



Ain Shams University
Egypt

Contextualizing The Notion of Secondary Cities in Egypt

**A Thesis submitted in the Partial Fulfillment for the
Requirement of the Degree of Master of Science in Integrated
Urbanism and Sustainable Design**

**By
Rana Assem**

Supervised by

Prof. Dr. Mohamed A. Salheen

Professor of Integrated

Planning and Design

University of Ain Shams

Prof. Marwa Abdellatif

Professor of Urban planning

and Design

University of Ain Shams

Contextualizing The Notion of Secondary Cities in Egypt

A Thesis submitted in the Partial Fulfillment
for the Requirement of the Degree of Master of Science
in Integrated Urbanism and Sustainable Design

by Rana Assem Mohamed Radwan

Supervised by

Prof. Mohamed A. Salheen
Professor of Regional Planning
Ain Shams University

Prof. Marwa Abdellatif
Associate professor of Urban Planning &
Design
Ain Shams University

Examiners Committee
Title, Name & Affiliation

Prof. (external examiner)
Professor of (...)
University of (...)

Prof. (Title/Name)
Professor of (...)
University of (...)

Prof. (Title/Name)
Professor of (...)
University of (...)

Prof. (Title/Name)
Professor of (...)
University of (...)

23/08/2020

Disclaimer

This dissertation is submitted to Ain Shams University (ASU) for the degree of Integrated Urbanism and Sustainable Design (IUSD), in accordance to IUSD-ASU regulations.

The work included in this thesis was carried out by the author during the period from February – August 2020.

The author confirms that the work submitted is his/her own and that appropriate credit has been given where reference has been made to the work of others.

Any disputes regarding the copy right of the content is the sole responsibility of the author.

Ain Shams University holds the right to publicly distribute this thesis in the current university standard format. The author holds the right to publish the content in any other format.

23/08/2020

Rana Assem

Signature

Acknowledgements

First, I would like to thank my respected supervisors, Prof, Mohamed Salheen and Dr. Marwa Abdellatief, for their continuous support, guidance and immense knowledge. Your guidance and insightful arguments helped me develop my logic and turning my topic of interest into an actual possible topic of research.

I would like to acknowledge each and every professor in both IUSD Ain shams and IUSD Stuttgart. Being a part of IUSD has given me the opportunity to meet such great people and experience many different things that helped widen my knowledge and totally change my perspective.

I want to thank my family and friends for their continuous support and always pushing me forward. A very special thank you for Merna Amr, for her assistance and getting me through the final days of this work. Last but not least, many thanks to my dear friend Dina Alaa. My companion on IUSD journey, whom without her everything would be hundred times harder. Cheers to our future selves, may they be proud of us now.

Finally, I must express my gratitude to my husband to be and lifetime partner, Nagib. Thank you for always being there, your non stoppable encouragement, your patience, your mental and emotional support. This would never be possible without you.

Abstract

Regional inequality has always been a great challenge facing Egypt. The concentrated urban growth in Cairo and the Nile valley is constantly attracting population and investment, leaving the other regions underdeveloped as well as pressuring the resources and infrastructure in the areas of concentrations. The regional inequalities significantly increased in the last decades, specially due to the preeminence of the greater Cairo Metropolitan area, as one of the largest and important world`s cities. Various efforts are carried by the Egyptian government aiming to achieve balanced development all over the Egyptian regions. Although political events can strongly affect the development plans, but the de-concentration strategy is one of the continuous aims for modern Egypt despite the different political directions.

This research focuses on only one of the regional development strategies. The construction and promotion of secondary cities development. Many countries recently are giving attention for secondary cities development. As an alternative approach for de-concentrated urbanization and population diffusion. Secondary cities can vary significantly according to the context, but they play vital roles economically, socially and physically.

This study investigates the role of secondary cities in achieving regional development. As well as applying the notion of secondary cities in the Egyptian context. Exploring the different hierarchies, scales and functions of the Egyptian cities in order to correctly articulate the notion and benefit from applying it. As well as having an overview on the different regional development interventions in Egypt and how they might have adopted secondary cities development strategy. Narrowing down the focus of the study to the case of new Alamein city and how can this secondary city affect the development of the north west coast Region.

Keywords: Secondary Cities, Regional inequalities, Urban primacy, Regional Development, North West Coast of Egypt, De-concentration

Contents

Disclaimer.....	2
Acknowledgements	4
Abstract.....	6
Abbreviations.....	14
 CHAPTER 1 INTRODUCTION	 16
1.1. Introduction.....	16
1.2. Research Objectives	17
1.3. Research Questions.....	17
1.4. Research Methodology	18
1.5. Research limitations	21
1.6. Research Structure.....	22
 CHAPTER 2 REGIONAL DEVELOPMENT	 26
2.1. Introduction.....	26
2.2. Region Definition	27
2.3. Regional Inequalities	27
2.4. Urban Primacy	29
2.5. Regional Development	31
2.6. Policy responses to secondary cities development	35
2.6.1 Decentralization and Devolution Policies.....	35
2.6.2 Spatial Planning Policies	36

CHAPTER 3 SECONDARY CITIES.....	40
3.1. Introduction.....	40
3.2. Defining secondary cities	40
3.3. Hierarchy of cities.....	42
3.3.1 Global hierarchy of cities.....	43
3.3.2 National Hierarchy of cities.....	45
3.4. Typology of secondary cities.....	46
3.4.1 Subnational Secondary Cities	46
3.4.2 Metropolitan Secondary City Clusters	47
3.4.3 Corridor Secondary Cities.....	47
3.5. Importance of secondary cities.....	48
3.6. Challenges of secondary cities development	48
3.7. Secondary cities development approaches	49
3.7.1 Governance and Decentralization.....	49
3.7.3 Competitiveness of Secondary Cities Development	50
3.7.4 Tapping into and Developing Latent Capital.....	50
3.7.5 Rectifying the Imbalances in Systems of Cities	51
3.7.6 Getting Urban Systems Integrated and Flowing	51
CHAPTER 4 SECONDARY CITIES IN EGYPT	54
4.1. Introduction.....	54
4.2. The Egyptian context.....	54
4.3. Working definition of secondary cities	58
4.4. Choosing potential secondary cities in Egypt.....	59
4.5. Defining characteristics of secondary cities in Egypt	62
CHAPTER 5 REGIONAL DEVELOPMENT IN EGYPT.....	66
5.1. Introduction.....	66
2.2. The 50s and the 60s.....	67
5.3. The 70s.....	68

5.4.	The 80s and 90s	71
5.5.	The 2000s	73
5.6.	After 2011	74
CHAPTER 6 CASE STUDY: NEW ALAMIEN CITY AND THE NWC REGION.....		80
6.1.	Introduction.....	80
6.2.	The North West Coast of Egypt	81
6.2.1	Location	81
6.2.2	Background	82
6.2.4	Administrative and planning.....	83
6.2.5	Previous development attempts	85
6.2.6	Current development plans.....	86
	National plans	86
	Regional and local plans.....	86
6.3.1	Size and location	88
6.3.2	Planning approach and design.....	88
6.3.4	The impacts of New Alamién city.....	91
	Regional scale.....	91
	National scale	91
	International scale	91
CHAPTER 7 CONCLUSION.....		94
7.1.	Overview	94
7.2.	Main Findings	96
7.3.	Recommendations	97
7.4.	For further research.....	98
References		102

List of Figures

Figure 1: Matster`s Thesis Structure	23
Figure 2: Top Populated Cities in Egypt.....	31
Figure 3 : Regional Development Approaches	33
Figure 4: Growth Pole Theory.....	34
Figure 5: Hudson`s Downward Diffusion of Development.....	35
Figure 6: Types of Urban Hierarchy	43
Figure 7: Linking size,function and national hierarchy of cities	46
Figure 8: Egyptian Economic Regions	56
Figure 9: Administrative hierarchy in Egypt	57
Figure 10: Population ranking for egyptian cities.....	59
Figure 11: Proposed city profile for egyptian cities	64
Figure 12: The emphasized polarization of Cairo during the 60s	68
Figure 13: New Map Policy of Egypt.....	70
Figure 14: 1st generation of new cities.....	70
Figure 15: Three generations of new cities	72
Figure 16: Priority development areas	75
Figure 17: Strategic National Development Plan 2052	76
Figure 18: 4 Generations of new cities	77
Figure 19: Alexandria Region.....	82
Figure 20: Administrative units for Matrouh governerate	84
Figure 21: NWC developmnt sectors	84
Figure 22: General plan for New Alamien city	90

Abbreviations

CAPMAS	Central agency for public mobilization and statistics
NWC	North West Coast
GDP	Gross domestic product
NUCA	New Urban Communities Authority
GOPP	General Organization for Physical Planning
GaWC	Global analysis of World Cities
UNPD	United Nations Procurement Division
UN-HABITAT	The United Nations Human Settlements Program
UNU-CRIS	The United Nations University Institute on Comparative Regional Integration Studies
IMF	International Monetary Fund

Chapter 1

Introduction

1.1. Introduction

Egypt is witnessing an uncontrolled population boom in the last decades, with an average population growth of 2.33% over the past 60 years according to CAPMAS. Along with the political changes and urban trends the country is facing many urban challenges. The rapid urbanization, rural –urban migration, increased poverty and the uneven population concentrations are sample of the challenges Egypt is dealing with right now. These challenges are also the reason behind the emergence of a new double-edged urban challenge, which is the primary cities.

Cairo, the capital of Egypt, and Alexandria are the primate cities in Egypt. Which means that they are the major cities that works as the financial, political and population centers of the country (Goodall,1987). Additionally, the metropolitan area of greater Cairo is one of the largest megacities around the world, playing a significant role in the global context. The significance of these two cities makes them the attraction poles to investments, development and a destination for immigrants. Leaving other cities, especially medium and small cities, with low chances for any kind of development and investment. As a result, a strong regional disparities and inequalities can be noticed in the Egyptian context. The regional inequality in Egypt can be primarily manifested

in the huge gap in the human development index between the different regions, as well as the service provision and GDP per capita.

On the other hand, secondary cities development is recently supported by many agencies and organization, especially after the issuing of HABITAT III.

“Secondary cities play an important role in the urban and economic structure of their subnational regions. Many play important roles as engines for national and regional development, which occurs despite the concentration of a significant amount of economic activities being concentrated in one or more primary cities.” (Roberts, 2014). Both primary and secondary cities are integrated in one national system of cities which is a part of the wider picture and integrated in the global system of cities. Secondary cities development and prosperity has a direct impact on the whole national development and an efficient secondary cities system has the potential to double the country`s GDP (Cities alliance).

1.2. Research Objectives

This thesis aims to investigate the application of developing secondary cities system as an alternative approach for regional development in Egypt, focusing on the north west coast. This can be achieved through developing a deeper understanding of the secondary cities in the Egyptian context. An attempt to find a working definition with the different typologies and characteristics of the secondary cities in Egypt and exploring the development approaches adopted by the country that might foster secondary cities development. With a more focused investigation on a subnational secondary cities system in one Egyptian region, the north west coast, and how can this system work towards increasing the regional economic competitiveness and achieving a more balanced national system of cities.

1.3. Research Questions

- a- What are the reasons behind regional inequality?
- How to overcome regional inequality?

- Which regional development policies promotes secondary cities development?
- b- What are the characteristics of secondary cities?
- What is the role of secondary cities development to overcome the regional inequality?
- What are the different approaches for secondary cities development?
- c- How to find a working definition of secondary cities in Egypt?
- What are the potential secondary cities in Egypt?
- How to differentiate between the different cities in Egypt?
- d- Does the national regional development planning in Egypt foster the concept of secondary cities development?
- How did the previous regional development attempts in Egypt deal with secondary cities concept?
- e- How can New Alamien city affect the development of NWC region?
- What are the previous development attempts of NWC region?
- What are the main planning objectives of new Alamien city?

1.4. Research Methodology

In order to address the research questions a proper research methodology is used based on literature review and case study approaches. A theoretical background on regional development and secondary cities is developed as the base of the research argument. To achieve the theoretical background an extensive literature review is done on the following aspects: regional inequality, regional development approaches, secondary cities definition, typologies and regional development attempts in Egypt. The literature review is based on both secondary and primary sources of data. Secondary sources of data include:

- Books
- Scientific articles
- Laws and official statistics

- Reports of the strategic national plans, strategic urban plans of some Egyptian cities and economic reports
- Academic research papers and theses
- Websites and national newspapers

Primary sources of data include a series of interviews and field observation. The interviews are mainly conducted related to the part of the case study.

Interviewees include region residents, cities officials and representatives of local administration of different cities in the region of the case study.

For regional development, literature review is done focusing on the following aspects:

- Definitions of a region
- Regional inequalities and their reasons
- Urban primacy
- Regional development approaches

For secondary cities, literature review is done addressing the following aspects:

- Different definitions of secondary cities
- Secondary cities typologies and characteristics
- The challenges facing secondary cities
- Secondary cities development approaches

Having done that, a working definition of secondary cities is formulated to be used within this research with key defining elements that can be addressed and applied in the Egyptian context.

In order to use the term secondary cities in the national and regional settings, the theoretical background defining secondary cities, achieved from literature, is used as a framework for the quantitative and qualitative data needed to identify the secondary cities in Egypt such as:

- Population (per markaz and villages) from CAPMAS

- The detailed administrative hierarchy of the Egyptian governorates from ministry of local development
- Population and economic activities from CAPMAS
- Economic reports on the different cities from ministry of planning and economic development.

Accordingly, a list of the potential secondary cities with various sizes and functions and typologies will be ready for further analysis along with the national strategic plans for these cities.

In addition to, developing a set of defining characteristics for secondary cities in Egypt based of the international characteristics. Using them as a city profiling for each city. The city profiling is divided into 3 main sectors: demography, economy and quality of life

In order to understand the Egyptian planning strategy and how the government is dealing with regional inequalities, a comprehensive analysis is needed on the Egyptian regional planning attempts. Thus a literature review is done addressing the following:

1. Background on the major events on Egypt and their effect on the spatial regional plans
2. The current strategic national plan and development vision
3. The regional development attempts in the case study region

Also investigating the involvement of the non-governmental and international organization of such projects aiming for regional development. With a special focus on how these different interventions adopted secondary cities construction or development. This will be achieved through a close analysis for Egypt`s development vision 2030 and The Egyptian national plan 2052.

