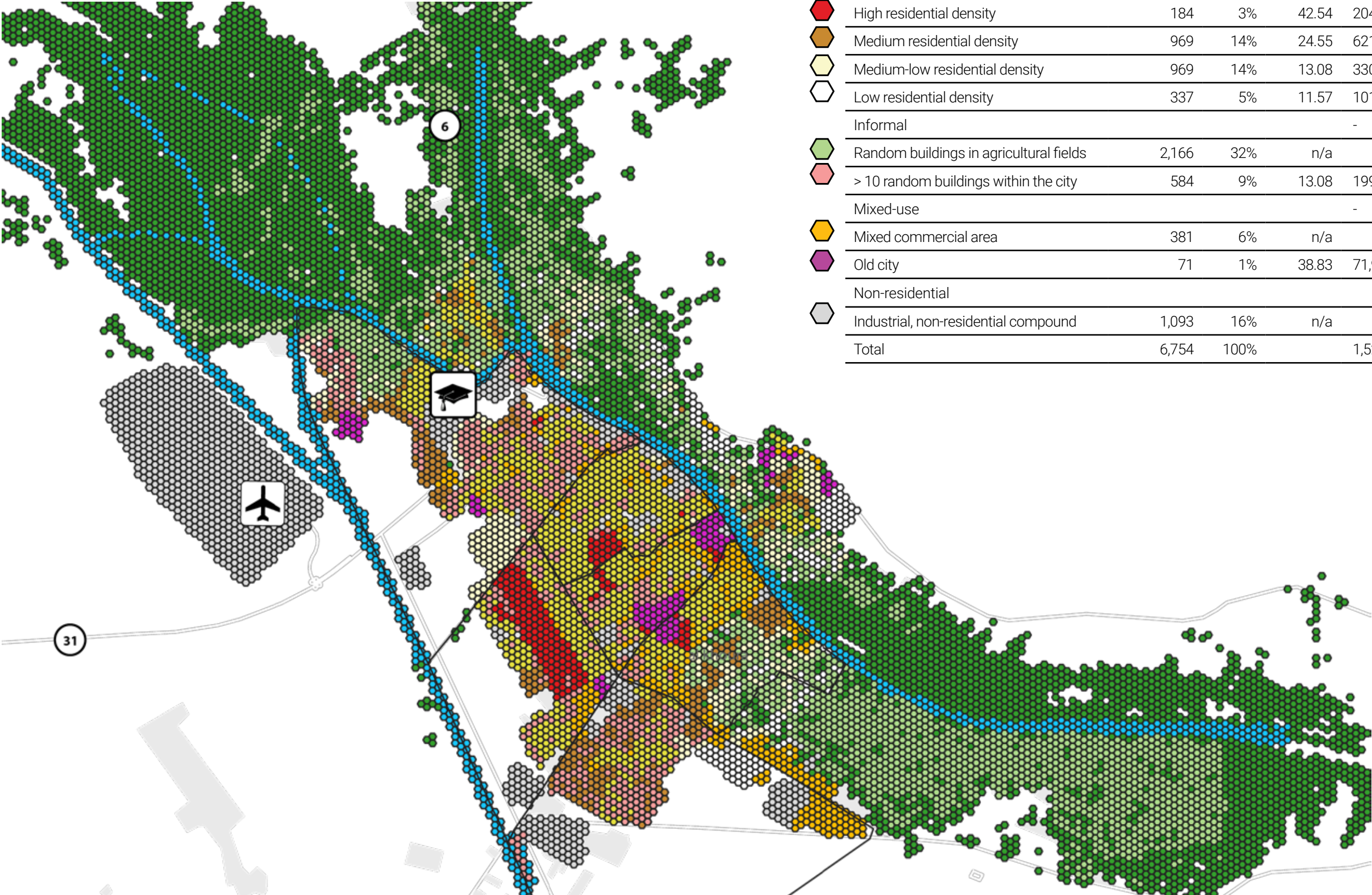


FIGURE 24. Histogram amount of tiles with X number of unplanned dwellings within the city boundary



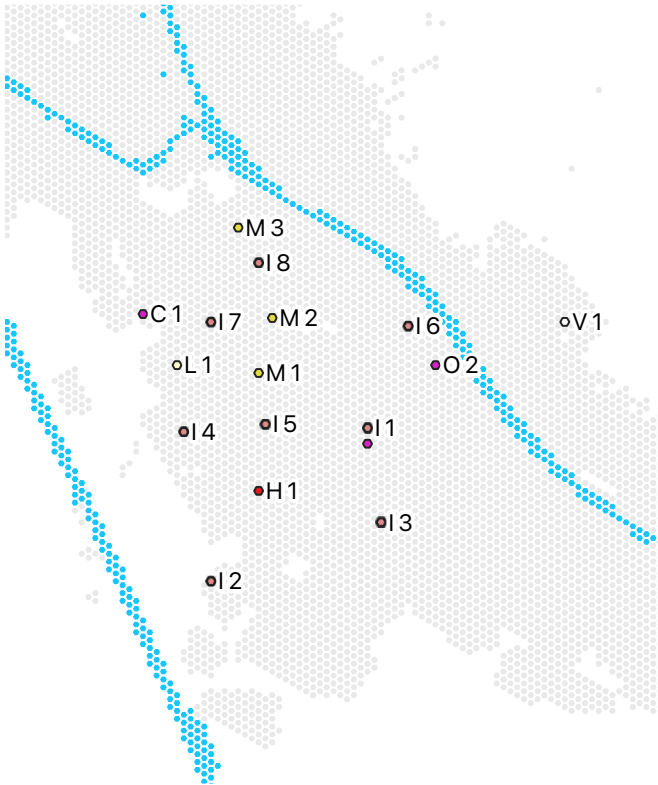
MAP 10 - TITLES AND DENSITY BY LAND USE

3.73  
HA



	Natural	No. of tiles	%	Density	Population
	Water	1,030			
	Agriculture	8,331			
	Residential				
	Residential compound	53	1%	n/a	
	High residential density	184	3%	42.54	204,372
	Medium residential density	969	14%	24.55	621,129
	Medium-low residential density	969	14%	13.08	330,932
	Low residential density	337	5%	11.57	101,805
	Informal				-
	Random buildings in agricultural fields	2,166	32%	n/a	
	> 10 random buildings within the city	584	9%	13.08	199,447
	Mixed-use				-
	Mixed commercial area	381	6%	n/a	
	Old city	71	1%	38.83	71,983
	Non-residential				
	Industrial, non-residential compound	1,093	16%	n/a	
	Total	6,754	100%		1,529,669

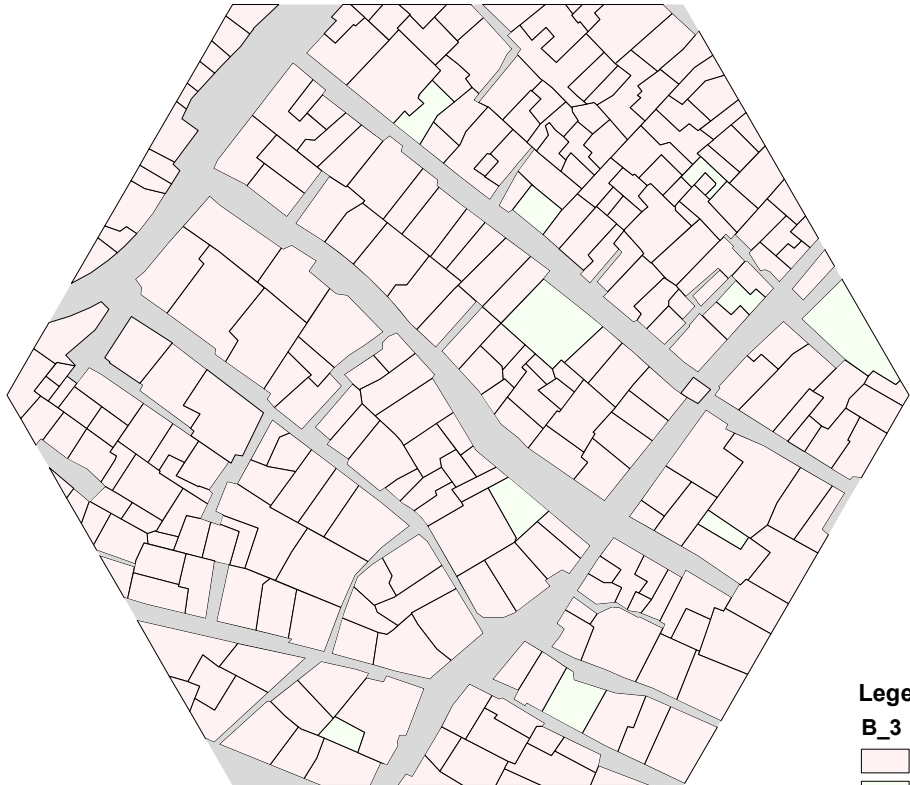




Typology	Density	New code	Code 1	No. of buildings	Construction quality	Av. Floors	Infrastructure	Road condition
High density residential	52.12	H 1	B 6	195	Poor	2	Acceptable/Electricity Poles Visible	Acceptable
Informal*	45.44	I 1	R 8	170	Very Poor	2	Acceptable/Electricity Poles Visible	Acceptable
Informal	13.63	I 2	R 5	51	Very Poor	1	Very Poor/Electricity Poles Visible	Very Poor
Informal	13.90	I 3	R 3	52	Poor	3	Very Poor/Electricity PolesAntennas wires Visible	Very Poor
Informal	34.75	I 4	R 6	130	Very Poor	2	Very Poor/Electricity Poles Visible	Very Poor
Informal	74.31	I 5	R 7	278	Very Poor	1	Very Poor/Electricity Poles Visible	Very Poor
Informal	27.00	I 6	B 4	101	Poor	2	Very Poor/Electricity Poles Visible	Very Poor
Informal	33.41	I 7	R 9	125	Very Poor	1	Very Poor/Electricity Poles Visible	Very Poor
Informal	39.03	I 8	R 10	146	Very Poor	1	Very Poor/Electricity Poles Visible	Very Poor
Low density	10.96	L 1	B 9	41	Poor	3	Very Poor/Electricity Poles Visible	Very Poor
Medium density resi- dential	32.61	M 1	B 7	122	Poor	2	Poor/Electricity Poles & Water Tanks Visible	Poor
Medium density resi- dential	29.40	M 2	B 8 *	110	Acceptable	3	Very Poor/Electricity Poles Visible	Very Poor
Medium density resi- dential	26.19	M 3	B 10	98	Acceptable	2	Poor/Electricity Poles Visible	Poor
Old City	48.65	O 1	B 5	182	Acceptable	3	Poor/Electricity Poles Visible	Poor
Old City	44.61	O 2	B 3	167	Poor	2	Very Poor/Antennas wires Visible	Very Poor
Residential compound	9.36	C 1	C 4	35	Incomplete	3	Incomplete/On Hold	Incomplete
Very Low Density		V 1	B 1					

\*A tile is marked as informal if it contains more than 10 unplanned structures

H 1 High Density Residential



Legend  
B\_3

Building

Open area

Road

O 2 Old City Area



Legend  
B\_5

Building

Open area

Road

I 8 Area with Informal Structures



Legend  
R\_10

Building

Open area

Road

## 8 BASIC SERVICES

The provision of municipal services such as Water, Sanitation, Electricity, Education and Health are and have been primarily the responsibility of the public sector, and have been supplemented by privately provided services, particularly in education and health but also water and sanitation as, when and where the public provision is or seen to be deficient.

