



Land
reconversion
strategy for
Kabul urban
development





Delft University of Technology

Msc Urbanism / Architecture
Spatial planning & strategy

Graduation project:
M. Heshmat Najim
h.najim68@gmail.com
0031-(0)646332913

04-07-2014

Main Advisors:
Fransisco Colombo, Ir. F.F.
Prof.Dr.ir. Arjan van Timmeren

Other advisors:
Ir. Anne Feenstra | Dehli 2050





Table of contents

- # Introduction
- # Understanding the context of planning in Afghanistan
- # Spatial analysis
- # New planning framework
- # Collective vision
- # Site specific analysis
- # Specific site vision
- # Specific site design
- # Reflection

ACKNOWLEDGMENT

I would like to express my deepest gratitude to ir. Francisco Colombo and Professor Arjan van Timmeren, my main project advisors. In the process of understanding the city, I have gained much respect for you both and you have inspired me to work exact and with enthusiasm. I think on the personal level you have taught me lesson of patience and respect towards another culture, because you have been both most humble and respectful towards me and Afghan culture.

I would also like to thank ir. Anne Feenstra, who has put time to write my long emails explaining the current development in Afghanistan and specific case of Kabul. Your work, advice and quick email responses has been instrumental for this graduation project. I will never forget what you have told me, when we were in Amsterdam.

To my friend and tutor Jan Willem Petersen who offered me the opportunity to work alongside him, your wise and sharp reasoning will be missed on this project, hopefully we can work on other projects.

I would like to express my genuine respect and appreciation to Dr. Pietro Calogero who has put the urbanization in Kabul to the academic and planning discourse. Hopefully we can meet in the future and exchange ideas.

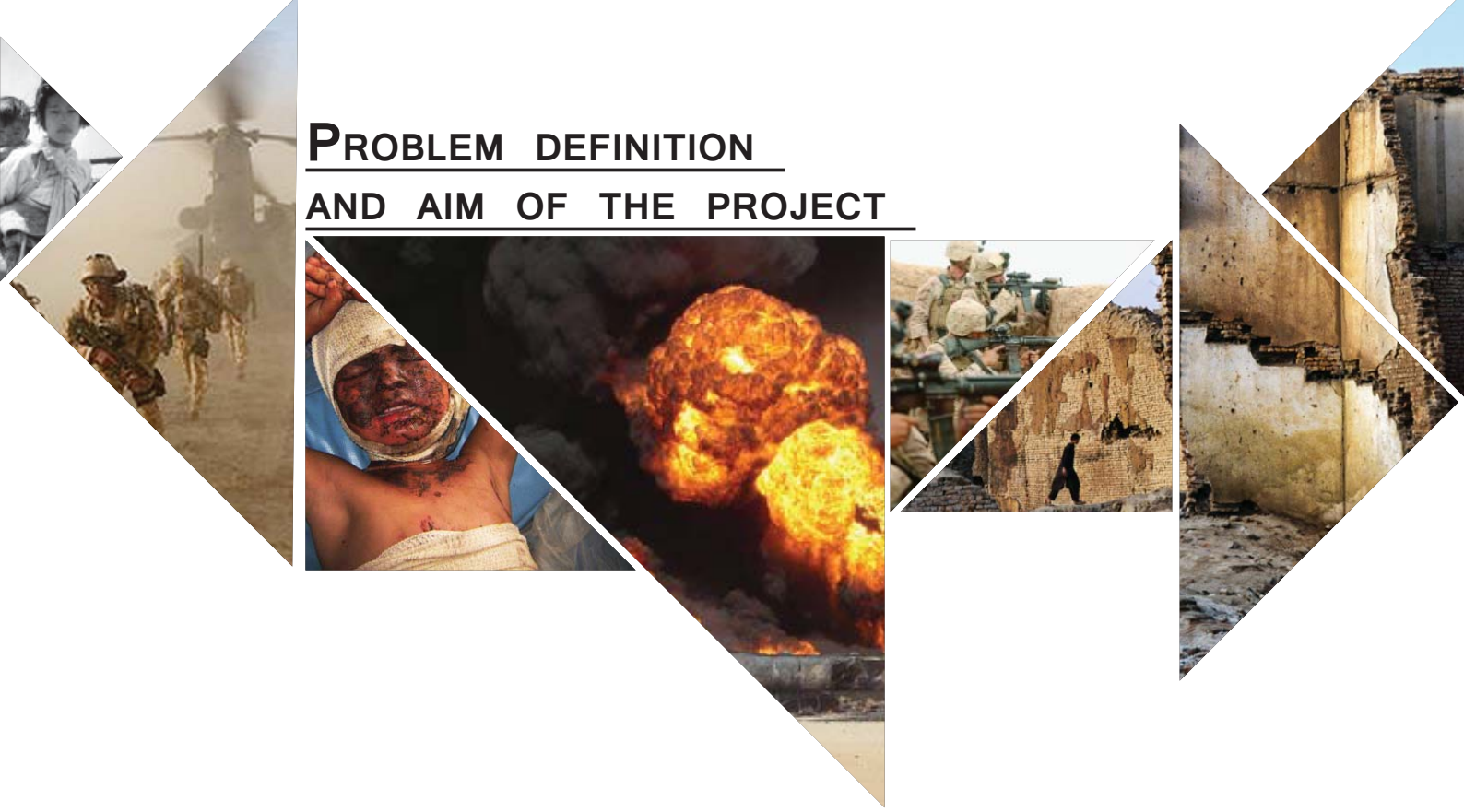
At last but not least I would like to thank my family especially my mother, father, I strive to live up to your profound expectations!



Introduction

- # Problem definition and aim of the project
- # Methodology
- # Research questions
- # Structure of graduation project

PROBLEM DEFINITION AND AIM OF THE PROJECT



THE RECONSTRUCTION DOCTRINE

The collective perception created by media associates contemporary wars with the images of exploding houses in Beirut, the bombed-out inner city of Sarajevo and Damascus, Baghdad and Kabul amenities flames in fire. Today's wars are fought primarily in and over cities, controlling the cities means controlling the country in the means of government, economy and cultural trades. Because of these reason cities has become an international concern for (post)-war reconstruction. The international communities importance with regard to local conflict resolution has increased considerably in recent years, it makes contribution not only to resolving the conflicts and security issues, but also shifts the political, social and cultural rationality and thus institutions of it. (Hackenbroich,2010).

The impact of political and managerial shifts on cities current and future development is immeasurable; the destiny of every (post)-war city lies in hands of official authorities, which consist of national and international agencies, and non-official forces. The implication and imposition of models and rules from different rationality and reality of official and non-official forces creates contradictory and unwanted conditions for the urban realm and how these cities are being managed.

The reconstruction doctrine for a city and thus for an urban life in a (post)-conflict situation must necessarily adapt to the specifics of the respective location. Most reconstruction programs aim to establish new forms of "good governance", yet these programs with help of donor countries who mostly copy their own political structures without embedding it to the local political, cultural and economy.

The need to contextualize planning in critical situations, and adjust planning targets in the light of the

local situation is therefore all the more demanding. Political, social and economic circumstances must be taken into account. (Calogero, 2011)

THE SPECIFIC CASE OF KABUL

To clarify the relationship between clashing regimes/policies and the growth of different level of exacerbation (social-spatial conditions) the specific case of Kabul is taken as example for this graduation project. Kabul has been in war for almost 36 years now. The city has been suffering from numerous waves of contrary regimes, planning doctrines, clashing political policies and impositions of various economic, social and urban planning models, which creates tension between institution and people who are running these clashing policies.

In last three decades the city has been dealing with at most opposed regimes. In 1979 the Russian invaded Afghanistan and thus Kabul, and so they imposed Marxism doctrine upon the city. Until 1991 the city had been handling its urban development through this mechanism sat up by the Russians and their political agendas. After 1991 until 2001 two regimes had been governing Kabul, under one overarching ideology based on Sharia law, with Taliban being most extreme of the two regimes. In November 2001 after the fall of the Taliban, the international initiated reconstruction programme for Afghanistan has been launched. In its minimalist version the aim was to eliminate "terrorists" reconstruct the state and kick start the economy through neoliberal political agendas. The objectives were conceptualised as a social-spatial engineering project, without understanding the underlying conditions and mechanisms of indigenous social, tribal and spatial forces. The objectives and aims put by the international assistance generated enormous expectations that could not have fulfilled under the best circumstances (source).



CONTEMPORARY KABUL CITY

Since 2001 around 6 million Afghans have returned from Iran and Pakistan, who have chosen to move to the large cities of Afghanistan, particularly Kabul. The massive waves of returnees and inflows of social-economic migrants have made Kabul the fastest growing city in the world, which creates various problems for the city to deal with (Feenstra, 2010).

The formal sector (the government) and international assistance, which also suffers from intergovernmental conflicts and corruption, are not able to provide the migrants and the inhabitants of Kabul with basic needs, such as adequate shelter, urban utilities, security of land tenure and water supply, the big Warlords are fulfilling this need for their own area and thereby seizing more power and support from the local people (Schetter et al, 2007).

However there are many agencies working on range of upgrading initiatives on urban conditions, in order to improve living conditions in the city as whole and illegal settlements in especial. This initiative varies from small acupunctural insertions to expansive road and sewage improvements. But there are no best practices done on urban planning level, which is giving answer to the major problems of the current city.

RESPONSE OF THE AUTHORITIES

In response to this, the authorities are intending to plan a new city in Deh Sabz valley, a half an hour ride from Kabul city centre, in order to absorb the new and future migrants to the city.

The new city of Kabul is not a satellite town of the existing one, but a new city that will provide housing for almost 3 million people. The intensions were to start the construction of New Kabul city in 2010, but until now there is no sign of construction.

PROBLEM DEFINITION

The hypothesis of the design project is that the new city of Kabul will delay until 2030. Meanwhile the rapid pace of urbanization in Kabul will be one of the mean features of the city, Population of Kabul will surpass 7.5 million inhabitants by 2030, while the city is planned for 2 million people, at its most comprehensive scenario. (RECS & Yec, J.V, 2010) Even under these circumstances, the city authorities

are eager to direct the city development through old master plan of 1978. Kabul does not have much experience in addressing large-scale urban planning issues, since it has been a largely rural society. The city authorities do not know how to deal with these highly complex problems created during 30 years of war, but to address it with the well-known Master plan of 1978. By implementing the master plan, more than 80% of dwelling in Kabul will be demolished in order to formalize the dwellings. The other major problems, which are generated by waves of clashing rationalities, wars, rapid population growth, weak governance and environmental degradation; will be discussed in the following chapters.



the city development more comprehensible for the authorities, private stakeholders and public agencies . The proposal of strategic site has been chosen as potential act in the framework of new regime; the new regime of neoliberal Karzai is promoting marketization, which works in contradictory with outdated Master plan of Kabul. The warlords, who were acting each as separate government institution during the wartime of 1992-1996 and therefore were maintaining their own territory with civil projects, are currently involved with several urban projects in Kabul, acting as urban planner and still maintaining their own territory. These initiated urban projects by warlords and private sector are mostly gated or in contrast with master planning of 1978.

The proposal of this graduation project is to develop sites in cooperation with public private partnership, in order to engage all the stakeholders even the warlords, who are already initiating several urban projects.

AIM OF THE GRADUATION PROJECT

Based on the spatial analysis, on literature reviews and in-depth interviews, it becomes clear that Kabul should tackle its problems not only by small acupunctural and upgradation interventions, but rather with good collaboration of all the stakeholders when developing a site. Due to the change of regimes and contradictory policies and urban planning tools, it seems also the best solution in order to benefit from the current regime. Within this context the general objective of this design project is to develop strategy and instruments for strategic site, with high potentials in order to tackle more than one issue.

Furthermore, the developing initiatives should not be undertaken in isolation, but instead should be an integral part of a larger urban vision.

Linking the development of the strategic sites with larger urban development project and environmental issues such as water shortage cannot be provided only by the government institutions, there is greater funding needed. Each project on the city level as well as on 'site' level needs the collaboration of important actors and different warlords in some cases in order to increase the scale and the impact of the project as well as its feasibility.

The development and planning framework should provide rules and opportunities for all stakeholders, in order to take an active part in the decision making process. This cooperation platform could be set up in the spirit of new cooperation platform between public and private stakeholders for the new city of Kabul. Urban designers will fulfil the task of giving variation of designs for each site, whereas at the same time giving answer to social spatial characteristics of the site and its surroundings. This graduation project will propose a spatial proposal for a strategic site and its surroundings.

PROJECT FRAMEWORK

This graduation project aims to develop strategies for the current situation until 2030, in order to make

Within this project all the strategic sites are mapped and are given a hierarchy and phasing sequence to develop according to the parameters designed to choose the most strategic site. The parameters are designed and derived from the analysis of the city.

METHODOLOGY



LACK OF DATA

Lack of spatial, social and economic data affects planning. Up to 70% or 80% depending on source urban dwellers in Kabul are residents of illegal settlement; there is almost no data about these dwellers. Also substantial amount of land has been grabbed by the powerful warlords, which municipal had other ideas for it. The question is; which aspects are taken into account, when a plan for the city is developed? If the Master Planning does not address the majority of population (illegal settlements) needs and the current development of the city, what does Master planning do incorporate?

The goal of this graduation project is to have an understanding of how Kabul city is developed in light of the constantly changing regimes and policies and ever growing power of warlords involved with urban planning, in order to be able to give suitable solutions for urban development of Kabul city the following method has been conducted to gain information.

METHODS

There have been three primary methods in which the data is collected for this graduation project.

First, there has been extensive literature study in order to understand the underlying mechanism of Kabul city development through the history. The different aspects of policy and urban planning in Kabul are explained in various papers, prepared by (non)-governmental and foreign donor institutions. Neglecting this theoretical aspects and data about policies, indigenous culture, history and foreign involvement, would have seriously limit the scope of this research project.

The second method of data collection has been through in-depth interview which I have conducted of people who are living in Kabul or professionally have worked in the field of urban planning and policy

making. After completing the interviews, which can be found in the appendix of this graduation project, I mapped the information which is concluded in the analysis. This has given me insight about urban planning in Kabul and how the various stakeholders are involved with urban planning.

The third method of data collection has been through spatial analysis. Satellite picture of Google earth has provided the main tool for maps information. Kabul's has few maps of very low quality and mostly outdated or wrong if you compare it with Google map. Google maps has revealed a great amount of information about infrastructural networks, density of plots and insight how the informal networks are organised since it is not mapped at all. Every single road from google maps are drawn in the AutoCAD and subsequently in Adobe illustrator, in order to put them in several layers which can reveal different aspects of the city.

The spatial analysis which is used to identify the city networks, road hierarchy and spatial form, are also used for analytical drawings derived from theoretical papers and in-depth interviews.



RESEARCH QUESTIONS

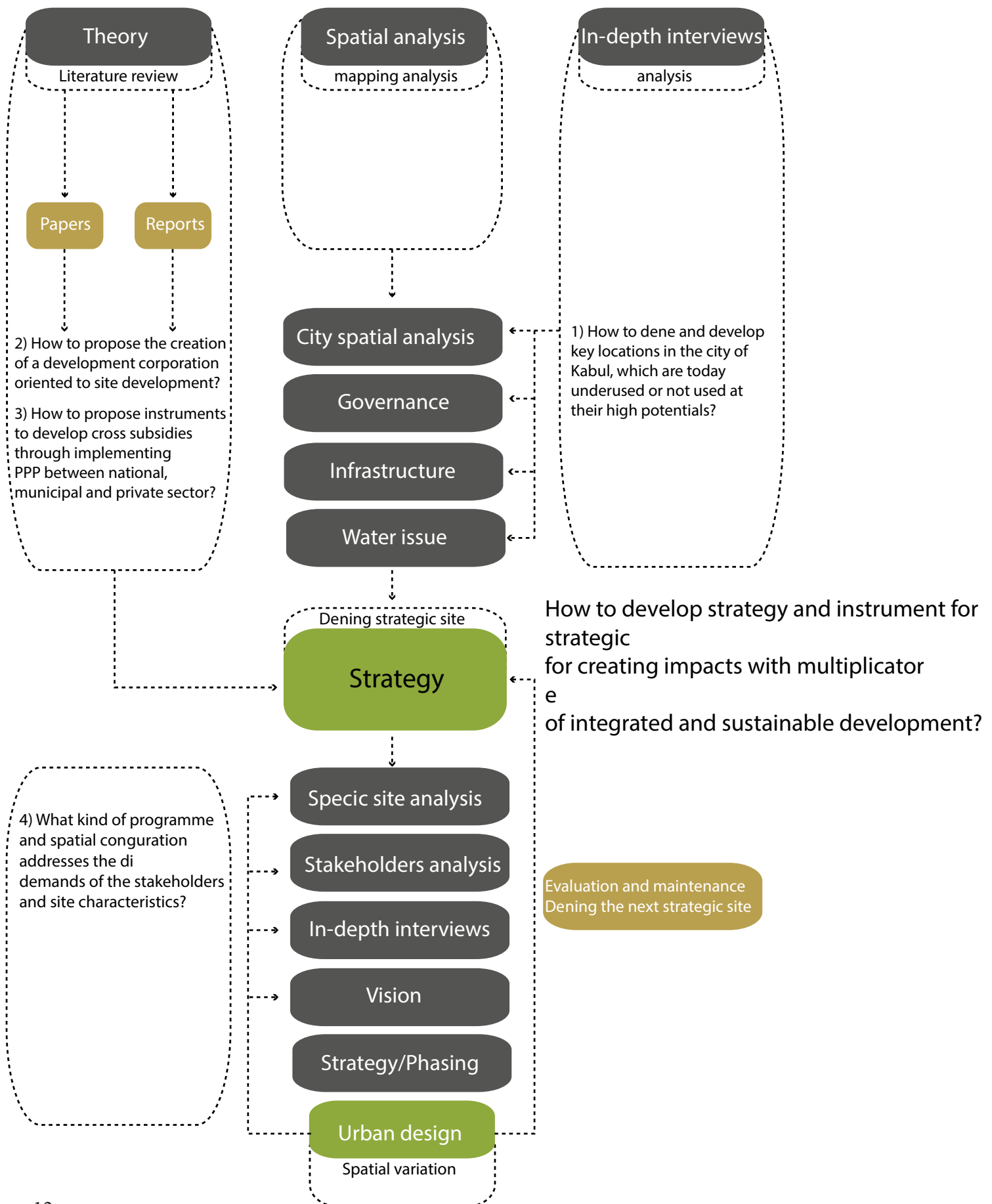
In order to investigate how a development corporation with authority and other stakeholders involved with urban planning, the following main research question will be addressed in this graduation project.

How to develop strategy and instrument for strategic 'site development' with potential for creating impacts with multiplier effects, in the framework of integrated and sustainable development.

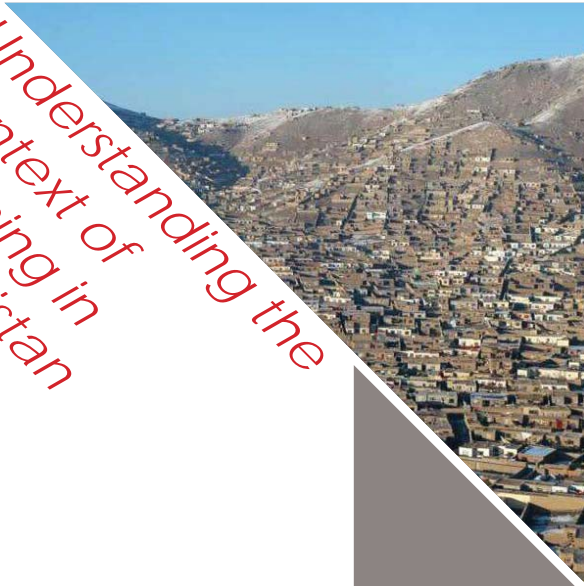
A series of sub-research questions has been developed in order to elaborate on the main research question.

- How to define and develop key locations in the city of Kabul, which are today underused or not used at their high potentials?
- How to propose the creation of a development corporation oriented to site development?
- How to propose instruments to develop cross subsidies through implementing PPP between national, municipal and private sector?
- What kind of programme and spatial configuration addresses the different demands of the stakeholders and site characteristics?

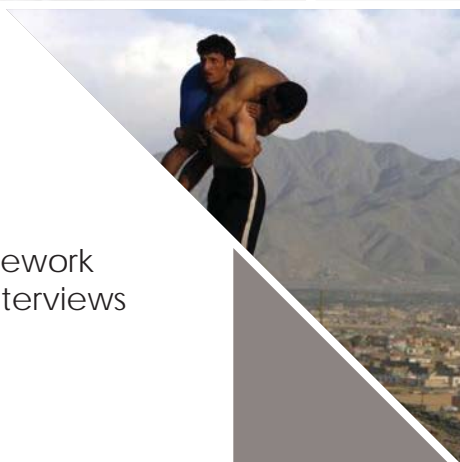
FIGURE 2
STRUCTURE OF
GRADUATION PROJECT



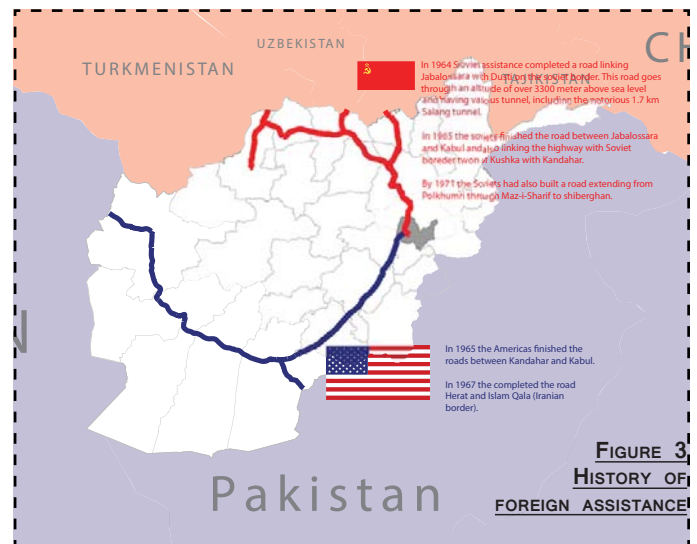
*Understanding the
context of
planning in
Afghanistan*



- # Important moments in history
- # Land ownership
- # Kabul through history
- # Warlord territory in Kabul



Theoretical framework
and in-depth interviews



IMPORTANT MOMENTS IN HISTORY

Afghanistan once at the center of the world's richest pathways to prosperity and civilization, has now become one of the poorest and under developed countries.

The historic and geopolitical role was well established over two thousand years ago. Afghanistan was then at the center of the global exchange of ideas, art and culture, and of longdistance trade, as it was located between china and India in the East and Europe in the West. The flow of trade, techniques, tools and innovations along the legendary Silk Road, allowed the growth of the great cities of Central Asia, enabling them to spread their influence far beyond the region. (Aziz, 2006)

And still important cities back then were partialy ruled by tribal leaders.

Traditionally gatherings of the tribal leaders, loya Jirga, were called to decide on matters. In 1747, a Loya Jirga declared Ahmad Sha's Duranni to be their Amir (ruler). All the other rulers after Ahmad Sha were descended from the same family.

18th century was the glorious times of Afghanistan, the tribal leader conquered areas as far as tibet. But in the 19th century, Afghanistan become the main barrier/border between two world powers Russia and Great Britten.

Both of the countries were conquering contries in the world, Russia was conquering areas of Bokhara and Tashkent, Northern part of Afghanistan. This alarmed the British, that any further move could be targeted on India.

Before the Russian army, the Brithish troops conquered Kabul and other major cities. But their heavy handed rule resulted in a popular uprising by the people which resulted in the massacre of the entire Brithish army of 15.000 men. Second time The Brithish army again conquered the major cities to regain positions in the region. They subsequently withdraw, but not before they set up a puppet ruler and forced the country to hand over control of its foreign affairs to Britain. In 1918 Afghanistan regain their independence. (de Planhol, 2010)

HISTORY OF FOREIGN ASSISTANCE

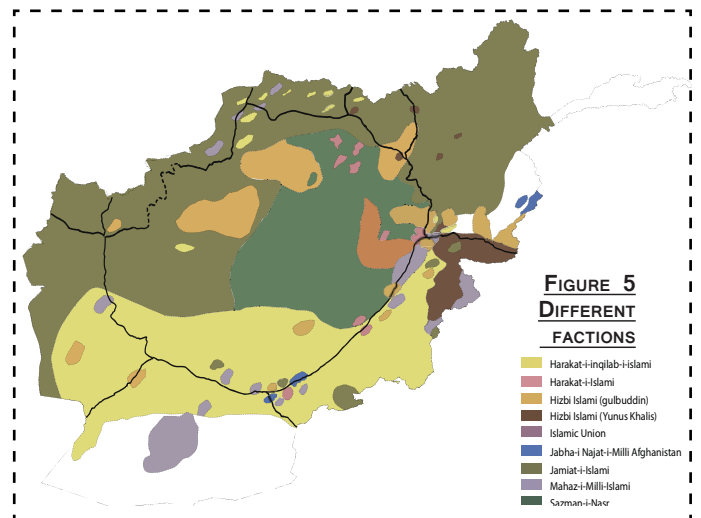
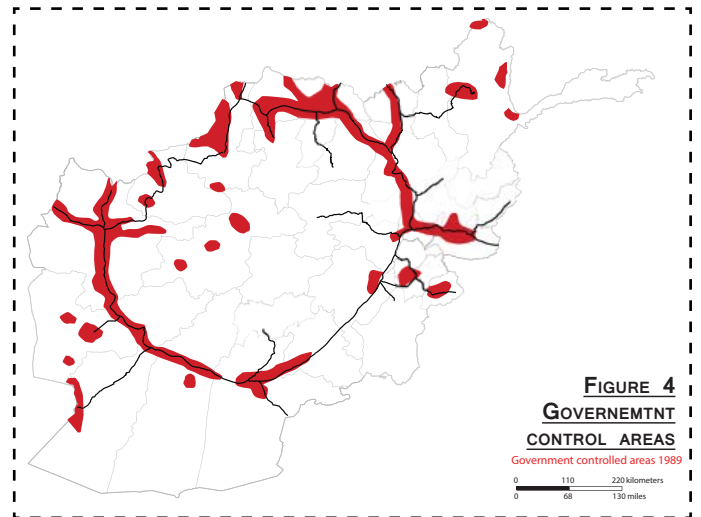
During the cold war of 20th centry, Afghanistan became once again a country where seizing powers became important for two world powers America and Russia. The two countries were busy to gain influence in less developed nations through economic and assistance means.

The super powers built the well-known ring road of Afghanistan, which connects the major cities of Afghanistan, in order to make their invasion path clear and paved. The main difference between the Soviet and American construction programs went beyond quality, but rather to orientation. (Schubert, 2009)

The American constructed roads ran more or less East-West and linked Afghanistan to Iran and Pakistan (at the time allies of U.S). Soviet roads went generally North to south and connected to railheads of their borders. In this sense Afghanistan has been a sandwich between the world powers.

Many observers understood the military potential of the new highway network provided by the competing superpowers.

After Soviet armed force invasion in December 1979, Afghanistan became the focus of worldwide attention. This invasion mostly provided by the country's paved network, constructed by the same competative world powers (Schubert, 2009)



INTRODUCTION OF MASTER PLANS

After occupation of Afghanistan by Soviet army in 1979, the aid assistance were not limited to infrastructure, but also large scale urban development were also assist with their doctrine. Most urban renewal projects were carried out within the framework of strongly centralized organizations. Municipals were required to implement urban plans that had been drawn under the supervision of the central authorities in Kabul. These Master plans drawn far from the local realities in Kabul with the help of foreign architects, from the Soviet Union and Afghans trained abroad, came to be dominated by foreign cultural models. (Grotzbach, 2011)

For this reasons the new cities often appears to be alien architectural elements within the traditional settlement landscape. Regular ground plans and buildings of concrete ; new types of houses and spacious streets, squares and parks, for which there is no water system design, are among the foreign imposed elements. (Grotzbach, 2011)

Almost all Afghan cities were developed within the same policy until 1991, which are located on the ringroad of Afghanistan. The other cities and villages outside of the ringroad, were developed with indogenous and customary laws. These villages, which were hostile toward the pro Russian central government, were funded by the USA.

EMERGENCE OF WARLORDS

The rural areas which were and still are treated in isolation from the government control, the tribes have been competing for control. For example in Kandhar, Southern Afghanistan, two Pashtun tribes, the Duranni and Ghilzai, which are made of several tribes, have been competing for control of the region.

The way some tribes seize power over the other is by landowning and managing to seize economic resource and thereby having control of the decision-making processes and have links with foreign aid providers, while ordinary tribesmen ends up as their clients. (Schetter et al., 2007)

These areas, which are isolated from the ring road, have been under control of one or several tribes. These powerful tribesmen, who are sometimes referred as warlords, have been maintaining their own

private militias. In order to sustain their power, these influential people are also involved in major businesses, collecting aid, investments in landownership and fighting against the central government.

Mojahedin who were funded by USA took over the administration of the country in April 1992, after heavy fight with the central government. The different factions of Mojahedin could not agree on coalition, as result the mojahedin factions and warlords were fighting each other for power, while governing and maintaining their own territory.(Giustozzi, 2009)

During Taliban regime the country has been stand still in time in terms of civil projects.

After the fall of Taliban the U.S program of assistance aims to stabilize and strengthen the Afghan economic, social, political and security environment of the country and the bigger region.

CURRENT GOVERNMENT COALITION

When the coalition started looking for suitable members of the new post/Taliban government , the most obvious candidates were the members of the tribal aristocracy, who had managed to survive, and influential members of different factions and warlords in Afghanistan. The most obvious example of this the presence of several warlords, or their associates, within the central government itself.

Out of 27 ministers in early 2004, four were

warlords or militia leaders (M. Qasim Fahim, Mohammad mohaqiq, Sayyed Hussain Anwari, Gul Agha Shirzai) and at least three more and out 32 governors appointed in 2002, at least 20 were former commanders and warlords of the civil war period (Suhrke, 2007). Most of these so called warlord are embedded in social-economic contexts and are part of interpersonal networks.

FOREIGN ASSISTANCE AFTER 9/11

The new assistance period started after the defeat of Taliban in 2001, the international community are acknowledged to help and transform Afghanistan into a stable state.

Since 2002 Afghanistan has turned out to be one of the major countries in the agenda of development partners, and the biggest recipient of foreign aid money. The international community has pledged 90 billion US dollar as aid money for Afghanistan reconstruction aims. 69 billion of this money has been distributed between 2002-2010. (Ministry of Finance, 2012)

The country has been improved in certain aspects, like education, work opportunity and health care, nevertheless there are many drawbacks because of this massive fuel of aid money. The major drawbacks are the inequality of distribution, not embedded solutions for vernacular urban structure and social values.

EXPENDITURE OF AID MONEY

The huge portion of external assistance is of course allocated to security expenditures. It is also clear for both international assistance agencies and government institutions that too much of aid money to Afghanistan is wasted. According to the former NATO special civilian representative is 40% of aid money to Afghanistan flows back to donor countries. (Ministry of finance, 2012)

The small amount of aid money which is preserved for development are allocated to the same international companies. According to Oxfam Afghanistan's biggest donor, USAID, allocates close to half of its funds to five large US contractors.

In some large contracts in Afghanistan there are up to five layers of international or national sub-contractors, each of which usually takes between 10-20% profit on any given contract, in some cases even 50% (Oxfam,2011).

For example: Khair Khana maternity hospital in Kabul had to double its capacity, for which the Italian government contacted the UN population Fund (UN-FPA). According to Kabul press, UNFPA were given \$2.2 million for the work, which was sub-contracted to the UN office for project services (UNOPS), again sub-contracted to an Italian organisation, who in turn sub-contracted to an Afghan construction company. On the basis of Oxfam investigation and sources involved with project, at least half of the total budget was spent on the project. As result the quality of work was so poor that it require further reconstruction (Poole, 2011)

FIGURE 6
DIFFERENT WARLORDS
AND HENCE DIFFERENT FACTIONS

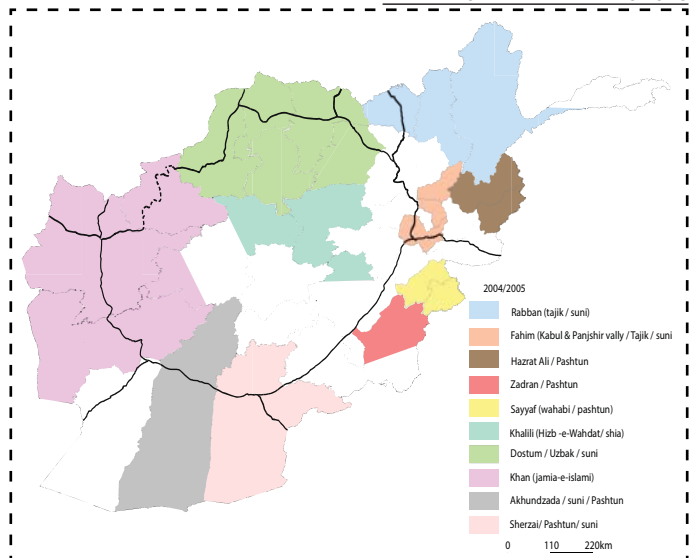


FIGURE 7
FOREIGN ASSISTANCE

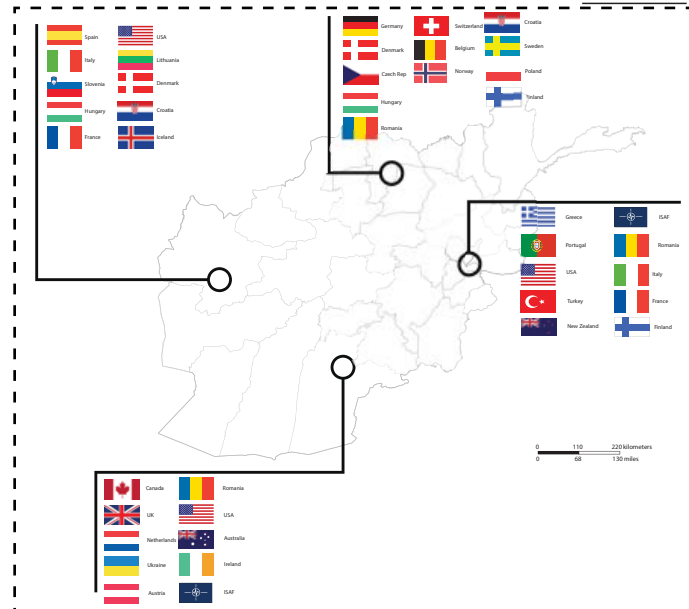


FIGURE 8
EXPENDITURE OF AID MONEY

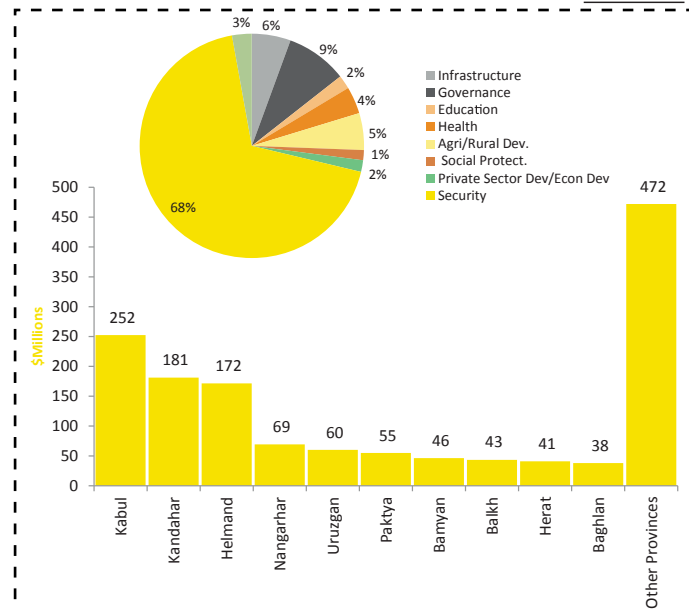


FIGURE 9
FUNDING FLOW

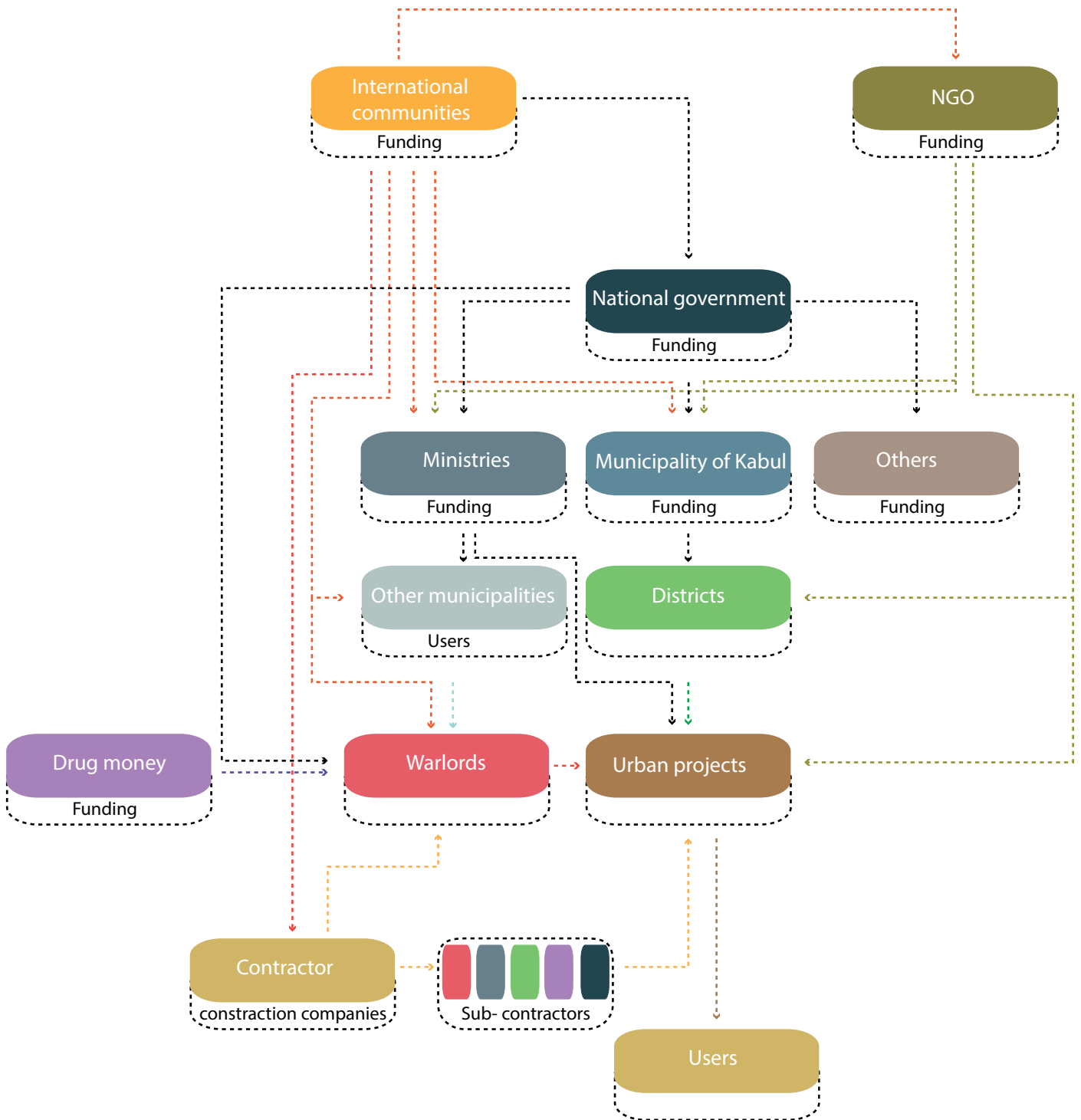
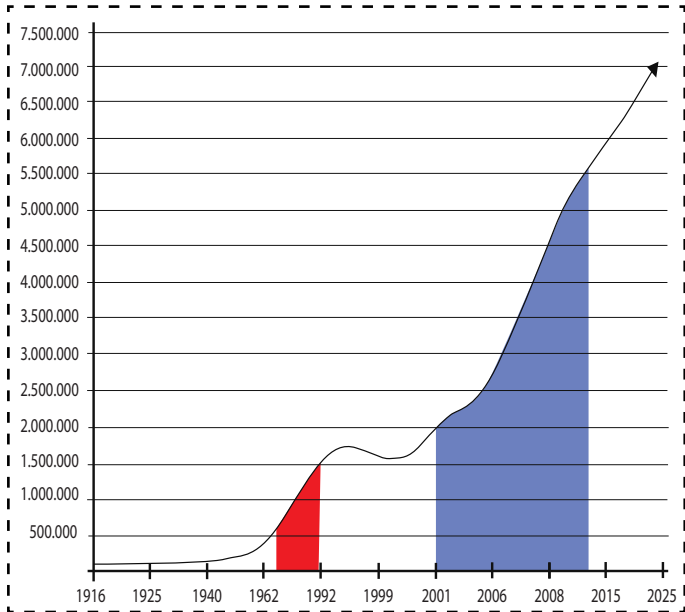


FIGURE 10
POPULATION GROWTH



POPULATION GROWTH IN KABUL

Kabul's population is currently evaluated about 4-5 million people depending on the source. And it is expected to grow about additional 3 million people in the upcoming decade (RECS intl & Yec, 2010). The relentless influx of hundred thousands people every year has shaped Kabul in a particular way and will continue to shape the spatial development of Kabul for many years in the future. According to Bertaud no municipality in the world has faced years after years migration of poor (Bertaud,2005). Within this chaotic times, the influential Afghans (Warlords) have gained the opportunity to develop various townships all over the country. Most of these townships have dubious status. On one hand there are under the protection of influential people on the other hand these townships have illegal status, mostly grabbed land by influential warlords.

AID MONEY AND SECURITY REINFORCES MIGRATION

Aid is centralised and focussing on Kabul or other urban centres, the results that majority of Afghans who live in rural areas have experienced only minimal social and economic progress (Waldman,2008). As we have mentioned before the security and access to urban network goes hand in hand with population growth, the Afghans who live in rural areas are "forced" to migrate major cities in order to be secure or to profit from foreign aid money. In the digram we can see how the two waves of foreign regimes influences the migration towards the city of Kabul.

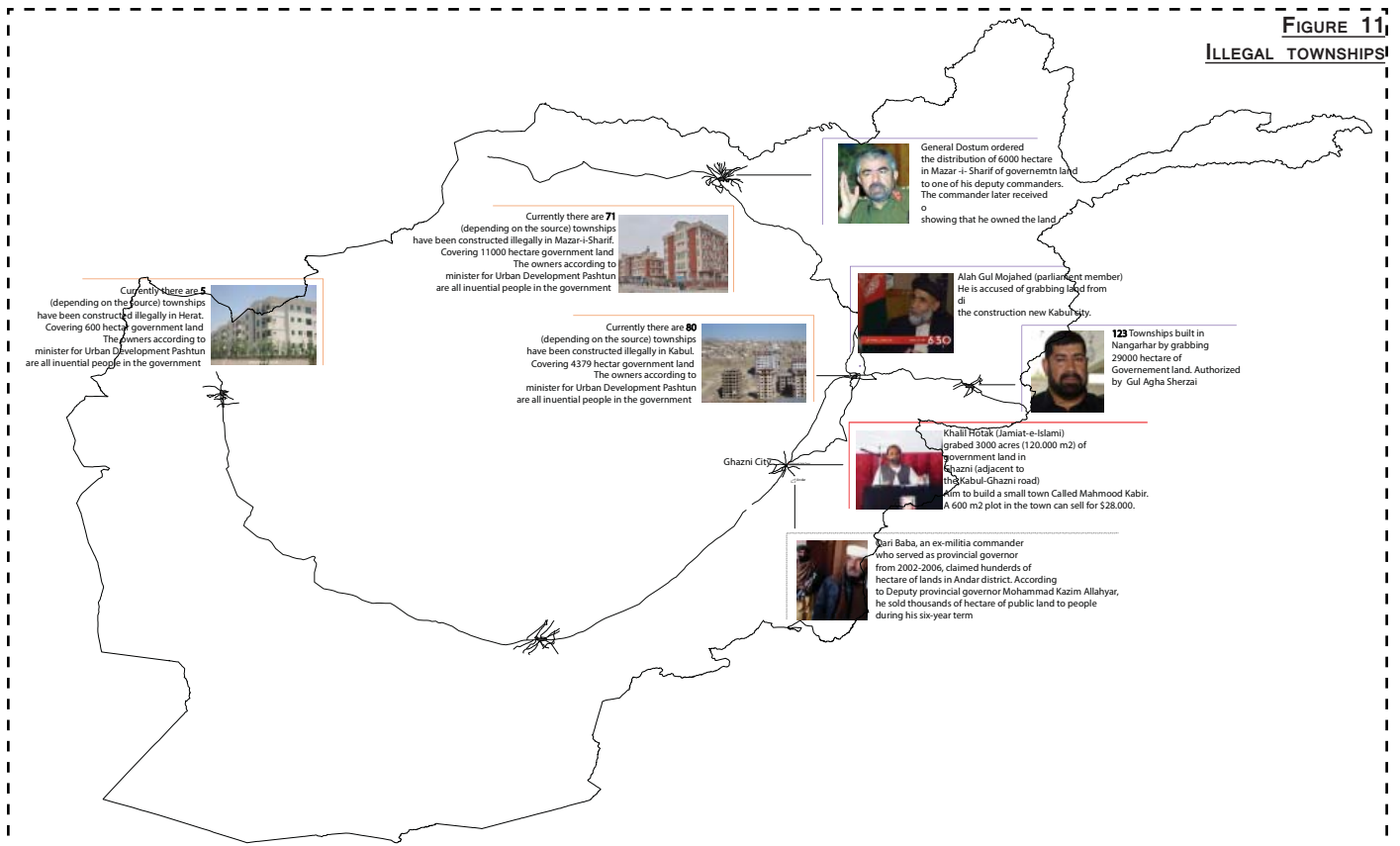
CREATION OF GATED TOWNSHIPS

The most visible evidence of injustice for ordinary Afghans has been the flourishing creation of housing estates in virtually all town and cities of Afghanistan. These Sharak (townships) are private enterprise developments authorised by influential afghans working the governmental institutions. Although Sharaks are building mostly good housing, but they symbolise the fragmentation, injustices and corruption in the land governance.

According to Pajhwok news there is overwhelming evidence that most of the constructed townships in Afghanistan are build illegally.

The chief of anti-corruption Azizullah Ludin says that there are 355 townships in the country whose documents should be investigated (Samimi,2013).

FIGURE 11
ILLEGAL TOWNSHIPS





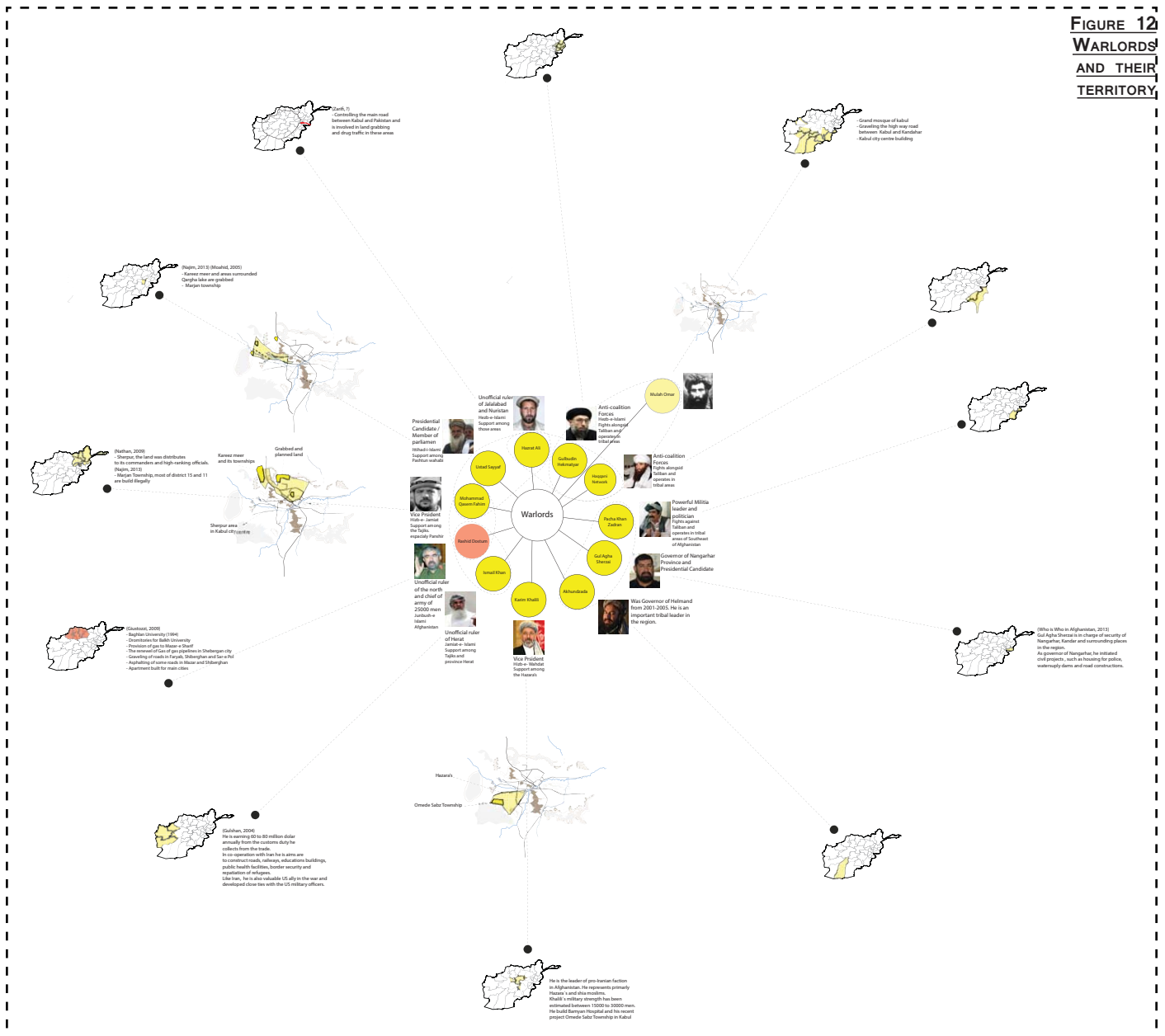
TERRITORY

According (Zarifi,2004) Afghanistan has thousands warlords, some deriving their power from a single roadblock, others controlling a town or a large districts. Nevertheless in the chaotic system of warlords, six of seven warlords have more power in terms of geographical location, ethnic and political support.