Narrowing it down to the case study which is the new Alamien city in the north west coast region Egypt. With the assistance of *urban development strategy for coastal frontiers: the north west coast region* issued by GOPP, a clear

understanding for the region, its assets, resources, limitations, previous development attempts and the current development plan can be reached. In order to conduct the research work for this case study field studies are of a significant value, in which site visits to the region will take place to experience the reality of the region, investigate the progress of the development plan and inquire whether the expected objectives can be met or not. During the field visit several techniques of inquiries are used such as on site documentation and interviewing the local residents, development projects workers and the city officials.

1.5. Research limitations

At the beginning of the thesis it is essential to mention some of the limitation occurred during the research period such as:

- The Spread of coronavirus: The World Health Organization declared the outbreak of the COVID 19 diseases as a pandemic on 11 March. Which is considered the largest limitation for the research, as it was a life threat for any data collection visits, interviews or follow up meetings with the supervisors. As well as a complete lock down for all the governmental offices in Egypt for 2 weeks and the strict curfew timings which halted the research process. As a solution, I tried to find an online alternative for all the site visits, interviews and data collection needed as possible.
- The official Census definition of urban areas in Egypt is highly affected by the administrative division. Which gives inaccurate results and indicators on the actual situation and real urbanization.
- The Egyptian discourse on the different functions and roles of cities is underdeveloped or nearly nihilistic. There is no official document differentiate between the different types and sizes of human settlements other than the population size.
- Some of the data needed for the city profile are not available at the level of the city. Especially the economic related data, available only on the

governorates level .it needs a deeper analysis to reach the data on the city level.

- Limited time availability to apply the city profile method on different potential secondary cities with the purpose of comparing between the different cities, in order to know their strength aspects and the aspects that need development.
- The NWC region boundaries can be somehow confusing, due to the conflict between different development plans issued by different authorities for the same region.as well as the development objectives and the power authority of the different plans.
- The choice of the case study as a new city was quite a limitation because of two reasons. The first reason is that new cities are the most common tool for the government to promote and adopt the concept of secondary cities, instead of developing an existing city. The research tried to choose a case study that connects the state`s strong direction towards new along with taking into consideration the old existing city base. The second reason is that new Alamien city is still under construction, which gives a lot of area for predictions and assumptions without knowing the exact outputs of the city development.

1.6. Research Structure

The thesis can be divided into three main parts: a theoretical background, the Egyptian context and the case study part, these parts are followed by a general conclusion. The structure is illustrated in the following diagram:

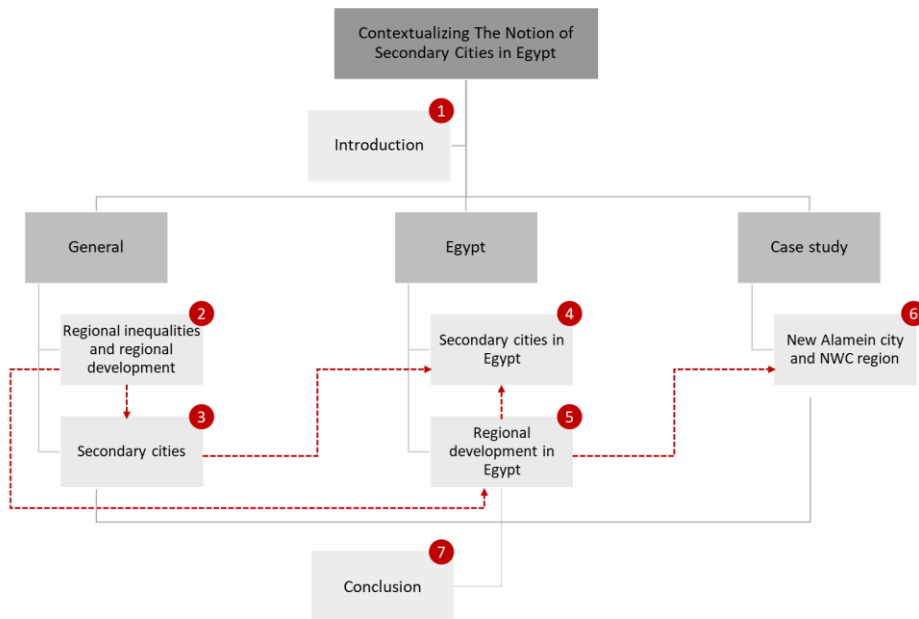


Figure 1: Matster`s Thesis Structure

The theoretical background consists of two chapters. chapter two: Regional Development, the aim of this chapter is to have a proper background on the regional inequalities and the different regional development approaches, as an introduction to situate the secondary cities promotion within the field of regional development. Chapter three: Secondary cities, where the main purpose is to understand the characteristics of secondary cities, their typologies and their development approaches. In order to come up with defining characteristics that can be applied in the Egyptian context.

The Egyptian context part consists of two chapters as well. Chapter four, secondary cities in Egypt, relying on the findings of chapter three. This chapter tries to find a working definition for the secondary cities of Egypt, using the qualitative and quantitative data of the Egyptian cities to list the secondary cities in Egypt with their different typologies. Chapter five, regional development in Egypt, aims to have a proper background on the regional developments attempts in Egypt. Analyzing how the previous and current regional development plans might foster the promotion of secondary cities.

The last part consists of only one chapter, chapter six, zooming in to one Egyptian region as a case study. The case study region is the north west coast in Egypt. The chapter will discuss the reasons behind choosing this region and providing a proper background on the region as an introduction. Followed by a deeper understanding of the urban network of the region and the current development plans. Ending with highlighting the possible potentials for secondary cities development that can upgrade the regional economic competitiveness, with reference to the international approaches of secondary cities development discussed in chapter three.

The three parts are followed by a general conclusion chapter, chapter nine, concluding the discussed topics, the findings and recommendations on the national level related to the promotion of secondary cities in Egypt.

Chapter 2

Regional Development

2.1. Introduction

The main aim of this research is to investigate the role of secondary cities in regional development. Regional inequalities and disparities between different regions are growing significantly, whether sub national or cross borders regions. Which urges the world to address these inequalities with various regional development strategies and theories. Thus it is essential to have a proper understanding of regional inequalities, as well as a brief overview on the different approaches of regional development. In order to articulate the promotion of secondary cities as one of the development strategies before proceeding to understand the secondary cities and their development approaches in the next chapter.

A comprehensive literature review is used in this chapter, in order to define the meaning of a region and the regional urban system and its components. The chapter then discusses regional inequalities as they are the main catalyst for regional development interventions, mentioning the main possible reasons of inequality. Followed by establishing a theoretical background on the different regional development approaches, with a special focus on the spatial de-concentration strategies, situating how secondary cities development are embraced in these approaches.

2.2. Region Definition

As a starting point to understand regional inequalities and regional development strategies, we have first to understand what is the region. The term region can vary in definition according to the audience, the field of study or the context it is used in. Generally, the region is a physical geographical area with certain characteristics that distinguish it from its vicinity, these characteristics differs according to the different fields and perception. The region can be defined by geographical, economic, social and cultural characteristics. All these different types of regions have in common the physical aspect, as all regions types require some kind of borders. As cited in (Serag, 2008) UNU-CRIS addressed the region from a spatial administrative point of view. They provided three main categories of regions as follows:

- A micro-region: which is a local area smaller than the state to which it belongs, but larger than a municipality
- A cross-border Region: which is a special case of micro-region, where the micro-region spreads across different states.
- A macro-region: which is a coherent territory composed of two or more states (International Region).

The scope of this thesis is discussing the disparities between micro regions and how national regional development plans can address these inequalities. Further in chapter 6, Egyptian administrative regions will be illustrated and how the national development plan is addressing each region with a focus on the north west region where the case study is.

2.3. Regional Inequalities

Regional inequality is a significant challenge facing governments all over the world. Such inequalities threaten national stability and social unity. Some

developing countries are suffering from regional inequality as a continuing result of colonialism. But regional inequalities can also be strongly noted in developed countries. Although the European union is one of the largest and economically strongest regions in the world, it shows serious economic imbalances and uneven spatial development (European Commission , 1999).

Doreen Massey relates regional inequality to historical processes, as regional inequalities have always been there. She elaborates that regional inequality is an unequal degree of attractiveness of a particular area to the dominant form of economic activity (Massey, 1979). It can be strongly manifested in various indicators such as social wellbeing, per capita income, employment rate and infrastructure services.

Regional inequities have different reasons and impacts from country to country and from region to region. Although regional inequalities depend on contextual factors and characteristics, UNDP grouped the contextual factors affecting regional disparities into two groups as follows:

- ‘Hard’ contextual factors that can hardly change. These includes the initial factor endowments available to a country, its geographical location and climate.
- ‘Soft’ factors which relate to policies and development programs made by governments, and the incentives facing individuals and their consequent behaviors.

On the other hand, Massey argues that these ‘hard’ factors are historically relative. These factors will change on the long run due to two reasons. Firstly, the change of the geographical distribution of the requirements of the production, the population or the resources. Secondly, the change of the pattern of spatial inequality as a result of changes in the production requirements (Massey, 1979).

2.4. Urban Primacy

As secondary cities are a level of the cities hierarchy whether in the national or global hierarchy of cities, it is crucial to understand how did this hierarchy emerged. In order to promote the development of second tier city we have to analyze what is the first or the primary level city is. especially when the concept of primacy is one of the direct reasons and also a consequence of the inequality gap between the different cities.

In most of the countries, the largest city is at least twice as large as the next city. Urban primacy, in one hand may be a natural phenomenon representing national unification. On the other hand, it's a physical manifestation of regional imbalance. The phenomenon of urban primacy has always been observed and studied under different names. It was first introduced by this name by Mark Jefferson who defined urban primacy as a general law that: "a country's leading city is always disproportionately large and exceptionally expressive of national capacity and feeling" (Jefferson, 1939).

Primacy is not limited to a country's seat of government, it's rather defined as the preeminence of a city in economic, social, and political affairs (Meyer, 2019). The emergence of primary cities is caused by many forces or various of these forces act together. Economics is one of the most effective factors in urban primacy phenomenon. High concentration of economic activities in one city can be both a cause and an effect of urban primacy (Seyed J. Faraji, 2016). Socially, Cities' population doesn't only grow as a result of the excess of births over deaths, but the main reason is the excessive migration from rural areas to metropolitan cities. Others, such as Mirabeau, relate the emergence of primary cities to the political dimension, due to the concentration of power and administration in the central governments. Such extraordinary degree of power and authority draws everything else towards it.

The political, demographic, and economic primacy of a capital city would arise normally, with no efforts to discourage it. The city starts to grow larger than any

other in its country, reinforced by the benefits of a large city for large-scale production, accessibility to buyers, and innovation through the clustering of talent and skill (Meyer, 2019). In earlier centuries, primacy was celebrated. As primary cities contributed in countries unification, heightened national prestige and increased the knowledge, intelligence and skills of the population.

Nowadays, in the era of globalization, the world is witnessing a dramatic increase in mobility and information technology. Consequently, urban primacy should be reconsidered. A balanced distribution of population and resources is a must, after primacy and centralization have shown many disadvantages on the various aspects, economically, socially, culturally and politically. The dominance of one large city attracts all the investments to it, causing commerce and manufacturing in the provinces to languish. Placing the entire country under the mercy of one city, threatening the national stability. Urban primacy has many advantages and reinforces national identity, yet it should be limited and managed. In other words, the bigger the primacy is than its optimal size, the more its negatively it impacts the economic growth. As the absolute dominance of a city widens the gap between regions resulting in regional inequalities and disparities.

In the case of Egypt, Greater Cairo is the largest metropolitan area in Egypt, the Middle East and Africa. It occupies the top of the urban hierarchy of Africa. Greater Cairo metropolitan area is four times larger in population than the next largest city in Egypt, Alexandria as shown in figure 2.

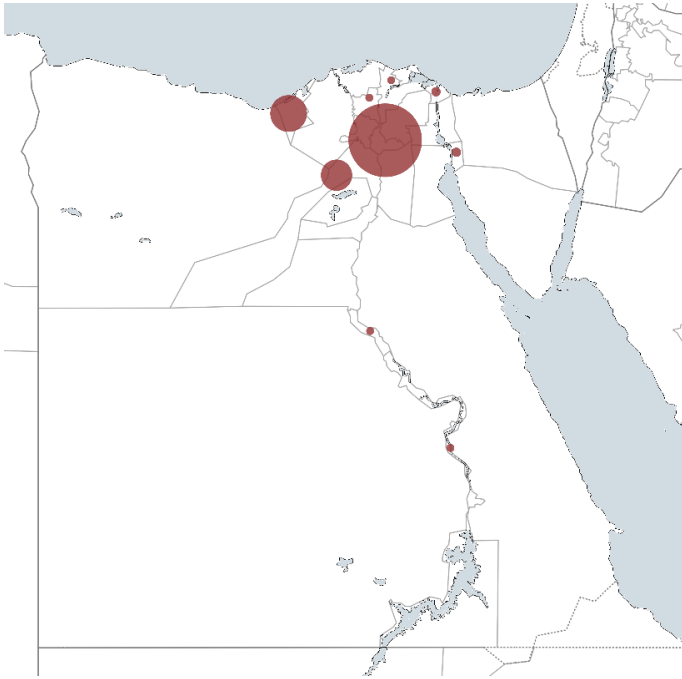


Figure 2: Top Populated Cities in Egypt

2.5. Regional Development

The main reasons behind regional development theories and strategies are to alleviate regional inequalities and lessen the gap between different regions, as well as reinforcing already strong regions to maintain their competitive capabilities. As the main aim of this research is to approach the promotion of secondary cities as a strategy for the regional development in Egypt, it's essential to have a proper understanding on the different approaches of regional development. A brief theoretical background on regional development approaches is important to be used as a framework to analyze regional development attempts in Egypt, moreover to articulate the promotion of secondary cities within the regional development theories and strategies context.

The coming illustration briefly overviews the two different approaches of regional development incorporating both their theories and strategies as discussed by Serag (2008) .

As shown on the figure, the different regional development theories and strategies can be generally grouped into two main approaches. The two approaches significantly vary in the used tools and interventions, but they both eventually aim to overcome regional inequalities and lessen the gap between the different region. The *Top-down* approach of development is mainly determined by the government or higher authority, advocating strong urban and economic development in specific locations. In which this development will consequently spread and benefit other areas. On the other hand, the *Bottom-up* approach follow a different paradigm of development. The bottom up development paradigm criticize the modest results of *top - down* development attempts and argues that the *top - down* development approaches achieve economic growth without development. Therefore, the bottom up paradigm adopt an alternative approach of development based on the satisfaction of basic needs, economic and social mobilization and local empowerment. There is no one recipe for the bottom up development approach, mostly it should include participatory development and collaborative planning, the involvement of civil society, stressing on good governance, capacity building and the empowerment of new groups of stakeholders.