Basra city also caters for the surrounding rural areas and indeed the rest of the Governorate for higher-level services such as water and education and therefore its supply has to allow for this wider demand. Until some twenty years ago, the system, while not perfect nor covering all the needs demanded of it, seemed capable of meeting the requisite levels of service provision through a centralised, largely free or highly subsidised provision.

Since then, most systems have been struggling to meet their targets, both because of the deterioration in installed systems and by increasing demand, including that of a growing population. In the case of water, for example, this has been further attenuated because of the reduction in the quantity and quality of the water in the Shatt Al-Arab, the main source of water. Not only have dams in Iran and Turkey drawn off more water, no offsetting measures have been undertaken in Iraq. The reduced water has not only reduced the quantity available for households but its quality has also worsened through an increase in salt levels. The situation was further compounded by a reduction in rainfall and ultimately led to public demonstrations when the water delivered by tankers was contaminated and caused health problems.

Over the last 5 years or so, the Directorates have drawn up upgrading and extension plans for the various urban services. However, these not been implemented, primarily due to budgetary constraints. Ultimately, all budgets drawn up by the Governorate have to be approved and funded by the central government. This

makes planning difficult, and is further complicated by the lack of co-ordination and control within each Directorate.

There is a remarkable similarity in the reasons for the problems and complications in delivering municipal services according to each of the Directorates (see below). On the other hand, the inability to make any radical changes means that the shortcomings in Basra's services and infrastructure provision is not going to be overcome soon.

As and when future decisions are made for urban services, the following suggestions should be taken into consideration to increase resilience:

- Greater decentralisation in responsibility for decision-making, planning and implementation
- Greater reliance on decentralised, smaller-scale facilities to prevent system-wide disruptions and enable more locally-relevant systems and operations
- Greater interaction and participation of community and users, including the introduction/extension of charging for service-provision
- Greater reliance on internally or locally generated resources rather than central government funding
- Greater emphasis on renewable energy options

### A. WATER: PROVISION, COVERAGE, PROBLEMS, PROSPECTS

The water supply system of Basra Governorate relies mainly on Compact Units (CU) rather than conventional Water Treatment Plants (WTP). The sector relies on services on a network of state entities. Under the Governorates' directorates there are district and sub-district water offices (delivery units) that manage the water and sanitation service within the administrative areas under their jurisdiction.

In general, these bodies work under a set of dependencies

that limit their control over water quality and price of services. The present institutional structure does not allow for any delegation or autonomy of service providers. In effect, service providers have no freedom or responsibility with respect to planning of financing/ investment and construction/maintenance. This limits improvements in services, maintenance and operations.

The water used for water supply purposes in Basra Governorate comes mainly from Shatt Al Arab (water supply infrastructures located in the northern districts have the intakes along Euphrates and Tigris). The river water is used for drinking water supply to urban and rural areas in the governorate as well as for agricultural purposes in the areas along the main rivers and canals. The water quality suffers from high salinity and due to the low water quality; the water requires treatment before being supplied to populated areas. Several treatment plants, compact units (CU), or desalination units (RO units) were installed to provide the populated areas with its water needs. Most of the water is supplied by CUs (more than 79%) and the rest from conventional WTPs (18%) and ROs (2%).

The households use various sources of drinking water. The majority (95.5%) get water through a residential unit connected to a public network. The coverage of the water supply service ranges between 80-95% and the average percentage of the coverage is about 92.8%. This value is considered acceptable but needs to be improved in the future considering the importance of the water service. The unserved urban areas are provided water by tankers.

There is a total lack of water meters at the private connections and billing is based on a flat rate tariff, which does not provide any incentive for proper and careful use of the water by the customers.

A major problem is water quality itself, affected by

MAP 11 - WATER SECTORS

	Estim. Population	Pop. Informal	Percentage informal
Al Ashar	105,316	791	1%
Al Basra	94,785	17661	19%
Al Jumhoria	82,424	4242	5%
Al Khaleej	243,106	19040	8%
Al Maqal	129,242	56889	44%
Al Mutayha	93,904	3843	4%
Al Qebila	82,566	43393	53%
Al Rebat	112,786	5810	5%

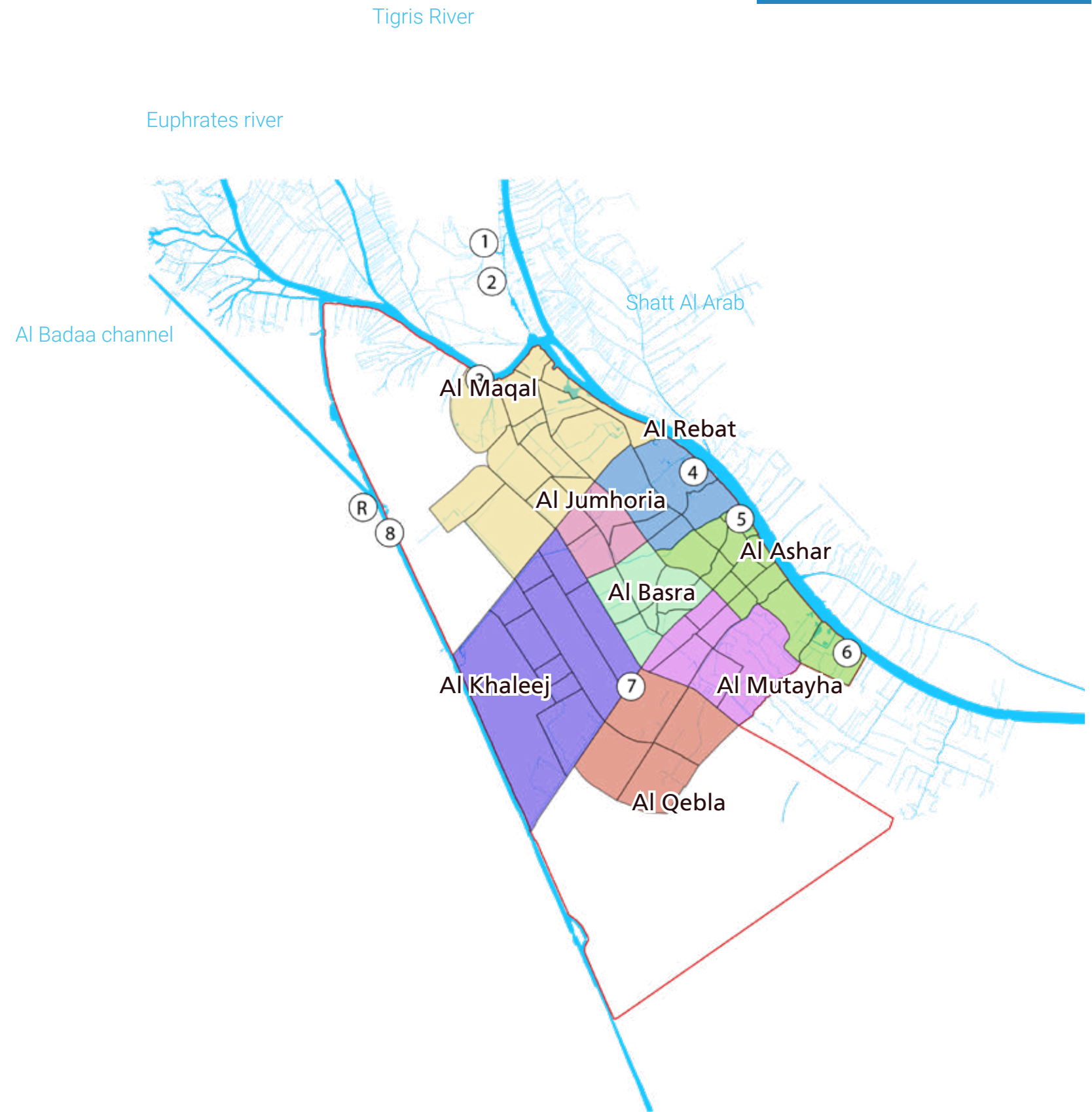
TABLE 7. Estimated population per sector

	Water treatment plants	Type	Capacity	Unit
1	Al Hartha	CU	6,200	m3/h
2	Al Basra Unifed	WTP	5,200	m3/h
3	Al Qarma	CU	3,800	m3/h
4	Al Jubalia Project	WTP	2,800	m3/h
5	Al Rebat	CU	1,600	m3/h
6	Bradhaya Project	WTP	5,000	m3/h
7	Hal al Husain	CU	1,200	m3/h
8	Abu Shair	CU	8,600	m3/h
	Total		34,400	m3/h
	Total litres per day		825,600,000	l/day

TABLE 8. Water treatment plans

Main sources of water	Issues
Dejla River / Shatt al Arab	Salination, high TDS
Euphrates River	?
Al Badaa Channel	Low treated amount (only 5-7 m3/sec). 12 m3/sec is needed. Growth of Lichen and Ceratophyllum plants.

TABLE 9. Main sources of water





water scarcity in the Euphrates, high rates of salinity and pollution, and contamination and leakages occur in the outdated supply network. Almost half of the governorate's inhabitants report the availability of drinking water as bad or very bad. Less than half of the people connected to the public water network have water available for the full day. The limited availability of drinking water is directly connected to a number of environmental problems threatening Basra's fresh water supply. Dams and irrigation projects on the Tigris and Euphrates rivers have diverted much of the water flow heading to the Shatt Al-Arab, and with the receding water levels in the rivers, salt water from the Persian Gulf has been reaching ever further inland. Wastewater from both Iraq's and Iran's industry and households flows into the rivers untreated, further contaminating the water supply.

Many of the current problems of the sector are related to the separation of functions between operations and maintenance and investment planning, financing and implementation. Additionally, the involvement of many ministries and governmental entities with various levels of control leads to an overlap of responsibilities in the sector, creating further problems and inefficiencies.

There is a need to:

- Update the outdated water supply network, including its mapping;
- Improve the system for reporting and collection of fees for users of the network;
- Modernize the system for monitoring the status of the network;
- Enable more timely identification of problems and improved planning.

The Basra Governorate identified the following constraints to improvements in the water supply:

- Lack of authority to address the real issues;
- Lack of financial allocations and insufficient resources;
- Complex procedures for acquisitions and weakness in coordination;
- Shortage in engineering and technical staff and weakness in training;
- Obsolescence of centralized projects, networks

and conveying lines;

- Unauthorised connections and the addition of slums on the network;
- Political interventions and favoritism in staff assessments and appointments;
- Insufficient lands allocated for the siting of strategic projects;
- Weakness in citizens' cooperation;
- High salts' percentage in source waters.

## B. SANITATION

There is an overall lack of wastewater collection networks and treatment plants.<sup>1</sup> Only one wastewater treatment facility exists within Al Basra Qadha. Though official figures state that 93.6% of Basra's inhabitants have access to improved sanitation facilities, only 24.8% rely on piped systems to dispose of wastewater, while 37.8% rely on a covered canal outside the house.<sup>2</sup> Similarly, 60% of the population is served by a sewerage network, 35% are served by septic tanks and 5% of the population is not connected to sewerage.<sup>3</sup>

The Basra sewage system is heading towards the end of its life span as a result of the deterioration and failures in some of the networks and sewerage lines and the obsolescence of the treatment stations despite the continuous maintenance of these stations. This is largely because of a failure to implement any new projects for the past 35 years, not least because of not having been allocated the land required for the construction of sewage treatment plants. Moreover, there been hardly any attempt to improve the performance or renew some of the dilapidated ones. This has exacerbated the problem of deterioration of the sewerage service in Basra.