To keep hold of their power or gain more power in their territory, the warlords are involved or initiating civil projects, such as land parcellation, building townships, hospitals, schools and irrigation projects. Some of them have even their own bank to finance the projects (interview Baburi).

The involvedness of warlords and illegal land occupation creates room for new patterns of land use and urban activity, which turns Afghan cities into fragmented and different realities.

FIGURE 12
WARLORDS
AND THEIR
TERRITORY





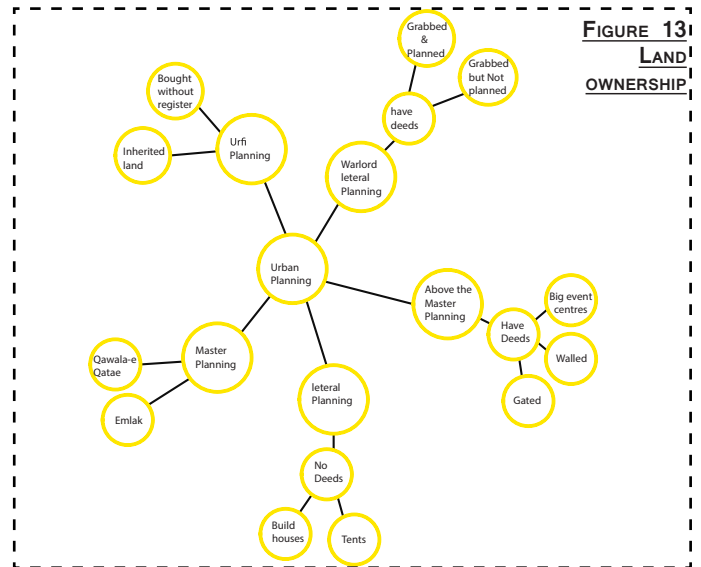


FIGURE 13
LAND
OWNERSHIP

LAND OWNERSHIP

Through involvement of various stakeholders in urban realm land ownership and its insecurity has become very complex - from the returnees and migrants who are unable to buy a piece of land to communities who are struggling with big warlords, who are actively involved in land grabbing issues. At this point there are multiple claims to a piece of land, each with its own historical legitimacy or recently made papers of the same land. The documents or testimony are plural, complex, uncertain, incomplete and currently unenforceable. While there is a need to rethink norms for sustainable land tenure and sustainable future, at the same time there is a need to reconcile with the past. (Wily, 2013)

There has been not much attention to land tenure issues and it has been more in the periphery on Afghanistan's planning agenda. While land tenure security is one of the most effective tools for reconstruction and poverty alleviation.

Before discussing how strategies might be achieved regarding land tenure security it is very helpful to understand the current land tenure system and land ownership in Afghanistan.

Land ownership rights in Afghanistan are governed by more than one legal regime, including customary law, civil law, Islamic law and state law. These laws are in most of the time in contradictory with each other.

These regimes and rules have not always been put in charge of land issue resolving. The weak rule of law and an authoritarian central state that has not even control of land and its population has facilitated the ground for more land grabbing and land disputes.

Land conflicts and relations in Afghanistan range from land grabbing to gain political and economic power to common dispute about the validity of the documents, which each actor holds for the same piece of land. In such case of uncertain state and unclear conditions and rules, the powerful elites and leaders are encouraged to grab land while it can, in order to secure their power as an elite.

It is even more complicated when we look at multiple

legal and customary deeds each actor holds to prove ownership. (Wily, 2013)

The most common ownership documents are:

Customary Documents (Urfi): Qawala-e Urfi is a customary Document, which is witnessed by relatives, neighbours or local leaders. This document includes bills of sale pawn agreement, wills, etc. The documents prepared prior to

1975, the details are entered in the book of ownership (makhzan, managed by the court). These documents are mostly held by middle to low income people to defend their inheritance or purchase witness by local and signed by Wakil-e-Gozar and acknowledged by their community. **Legal Documents:** The documents in Afghanistan are official when it is registered by the court.

Qawala-e-Qata-e: a piece of land or a house has its legal documents in the form of Qawala-e-Qata-e when it is entered in the local and taxation books.

Emlak: Act of converting an Urfi owned land to legal ownership deeds.

Grabbed and Planned: This way of ownership has documents, which is the same as bill of purchase.

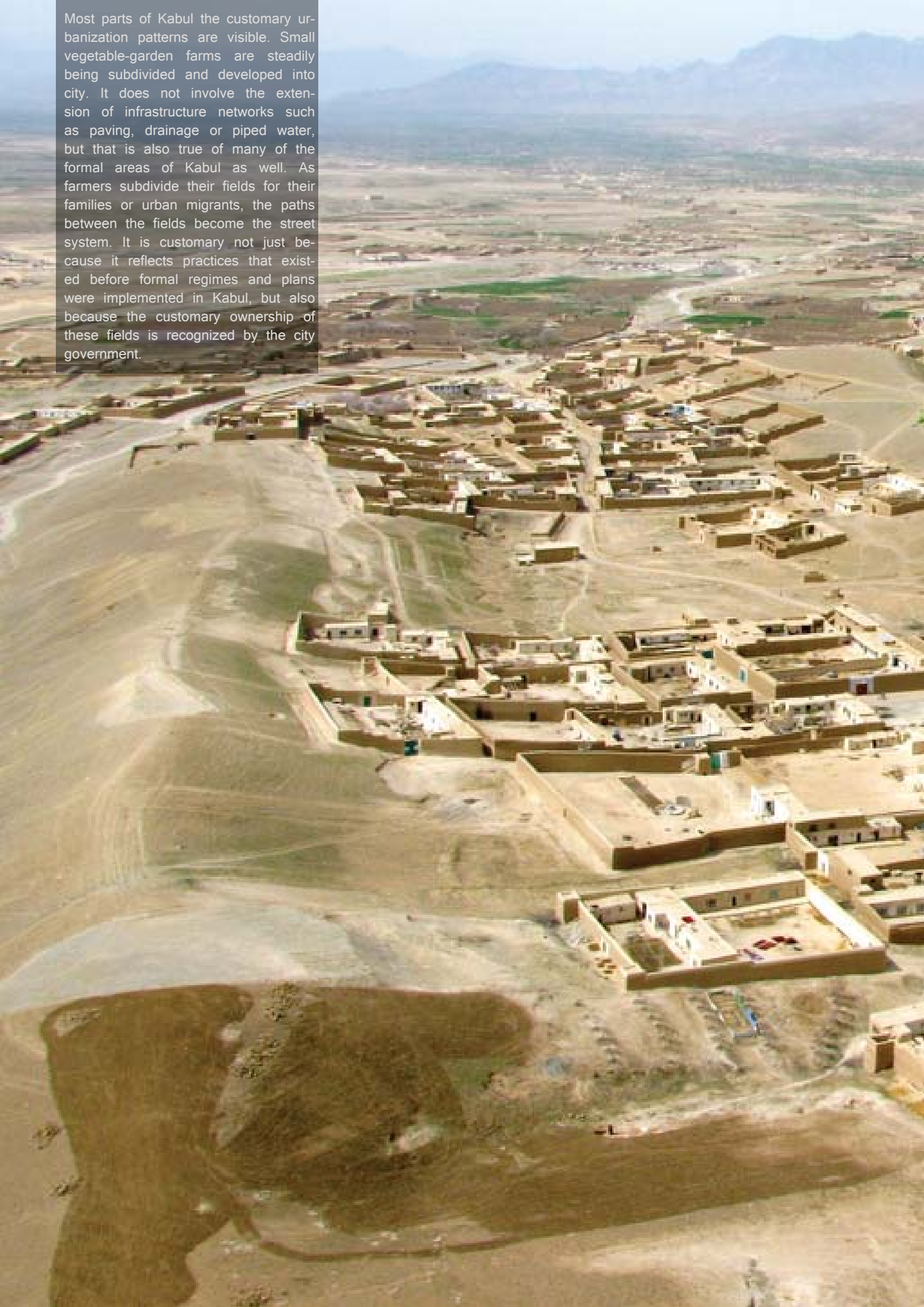
Bill of purchase of township are valuable than other purchase document.

Zoorabad: literally means built by force, are mostly referred to houses on the hills of Kabul and mostly in the centre.

The ownership, mode of planning and the status it holds are illustrated here. In this diagram we can clearly see, what formal/ legal planning means and what does it mean when it is built illegally.

It is remarkable to see that each status of ownership has direct effect on the visual features of the house and the materials which are used for building construction.

Most parts of Kabul the customary urbanization patterns are visible. Small vegetable-garden farms are steadily being subdivided and developed into city. It does not involve the extension of infrastructure networks such as paving, drainage or piped water, but that is also true of many of the formal areas of Kabul as well. As farmers subdivide their fields for their families or urban migrants, the paths between the fields become the street system. It is customary not just because it reflects practices that existed before formal regimes and plans were implemented in Kabul, but also because the customary ownership of these fields is recognized by the city government.

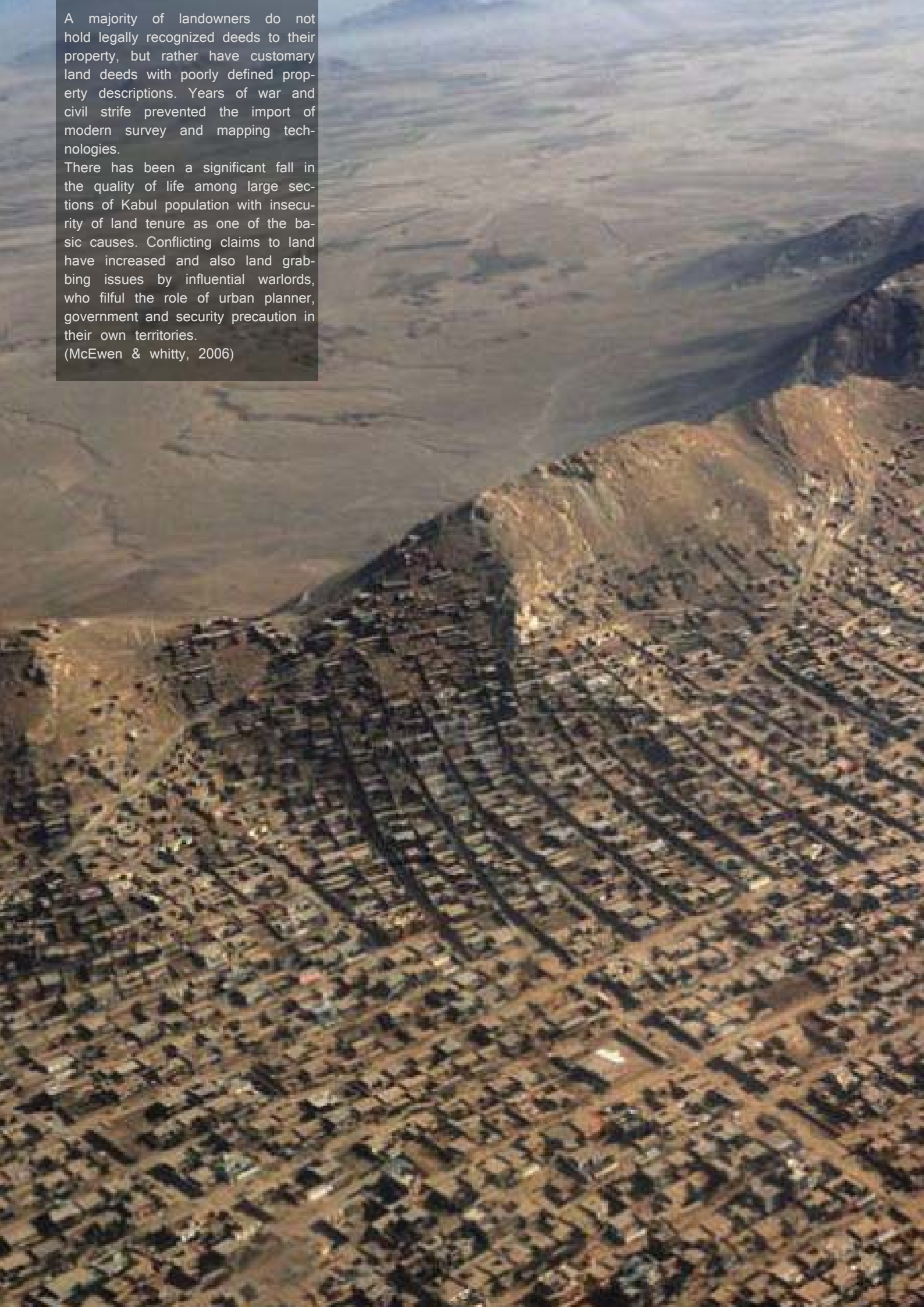




A majority of landowners do not hold legally recognized deeds to their property, but rather have customary land deeds with poorly defined property descriptions. Years of war and civil strife prevented the import of modern survey and mapping technologies.

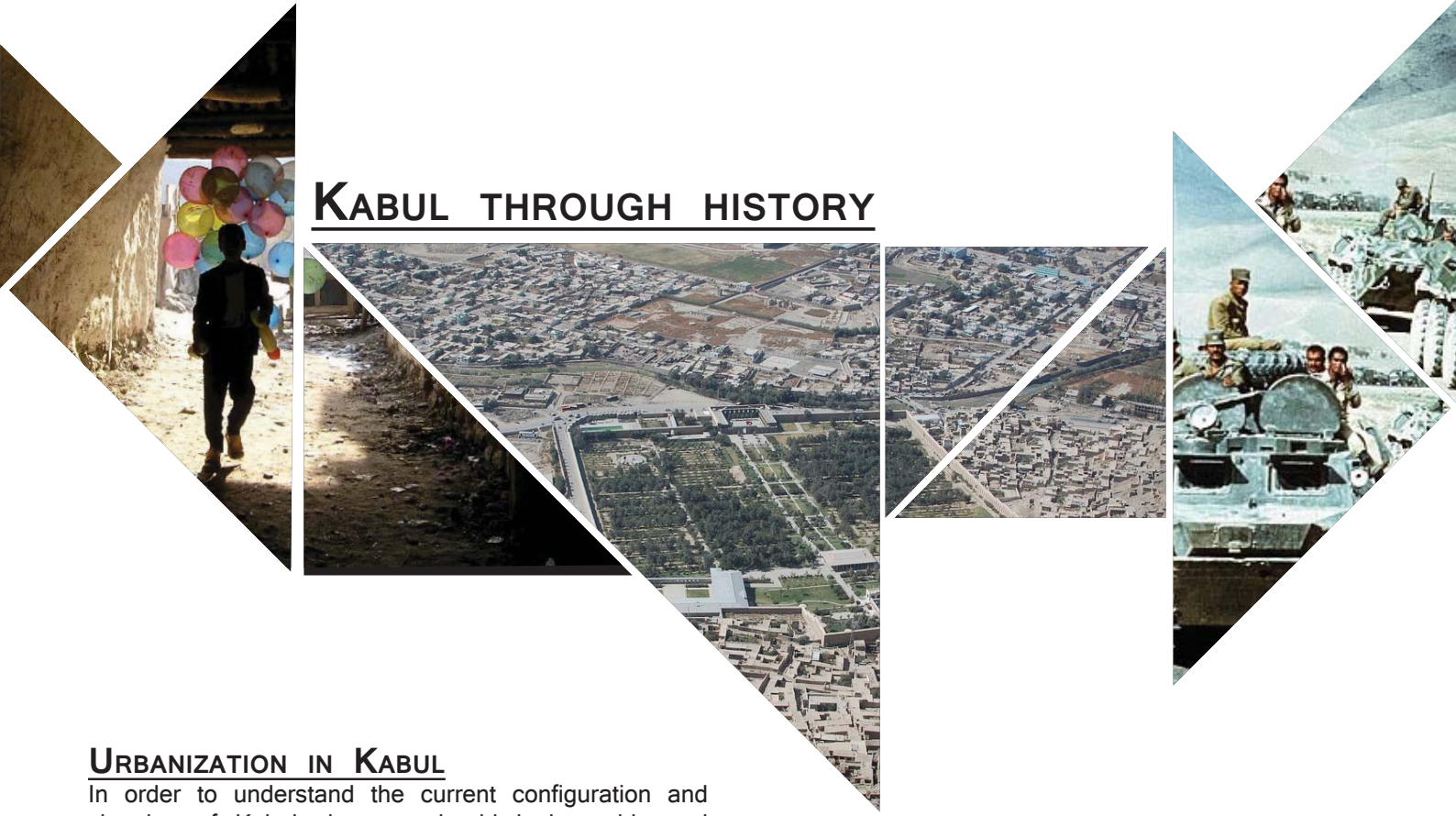
There has been a significant fall in the quality of life among large sections of Kabul population with insecurity of land tenure as one of the basic causes. Conflicting claims to land have increased and also land grabbing issues by influential warlords, who fulfil the role of urban planner, government and security precaution in their own territories.

(McEwen & Whitty, 2006)





KABUL THROUGH HISTORY



URBANIZATION IN KABUL

In order to understand the current configuration and situation of Kabul city, we should look at historical layers of urban settlements.

Due to local power struggles between the tribal leaders, Timur Shah decided to move the capital of his kingdom from Kandahar to Kabul in 1776, and this move is the starting point of Kabul's growth from a medium-sized village to the largest city of the country that it is today. Along with the growing population came a need for more dwellings and facilities. This was still largely solved within the borders of the old city walls but ever slowly settlements started appearing on the Northern shore and a bit further off the city, on the slopes of the city centre and Bebe Mahro. The agricultural land were converted to dwellings, as we call it here the Urfi planning mode.

As Kabul continued to grow during the 19th century, the city expanded mostly towards the Northwest under the supervision of the authorities. At the same time new residential plots, by converting agricultural land to residential plots, appeared along the major roads leading towards the city.

In 1901, Kabul counted a population of 140-160,000 inhabitants. The focus was to modernize the city in accordance to Western living standards. Automobiles and electricity were introduced and European architects were commissioned for designing dwellings for the bourgeoisie of Kabul and even neighbourhoods (Grotzbach, 2011).

During the first half of the 20th century the built-up area of Kabul would grow to about twice the size, mostly expanding in a Northern direction and in 1935 construction began on the first large expansion, the new neighbourhood Shahr-e Naw.

The Master Plan for Kabul came in three versions. The first version was prepared in 1962 by Afghan and Soviet urban planners and initiated in 1964. The

plan was based on a projection over 25 years with 800,000 inhabitants in the city; an increase of ~400% from the population of 215,000 that Kabul housed at the time. The Master Plan had a Corbusian character, with residential and industrial areas strictly zoned into different, independent districts, separated by flyovers and motorways. A revised version was developed in 1970, again with the help of Soviet and UNESCO. This plan projected a population of 1,4 million by 1995 and proposed a strong shift from single-household buildings towards large apartment blocks to house the new inhabitants (Grotzbach,2011).

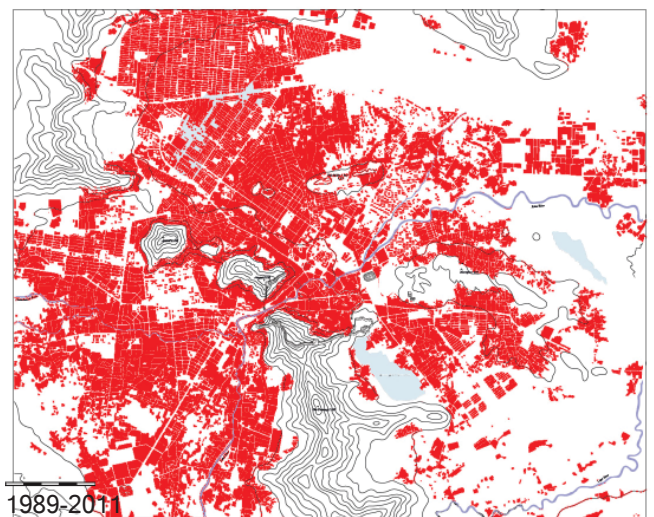
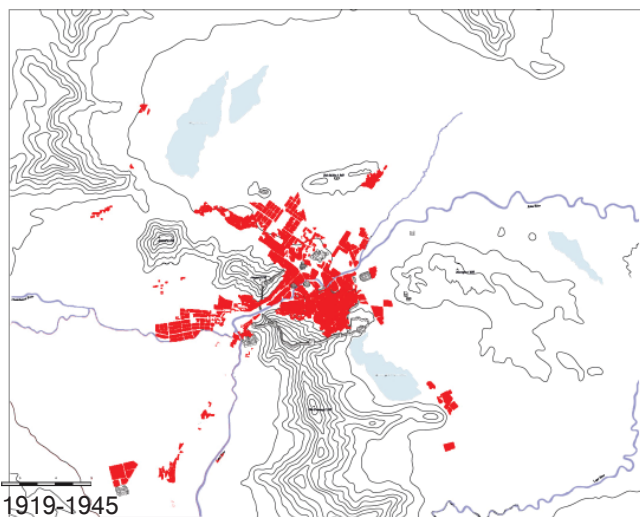
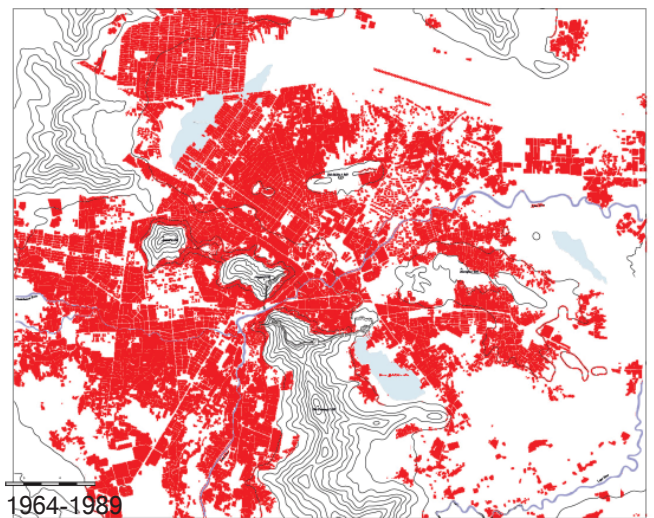
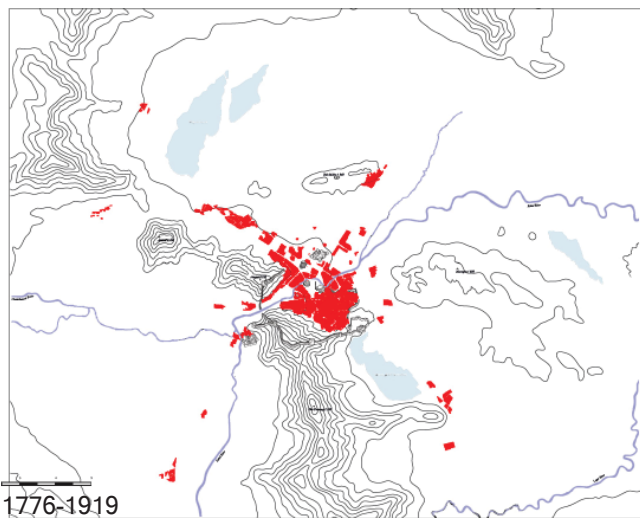
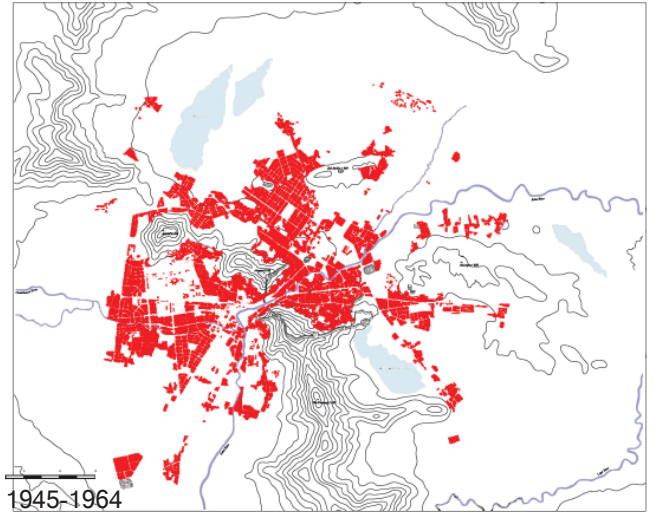
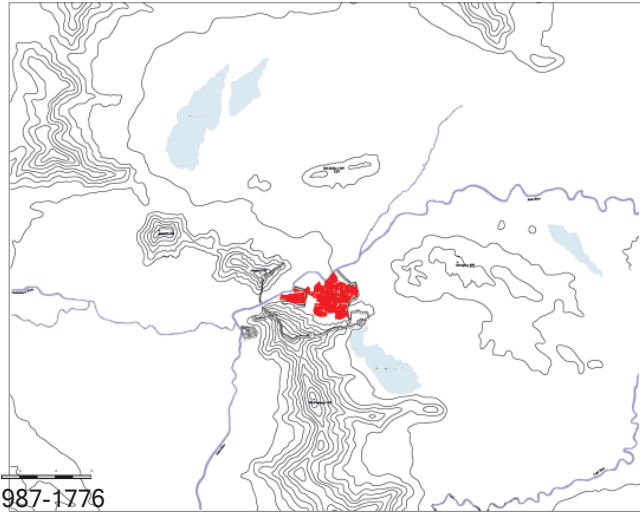
The third and final plan was approved in 1978, projecting a population of two million. This version of the plan can only be described as a modernist utopia, without incorporating the indigenous and already built sites. Only a few years after the initiation of the first iteration of the Master Plan it started to become clear that its realization would be difficult. There was no realistic mechanism for implementation prepared and it proved difficult to enforce to the plan.

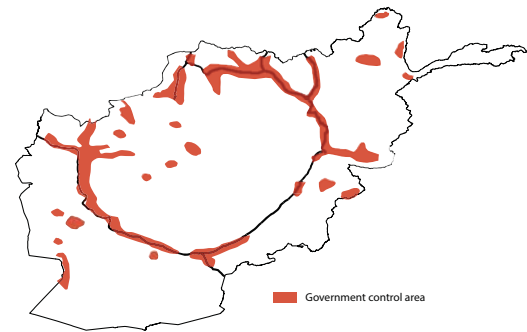
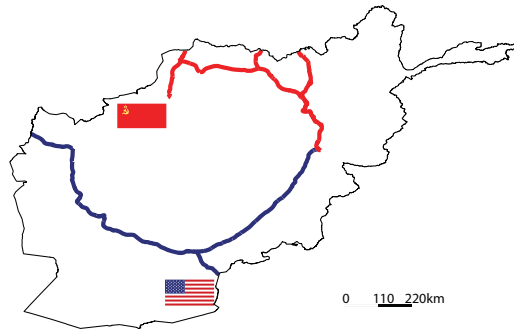
The years of civil unrest following the retreat of Soviet troops were a period of chaos and destruction. From the chaos of the civil war a conservative Islamic group known as the Taliban would rise and seize power.

Since the overthrowing of the Taliban regime in 2001 the Afghans are focusing on (re)construction of Kabul, with their outdated planning tool.

Foreign assistance like NGOs are setting themselves up in the city and old planning institutes are not working any more, because of the new neo-liberalism regime of Hamed Karzai. After 30 years of conflict a large amount of the buildings in Kabul are damaged or completely destroyed, and refugees are returning to the city in large numbers, building on mountain hills or buying land informally in order to convert them to housing.

SPATIAL REPRESENTATION





ORIGINE

Most of road building occurred in the 1960s partially funded by the US and the Soviet Union. The funding of the ring road happened into their own respective commercial, political and economic spheres.

Whereas the Soviets were busy linking Afghanistan with their own border and towns, the Americans were linking Afghanistan roads to Pakistan and Iran.

By 1975 when all the major projects were completed linking the cities and border Afghanistan had 23,500 kilometers of roads.

Source : Infrastructure Development Institute (Japan), Afghanistan, Present state of transport infrastructure, 2002

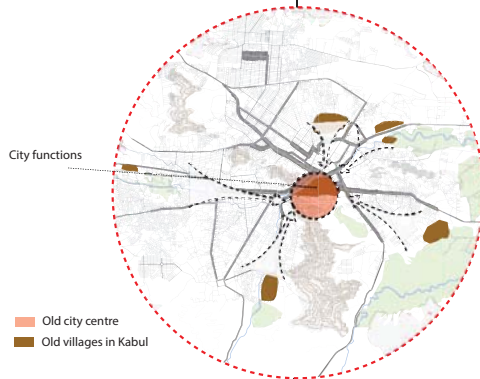


1950

1978

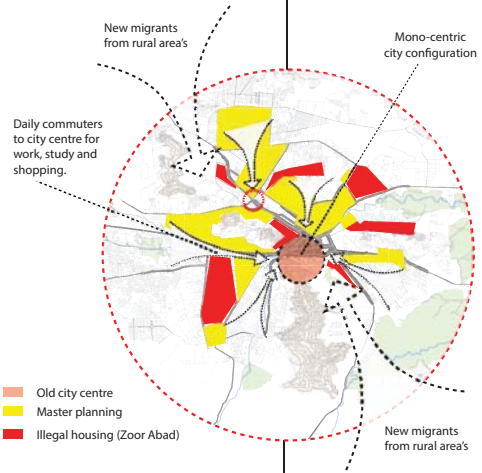
Pre-Russian time

Master planning



City functions

- Old city centre
- Old villages in Kabul



Daily commuters to city centre for work, study and shopping.

- Old city centre
- Master planning
- Illegal housing (Zoor Abad)

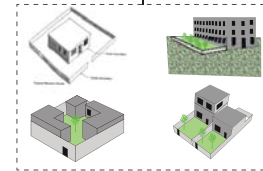
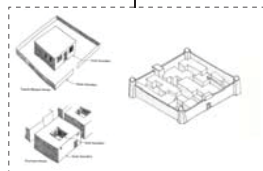
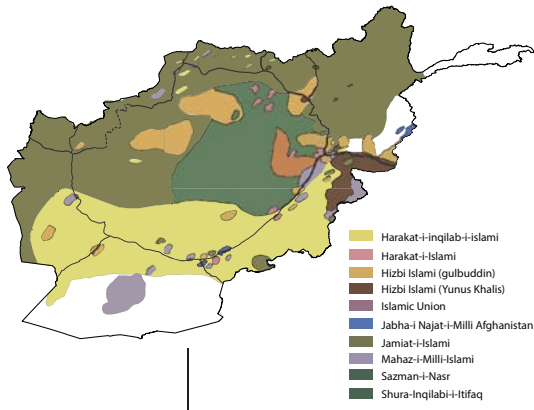


FIGURE 14
HISTORY

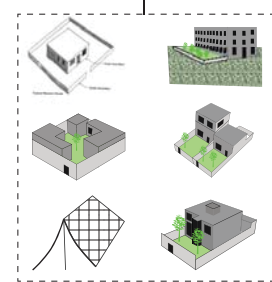
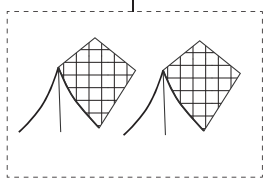
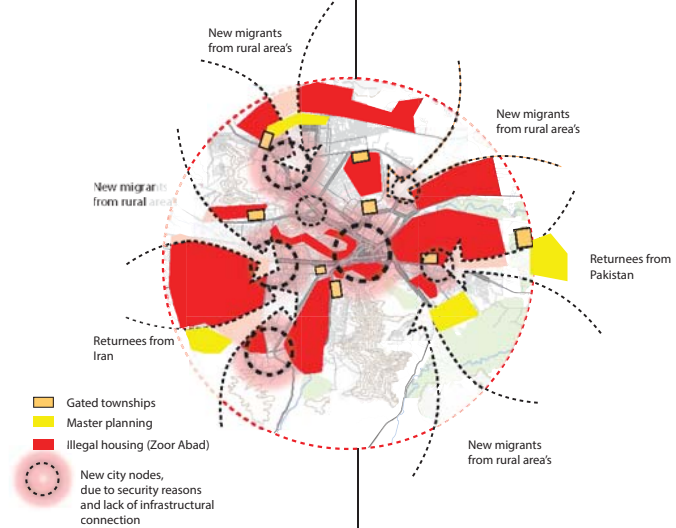
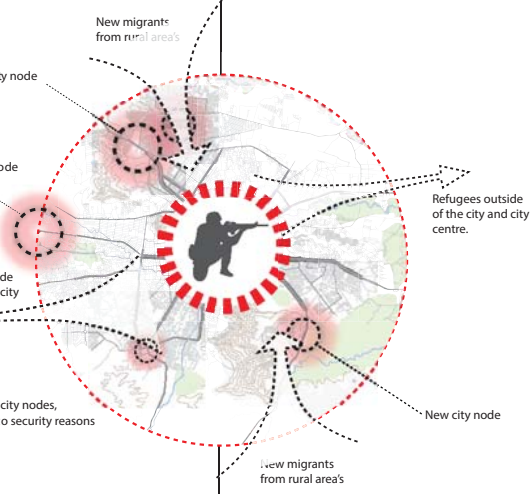


1992-2001

2001-present

Civil wartime

Master planning



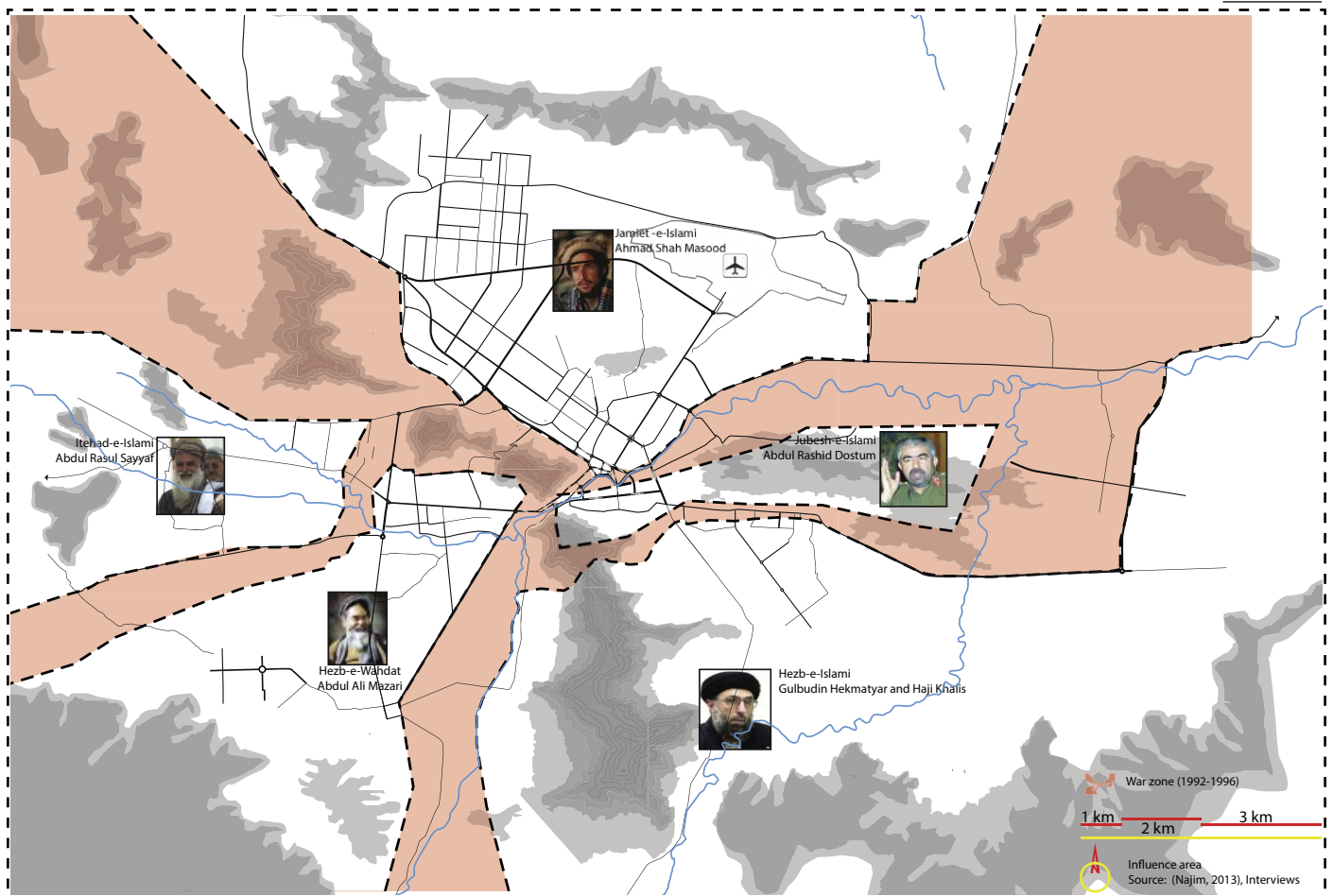


WARLORD TERRITORY IN KABUL

After the pro Russian regime of Najibullah, The different factions of Mujahiden were fighting to take control of the city. The Northern part was under control of Masood's troops. From the south and east Gulbudin Hekmatyar and Khalis were fighting to take over the control. Sayyaf's and Hezbe Wahdat were fighting for the same reason from the west.

The city is not fragmented as such in present condition , but after verifying the initiator of every major development in Kabul, the legacy of wartime and separation is still present. The next map will give an idea about how urban development in Kabul is initiated and who is funding it.(Najim,2013)

FIGURE 15



01 Land Grabbing

According to minister Pashtun there are various examples of land-grabbing by powerful and influential people both from parliament and military of Afghan government. The grabbed land has been sub-divided in parcel and subsequently sold to the market. Most of these examples are easy to point in the urban land scape of Kabul.

02 Sherpur

In September 2003, armed police and bulldozers violently ejected around 250 people from land in central Kabul and demolished their homes to make way for the lavish mansions of the freshly empowered elites.

Informal mimics the formal

Karte-5 (Jemal Mena) is constructed in the year 1923. The area was developed under the control of an army general. Insofar as the terrain allowed, it was laid out orthogonally. The terrain is so steep that settlement could only follow the contours of the terrain.

04 Omed-e Sabz city

The construction of this township has been recently finished by the Gholghola construction group. The approval of the construction of this township is not conformed by the government. In this case the government is accusing the developer Mohammad Mohaqeq playing a role in the land grabbing.

05 Organized informal growth on hills

The informal growth on the hills are orgaized land grbbing act by warlords.

06 500 Family

The area is located within the boundaries of district 15 Between Khair Khana and Kabul airport. The area is older than Khair Khana area and is one of the first developments in northern part of Kabul. During the regime of Khalq (communists, around the year 1979), the area is initiated to pay respects for those politicians / militants who were doing good work for the government. After escalating political upheaval and on-going war with Mujahedeen, the government decided to provide housing for those who lost love ones during the war. The area was not only well paved by the government but also constructed before assigning to a well-deserved family.

07 Block-haye- Haway

The area was developed to serve the Air force workers.

08 Saleem Caravan City

This area has been converted into the new gated city. The houses are constructed and subsequently sold to buyers. Developer Haji Hafizullah Caravan says that Carvan city provides 500 luxury homes and apartments.

09 Estemlak of Agricultural land

The agricultural land has been converted by municipality and included into the Master Plan of Kabul city, by providing utilities.

10 The informal follows the formal.

The formal houses on the hill side of the areas have been involved in the land grabbing through community negotiation by sub-dividing the government land. Currently these areas are fully built, without any kind of legal documentation.

11 Sharake Telaye (Golden town)

This township is the initiator of the rise of gated communities in Kabul. The area was guarded during its construction to avoid the illegal occupations. This township has been approved by the government.

12 Informal on Maranjan hill

The land on the Maranjan hill is partially divided by officials who were in power and partially by land grabbing by the common man



WARLORDS ACTS AS URBAN PLANNER

Kabul is witnessing a remarkable private sector-led construction boom, sustained by the “economic bubble” that is mainly generated by the temporary presence of international forces and organizations. Planning processes and investments seem however to be in private hands - including the private hands of some government officials. Afghanistan’s warlords, now landlords, have forcefully captured public land, or acquired it by dubious means. On their part, the new owners subdivided the land (sometimes subdivided and built) then sold it in formal and informal land (and real estate) markets to ordinary citizens, mainly middle-income groups.” (Khechen, 2012)

This inequality and disagreement of policy on the formal side of the planning creates and opens up the space in which both illegal, gated communities and land grabbing emerges. These spaces are recognized as Grey spaces by Yiftachel, he argues that gray spaces contain a multitude of groups, bodies, housing, lands, economies and discourses, lying literally ‘in the shadow’ of the formal, planned city, policy and economy (Calogero, 2011). These areas, he reminds us, exist partially outside the gaze of state authorities and city plans. Disagreement and inequality in the policy of urban planning creates multiple modes of planning in the city. Formal planning occurs where government has control then urban informality and gated communities, which he are both above the law, emerges in ungoverned spaces, or where the urban planning fails to govern.

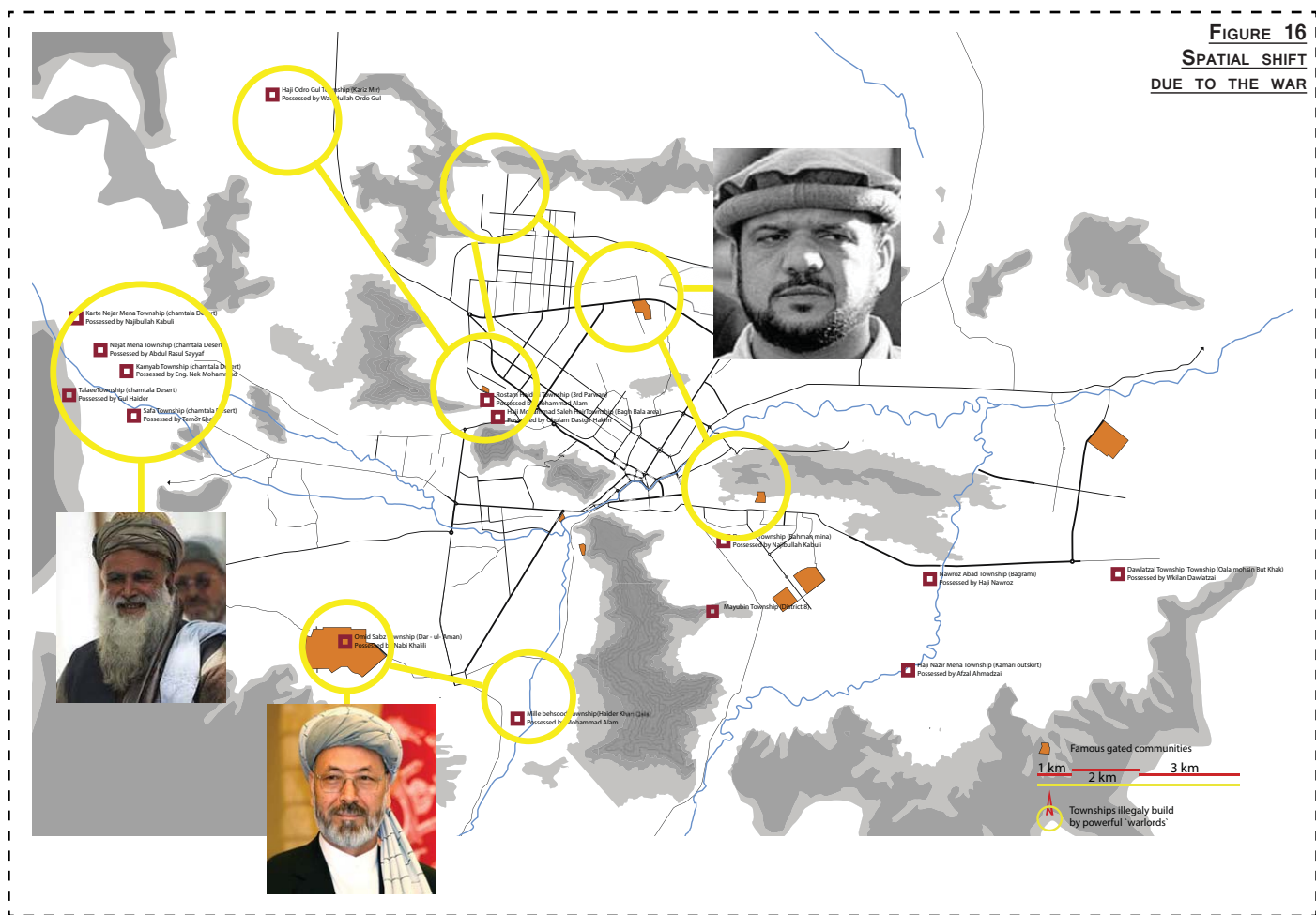
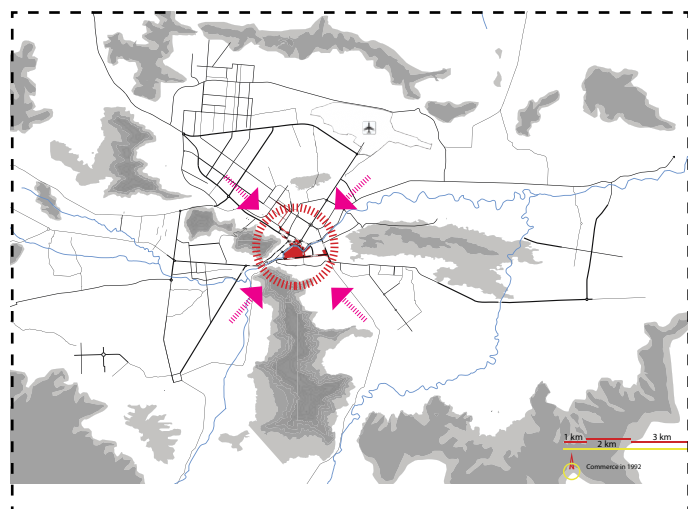
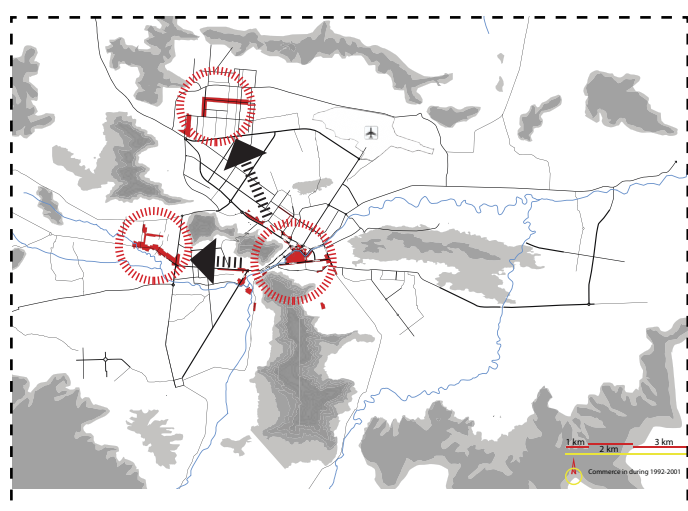




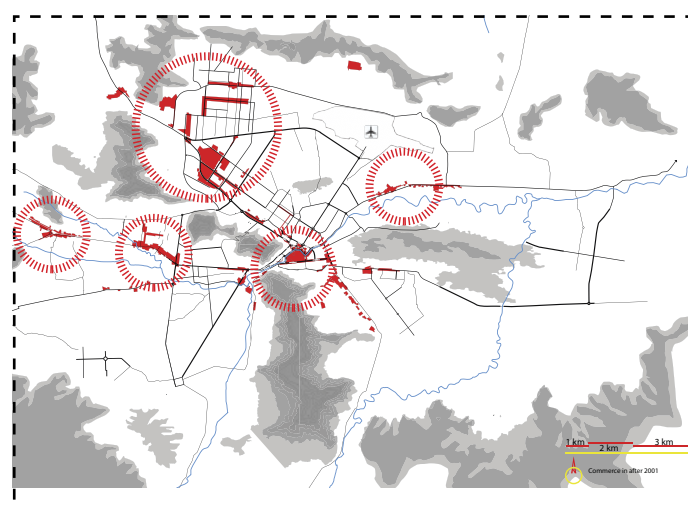
FIGURE 17
SPATIAL SHIFT
DUE TO THE WAR



CENTRAL GOVERNMENT SECURITY



WARLORD FRAGMENTED SECURITY



(ISAF+GOVERNMENT+WARLORD) SECURITY

SPATIAL SHIFT IN CITY CONFIGURATION

Because of the interconflict of various factions of mujahidin, Kabul has been scattered in parts and also the shift of amenities towards the secure zone.