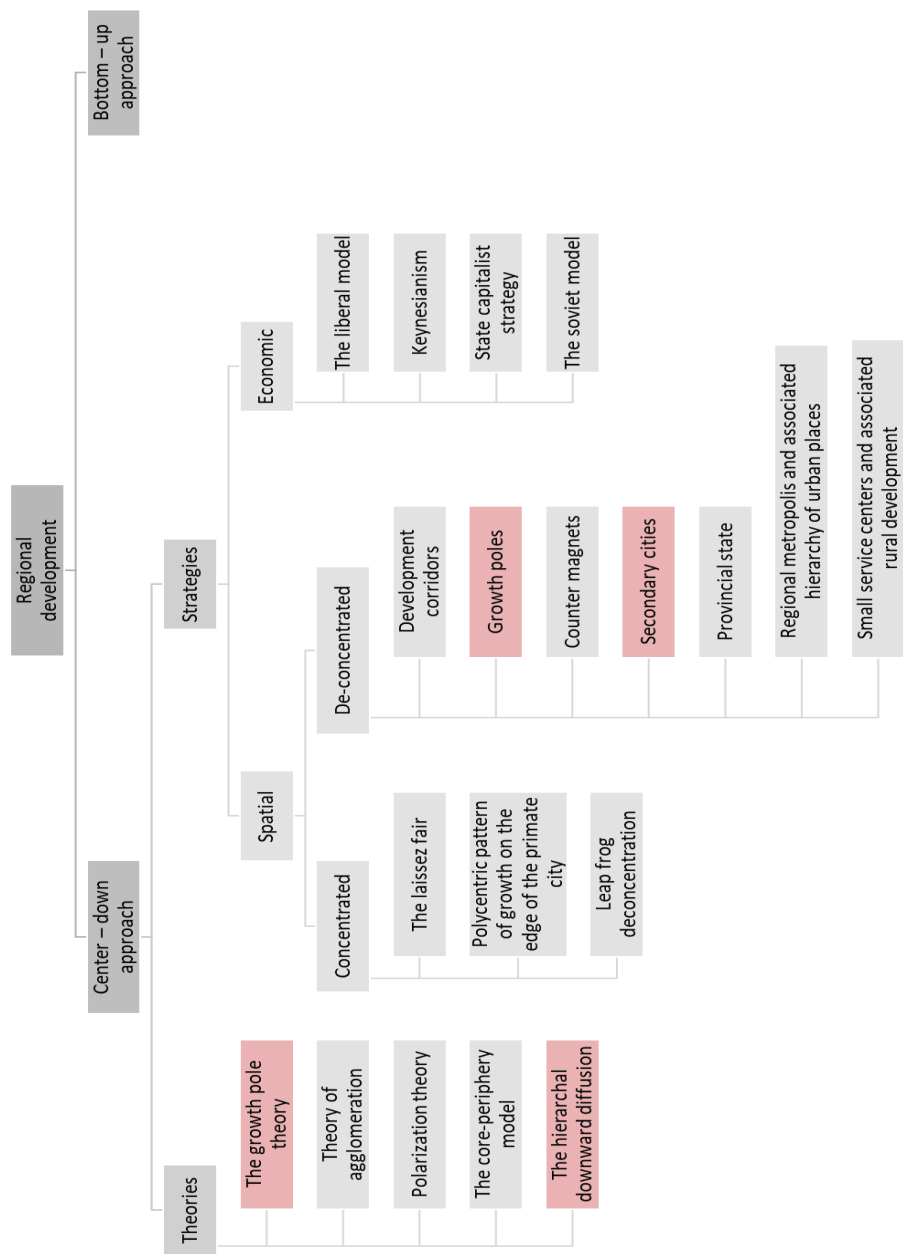


Figure 3 : Regional Development Approaches
Developed by author based on (Serag, 2008)

Regardless the variance between the results of the two approaches, as highlighted in figure 3 we can notice that the promotion of secondary cities development is a strong direction for the top down approach. This direction can be observed in the following theories and strategies:

- **The growth pole theory:**

The main concept of growth pole theory, which was first generated by Perroux, is that economic development or growth is not uniform over an entire region, but it's rather around a specific pole. This pole is mostly characterized by a key industry, which will consequently impact the surrounding directly or indirectly.

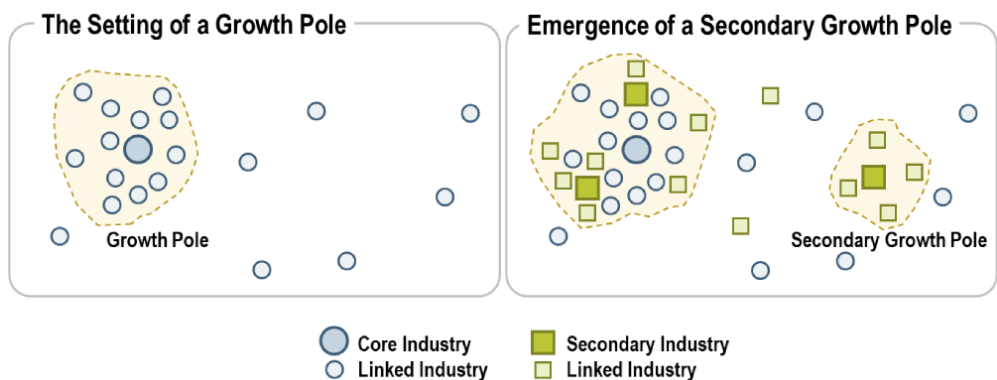


Figure 4: Growth Pole Theory

- **The hierarchal downward diffusion theory:**

This theory adopts the establishment of new urban centers and secondary cities in order to fill the gap in the hierarchal system and make it more coherent through which the development can spread.

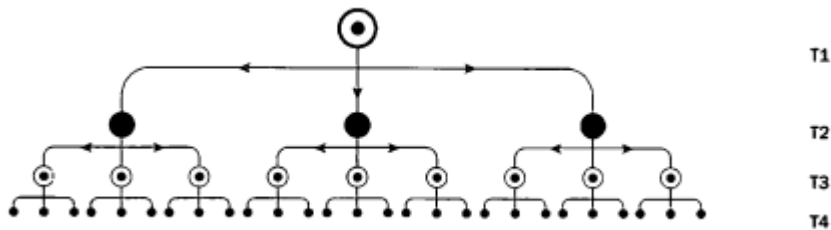


Figure 5: Hudson`s Downward Diffusion of Development

- **Deconcentrated spatial strategies:**

De-concentration strategies aim to approach the national regional inequalities through the distribution of population, investment and economic activities, Strategies such as the establishment of growth poles and the promotion of secondary cities are obviously a direct focus on secondary cities and their importance.

2.6. Policy responses to secondary cities development

Figure 3 illustrates the different regional development approaches, in order to assist building a proper understanding for the general theories and strategies. This part narrows it down to focus on the approaches and initiatives carried by governments to support secondary cities development. These approaches can be discussed briefly as illustrated by Roberts (2014) as follows:

2.6.1 Decentralization and Devolution Policies

Political and governance system are the most influential factor in the development ideologies of countries. Many countries choose to decentralize government and localize the decisions concerning development, as the ability to control and manage development is best conducted locally.

2.6.2 Spatial Planning Policies

A wide range of spatial planning interventions carried by different countries to foster secondary cities development, such as

- **New Towns**

The idea of building new town is not new, it exists since the romans. In the 50s the development of new towns started around large cities, such as Paris and London, aiming to reduce population in these dense cities. In the 70s many developing cities started developing new towns, away from historic capitals, as a symbol of post-colonial era of aiming political unity.

- **Satellite Towns**

Satellite towns are mainly adopted by large metropolitan cities, as a part of the decentralization strategy. Due to the rising congestion and high land prices in the inner city, many firms, in a process called de-industrialization, tend to relocate their industrial areas in satellite towns in the periphery of large cities.

- **Industrial Enterprise Zones and Business Parks**

Industrial Enterprise Zones are considered as a significant attraction for investors in many countries. EPZs are characterized by many advantages that foster industry agglomeration such as tax incentives, good services and the inclusion of many manufacturing- related enterprises. Although EPZs in secondary cities are not as successful as the ones in metropolitan centers, but they managed to foster economic development in many countries.

- **Growth Poles**

As mentioned previously, growth pole theory is one of the regional development strategies directly fostering secondary cities development. Growth pole strategy is a spatial instrument adapted by governments to direct development into poorer region or other politically desired areas.

- **Techno poles**

Techno poles can be considered as a specialized growth pole for science development. Techno poles are concentrations of high tech business activities, which are strongly associated with universities and institutions. They are mainly focusing on the development of science, technology and innovation in secondary cities.

- **Urban Revitalization**

Urban revitalization projects aim to support redevelopment and investment in secondary cities. These projects were undertaken in secondary cities in many countries to improve basic infrastructure services and real estate and to support tourism.

The previous spatial interventions represent some examples of the efforts made by different government to foster secondary cities development. In chapter five, the regional development interventions in Egypt throughout the past decades are analyzed. The previous interventions are an assisting guide to understand whether the Egyptian government is using the tools and planning decisions to support secondary cities development or not

Chapter 3

Secondary Cities

3.1. Introduction

This research studies the possibility of applying the notion of secondary cities development in Egypt as a tool for regional development. In order to be able to apply this, a clear theoretical background on secondary cities is essential. This chapter relies on literature discussing secondary cities and their development approaches by different authors and organizations such as City Alliance organization and their body of knowledge on secondary cities on several publishes. The chapter focuses on reviewing the different definitions, defining characteristics and typologies of secondary cities. As well as giving a glimpse on the challenges facing secondary cities development and how the different countries are overcoming these challenges.

3.2. Defining secondary cities

The term secondary city was widely known after the work of Rondinelli in the 80s, where he defined the secondary cities as an urban settlement with a population of at least 100,000, but without including the largest city in the country. The population size is a major factor in defining secondary cities, especially with UN-Habitat definition to secondary cities as an urban area generally having a population of between 100,000 and 500, 000.

The term is also commonly used to describe second tier or intermediate cities as one of cities levels that countries have, which mostly start with the primary level. Friedmann states that secondary cities tend to be somewhat smaller than the cities in the first level (1986). A primate city, what first level cities named, is defined as “the leading city in its country or region, disproportionately larger than any others in the urban hierarchy” (Goodall, 1987 cited in (Roberts, 2014)).on the other hand ,there is no fixed definition of secondary cities, but the term is rather context dependent. Different attempts define secondary cities as part of an integrated functional system of a national or global system of cities (Abdel-Rahman and Anas, 2012).

After the publication commissioned by the Cities Alliance, a new body of knowledge of much needed data about secondary cities are added. Brian Roberts in his work “Managing Systems of Secondary Cities” seeks to fill the gap. He believes that the world needs a new working definition, with the direction of the world bank to integrate the importance of functions and links some secondary cities have in the national and international urban systems (world bank,2011). In order to redefine the term secondary city, the merging of traditional hierarchical, systems and functional typologies of cities brings forth a new hybrid and perspective of secondary cities that should be included in the definition. (Roberts, 2014)

In seeking to understand the term secondary cities in the Egyptian context for the next chapter, it is useful to review and understand the four defining characteristics of secondary cities mentioned earlier, which are hierarchy, typology, systems and functions of cities.

3.3. Hierarchy of cities

Nowadays we are living in a world controlled by cities rather than countries. Cities are directly connected to the global economy. We would expect cities to differ among themselves according to not only the mode of their integration with the global economy, but also their own historical past, national policies, and cultural influences (Friedmann, 1986). The concept of urban systems, nationally and internationally, interconnect all cities with different relationships and magnitudes. Especially with the significant effects of increasing globalization and the informationalization of the economy on the urban system. A hierarchal structure can be imposed upon the urban system, in order to evaluate certain relationships within the system (Simmons, 1981).

Heilbrun wrote: “A hierarchy is by definition a systematic arrangement of the classes of an object.”. Walter Christaller`s work “Central Places in Southern Germany” (1966) was the first to introduce urban hierarchy as a natural phenomenon, after the word hierarchy was misused in the academic circle. The theory describes the spatial pattern of urbanization. It initiated the efforts to provide a needed spatial perspective on the economy, which was not offered by economic theories back then.

Due to the constant global changes, Christaller`s theory is no longer valid on its context. The traditional hierarchy of cities based on population is not sufficient, accordingly we need different perspectives to address the urban hierarchy in order to cope with these changes. According to Lynelle John ,there are two lenses through which we can view the urban hierarchy (2012) as shown in the following illustration:

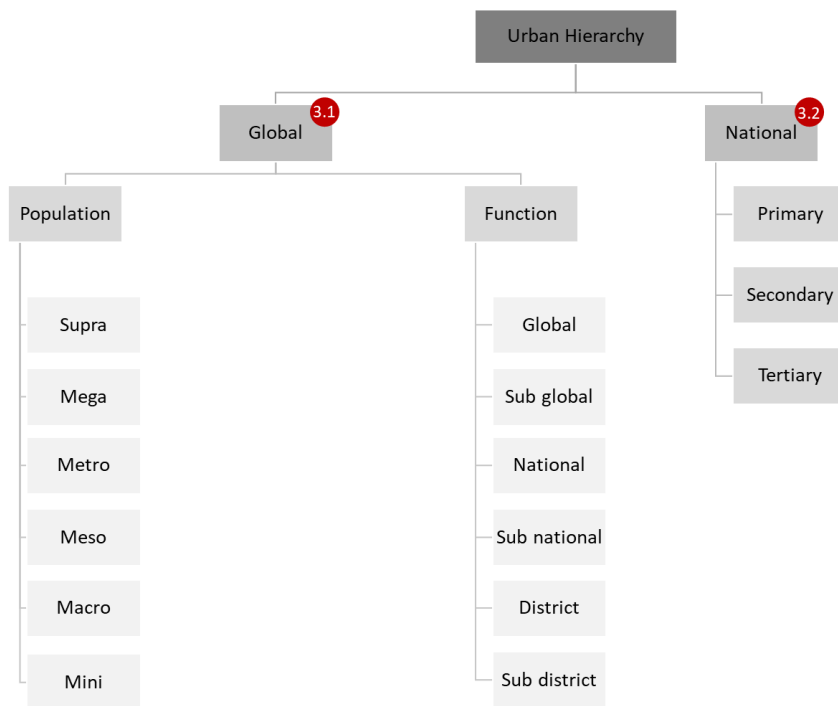


Figure 6: Types of Urban Hierarchy

3.3.1 Global hierarchy of cities

Focusing on allocating cities in the global system, exploring the position of cities on the international stages. It defines how integrated the cities are with the global network. This perspective emphasizes two main aspects:

- **Population size**

Although population size alone is not sufficient to classify cities globally, but it is an important classification that cannot be neglected. We can usefully classify cities by population as supra, mega, metro, meso, micro and mini (Roberts, 2014). Roberts continues a further illustration for the population classification, as supra is a term given to very large cities that form a conglomeration of populations in excess of 50 million. Although the term supra is new but it's already applied in china and India. The term mega city is more commonly known as mega cities are cities with more than 10 million inhabitants.