As a result, even some of the areas that are served by piped sewerage are unable to dispose of their wastes and, increasingly, households have to rely on septic tanks that need frequent emptying by municipal vehicles.

At the same time, the increase in population growth,

1. Joint Analysis Unit (2013), "Basra Governorate Profile"

2. NGO Consultation Committee for Iraq (December 2015), "Basra Governorate Profile"

3. Central Statistical Organisation (2015), "Environment in Iraq"

as well as migration from the countryside and other governorates to the city has led to an increase in the area requiring storm-water and wastewater drainage. As a result, the current networks and can not cope with the ongoing drainage. The problem has been further aggravated because of shortages of specialized equipment and technical personnel to carry out the work and the extra burden resulting from the increasing demand of urban growth as well as the increase in the number of slums which are not properly connected to the drainage network and cause an additional burden on the rainwater networks and channels resulting in further pollution of water bodies.

## C. ELECTRICITY

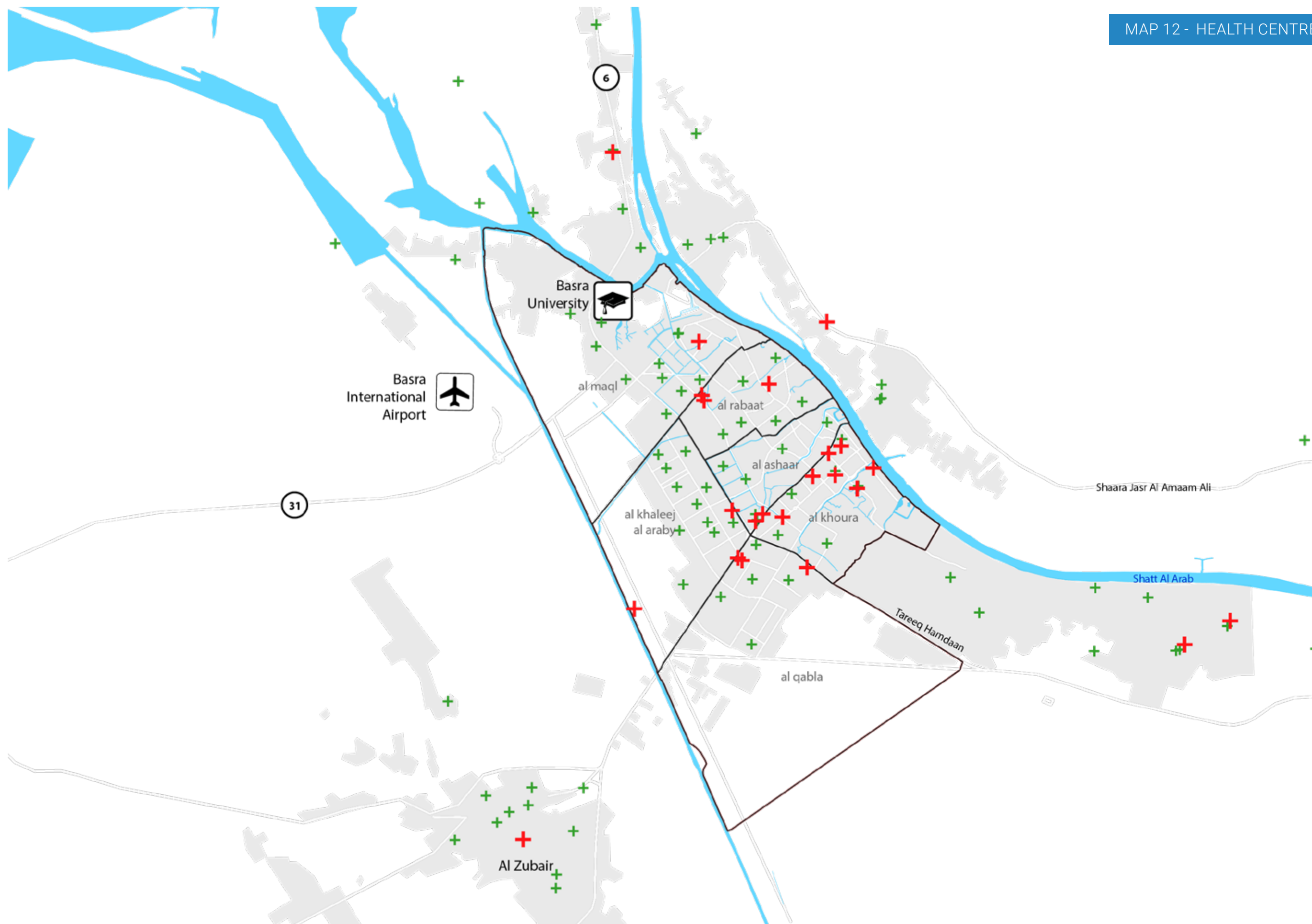
As in other countries, the Iraqi population is increasingly dependent on electricity for many of its household needs and this demand is increasing. The public power grid is the main source of electricity for almost all households in Basra. The electric power infrastructure in Iraq was severely damaged during the Gulf War and most households had to make do with limited supplies from local, privately run generators. Despite efforts to reinstate electricity supplies to previous levels, it has suffered from underinvestment and lack of equipment, and few households can be assured of regular 24-hour electricity.

Thanks to the availability of oil, the problem is not that of basic fuel or energy but one of having a reliable, well-maintained and fully operative distribution and transformation system. Ironically, despite the abundance of solar power, that potential has not yet been exploited, nor have communities managed to harness solar energy for lighting or cooking purposes using roof-top bases systems – perhaps because of the general lack of security which discourages any public display of wealth or equipment.

According to the Governorates Directorate, the problems of electricity are:

- Insufficient budgetary allocations and lack of authority to contract works;
- Obsolescence of networks;
- Existence of excess demand on the network;

MAP 12 - HEALTH CENTRES





- Lack of professional and technical project planning;
- Shortage in engineering and technical staff;
- Obsolescence of power stations;
- Weak response to citizens' complaints.

#### D. EDUCATION: PROVISION, COVERAGE, PROBLEMS, PROSPECTS

The literacy rate of 81.9% is higher than the national average and differs across gender and district. In 2011, enrolment in primary education rose from 90.1% in 2006 to 91.4%, which is higher than the national average of 90.4%. The target of 100% remains far, especially for females for whom the rate of enrolment is only 89%, compared to 93.9% for males. In 2011, net enrolment in secondary education decreased from 45% in 2006 to 43.6%, which is lower than the national average (48.6%).<sup>4</sup>

The Directorate General suffers from a severe shortage in the number of school buildings throughout the governorate due to the lack of land allocated for construction and in places that suffer from overcrowding such as the centre of the province and its urban areas.

The governorate's education sector strategy is based on trying to fill the education gaps between rural and urban areas and poor neighbourhoods areas, aiming also at the achievement of gender equity in education. It also addresses harmonization and coordination

4. NCCIRAQ (December 2015), "Basra Governorate Profile"

Type of school	Need	Actual buildings	Gap
Kindergarten	66	61	5
Primary	1128	689	439
Secondary	533	259	274
Vocational	18	14	4
Institutes	7	4	3
Total	1 752	1 027	725

TABLE 10. Schools in Basra Governorate

between graduates and the job market through specific vocational and high-specialized curricula and tailor-made internship programs. Among the strategy's objectives are reducing the number of students in certain overcrowded schools, solving the issue of land availability for new school buildings, improving the interaction between the school system and the expanding industrial, agricultural and tourism sectors that are looking for additional workers with high skills and competences tailored to the changing and growing needs of the Governorate.

The efforts invested in the training of teachers for education of women are greater than those for men and have nearly doubled. There is currently a severe shortage of teachers in all-male schools, because female teachers are unwilling to work in them in the present social situation. The schools in Basra also suffer from inadequate staffing for some of the disciplines.

The governorate identified the following reasons as being responsible for the continuing problems in secondary education in Basra:

- Insufficient financial resources and lack of authority at the Governorate level to manage and plan operations;
- Poor distribution of teaching staff amongst institutions and pupils;
- Weakness in the qualifications of teaching staff;
- Acute shortage of school buildings and poor and damaged condition of many;
- Weakness in the use of modern educational technologies;
- Shortage in engineering, technical and maintenance personnel;
- Shortage in land for schools and institutions;
- Political Interventions in the operation and management of educational services.

#### E. HEALTH

Public hospitals are the health facilities most used by people in case of illness of a household member (54.3%), followed by clinics and governmental health centres (29%) and clinics or private medical complexes (12%). 98.4% of the population

is able to reach the closest health centre in less than one hour. The main obstacles in accessing public hospitals are related to the unavailability of medical equipment, unavailability of doctors, and unavailability of female doctors or nurses. 23.3% of the population assesses the health care services in the area as 'bad', while 47.2% considers health services to be 'neither bad nor good.'

According to the Governorate of Basra, the main concerns regarding the health sector are:

- Shortage in financial resources and lack of authority granted to health services;
- Centralization of admission to educational institutions and poor distribution;
- Insufficient lands allocated to health centers;
- Absence of a health insurance system;
- Medical gradation law prevents sustainability of personnel in the workplace;
- Lack of separation between private and public sectors;
- Weakness of the efficiency of administrative work and maintaining of bureaucratic methods;
- Shortage in specialized medical devices;
- Shortage in sufficiently trained technical personnel;
- Poor and inadequate control over medicines and private pharmacies;
- Growth of the private sector, in both small hospitals and clinics and the pharmacies without adequate control, oversight or co-ordination by the Ministry of Health;
- Growing phenomena of drug use amongst youth and unemployed fuelled by imports from Iran and other countries.

## PROBLEMS AND CONSTRAINTS

Summary and problems and constraints cited by Directorates of the relevant service:

### A. WATER

- Lack of authority to address the real issues
- Lack of financial allocations and insufficient resources
- Complex procedures for acquisitions and weakness in coordination
- Shortage in engineering and technical staff and weakness in training
- Obsolescence of centralized projects, networks and conveying lines
- Unauthorised connections and the addition of slums on the network
- Political interventions and favoritism in staff assessments and appointments
- Insufficient lands allocated for the siting of strategic projects
- Weakness in citizens' cooperation
- High salts' percentage in source waters

### B. SANITATION

- Insufficient specialized equipment and devices
- Insufficient financial allocations
- Shortage in engineering and technical staff and training
- Lack of financial, administrative and technical authorities
- Obsolescence of networks and conveying lines and treatment projects
- Existence of excess demand on the network
- Not being able to adopt modern technology
- Lack of specialized and competent companies to undertake tasks

### C. ELECTRICITY

- Insufficient budgetary allocations and lack of authority to contract works
- Obsolescence of networks
- Existence of excess demand on the network
- Lack of professional and technical project planning

- Shortage in engineering and technical staff
- Obsolescence of power stations
- Weak response to citizens' complaints

### D. EDUCATION

- Insufficient financial resources and lack of authority to manage and plan operations
- Poor distribution of teaching staff amongst institutions and pupils
- Weakness in the qualifications of teaching staff
- Acute shortage of school buildings and poor and damaged condition of many
- Weakness in the use of modern educational technologies
- Shortage in engineering, technical and maintenance personnel
- Shortage in land for schools and institutions
- Political Interventions in the operation and management of educational services

### E. HEALTH

- Shortage in financial resources and lack of authority granted to health services
- Centralization of admission to educational institutions and poor distribution
- Insufficient lands allocated to health centers
- Absence of a health insurance system
- Medical gradation law prevents sustainability of personnel in the workplace
- Lack of separation between private and public sectors
- Weakness of the efficiency of administrative work and maintaining of bureaucratic methods
- Shortage in specialized medical devices
- Shortage in sufficiently trained technical personnel



## 9 HERITAGE AND SOCIAL COHESION

Basra, like most Iraqi cities, has a rich cultural heritage manifest not only in the many magnificent buildings but also by the regular participation of large numbers of people at the shrines and places of worship. This is not merely a recent tradition, but goes back to pre-historical times which manifest in the archaeological heritage. While some of this heritage has been exposed and explored, much of the greater part still lies buried and as of yet unexplored.