After defeat of Taliban this shift generated during the civil war has been reinforced due to the lack of connectivity and secure central government.

The immediate post-war re-construction focus was on renovation of office buildings, traffic management through the construction of various roads and roundabouts and lobbying the various gated communities. While policy making and balanced planning policy has been put in prephery of priorities.

This phenomen is explained by Daniel Esser, who argues that recent international reconstruction efforts in war zones in developing regions have paid little attention to the urban dimension of conflicts, thus leaving unexplored indigenous urban policy, urban social reality and violent conflict at its place. At the same time promoting liberalization and privatization of the city gives the shadowgovernment more power to rule certain areas (Esser, 2009).

This shift is mostly visible in shift of amenities and centrality of commerce as well as creation of gated communities and growth of illegal settlements.

In the old socialist era of Kabul the amenities and commerce as well as housing were mostly regulated through government regulation and Master planning, while in the in the war time and new regime of Hamed Karzi city's commerce, amenitie and housing are regulated by market mechanism and security.

The shift of commerce due to war and security provided by the influential warlords have created new centralities in Kabul which I will refer as city nodes, which goes hand in hand with creation of new townships built on public land, which excludes the urban poor. The same goes for privatization of water supply, electricity, and urban transport system, which creates another level of marginalization of urban poor. (Gregory, 2004).



Spatial analysis



- # Master Plan of Kabul
- # Municipality and Ministry tension
- # Ethnicity and created nodes
- # Future government plans
- # Housing typology
- # Conclusion of spatial analysis



spatial analysis derived from google maps, maps made by the government, in-depth interviews

MASTER PLAN OF KABUL

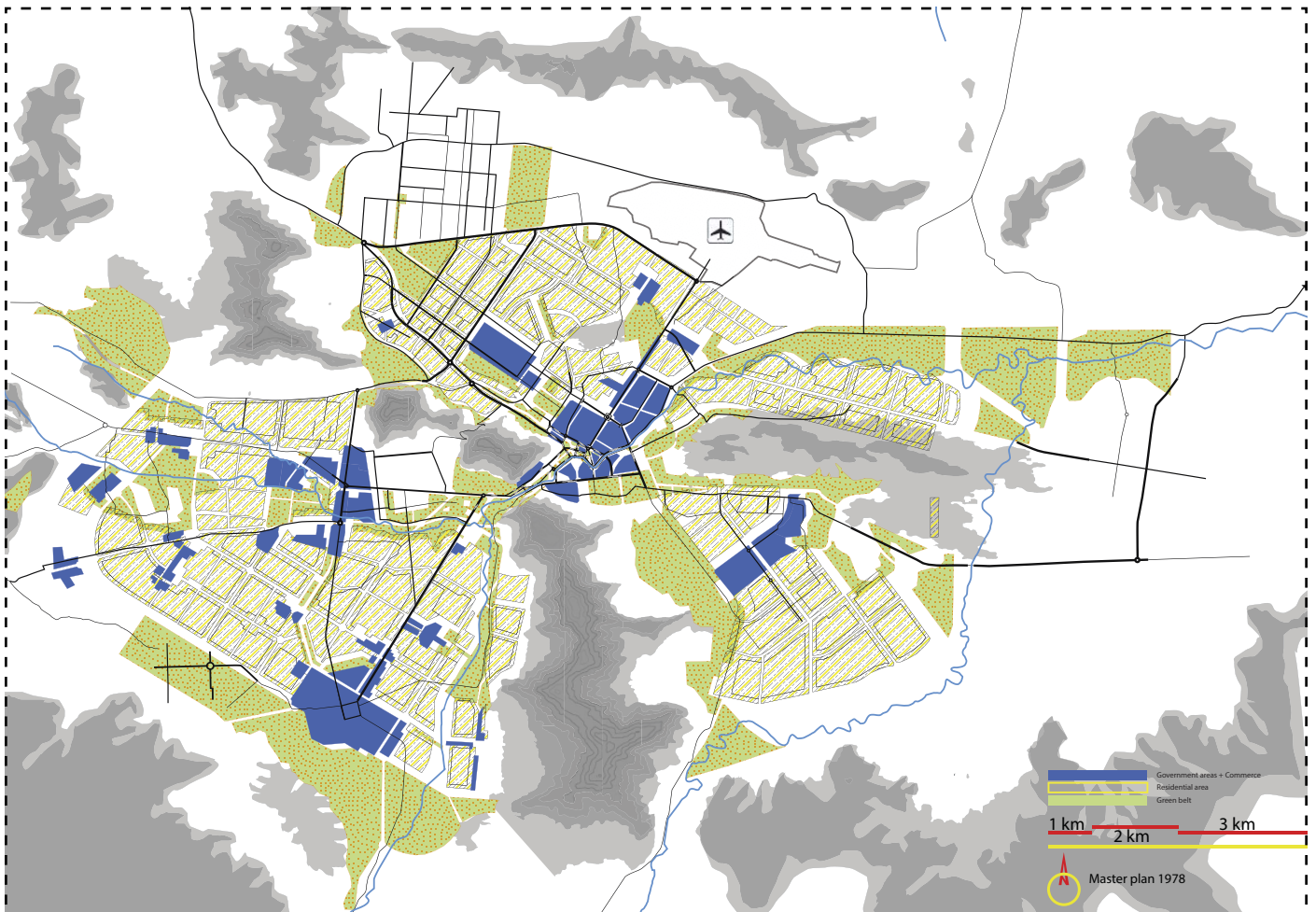
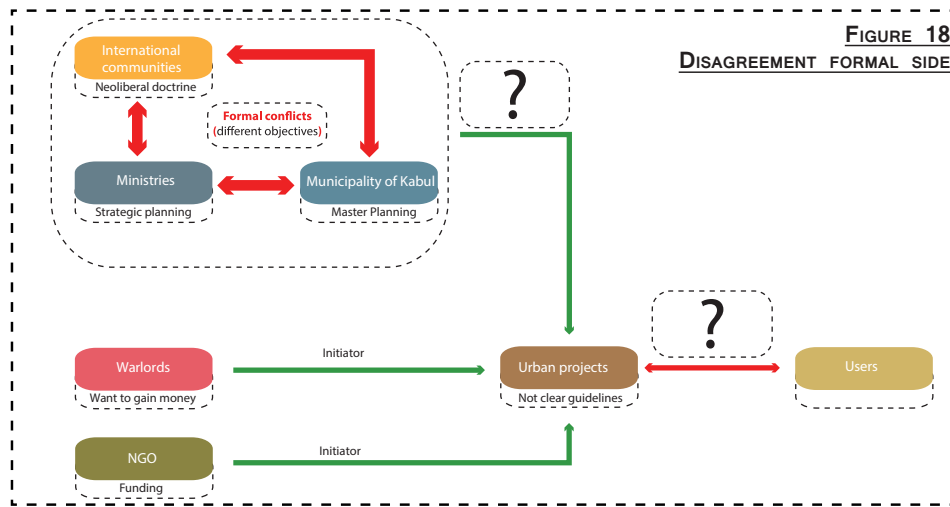
Kabul master plan comes in three stages. The third and hence the last version of Master plan, before adjustment to the current development, was designed to guide the growth of Kabul to a population of two million over a 25 year period, from 1978-2003. The plan promotes high residential densities as a way of doubling the population of the city without increasing the gross developed land area. Mid-rise densification only began in a few areas of Kabul after 2002 in the form of gated communities. The riverway are reserved as undeveloped aquifer recharge areas, Most of these aquifer recharge areas are converted to housing in the current situation of the city (Calogero, 2011).

MUNICIPALITY AND MINISTRY TENSION

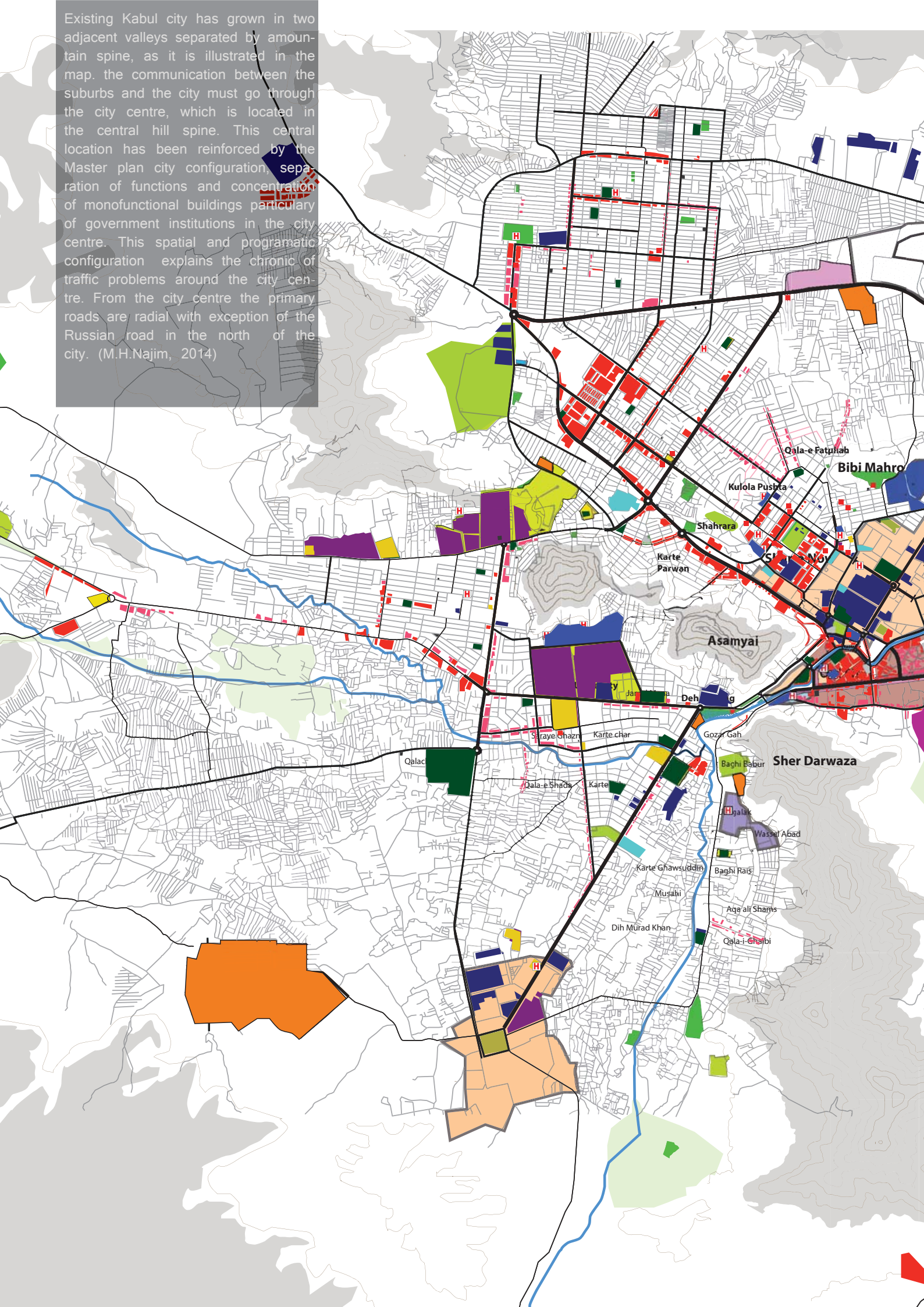
The municipality of Kabul is able to act in complete independence from the ministry because of a Municipal law enacted in 1990; this makes the municipality officially part of the national government. Therefore, the municipality do not need to report to the provincial governors as every other municipality of Afghanistan, instead the municipality reports directly to the President.

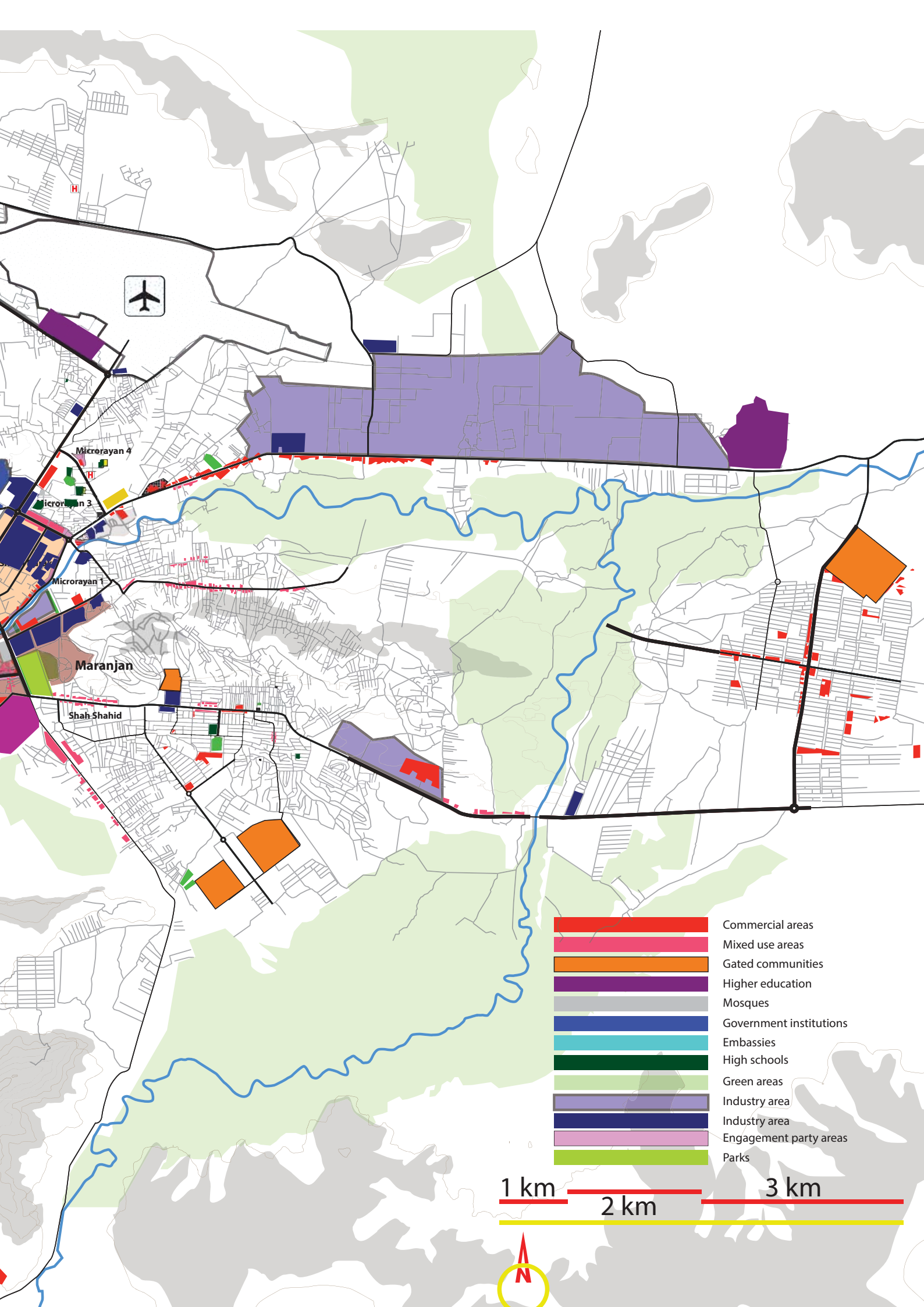
The mayor of Kabul city is committed to implement the adjusted Master plan on the behalf of the government, while the Ministry is showing some disagreement on the level of implementation, both approaches are not inclusive; hence it excludes the other kind of developments initiated by various stakeholders, such as warlords and NGO's.

The scheme below shows how the formal conflict excludes the initiatives from other stakeholders and the end user.



Existing Kabul city has grown in two adjacent valleys separated by a mountain spine, as it is illustrated in the map. The communication between the suburbs and the city must go through the city centre, which is located in the central hill spine. This central location has been reinforced by the Master plan city configuration, separation of functions and concentration of monofunctional buildings particularly of government institutions in the city centre. This spatial and programmatic configuration explains the chronic traffic problems around the city centre. From the city centre the primary roads are radial with exception of the Russian road in the north of the city. (M.H.Najim, 2014)







DAILY COMMUTERS

The daily commuters within the city is mapped here. As we can see the communication and movement within the city is always towards the city centre ,because of its concentration of amenitie and morphology of the city. (RECS intl & Yec, 2010)

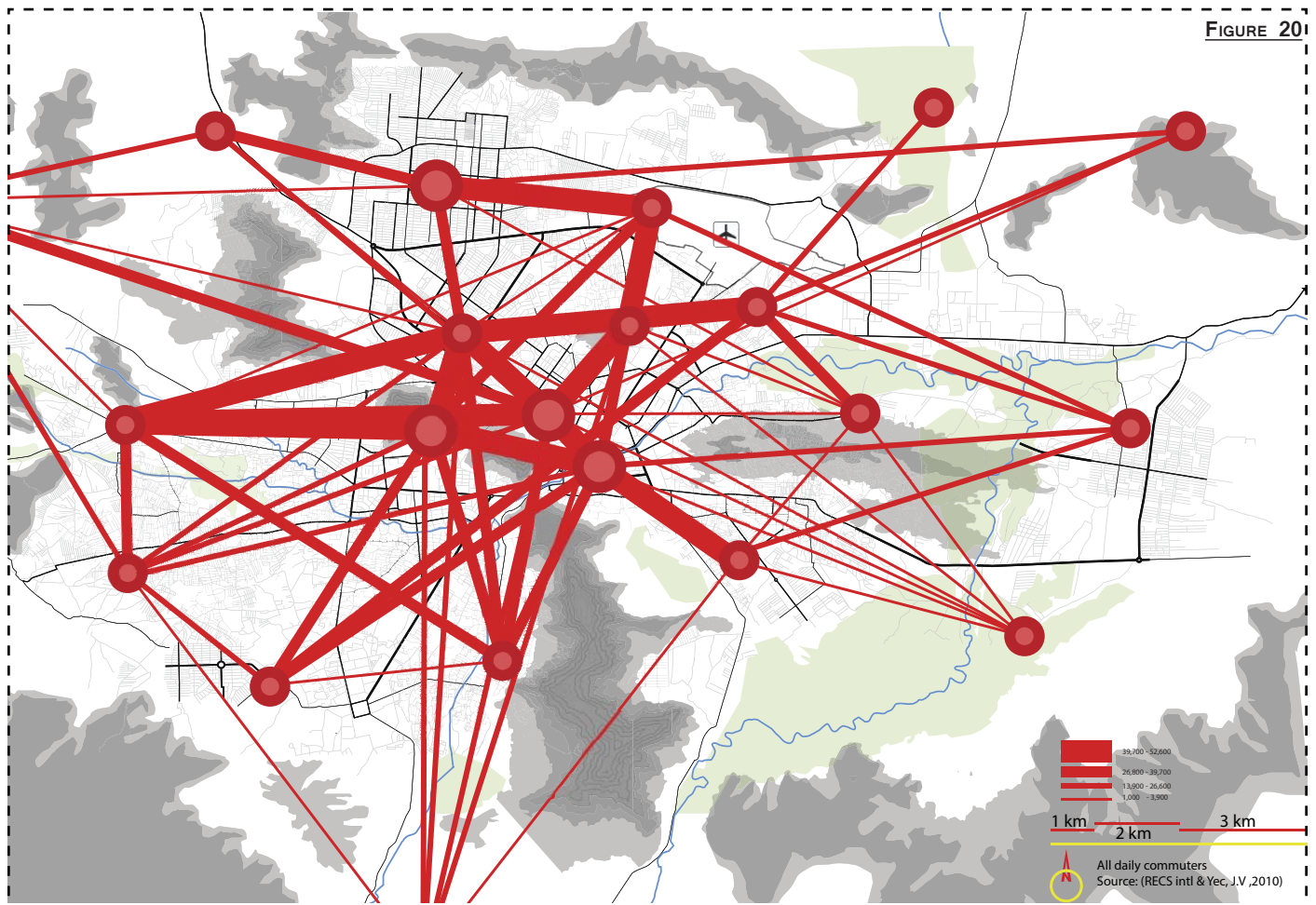
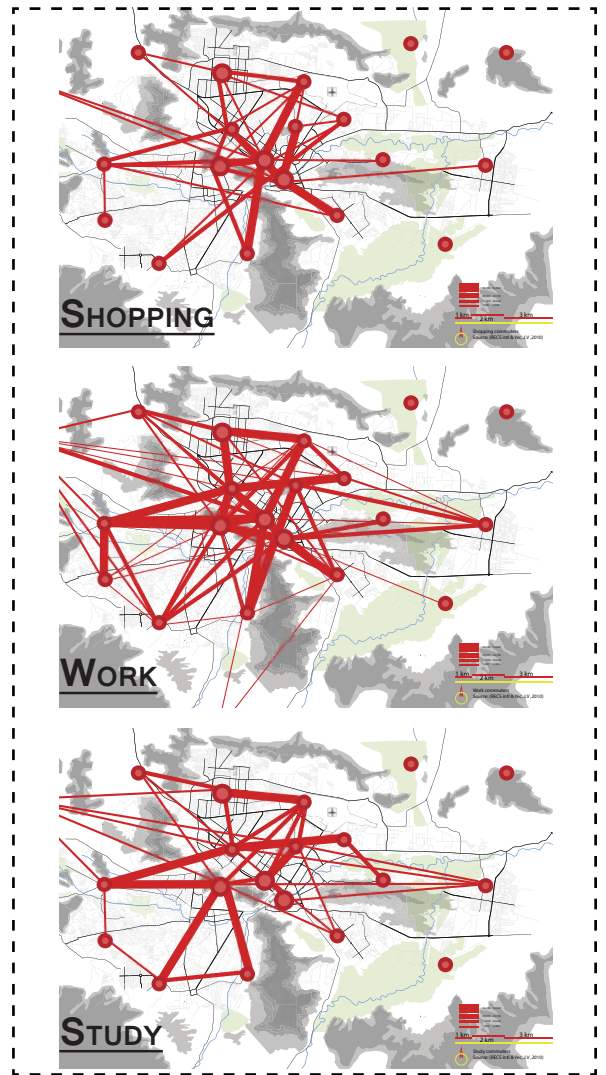


FIGURE 20

ETHNICITY AND CREATED NODES

The lack of (paved) street network, the morphological character of the city and the various security zones has created several nodes in the city. These created nodes represents different ethnic groups and each has link with important regional infrastructure, while they lack of good connection with each other. The created nodes are illustrated with circles here, where we can identify if they are under control of central government.

The city can divided into three parts in terms of social and ethnic differences. The majority of Pashtuns are located throughout the city, but predominantly in the Western part of the city, which has good connection with Kandahar and Wardak. The most Western node of the city, which has good connection with Kandahar and Wardak, is represented by the Pashtuns.

Tajik ethnic groups are also located throughout the city, but mainly in the Northern side of the mountain spine. In contrast to Pashtuns, Tajiks are speaking Dari and possess a lot of important nodes within the city.

Hazara the other major ethnic group in Afghanistan, most likely descended from the Mongols of Jenghis Khan and different in physical appearance compared with Pashtun and Tajiks. Traditionally the Hazaras, who also represents Shia Muslim in Kabul, are settled in the South West of the mountain spine.

FIGURE 21
ETHNICITY MAP

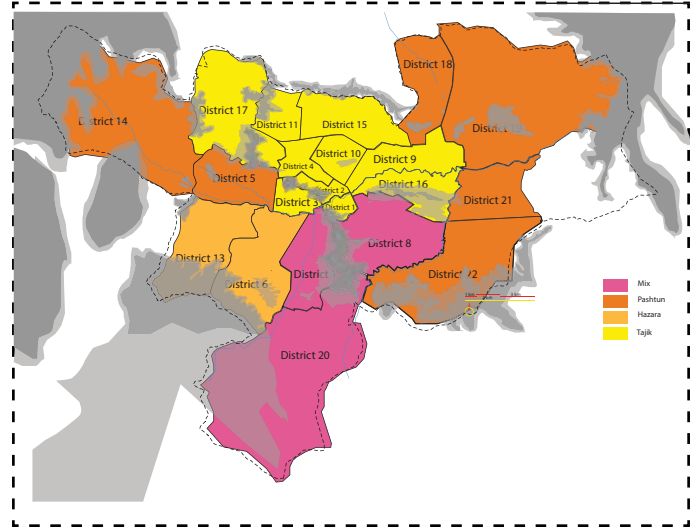
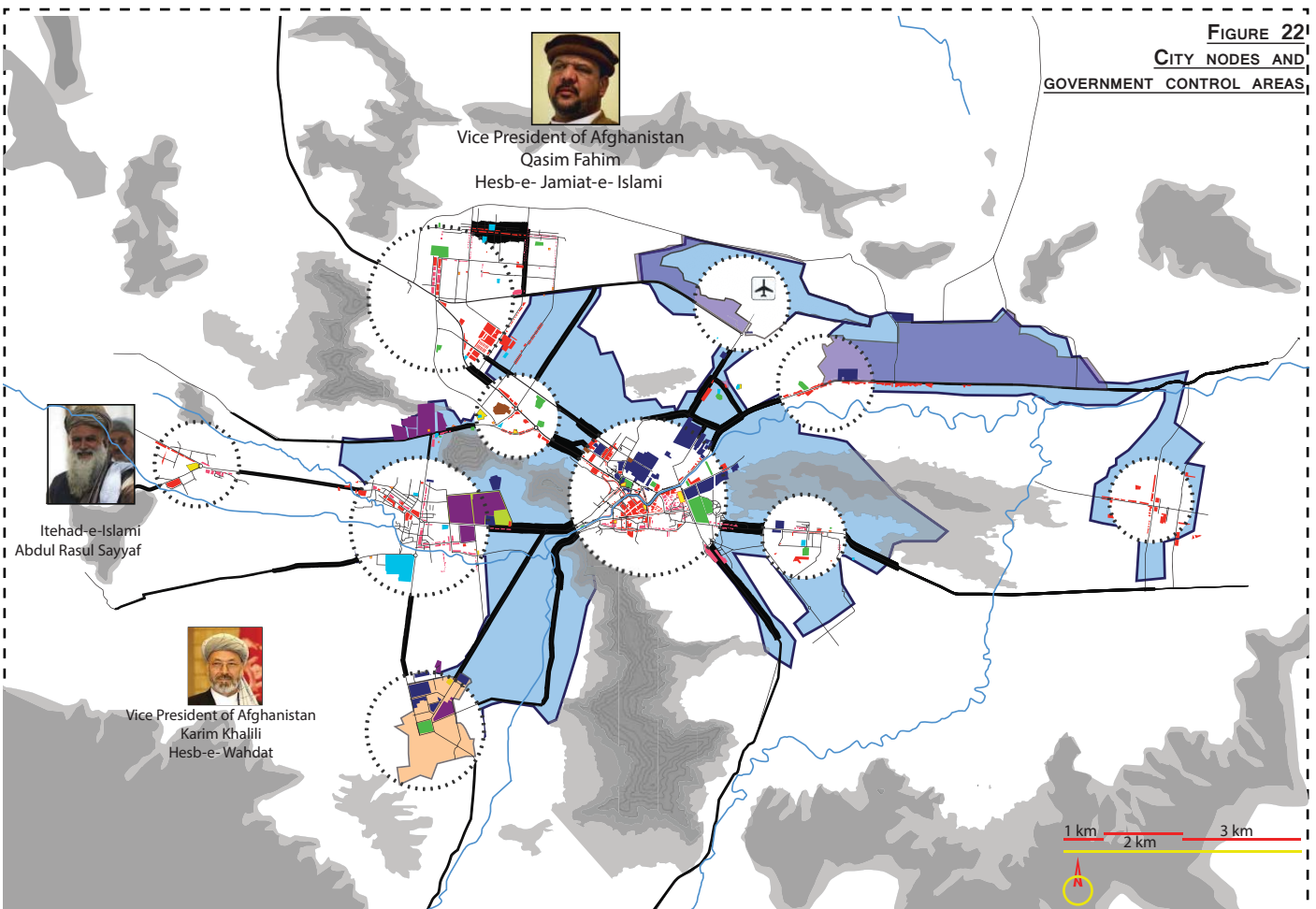
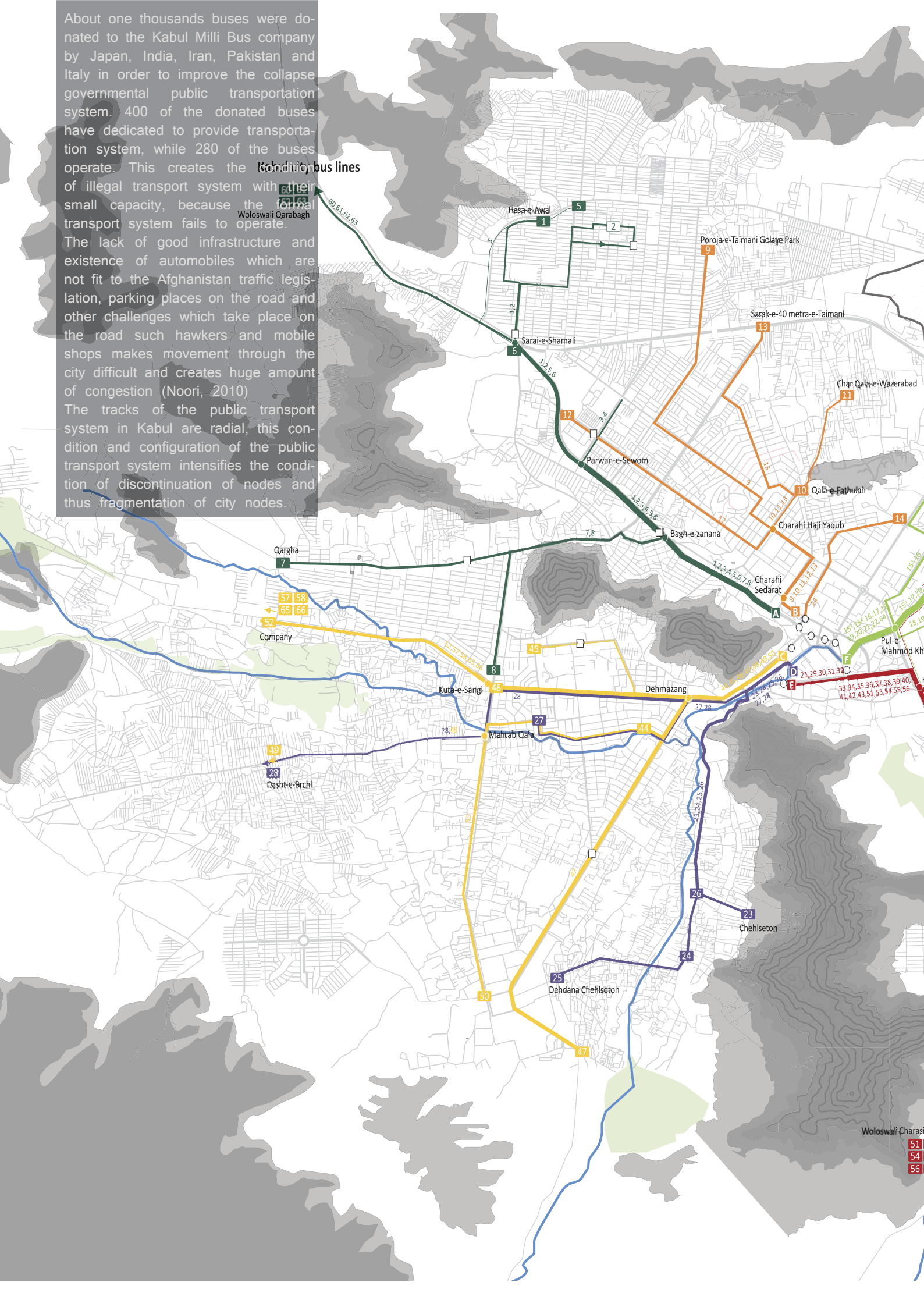


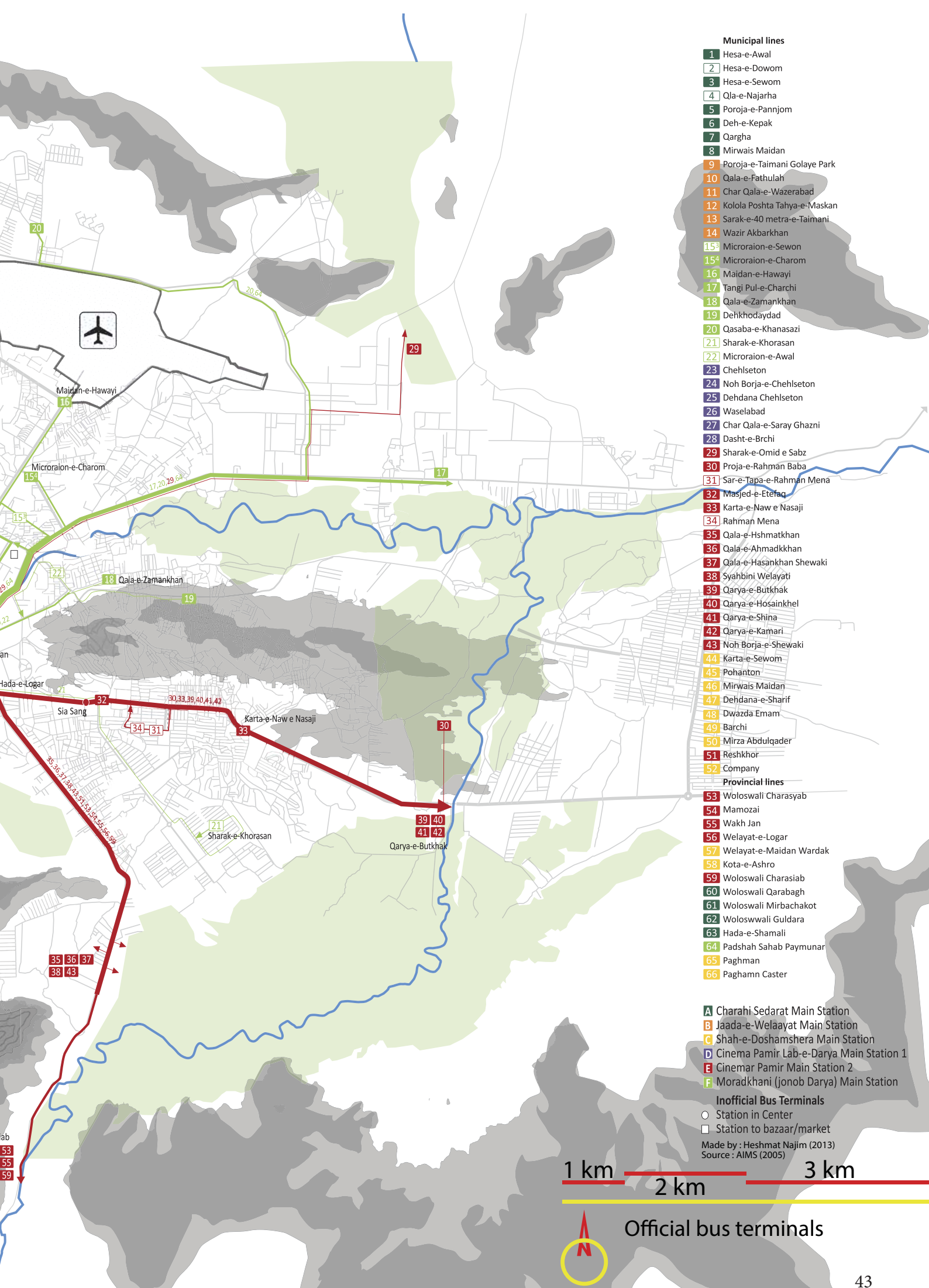
FIGURE 22
CITY NODES AND
GOVERNMENT CONTROL AREAS



About one thousands buses were donated to the Kabul Milli Bus company by Japan, India, Iran, Pakistan and Italy in order to improve the collapse governmental public transportation system. 400 of the donated buses have dedicated to provide transportation system, while 280 of the buses operate. This creates the condition of illegal transport system with their small capacity, because the public transport system fails to operate. The lack of good infrastructure and existence of automobiles which are not fit to the Afghanistan traffic legislation, parking places on the road and other challenges which take place on the road such hawkers and mobile shops makes movement through the city difficult and creates huge amount of congestion (Noori, 2010). The tracks of the public transport system in Kabul are radial, this condition and configuration of the public transport system intensifies the condition of discontinuation of nodes and thus fragmentation of city nodes.

Radial bus lines





Municipal lines

- 1 Hesa-e-Awal
- 2 Hesa-e-Dowom
- 3 Hesa-e-Sewom
- 4 Qla-e-Najarha
- 5 Poroja-e-Pannjom
- 6 Deh-e-Kepak
- 7 Qargha
- 8 Mirwais Maidan
- 9 Poroja-e-Taimani Golaye Park
- 10 Qala-e-Fathulah
- 11 Char Qala-e-Wazerabad
- 12 Kolola Poshta Tahya-e-Maskan
- 13 Sarak-e-40 metra-e-Taimani
- 14 Wazir Akbarkhan
- 15⁸ Microraiion-e-Sewon
- 15⁴ Microraiion-e-Charom
- 16 Maidan-e-Hawayi
- 17 Tangi Pul-e-Charchi
- 18 Qala-e-Zamankhan
- 19 Dehkhodaydad
- 20 Qasaba-e-Khanasazi
- 21 Sharak-e-Khorasan
- 22 Microraiion-e-Awal
- 23 Chehlseton
- 24 Noh Borja-e-Chehlseton
- 25 Dehdana Chehlseton
- 26 Waselabad
- 27 Char Qala-e-Saray Ghazni
- 28 Dasht-e-Brchi
- 29 Sharak-e-Omid e Sabz
- 30 Proja-e-Rahman Baba
- 31 Sar-e-Tapa-e-Rahman Mena
- 32 Masjed-e-Etefaq
- 33 Karta-e-Naw e Nasaji
- 34 Rahman Mena
- 35 Qala-e-Hshmatkhan
- 36 Qala-e-Ahmadkhan
- 37 Qala-e-Hasankhan Shewaki
- 38 Syahbini Welayati
- 39 Qarya-e-Butkhak
- 40 Qarya-e-Hosainkhel
- 41 Qarya-e-Shina
- 42 Qarya-e-Kamari
- 43 Noh Borja-e-Shewaki
- 44 Karta-e-Sewom
- 45 Pohanton
- 46 Mirwais Maidan
- 47 Dehdana-e-Sharif
- 48 Dwazda Emam
- 49 Barchi
- 50 Mirza Abdulqader
- 51 Reshkhor
- 52 Company

Provincial lines

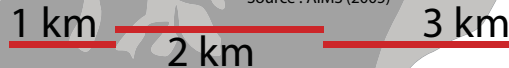
- 53 Woloswali Charasyab
- 54 Mamozai
- 55 Wakh Jan
- 56 Welayat-e-Logar
- 57 Welayat-e-Maidan Wardak
- 58 Kota-e-Ashro
- 59 Woloswali Charasiab
- 60 Woloswali Qarabagh
- 61 Woloswali Mirbachakot
- 62 Woloswwali Guldera
- 63 Hada-e-Shamali
- 64 Padshah Sahab Paymunar
- 65 Paghman
- 66 Paghman Caster

- A** Charahi Sedarat Main Station
- B** Jaada-e-Welaayat Main Station
- C** Shah-e-Doshamshera Main Station
- D** Cinema Pamir Lab-e-Darya Main Station 1
- E** Cinemar Pamir Main Station 2
- F** Moradkhani (jonob Darya) Main Station

Inofficial Bus Terminals

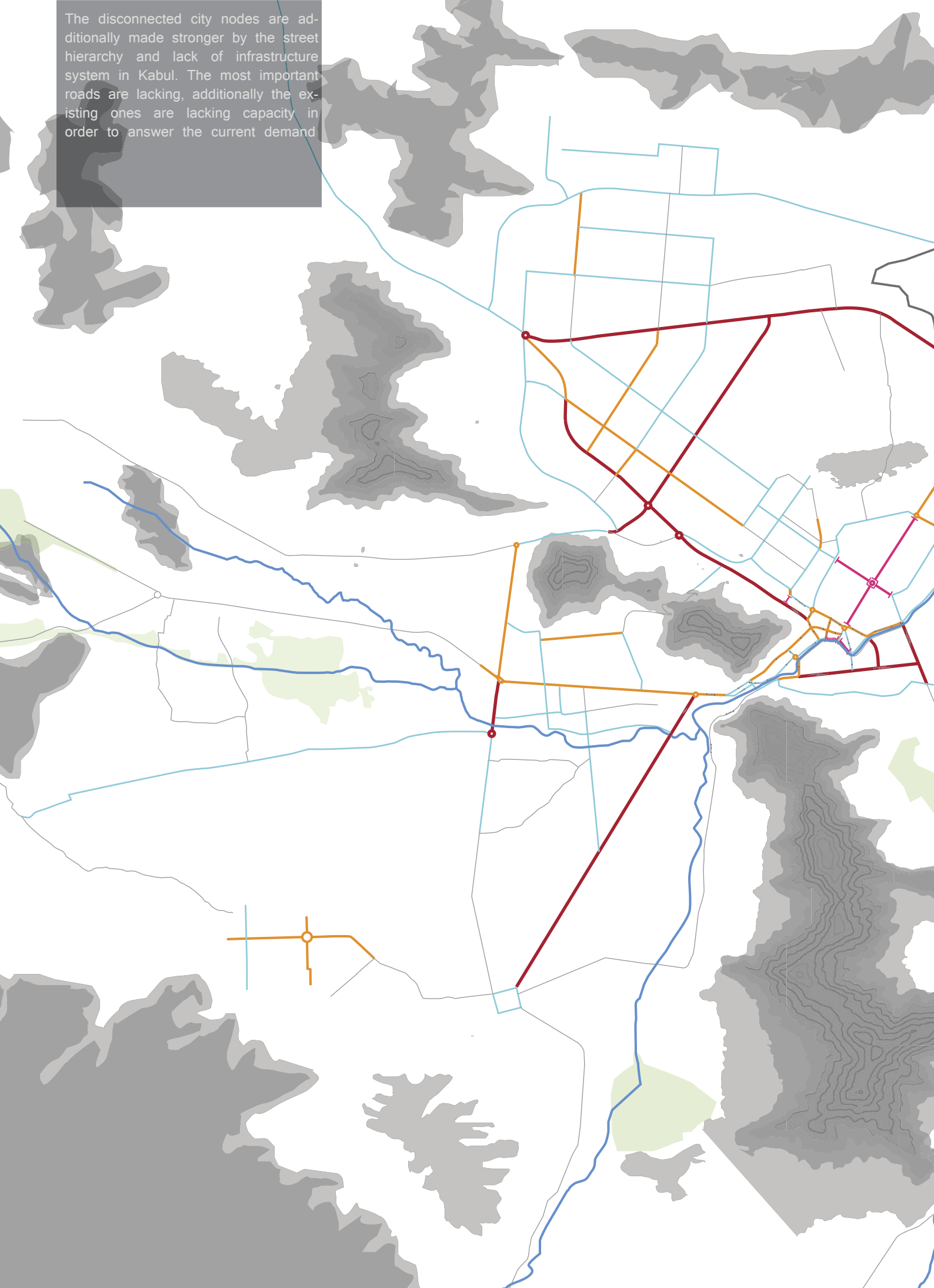
- Station in Center
- Station to bazaar/market

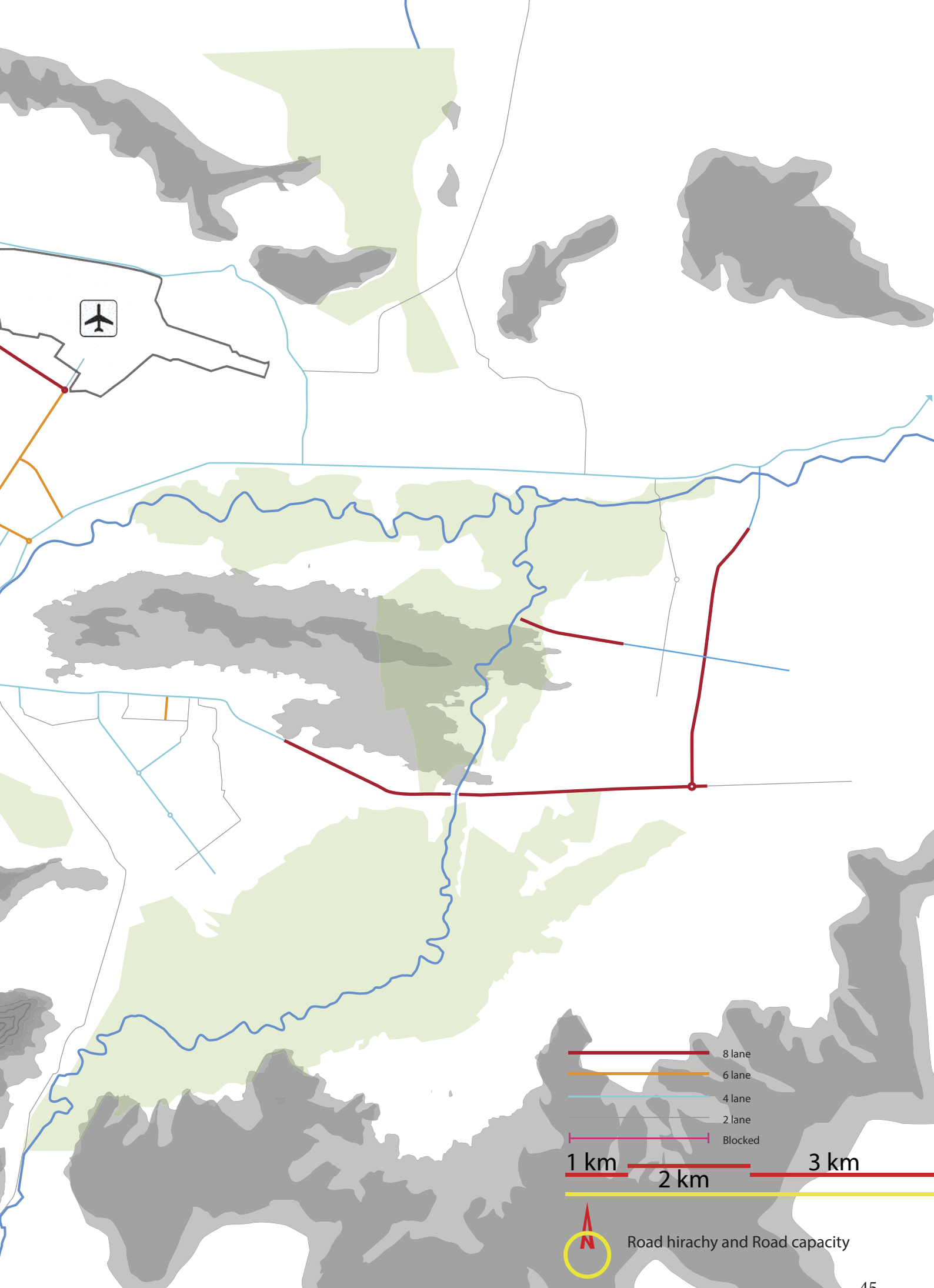
Made by : Heshmat Najim (2013)
Source : AIMS (2005)



Official bus terminals

The disconnected city nodes are additionally made stronger by the street hierarchy and lack of infrastructure system in Kabul. The most important roads are lacking, additionally the existing ones are lacking capacity in order to answer the current demand





- 8 lane
- 6 lane
- 4 lane
- 2 lane
- Blocked

1 km 2 km 3 km

Road hirachy and Road capacity



The plots in the illegal settlements are not much different from the plots of legal (municipal approved) settlements. The size of the plots in the illegal settlements are in many cases larger than the legal settlements because the land is purchased cheaper than the legal land provided by the municipal.

STREET PATTERN AND PUBLIC PLACES

Most of the roads in the illegal areas are very narrow, which is not wide enough for a car to get through for an emergency or give access to plots. These roads lack of street hierarchy as well as proper street networks.