According to the United Nations, the number of mega cities is expected to rise from 33 in 2018 to 43 in 2030 (United Nations, 2018). The rest of the classification is described as following, “metro”, populations 5-10 million; “meso” 1-5 million; “micro” 200,000-1 million; and “mini”, cities less than 200,000 populations (Roberts, 2014).

There is no population size can be constantly linked to secondary cities. Secondary cities population size can vary significantly from one country to another. Theoretically, we can say that population size of secondary cities can range from the meso to mini scale.

- **Function**

An alternative perspective to address urban hierarchy is the functional hierarchy of cities. As mentioned previously, Christaller`s central places theory was one of the first attempts to classify cities based on market, transport and administration. There have been numerous attempts over the years to develop the world`s cities discourse.

Hall supplemented Christaller`s hierarchy with two more levels (Hall, 2005), combining the produced hierarchy with the ranking of GaWC (Global analysis of World Cities) which measures a city's integration into the world city network. Hall suggested new hierarchy is as follows:

- Global Cities (Alpha cities), they are typically 5 million inhabitants that can reach 20 million within their administration boundaries. They effectively serve very large global territories and strongly engaged in global economy.
- Sub-global cities (Beta and Gamma cities) with a population range from 1 to 5 million and they can reach 10 million in their urbanized areas. These cities perform global service functions for certain specialized services (banking, fashion, culture, media). This special category exists for the national capitals, which is missing in Christaller`s scheme.

- Regional, which is Christaller`s Landstadt, typically with a population range from 250,00 to 1 million people. GaWC describes this level as (showing evidence of World City Formation)
- Provincial, which is Christaller`s provinzstadt, with population from 100,000 to 250,000

These levels are followed by the 5 rest levels of Christaller`s hierarchy: Gaustadt (District), Bezirkstadt (sub district), Kreisstadt, Amtsort and Marktort. With a decreasing population range from one level to the lower level. Due to the dramatic increase in mobility, the lowest two levels in Christaller`s hierarchy, Amtsort and Marktort, are no more playing any significant role as central places. Bezirkstadt (sub district) is the lowest significant level with population ranging from 10,000 up to 100,000.

Same as the population hierarchy, we cannot link secondary cities to one level of functional hierarchy. Theoretically and from the previous population range and functions of each level, we can impose that secondary cities can range from sub global level to District level.

3.3.2 National Hierarchy of cities

There is no universally accepted definition of what constitutes a national hierarchy of cities (John, 2012). Some people describe national hierarchy simply from very urban to very rural. Most of the debate in this discourse tend to classify cities for national hierarchy as primary, secondary and tertiary.

The following illustration links the different urban hierarchy from the different perspectives to articulate the position of secondary cities within the hierarchy.

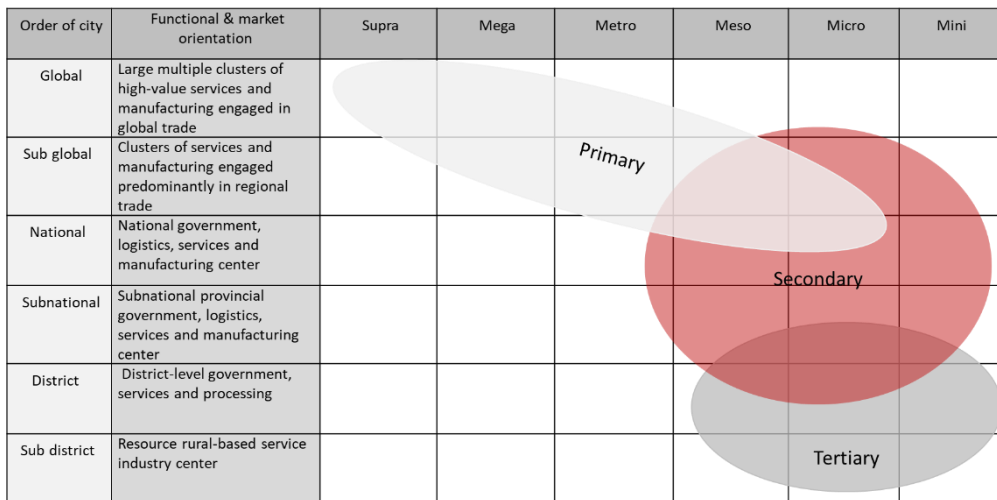


Figure 7: Linking size, function and national hierarchy of cities
Source: Land Equity International/Brian Roberts (2013)

3.4. Typology of secondary cities

The forms of secondary cities can be determined by economic geography and function. Roberts in his publication, describes the three types of secondary cities as follows:

3.4.1 Subnational Secondary Cities

The most common type of secondary city development is a subnational administrative capital, transport hub or large manufacturing or natural resource industry center. Many of these are the location of major transport junctions or ports along coastlines and navigable river systems. Subnational secondary cities play a vital role in the development of national and, in some cases, the global economy, especially those that are engaged in exports.

Roberts elaborated more, typically the city's population will range from 100,000 to over 1.5 million. (Cities Alliance, 2019). The spatial features of regional secondary cities are typically a sizable central business district or services center, surrounded by smaller sub regional cities and towns serving mostly rural regional populations in developing economies. The population of

regional secondary cities is likely to be less than that of the surrounding hinterland/rural population. In developed economies, a much higher proportion of the region's population will live in the city than in surrounding towns and rural areas.

3.4.2 Metropolitan Secondary City Clusters

Secondary city cluster development is a phenomenon associated with the development of a metropolitan. Clustered secondary cities mostly located within 50 kilometers from a historic city center. Most of these cities are integrated in the metropolitan fabric.

Due to cities expansion, economies of scale and externality costs the efficiency and competitiveness of large cities are highly affected. Firms resort to the process of decentralization and deindustrialization, in which they relocate manufacturing and back-office servicing to new industrial areas, where they have room for expansion, on the periphery of cities. Thus most of these cities are independent as the core city are the main catalyst for them to grow and develop.

In developing countries many of these secondary cities lack infrastructure, housing, services for the poor. Also the lack of convenient public transport between the core cities and secondary cities increase the reliance on private automobile, leading to high level of congestion which most of world's cities suffer from. In developed economies, they have become cities for refugees, with poorer quality housing and undesirable social issues. (Cities Alliance, 2019) This typology is out of the study scope of this research as clustered secondary cities are a dynamic integrated part of the metropolitan area. The metropolitan areas should be approached differently, due to the unique characteristics and challenges facing such areas.

3.4.3 Corridor Secondary Cities

Corridor secondary cities are developed along trade and economic corridors. The improvement of road and rail networks and the growing levels of trade and travel between cities and countries are the main reasons of the emergence of

corridor secondary cities. The spatial features of corridor secondary cities are mostly a contiguous strip of urban development with no central business core or district.

There are two types of corridor systems in secondary city networks: national and international economic and trade development corridors (Cities Alliance, 2019). National corridor secondary city is usually contained within the boundaries of a country. The development investments in these cities are mostly directed to alleviate congestion and freeing up the capacity of the corridor city to function more efficiently. On the other hand, international corridor secondary cities may cross multiple countries and connect many primary and secondary cities. Recently, many initiatives, agencies and countries are focusing on the promotion of international corridors secondary cities development. Some economic development corridors are confined to connecting cities within countries.

3.5. Importance of secondary cities

The importance of secondary city is increasing daily and more countries and agencies are drawing the attention towards them. Secondary cities have always played a vital role as an alternative urban center for people to live and work. They are considered as a population diffusion in order to relieve pressure exerted on the primary cities. As well as playing a significant role serving their surrounding region and rural hinterlands. Secondary cities are working as an important catalyst for more balanced growth across the country.

3.6. Challenges of secondary cities development

The secondary cities development is facing significant challenges on various levels, scopes and scales. “The core problem is that the management of secondary cities is failing to deliver sustainable development outcomes for them” (Roberts, 2014). Roberts links this issue to many reasons, but the main causes of the issue are:

- **Governance systems** that don't support effective planning, delivery and management of physical services as well as economic and social development.
- The failure of **economic and finance systems** to deliver sustainable local economic development and public revenues, create investment and jobs, or reduce poverty
- **Urban development and management systems** that are not delivering and maintaining essential urban infrastructure, land, shelter or utility services
- **Social development systems** that are not supporting the social, knowledge, competencies and learning needs of cities
- **Environmental systems** failing to ensure sustainable use of nonrenewable resources or maintain high-quality environmental services

3.7. Secondary cities development approaches

Governments and international organizations are addressing secondary cities development through different approaches, from global and national perspectives, to overcome these challenges. The City alliance study “Managing systems of secondary cities” analyze how different geographical regions and countries are addressing secondary cities development challenges (Roberts, 2014). It describes the varying success rates of different approaches in the different countries according to their conditions. Roberts outlines the important lessons learned from the development approaches applied by different regions and counties, summarized as follows:

3.7.1 Governance and Decentralization

Policies supporting decentralization are adopted by most of the countries, as well as regional and economic and urbanization development plans. We can generalize saying, the higher the level of decentralization and government

devolution, the more dynamic and competitive secondary cities tend to be, with lower levels of socioeconomic disparities between systems of cities. Thus, we can observe higher success rate of this approach in federated states rather than other countries where there is a high levels of central control and limited local governments responsibilities.

3.7.2 National Policies on Urbanization

Economic development is strongly positive correlated to the level of urbanization. Therefore, many countries are developing national urban development plans to support the diversity of city sizes in their urban systems. However, these national physical development plans are often prepared in isolation of social and economic development plans. Leading to disproportional allocation of public resources, tends to support national largest cities, leaving the systems of smaller cities behind. City alliance report assures that countries, which implement urbanization policies to improve the overall urban system efficiency, are more successfully managing urbanization and achieving equity between cities.

3.7.3 Competitiveness of Secondary Cities Development

Secondary cities need to be more competitive with each other. Countries that adopt competition and trade between cities, have the most competitive efficient secondary cities. As these countries force local governments to take all the measures to enhance competition between secondary cities, attract investment and create more job opportunities. A new approach to enhance city competitiveness is collaboration. Cities can share knowledge to solve their problems that couldn't be solved separately, and overcome their weaknesses. This cross country collaboration between secondary cities gives them global competitiveness advantages.

3.7.4 Tapping into and Developing Latent Capital

Significant policy reforms at central government level are needed to unlock and capitalize at latent capital in countries, where the main challenge for secondary

cities is to attract investment and create sustainable job opportunities. As an example of these policy reforms is the growth pole policies. Growth pole policies are criticized because economists often perceive it as the governments are choosing winners neglecting side economic growth strategies. On the other hand, some countries find growth pole policies are the catalyst for developing secondary cities. Focusing on unlocking the latent capital tied in assets, land, human capital, tax- revenue collection and governance can expand the opportunities for formal sector employment, attract regional investment in many services and industries. This can ensure a more balanced pattern of urban growth, especially in secondary cities.

3.7.5 Rectifying the Imbalances in Systems of Cities

As the previous approaches, rectifying the imbalances between systems of cities requires strong national policies to direct a high level of resources to secondary cities and underdeveloped region. Countries with balanced efficient urban systems, are those achieving a wide geographical spread and hierarchy of cities with high levels of connectivity and trade between them.

3.7.6 Getting Urban Systems Integrated and Flowing

In most secondary cities, urban systems are weak because the systems are poorly integrated and badly designed. On the other hand, these systems are remarkably adaptable and can be reinforced to be more efficient. Flow systems are highly required in secondary cities to be capable of supporting the supply chains that keep government, businesses and communities operating. Human capital development is the most important focus to enhance the flows in urban systems in secondary cities

Chapter 4

Secondary Cities in Egypt

4.1. Introduction

As mentioned previously, this research aims to apply the concept of secondary cities in the Egyptian context. Chapter 3 illustrates the general definition, the defining characteristics, typologies and the various development approaches of secondary cities as discussed in the global discourse. Also the previous chapter highlighted that there is no fixed definition for secondary cities, but it's rather context based definition. Accordingly, this chapter attempts to reach a working definition that can be applied in Egypt.

In the search for equivalent defining characteristics in the Egyptian context. Thus, data about cities population, administrative hierarchy and the functional hierarchy is collected from CAPMAS, ministry of local development and Egypt state information center. Reaching preliminary lists of Egyptian cities classification according to size and typologies. These lists can be used in future studies as a framework to approach the development of different cities levels in Egypt.

4.2. The Egyptian context

Egypt is one of the oldest nations in the history of human civilization, as well as one of the oldest in the civilian manners. The urban formation started in Egypt

from the prehistoric times, since the Egyptian families started to settle on the banks of the Nile river forming villages. Mohamed Ali was the first to divide Egypt into directorates, centers, and cities.

The Local Government Law establishes a number of economic regions comprising several economically integrated governorates. According to law no. 43 in 1979, the Arab Republic of Egypt was divided into eight economic regions, and then the legislator merged the Matrouh region into Alexandria, thus bringing the number of economic regions to seven as follows:

- A. Cairo and its capital, Cairo: It includes the governorates of Cairo, Giza, and Qalyubia.
- B. Alexandria and its capital, Alexandria, which includes the governorates of Alexandria, Beheira, and Matrouh.
- C. Delta region and its capital, Tanta: includes the governorates of Menoufia, Gharbiya, Kafr El-Sheikh, Damietta, and Dakahlia.
- D. The Suez Canal region and its capital, Ismailia: includes the governorates of Sinai, Port Said, Ismailia and the Eastern, and the northern part of the Red Sea Governorate until the end of the Gulf of Suez.
- E. North Upper Egypt and its capital, Minya: it includes the governorates of Beni Suef, Minya, and Fayoum, and part of the northern Red Sea.
- F. Assiut region and its capital, Assiut: it includes the governorates of Assiut and Wadi Al-Jadeed.
- G. South Upper Egypt, with its capital in Aswan: it includes the governorates of Sohag, Qena, Aswan, and the southern part of the Red Sea Governorate.