Yet another very important component of Basra's cultural heritage is that of the unique form of the central Basra Qadima with its systems of canals, walkways and Shanasheel buildings with their balconies and windows with carved wooden screens. However, the pressures of modern development and the lack of financial resources have led to extensive decay and destruction of most of Old Basra.

Both of these aspects of Basra's heritage are the subjects of recently initiated schemes of protection and conservation with funding as well as technical expertise and also have government backing, so there is hope for these aspects of Basra. See below.

In the context of the future of Basra, these aspects also need to be incorporated into the day-to-day management and operations of both the government as well as the private sector – developers as well as communities. The protection and promotion of the cultural heritage is not something to be detached and preserved, but properly used, it could provide the means of attracting investment and visitors. As a unique-selling point and one that could help Basra regain some of its former glory and status as one of the leading cities in the region, every effort should be made to support the heritage initiatives as a part of the every-day development initiatives. Thus, whether by emulating some of the

principles that made Basra the "Venice of the East" or by including, incorporating and integrating some of the as-yet buried architectural and archaeological sites into the urban fabric and designs of new housing areas, more value will be added to the city of Basra as a whole.

### A. UNDERGROUND/ARCHEOLOGICAL HERITAGE

Due to Basra's rich history, there are many heritage sites that are currently not visible as they are located underground. Basra's heritage department is collaborating with several international universities for research and excavations of these heritage sites. However, the department is not comfortable with sharing the exact coordinates with the public as they are afraid that if the information falls into the wrong hands, looting of heritage sites may occur. As a result, it was recommended by the department that, as part of the approval process of proposed projects, a clearance process through the heritage department should be institutionalised. Currently, many approved construction projects are being delayed late in the process due to the discovery of underground heritage sites in project locations. This has frustrated and slowed the delivery of many projects.

### B. SHANASHEEL HOUSES

The old brick houses lining the creeks and streets of the old quarters of Basra, with their elegant timber loggias, latticed shanasheel and decorated doorways, bear witness to the earlier grace of this ancient city. Once inhabited by wealthy families and merchants, today most of them display clear signs of abandonment with their broken corniches, hanging lattice screens, splintered glass panes and bricked-up windows.

Countless shanasheel homes and rows of traditional storage/shops units dating back from the Ottoman times, and colonial mansions from the 'British Raj' period of the 1930s have been lost to make way for new wide roads lining the canals and incongruous medium-rise commercial buildings. The palm-lined creek waters, today confined in vertical concrete retaining walls, suffer from environmental neglect, accumulated solid waste and low water levels.

Typically inhabited by poor tenants unable to afford expensive maintenance works, historic buildings in historic cities tend to deteriorate rapidly, offering profitable opportunities for redevelopment. Old Basra is no exception. The government is aware that without a solid financial assistance and management plan in place, there is little chance that homeowners will be able to restore their homes in accordance with international standards.

Yet, because of the sheer complexity of dealing with a multitude of property owners and tenants with different aspirations, authorities throughout the world – including Iraq – have often resorted to large-scale expropriations of urban heritage and the eviction of its residents. Regrettably, such operations have seldom had the desired outcome. Without their inhabitants, heritage areas risk becoming

‘open-air museums,’ sterile, lifeless and unsustainable. On the other hand, international experience shows that historic quarters can provide sustainable economic and tourism opportunities where they manage to integrate cultural heritage in local socio-economic development and upgrading programmes.

Basra’s cultural patrimony can indeed become a pillar of the region’s overall growth-enhancing strategy, as a source of skilled and labour intensive unskilled jobs, contributing to the overall reduction of poverty.

The Plan for the Conservation and Development of the Historic Quarters of Basra that was presented to Basra Governor and Basra Municipal council in late 2017, takes stock of the rehabilitation proposals developed in the last 20 years and focuses on the main blockages that have impeded the implementation of any meaningful rehabilitation project so far in this unique but dilapidated heritage area lining the Al Ashar canal.

As first tangible steps to be undertaken by the concerned institutions, the proposed Plan looks into the urgent creation of an Old Basra Committee operating with seed funding from the governorate and/or central government, the set up of an institutional framework, the official designation of a Heritage Zone and its Buffer Zone, the enforcement of immediate legal measures (speculation disincentives), the drafting of context-specific and legally-binding Building Guidelines and the strengthening of procedures for obtaining a building permit in the identified heritage area.

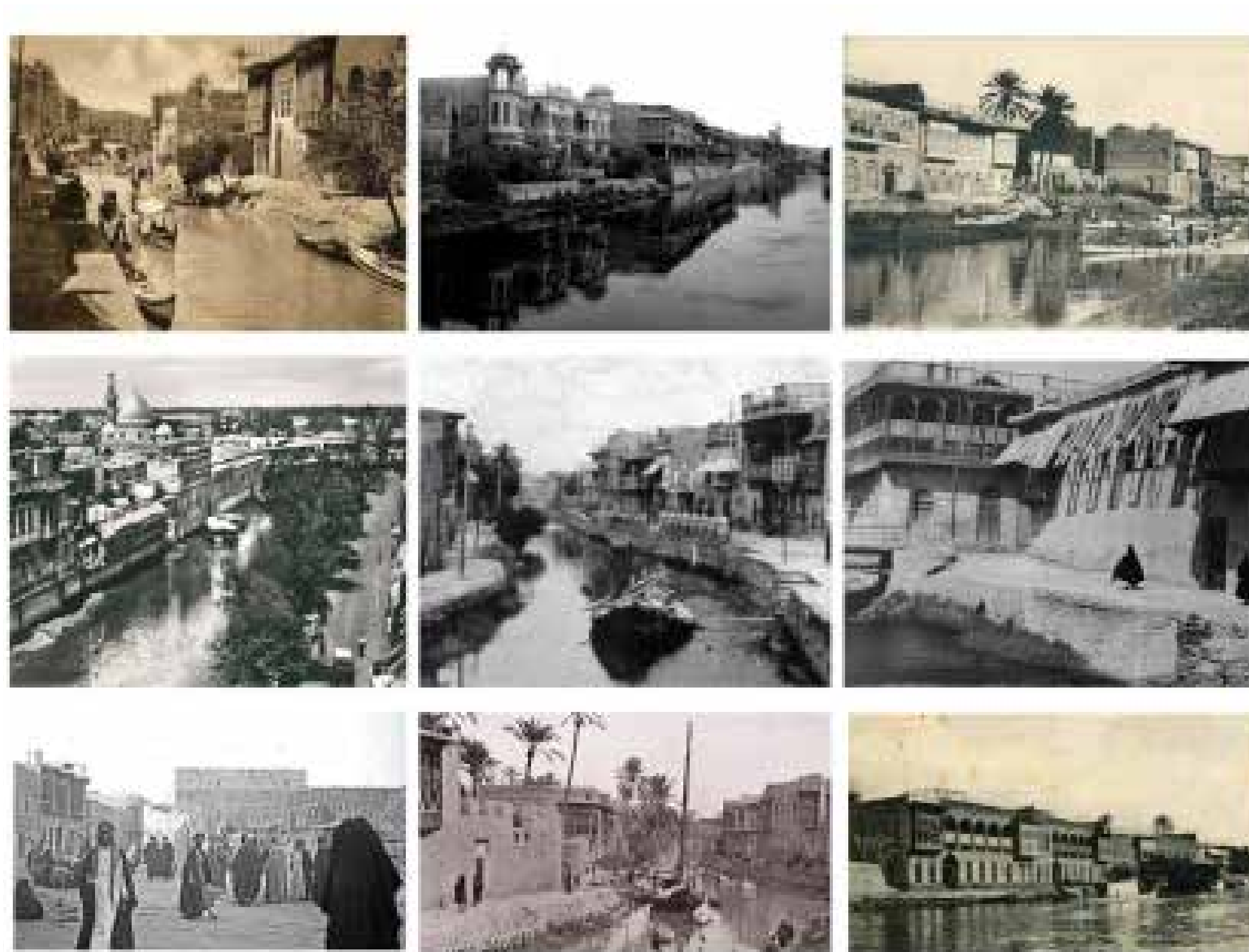


FIGURE 25. Historical images of Basra



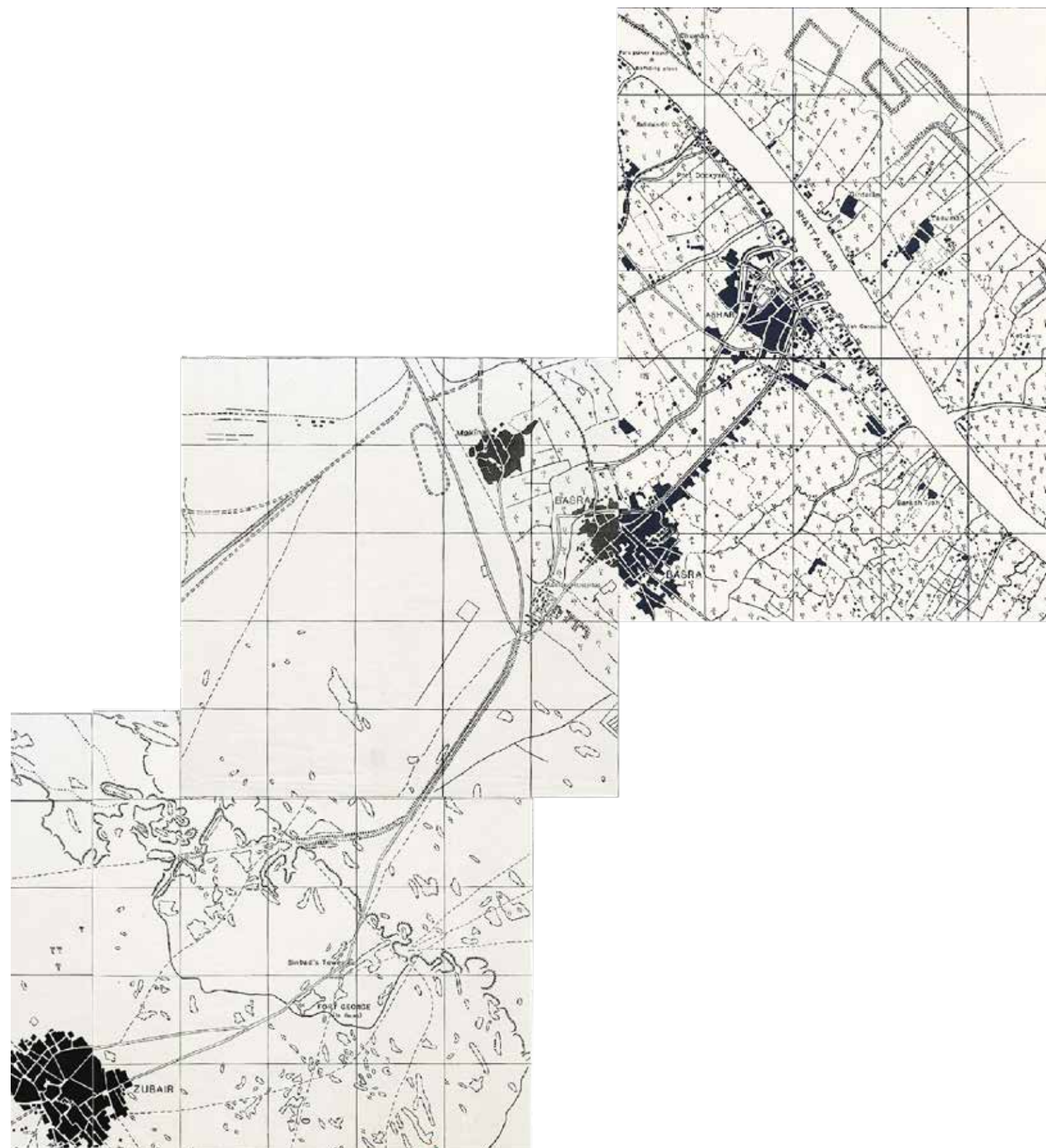


FIGURE 26. Basra, Shu'aibba, Al Zubair. Compiled from air photographs taken in 1939 by R.A.F. Survey of India. Compilation of 3 maps accessed on oldmapsonline.org.