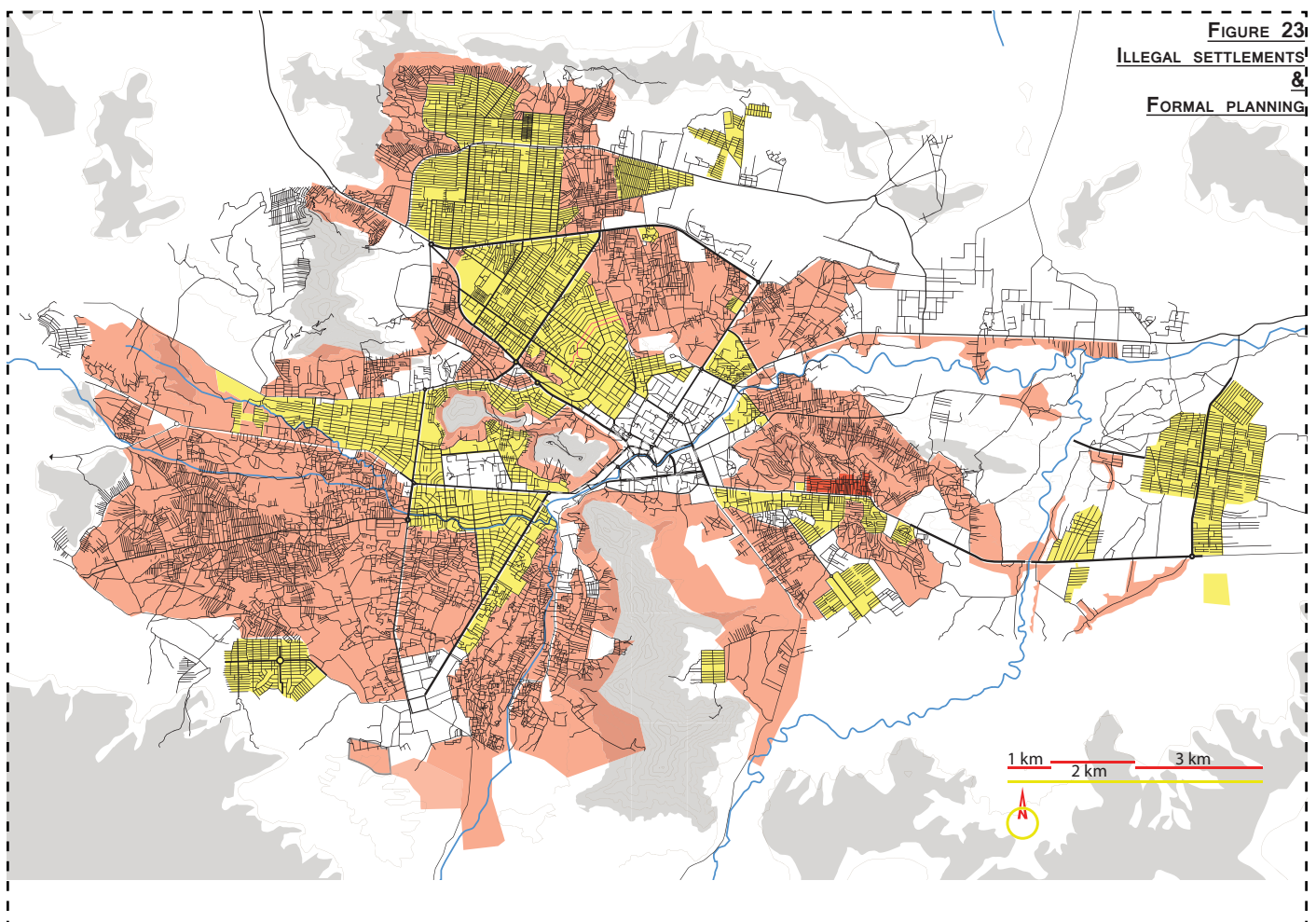
The development process of these areas do not leave also any space for community facilities like schools, clinics and mosques.

The described situation is one of the crucial differences between the formal planned areas and illegal settlement. The illegal settlements are not only physically isolated from the city network, but also in institutional and organizational form. These areas are not recognized by the authorities and therefore the authorities do not feel obligated to provide basic services for these areas.

PERSPECTIVE OF MASTER PLAN

From the municipal and Master plan perspective, all what is built in Kabul which has not been approved by the municipal authorities is illegal and should be demolished in order to make room for the Master plan implementation. After speaking with Deputy minister ir. Salek became clear how the master planning mentality still has its roots in Afghan planning. Deputy minister ir. Salek points out that the areas preserved for greenery or other facilities in the city are mostly converted by illegal occupation, he wants to demolish these build up areas and convert them into assigned program from the Master Plan (Deputy minister eng Amiruddin Salek, 2013)

Illegal settlements can be found in all parts of the city, but more heavily concentrated in the South west part of the city.





On regional level new infrastructure will be built in order to improve connection of the city with its region and the new Kabul city. At the local level, new efforts are made to upgrade the condition of the city and its inhabitants, by demolishing the existing illegal occupied areas on the strategic location. The illegal occupants are guaranteed of a dwelling in the new build up environment. According to Deputy minister this way of dealing with the illegal occupants is sustainable and it helps both the city and its inhabitants of a better and prosperous future (Deputy Minister Eng Amiruddin Salek, 2013)

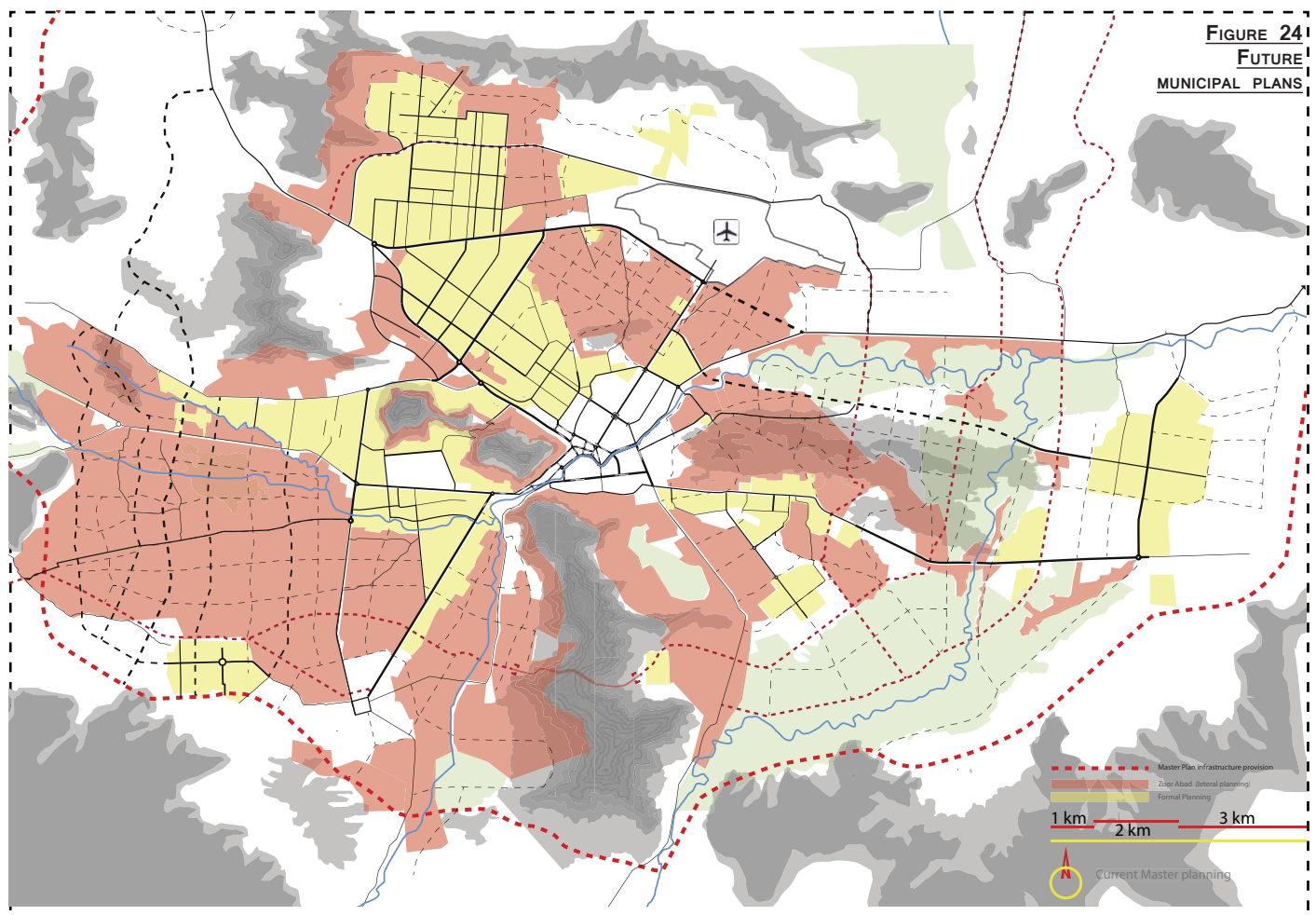
I believe this kind of initiatives is not very functional in Kabul, because it is willing to shift the problem from one site to the other, on the other hand this proposal will reinforce illegality because it will be a nice way to penetrate the legal market.

FUTURE MUNICIPAL PLANS

The ministry of plan implementation in Kabul, has adjusted the Master Plan of 1978, but still with the idea to demolish the already build up illegal housing in the city. The road plan which is one of the crucial elements of Master Plan has adapted vernacular illegal structure of the city.

In this way the government have adapted the most crucial and important illegal roads through designing them into the new master plan. Some of these plots should be bought and demolished in order to implement road network plans (RECS intl & Yec,2010).

According to deputy minister Salek in the upcoming years, new projects will be initiated in Kabul and some of the projects are taking place right now.



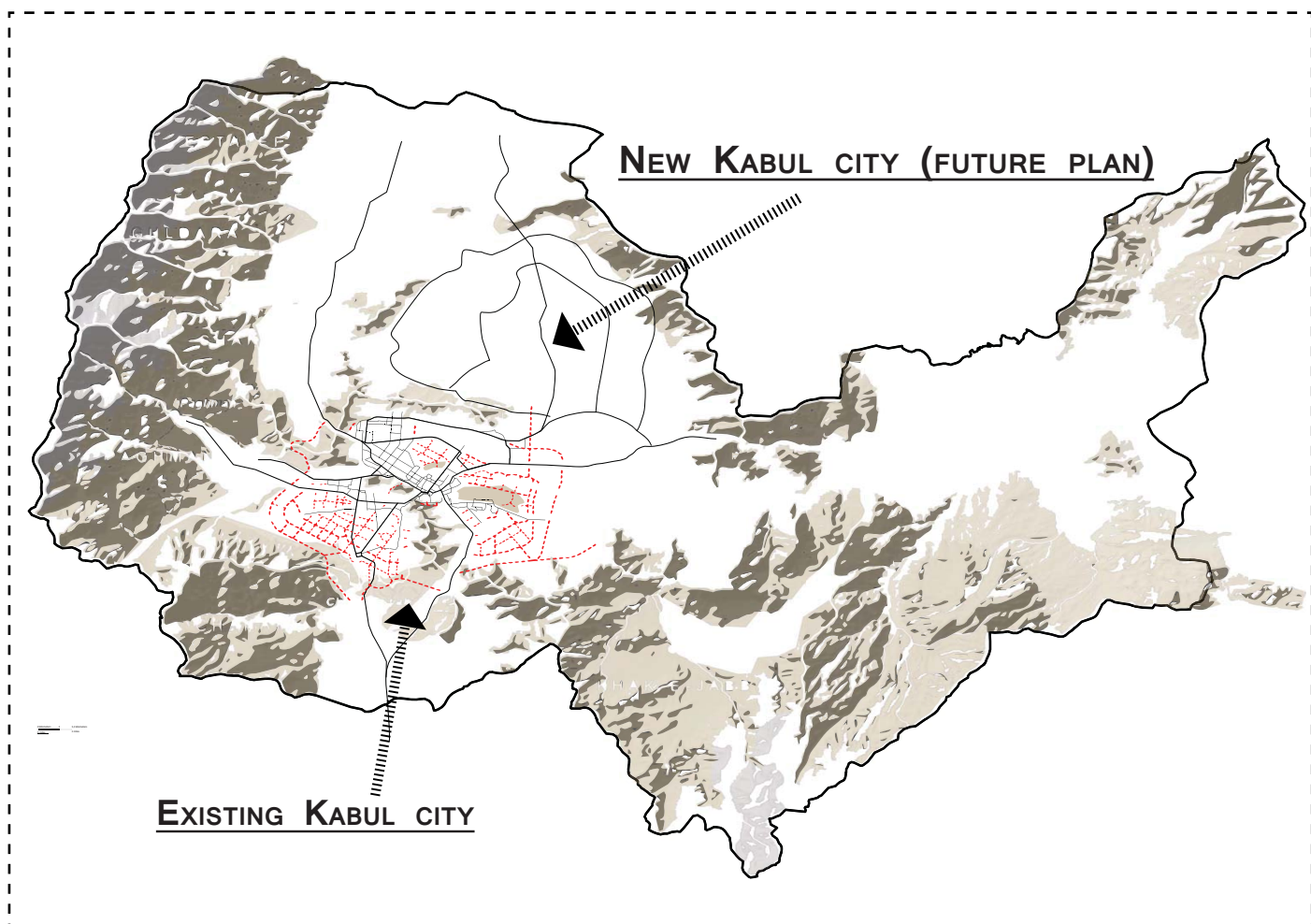


until today there is no sign of construction and it is not clear when the official will start the project (DCDA, 2014).

FUTURE GOVERNMENT PLANS

While the Kabul municipality has continued to implement the master plan within the boundaries of Kabul city, the Ministry of urban development issued a Multi-billion dollar project of New Kabul city, which sounds the solution of existing Kabul city for the government officials. The site for the new city is on the vacant land just at the north of the existing Kabul city. New Kabul city began as initiative when president Hamid Karzai set up a board of stakeholders to develop a new city to provide additional housing for residents of the capital, when this city can not handle its current urbanization. The first phase had to be completed in 2015 with 80.000 housing. But

FIGURE 25
FUTURE
ADDITIONAL CITY (DEH SABZ)



HOUSING TYPOLOGY

As stated before there are several form of ownership, while Kabul's residential housing can be categorised into 4 housing types.

- Flats of 5 floors: These housing types are introduced through master planning by the Soviet Union. It's constructed mainly of prefabricated materials in a Soviet-constructed local factory. These multi story concrete housing was also the only high rise residential buildings of Kabul until 2001. After 2001 there are several gated communities constructed with high rise building surpassing the flats of Soviet Union.

- Detached houses built on the middle of the plot. Conventional type and new imported architecture from Pakistan (Feenstra, 2010). (Figure 28)

- Houses built around a walled compound leaving the center of the plot as an open courtyard. The majority of structures being one or two stories high.

- The traditional Qala: The tendency of families to become extended (even to tribal units) and for women rarely to go out in public have led to the development of open-air courtyards (Qala), wherein domestic activities may be pursued most of the time. The Qala consists of a four-square enclosure with walls about eight meters high and two meters thick. Corner and median watchtowers allow it to act as a fortification protecting people and animals and providing a secure storage place for farm produce. These Qala's are normally build by Khan's (rich-men), landlord or tribal headman in order to accommodate his extended family. (Figure,29)

Each type of housing corresponds to demand from different socioeconomic group. According to (Ber-taud,2005) 90% of the housing in Kabul are built as courtyard layout.

The illegal urban dwelling as courtyard in the city centre such as in Deh Afghanan have no sanitary services or water, but they do have access to electricity. The layout of the houses are irregular: lots vary in size and shape. Adobe and mud, brick and stone are the materials used for the construction. Building materials corresponds and reflects lifestyle, climate, geography and socio-economic situation of the family.

BUILDING MATERIALS

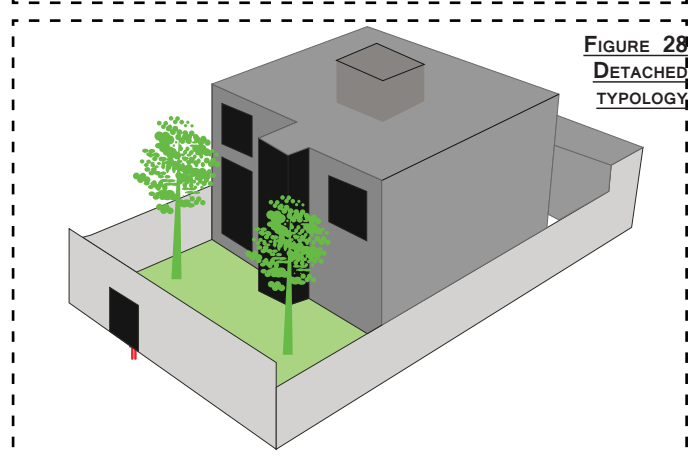
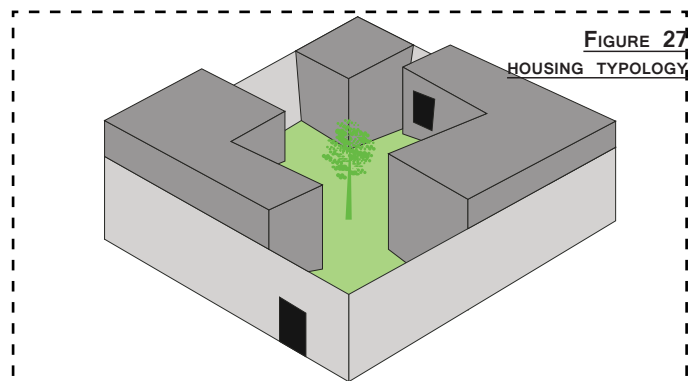
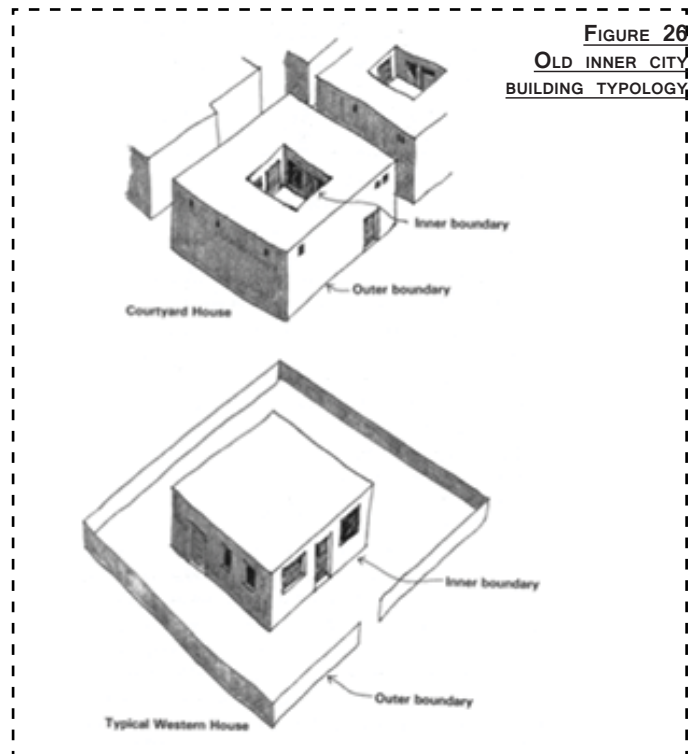
The following materials are commonly used for urban dwelling in Kabul :

- Pakhsa: A building material that employs compressed mud for building walls. The walls are thick and the mud is mixed with hay in order to make it more firm. This material is mostly used for Qala's and illegal occupants who are migrants from the rural areas.

- Khesht-e-Kham: A building material that em-

ployes compressed mud with hay in bricks form. The brick form is only sun-dried and they are not fired bricks. This material is cheap and easy to make, for this reason most of the illegal houses are built from this material and at the same time produced by the same occupants.

- Kesht-e-Pukhta: Fired bricks, most often found in modern buildings in the city. The houses built within the framework of Master plan usually uses this material (Colagero, 2011).

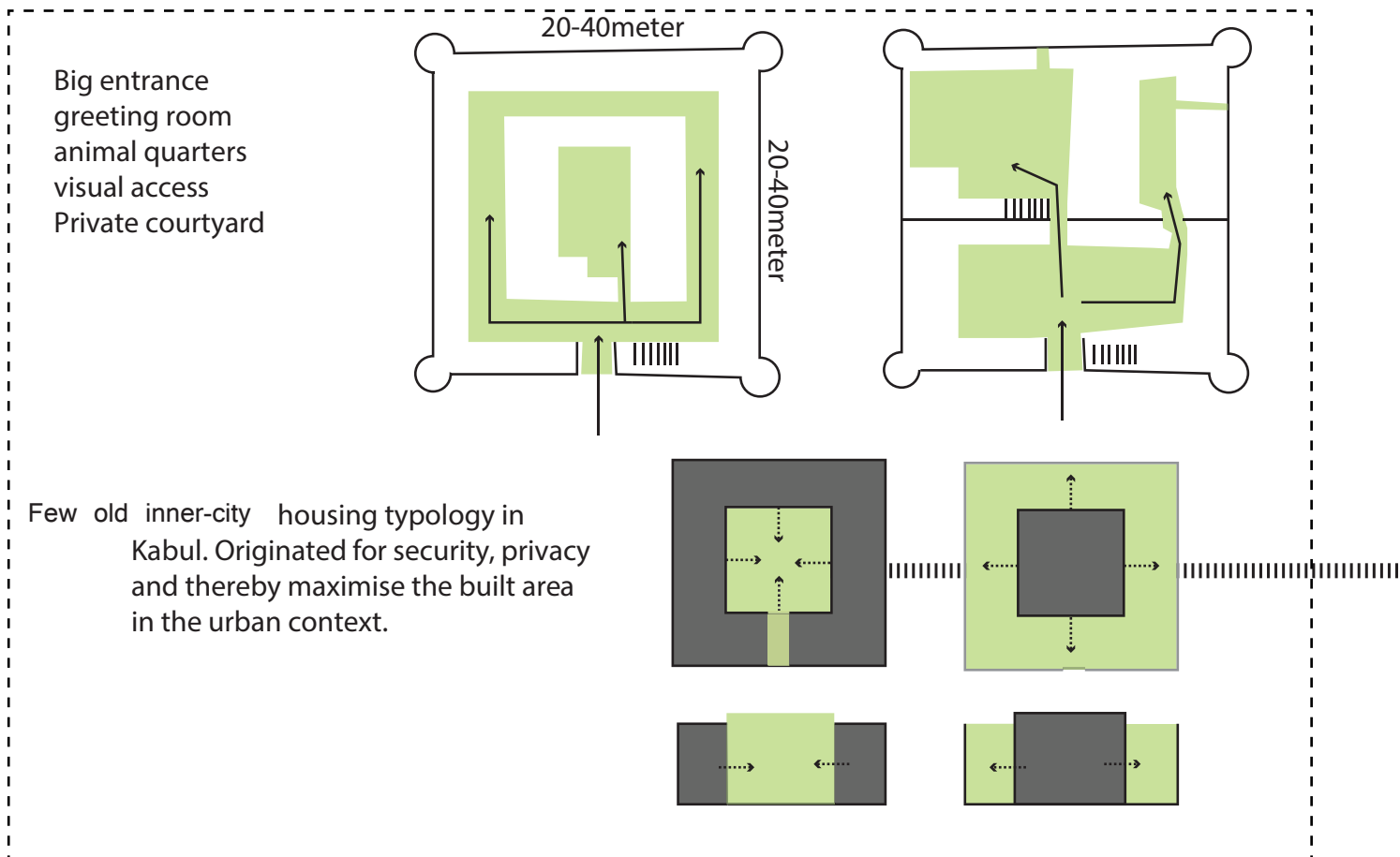
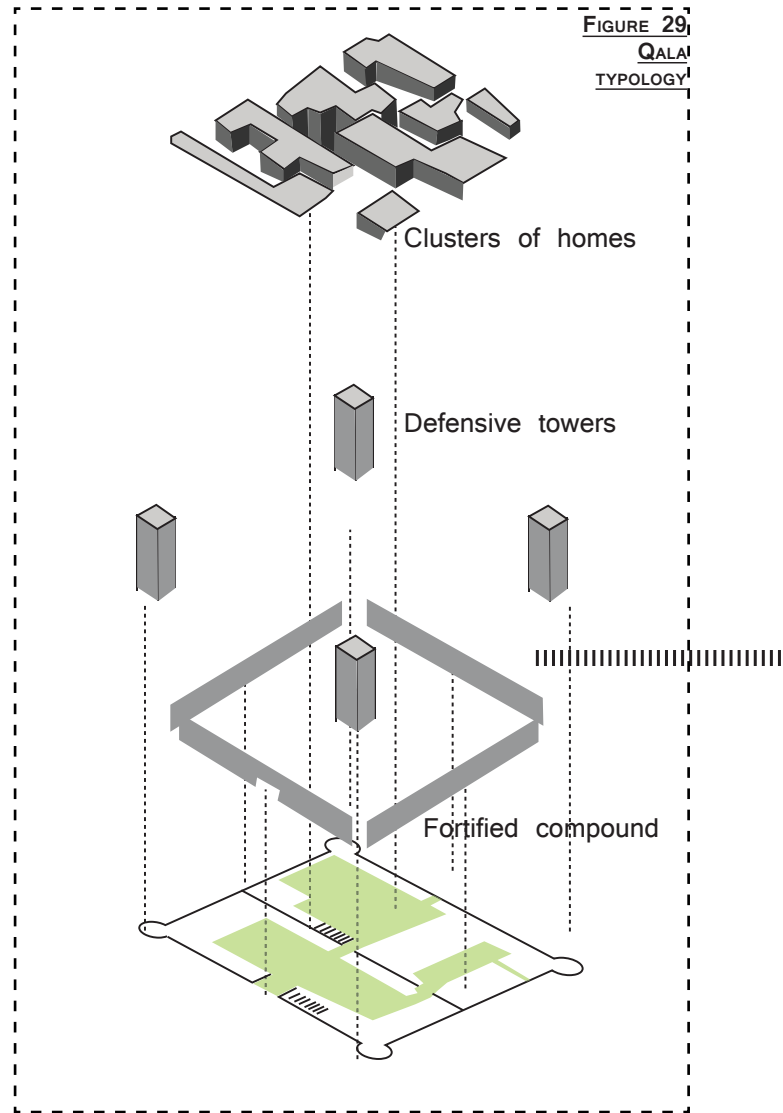


QALA: A Qala is a fortified compound. It is a fortress-like structure built on a flat terrain. Qalas have thick and high walls, a square plan, defensive towers on each corner, and a single fortified entrance flanked by defensive towers.

Every Qala is subdivided into clusters, within which different homes are built. Every qala has a main entrance with a guest room (mehmankhana) above the entrance, with an outward facing window. Each cluster has a compound wall and a separate entrance in order to provide privacy from the other inhabitants. The compound wall thus encircles the private and shared spaces to indicate the extended family relationships.

When you enter a cluster, first there is an alleyway with a wall at the end blocking the sight. Besides an entryway, every cluster shares a courtyard. Several rooms are built around the courtyard: family room, kitchen, storage room, animal stable, and toilet (pit latrines). The family room is at the centre, flanked by a storage room and kitchen. The animal stable and the toilet are at the outer side. The towers were originally meant for defence, but are nowadays used as storage. Whenever there are multiple stories, the first floor usually consists of storage rooms and stables, and the second or third floor contains the family room and kitchen. (Kazimee, 1977; Watts, 1983)

FIGURE 29
QALA
TYPOLOGY



Few old inner-city housing typology in Kabul. Originated for security, privacy and thereby maximise the built area in the urban context.





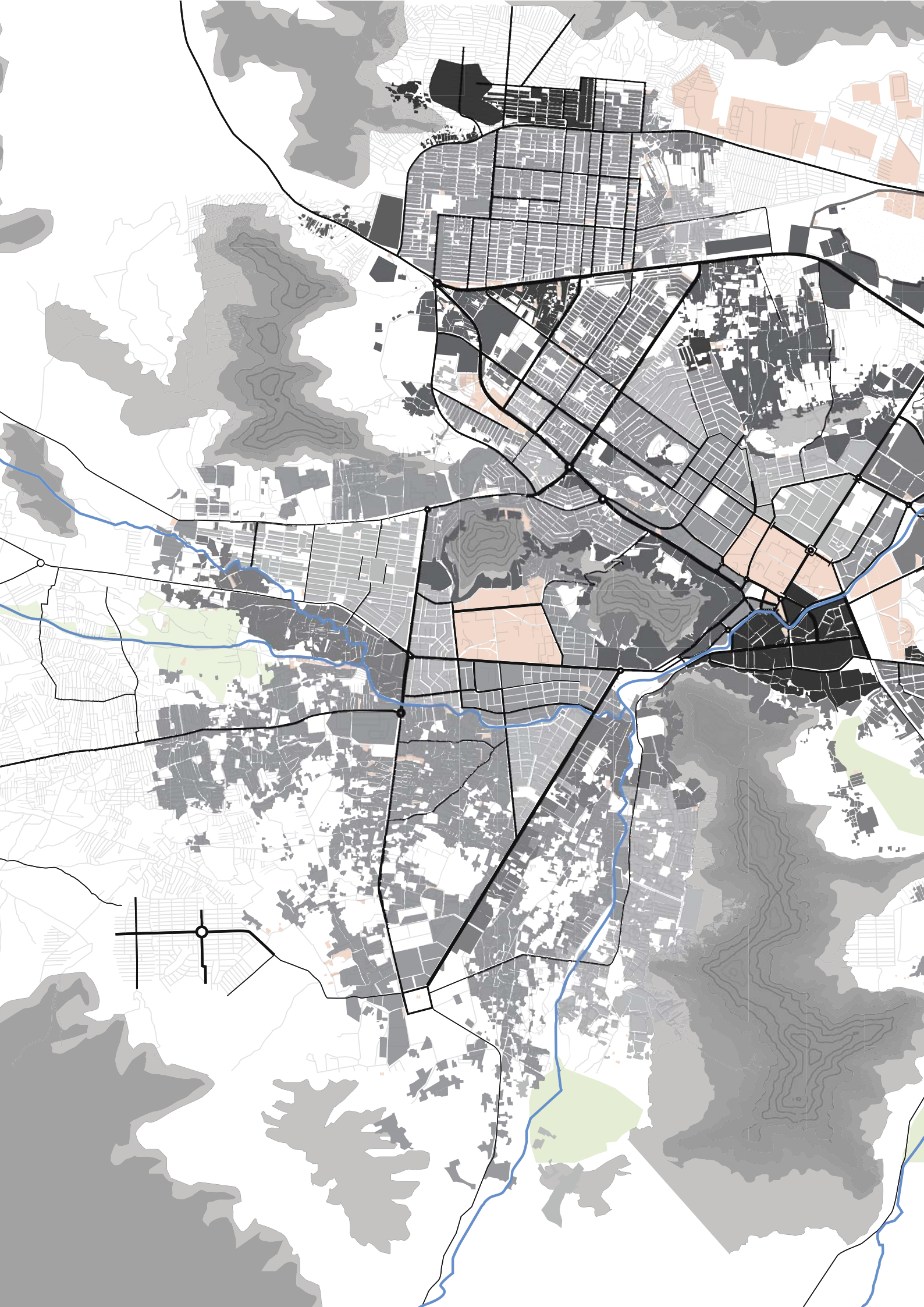






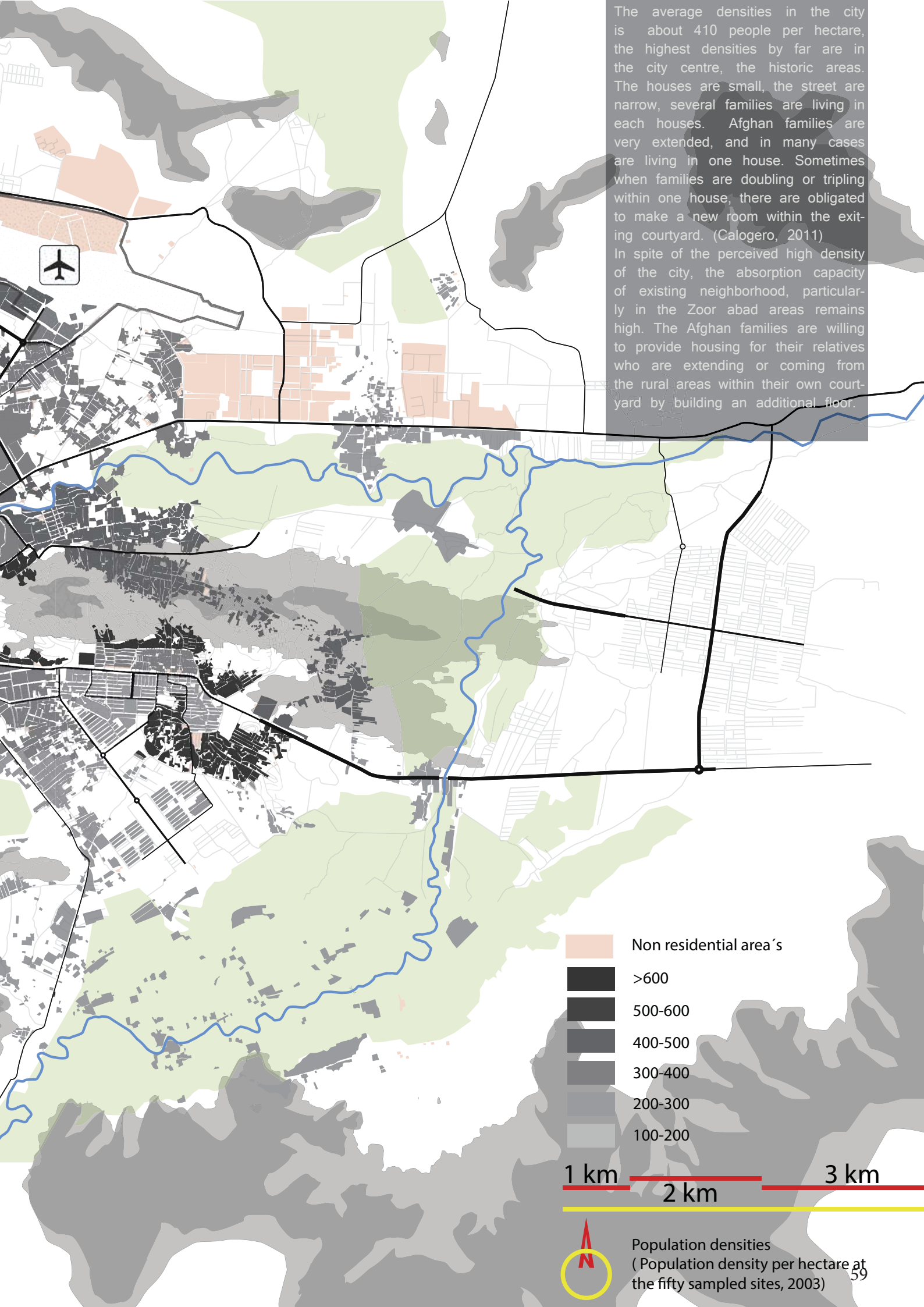






The average densities in the city is about 410 people per hectare, the highest densities by far are in the city centre, the historic areas. The houses are small, the street are narrow, several families are living in each houses. Afghan families are very extended, and in many cases are living in one house. Sometimes when families are doubling or tripling within one house, there are obligated to make a new room within the exiting courtyard. (Calogero, 2011)

In spite of the perceived high density of the city, the absorption capacity of existing neighborhood, particularly in the Zoor abad areas remains high. The Afghan families are willing to provide housing for their relatives who are extending or coming from the rural areas within their own courtyard by building an additional floor.

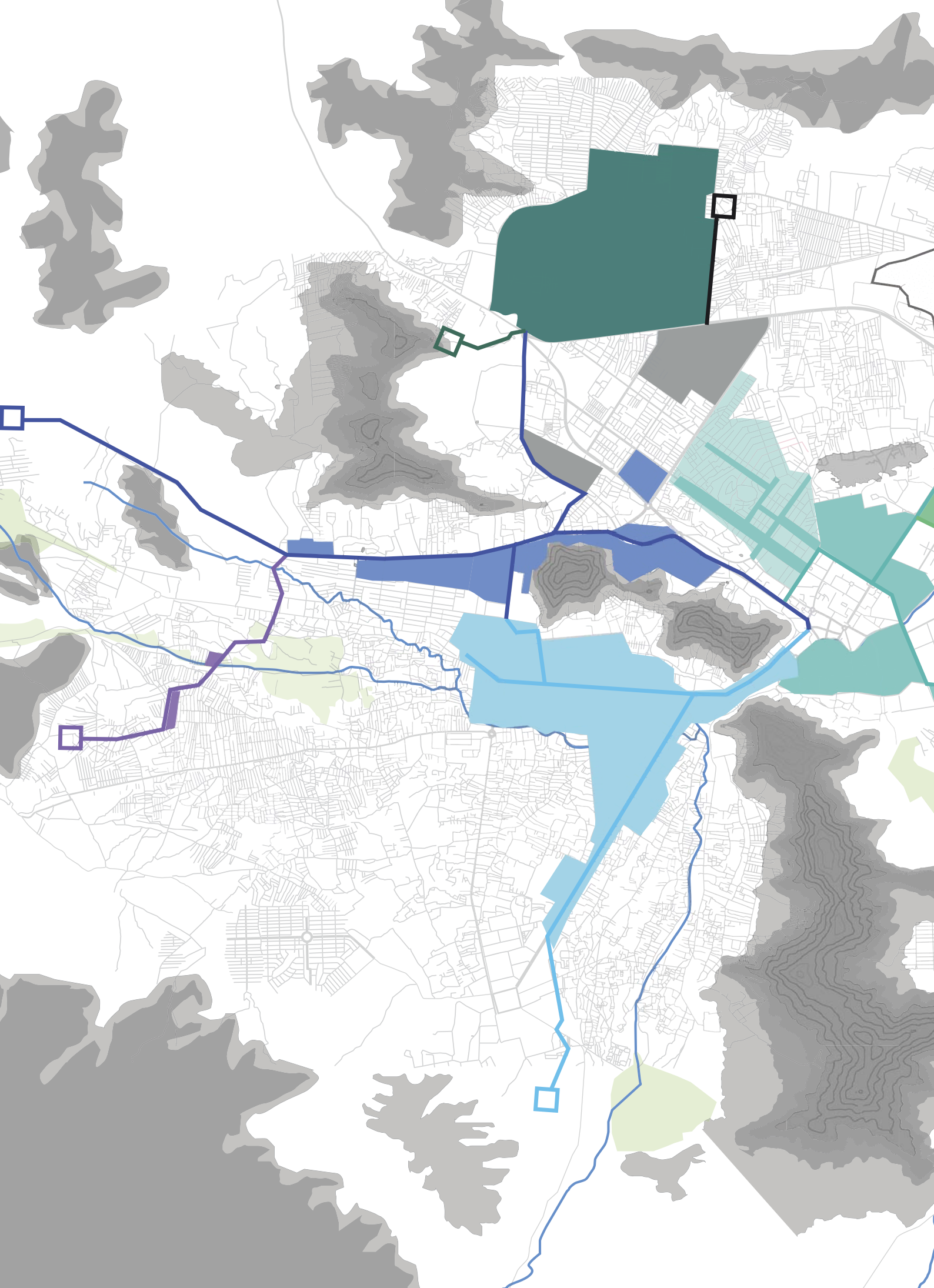


- Non residential area's
- >600
- 500-600
- 400-500
- 300-400
- 200-300
- 100-200

1 km 2 km 3 km



Population densities
(Population density per hectare at the fifty sampled sites, 2003)



The Kabul legal water supply network is quite complex (because of its water right compelled by sharia law and state law) and is composed of 11 interconnected networks 20 independent networks. These networks are supplied by an important number of deep wells. The water supply is managed by the central authority, smaller networks are managed by small communities funded by UNCHS. Most of people who do not have access to central water supply has their own private wells in their homes, which affects the water level of kabul basins. The situation in Kabul is critical and the management of water resources is on of the major keys to the improvement and development of the living conditions of its inhabitants. The priority for upcoming decades should be the supply of addquate drinking water and management of it (MUDH, World Bank & KfW, 2007).



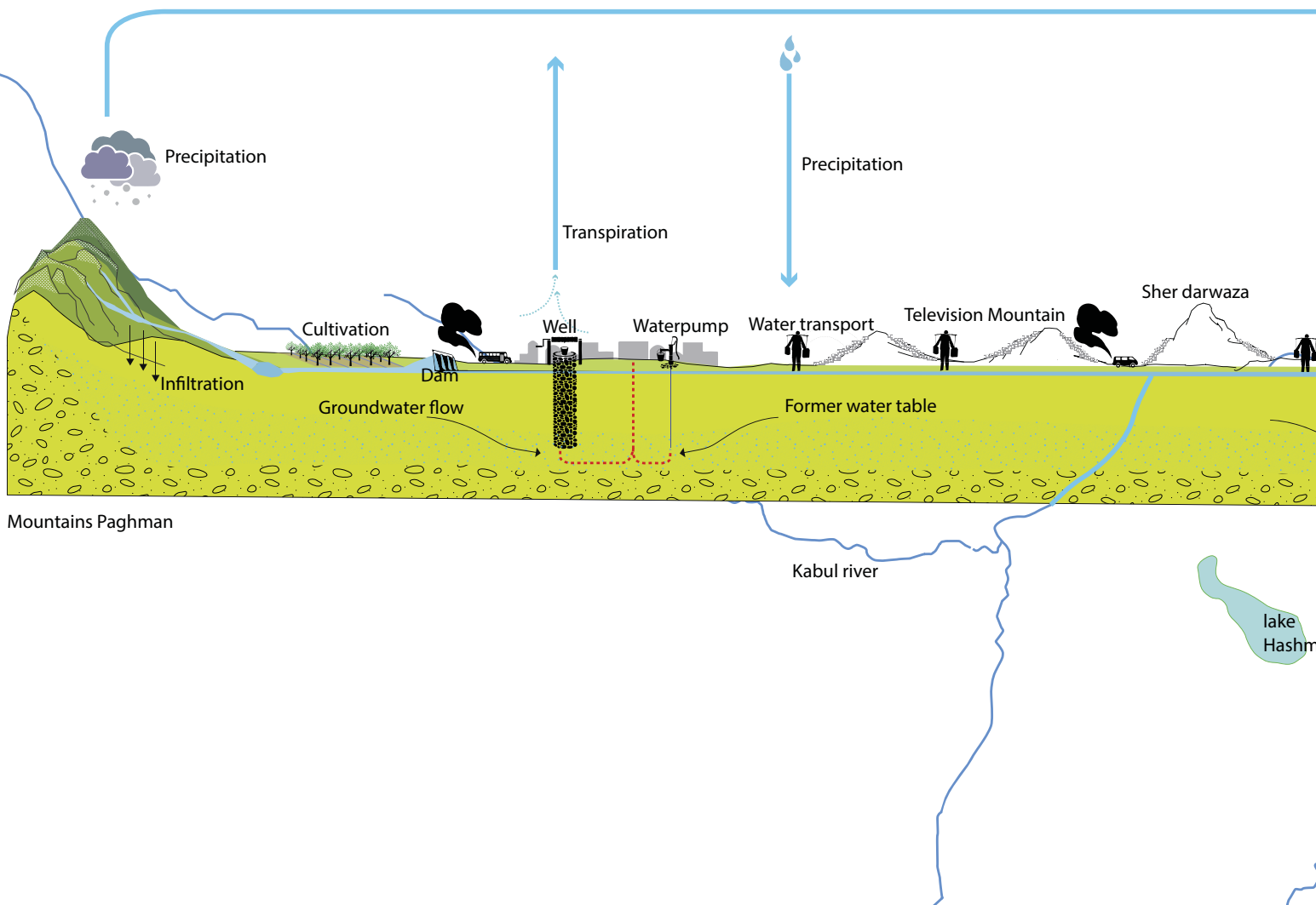
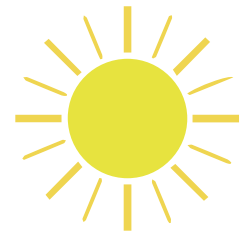
1 km 2 km 3 km



Water supply system

Increased surface temperatures in mountainous regions would be likely to result in reduced snowpacks and cause snowmelts to occur earlier in the year. 10-20 percent reduction in recharge was simulated to assess the hydrologic effect of potential climate change on groundwater resources in the Kabul Basin. This is resulting in groundwater-level decline, which will cause about one quarter in the most prosperous prospects and 50% in the most extrem scenario of all existing shallow supply well to become dry. Because the usage of water is in very large quantity and recharge is very small, the ground water level decline very fast.