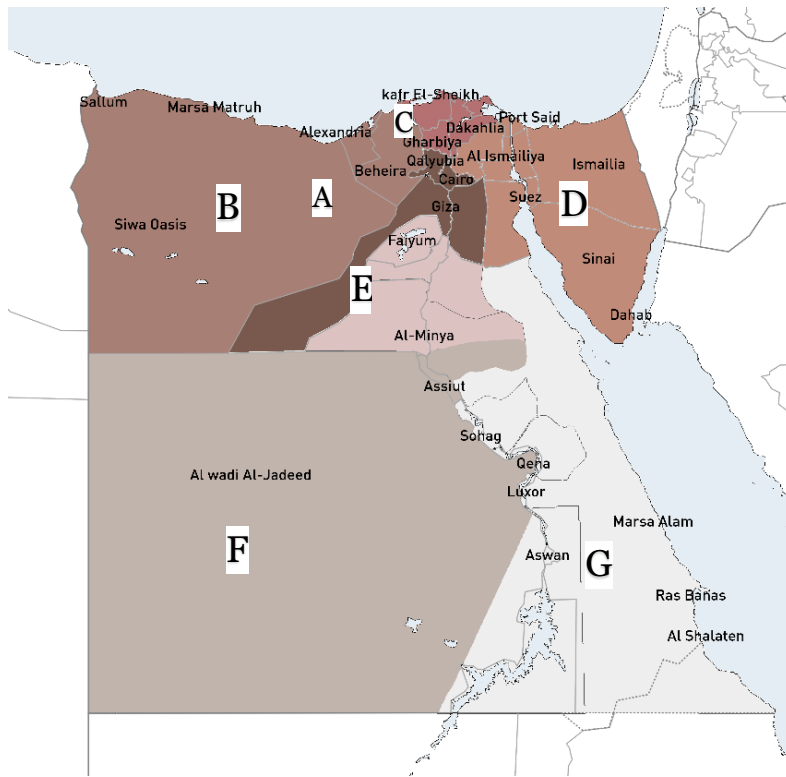


Figure 8: Egyptian Economic Regions

As shown in the figure 8, currently the local administration in Egypt is regulated by the Law no. 43/1979 for local administration. This law establishes the relation between the central government and the different local administrative units. The first article of the local administration law states the division of the republic into 5 main administrative units: governorates, centers, cities, villages and districts. This division gives two typologies of governorates, urban and provincial governorates. The urban governorate consists of districts which represent a major city and divided into quarters. The mixed governorate consists of both districts and centers. The districts represent the major city and divided into quarters. While centers also have at least one city and one or more villages.

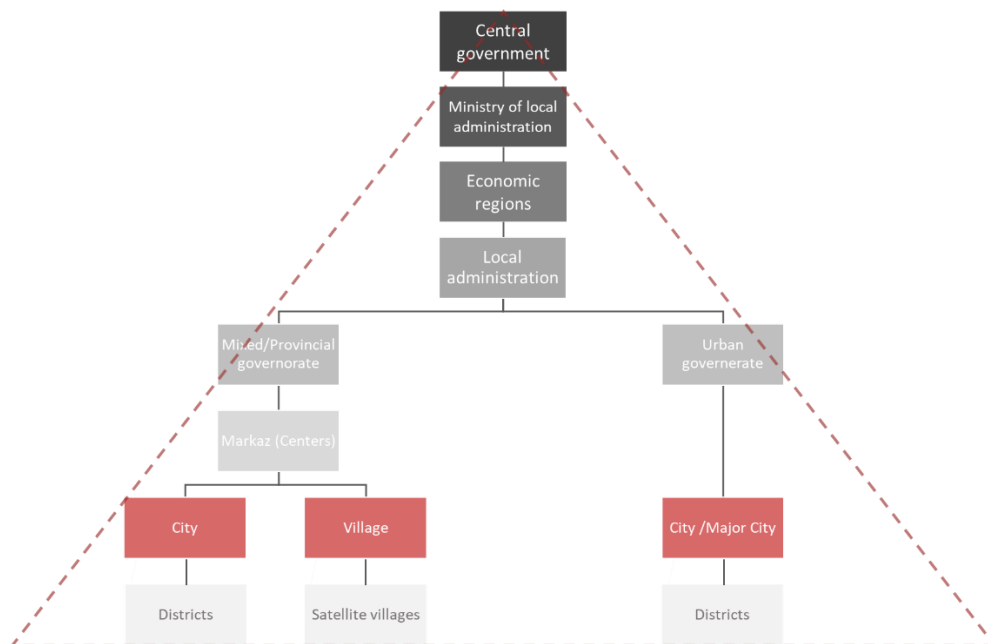


Figure 9: Administrative hierarchy in Egypt
Source : (Abdellatif, 2013)

Hence, the official Census definition of urban areas in Egypt is highly affected by the administrative division. Which gives inaccurate results and indicators on the actual situation and real urbanization. Urban areas according to census data are considered to be either:

- Urban governorates: Cairo, Port Said, Suez and Alexandria
- Agglomerations which have been declared “cities” and have a city council
- The capitals of rural centers(marakez) and capitals of mixed governorates.

This definition doesn't take into consideration the different population sizes of urban agglomeration or the function of these urban areas. (The World Bank, 2008)

4.3. Working definition of secondary cities

As discussed in the previous chapter, there is no one globally agreed on definition for secondary cities. Secondary cities can significantly vary according to the context and to the study purpose. It's rather a hybrid definition that integrates size, function and the role within the national and the global systems.

Secondary cities normally have population between 100,000 up to 5 million according to the size of the country, ranging between 10 to 50 % of the country's largest cities. Mostly administrated by a single local government. Secondary cities generally fall into one of three types: subnational secondary city, metropolitan secondary city clusters and corridor secondary cities, playing vital role in the national systems of cities.

Besides population size, some international organizations, such as the world bank and the European commission, and national efforts from some countries such as china and south Africa, started to think about more defining characteristics that should be taken into consideration when deciding the hierarchical level of cities. The defining characteristics mainly concentrate on the demography, economy and quality of life in the city.

The defining characteristics focus on demography of city such as: population density, employment rate, migration rate, availability of skilled labor and the number of rural population served by this city. The characteristics focus on economy such as the nature of economic activity, economic growth rate, per capita income, size of economy to the national GDP, economic advantages, connectivity and regional importance of the city. While the characteristics focusing on quality of life in the city are related to accessibility of services and basic infrastructure (water supply, sewage, safe housing and electricity), accessibility and availability of education infrastructure, and health infrastructure.

4.4. Choosing potential secondary cities in Egypt

This research is an exploratory research aims to provoke the discussion on secondary cities in Egypt and the role they can play in the national urban system, rather than giving a definitive answer or a rigid datum. Selecting secondary cities is not a straightforward process, but it`s more of a dynamic back and forth process based of the purpose and scale of such classification.

There is no official document from the Egyptian side about the urban hierarchy and the roles of different human settlements. The local administration law differentiates between the urban and provincial governorates. While a difference is observed in the function of the region`s capital representing the administrative center of the region. The official census figures only allow the ranking of the Egyptian cities according to population size, as shown in figure 10 (The World Bank, 2008). Based on the world bank report on Egypt, there are two main factors determining the potential lists of secondary cities in Egypt. The two factors are cities with population over 100,000 inhabitants and provincial capital cities other than the largest two cities, greater Cairo region and Alexandria.

Over one million
500,000 to one million
100,0000 to 500,000
50,000 to 100,000
20,000 to 50,000
Less than 20,000

Figure 10: Population ranking for egyptian cities

As a conversation starter on the secondary cities in Egypt, this research makes a few assumptions in order to focus on the purpose and the scope of the research. The assumptions are as follows:

- The greater Cairo region, which includes Cairo governorate, Giza governorate and Al Daquahlia governorate and the cities included in these governorates, is out of the scope of this research. The three governorates represent the primary region in Egypt which is the least in need for more development and investment attraction.
- Alexandria on the scale of this research is considered a primary city as well, as it is a major city in Egypt and putting any city in comparison to it would be imbalanced.
- In urban governorates, the districts are combined representing the major cities in order to be added and compared to other defined cities.
- In mixed governorates, only urban cities are considered as potential secondary cities while the rural population served by this city is a significant defining characteristic in the city profile
- Some governorates` capitals do not achieve the number of 100,000 inhabitants and some other cities that do not achieve any of the factors can be added to the list according to the country`s development direction.
- The following list is only a primary suggestion of the potential secondary cities in Egypt and can be redefined or changed according to the nature and the purpose of the research

The following table shows a list of the Egyptian cities with population over 100,000 inhabitants and all governments capitals according to CAPMAS 2017 census, in a descending order. Highlighting the cities that both factors achieved in with the red color. The cities that are only a governorate's capital without reaching the minimum population are highlighted in blue. The order of secondary cities presented in this list only represents the population size and doesn't constitute any kind of other ranking. This list gives us a glimpse on the potential cities that can be considered and developed as secondary cities.

Number	Governorate	City	Population
1	Suez	Suez	728180
2	Port said	Port said	657424
3	Gharbya	Tanta	504855
4	Fayoum	Fayoum	472314
5	Assiut	Assiut	458468
6	Gharbya	Al mahla Al Kobra	405126
7	Ismalia	Ismalia	384351
8	Sharqya	Zagazig	380980
9	Daquahlia	Mansoura	333673
10	Aswan	Aswan	319855
11	Demitta	Demitta	281493
12	Behira	Damanhour	259213
13	Menya	Menya	244101
14	Luxor	Luxor	242375
15	Sohag	Sohag	239988
16	Menoufia	Shebin Al Kom	239624
17	Quena	Quena	235647
18	Bani Suef	Bani Suef	233808
19	Sharqya	10th of ramdan	217884
20	Red sea	Hurgada	191907
21	Menya	Mallawi	183018
22	Kafr Al Sheikh	Kafr Al Sheikh	176883
23	Sharqya	Belbis	163957
24	Behira	Edko	144310
25	Matrouh	Matrouh	143524
26	Daquahlia	Al Mataria	141639
27	Sharqya	Abo Kber	136725
28	Sohag	Akhmim	136146
29	Sohag	Gerga	135989
30	Kafr Al Sheikh	Desouq	135725
31	Daquahlia	Meet Ghamr	134386
32	Noth Sainai	Al Aries	134225
33	Menya	Samalout	122232
34	Fayoum	Snores	121516
35	Sohag	Tahta	120765
36	Daquahlia	Belquas	119804
37	Bani Suef	Naser	116791
38	Menoufia	Menouf	112423

39	Menoufia	Ashmoun	111337
40	Daquahlia	Al Manzala	108395
41	Daquahlia	Al Senblaween	108395
42	Behira	Kafr Al Dawwar	104709
43	Sharqya	Faquos	103506
44	Behira	Rashid	102460
45	Assiut	Mnfalout	102266
46	Menya	Maghagha	101756
47	New Valley	Al Kharga	71936
48	South Sainai	Al Tor	33576

4.5. Defining characteristics of secondary cities in Egypt

Following the lead of South Africa (John, 2012), profiling the potential secondary cities in Egypt can be of a great benefit in this discourse. The following actions can be done for a further detailed research on secondary cities in Egypt:

- Developing set of criteria and indicators that can be used to identify secondary cities in Egypt.
- Reflecting these criteria on the potential secondary cities list.
- Some future efforts can expand the research to profile all the Egyptian cities, which may yield some secondary cities that are not listed on the list above.

The defining criteria, as mentioned previously in this chapter, can be presented in the shape of city profile. This city profile is divided into three main sector demography, economy and quality of life. This profiling help distinguish the differences between cities, identify their functions, roles, weaknesses and strengths eventually to be able to approach them in a convenient and most efficient way. As well as, comparing between the secondary cities and primary cities in terms of the same criteria. This can establish the Egyptian urban hierarchy and identifying the role of various urban levels. The city profile can preliminary be as shown in figure 11.

Despite the different hierarchies and classification ideologies, human settlements exist and function whether they are classified correctly or not. Surely the right hierarchy and classification lead to sufficient function and assist each human settlement to play the ideal role in the overall urban system. Moreover, the right hierarchy and classification can significantly help countries to approach the different settlements with convenient development interventions, to achieve the desired development goals.