FIGURE 27. Basra Ports. Source: Royal Geographic Society. Photographer: RAF. Licensed through Alamy stock photos.



# 10 ENVIRONMENT AND CLIMATE CHANGE

According to the 2017 GEMS Climate Risk Profile for Iraq<sup>1</sup>, the country has the highest climate-change impacts in the Middle East after Egypt. By 2050, the climate is projected to have an increase in average annual temperature of 2°C, with frequent heat waves, more extreme weather with intense precipitation, floods and droughts and a decrease in the average annual rainfall by 9%. A three metre rise in the water levels of the Arabian Gulf would mean that most of southern Iraq, including Basra, would be underwater. At the same time, the reduction in rainfall and hence vegetation would mean an increase in dust storms.

At the same time, the many environment impacting activities of industries in particular and people in general, including waste generation, use of hydro-carbons and fossil fuels, and poor maintenance practices will add to the climate-change impact. While many of the climate-change impacts are the result of global rather than just local acts and activities, the impact of any local impact by Basra alone would not be sufficient to ward off, for example, rise in sea water levels. Nevertheless, by being better prepared, reduction if not prevention or elimination of climate-change is possible and must be incorporated into any planning for Basra.

## A. IMPACT ON AGRICULTURE

Relatively fewer households are directly engaged in agriculture. The lower cost of Iranian and other imported produce has made agriculture less attractive, and an increasing number of people are turning to other sectors for their livelihood. Nevertheless, the trading and marketing of agricultural produce in the markets of Basra is an important economic activity that would be affected by its rising costs. The overall impact will also be to increase the cost of food, and in a worse case scenario, reduce its availability.

It is also possible that a reduction in agricultural activities in Iraq as a whole will push more households to move to urban areas, though the majority will more likely go to their nearest urban area and not necessarily come to Basra. Nevertheless, this will impact other aspects of the economy.

Basra should be engaged in encouraging more salinity-tolerant crops, urban market gardening and generally expect continued in-migration.

## B. WATER RESOURCES

Basra has recently witnessed the impact of decreasing water quality with rising salinity and reduction in the available quantities. With the increasing impact of climate-change driven phenomena, water is likely to become a major problem for Basra. The city should prepare for this by increasing water re-use and more prudent water usage by all sectors, perhaps through the introduction of a more sensitive charging regime. In addition, the exploration of household-based solar water distillation stills should be introduced to reduce the almost universal reliance on bottled water, especially for drinking.

As Basra is built on low-lying marshland it is susceptible to seasonal flooding from the river and vulnerable to increasing sea levels. A new study<sup>2</sup> has found that rising sea levels could affect three times more people by 2050 than previously estimated, and threaten to wipe out the majority of the world's coastal cities. Basra has been identified as a high-risk area and by 2050, it could be mostly underwater.<sup>3</sup> In the Middle East, a rise in sea levels would trigger large-scale migration of populations,

PREDICTED CLIMATE CHANGE IMPACT ON BASRA		
FUTURE CLIMATE	IMPACT ON IRAQ	IMPACT ON BASRA
<ul style="list-style-type: none"><li>● Increase in mean annual temperature by 2°C by 2050.</li><li>● More frequent heat waves and fewer frost days.</li><li>● Decrease in mean annual average rainfall by 9 percent by 2050, with the greatest reduction (-17 percent) expected during December, January, and February.</li><li>● Decrease in the maximum amount of rain that falls in any 5-day period, but overall increase in rainfall intensity.</li><li>● Decrease in runoff of 22 percent (countrywide average).</li></ul>	AGRICULTURE	<ul style="list-style-type: none"><li>● Some impact on production</li><li>● Major impact on marketing</li><li>● Increase in food prices</li></ul>
	WATER RESOURCES	<ul style="list-style-type: none"><li>● Worsened water quality</li></ul>
	HUMAN HEALTH	<ul style="list-style-type: none"><li>● Increased pressure on facilities</li></ul>
	ENERGY AND INFRASTRUCTURE	<ul style="list-style-type: none"><li>● Minor impact on power</li><li>● Major impact on oil sector and infrastructure</li></ul>
	<ul style="list-style-type: none"><li>● Reduced agricultural productivity activity</li><li>● Desertification of arable land</li></ul>	
	<ul style="list-style-type: none"><li>● Increased water scarcity</li><li>● Longer and more severe droughts</li><li>● Reduced water quality</li></ul>	
	<ul style="list-style-type: none"><li>● Increased food insecurity</li><li>● Intensified epidemics (eg cholera)</li><li>● Compound Respiratory Health</li></ul>	
	<ul style="list-style-type: none"><li>● Reduction in electricity from Hydropower</li><li>● Damage and destruction of vital infrastructure (levels)</li></ul>	

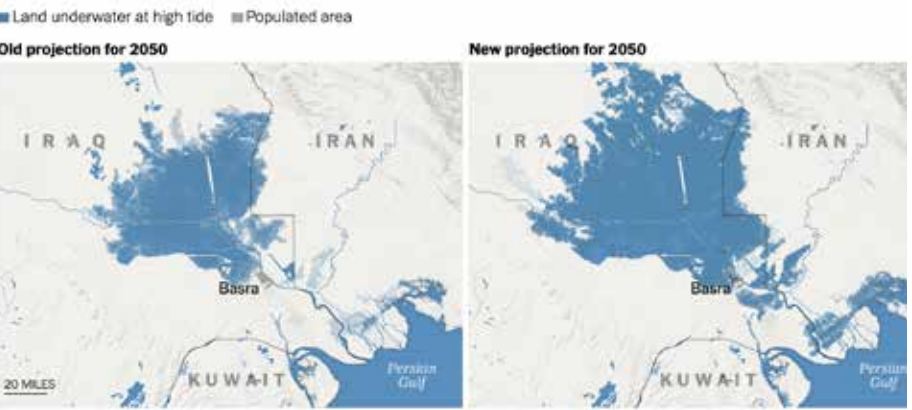


FIGURE 28. Old vs. New Projection of Effects of Rising Sea Levels on Basra in 2050. Source: New York Times/OpenStreetMap.

1. USAID (March 2017), "Climate Change Risk Profile - Iraq"

2. Nature Communications (October 2019), "New elevation data triples estimates of global vulnerability to sea-level rise and coastal flooding"  
3. New York Times (October, 2019), "Rising Seas Will Erase More Cities by 2050, New Research Shows"



which in turn could trigger or exacerbate conflicts in the region and worsen the refugee crisis. Therefore, the loss of major coastal urban areas such as Basra’s could have major security implications that would be felt far beyond the borders of Iraq, and has the potential to not only become an environmental concern but also a humanitarian and security issue.<sup>4</sup>

Tackling a rise in sea levels is a difficult process, but reducing its impact on cities like Basra is possible – provided that the actual rise is limited (and that global intervention succeeds) then, some form of enclosing wall (bund, dyke or levee) would at least keep the water from flooding Basra.

C. HUMAN HEALTH

Water-borne and pollution induced diseases such as cholera and bronchial ailments are inevitably going to increase and will be worsened unless more effective hygienic practices are introduced. The use of recycling, reuse and reduction are not only economically and environmentally sound but also help prevent health hazards.

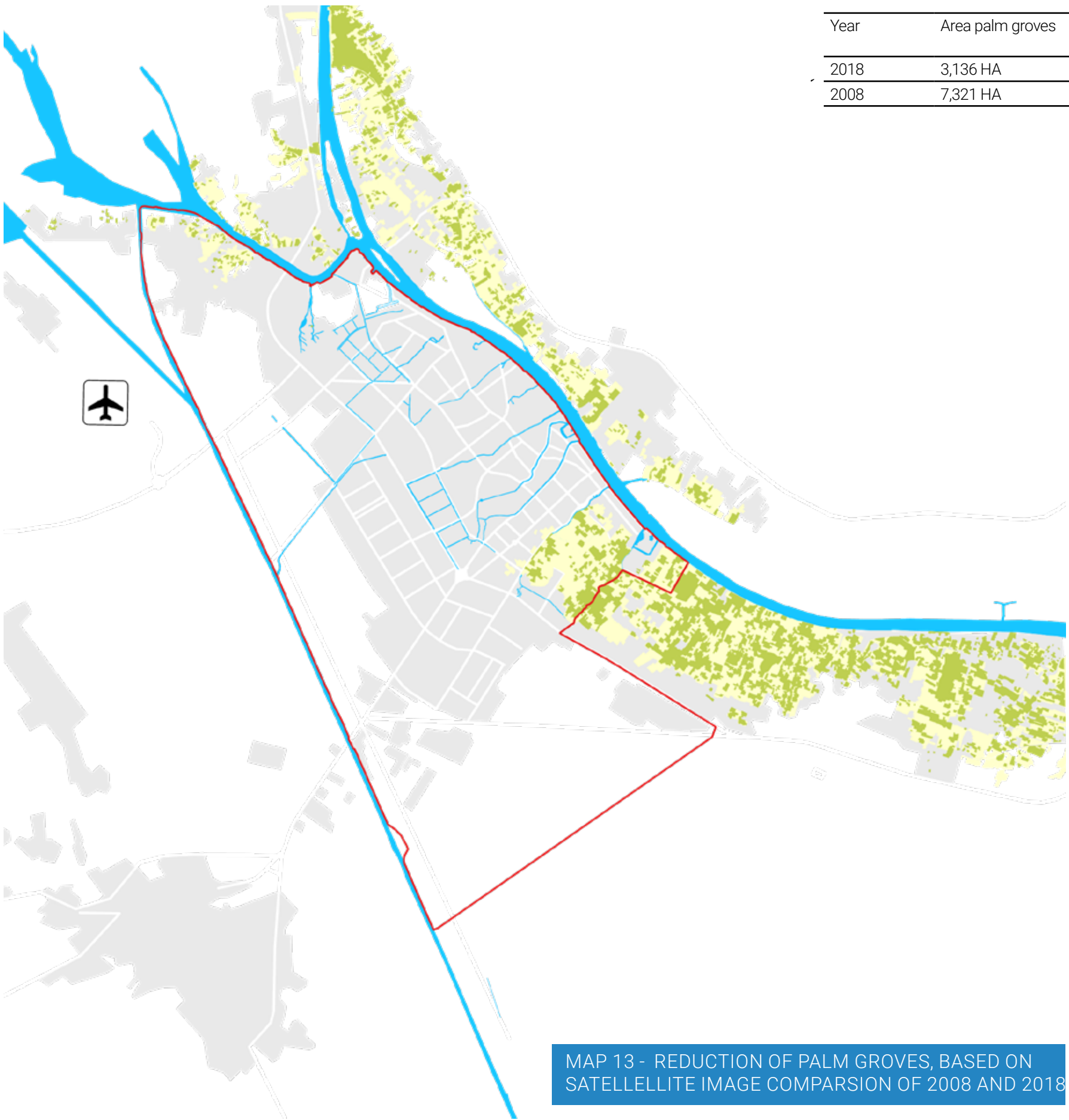
D. ENERGY AND INFRASTRUCTURE

As the major producer and processor of oil and its associated products, Basra is most likely to be impacted by any disruption in the energy sector. Not only the many extraction and production facilities, but also the storage and transportation facilities are likely to be negatively impacted. At the same time, most urban infrastructure, from transport to water and sanitation infrastructure will also be under stress from an increasing population.