At the same time the quality of the water in is deteriorating as result of population growth and human activities (USAID, 2010)



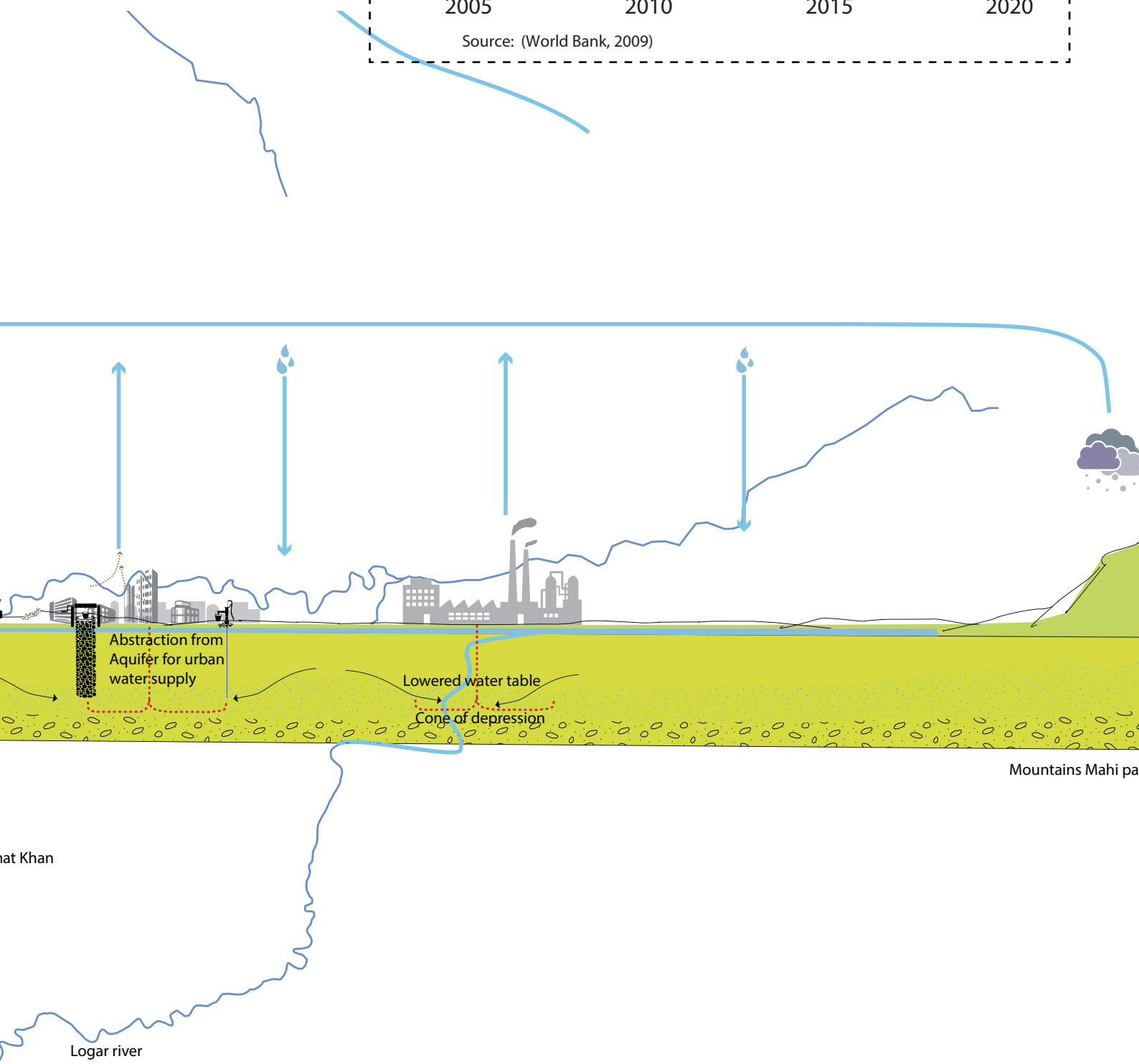
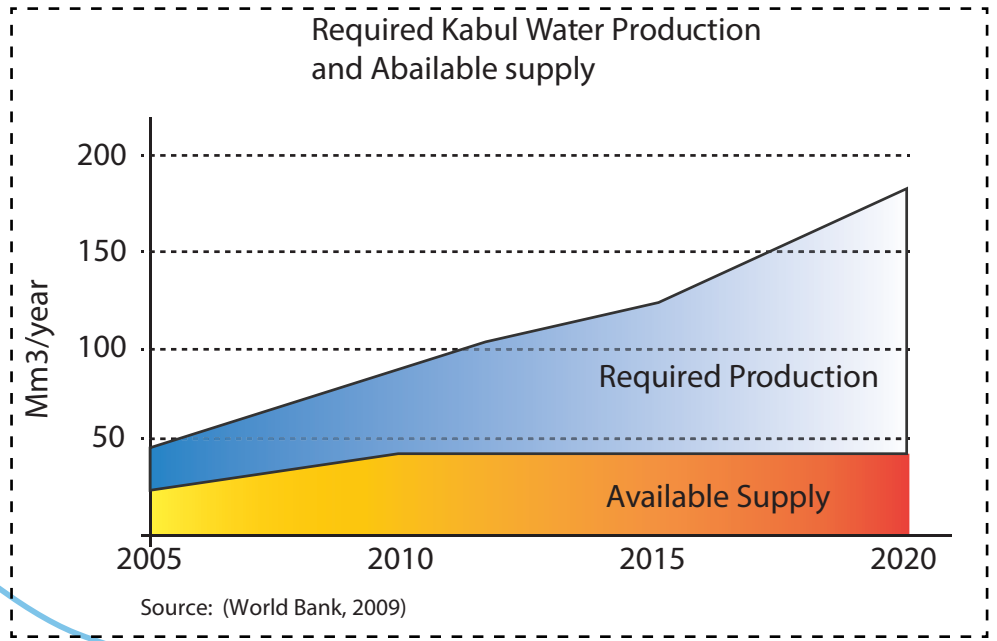
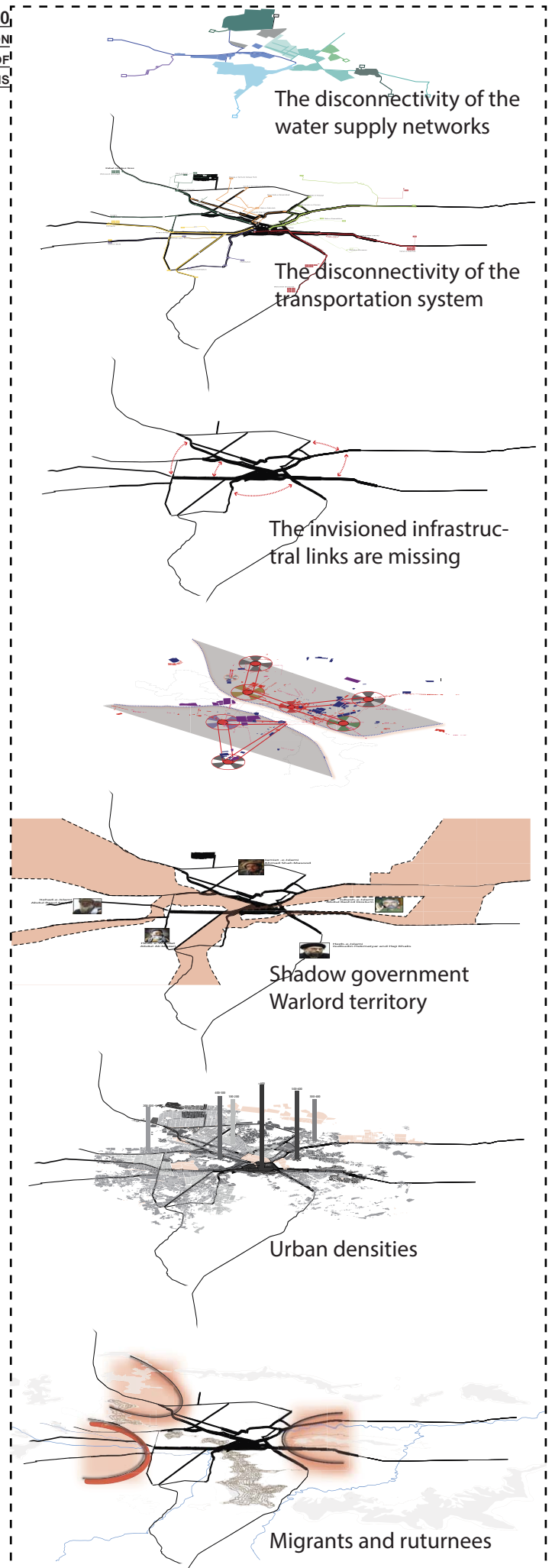






FIGURE 30
CONCLUSION
OF
ANALYSIS



CONCLUSION OF SPATIAL ANALYSIS

The spatial analysis enabling us to conclude several aspects, which are mapped here.

The contemporary Kabul under the protection of ISAF has become the magnet for people who are in seek of security , job opportunity and access to urban services. This puts a lot of pressure on the urban network of the city, which are inflows from three direction. From the east the rturnees from pakistan and Logar, who are in seek of shelter. From the west there are a lot of refugees from Kandahar (currently in war with Taliban), who are in seek of shelter and at last from the North there are a lot of rural migrants who are coming to Kabul in seek of Job opportunity. These inflows of migrants and returnees are rendered in the next map where we can see the densities of the city. People in seek of job opportunity and shelter, mostly built houses in the mountain or settle down in the centre because of the proximity to their job and functions in the city centre. This resembles in the high densities in the city centre where more than one family lives in one courtyard house. This spatial development, is sustained by powerful warlords, who also build illegal gated townships for whom can pay for it.

On the other hand much of Kabul's physical infrastructure has been destroyed after decades of conflict and lack of plan implementation and maintenace and therefore most of the existing infrastructure is damdged or in poor condition in relation with its high amount of usage a day. Therefore the two valleys of the city and the created nodes within these valleys are functioning separatly. The important infrastructural links, which was invasioned in the Master plan, in order to connect the nodes have not been constructed due to the wars. The city functions currently as monocentric city and much of the the primary roads are radial to city centre with exception of the Russian road in the north of the city, this results in crowding of the city centre and connection between two valleys which is mostly through city centre is congested and makes the connection very weak. The separation and disconnectivity between the urban network in the city is also visible when we analyse the transportation system water supply networks, the transporation lines as wel as the water supply pipes are all working independently and not connected with each other.



New planning framework

New planning framework

Curative measure for the surrounded areas of the site

Required steps



spatial analysis derived from google maps, maps made by the government, in-depth interviews

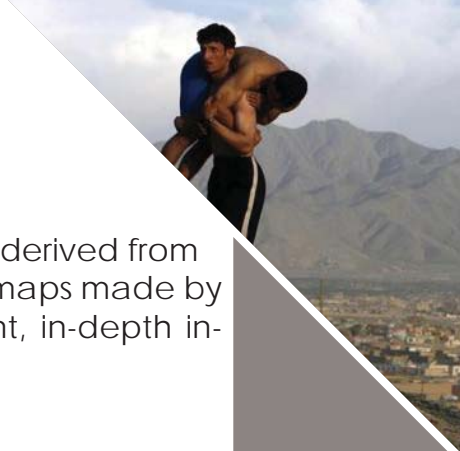
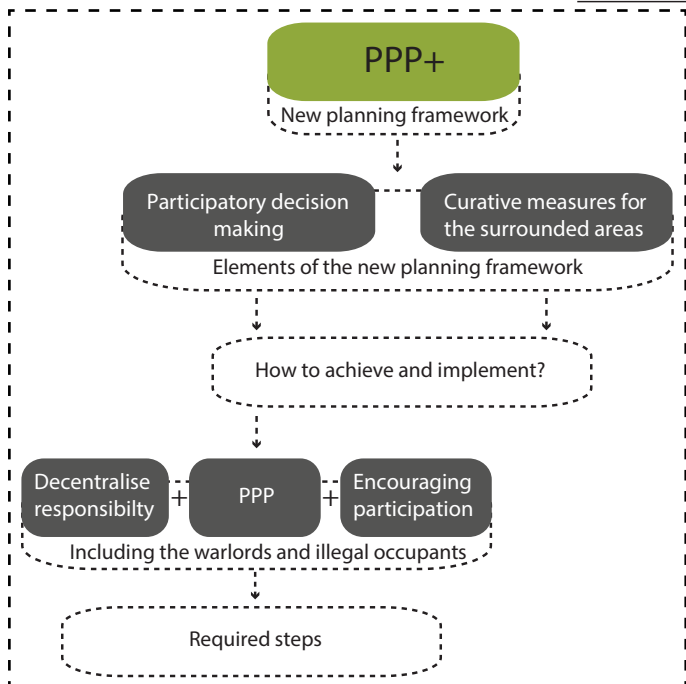




FIGURE 31
NEW
PLANNING
FRAMEWORK



NEW PLANNING FRAMEWORK

Master planning does not adequately address the need of the city, there is need for new planning framework in the context of neoliberal regime and rapid population growth. The new planning framework should incorporate the government, warlords (who are involved in creation of various townships), marginal population groups that represents the majority of urban dwellers in Kabul, and private investors.

By introducing a PPP (Public Private Partnership) planning framework all the stakeholders will be included, in which plan, investment and the need of the city will be addressed and implemented on sequence of the strategic sites, which is much more comprehensible than the blue print master planning.

The out dated Master plan of Kabul has failed to respond to rapid urban growth, which is stated before. It has furthermore failed to respond to the new regime as well as to include the variety of stakeholders into decision making and investment, which result in exclusion and illegality in the city. Therefore new planning framework is required to deal with a fore mentioned issue (coclusion of analysis).

Strategic site development promotes an adaptable, inclusive and non-rigid approach, which is a tool toward local development aiming to improve overall quality of life, as well as economic and social prosperity and allows new way of thinking and action in order to collaborate between public and private stakeholders.

Thus it gives ground to address the complexity of urban development in Kabul in a more comprehensible way implemented in a small area (site).

ELEMENTS OF A NEW PLANNING FRAMEWORK

In the new planning framework the following elements need to be addressed.

1) New way of governance is needed in order to allow participation of different stakeholders in decision-making. (Figure ,32.0)

This shift from top down decision making towards a more market and participatory urban decision making is necessary, otherwise the problems of Kabul will be not solved and the social spatial fragmentation will aggravated.

2) Curative measures for the surrounded areas of a strategic site, this will be explained later.

HOW TO ACHIEVE AND IMPLEMENT NEW GOVERNANCE

The following strategies can be applied to achieve new governance and participatory urban decision-making.

1) The municipal should give and decentralise responsibilities to different wards of the city, who are responsible for the specific strategic site to develop.

2) Partnerships including the warlords, in order to achieve a more common objective about city development.

3) Encouraging participation and entrepreneurial initiatives by the rule of law.

STRATEGIC SITE DEVELOPMENT

It is important to understand how these strategies can be achieved on governmental level. In this case the method of implementation of new governance is through strategic site development. Strategic site development which replaces the old model of Master planning, it shifts the planning doctrine from socialist top down approach towards a more participatory approach with help of all the important stakeholders. It will set a vision for the future and the plan is subject of change when there is need for it with a realistic budget based on deep analysis of PPP. The development and implementation of the plan on one of the strategic sites can be done through Public Private Partnership.

This kind of development and planning tool is dependent on the quality of urban governance and policy. In the process of initiation and development, this should be prepared democratically, in order to allow involvement of civil society and all the concern stakeholders including the warlords.

The urban design (product of the process) is a step to replace the out dated master plan, which includes the current development and future projections as shared vision for the city by all the involved stakeholders. The implementation method in terms of planning process can be used for more than one strategic site, the first strategic site could work also as an experiment or an example for the following developments.



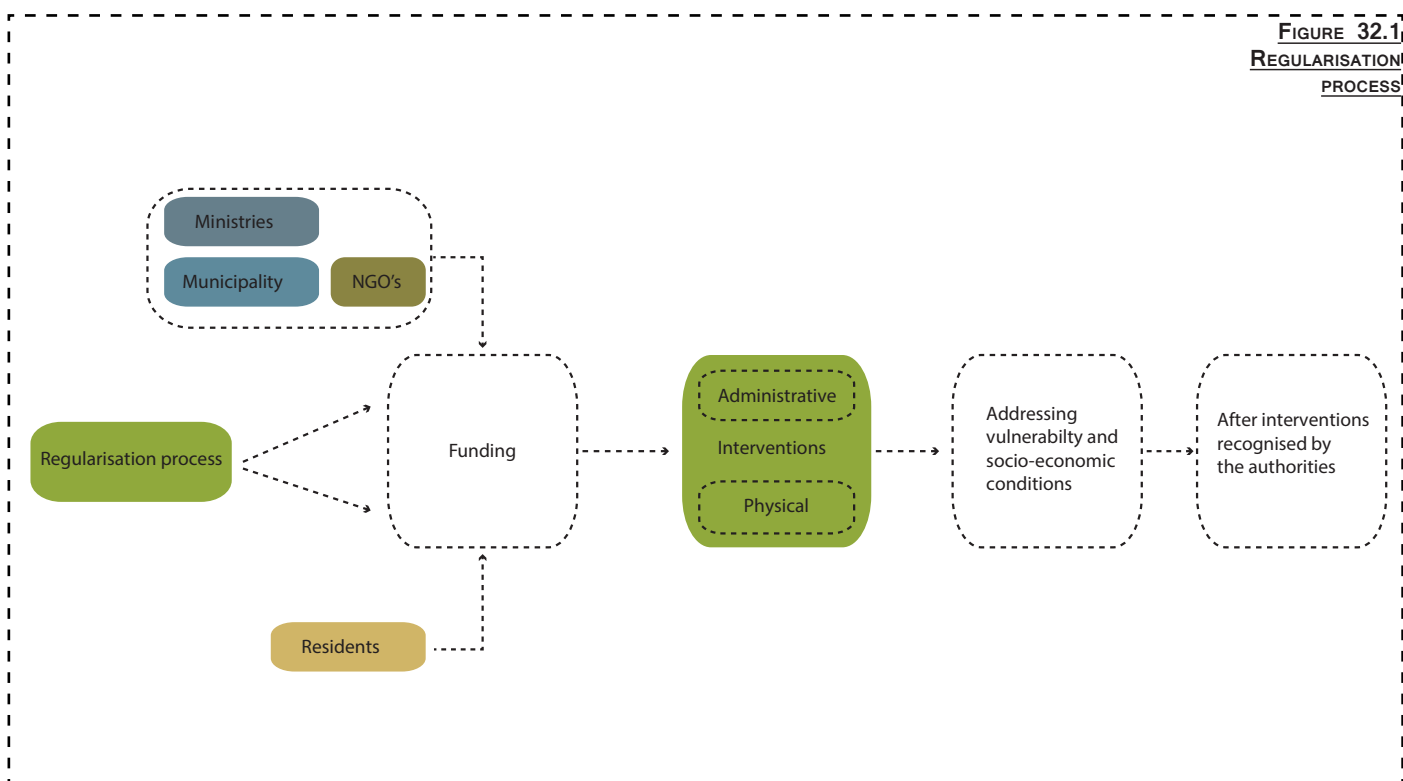
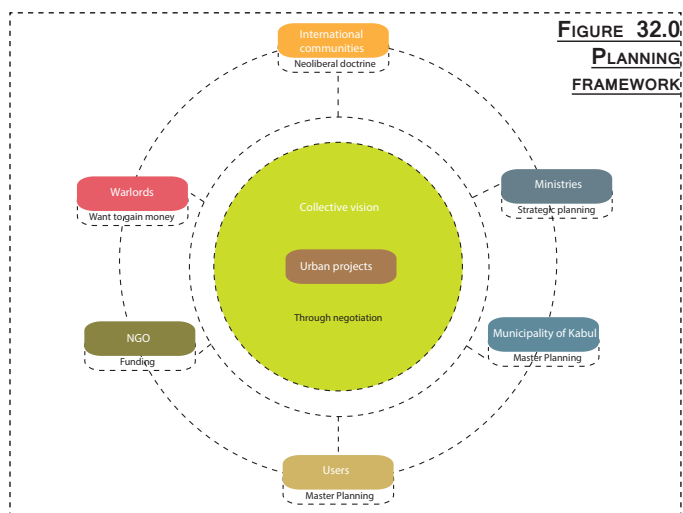
CURATIVE MEASURE FOR THE SURROUNDED AREAS OF THE SITE

When developing a strategic site, the aim is to tackle following issues: Promoting new planning and policy framework, which involves participation of all stakeholders and making the urban development in Kabul inclusive. Furthermore the strategic sites are used as development strategy in order to integrate the dis-connected urban network of the city, additionally it provides dwelling for the rapid population growth within the site or densification in the surrounding areas. On the local level the development of the strategic sites aims to upgrade the situation for the surrounded illegal settlements.

In this part the up-gradation aims with multiplier effects of site development on the surrounded areas are further elaborated.

According to colargo the most valuable asset that people in Kabul possess, is the house or a piece of land. Nevertheless the majority of people in Kabul do not hold legal deeds for their property, which aggravates the situation of their life's. Land tenure problems in Kabul are one of the major factors which add on vulnerability along with war and economic stress. One of main curative measure aside from spatial interventions in the areas, when a strategic site is being developed, is the regularisation of the area. It is a process which involves series of interventions to their property in order to receive legal document for their property.

In Kabul there are various land tenure systems, which represents different level of ownership and thus various level of security from the Master plan. Master plan is not easy to implement because of the multi-layer complexity of land ownerships alongside the current Master plan ownership, the most vulnerable ownership is land grabbing without any legal deed, which can be easily demolished in order to implement the Master plan.



The regularisation process has two components: administrative process and physical intervention process. When developing a strategic site an integral approach combining the two components will address the vulnerable areas in the surrounding of the site as well as socio-economic conditions. These interventions on both level requires funding from the residents of the area as well as from the public sector or NGO's. The reason to include these regulations within the development of the strategic site is to improve living conditions of the already residents of the surrounded areas in order to upgrade the overall quality of life and allow social inclusion and integration within the city.

More specific advantages, after regularisation interventions, are that the illegal settlements will be recognised by the authorities, which allows the property to engage in real estate market. Due to the spatial intervention conducted on the strategic sites as well as the regularisation intervention for the surrounding areas will have positive effects on the property value of the illegal adjacent areas to the site.

PREVENTIVE MEASURE **(PRE-EMPTIVE STRATEGY)**

The curative measures only improve the existing conditions of the surrounded areas of a strategic site, but it does not include the overall problem and future growth of illegal settlements. Although this part is outside of the scope of this graduation project, but is important realise the overall problem. As it is discussed in previous section, the tenure complexities and problems of the illegal areas in Kabul, creates a legal barrier in order to participate in real estate market. On the other hand, it can be stated that the government fails to provide housing or land for the fast growing population, which exacerbate the already existing and future situations of the illegal areas.

In this graduation project the only important measures will be pointed which can alleviate the current and future conditions of the illegal areas. These preventive measures are as follows:

- The provision of land and parcellation of the provided land
- Provision of infrastructure
- Regulatory reforms
- Legalisation of the areas, with rules which will upgrade the public space

Of course there are more factors which can upgrade and prevent the growth of illegal areas, but this should be studied.



site and its spatial, social and economic situation is addressed. After negotiation, the stakeholders can decide which issues they want to tackle. Subsequently the first involved stakeholders are going to promote the site in order to gain more investors and capacity for this kind of urban project. On the next round of negotiation the stakeholders who are willing to invest in the site development are managed through a group of representatives which can be the good bases for the next phase.

- Preliminary analysis and investigation: Analysis should be conducted in order to and define the strategic site. Subsequently specific analysis should be conducted in order to determine the characteristics of the site and spatial issues which limits the potentials of the strategic site.
- Identifying the groups of warlords who have influence on the area. Along with people and groups who has legitimate interests for urban development of the site. In this stage the role and capacity of each stakeholder should be determined.
- Promotion of the site, in order to build capacity and awareness for the local and regional investors.
- Mobilization of all the stakeholders through meaningful consultation, in order to achieve a better understanding of the issues and complexities of the city as well as the specific site.

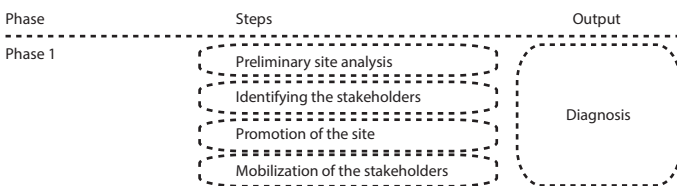
REQUIRED STEPS

For this graduation project participatory urban decision-making process has been created, which aims to consider that steps that are required in order to process inclusive decision-making for all the stakeholders. The following steps are essential in PPP and participatory urban decision-making process after defining the most strategic site.

This is divided into phases:

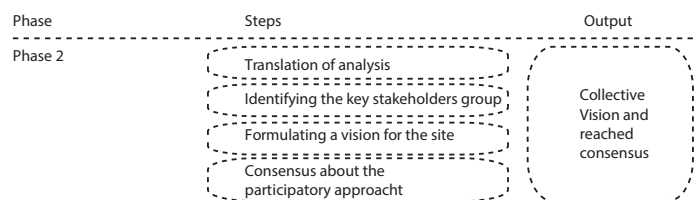
- Phase 1: Defining the site and promotions of the site and stakeholders mobilisation
- Phase 2: Collective vision development for the site
- Phase 3: Implementation
- Phase 4: Evaluation and maintenance

The phasing of new planning framework is elaborated on the development of the strategic site. After defining the most strategic site derived from the analysis of the city and its parameters, it is important to understand how the development should be processed in order to give ground and build capacity for the new planning framework.



PHASE 1: DEFINING THE SITE AND PROMOTIONS OF THE SITE AND STAKEHOLDERS MOBILISATION

In the first phase the chosen strategic site should be analysed, in order to get a rough idea about the situation, its underlying mechanisms and its characteristics. On the next step the stakeholders need to be identified, who are needed for the empowerment or authorizing the implementation process. In this step the land tenure systems of the surrounded areas should also be identified, in order to understand its condition. After the preliminary analysis and the identified situation of the surrounded areas a diagnosis need to be developed through participation all the stakeholders. In this stage the potentials of the



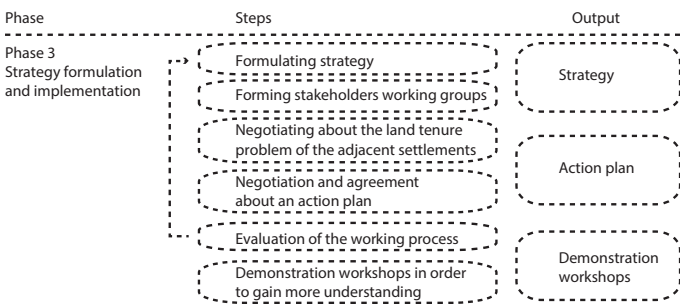
PHASE 2: COLLECTIVE VISION DEVELOPMENT FOR THE SITE

After the first phase which was about the involved participants and diagnosis of the site, second phase will issue the further development process of the site. In this phase consensus will be reached between all the involved stakeholders for the future development and upgrading measure for the adjacent areas. The consensus is represented through an urban designer in a spatial vision for the site. The conceptual vision for the future configuration of the site, which takes social, economic and environmental issues into consideration, is set out in a document. This document elaborates the vision, the action plan, negotiation outcome and commitment of all the stakeholders involved with the site development. In addition the document describes the main goals of the project, as well as the agreed terms by all the stakeholders within each phase of the process.

In order to enhance the positive effects and regulate the negotiation efforts between all the stakeholders, an external advisory agency is needed in order to incorporate the different aspects of the plan into a relevant urban design and strategy for the development. The consultant team should have relevant knowledge of indigenous mechanisms and culture,

which can provide intelligent, embedded solution for the specific issues.

- The conclusion from the preliminary analysis could be perceived and illustrated in variety of ways in which issues could be addressed. This will enable all the stakeholders for a debate about how to tackle these issues.
- The surrounded areas which have different kind of ownership should be taken into account, in order to achieve a legitimate ownership of their property. In return the adjacent owners should upgrade their property or invest in the area. This should be subject of the discussion between al the involved stakeholders and the owners of surrounded areas.
- Gathering of key stakeholders (public, private and community) to discuss the issues identified. In this stage a consensus should be reached about how to tackle the issues and how the participatory arrangements institutionalised in the further process.
- Formulating a vision for the site based on the inputs of all stakeholders and the issues derived from the preliminary analysis and the conditions of the surrounded areas.
- In the stage after consultation and debate between all the stakeholders a consensus will reach for the first step of the strategy about the site development.

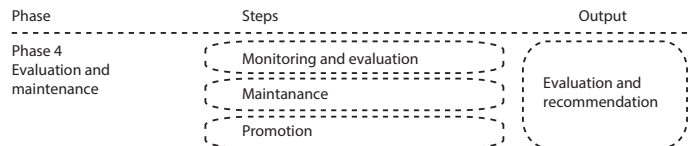


PHASE 3: STRATEGY FORMULATION AND IMPLEMENTATION

In this phase the conceptual vision from the previous phase is transformed into a strategy for the development of the site, in the framework of spatial interventions in order to convert the obsolete area into the envisioned development from the previous phase. The translation of the vision into a strategy is agreed upon the issues, working group as well as action plan for implementation of the strategy. The action plan are negotiated and agreed amongst the stakeholders, these action plans sets fixed steps to follow in order to implement the strategy and achieve the conceptual vision. These steps specify exactly what should be done, by whom and when, within the available budget. The duration specified in the contract between authority and contractors distinguishes the time of cooperation, so it is important to add the time component to the strategy. Before start of actual implementation, the strategy and the action plan should be evaluated by the external consultant, in order to be sure of its proportionality with strategy and vision. If necessary, the strategy can be adjusted, otherwise the implementation of the strategy with action plan

as guideline can start.

- Formulating strategy after gathering the different views of various stakeholders for various ways of implementation in the context of Kabul.
- Specific working groups are formed representing the stakeholders, in order to be able to address all the concern issues. These groups create will discuss about the issues an how to begin with implementation of the plan and investment model.
- Negotiation about the land tenure of the surrounded sites and action plan to upgrade the adjacent illegal settlements.
- Action plan are negotiated and agreed upon which is based on result oriented, time specific and actor-specific plans that is guide through the agreed vision and strategy. The task of every group and agencies are clear and timeframe as well.
- The work and process should be evaluated, in order to enhance the impact and results of the implemented project.
- Organising workshops and presentations in order to generate awareness and wider understanding of the work and the involvement of various stakeholders.



PHASE 4: EVALUATION AND MAINTENANCE

For the sake of long-term sustainability and efficiency of the implemented project and the following site developments, it is important to monitor and evaluate the development process. The outcomes can be considered as feedback for the next site development; this kind of monitoring and up scaling of the following interventions should be as part of the new planning framework and should be institutionalized. After implementation of the strategy and completion of the project, the maintenance of the area and its utilities should be negotiated and agreed upon the reasonable share of the cost for both landlords and tenants. Some cost can be shifted to tenants, while some major cost should be provided by the stakeholders.

- In order to evaluate the process and learn from the implementation process, there is systematic feed-back which allows adjustments for the second site development.
- Evaluating the effects of implementation on social economic terms, which will attract more awareness of the stakeholders for the next strategic site to develop.
- The implemented development requires also long-term maintenance, which also should be provided involved stakeholders and future residents of the



Collective vision



Strategic proposal in defining the site

Urban vision (proposed sequence of the strategic site)

Parameters of a strategic site



STRATEGIC PROPOSAL IN DEFINING THE SITE

The proposal of this graduation project exists of several steps, which can be followed according to the parameters, which is choosing most the strategic site. Each step is organised and facilitate by the stakeholders in order to tackle more than one problem on the regional level. Each strategic site, chosen by the parameters derived from the analysis, can become a stepping stone which is connecting different nodes of the city and thereby strengthen and widen the central authority influence in the city. This kind of approach, in contrast to master planning, not only benefits the authorities but also the local and regional actors because they can be included into the planning process.

The steps which are going to be followed in time sequence in recognizing the strategic site should be part of the strategy and also subject of negotiation between the key stakeholders. Developing kind of consensus in a contract about the steps and inclusion of the stakeholders is a key step. Defining the first three steps to follow in choosing the strategic site becomes the urban vision on the regional level, before the new city of Kabul emerges in Deh Sabz. This consensus contract is important because it ensures commitment from both public and private stakeholders in order to prevent the strategy from collapsing after political instability until 2030.

The consensus contract is developed according to the city analysis and consultation sessions for all the involved stakeholders. During these workshop / meetings the first three steps of defining the strategic site should be agreed upon. In this case all the stakeholders know when their project is planned and in which sequence.

URBAN VISION (PROPOSED SEQUENCE OF THE STRATEGIC SITE)

According to analysis and in-depth interviews, there are three possible steps in defining the strategic sites, which can tackle dis-connectivity of most important nodes of the city and thereby creates a vital condition for the city.

The central authority of Kabul does not possess control of all the areas and nodes of the city in terms of security and legitimacy. In certain nodes and region of the city, which also lack of physical infrastructural connection with central government control area, are controlled by different factions of warlords who represent different ethnic groups.

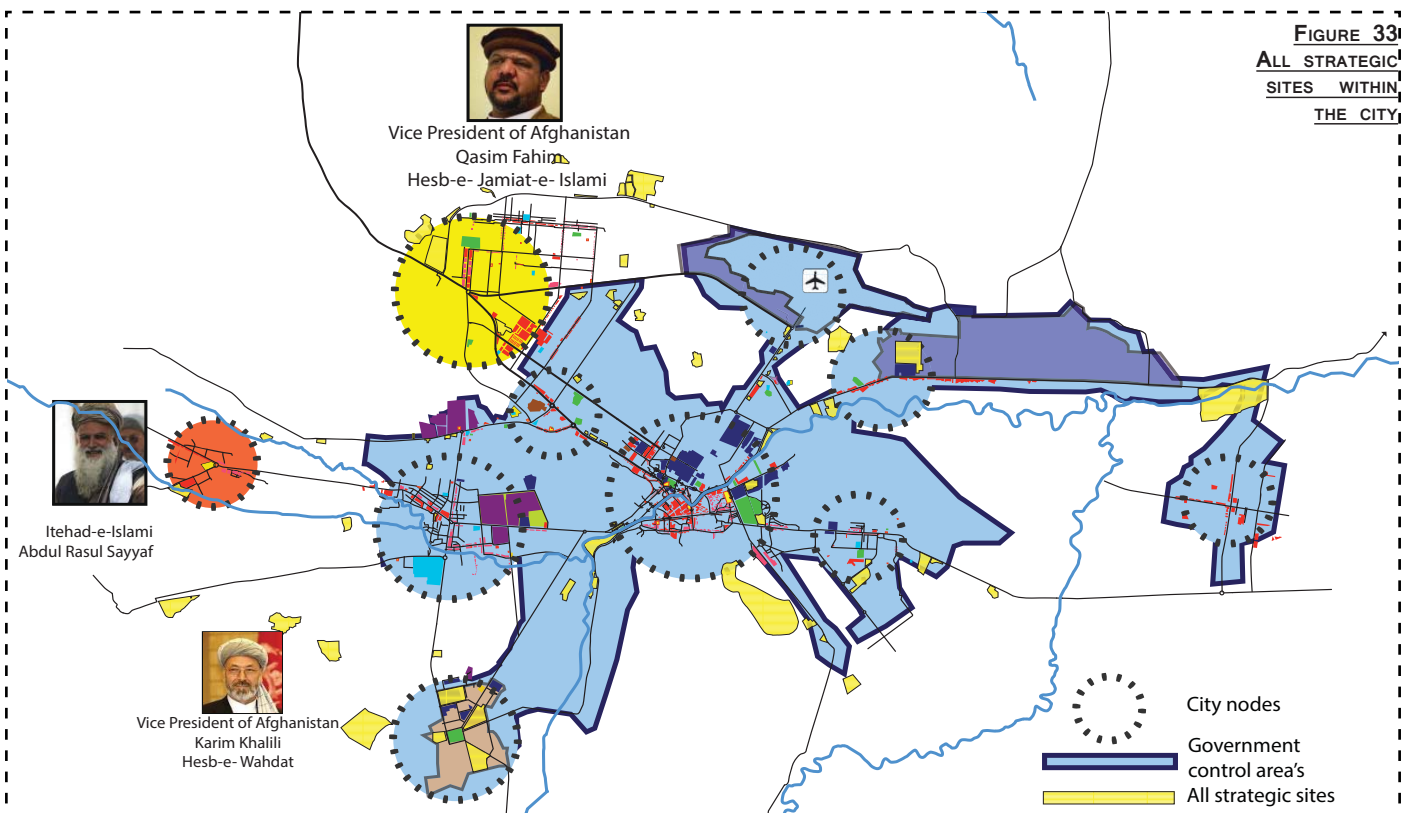
The reason behind the sequence of choosing a strategic site is two folded. Firstly the defined strategic site should be under control of the central authority in order to reduce complexity and security risk. Secondly the strategic sites should be chosen in a sequence that can improve connectivity of the most important city node and as such broaden the authority of central government, hence the mobilization of the stakeholders towards a PPP development.

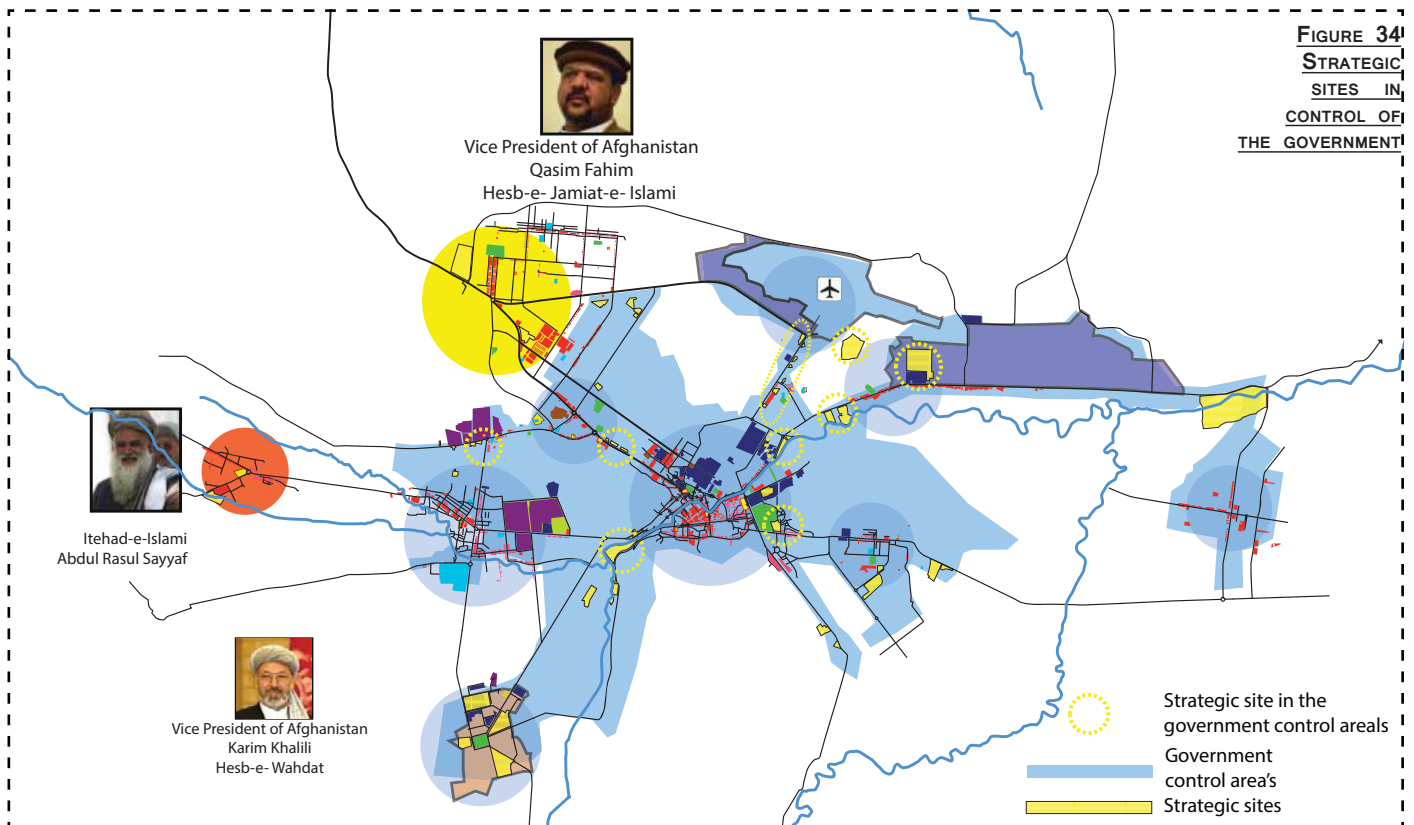
PARAMETERS OF A STRATEGIC SITE.

The following steps can be recognized in defining the strategic site.

- The strategic site should be under control of central government in the current situation

Given this context of the government relation and various stakeholders involved with urban planning, when defining the strategic site, territory should be the first parameter to look at. The strategic site should be owned by the government and also under the control of the central government (government territory), in order to reduce complexity of ownership and enhance power of the central government. In order to reduce isolation of the nodes and enhance



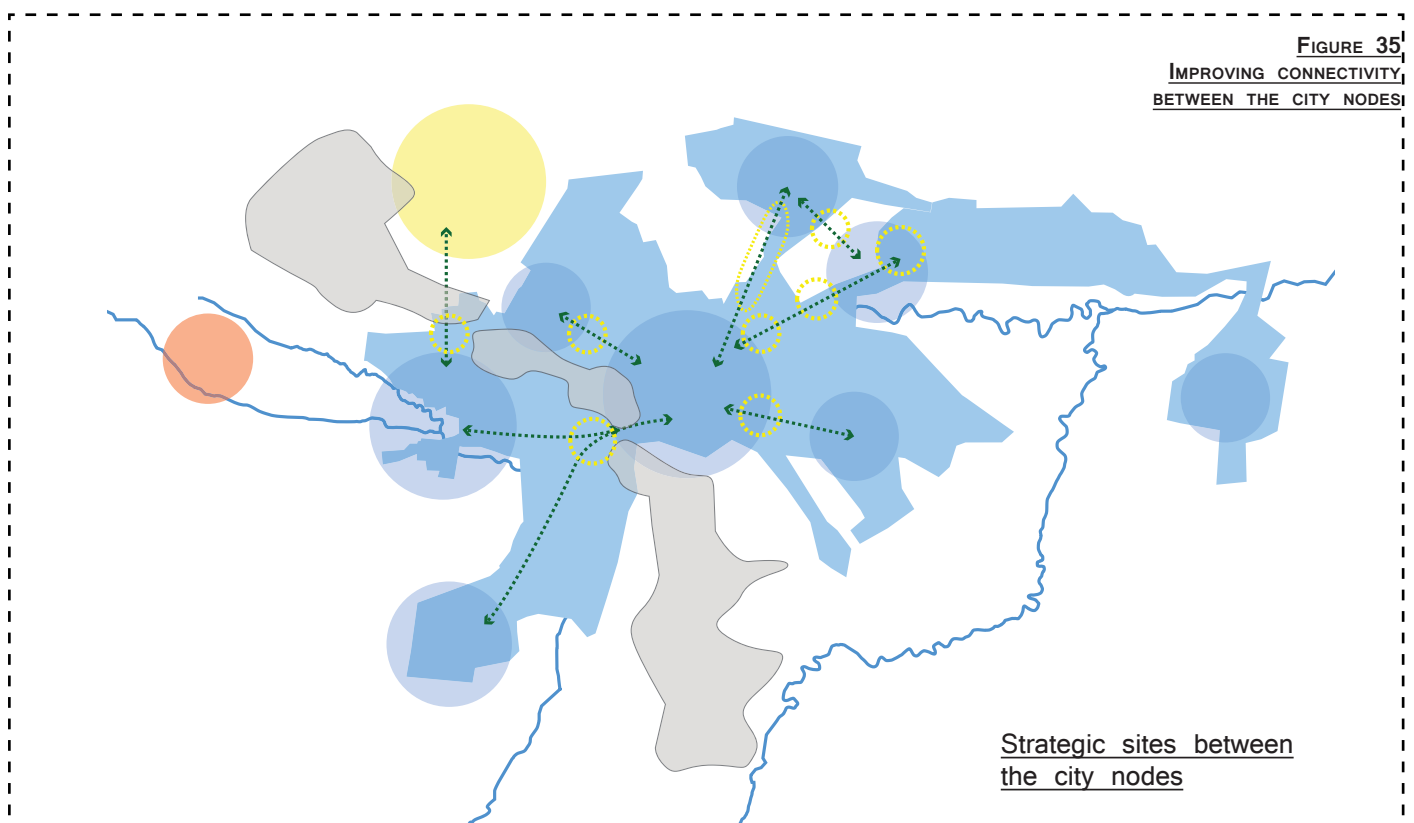


connectivity within the city, the strategic site will provide the opportunity to do so.

- The strategic site should improve connectivity between the most important nodes of the city.

The relation between infrastructure and government control areas is clear from the analysis, the ring road acting as only control area in the country and rural areas which have been treated in isolation are controlled by warlords. The same relation is examined in Kabul, dis-connectivity of city nodes, which

represents various ethnicities and different warlords, are reinforced by the lack of connectivity within the city. In order to enhance central government power and reduce dis-connectivity between city nodes the strategic sites can play an important role to enhance connectivity while developing the site. This mechanism works two ways; at first hand it identifies the most strategic site, which can contribute to connectivity of the city nodes secondly the site can work as stepping stone from one territory to another.





- Water supply network dis-connectivity, the water supply system in Kabul is working independently. Only 12% of the population have access to water supply network of Kabul. There is an obvious relation between aquifer depletion and population growth. Due to conversion of aquifer land recharge areas into urban settlements, the basins of Kabul are not recharged sufficiently. And Kabul River is not being used at its high potentials for water supply; instead it causes problems for the urban dwellers. Additionally the water supply network excludes the majority of urban dwellers from water supply.

These three problems cannot be tackled only through development of the strategic sites, but it could be one of the parameters to give priority for choosing the strategic site. When developing a site it should incorporate at least one of the water problems. In order to be able to tackle at least one of the problems regarding water issue, the strategic site has to be adjacent to the river or should give the opportunity to recharge the aquifer level.

The strategic site should be adjacent to illegal settlements in order to improve liveability of the surrounded areas.

- The strategic site should have proximity to main infrastructure and urban facilities, in order to attract investors.
- The size of the strategic site should be not bigger the 15 hectares.

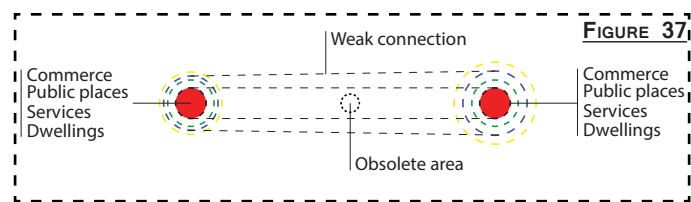
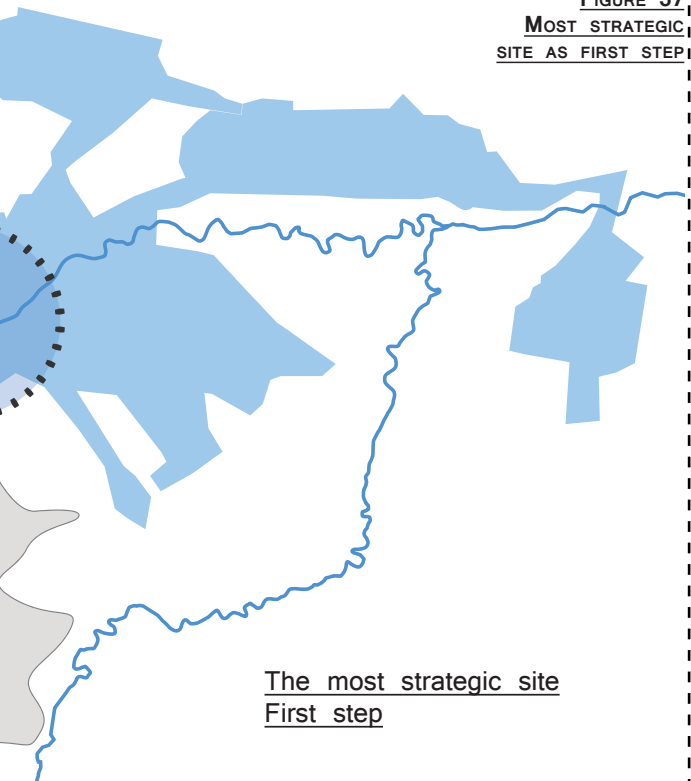


FIGURE 37
MOST STRATEGIC SITE AS FIRST STEP



The most strategic site
First step

- In the first step the strategic site should be adjacent to the river in order to give examples solutions for flooding and water issues.

The analysis about water issue in Kabul has delivered an understanding of the problems, while creating a solution for this issue reaches beyond this graduation project. Nevertheless this graduation project aims to point out few recommendations for the water supply in Kabul.

At first hand we should look at the water issues; in Kabul can be summarized in the following three:

- Ground water depletion, due to enormous amount of wells and water extraction from the aquifer in the city and there is lack of recharge ground areas for ground water. The recharge areas which were preserved for aquifer recharge areas are mostly converted into illegal occupation.
- A seasonal river problem, during the high season the river causes flooding in the city, which demolishes a big amount of settlements near by the river.

-Infrastructural Vision

On the regional level there are few important infrastructural links needed to be built in order to act in accordance with the fast growing daily commuters around the city centre and also between the two valleys and thus the between the city nodes.

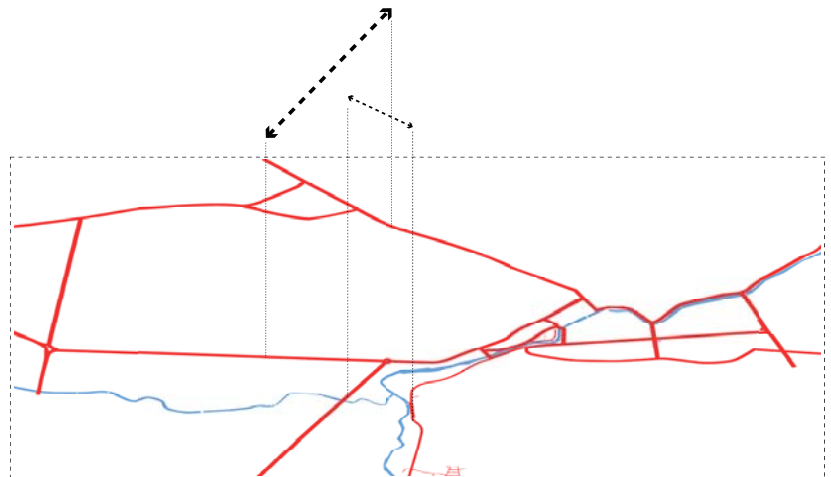
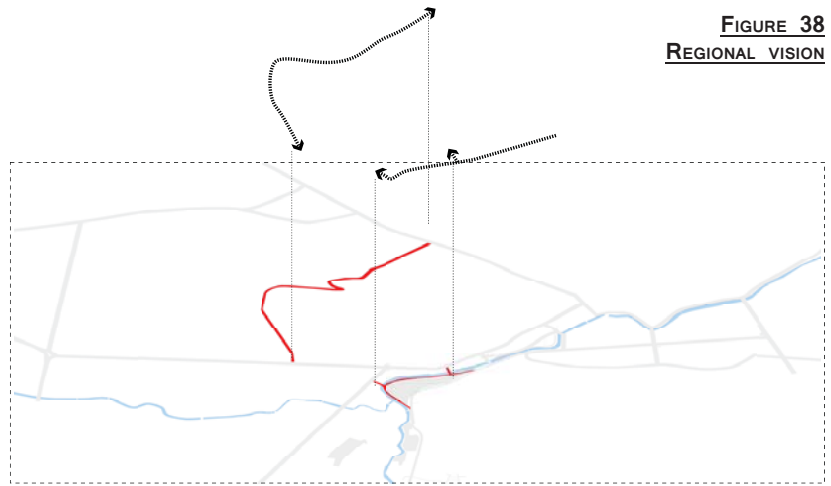
The communication between the two valleys of the city is now happening through two important roads, which needs more capacity.

The proposal is to make two new infrastructural lines, one which goes through the strategic site and the other one over the mountain.

These two infrastructural lines can release some pressure from the important roads and increases the infrastructural capacity of the city.