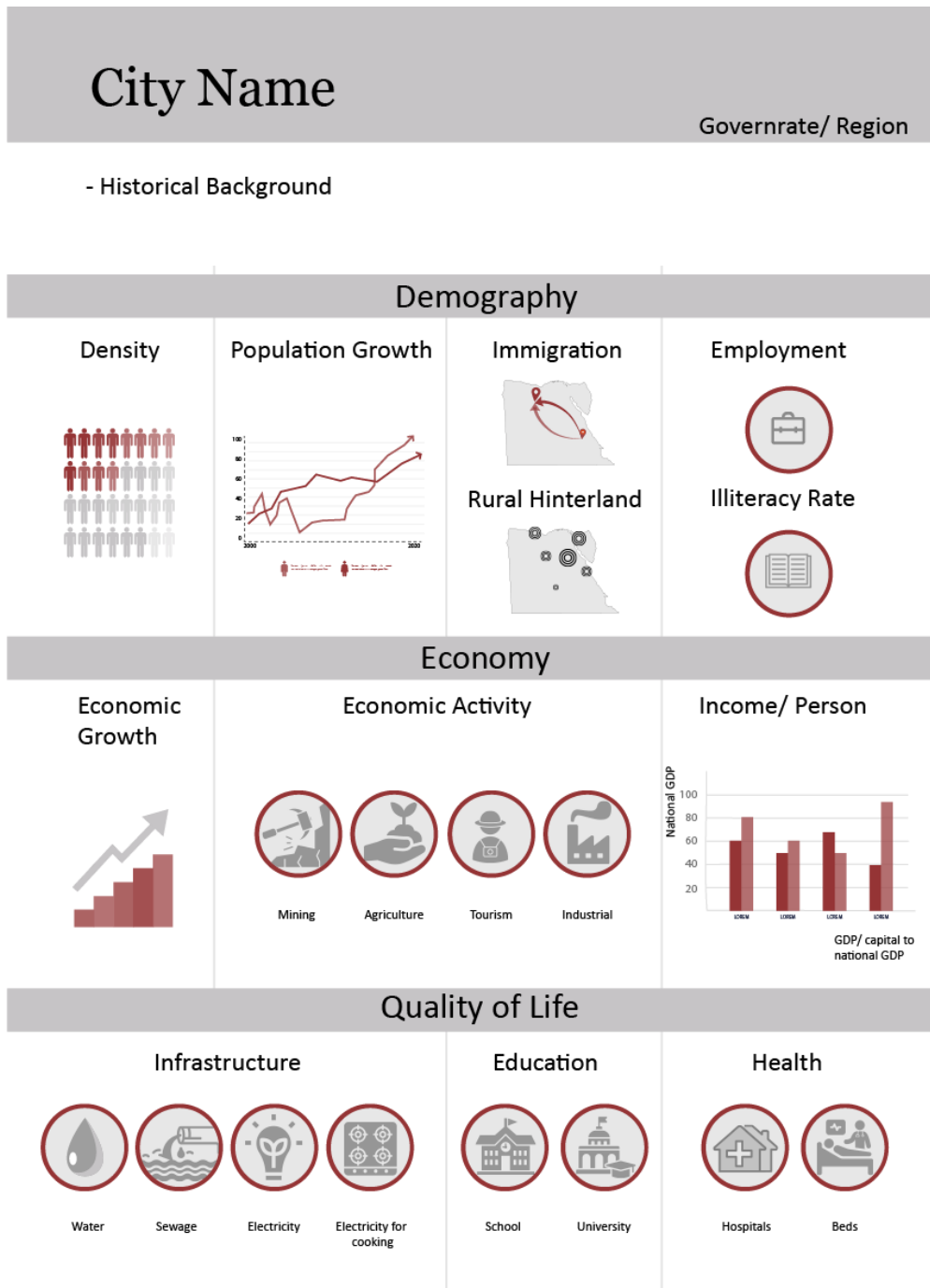


Figure 11: Proposed city profile for Egyptian cities

Chapter 5

Regional Development in Egypt

5.1. Introduction

In order to be able to correctly articulate the concept of secondary cities development in Egypt, we have to fully understand the surrounding context. Development plans and policies are the direct manifestation of governance and decision makers' ideologies. Thus, the variations between the development plans through the different political eras are quite noticeable. One of the issues that are being the main focus of the different Egyptian development plans in the contemporary time, is the densely populated Nile valley and delta and its impacts. The government exerted many efforts in order to efficiently deal with this issue.

This chapter discusses briefly the regional development interventions occurred in Egypt in the contemporary history till now. Mentioning the major political events and the accompanied spatial interventions. Analyzing how these interventions could possibly foster secondary cities development directly or any of the policies mentioned in chapter two. This overview provides a proper background to assist understanding the development interventions happened in the case study area discussed in the following chapter.

2.2. The 50s and the 60s

The 1952 army revolution is one of the major turning points in the modern history of Egypt, shaping the political, social and economic settings that we are currently living. It's considered the starting point of many of the challenges that Egypt is still facing. After the declaration of the republic in 1953, Egypt witnessed a radical political and socio-economic transformations. The country gradually shifted to the soviet model, especially after the refusal of the international bank to fund the construction of the high dam. Several nationalization waves occurred inspired by the soviet model, emphasizing the role of public sector while reducing the role of the private. (Serag, 2008)

The country was heavily drained by the political struggles, also the spatial regional developments were strongly directed by political decisions. Especially with the absence of political competitiveness and the adoption of the one party rule. A great focus was given to industrialization towards modernizing the country. The location of the industrial areas was chosen based on political aspects with no technical measures ,resulting in serious spatial and environmental impacts. (Abdellatif, 2013).

On the meanwhile, huge investments and industries were directed to Cairo, highlighting the preeminence of the capital. Consequently, rapid urbanization and population growth started to become a serious concern in Cairo. Which urged the government to start preparing the structure plan for greater Cairo region to solve these implications. The plan adopted the rapid de-concentration as a part of concentrated urbanization strategy, through the construction of four new cities in the desert hinterland of Cairo. Another spatial development intervention was the land reclamation in western Egypt, through the construction of ten new villages and upgrading 5 existing villages, thus establishing the new valley governorate. (Serag, 2008).

This period can be marked by the emphasized polarization of Cairo, on the other hand it`s the starting point of realizing the serious implications of such

polarization. With slight actions towards solving these issues, by deconcentrating population in the periphery of the capital. No apparent interest was given to other cities or regions, only limited attempts towards desert reclamation.

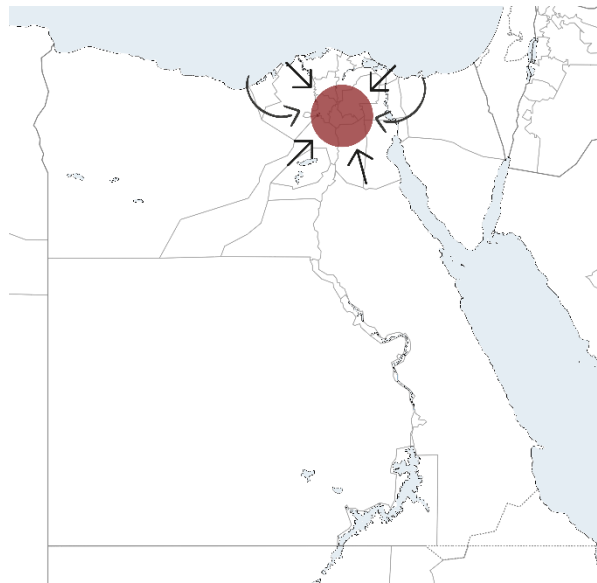


Figure 12: The emphasized polarization of Cairo during the 60s

5.3. The 70s

Egypt witnessed some significant events in the 70s. The country started to shift gradually from the socialist model to the open door policy. After the victory in 1973 war, president Sadat started to focus on development. Issuing *October Working Paper* was mainly to solve Egypt's major problem of the growing population depending on a weak economic base (ATTIA, 1999). *October working papers* mention two development policies, the open door policy for economic development and *the new map* of Egypt for reconstruction and spatial development.

The open door policy is an economic policy promoting for economic liberalization and decreasing the role of the state in many activities. The policy

can be presented briefly in the process of opening the economy up for foreign investments and profits.

Spatially, *October working papers* included *the new map* policy as a spatial regional development plan. The policy aimed to achieve balanced development over the entire country, as well as reducing the population pressure on the congested areas. The policy acknowledged the issues caused by the preeminence and the polarization of Cairo. Instead of addressing the capital only in the previous decades, the policy is focusing on the entire count, willing to overcome the regional imbalances. (ATTIA, 1999) (Abdellatif, 2013) (Serag, 2008).

The new map policy depended on two main aspects. The first aspect is to introduce longitudinal and transversal axes along the country. The development of these axes to be divided into 3 phases, which will eventually lead to population de-concentration. The second aspect is the development of new towns in the desert, which we now call as first generation cities. This generation of new cities included the following: Al Sadat, 6th of October, 15th of May, 10th of Ramadan, new Damietta, new Slheia, new Burj Al-Arab and the touristic villages on the NWC.

This decade is considered the starting point of spatial interventions in order to overcome regional imbalances in Egypt. Despite the various success percentages of the new cities built at this time, but it is a step forward towards a more balanced system. As mentioned in chapter two, new towns are one of the spatial planning policies carried by many countries to foster secondary cities. Although the term “secondary cities” was not common at this time, but the motive behind building these new cities is embracing the same concept as secondary cities development.

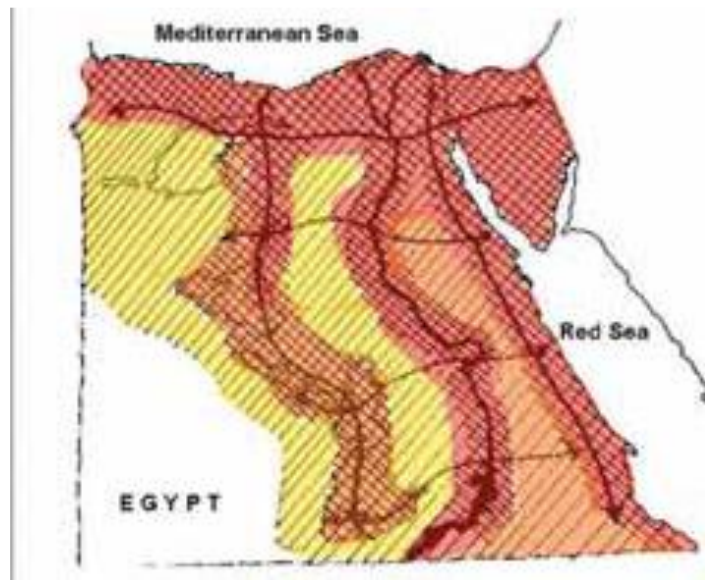


Figure 13: New Map Policy of Egypt

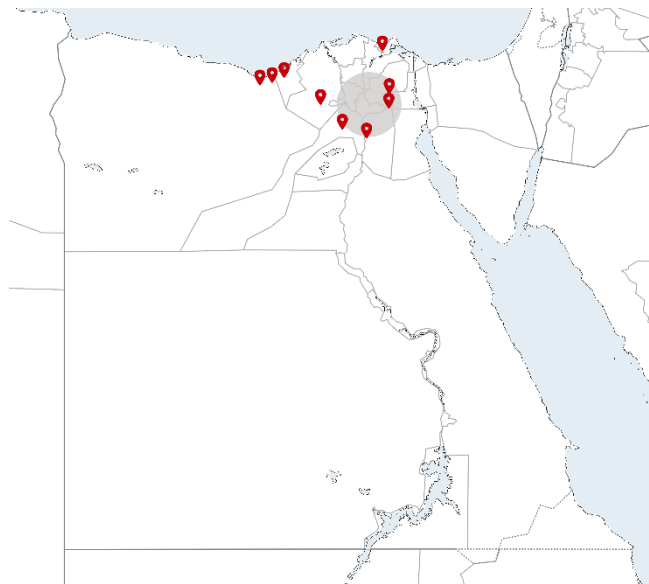


Figure 14: 1st generation of new cities

5.4. The 80s and 90s

Egypt witnessed two main events in this period that affected the regional development. The first event is the return of Sinai in 1982 to the Egyptian procession after the total Israeli withdrawal. This emerged the urgent need to integrate Sinai Peninsula in the development plans. The second event is the participation of Egypt as one of the allied forces in the first gulf war, in return of international debt reduction for the country. Due to the mutual agreements between Egypt and the IMF and the world bank, Egypt was forced to implement economic liberalization programs. which led to a significant wave of privatization to lessen the stress on the public budget (Abdellatif, 2013).

Spatially, the country continued its efforts towards de-concentration and diffusing the population from Cairo and the Nile valley, following the broad lines on the new map policy. The government relied on the strategies of constructing secondary cities and introducing new growth poles to achieve this de-concentrated urbanization pattern (Serag, 2008). These strategies were manifested in three types of interventions as follows:

- **Regional development plans:**

Many regional development plans formulated following the development axes of the new map policy. Towards urban expansion all over the Egyptian lands.

- **The new communities:**

Since the late 70s, NUCA and GOPP started the construction of new cities following the new map policy. The construction of new cities, which is still currently happening, aims to creating new job opportunities and attracting population from Cairo and the Nile valley. This series of new cities is called the second generation cities including: Al Sherouk, Al Obour, Badr, new Cairo, Nubaria, New Menia, New Bani Swief, Suez bay and east Owainat. Although these cities failed to attract the expected population, but they succeed to increase the built up area in Egypt by 20% (Serag, 2008). Additionally, GOPP introduced

Development and urbanization map of Egypt 2017. The policy aims to achieve de-concentration through secondary cities development and construction. The Map suggests possible locations to 44 new cities according to prioritized development areas. Accordingly, a third generation of new cities were implemented as shown in figure 15.

- **Large scale national projects:**

The government initiated a series of large scale national projects toward the expansion on the desert. The country relied on agriculture as the main economic base in most of these projects such as Tushka project and al salam canal.

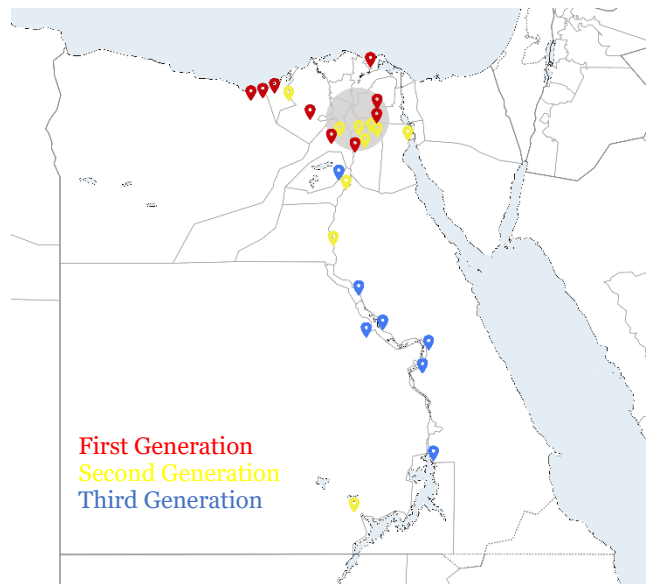


Figure 15: Three generations of new cities

The government at this period continued following the same strategy indirectly fostering secondary cities as the 70s period, which is the new cities development. In a more structured and systematic way, NUCA started the construction of the second generation of new cities. The new cities varying between satellite cities around greater Cairo region, twin cities to highly populated existing cities and other dependent cities such as new Nubaria city.

The spatial interventions of this period represents the country`s increasing interest in the overall urban expansion around Egypt with a special focus on upper Egypt.