E. MARSHES AND PALM PLANTATIONS

The Mesopotamian Marshes and the Palm groves of Basra are both examples of the inter-play of social, political and economic forces and how these considerations influence and are used to justify physical interventions. They also highlight how ground realities change over time and can have unintended consequences.

4. New York Times (October, 2019), “Rising Seas Will Erase More Cities by 2050, New Research Shows”



MAP 13 - REDUCTION OF PALM GROVES, BASED ON SATELLELLITE IMAGE COMPARSION OF 2008 AND 2018

## The Marshes

Historically, the marshlands constituted a chain of almost interconnected permanent and seasonal marsh, shallow and deep lake complexes that flowed into one another and mudflats that were regularly inundated during periods of elevated water levels. During periods of high floods, large areas of desert were seasonally under water. Consequently, some of the formerly separate marsh units would merge together, forming larger wetland complexes with a great variety of habitats and ecological features.

In the 1950s, the construction of the MOD (Main Outfall Drain) started with the purpose of controlling mosquitoes and diverting saline residual water away from agricultural land. The construction of the MOD took several years, and as its construction proceeded, the focus gradually shifted to marshland reclamation. However, these projects were stalled by the Iran-Iraq conflict; therefore until the middle of the eighties the marshlands remained relatively intact.

After the 1991 Gulf War, a massive hydro-engineering drainage programme was launched. The original purpose of the irrigation and agricultural improvement was changed into land reclamation, by diverting waters from the Euphrates and Tigris into the drainage canals. At the same time, Turkish and Iranian dam-building programmes had reduced the volume of water. The results of these massive drainage and reclamation schemes have been extraordinarily devastating; in less than a decade, one of the world's largest and most significant wetland ecosystems had completely collapsed.

In addition to the engineering works, the marshes became one of the main areas of fighting in southern Iraq in 1991-93. Of the 95,000 southern Iraqis who sought refuge in Iran since the end of the Gulf War in 1991, an estimated 40,000 are Marsh Arabs.

Since then, spontaneous actions to re-flood the marshes have been taken by local people either acting by themselves or asking for support to local authorities; due to these efforts by the local population and MoWR, within about nine months of liberation, approximately 40% of the marshes had become inundated, (75% by 2008) but the levels of salinity have soared to 15,000 parts per million (ppm) in some areas, up from 300 to 500 ppm in the 1980s, directly leading to shortages in and contamination of potable water in urban Basra.

## Date Palms

Basra was once world-famous for its date palms with over 30 million trees, but that figure dropped to 12 million by 2000 as the trees were brought down by shells during the Iraq-Iran war. Later, during the 2003 invasion, the US Forces sprayed the palm plantations with insecticide to deprive insurgents of cover. The country that once produced three-quarters of the world's dates now accounts for just five percent after it switched its economic focus to oil and after decades of conflict devastated its farms. The loss of the plantations is not just an economic disaster but also an ecological one. The government programme aims to increase the number of trees to 40 million in 10 years.



FIGURE 29. Neglected date palm trees at a farm in Basra. Source: AFP.

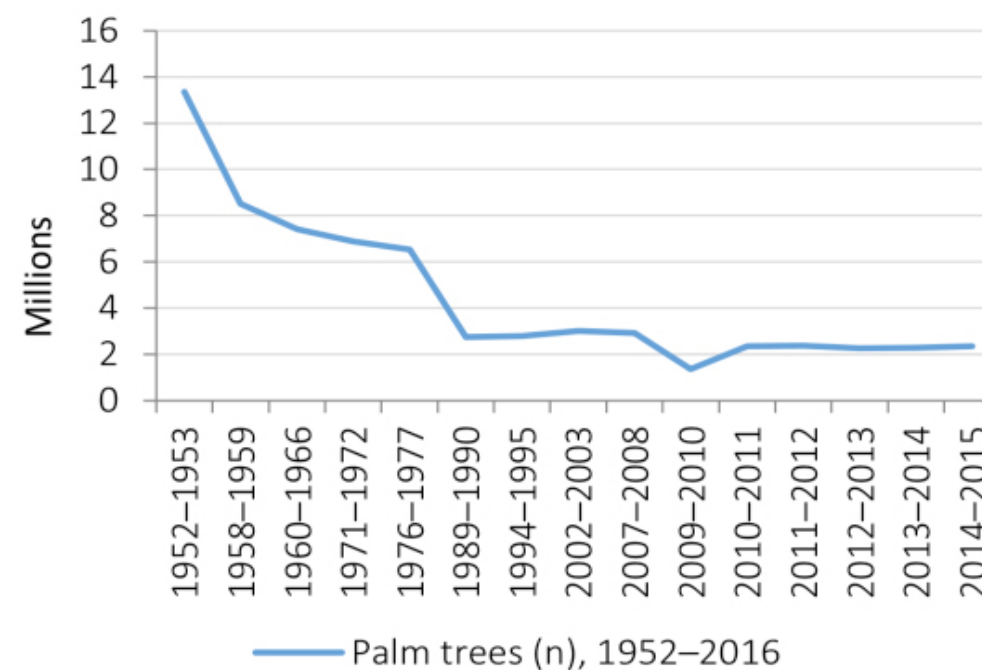


FIGURE 30. Decline in date palm trees from 1952 to 2016



# 11 TOWARDS A RESILIENT BASRA

## A. GOVERNANCE, LAND AND INFRASTRUCTURE

In the sections above, various suggestions have been made regarding what could be done and how it could be done to ensure a more outlook for Basra. These have covered governance, land and infrastructure. Many if not most of the suggestions are not only known by, but have come from the various Directorates and professionals dealing with these issues in Basra. Not surprisingly, there is a common thread running through them, which reinforces both the analysis and the recommendations.

First, there is the need for greater decentralisation. This has been promised and is incorporated into many of the legal and governance documents but has not been put into practice. Or, even if it has, it has not been implemented on the ground. Whether finance, delegating authority or transferring control to the local organisations and institutions that know local conditions, the central government has been reluctant to let go – or perhaps does not feel that it has the capability to be able to do so. Higher issues and considerations have resulted in repeated delays.

Not only financial resources and regulatory powers, but by retaining central control over the senior staff of Ministries and Departments has prevented a genuine local capability to act from emerging. It has also meant that the various Departments have not been able to interact as often and as easily amongst their colleagues within the Governorate as is required to develop local capacity.

The major result has been to weaken local authority and to make their task of delivering local results that much more difficult. Not just the ability to raise and decide their own funding and finances but also to decide and formulate their own regulations and management systems. Perhaps if Basra succeeds in its ambitions to become a region, this will become more possible. At the same time, as stability and self-reliance increase at the centre, it will be able to

ease some of the restrictions.

In the mean time, Basra must try and do what it can to increase its room for manoeuvre by seeking ways of doing things that rely more on local rather than external support. Amongst other things, it needs to reach out to and interact with the local population more and involve and integrate them into local decision-making. It is the people who make a city.

## B. HOUSING

Nothing epitomises “local action” more than housing. While over-arching legal and financial systems are crucial in the development of vibrant housing development and production, they are not as central to its success as is local action and intention.

Essentially, the proposed strategy would examine each piece of land that has “informal housing” and see what would have to be changed in order to make the housing “acceptable.” In many cases, it is the formal definition of land according to the land use or zoning map that needs to be modified. In many cases, this is not a material change and could be undertaken in Basra, perhaps with prior clearance in principle from the national ministry.

In addition there may be certain other changes that would need to be made to the structure in terms of size, materials and finishes. Again, some of these could be easily undertaken (over time, perhaps) but some may require an easing of building regulations. While it is a local matter, it would be more effective to have prior clearance from the national Ministry.

At the same time, there will be instances where some structures are incapable of being transformed effectively and may have to be demolished. This may be where the size cannot be enlarged, for example. Where such

cases open up or make land available, there may be an opportunity to introduce hitherto missing land-uses or to enhance existing ones.

A useful casebook can be developed very quickly, making the exercise simpler over time. However, to make it effective, it should be implemented on the ground by locally-based teams of men and women who know the locality and are known to the community. Such a cadre could be developed through quick on-the-job training. They can go on to becoming permanent city facilitators as an effective yet relatively inexpensive way of reaching out to the community and engaging them in city-building.

A simple but effective system of savings and loans will also be needed to allow saving-for-housing to build up revolving funds without direct recourse to the formal banking system. Saving-for-housing will allow residents to save up for housing improvements in discrete 2 to 3-year stages. The pool of funds would be available for other borrowers in rotation. The final set of longer-term (e.g. 5-year) loans would be used to buy land title.



# Current Strategies

## 1 Housing Projects



+ - 20k dwellings

As the central plank of its housing strategy, between 2012 and 2019 the government invited tenders from the private sector for eight housing projects on 1000 dunum of public land to produce 17,000 apartments and villas (8% of the total needed). Only four have achieved progress of more than 40% while three have only 10%. Effectively, all the projects had been cancelled or abandoned. The failure was attributed to contractors technical and material problems. Some projects have recently been restarted now.

## 2 Urban Extensions



+ - 100k dwellings

In response to the failure of its previous attempts, the current government strategy is to undertake a 7600 hectare “green site” extension, south of Basra in the newly-planned Al Siaab city. Based on the developer-led real estate success in countries around the Gulf. So far, foreign developers have shown little appetite for the project, given not only the lack of stability, but also the low rate of return over a long period. The current plan depends almost fully on government participation financially or in the provision of utilities and infrastructure.

# Current Realities

## A Informal settlements



+ - 25k dwellings

The process of individual households constructing houses on government-allocated land has continued, implementing planned housing on plots within the existing urban area during 2010-19. However, given the inability of government projects and strategies to provide sufficient houses or support housing production, and a growing population as well as in-migration, people have resorted to informal methods to meet their needs. As well as subdividing plots and buildings, constructing extensions, households have also resorted to the informal occupation of public lands and open spaces in and adjacent to formal housing areas. This process has resulted in the construction of more than 25,000 houses, perhaps helped by the lack of authority and policing at the local level.