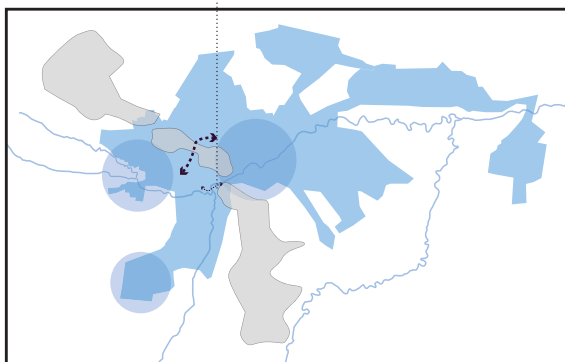
The regional infrastructural vision is also one of the parameters; the site should be nearby the infrastructural link in order to benefit from the infrastructural improvement

FIGURE 38
REGIONAL VISION

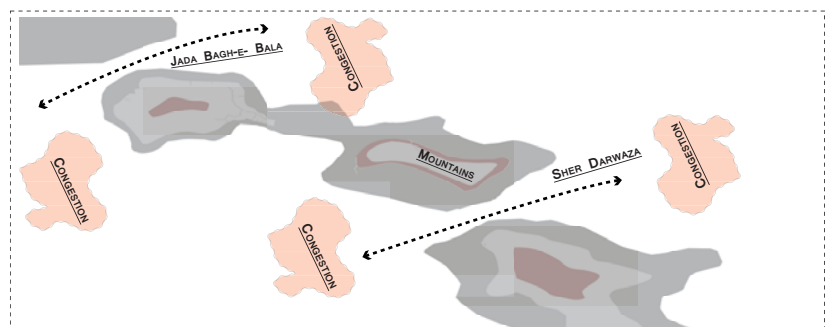


NEW INFRASTRUCTURAL LINES IN ORDER TO PROVIDE MORE CAPAC-

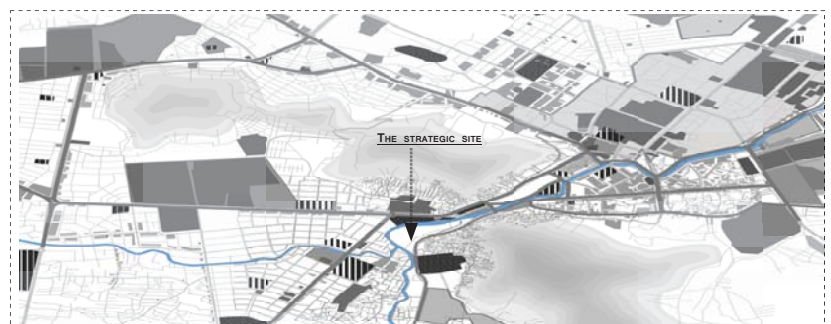
The most strategic site



URBAN FUNCTION AROUND AROUND THE CENTRAL MOUNTAIN SPINE



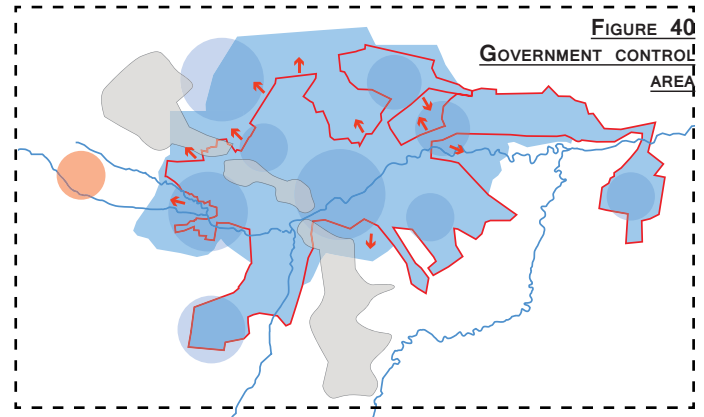
COMMUNICATION BETWEEN TWO VALLEYS



CENTRAL AREA KABUL



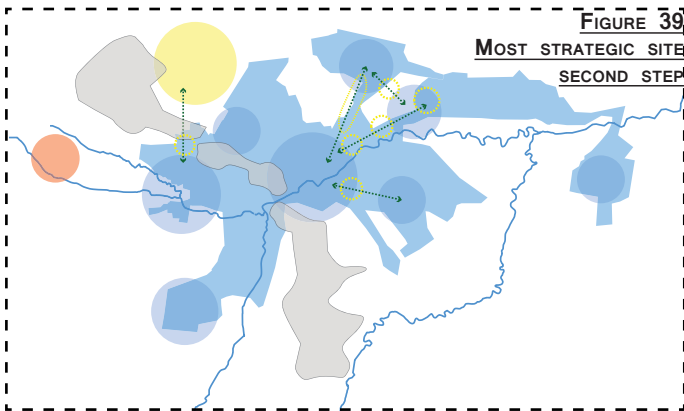
strategic site does not change from the first one, however the influence area of central government is substantially broadened after the development of the



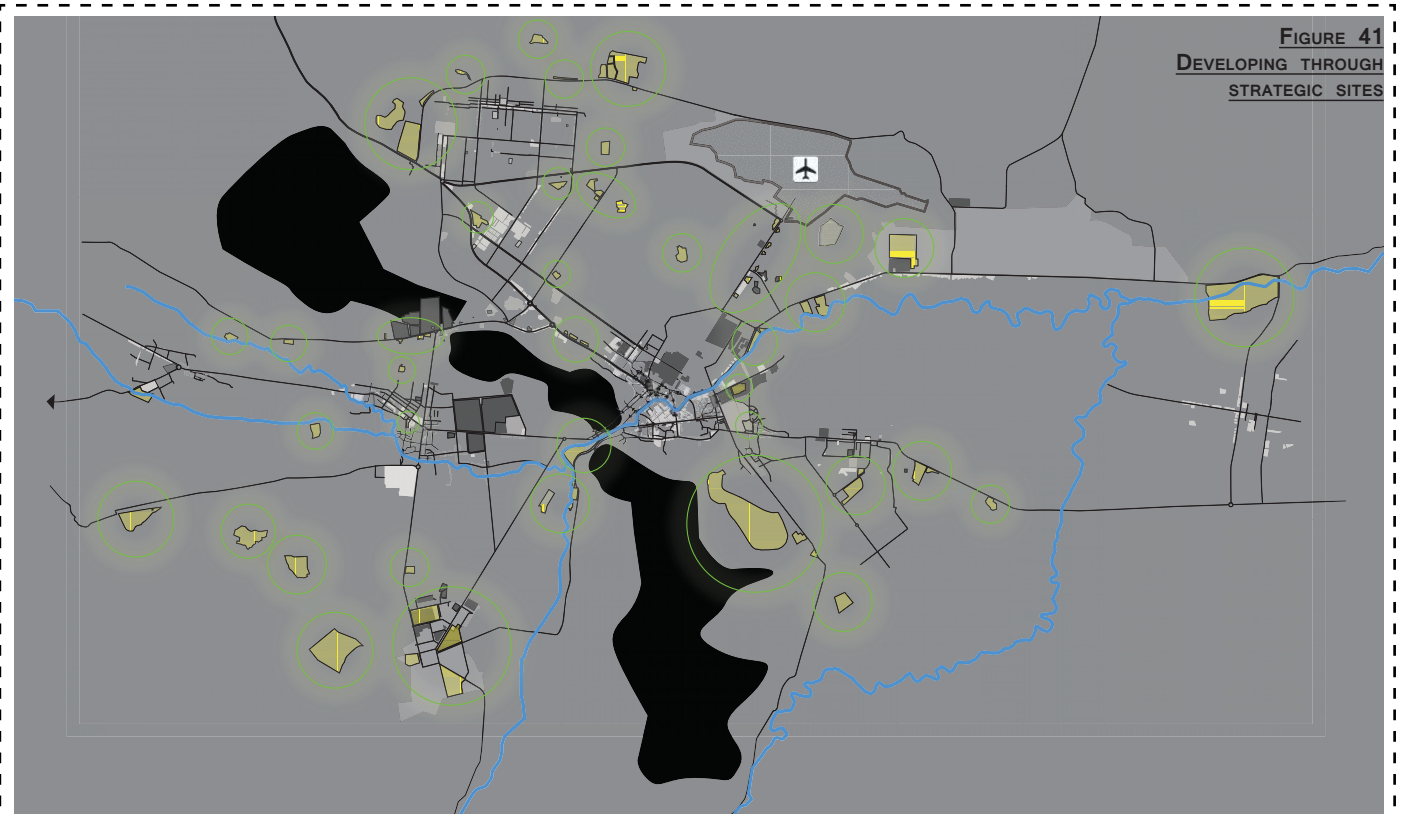
After defining the first strategic site, it is important to under pin which steps will be taken to define the next one. The parameters for defining the next

first strategic site.

The map her below illustrates which strategic site can be developed, after the initial site development. The sites are chosen according to the parameters of site development, which is aiming to enhance connectivity and influence from central government.



After developing the second stage of site development, the influence of central government will enlarge. This means that other strategic sites can be developed, which were once not under control of central authority. The development of all site are shown in the map below, which of course will effects its surrounding and the connectivity of the city.

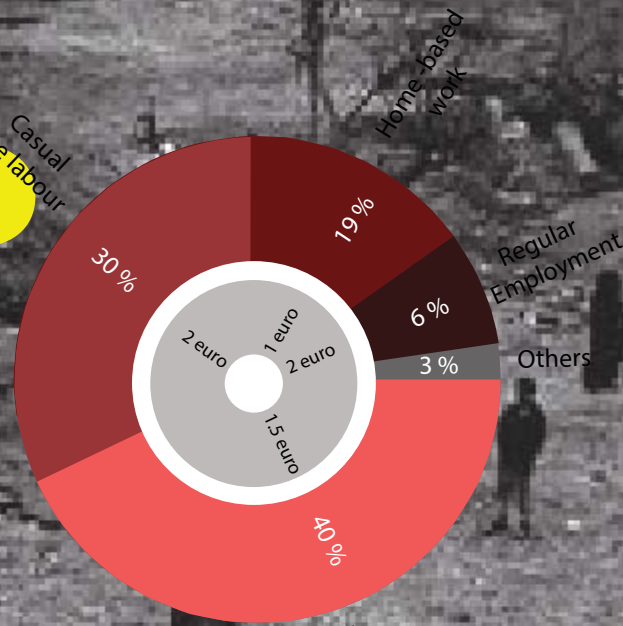


30000

people dies from air pollution and unsafe water per year

40%

unemployed



2\$

a day

4.5 Million of people

Million of people

2% urban space is used for recreation

3000\$

a month

3%

Sewage system

30000

Tons of solid waste/day - compare with Dehli 8500



Site specific analysis



- # Stakeholder analysis
- # Consensus contract



Stakeholders analysis



control over their own territory and respective provinces. Their power is achieved by both force and formal administration, because they have installed their men throughout all administration scales. These powerful elites of the city are involved with planning and real estate market in order to gain more power and of course gain more money.

This graduation project which has a specific focus on one of the strategic sites, a more detailed analysis of the different stakeholders is given in the chart, which is relevant for developing of the specific site. In this chart for each stakeholder, their role, respective share, influence/power and current legitimacy, as well as effects after the development is given. This will allow as pointing out the most important stakeholder for this development and with their respective influence on different scales.

The indicators are defined as such:

- Share: the degree to which stakeholders is involved with the strategic site, either by possessing the site or have invested for the development of it.
- Influence/power: The ability to use force or use power to gain control over the area. These resources are either legitimate power, military power or economic power, which can be used to strengthen their own perspective and use violence.
- Legitimacy: The actor which has right on the peace of land, who holds legitimate documents to prove it.

The stakeholder analysis is useful to understand about different perspective of each stakeholders and their main conflicts regarding urban planning policies. In this way we can point out where they can cooperate and find a common ground for all the users. The diagram represents the inner conflict policies on the formal side of urban planning, alongside the informal stakeholders also involved with urban planning. The conclusion that can be drawn from the diagram is that there are many conflict on both formal and informal side of urban planning, which exacerbates the overall condition of the city. This confirms the idea to create a new platform for urban development, which includes different objective performed upon a small, tangible and comprehensible site development.

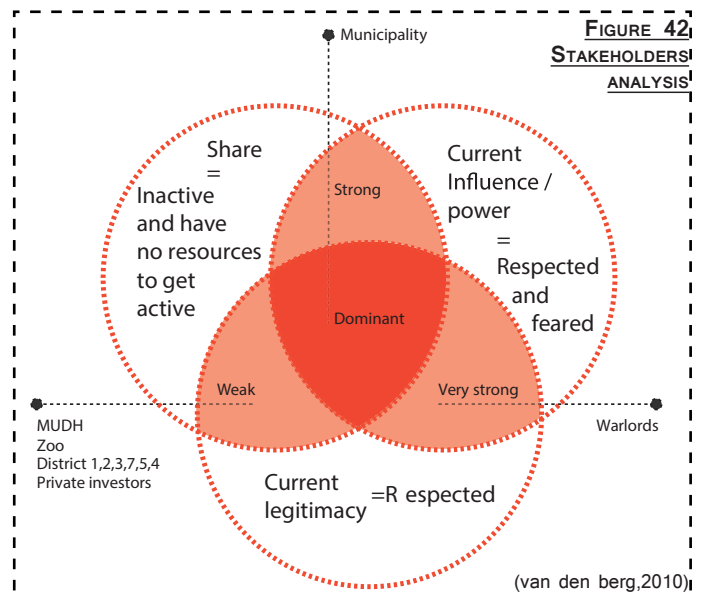
STAKEHOLDER ANALYSIS

For the new planning framework, a stakeholder analysis is crucial and it forms the first phase of the decision-making. It helps to understand the actual power and needs of the stakeholders, which forms the basis of any intervention. It allows to incorporate the different views of various stakeholders into a spatial configuration of the site, in order to optimise and localize goals and spatial intervention. In this section, first general information is given on stakeholders in Kabul and their various perspectives and power, subsequently this is used for this graduation project. Stakeholders are individuals and groups who have a share or interest in the project, each with different views and ideas how the project should take form. Therefore an assessment is needed in order to understand their interest and point of view

STAKEHOLDERS IN KABUL

Before giving an overview of all the stakeholders involved, which are relevant for this graduation project, firstly the major stakeholders and their drive and involvement should be understood.

- Foreign Donors: The assistance period started after the defeat of Taliban in 2001. The international community has pledged 90 billion US dollar to Afghanistan for reconstruction aims. Because of their capital and security power in Afghanistan, the foreign donors have become the most important stakeholders in Kabul and hence in Afghanistan.
- MUDH: The ministry of urban development and housing is responsible for the policy and programming of all urban development activities. Who plans to suspend the Master plan of Kabul, which is no longer realistically reflecting the city's needs.
- Municipality of Kabul: The Kabul municipality is somewhat greater than other municipalities in the country, because it has far greater independence from the ministries. Therefore the municipality can decide about the Master Plan implementation, even though the ministry has suspended it. The staffs working in the municipality are mostly structural or civil engineers and studied in Russia, who have great admire for the implementation of the Master plan.
- The powerful warlords: President Hamid Karzai placed many former warlords in positions of power. They have employed informal power and rules, as well as their personal networks, in order to preserve



Stakeholder	Role	Direct influence and Involvement	Scale	Share	Current Influence / power	Current legitimacy	effect of development	Wat kind of effect?	Action required?
MUDH	Policy and programming	✓	National	High	Medium	High	+++++	social and physical alleviation	Yes! Recognition of strategic urban development
Municipality	Implementation and Maintenance /owner	✓	Regional and local	High	High	High	+++++	social and physical alleviation gaining more power	Yes! Recognition of strategic urban development
NGO's	Financing		Local	Low	Medium	Low	+++++	social alleviation	
Ministry of Agriculture	Owner	✓	National	High	Medium	Medium	+++++	social and physical alleviation	Yes! Recognition of strategic urban development
Warlords	Financing	✓	Regional and local	Medium	High	High	+++++	gaining more money	Yes! inclusion within the planning
Zoo	Owner	✓	Local	High	Low	High	+	gaining more money	Yes! inclusion within the planning
District 1,2,3,7,5,4	Owner and user	✓	Regional	High	Low	High	+++++	social and physical alleviation	
Private investors	Investors	✓	External	High	Medium	High	+++++	gaining more money	Yes! inclusion within the planning
Universities	Educational facilities		Regional and local	Low	Low	High	+++++	gaining more influence	Yes! inclusion within the planning
Local residents	Users and neighbours	✓	Local	Low (-)	Low (-)	Low (-)	+++++	social and physical alleviation and inclusion	Yes! inclusion within the planning
Commerce	neighbours, competitor		Local	Low	Low	Medium	++	More commerce	
Mosques	Investors		Local	Medium	Medium	Medium	+++	gaining more influence	
Construction companies	Construction	✓	External	Medium	Low	High	+++++	gaining more money	

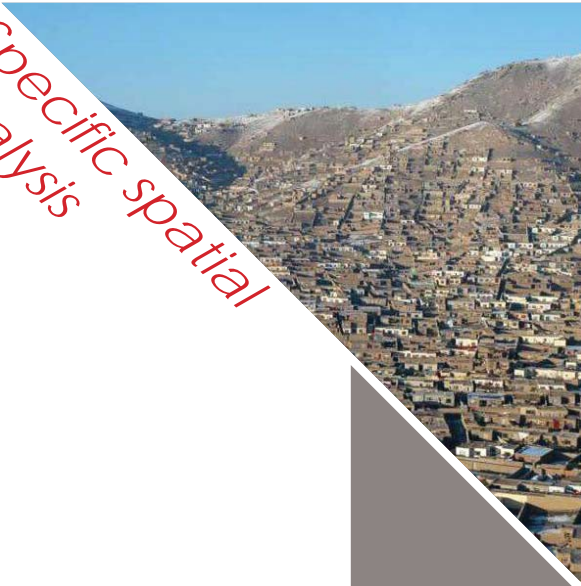
CONSENSUS CONTRACT:

As described before the consensus contract is an important part of the strategy in site development strategy. This contract describes the commitment of all stakeholders and thereby articulates the steps to follow on the regional scale, the vision, objectives and priorities of actions which is described in the phasing and sequence of each site development.

By determining the agreed upon steps and commitments of all stakeholders, creates the conditions of stability and provides guidelines for the urban development in Kabul. The setup of this contract consists of most important stakeholders and also most vulnerable stakeholders. While developing a specific strategic site, the local residents should be part of the decision making, whereas in the regional strategy which is only about the sequence of development the representative of each district will do the job.

The advisory board, which must be independent and neutral board, will gather the stakeholder groups for defining the strategic site development sequence as well as for developing a strategic site. This neutral board should be accountable for investigation and communication for the conflicts and interests of each stakeholder. This role can be performed by an urban planner, architect, who is competent enough to translate the different interest into a spatial configuration. For this graduation project an exemplary consensus contract is proposed, based on the analysis and in-depth interviews.

Specific spatial analysis



- # History
- # City centre
- # Sections
- # Gated public places

cow. This plan proposed replacing most of the Old city. The plan had great dedication for green spaces in the city centre along the river side in order to recharge ground water and at the same time will work as park for the inhabitants. This plan goes hand in hand with separation of functions and the city centre mainly assigned to government institutions and greenery. According to Calogero the Master plan is literally a graphic diagram of how the city should be developed, a technocratic plan without understanding of the current situation.

The specific chosen site is reserved as green and flooding area, and it's surrounding surrounding too. Implementing the Master plan would require demolishing most of the the housing in the area, which has various kind of ownership status, from gated to illegal purchase bill (Calogero, 2011)

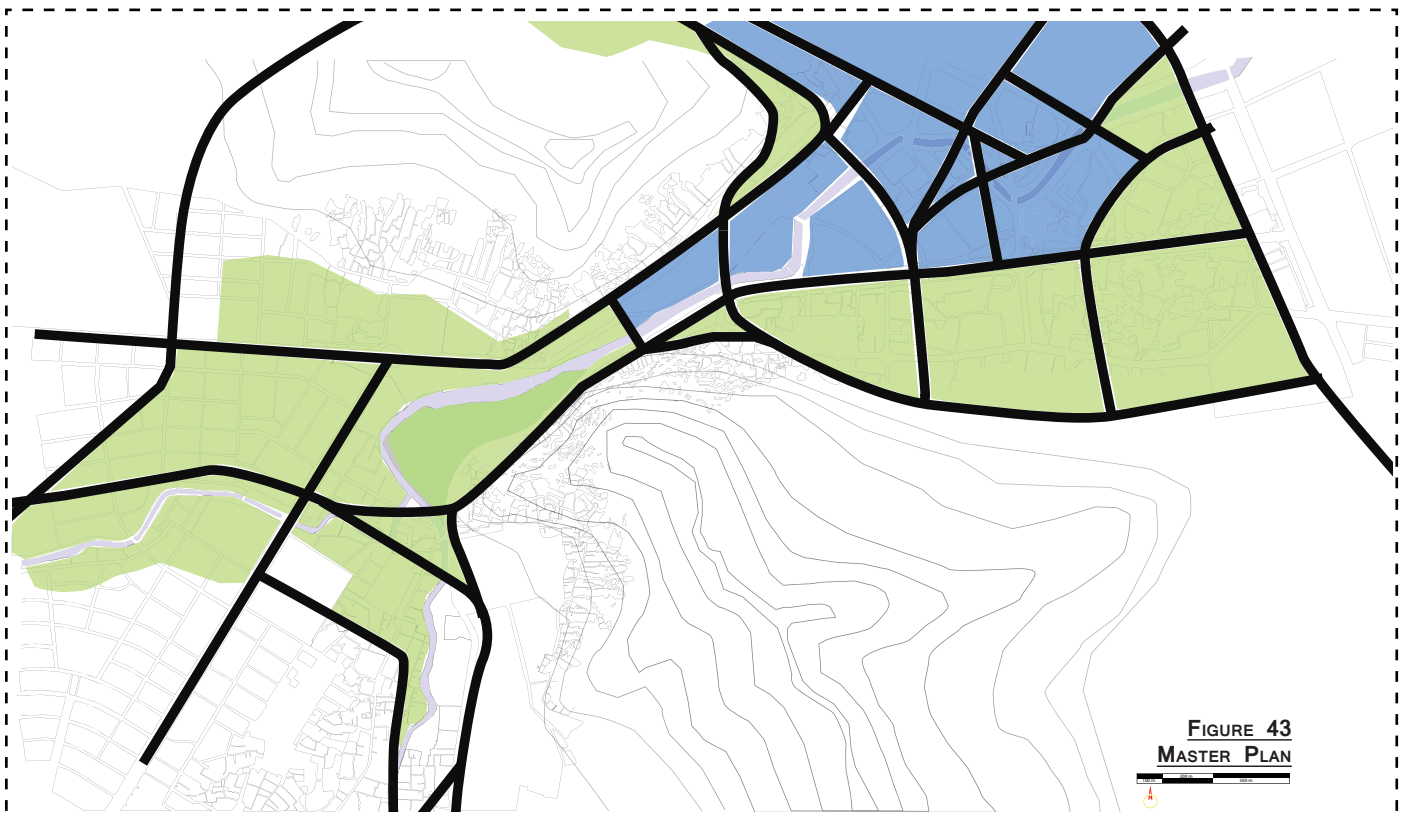
HISTORY

The site is surrounded with historic places. Some areas are built around the 14th century under the first Mughal emperor Babur, who laid out a number of gardens in and around the city. Kabul flourished under the Mughal emperors, The most famous of all the garden laid during this time is Baghe Babur, almost adjacent to the site.

The city centre is full of layers of spatial configuration and transformation by different regimes and modernization attempts.

Because of the spatial and morphological configuration of the city centre, it retained its commercial importance for centuries. This reinforced the densities in the city centre as result the conditions within the historic areas deteriorated. Much of the wealthy Afghans moved out of the city centre into the new district called Share naw (New city).

The survey map of Kabul in 1963, used as a basis for the first Kabul Master Plan, was compiled in Mos-



BUILD UP MASS

Households doubled and tripled up within the existing plots, and other returnees and migrants began to build houses as quickly as possible within every available space (Bertaud, 2005).

At average the population density is 410 people per hectare, with highest densities in the central areas, in the surrounding of the site.

After several attempts of moderizing the city centre, the municipal realized that the plan is very difficult and expensive to demolish all the city centre in order to make it green or building new high rises. The existing build up mass of Kabul city centre is very mixed and irrational if we look at from functional point of view. The seperation of the function assigned from Master plan, takes huge areas in the city centre, which is fully empty through the nights.

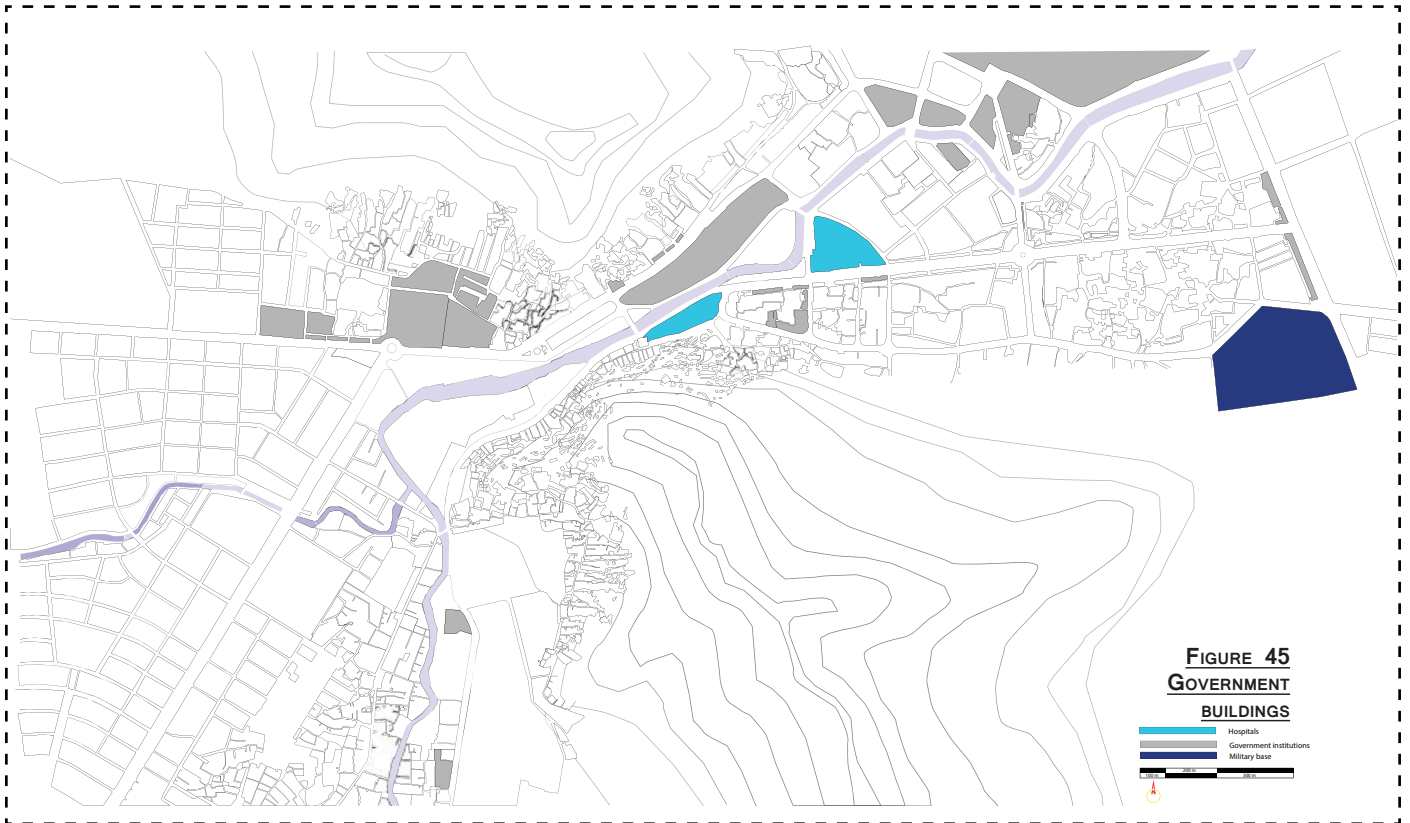
The other buildings beside government buildings, are prominently at max three stories high.

MONO-FUNCTIONAL CITY CENTRE

Most of the governmental buildings in the city centre are constructed according to the Master Plan. The total separation of these building plots from its surrounding, makes the surrounding unattractive and useless.

As stated before due to security and conventional Afghan architecture, the buildings are mostly gated and hence do not allowed mix use. The streets along these buildings becomes mostly dead zones and unappealing for thosewho are walking by.





CITY CENTRE

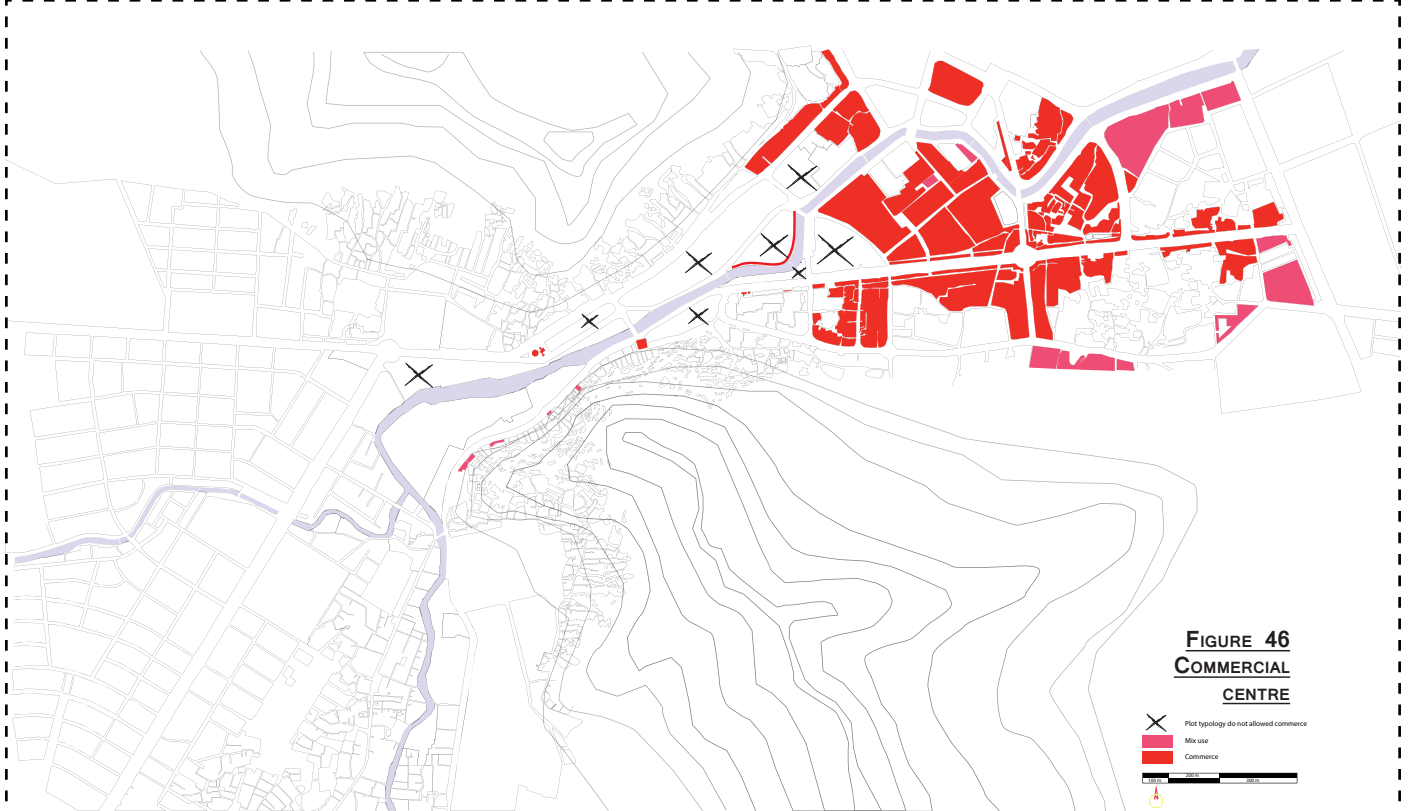
The highly active core of the city, is located in the east side of mountain spine in the old part of the city. As you move towards the west of the city centre the activity is getting less and the building size and functions are changing.

The separation of the functions and the predominantly government buildings in the city centre stops the transition and continuity of activity towards the selected site. The government buildings in the city centre covers a huge amount of land and these plots are mostly gated due to safety reasons, which

leaves the street and its surrounding as non active places.

ILLEGAL STREET PATERNS

Looking at the internal organization of the Zoor abad in the mountain hill, we can understand that there is an hierarchy of the roads connection the housing with the planned infrastructure of the city. It is remarkable to notice that the main road in Zoor abad has the same layout as it is invisioned by the master plan for the city centre. Here we can sense the awareness of the Zoor abad inhabitants about Master plan and the



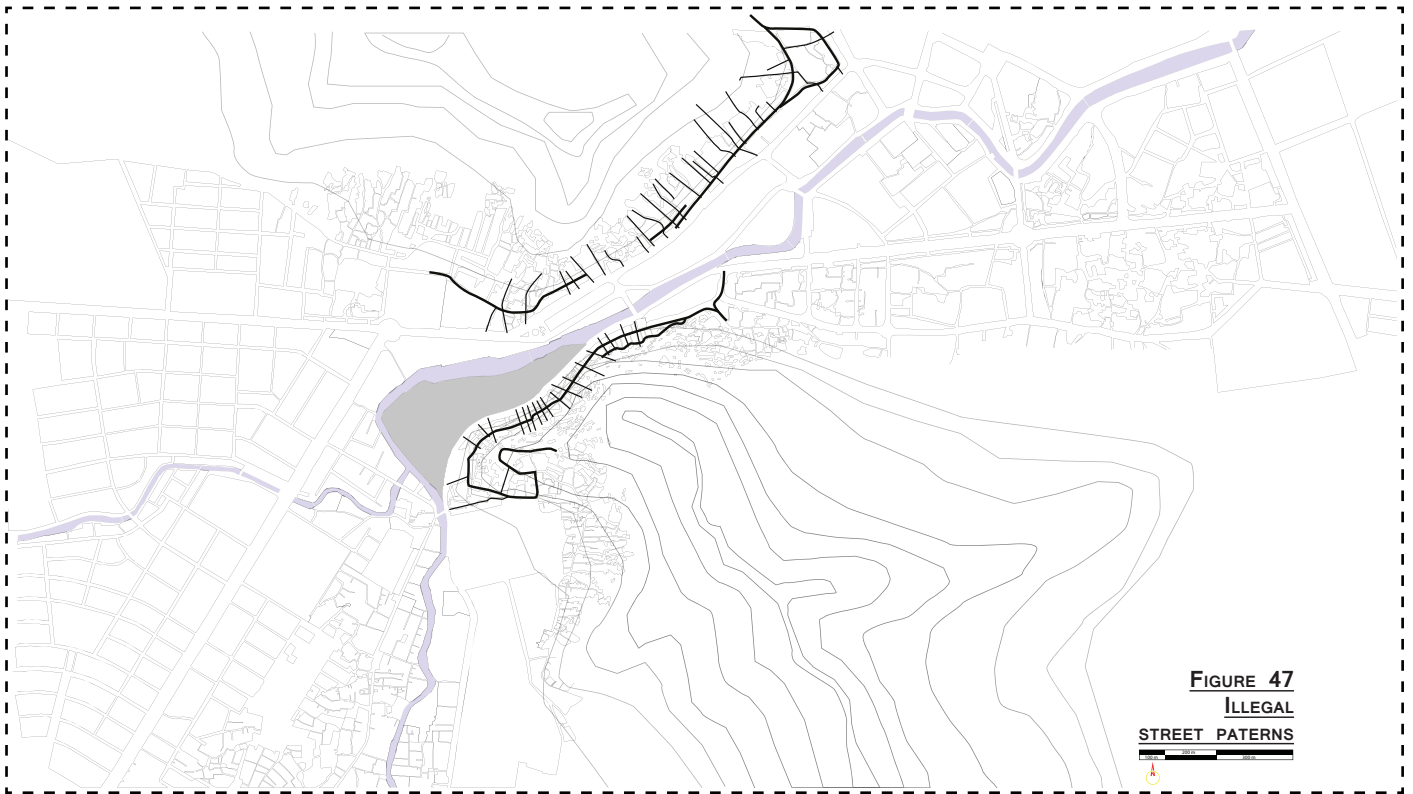


FIGURE 47
ILLEGAL
STREET PATTERNS

consequences it has for them. They have managed to organize and cooperate with each other, in order to their houses if the Master plan is implemented. While thinking of capacity building in the infrastructural networks of the city these informal roads can offer the opportunity to reduce the congestion and reinforce the connection between the two valleys. According to the (Noori, 2010)

TRANSPORTATION NETWORK

the connection of transportation network on both side of the mountain spine are not well connected and not well planned. In some cases the river becomes

a barrier between the two sides and the number of bridges are decreasing moving away from the city centre. The lack of good infrastructure, parking places, bus terminals and bus stops creates overcrowding of both vehicle and people in the city centre. Besides the distance between bus terminals (stops) in the city centre with no public transit connection creates over crowding of people who walks in the city centre in order continue their journey. The lack of transit points and heavy presence of hawkers, small mobile shops, pedestrians and occupancy of road by parking and bus terminals aggravates the congestion and air and street pollution.

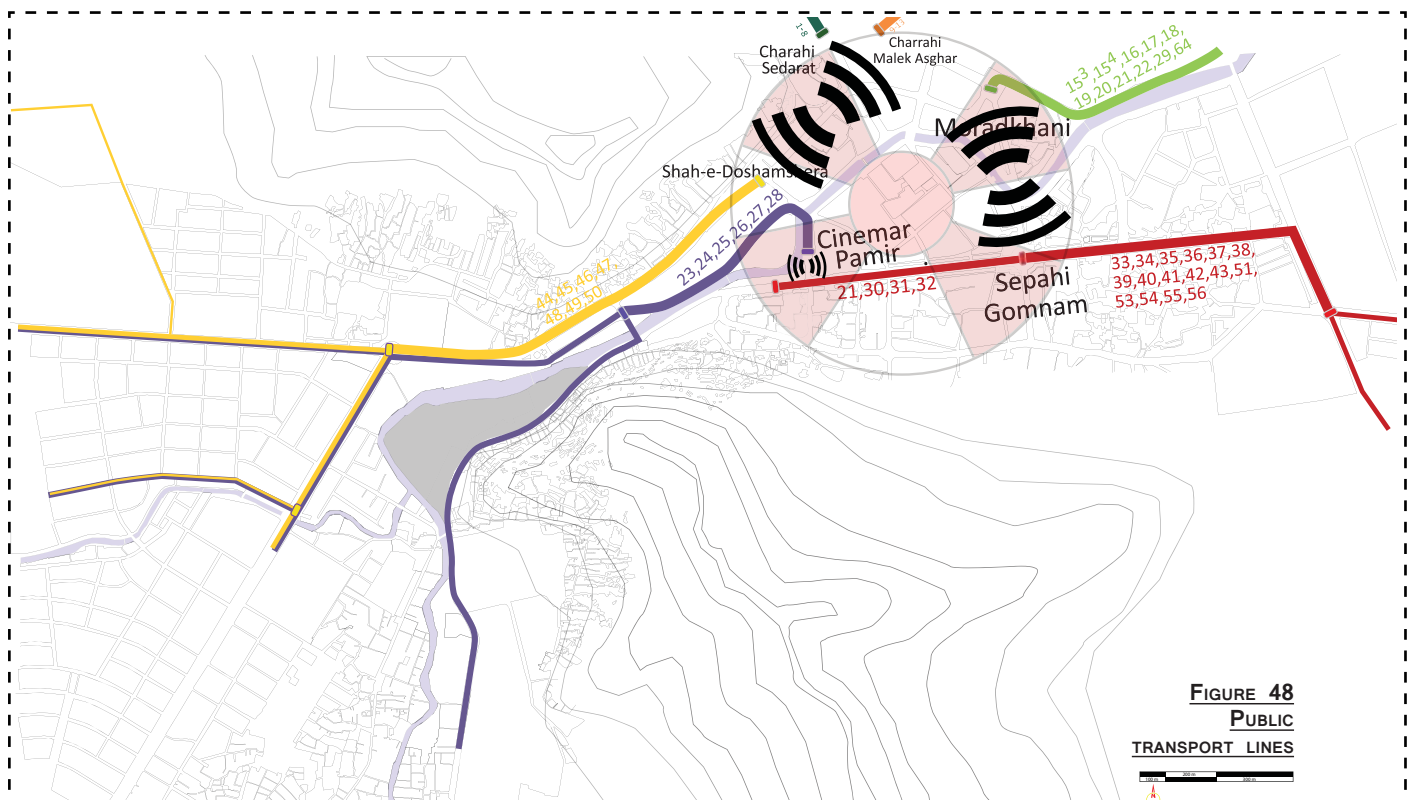
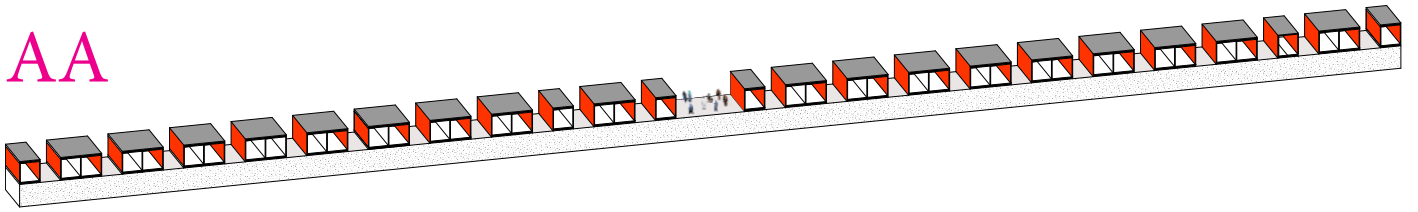
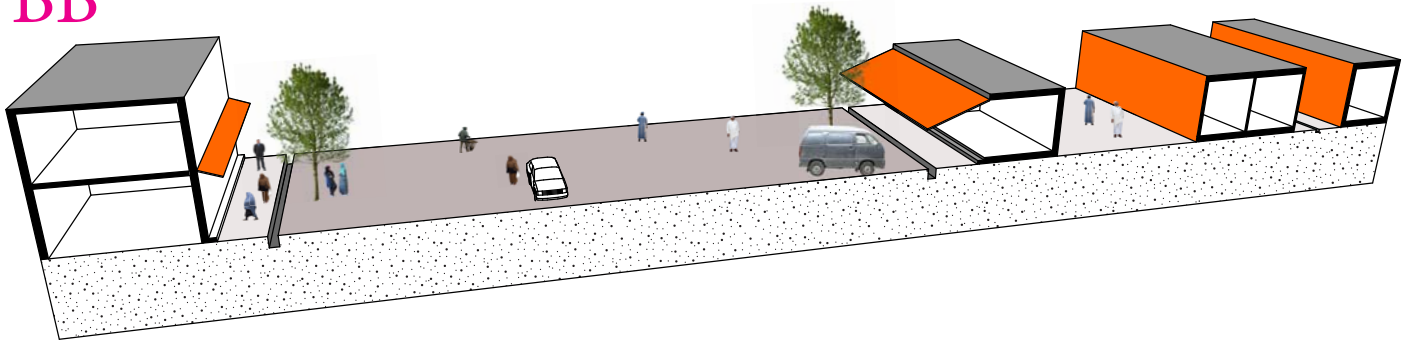


FIGURE 48
PUBLIC
TRANSPORT LINES

AA

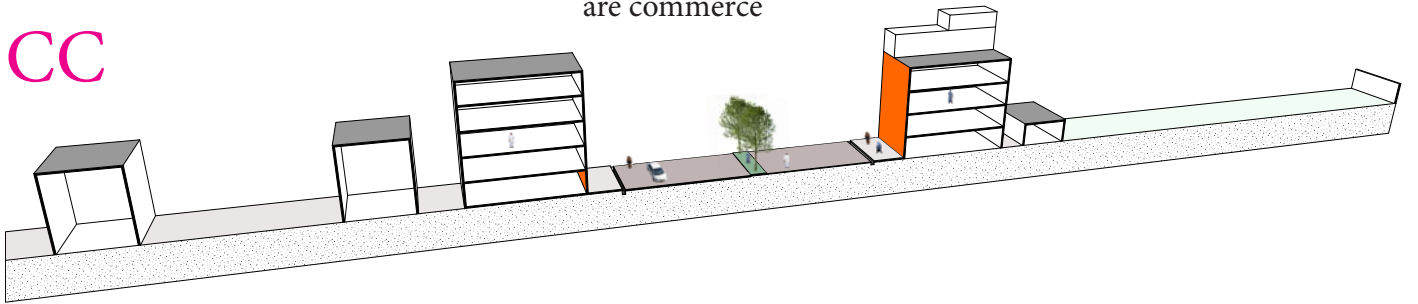


BB

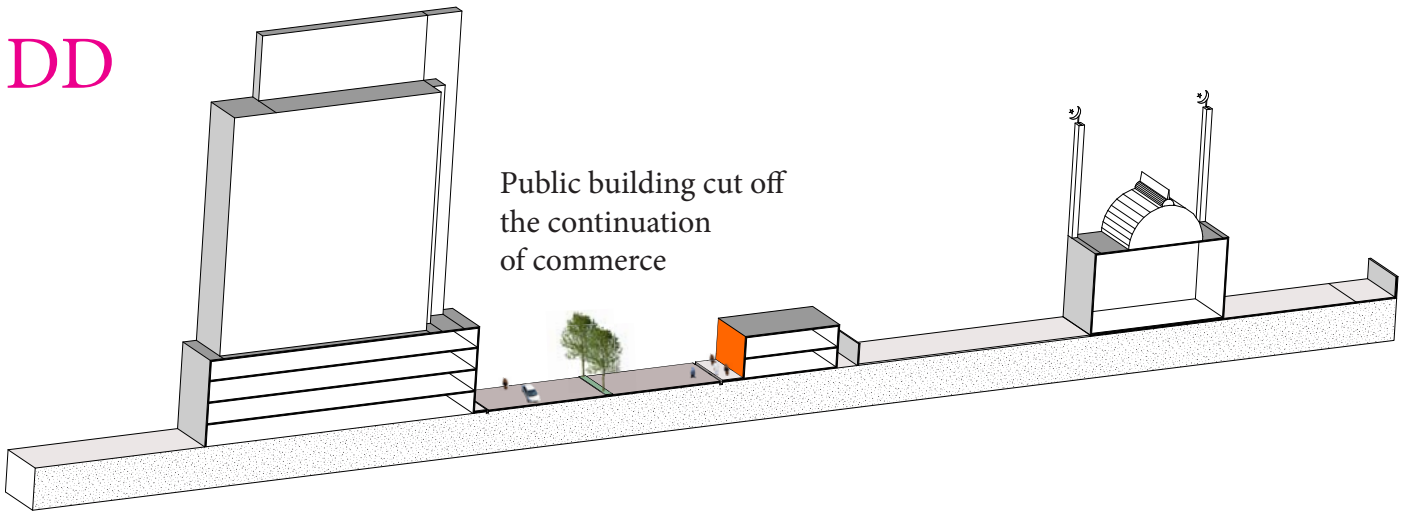


Bothe side of the street
are commerce

CC

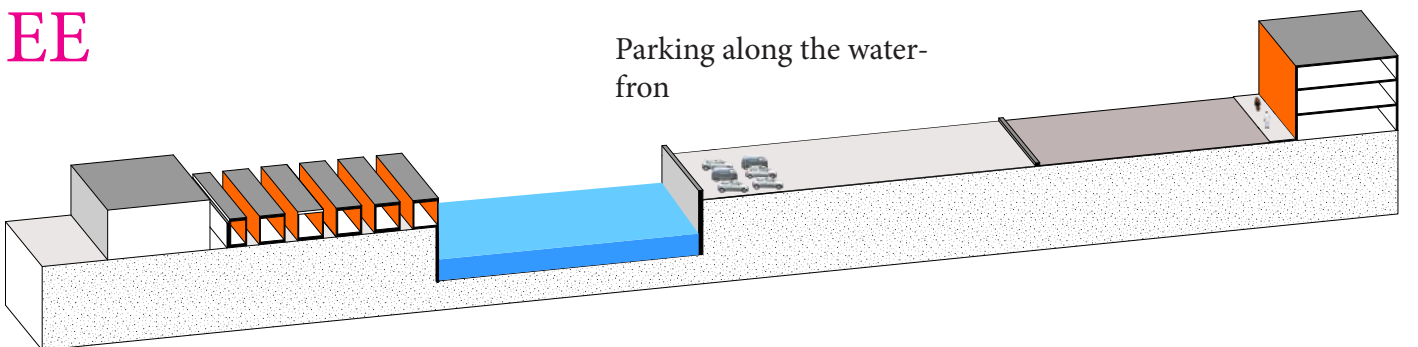


DD



Public building cut off
the continuation
of commerce

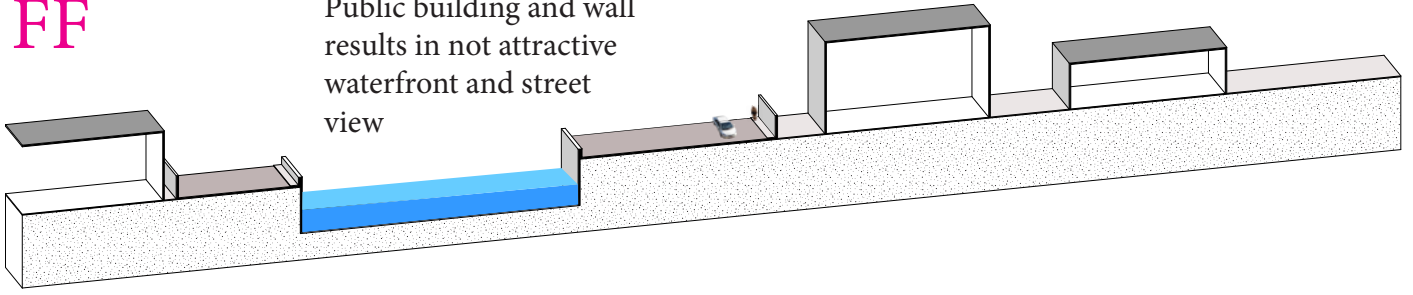
EE



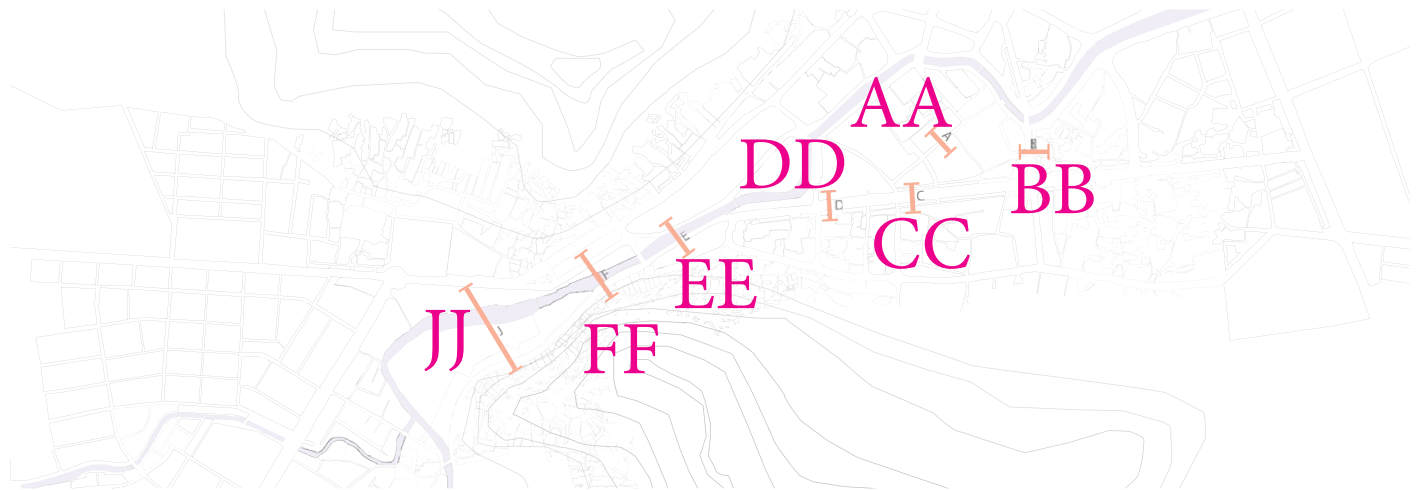
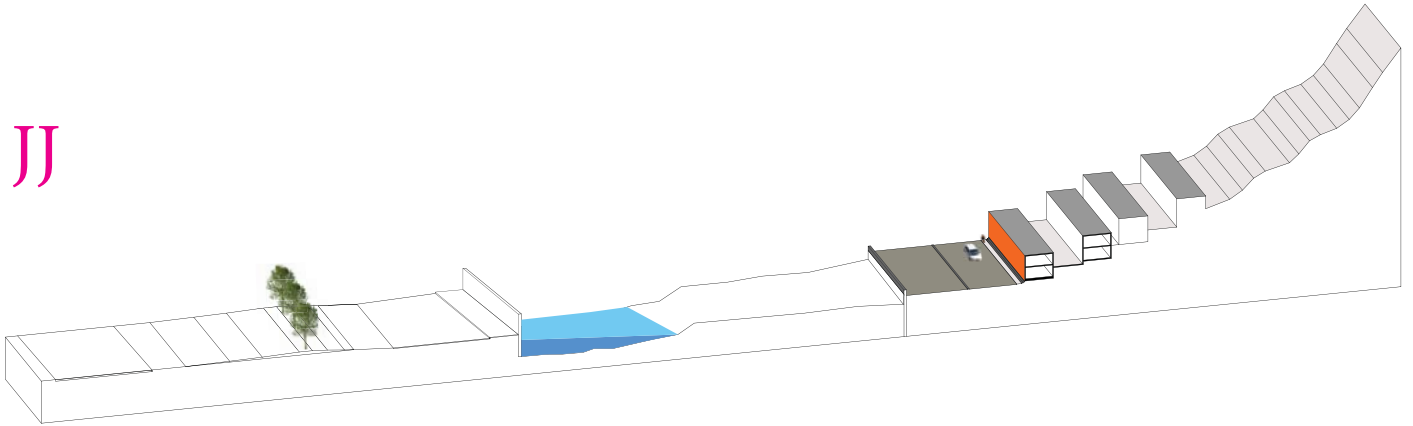
Parking along the water-
fron