5.5. The 2000s

By 2002, the country started to cooperate with international development agencies on both local and governmental levels. This cooperation led to an increase of the local participation in the planning process. Thus, a gradual shift can be noticed from a top-down to bottom –up planning approach. Many international agencies participated in the regional development projects in Egypt such as USAID, UNPD, UN-HABITAT. One of the most related examples of these initiatives is the national project of planning the Egyptian villages. The project initiated by GOPP and witnessed many changes until it came to the final shape. (Abdellatif, 2013)

In 2007, GOPP launched two projects for preparing strategic plans for 227 Egyptian cities. The first project is “Strategic Urban Planning for Small Cities Project” (SUPSCP). This project targets 50 small sized cities and it was a cooperation between GOPP and UN-habitat. The second project is “Strategic and Detailed Urban Plans for the Egyptian Cities Project” (SDUPECP), targets medium and large sized cities other than Cairo an Alexandria including all the governorates` capitals. The authority adopted a strategic regional planning approach, aiming to integrate a future vision to achieve sustainable development and to involve different actors and stakeholders. (Khalifa, 2012).

The projects at this period can be considered as a direct adoption of the concept of secondary cities development. With a clear realization of the different levels and sizes of cities, the international agencies along with the government`s official support initiated two projects approaching small sized cities and medium sized cities separately. These projects are different from the strategy used in the previous decades, as the projects aims to develop the existing cities themselves not building an adjacent new city to the existing one. This shift is

highly inspired by the international discourse which is a good indicator of the openness of the decision making process in Egypt, even if it's a limited effect. Part of the strategic plans for the cities is similar to the city profile but in a more narrative way.

5.6. After 2011

In the wave of the Arabic spring, Egypt witnessed a major event which is 25th of January revolution in 2011. The revolution affected all aspects of life in Egypt. The continuous protests and categorical demands disrupted the daily life in Egypt for almost three years. Once again the country is totally drained in political struggles and regime shifts. Afterwards, a noticeable development wave and numerous fast pace national projects can be seen all over Egypt. In order to achieve Egypt's vision 2030, which is based on UN sustainable development goals, GOPP developed the strategic national plan for urban development 22052. The strategic national plan using three main pillars to achieve this vision as follows:

- **Economic efficiency:** which discusses the optimum use of resources and assets on the different economic activities (agriculture, tourism, industry, trading and logistics services, and telecommunications and information technology). As well as, facing the challenge of limited resources like water and energy.
- **Social justice:** this pillar concentrates on regional development and population balanced redistribution with a special focus on poor region like north and south upper Egypt. A significant adoption of the secondary cities development concept can be noticed in this pillar of development, with a strong direction towards the development of different sizes and functions of human settlements. Along with, supporting and maximizing the integration of the roles, functions and sizes of existing settlements and cities
- **Facing natural and security risks:** focusing on the areas require urban and population intensification for national strategic security regions such as almost all the borders areas.

Spatially, the three pillars together can be represented in the national strategic map Egypt 2052, which should be the constitute for urban development in Egypt. The national strategic plan includes the following spatial components as shown in the map:

- Determine the existing and proposed road network and axes
- Maximize Egypt's geographic location regionally and internationally through the different ports, airports and overland international roads.
- Identify priority development areas as follows:
 1. Suez Canal development axis
 2. The north western coast region
 3. Qattara Depression Area
 4. The western Minya plain
 5. Western Sahara Oases
 6. Development triangle in Upper Egypt
 7. The golden triangle of mining
 8. The Frontier Parable (Halayeb - Shalateen - Aburmad)
 9. Nubia and Lake Nasser
 10. Toshka and East Owainat



Figure 16: Priority development areas

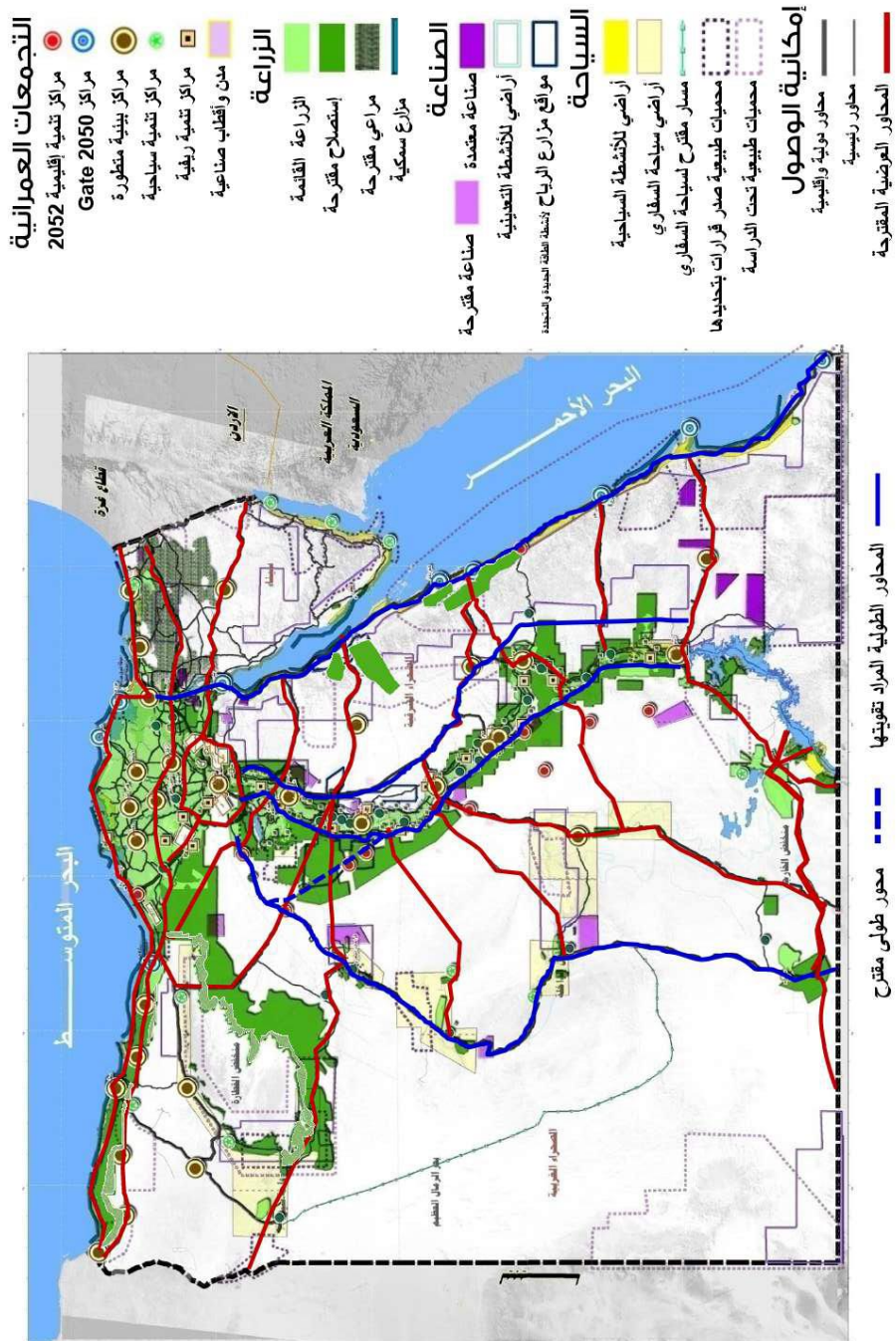


Figure 17: Strategic National Development Plan 2052
(GOPP, 2017)

- Determining growth poles in the development priority regions which we now call, 4th generation cities.
- Implementing the projects supporting the development in each city or growth pole according to the different needs and the studies carried on the regions. These projects aim to achieve one or more of the pillars: economic efficiency, social justice or facing natural and security risks.

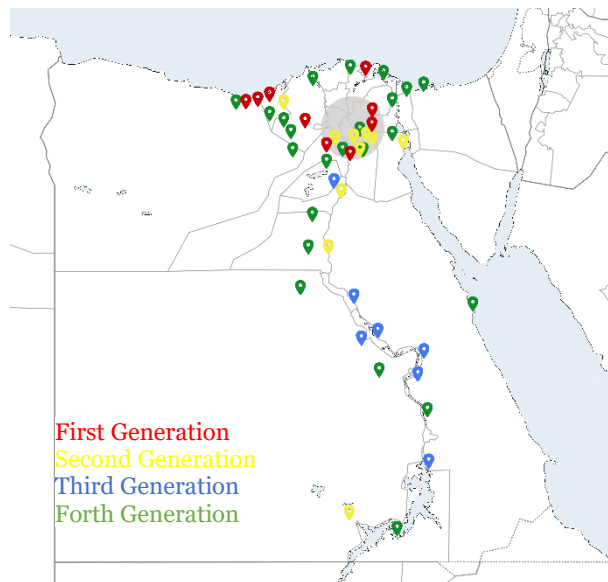


Figure 18: 4 Generations of new cities

The outputs and results of this strategic national plan can't be determined now, as most of these projects are on the implementation phase or on their first trials. The strong direction towards achieving regional balanced development can be significantly seen, through developing growth poles on different region, the focus on social inclusion and poverty reduction and population redistribution as well as the encouragement of developing different sizes and functions of cities. In this context, some cities can be added to the list of potential secondary cities even though they don't currently achieve the population or the function of the existing potential secondary cities. These cities are planned to play a vital economic and urban role by the direct efforts of the current strategic national plan. putting these new growth poles into

consideration in the secondary cities discourse in Egypt, gives a new typology of potential secondary cities that may give a push forward for many other cities and regions.

The previous analysis of the different regional development attempts in Egypt only focuses on whether the development plans adopted the concept of secondary cities or not. Mentioning the strategy carried by the government to foster such concept, doesn't necessarily mean that these strategies are carried correctly. A further detailed analysis needed to study the success percentages and the causes of failure or success for such attempts. Questioning if these were the right tools to use in the different cases over the country and if they had the factors to achieve the targeted attraction.

Chapter 6

Case Study: New Alamien City and the NWC Region

6.1. Introduction

The case study region is the north west coast of Egypt. This chapter narrows down the analysis to the NWC region, in order to study the effect of developing a secondary city in the overall development of the region. Before studying the possibility of secondary cities development to achieve a balanced regional development, it is important review the previous development attempts in this region. Briefly reviewing the previous development attempts in the region and their results will help us forecast the expected outcomes of the ongoing development project, which is building a new city as a growth pole. This chapter focuses on New Alamien City as well as its strategic development plan and the expected population and investments. Analyzing how can this new city affect the whole region.

The study region, as shown in the previous chapter, witnessed a series of development attempts through the last decades. There are many reasons behind choosing NWC region as a case study, such as:

- It`s one of the most important development regions chosen by the strategic national plan 2052. It is the second priority development area in the plan.
- The development of New Alamien city as a national project representing an economic growth pole in the region.
- The heritage and socio economic value of al Alamien area.
- This region is one of the top destination for domestic tourism.
- The strategic location of the region, with a long attractive beaches on the Mediterranean Sea

6.2. The North West Coast of Egypt

In order to understand the regional development attempts that took place in this region, it`s important to have a brief background on the region such as the location, population and administrative settings.

6.2.1 Location

The definition and borders of the north west coast of Egypt is different from a document to another. The official boundaries of the north west coast region according to *the Urban Development Strategy for Coastal Fronts* issued 2017 by GOPP as follows: The broader region of the northwestern coast of the Mediterranean includes the governorates of Alexandria and Matrouh, which also represents a huge part of Alexandria economic region. With a total area of 168.8 kilometer square representing 16.6% of Egypt`s total area. While the coastal zone extending from Abo kier from the east to Al Salloum from the west, with a total length of 550 km and a depth from 20 km to 50 km according the international coastal road route.



Figure 19: Alexandria Region

6.2.2 Background

This region has been one of the top development potential areas, due to its rich nature and distinguished characteristics. The region is characterized by the following:

- Naturally, the region is characterized with a long attractive coastal area with blue clear water and sandy beaches, the availability of raw materials, the availability of water sources such as rain water and underground water, the availability of land and the suitability of soil for many economic activities and the diversity of wildlife, fauna and flora.
- Although the economic performance of the region is considered weak, but the economic activities are diverse including: land reclamation, grazing, tourism and mining.
- Spatially. The region is well connected to the whole country through different transportation moods and high quality road network. The region is considered relatively close to the largest two cities in Egypt, Cairo and Alexandria. Besides the potential of being the gate of the country from the Mediterranean.

- Culturally, the region witnessed the battle of Alamien in World War II. Besides the Bedouin culture and heritage, the presence on Rommel museum, the military museum and the commonwealth war memorial gives the region a unique historic depth. The region is one of the top touristic destination, especially domestic tourism.

6.2.3 Population

The study region is populated with small urban settlements along the coastline, with scattered Bedouin communities in the hinterland. The results of the 2017 Census show that Matrouh governorate had a population of 425,624 inhabitants. Marsa Matrouh city and its hinterland had the biggest concentration of population 188,252 inhabitants. Areas such as El Alamein had only 9,932 inhabitants, accounting for no more than 2.3% of total governorate population.

6.2.4 Administrative and planning

This region is under the administration of Mtrouh governorate. It includes the following administrative centers(Marakez): Al Hamam, Al Alamien, Al Dabaa, Marsa Matrouh, Al Negila, Sidi Barani and Al Salloum as shown in figure 18.

The urban development strategy for coastal frontiers proposed six development sectors for the coastal zone of the northwestern coast, the first five sectors represent the study area as shown in the figure.

The study area is limited to the coastal area of Matrouh governorate. Expanding from al Hamam to Al Salloum with a depth up to 50 km from the Mediterranean.