## B Growth in Agriculture

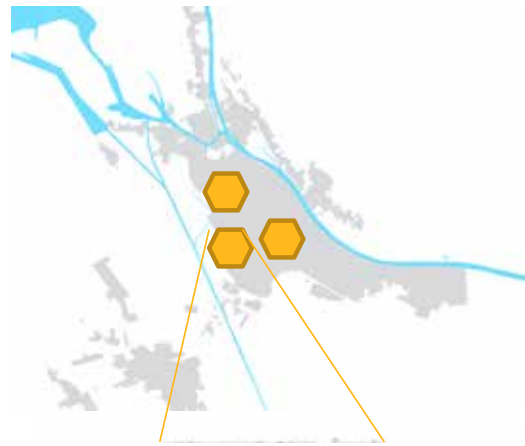


+ - 100k dwellings

More than any other housing in recent years has been the construction in agricultural areas, primarily across the Shatt Al Arab. Land designated for agriculture allows the construction of some housing – primarily for the use of the farmers. However, given the demand for housing coupled by the relative drop in value of agriculture because of problems of water and cheap imports from Iran, selling agricultural land for housing has been the most profitable alternative. Furthermore, since many of the in-migrants were connected or at least known to the local population, there was little objection to selling land to them. Being outside the urban area, also made it easier to evade legal objections. As many as 100,000 housing units appear to have been built during 2010-19, covering an area half the size of urban Basra.

# Proposed Strategies

## ③ Densification



**The Densification Strategy for Basra** relies on three measures that facilitate housing construction:

1. Constructing houses on allocated land now rather than later. While some of the land may be held speculatively (as in cities in other countries) in Basra it is more likely that the land is being held preemptively to reduce uncertainty and enable children to remain close rather than having to look for housing on the boundaries of an expanding city. Or, the family actually lacks the money for construction, or has moved out of Iraq to avoid the current uncertain situation.
2. Building additional floors to existing structures. The current regulations and indeed infrastructure do not encourage the construction of medium-rise construction, and most Basrawis probably would not like to have strangers sharing their plot. On the other hand, the timing is probably right for such construction to be the answer to growing families, with the eldest offspring looking to start a family and looking for accommodation.
3. Aggregating smaller properties and replacing them with apartments. While it is certainly possible to add 2 or 3 floors to

existing houses, more commercially valuable properties can be developed by amalgamating adjacent plots and building 4 or 5-story apartments – thus gaining 2 to 4 additional units.

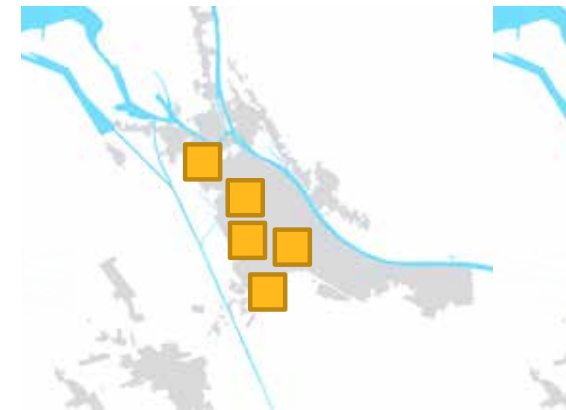
These strategies require modifications to the building and planning regulations. Though such modifications could potentially double the population that could be accommodated within the existing foot-print of Basra, the actual changes required are relatively minor, and Basra should argue for and take the initiative to do so of its own accord, as “administrative changes” rather than waiting for Central Government to change the Law.

It will also require some facilitation: a process of informing and encouraging the population to adopt these practices by providing the technical and legal assistance required. The cost of this is far less than the subsidy of providing public land to invite private sector to invest in housing projects.

Much of the finance can be provided either by the households themselves, or by forming strategic alliances with small private developers: as a general rule, a contractor will build 6 to 8 units on a plot, giving 2 to the current household, selling 2 to offset costs and making a profit from the remaining 2 to 4 units.

The strategy will also require an upgrading of the existing urban services and networks, particularly water, sanitation and electricity. This could be done on a street-by-street basis, paid for by the house-owners at a cost less than buying plots elsewhere.

## ④ Informal Upgrading



### Informal Upgrading Strategy for Basra

would be largely based on the same principles that have been established for the proposed Informal Settlements Law. The general context and content of the Draft Law is in accord with the needs and aspirations of Basra, and therefore, the Governorate should take steps to implementing a programme in anticipation of the Law being passed rather than waiting for it to happen before taking steps to implement it. Certainly, a considerable amount of time and effort could be saved by such pre-emptive action, not least as regards planning and preparation. For example, surveys and studies can already take place to identify and classify informal settlements for their relative suitability and acceptability for formalization. Thus, settlements could be classified by order of priority as well as by the types of action that would be required. Furthermore, a better estimation could be made of the inputs that would be required in terms of infrastructure provision. Finally, plans could be drawn up for likely alternative solutions for those settlements that cannot be formalised in

situ, and for the households that cannot be accommodated even when their current settlements are capable of being formalized. On the other hand, there are likely to be a number of additional housing plots becoming available or being generated, and criteria for allocating these to households on the basis of their eligibility and priority for resettlement can be prepared.

Most important is to have in place a trained and practiced cadre of “Housing Facilitators” who understand and can help inform and implement the upgrading strategy through personalized strategies for eligible households. To the extent possible, the bulk of this cadre should come from the various communities themselves, and should include both females and youth. They would likely form the basis for an on-going cadre of urban facilitators.

## ⑤ Manage Growth



**Growth Management** in the agricultural areas of Basra requires a strategy to control the transformation of agricultural areas in ways that minimise the loss of agricultural production. It is clear that over time, more of the agricultural land will be converted into housing and other urban functions. This is a phenomenon that has been happening for the last decade and will only escalate further in a haphazard way that will make both agricultural production and housing provision less efficient.

The obvious alternative is to encourage the conversion of agricultural land in a systematic way, such that both uses can co-exist effectively. There are two basic approaches that could be adopted. One would be to try and preserve as much of the agricultural land in as large blocks as possible so that zones of agriculture would exist alongside housing areas. This approach may no longer be possible since land has been sold or given over to housing on the basis of personal ownership patterns and needs. This means that both housing and agriculture exist side by side in a random mix and both are less than efficient in terms of location, extent and

endowments.

The strategy would therefore require the shifting of some of the existing housing units in order to create more viable parcels of agricultural land. This requires either effective, perhaps draconian legislation or offering large sums of compensation. Neither is available to the Government of Basra, and the process would likely alienate both farmers and house owners.

Therefore, the more plausible scenario is to make a rapid assessment of what can best be done using small-scale allotments and more mixed uses. This requires a change in agricultural practices towards a more technical solution. More intensive farming using green/brown houses, for instance; concentrating on market gardening: fruit and vegetables. To improve output and efficiency, the quality of the land (soil) as well as the availability of water should be examined, and a programme of planned, gradual shifting of housing units introduced whereby both housing and agriculture can become more efficient by locational choice as well as infrastructure provision. Under this scenario, house-owners would be party to drawing up a schedule of land-exchange that would mesh with the programme of transformation from "rural" housing to planned, upgraded urban units.

## Integrated Urban Strategy

The Resilience-Building Strategy for Basra is based on the bringing together the current strategies for land development and housing with a proposed strategy for dealing with the urban areas of Basra.

The existing strategies are sound and likely to be successful, especially if they can get the support required from national government and there are no disruptions due to local or indeed external events and forces. Even so, they are unlikely to be implemented in the immediate future, and their products will only be available some 5 to 10 or more years down the line once the investments are forthcoming and led to the construction and development of the necessary urban infrastructure and housing projects.

However, they ignore many of the very real opportunities that are available locally. Ironically, many of these opportunities are not only ignored but are being deliberately frustrated and even destroyed. As indicated above, the informal housing is the seed that could help transform Basra. It has the further advantage in that the transformation from a problem to a solution is one that needs very little funding, technical expertise or indeed time. It can thus dovetail with the longer-term strategies that have already been proposed.

Thus a Win-Win solution is possible that could potentially change not just the physical fabric of Basra but also its economy and outlook and help create a more integrated and engaged community of citizens and more effective governance.

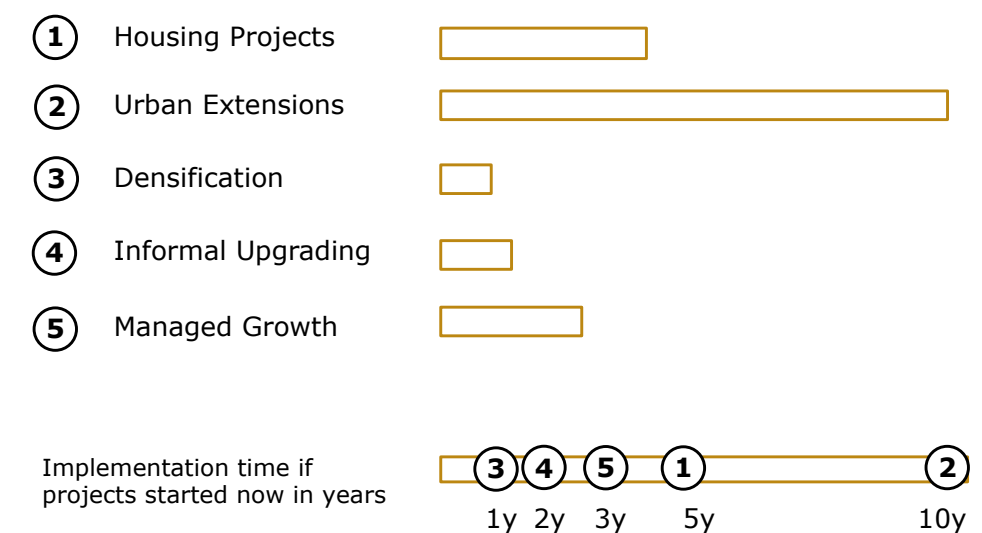


FIGURE 31. Projected implementation time for current and proposed strategies



## INFORMAL SETTLEMENTS UPGRADING

## BASRA Al-Qibla Area

## Planned Situation

This is a part of a planned housing area including open areas for play and recreation, shops and other neighbourhood facilities. The average plot size is 200m<sup>2</sup> (approximately 8m x 25m). These plots would normally be allocated to lower-income households for a nominal payment (currently) of 250 IQD/m<sup>2</sup> and no charge for infrastructure, making a total of 50,000 IQD per plot. If there was a nominal charge for infrastructure of 75,000 IQD per m<sup>2</sup> (as in Abu Sayyab), the total cost of the plot would become 22,575,000 IQD.

## Actual Situation

Over the last 12 years or more, parts of the area have been gradually occupied without authorisation and rudimentary houses have been constructed. In the surveyed area, there are some 230 houses built on plots ranging from 50 to 400 m<sup>2</sup>, with no overall plan. Therefore, plot sizes and shapes are not regular and there are no municipal services or roadways.

## Conventional Approach

Since the housing has not been authorised, the conventional approach would be to demolish and construction and remove, forcibly if necessary, the occupants. Where the current occupants go and how they then obtain housing would not be part of the remit. Even though many, if not all of the current residents could well be eligible for housing in areas such as Al-Qibla, it is very unlikely that they would actually be housed here, if for no other reason then to act as a deterrent for others who might then choose to adopt a similar approach and occupy other municipal land.

Partly because the municipality has been too preoccupied by other priorities and partly because the current residents would have formed links to local political and influential actors and removing them



FIGURE 32. Unplanned settlement in Al Qibla, UN-Habitat (2019)



could be actively resisted, nothing has been done, and may not be done in the immediate future – or until the municipality feels that it may not face insurmountable opposition. Until then, the residents will continue a somewhat precarious situation, unwilling to make further investments or improvements.