FF

Public building and wall results in not attractive waterfront and street view

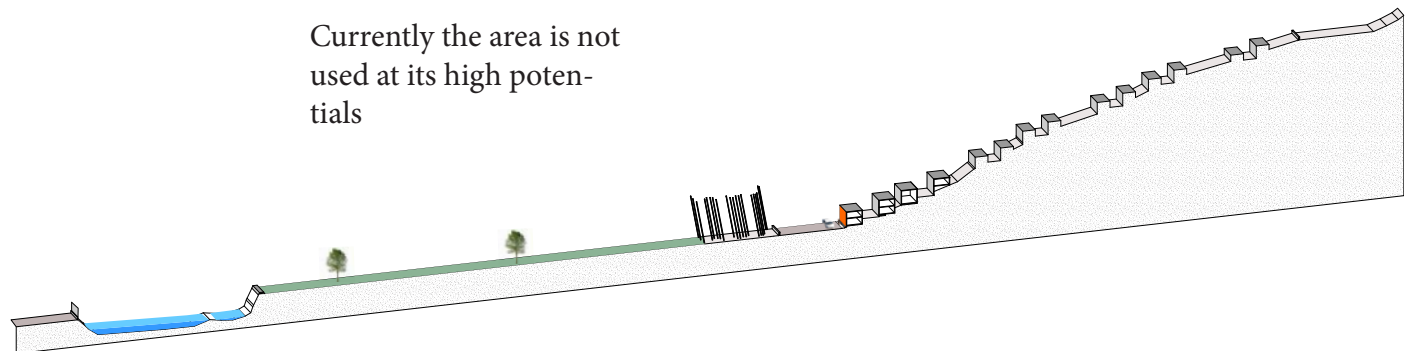


JJ



The site

Currently the area is not used at its high potentials



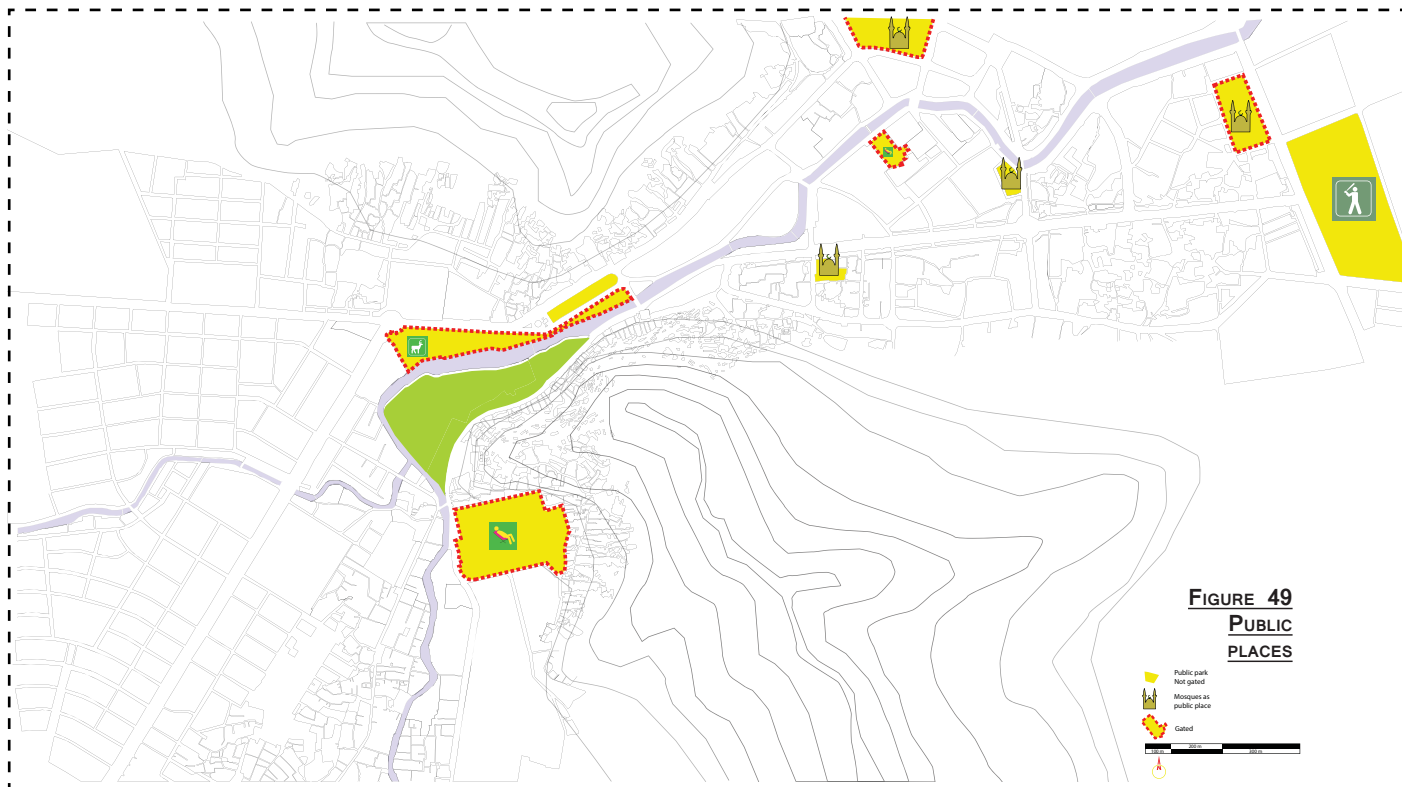
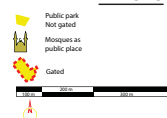


FIGURE 49
PUBLIC
PLACES



GATED PUBLIC PLACES

According to minister Pashtun only 2% of the land in Kabul is assigned for public recreation, while 15% is required. In Kabul most of the public places and parks are gated, in order to avoid the unwanted crowding, you required to pay intrance money for the parks. While the majority of people are poor, these parks and public places in the city centre are only available for people with money. In contrast to the gated parks, the mosques are open for every one, and they are also used for relaxation purposes. The majority of population in Kabul are young, 66% of population under 21 years old, hence there are no recreation places (Livingston, 2012)

INFRASTRUCTURE

The current infrastructure network in the city centre lacks connection and traffic management according to (traffic problems kabul). In this map we can see that the east side of the mountain spine, the city core, the roads are more interconnected and there are more bridges, while on the east side of the mountain spine the roads are not well connected, the river creates the separation with few bridges.

NO LIBRARY

Most important schools and universities are in the surroundig of the site. Each of these educational institutions has their own library and facilities within

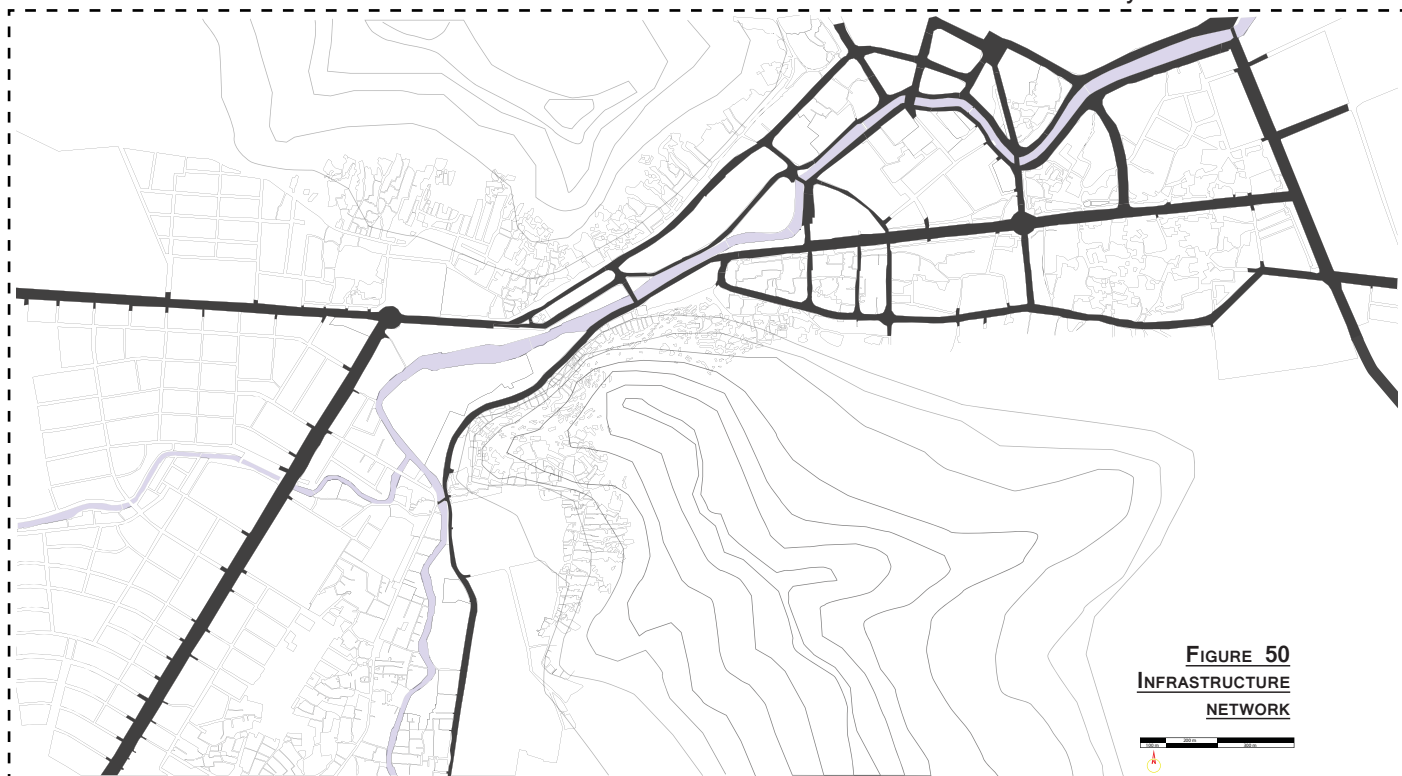


FIGURE 50
INFRASTRUCTURE
NETWORK



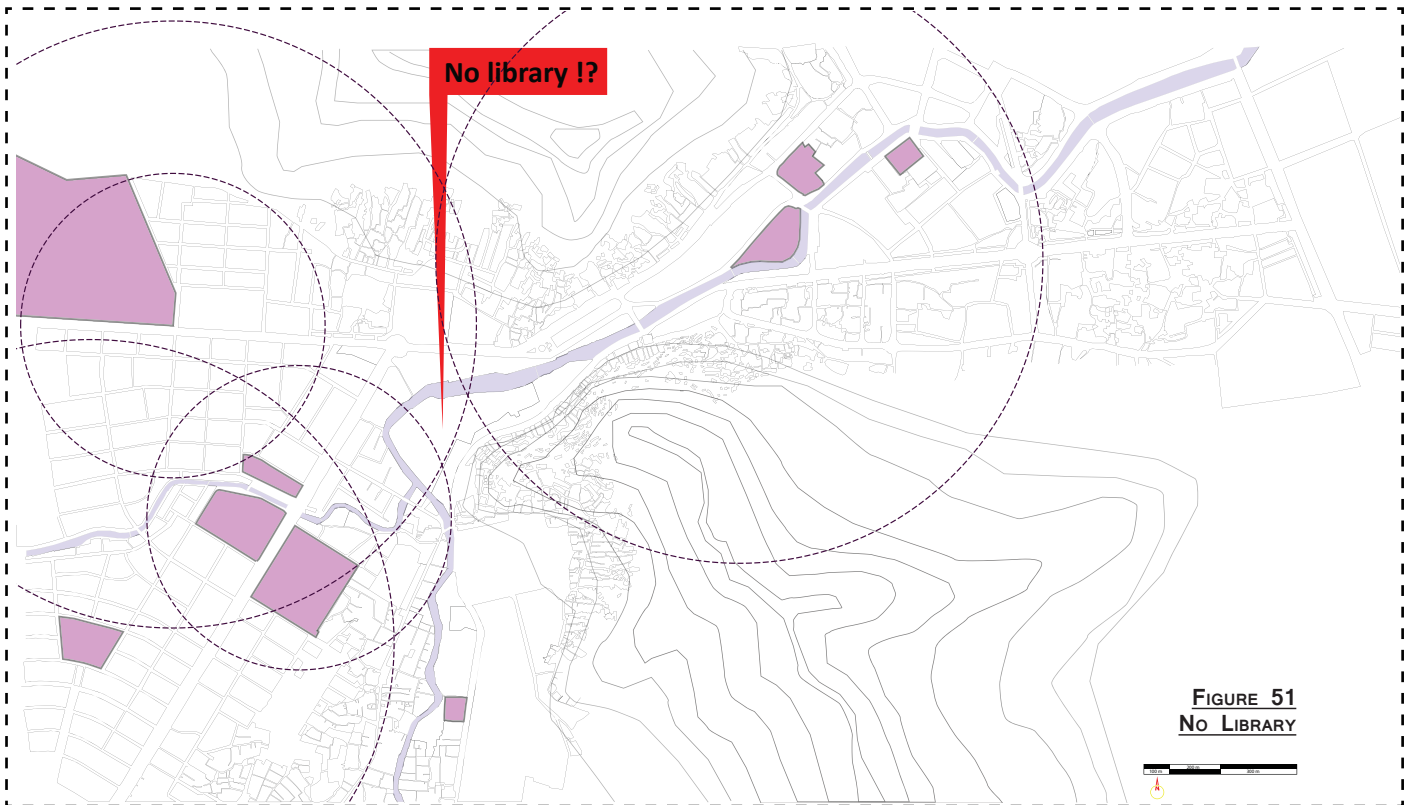


FIGURE 51
NO LIBRARY

their own gated areas. There is not a common place , a public library, where all these insituation comes to gether.

The lack of public library creates the condition which makes the knowledge only available for people whom are paying for it, in this sense lack of access to to knowledge creates another level of social spatial segregation. The site could propose a public library which will benefit all the inhabitants of the city.

SURROUNDED RESIDENTIAL AREA'S

The residential areas in the surrounding of the site can be understand throug the ownership status and the mode of planning in which it is build.

1) At the east side of the mountain spine the resi-

dential areas from the ancient time of the city. The status of the ownerhsip is unclear.

2) On the mountain hills the residentsents have build there shelter by grabbing the land or bought from prior occupant.

3) By converting the cultivation land into residential areas, these households are the owner of the land but not the constructed houses.

4) Houses build according to the Master plan holds the full ownership of the plot and the constructed house. The materials that these households use for the construction of their houses more expansive.

5) The gated communites are provided with full construction and legal documents of the ownership of the apartment.

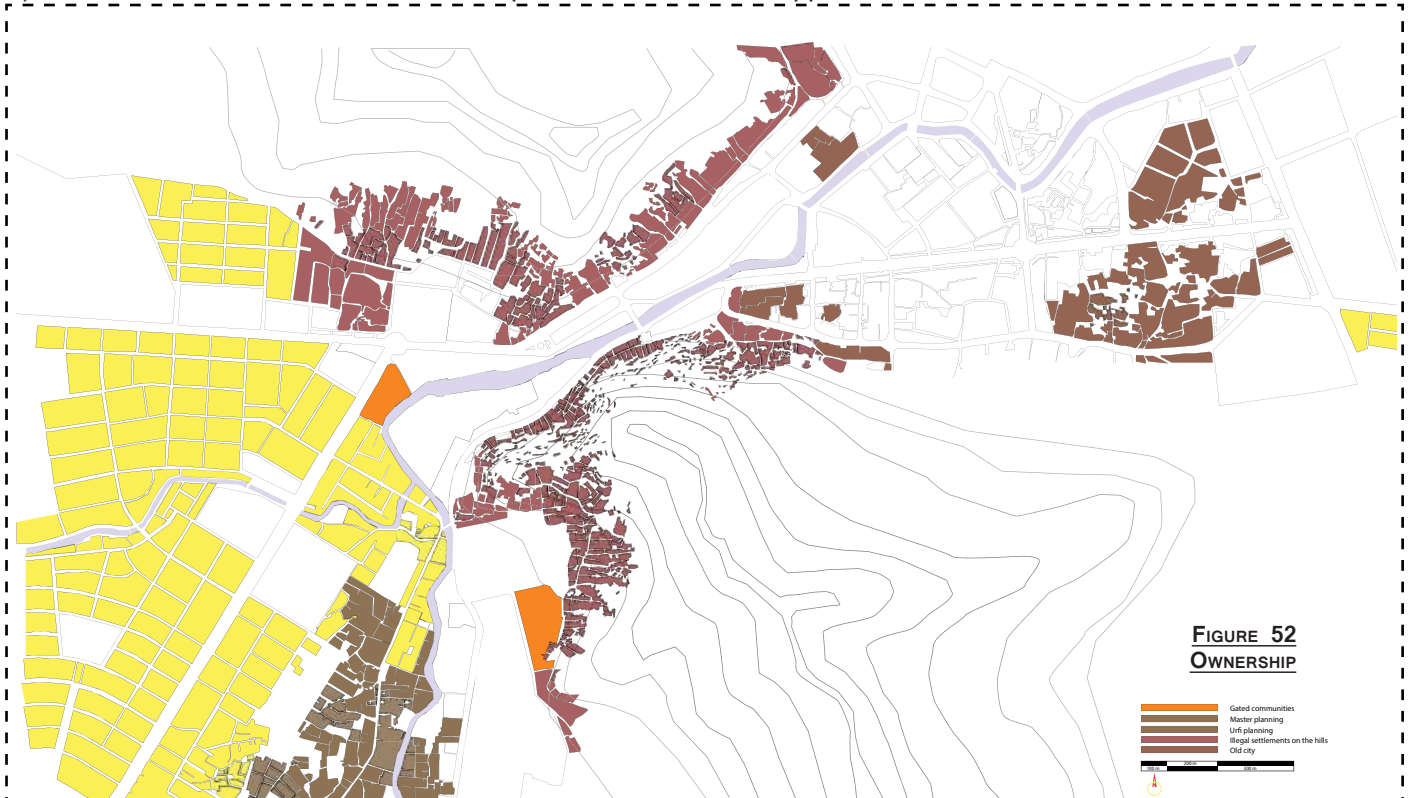
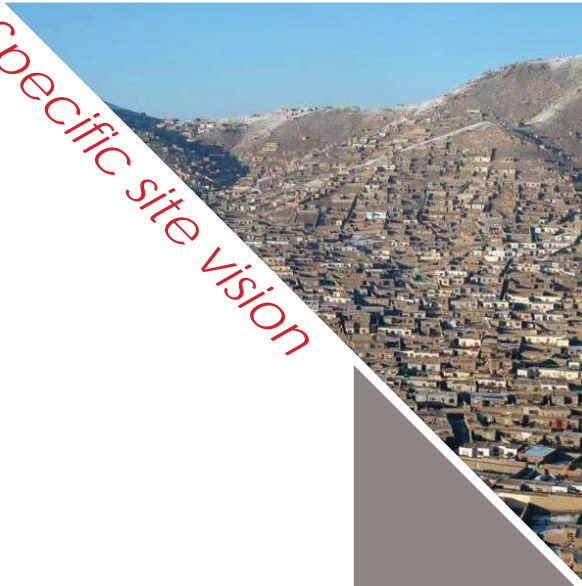


FIGURE 52
OWNERSHIP

■ Gated communities
■ Master planning
■ Unplanned
■ Illegal settlements on the hills
■ Old city



Specific site vision



- # Formulating a vision
- # Strategy
- # Plan for regularisation



FORMULATING A VISION

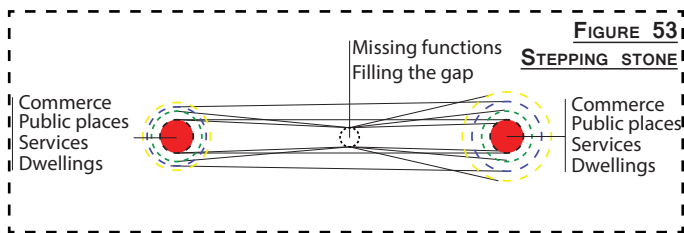
The area is located in very heart of the city, meanwhile the area is very much isolated from the city's urban fabric. Kabul river and the regional road which connects the city centre with its periphery, performs here as barrier.

A vision is proposed that makes the area active as well as improves the connection between the two important city nodes. Hence provides solution for the surrounded areas and local problems in a more accessible and integrated manner into the already existing urban fabric of the city.

With this proposal the strategic area becomes connected with existing infrastructural lines and performs the duty to enhance these connections.

The area provides the ground to enhance urban network through open spaces, cultural activities, recreational areas, dwellings and a more connected urban infrastructure, while using the potentials of the site.

This kind of approach not only benefits the regional scale, because it connects the nodes, but also the local scale, particularly the adjacent illegal settlements and the surrounded areas. The specific strategic site will work as catalyst for the area and will give a new positive boost for the development. Because it is participatory planning, it will achieve the sustainable aims and will provide the ground for a more inclusive city, and thereby will reduce poverty and vulnerability of the specific area.



CONNECTIVITY THROUGH INFRASTRUCTURE

In order to enhance connection between the two city nodes, new infrastructural lines are proposed.

The new infrastructural line are the basis of the site development, therefore a lot of varieties are proposed in order to select the most suitable one. The variety of infrastructural connection defines also the site borders and the connection between the existing network and the strategic site. (figure 54)

CONNECTIVITY THROUGH PROGRAMME

Currently the city is not balanced if you look at its programmatic configuration, there is a need for balancing the programme in order to reduce the daily commuters to the city core and also enhance continuity of the city programme to other side of the mountain spine. This shift will be provided by the programmatic infill of the strategic area in order to turn a marginal, obsolete area into a more accessible, active area.

By connecting the existing cultural places, commerce, open space and other programmatic infill, the area will become part of the daily system and will improve the existing network.

POLLUTION REDUCTION STRATEGY

Pollution is one of the major problems in Kabul, which aggravating the health of millions of people in Kabul. One of the main causes is that the daily sewage output most of dwellings in Kabul are directed to the public space, to the street or directly discharged in Kabul River without any treatment. In order to upgrade the environmental conditions in the area as well as in the entire city, structural improvements are need in both policies and spatial level.

Spatially, some strategic areas are located in an area which can improve the situation in certain extent addressing some issues. Strategic sites along the Kabul river or wetlands, can give solution for black water. These areas can play a role for black water, awareness for the local residents and new ways of solving the sewage problems in Kabul. While integrating the solution into the strategic site development, can also attract more funding from the NGO's and other agencies who are involved with environmental up-gradations.

RIVERFRONT SOLUTION

In the existing situation for this specific site, flooding occurs seasonally, which always demolishes the areas in the surroundings of the river basin. The surrounding of a river basis is mostly occupied by illegal settlements and they are very poor to move elsewhere. Each year these settlements are demolished and they build it up again.

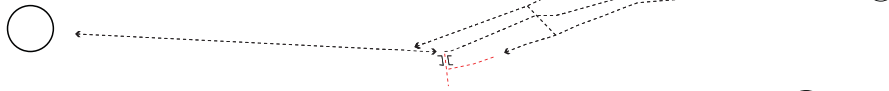
In this graduation project a series of measures are proposed in order to reduce flood risk on local strategic site level, which can be used to gain more awareness for the overall problem as well as giving answer to local scale problems.

The specific chosen strategic site is preserved as flooding area; therefore it is left empty in such a valuable place. This area can play a valuable role, if this problem is handled in a different manner. The proposal is to make a dike around the area, in order to protect the valuable area from flooding risk, at the same time the dike can be combined with a road, which will enhance connectivity and inclusion within the current urban network. (figure 54)

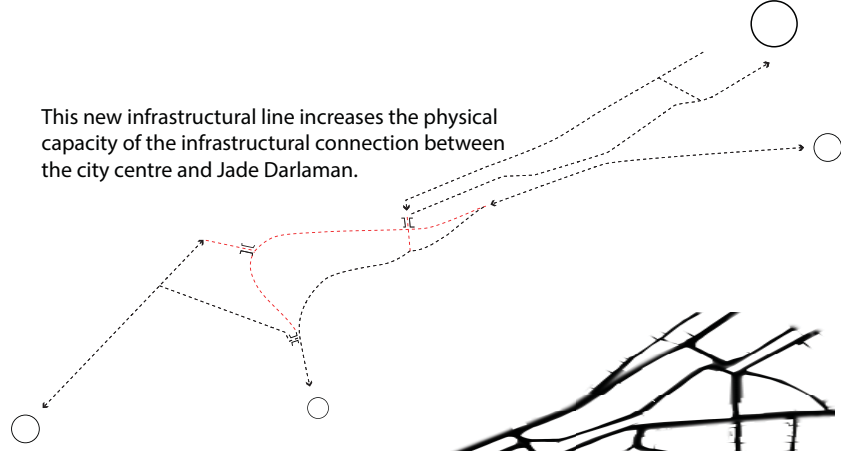
This combination between a dike and road gives answers to both flooding risk and dis-connectivity of the city nodes. Several combination concepts are made in order to choose the most suitable for the area.

FIGURE 54
STRATEGY

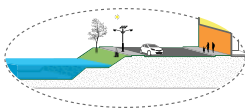
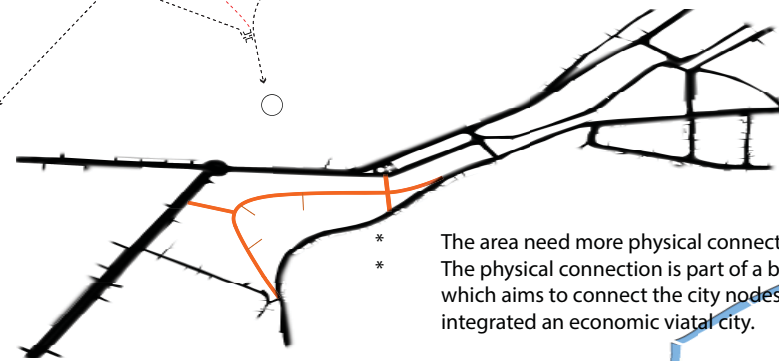
* The current infrastructural lines between Kote Sangy and city centre has more room for tra



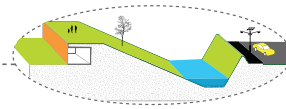
* This new infrastructural line increases the physical capacity of the infrastructural connection between the city centre and Jade Darlaman.



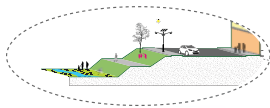
* The area need more physical connection
* The physical connection is part of a bigger strategy which aims to connect the city nodes for more integrated an economic viatal city.



When there is more water

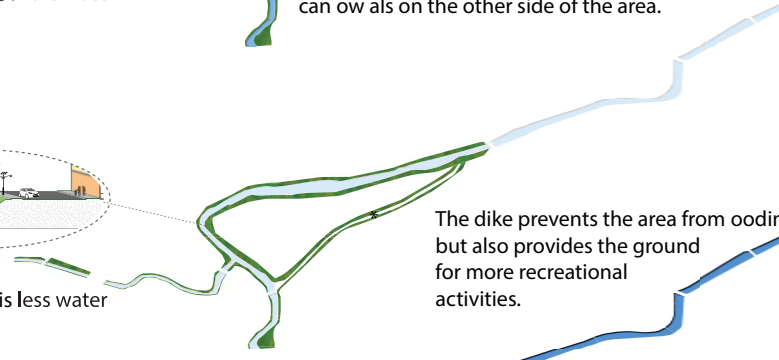


When there is more water in the river, the water can ow als on the other side of the area.

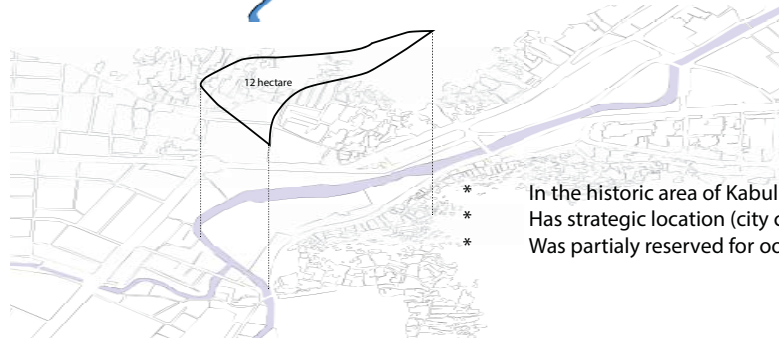
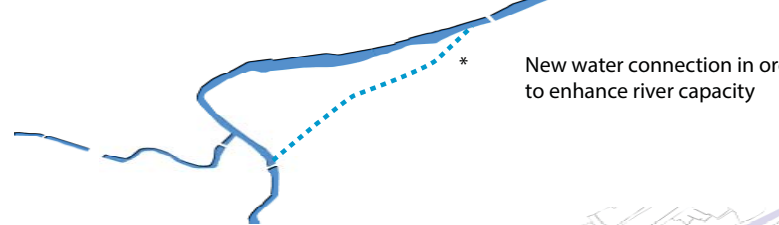


When there is less water

The dike prevents the area from ooding, but also provides the ground for more recreational activities.



* New water connection in order to enhance river capacity



* In the historic area of Kabul
* Has strategic location (city centre)
* Was partialy reserved for ooding

STRATEGY

The strategy is to react to the conditions created by the urban morphology in specific site as well as answering the overall problems of the city. As such there are rules created for each site, but also for the site specific. In this specific case the potentials of the site is used in order to reduce the problems of the wider area, through improving physical connectivity and thus reducing congestion. Additionally the site development is being used to give answer to housing shortage in corporation with private stakeholders.

The strategy should be three folded, first investment should be delivered for promotion, capacity building (bringing stakeholders together) and building awareness. Second investment should be delivered for infrastructure and preparation of the land mostly by public partners. The third phase of investment should come mostly from private investors.

In contrast to the standard business model, where value is created through planning permission, in this model the value of the area is created through facilitating the capacity building and providing infrastructure and preparation of the area (strategic investment model). Investments are principally used to fund enabling activities and infrastructure, allowing the

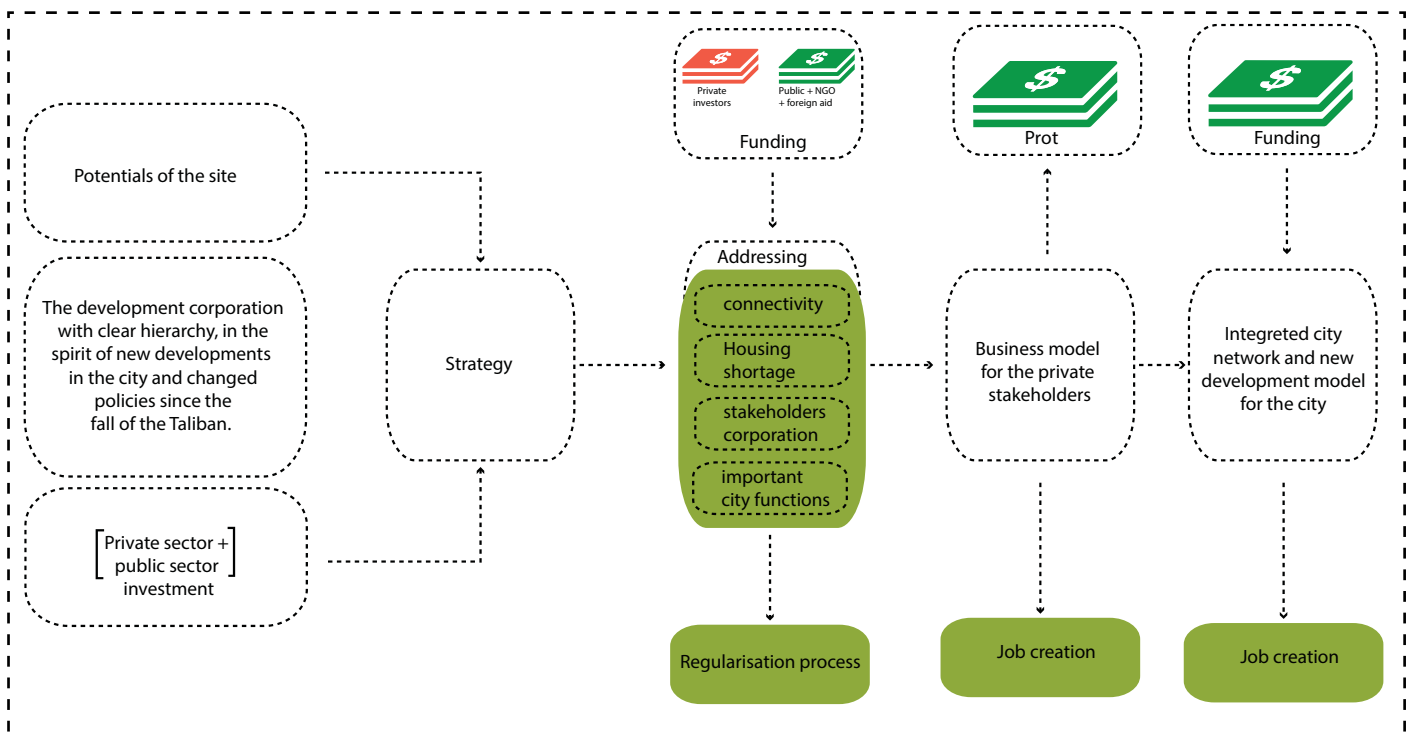
landowners (in this case the municipality of Kabul) to benefit from the uplift value of the land because of the increased interest for the land.

At the begin the landowners (Kabul municipality, Kabul Zoo) and the promoters (Foreign aid agencies, NGO's and constructor companies can become partners in promoting the land for development and additional investment in infrastructure at the end their return investment would be much higher (illustrated in next page). Return comes from the phasing of land sales, while it value is increasing. The landowners maintain an ongoing role in the site development, in order to coordinate the development according the envisioned plan for the site.

SPATIAL REPRESENTATION

The spatial representation strategy represents clearly the main objectives of the overall strategy, which is to enhance connection between the city nodes and reduce fragmentation. The proposal allows the obsolete area to become part of the city and thereby a new stepping stone in connection between the nodes of the city.

Reference projects : Dakpark, wetlands , iLent.

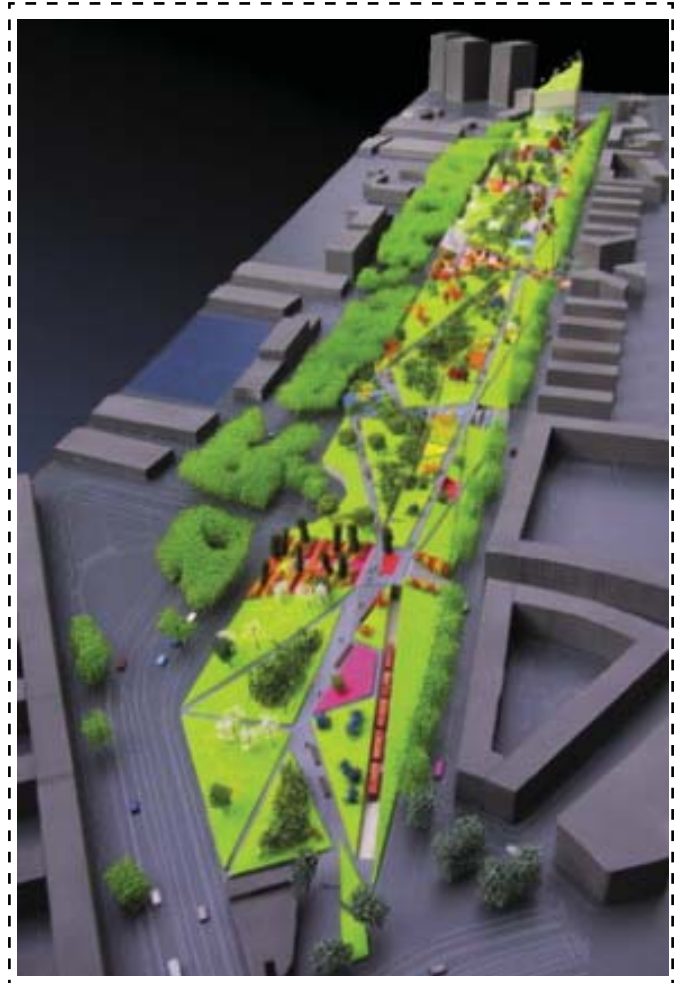


DAKPARK AS REFERENCE

The roof park consists of long and narrow terrain, half of which is situated on the Bigshops Dakpark's roof, which is also used in various scenarios of the dike. The side of the park facing the neighbourhood rises up gradually. A large portion of the park is located more than nine metres above street level. It will become a green park with three special places: the Mediterranean garden, the playground and the community garden. Three stairways transverse the park as a shortcut to the surrounding neighbourhood. The park lowers down to five metres at the height of the two outermost stairways. There is a wide main path over the entire length of the park that very gradually rises and falls, as well as a finer network of ramps and winding paths that wends its way through the park.

The elements which are used for this design are:

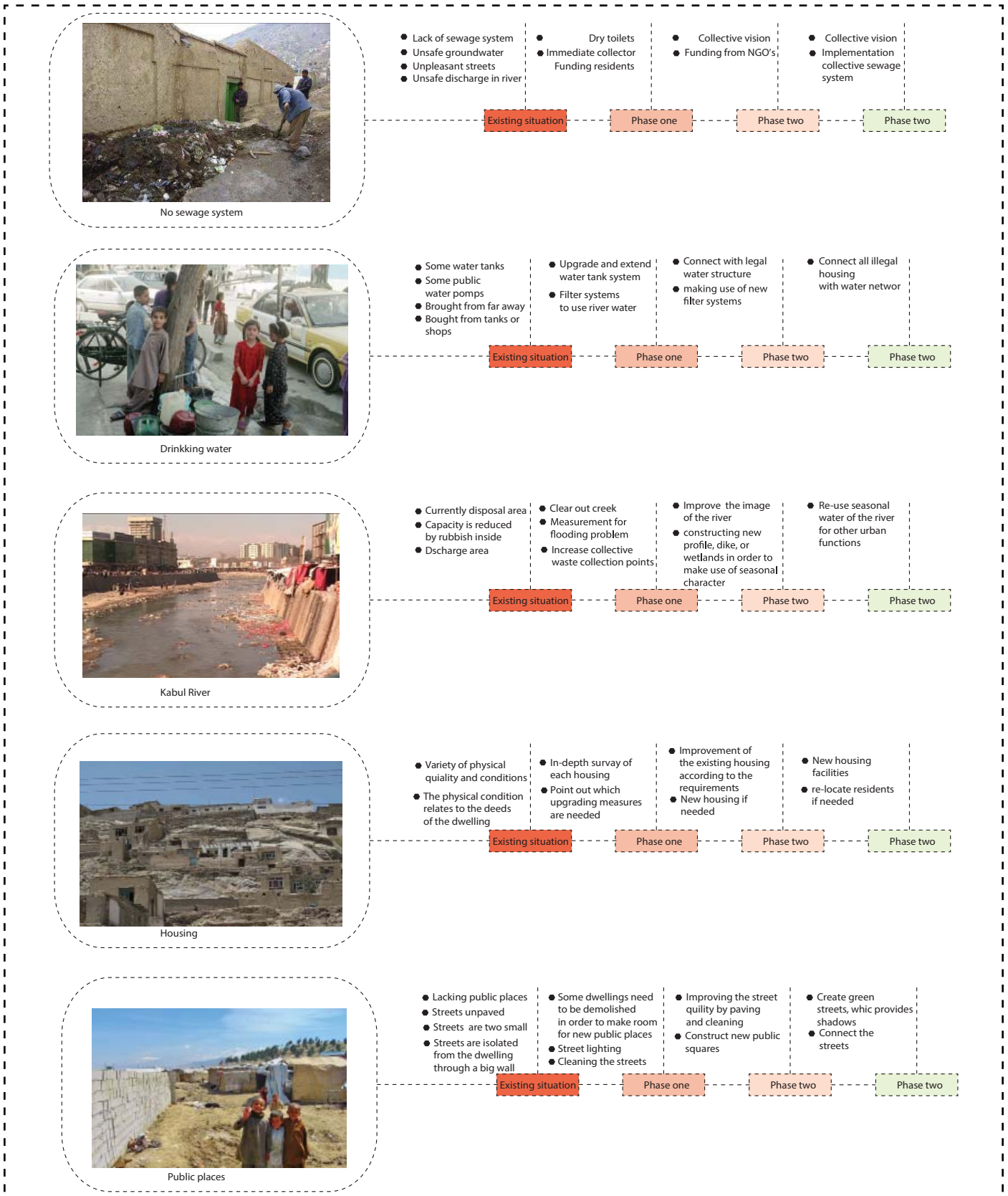
- Shops beneath the dike
- The park on top of the dike
- Stairways to get on top of the dike
- Ramps to connect different heights



PLAN FOR REGULARISATION

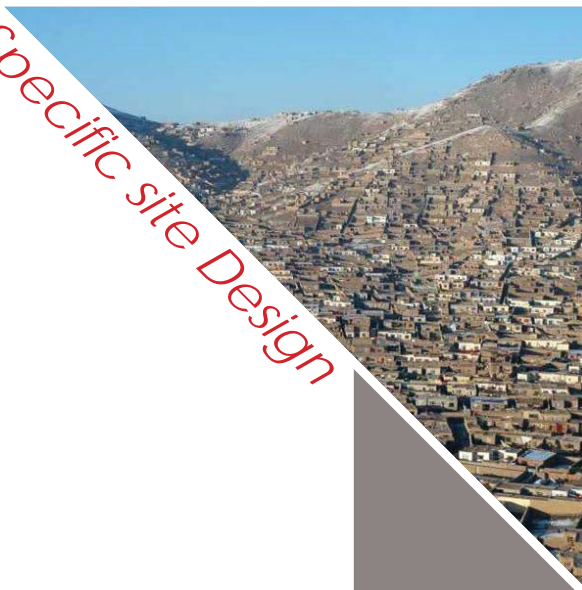
As described before there are two components needed in order to upgrade the adjacent illegal settlements. In this project we will focus on more physical intervention solutions, the administrative part can be subject of stakeholders' negotiation. Although a detailed consideration of the process of regularisation is outside of the scope of this graduation project, but is important to notice that land tenure is essential for upgrading process and cannot be left out the process.

In order to improve the overall condition of the adjacent illegal settlement, few physical interventions should be provided. The required steps of the upgrading process are illustrated here. The diagram explains the existing solution and the required physical intervention in order to upgrade and benefit from the strategic site development. The diagram describes the steps needed in physical interventions in order to upgrade the overall condition of illegal settlements. The process is slow because firstly an initial survey is needed.





Specific site Design



Design concept

Methodology



DESIGN CONCEPT

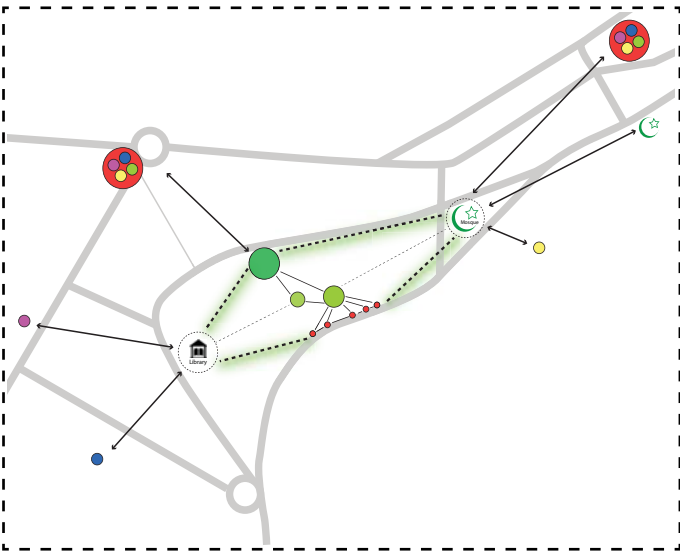
The concept of the strategic site design is derived from analysis and in-depth understanding of the cultural and programmatic values. Within this concept a number of different elements are used in order to achieve the desired objectives. Within this concept the most important values of the old city of Kabul as well as cultural values are put together.

STREET NETWORK

The layouts of the streets are chosen to represent the old city of Kabul, since the site is very much located in the historic areas. The irregular pattern are used in different ways with building typology and combined with public places.

PUBLIC SQUARES

One of the main characteristics of Old Kabul city is the woven structure of courtyards, which lacks open and public spaces. In contrast to old characteristics this design tries to provide public places in cohesion with the old cities street pattern. These public spaces are in good sequence in between the mosque and public library, connected with wide green boulevard

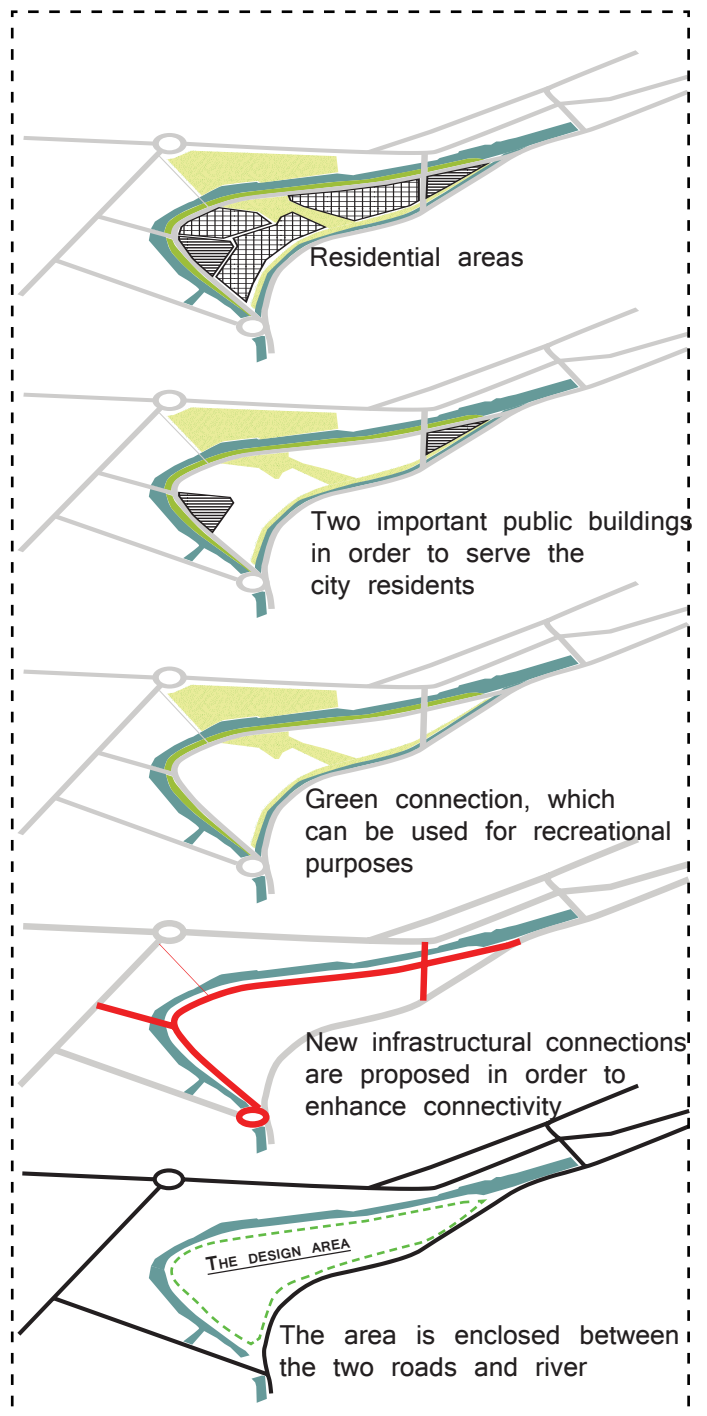



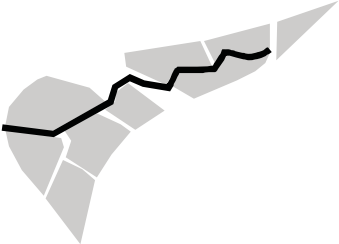
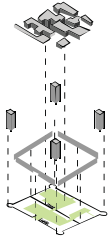
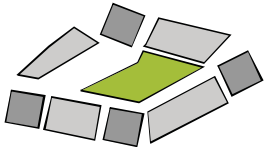



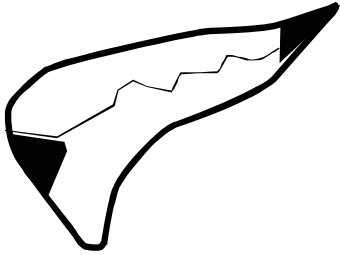
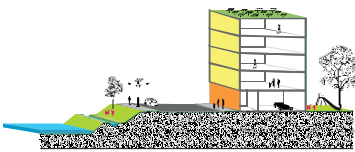

BAZAARS (COMMERCIAL STREETS)

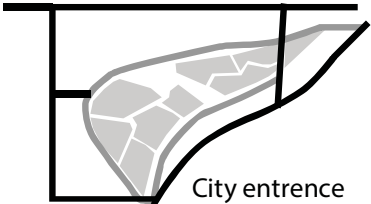
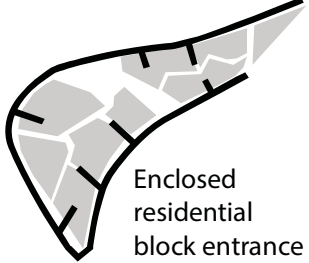
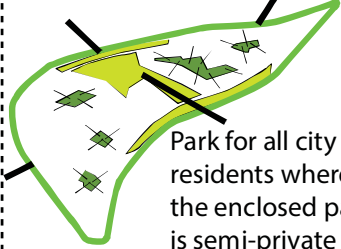
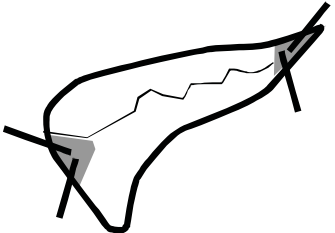
Since the two major public buildings, mosque and public library are located on the two sides of the site, opposite of each other in service of the specific site and the whole city; the major streets between these two becomes focal point of commercial activities. Commercial activities and services are design to attract more people to the site and make the area more attractive.

Commercial activities between or in the surrounding of major mosques occur in every Islamic city, which has different names such as: Suq, Bazaar.

Within this design the commercial activities are combined with the dike which leads connects the two important buildings with each other



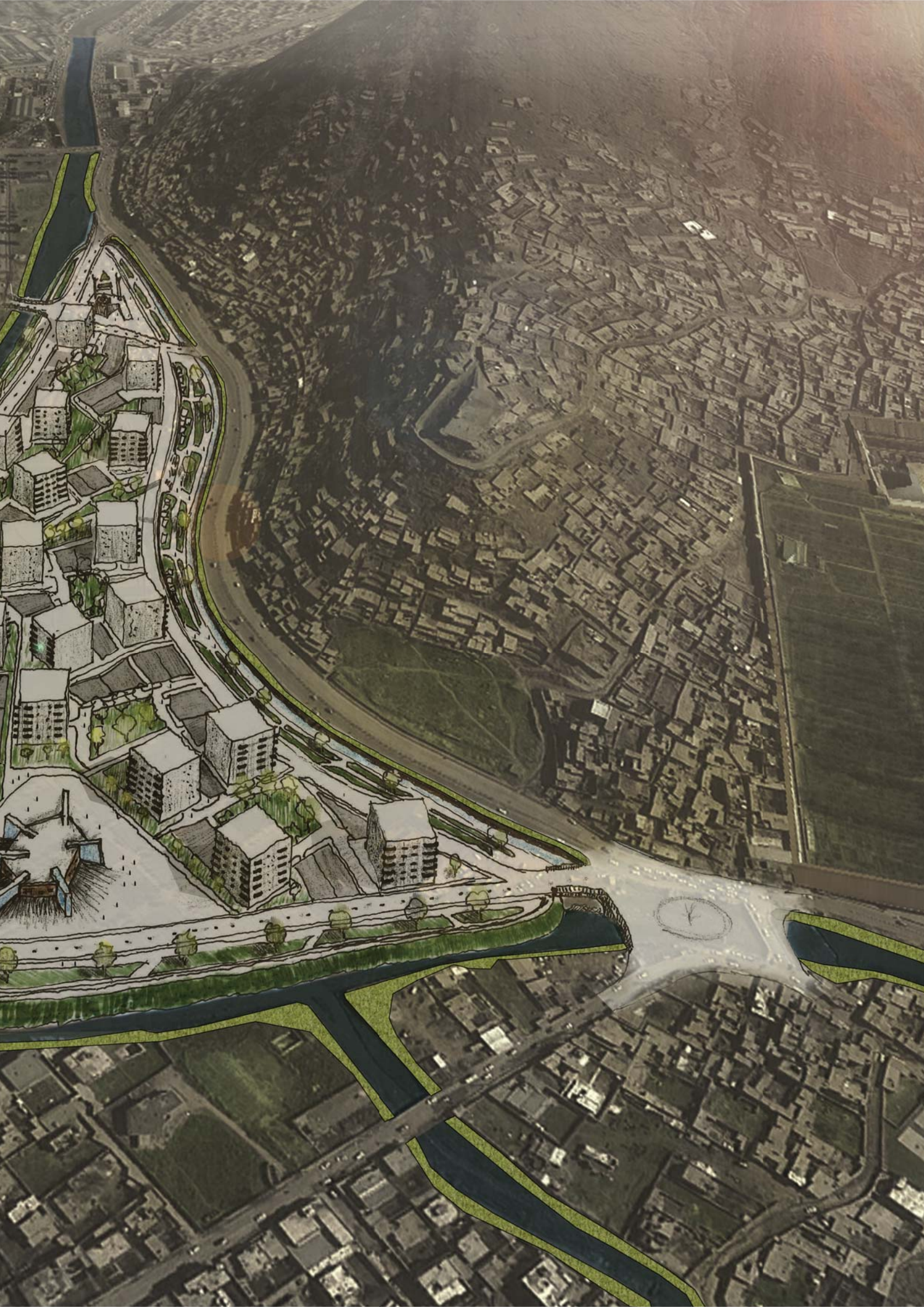
Elements	Spatial form	Spatial translation	Spatial translation in words
Old city patterns			<p>The conformation of the street patterns represents the old city of Kabul, which is interwoven. This will give room for di enclosed block typology.</p>
Old building typology		 <p data-bbox="815 898 1129 931">Enclosed residential blocks</p>	<p>The defensive towers in old Qala are translated as high residential buildings, whereas the fortified thick walls are translated as low residential areas, which are creating the resemblance of old walls.</p>
Park			<p>In order to provide park and recreational places for the the whole city as well as for the residents of the site, there are several kind of public / semi-private recreational gardens designed</p>
Important public buildings	 <p data-bbox="459 1476 544 1509">Library</p> <p data-bbox="655 1476 759 1509">Mosque</p>		<p>The two important public buildings which are serving the city , are located in a very strategic location of the site.</p>
Dike			<p>The surroundings of the site is designed as dike, which is preventing the ood risks additionally it provides recreational places.</p>

target group	Accessibility	life style	densities
City dwellers	 <p>City entrance</p>	part of the city	
<p>Each entity of enclosed residential block is providing housing for mix ethnic groups and as well as social groups. 20% of housing will be assigned to poor people.</p>	 <p>Enclosed residential block entrance</p>	Having a private place within all the surrounded functions	<p>Residential buildings: 20 buildings*12 oor*5oors= 1200 people Low residential houses: 48 houses* 6 people= 288 total= 12228/12hectare 124 people / ha</p>
<p>City dwellers can use the public parks for recreational purposes. the semi-private parks are for the residents of each enclosed residential block.</p>	 <p>Park for all city residents whereas the enclosed park is semi-private</p>	Living in a green area in the heart of the city.	
<p>City dwellers can use the public buildings for religion and educational purposes.</p>		Educational and religion place	
<p>City residents can use the park and the commerce along the dike for their daily uses.</p>			











Sev











In this illustration the dike around the area is illustrated as green. The dike solution as prevention of flooding goes along the river area where it is not canalized and in some location the river has more area to use, when the water level rises. On the other hand this picture shows the green connection between the surrounded dike and also the area beyond the river such as the Zoo.





The situation when the water level rises.





Waterfront Development
Waterfront Development
Waterfront Development

The infrastructural connection along the site is one way, which aims to increase the capacity between the city and Kote Sangy. From this perspective the road has another status than the already existing road in the area.

All the other roads provided for the sites are working as entrance connection for each residential unit. From the street patterns we can understand the enclosed character of each residential unit. The streets are not interconnect and thus private.



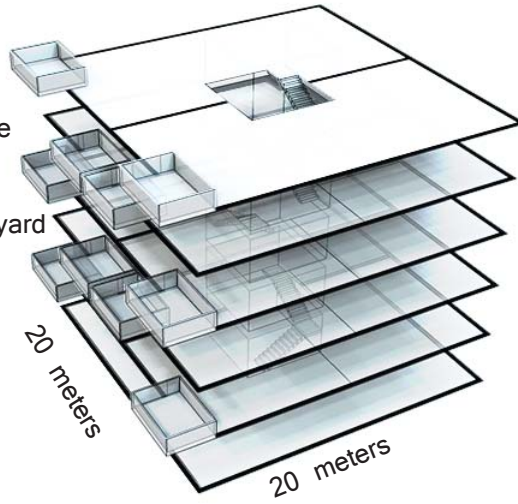


One central stairs, which connects all floors with each other

Balconies are not oriented toward the neighbour's yard

Two families each floor

Parking



20 meters

20 meters



The enclosed residential units are a translation from old Afghan housing typology. The old housing typology as described before consists out of three important elements.

- The mud wall

Translation: free housing parcels

These parcels also define the boundaries of a unit and also provide a quieter and private garden inside for those houses around the unit.

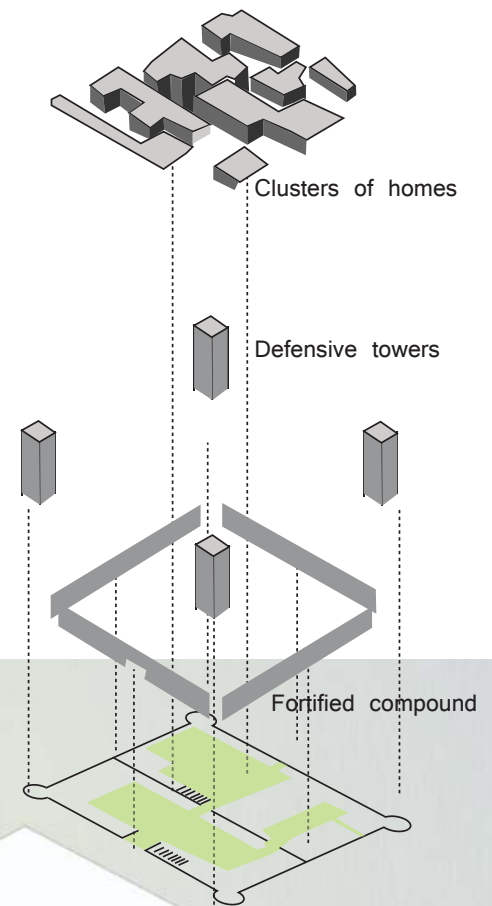
- Defensive towers: High building blocks (flats)

The new building blocks, which makes a unite boundaries complete, also defines the length of the parcels 'Mud walls'. Some units consist of more which also common in the old building typology.



- Clusters of homes

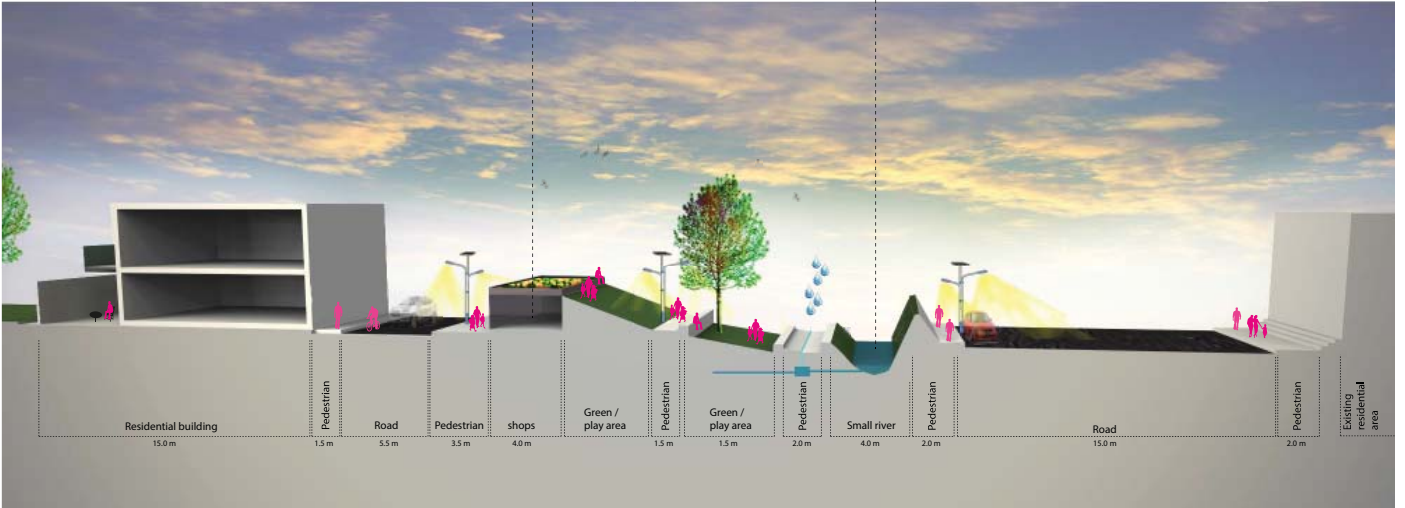
Translation: The green private garden


In the old typology the green area inside the Qala does not exists, but in the new typology it can provide a new ground for coherence and integration for a building unit.

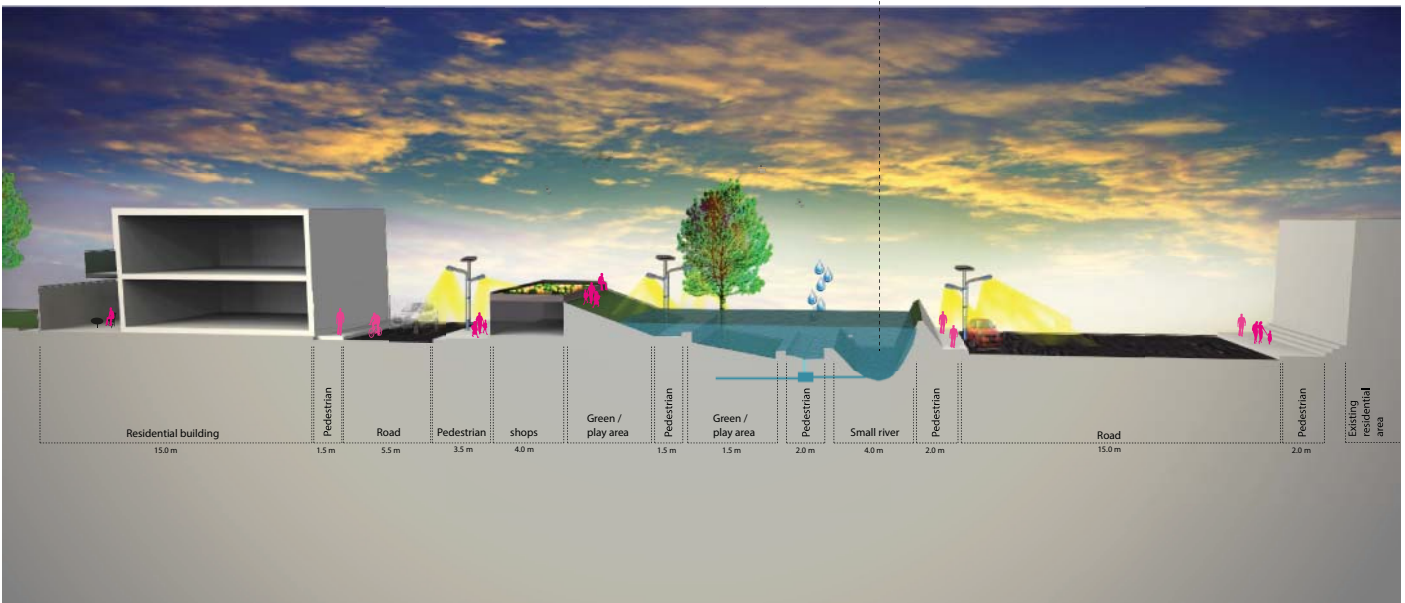


-  Flower gardens, which represents the carpet market of Afghanistan and also cultural values of the industry.
-  Beneath the flower garden, there are Shops for daily grocery.
-  Restaurant for recreation activities

-  An additional water way in order to enhance the water flow capacity
-  The dike provides also recreational activities.

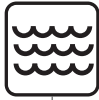


-  The dike can provide room for more water flow, in order to increase the capacity of Kabul River



Reference project





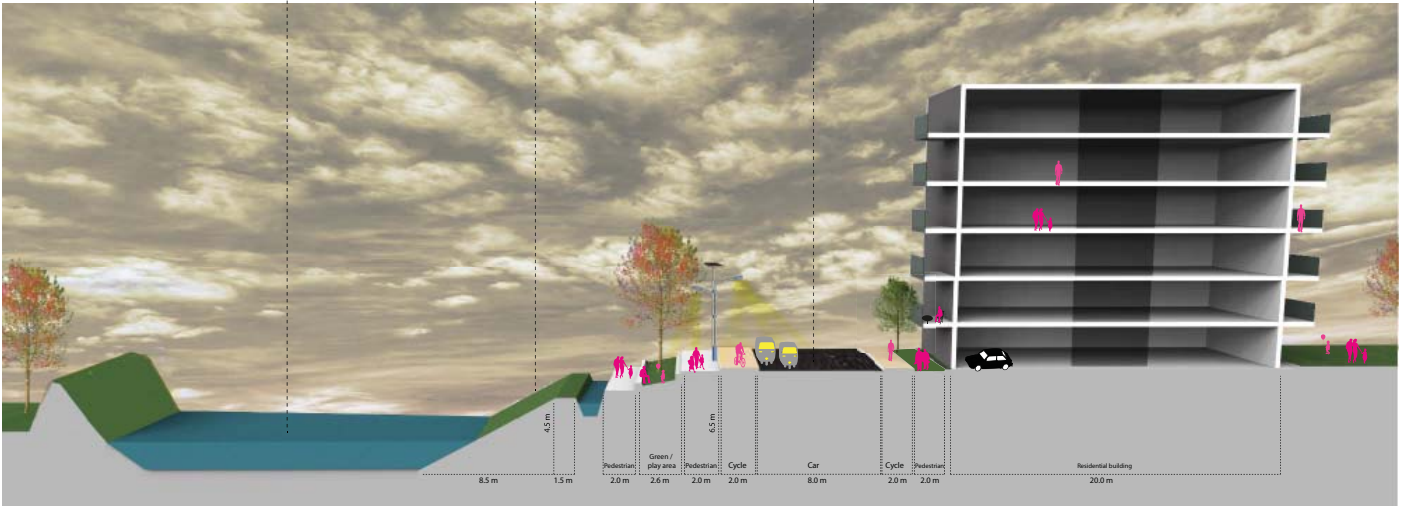
The dike can provide room for more water now, in order to increase the capacity of Kabul River



The dike provides also recreational activities.



The new infrastructural connection between inner city and other side of the mountain spine



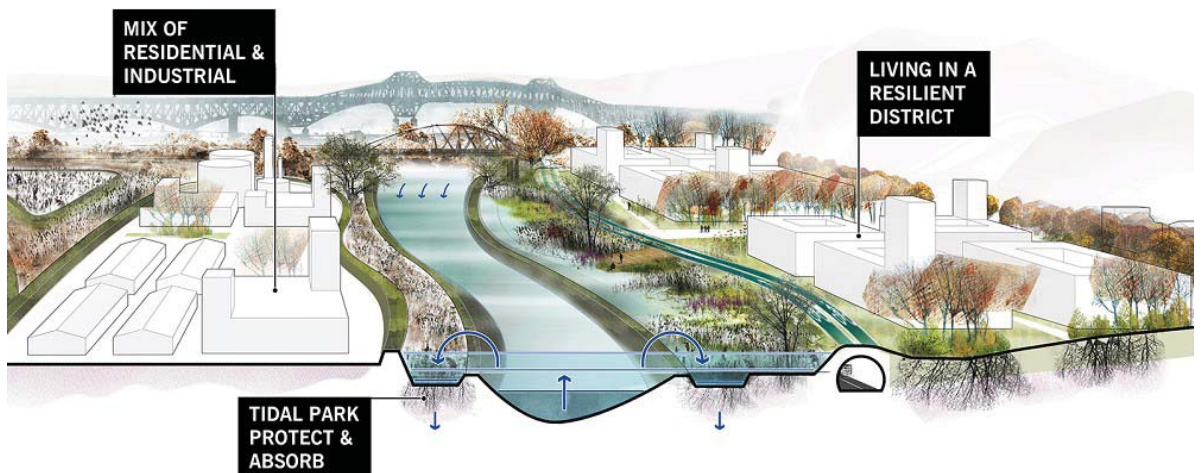
The dike can provide room for more water now, in order to increase the capacity of Kabul River



Green area works separation element between the road and residential areas



Reference project





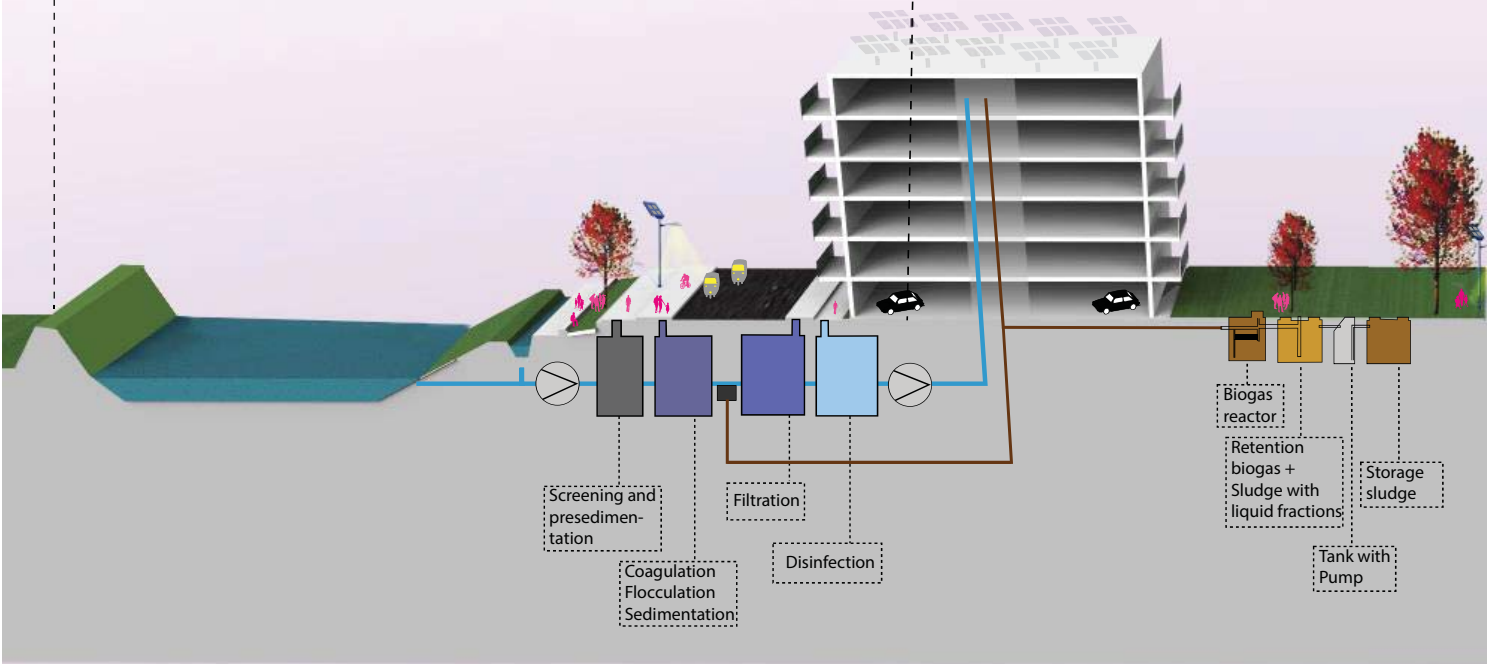
Zoo is also prevented from flooding



Designed typology
Each floor provides room for two families



Parking for the residents of the building



The sections are showing how the area and thus the dike provide room for water flow when there is need for it. The dike can also be used for recreational purposes, when the river water is low.

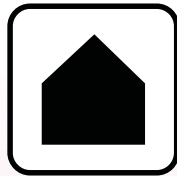
The river and also the dike provide the area to implement the water purification system in order to supply water for the new residents. This system can also be adapted for the illegal systems if there is funding for it. This system should be clarified further, but here we can see the integration of it with spatial design.

On the other hand the private green garden can provide room for installation of sewage treatment plant, because Kabul lacks sewer system supply.

This system is very suitable for this kind of development and areas such as Kabul. In the strategic site each unit can have its own sewage treatment plant beneath the green garden.

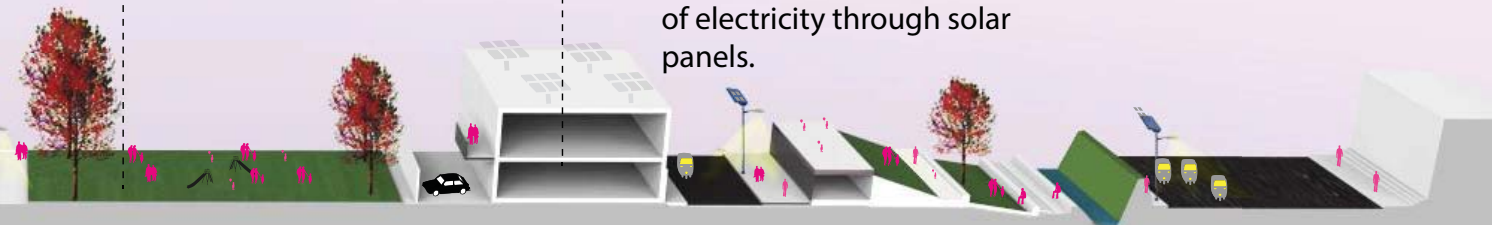


Private gardens for the residents of the area.



Residential plots for sale, The owner can decide about the architectural typology. The typology has its limits:

- Not higher than two floors
- The window and the balcony should not be at the side of the neighbour
- The architecture should also solve parking and 30% of electricity through solar panels.





In this illustration we can see the integration of all design elements on eye level. The free parcelling and apartment building have shading elements in order to provide more privacy from outside. On the street level we can see the stairs which provide access to the dike; beneath the dike we can see the shops for daily grocery.





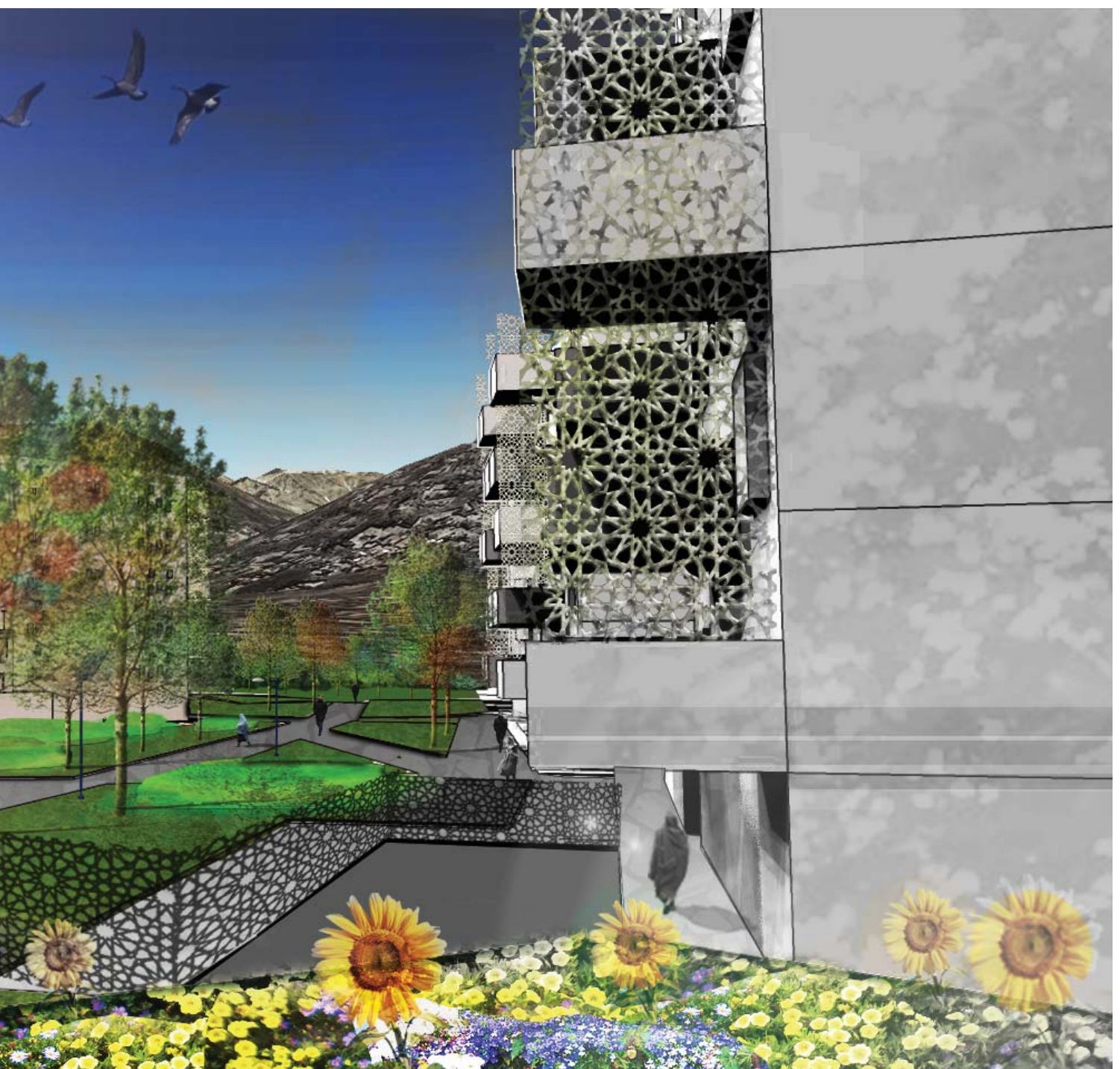
This illustration describes inside of one of the residential unit. The entrance of every dwelling is oriented toward the private garden. The residential buildings are also providing parking, which leaves the private garden free of cars and very safe for children to play outside and form a community and enhance social coherence between neighbours.

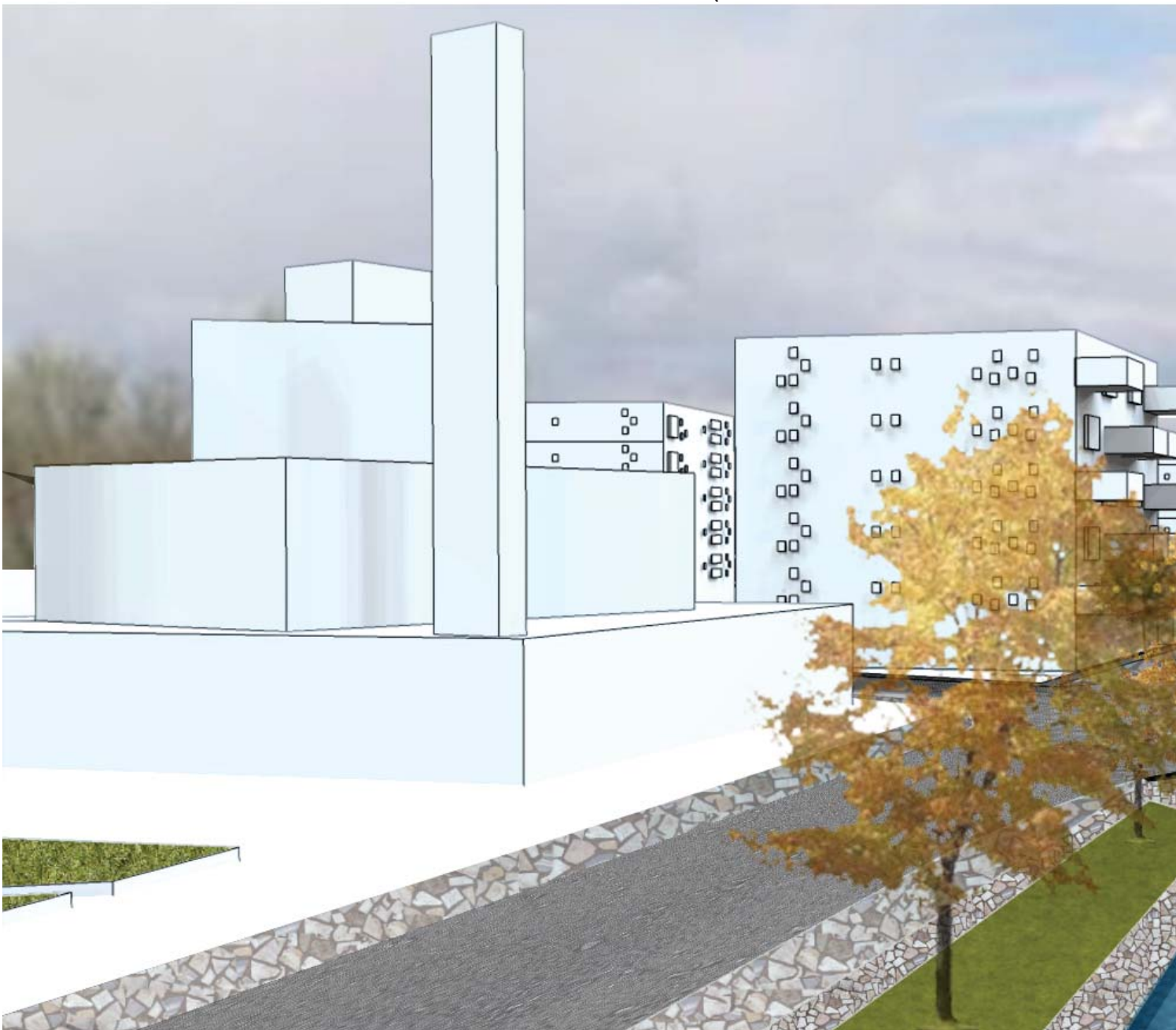
In the middle of the green garden we can see the building of sewage treatment plant, which is visible and this will increase awareness of the residents about their environment.





This picture illustrates the situation on top of the dike looking towards the public park. A portion of the flower terraces are visible as well, on top of the dike and the stairs which provides the connection between the green recreational dike and the public park. The public park do have a gate for maintenance and security, but still visible for the people. The apartment buildings are oriented towards the dike and public park, where the residents can enjoy the view.





This picture illustrates future situation for the waterfront, the dike as public domain and recreational place for the city residents and direct connection between the two public buildings.
The bridge is also a direct connection between the two sides of the river.



Implementation phasing

After mobilization of the stakeholders describe in phasing of the strategy, the first implementation phase can begin. The area should begin its consolidate its boundaries first through construction of the dike and the main infrastructural lines. On the second phase the two public buildings should be constructed

Users

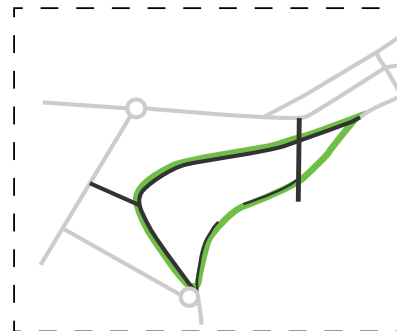
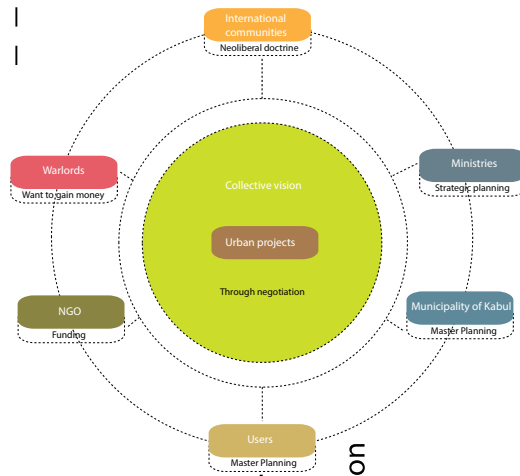
Warlords

International communities
Funding

NGO
Funding

Ministries
Funding

Municipality of Kabul
Funding



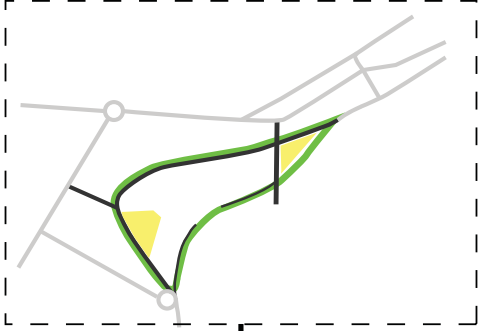
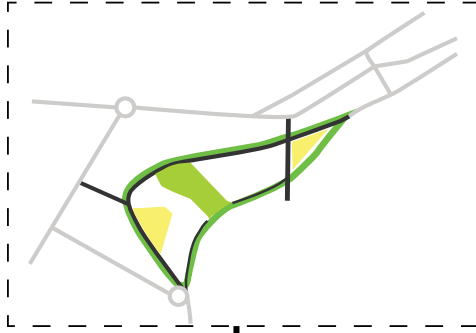
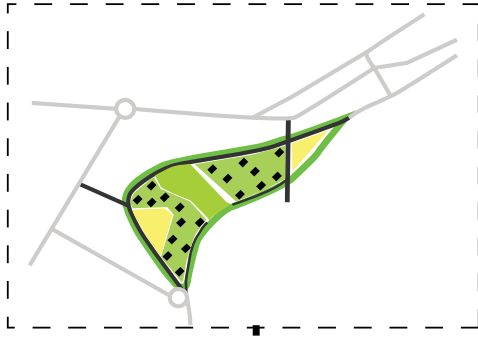
Stakeholders mobilization
And collective vision

Implementation of the dike
and the infrastructural lines

2015

2015

in order to make the city residents aware of the site. After implementation of the two public buildings, the public park can be constructed for recreational purposes of the city residents. This will make the site attractive for city residents to buy a plot or a house in the area. At last the buildings can be constructed.



Two important buildings should be implemented, in order to activate the area

Two important buildings should be implemented, in order to activate the area

Implementation of design flats, and thereby also selling the free plots

Evaluation and maintenance

2016

2017

2020

2020

REFLECTION ON PROJECT

My graduation research about Afghanistan Kabul brings back memories from my childhood, where I have experienced hardship and war in the 1990s. While reading about it has been some times emotional, but it has not stopped me from putting the actual facts on map. In this reflection I will reflect on the process of understanding the actual problem in Afghanistan, specifically in Kabul.

As a student with Eastern background in specific Afghanistan, it was easier to understand the situation and put the theoretical papers into its context. Nevertheless choosing a specific problem has become difficult and even more translating it spatially.

The first 4 months of my graduation project I have experienced struggle to comprehend the city of Kabul and its underlying mechanisms. After a while I have been introduced to very important people such as Architect Anne Feenstra, who has been a great help in pointing me towards the right direction. During the graduation process I have been also assisting a project called Assembling Afghanistan for three months; Jan Willem Petersen the initiator of the project has helped me understand the underlying mechanism of the current development while discussing the project of Assembling Afghanistan.

The overwhelming information only in written form about reconstruction of Afghanistan and my own experience has given my graduation project a slightly political and strategic focus. Without understanding the current political regime in Afghanistan, it is impossible to understand its current development. Recent urban planning projects in Kabul is revealing the interwoven relation of warlords with political interest, site plans without understanding of the cultural and morphological values of the site. The main objective of the recent development is only money making or even worse money laundry.

While processing this information, the most valuable lesson that I have learned is the multi layers of interest involved with urban projects in the developing countries in specific Kabul. As I mentioned above, I have an Eastern background, which was valuable in understanding the situation and problems, which I was aiming to solve. The aim is to explore potential solution for urban development of Kabul, while the Master plan seems too comprehensive and not realistic to implement for the current situations of Kabul city. The given solution in this graduation project seems reasonable, since it is incorporating the various stakeholders and problems. The given solution does not solve the overall problems of the city such as water issue, housing shortage, vulnerability, illegality and many more; nevertheless it does provide the first step towards a liveable, integrated, more important a negotiation platform for all the involved stakeholders.

REFERENCES

- Aziz, M. (2009). The new silk road Afghanistan, Gas pipe.
- Bertaud, A. (2005). Kabul urban development. Current city structure, spatial issues, recommendations on urban planning. Kabul: World Bank.
- Calogero, P. A. (2011). Planning Kabul: The politics of urbanization in Afghanistan. (Dissertation), University of California, Berkeley.
- DCDA. (2014). The New Master Plan - Strategic Plan. Retrieved 2-3-2014, 2014
- de Planhol, X. (2012). Kabul. Historical Geography. Fasc, 3(XV), 282-303.
- Deputy Minister Eng Amiruddin Salek (2013). [Urban planning policy for Kabul].
- Eberhard, K. (2004). The need for one "urban vision" and many 'Master plans". Paper presented at the Development of Kabul. Reconstruction and planning issues, Monte Verita, Ascona.
- Feenstra, A. (2010). Kabul's kitschy wedding cake architecture. Afghanistan analysts network.
- Giustozzi, A. (2009). The eye of the storm. Cities in the vortex of Afghanistan's civil wars (Vol. 62): Crisis states research centre.
- Grotzbach, E. (2011). Cities v. Modern urbanization and modernization in Afghanistan. Fasc, 6(V), 629-631.
- Hackenbroich, W., Bittner, R., & Vockler, K. (2010). UN urbanism. Kabul Mostar. Goegel Duitsland: Bauhaus.
- Khechen, P. M. (2012). Architecture and war. From Baghdad to Kabul. Les Carnets de L'Ifpo. Retrieved <http://ifpo.hypotheses.org/4232>, 8/1/2013
- Livingston, I., & O'Hanlon, M. (2012). Afghanistan Index. Also including selected data on Pakistan.
- McEwen, A., & Whitty, B. (2006). Land tenure. Water management, Livestock and the opium economy. European Commission.
- Ministry of Finance. (2012). Development cooperation report. Kabul: Ministry of Finance.
- MUDH, World Bank, & KfW. (2007). Water for Kabul. Extension of the water supply system of Kabul. Kabul.
- Najim, H. (2013). [War zone].
- Najim, M. H. (2014). Land Reconversion Strategy for Kabul urban development. (Master's degree), Urbanism. Delft University of Technology, Delft. (Francisco Colombo, Ir. F.F. ;Prof.Dr.ir. Arjan van Timmeren; Anne Feenstra; Prof. ir. Robert Brouwer; Deputy Minister Eng. Amiruddin Salek;)
- Noori, W. A. (2010). Challenges of traffic development in Kabul city. (Dissertation), Justus-Liebig-Universität Gießen, Gießen.
- Ohland, G. (2010). Delivering sustainable urbanism. A strategic land investment model. London: Beacon Press.
- Poole, L. (2011). Afghanistan. Tracking major resource flows 2002-2010. Conflict & the military.
- RECS intl, & Yec, J. V. (2010). Sub-project for revision of Kabul urban Master Plan.
- Samimi, M. A. N. (2013). Most townships built illegally across Afghanistan. Pajhwok News, <http://www.pajhwok.com/dr/node/204883>.
- Schetter, C., Glassner, R., & Krokhaile, M. (2007). Beyond Warlordism. The local security architecture in Afghanistan.
- Schubert, F. (2009). U.S. Army corps of engineers and Afghanistan's Highways 1960-1967: ASCE.
- Suhrke, A. (2007). Democratization of a dependent State. The case of Afghanistan CMI working Papers. Bergen, Norway: CHR. Michelsen Institute.
- Urban management support programme. (2012). Infrastructure development cluster. Urban management support programme.
- USAID. (2010). Availability of Water in the Kabul Basin, Afghanistan.
- Waldman, M. (2008). Failing short. Aid effectiveness in Afghanistan. In A. A. Series (Ed.).
- Wily, L. A. (2013). Land rights in crisis. Restoring tenure security in Afghanistan. AREU(Land tenure security in Afghanistan).
- World Bank. (2009). Scoping strategic options for development of the Kabul river basin. A multi-sector decision support system approach. Kabul: World Bank.
- Zarifi, Z. S. (2004). Losing the peace in Afghanistan. Human rights watch.