### Suggested Approach

Under the recent legislation regarding informal settlements, an alternative approach has been proposed and is being tried out to enable settlers such as these to be incorporated into the urban fabric, offered security of tenure and access to urban services. This opens up an opportunity for the city of Basra to resolve its current “housing shortage” and generally improve the urban fabric.

If the current houses were demolished and the area re-planned, it would likely accommodate between 150 to 175 households, depending on whether any open space was to be provided. At present there are 219 households – or 44 to 69 more than if the area was officially planned. If it were decided that the minimum plot cannot be less than 100m<sup>2</sup> then 39 households would have to be relocated. If the minimum plot size had to be 200m<sup>2</sup> then another 116 would have to be relocated. In both these cases, about 100 households could remain on the site by allocating all or part of an existing plot that would be vacated. Thus only some 70 households would have to be relocated. This would mean that the same number of households would remain on the site and only 70 would need to be relocated – as against the 230 or so that the conventional approach would make homeless. Applied globally, it would mean a 70% reduction in the overall land required for new housing to accommodate those living in informal settlements.

The above shows the advantage of keeping people where they are (even in informal settlements) instead of demolishing these settlements and developing new sites. Of course it raises other questions:



FIGURE 33. Open water at Al Qibla unplanned settlement



1. Will this not cause the creation of more informal settlements?

Not if these are stopped and prevented right at the beginning of their formation. Moreover, if there were affordable options there would be less of an incentive for in-migrating or even Basrawis to opt for informal settlements.

2. Housing and Planning regulations do not allow plots of less than 200 m<sup>2</sup>.

The fact is that even in the absence of any controls, relatively few households occupied plots of more than 100m<sup>2</sup> – 64 as against 155. In fact Basra should be moving towards smaller flats. In high-rise buildings, flats are usually not larger than 100m<sup>2</sup>. One way would be to encourage people to only build on one half of their plots, and later add another house for their child. Similarly, with facilitated construction, their could easily be 4 housing units on each plot of 200m<sup>2</sup>.

3. The informal housing units are badly constructed and poorly designed. Their presence spoils the appearance of Basra.

One of the reasons for the poor construction, especially in terms of appearance is because households do not want to spend money that would be lost if their houses were demolished by the municipality. With more security of tenure, there would be more investment and better houses as a result.

4. Why should the informal settlers be “rewarded” for their illegal activities?

It could be argued that they only undertook informal settlement because the municipality and the government failed in their duty/responsibility to provide affordable housing. Moreover, the actual formalisation of the land and indeed building permission should have fees attached to it and the municipality should at least recover their costs in order to develop additional settlements.

5. How will these “poor” people afford to pay for their land and housing construction?

The government already subsidises contractors to build “low income” housing. These subsidies would be better given to the households. Indeed, many of the tasks that the government pays for in the running and management of the city could be transferred to local communities.



FIGURE 34. Unpaved road in Al Qibla unplanned settlement



URBAN DENSIFICATION

This is a randomly selected polygon of 37,412 m2 in Basra. The polygon was identified on the ground and a Windscreen Survey was carried out to make a rapid assessment of the size and quality of various land uses as they exist and their potential. The intention here is to use randomly selected polygons to allow an assessment to be made for the whole of Basra. In this case, the assessment is of the potential for densification and what the resulting holding capacity of Basra might be.

The particular polygon is fairly typical of “middle Basra” – between the older parts and the edge of the existing development. There are over 250 distinct parcels of land, 85% of them have buildings on them, most of them housing of various sorts, ranging from planned to informal in terms of both use and construction. There are 18 clearly defined and fairly serviceable roads giving access to virtually every plot and parcel. As well as a couple of open spaces, there are 16 vacant plots (clearly intended/reserved for building and likely for housing) as well as a school.

Apart from the vacant plots, there is the potential for both improving the existing structures so that their quality can be upgraded and improved. Over 70% of the buildings have flat roofs that are used as terraces and which could easily be extended upwards. Many of the existing plots and structures are such that they could well be redesigned and reconstructed in order to provide small mid-rise apartment blocks. Thus the number of housing units could easily be doubled if 2 or more stories were encouraged and their construction facilitated.

Type	m2		m2	Count
Building	26259	... of which upgradable		
Open Space	207		5104	43
Road	7554	... of which unplanned		
School	656		4544	28
Vacant plot	2736	... of which with terrace		
Grand Total	37412		25450	155

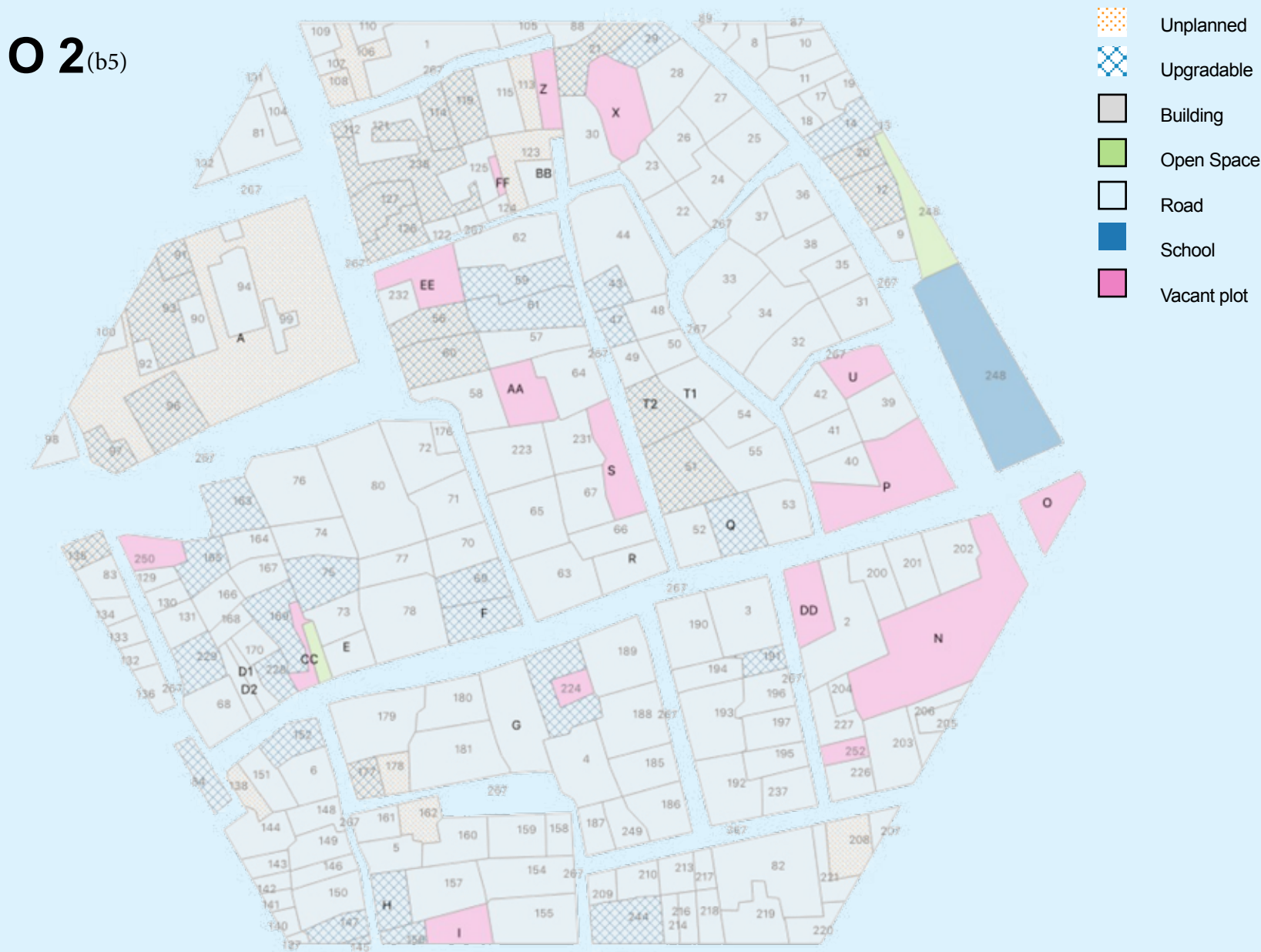


FIGURE 35. Density of randomly selected polygon in Basra



**P.**

This is a vacant parcel of land off a major cross road, providing an opportunity for a commercial/residential mixed use multi-storey development. The buildings surrounding it are made of fairly good quality cement blockwork with a rendered finish, making them effectively comparable to planned or formal housing units. There is sufficient evidence of a power network to suggest that the area is, or could be made adequately serviced. Other than some construction shuttering and old furniture, the plot is fairly clear of rubbish, suggesting some community activity.

**H.**

An area on the edge of the polygon that seems to have been in existence for some time, with typical rural structures: flat mud roofs, probably on reed matting on a framework of unwrought timber. The adjacent buildings are typical informal construction, re-using second-hand cement blocks. The units have been constructed in stages and have been roofed by galvanized corrugated sheets. This is standard construction for households that are unsure of their tenure status and therefore unlikely to make unnecessary investments that could be forcibly demolished. The clean and well-swept semi-private courtyard indicates the existence of a settled community. The use of cement pavements for the street are also indicative of a fairly stable, settled community.

**A.**

The fairly solidly and well-constructed boundary walls show confidence as well as some assurance of a settled development which is also reflected in the roads with pavements. The addition of a ramp off the street suggests the presence of a vehicle, probably for commercial use. The quality of

the gates and the presence of infrastructure, are all indicative of a strong, well-established community. Clearly, with security of tenure households such as these would be more willing to invest in the development of their housing, including the addition of additional stories.

These houses are indicative of suppressed investment potential that would be forthcoming if there was support and facilitation and already there are some signs of plaster finishes and paintwork that would welcome a formalization of the housing.

**51.**

These are transitional housing units that seem to have originated as traditional mud-brick and plastered structures and have transmuted into cement blocks and rendered walls. The introduction of in-situ-cast courses of concrete beams and the use of pre-cast cement block shows that the residents have the expectation of a more permanent residential status. Most likely the house in the foreground has been rebuilt, and a gap has been left between this and the neighbouring structure on the expectation of future changes. The use of the external light is another indication of a developing community. With greater security, these houses could very easily, and most likely will, be upgraded into acceptable permanent structures that conform to building and construction norms and regulations.

FIGURE 36. Opportunities for housing and existing housing units

**P****H****A****51**





*UN-Habitat seeks to provide up to date, holistic documentation and analysis of the impact of the crisis in key cities, through City Profiles, synthesising information and insight from existing sources and priority sectors, supplemented by direct field research by UN-Habitat teams based in each city. This profile is part of a regional urban profiling exercise that aims to develop urban profiles for the cities of Basra, Sinjar, Derna (Libya), Mareb (Yemen) Deir-ez-Zor and Dar'a (Syria). UN-Habitat's expertise in urban analysis, community approaches and crisis contexts have informed the development of the City Profiling process. All City Profiles are developed in close association with the concerned governorates and municipalities.*

*The structure of the City Profile provides a pre-crisis baseline and data from the current situation to understand the impact of the crisis accompanied by narrative description and analysis. Furthermore, City Profiles review the functionality of the city economy and services, understanding of capacities and coping mechanisms and the identification of humanitarian or development priorities. They do not provide comprehensive data on individual topics, but seek to provide a balanced overview. The City Profile affords an opportunity for a range of stakeholders to represent their diagnosis of the situation in their city, provides a basis for local discussions on actions to be taken and helps to make local information and voices accessible to external stakeholders seeking to assist in development response.*