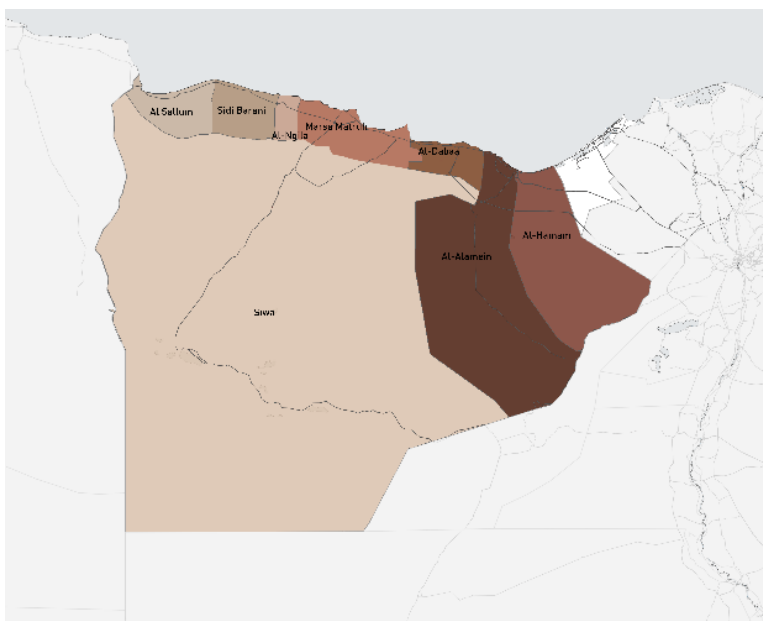


Figure 20: Administrative units for Matrouh governorate

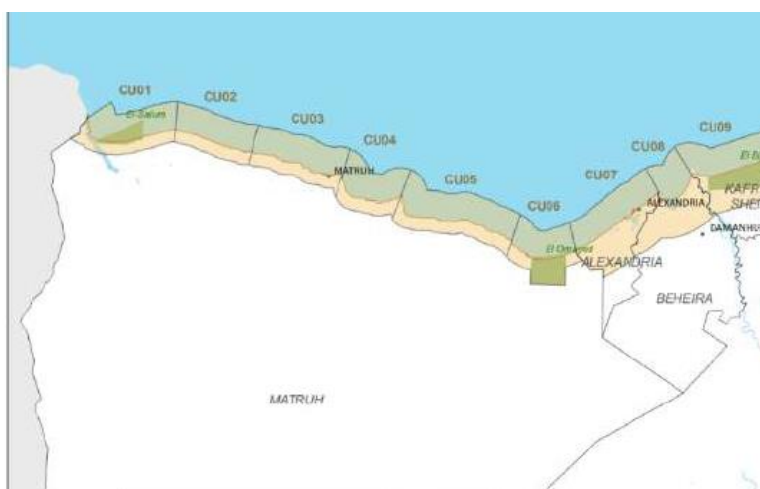


Figure 21: NWC development sectors

6.2.5 Previous development attempts

The region has always been a subject for development and drew the government`s interest as well as the private sector, due to its high potentials and diversity of resources. Many studies were carried on the region in the past decades.

- The first study was a comprehensive survey sponsored by the food and agriculture organization FAO in 1970. Aiming to study the suitability of the region for the development of agriculture activities.
- The second study was carried by the ministry of tourism in 1973. It was a tourism development strategy, resulted in proposing some guidelines and buildings regulations for the tourism development at the region.
- ‘The Regional Plan of the Coastal Zone of Western Desert’ was the third study started in 1976, initiated by the ministry of construction and carried by a private Dutch consultation office in collaboration with an Egyptian consultation office. The plan has two main objectives, a regional and a national one. The regional objective is to increase the wellbeing and welfare of the original population. The national objective is for NWC to contribute in solving the economic and human settlement`s problems in Egypt. Thus, tourism was chosen as the main economic activity to achieve both objectives. The plan divided the region into 4 sub-regions. The sub region of Alex-Imayed was the pilot area, in 1983 the structure detailed plan was approved and authorized. (ATTIA, 1999) Unfortunately, the plan was not fully implemented, as then it became clear that the General Authority for Agrarian Reform of the Ministry of Agriculture had divided the areas of the northern coast into large plots and sold them to cooperative societies that established coastal housing projects that are called touristic villages. (Ibrahim, 2000).

6.2.6 Current development plans

As mentioned previously, the region triggers the interest of many governmental and private investments. A huge conflict between the different development plans that are addressing the region can result into conflict of interests between the different actors, as well as inconsistency of the output and slowing down the development process. The following are some of the current and future trends of national and regional development plans of the northwestern coast of the Mediterranean in Egypt.

National plans

- Strategic National plan 20502:

This plan is considered the urban development constitution; thus all developments across the country should follow the major guidelines determined by this plan. The national strategic plan conceives the NWC as one of the top priority development regions. Targeting to increase the housing capacity of the region up to 5 million people, in order to absorb population from the surrounding highly populated regions. Accordingly, the development of 3 main axes in the region as a part of the national road network development plan. As well as, allocating some arable lands for the 1.5 million acres' project. Building New Alamien city, one of the 4th generation cities, as a growth pole for the region.

- Sustainable tourism development plan:

This plan determines the lands of the tourism development authority. Aiming to putting the region on the world touristic map and strengthening its competitive ability to attract tourists from all over the world.

Regional and local plans

- Integrated coastal management plan for the northern west coast of Egypt:

This plan issued by ministry of water resources and irrigation divides the coastal area into several development sectors, as shown in figure 21, according to their characteristics. As well as studying the challenges and the needed development projects for each sector.

- Strategic development plan for Matrouh governorate 2032:

This plan is based on 3 main strategic lines: the green economy, promoting national security and citizenship, and upgrading the urban communities, services and public utilities. Accordingly, a set of the most important development projects is prepared for four main areas at the governorate: Almien, Matrouh, sidi Barani and Siwa.

- NWC and Quattara depression development proposal:

This proposal approaches the region as a population attraction area from the Nile valley and delta, which enjoys the availability of resources that can be used to strength the economic activities in the region.

Currently, in order to integrate all of these plans together, GOPP issued The urban development strategy for coastal frontiers: NWC region. This strategy studies the current conditions of the region, asses its potentials and challenges, integrates the various development plans for the region proposed by the different authorities and finally proposing a development strategy for the region. The development vision is applied to the different sub regions according to their needs and characteristics. The strategy proposes an implementation plan for each sub region.

From the previous development attempts of the NWC, we can clearly observe that all the attempts are focusing into achieving their objectives through promoting or enhancing a particular economic activity or a number of activities together. Neglecting the urban human settlement base, which is the most crucial development base in such a desert nature region.

The unique thing about the current development vision of NWC region, is the focus in developing urban settlements. Varying from a resource based urban settlements to knowledge based urban settlements.

6.3. New Alamien City

In the light of the governmental efforts to solve the population issue in Egypt, the state already started in the implementation of the fourth generation of new cities. The government is establishing 20 fourth generation cities on a total area 243,600 hectares and the cities are expected to accommodate about 30 million people. These cities aim to increase the housing capacity of the country, increase the urban occupied land across the country, attract population from highly concentrated cities as well as providing many job opportunities and international investments.

The 4th generation cities are currently being established in different governorates across the country. Each new city has its own characteristics and objectives according to the region`s needs and capacity. New Alamien city is one of the top priority national projects nowadays, it`s one of the 4th generation cities as well.

6.3.1 Size and location

The city is built on a total area 201 million and 600 thousand square meters, and still currently under construction. The city is located in Matrouh governorate in Al Alamien administrative center (Markaz). According to the strategic national plan 2052 the old and the new cities of Alamien will be integrated as one city after the completion of construction.

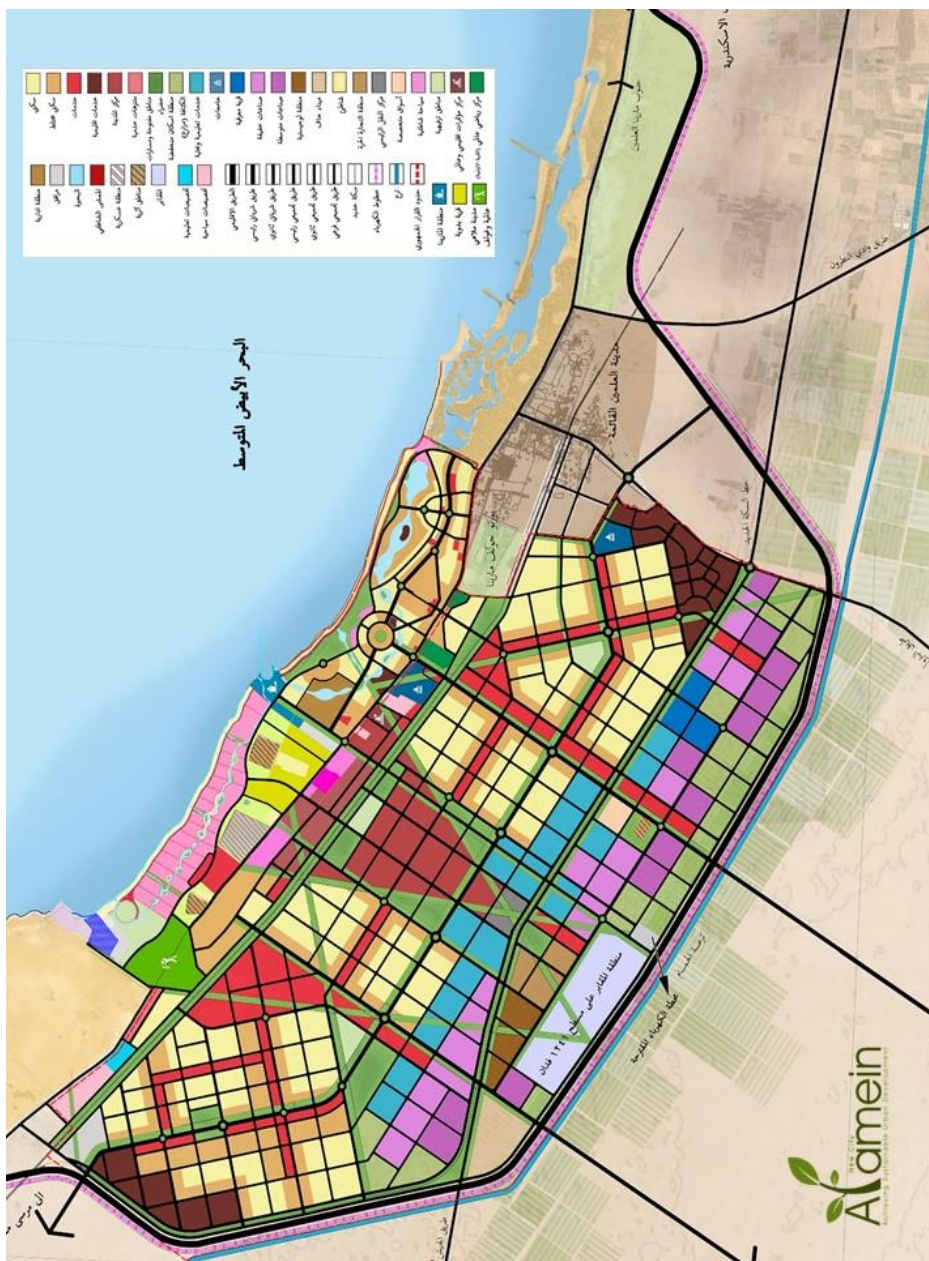
6.3.2 Planning approach and design

The government adopted a different approach addressing the planning of new Alamien city which is open to the public tourism. The city is conceived by the government as a center for tourism, government and education as well. It is a new model for Egyptian coastal cities that achieve integrated development and

provide a diversified economic basis (tourism, agriculture, industry, trade and scientific research).

The development is planned to be implemented on 4 stages. The target population of the city is approximately 2 million by the end of the first phase. According to the master plan of the city, the city development is divided into 3 main sectors, international tourism, archaeological and urban sectors. Each sector is achieved through the implementation of various projects as follows:

International tourism	The Archaeological sector	The Urban sector
<ul style="list-style-type: none"> • Downtown area • Premium residential area • Conference center • Alamein gardens area • Al-Hamra Port • Entertainment area • Private resorts • Cultural center • Tourism residence area • Lake residence area • Exhibition center • Beach touristic side walk 	<ul style="list-style-type: none"> • Open museum • International park • Entertainment area • Hotels • Port services 	<ul style="list-style-type: none"> • Universities • Regional services center. • International medical center • Social housing apartments • Old city development and integration • Connected road network and transportation system • Infrastructure networks



6.3.4 The impacts of New Alamien city

Regional scale

- The city includes a series of hubs, cultural, commercial, business, and research hubs serving the surrounding areas, and the region.
- Improvement of the overall road network of the region.
- Connecting the old and the new cities through light transit system
- The construction of huge infrastructure projects: Drinking water production plant with condensation technology, wastewater networks, storm water drainage, irrigation networks for the green areas, electricity network, transformers chambers, distribution plates and pumping stations. Which will be of a great benefit for the region and attract more investments.
- The developing of the existing Alamien city and integrating the old city within the new city development.
- Reactivating the tourism on the surrounding latent areas such as Siwa oasis.

National scale

- Increasing the housing capacity of the region. The city has 10,000 social housing units
- Providing job opportunities in various economic activities
- The possibility of future extension around the city in the southern and western direction.
- Representing a new model of new cities in Egypt that can strongly compete large cities.

International scale

- The city works as a new gate city on the Mediterranean
- Building al Hamra ports which is a touristic
- Building al Alamien Airport

From the initial indicators, we can say that new Alamien city can be a great potential secondary city. The city is planned on an urban base which is the most important factor for population attraction, with a special focus on one economic activity which is the tourism. Along with the integration of other economic activities, the city can achieve an economic diversity and integration. The city plays such significant roles on different scales, thus this huge potential should be correctly directed for the public benefit prevails. The only critical point is whether the old city will integrate smoothly within the new fabric or the city will face a series of social issues later.

Chapter 7

Conclusion

7.1. Overview

The main interest of this research is to investigate the application of secondary cities development as an alternative approach for regional development and population redistribution across the country, narrowing down the focus into one Egyptian region for more defined outputs.

In order to investigate this development strategy, it was essential to have a proper back ground on the different planning approaches addressing regional development. This was an enabling step in order to correctly allocate the secondary cities development within the regional development body of knowledge. In addition to providing a guidance to understand the development directions of the Egyptian government throughout the years. It goes without saying that a deep proper background on secondary cities is also the foundation of this research. Exploring the different definitions, development approaches, typologies and functions of secondary cities as discussed in the international discourse.

The first part provided a theoretical foundation for the thesis. This parts mainly focuses on answering the following research questions and sub-questions:

- a- What are the reasons behind regional inequality?
 - How to overcome regional inequality?
 - Which regional development policies promotes secondary cities development?
- b- What are the characteristics of secondary cities?
 - What is the role of secondary cities development to overcome the regional inequality?

The second part tried to start a conversation of secondary cities in Egypt. The main purpose of chapter 3 was to find a working definition for secondary cities in Egypt, in an attempt to apply the concept on the Egyptian context. This chapter proposed a list of potential secondary cities in Egypt using the framework developed from the literature review in part 1. As well as developing a defining characteristics that can be used later to compare between the different cities. A chronological review used in chapter 4 in order to trace the regional development attempts in Egypt in the last 70 years. The main objective of this review was to investigate if the various development attempts might have adopted the concept of secondary cities promotion.

The main purpose of the second part is to develop the secondary cities discourse in Egypt through answering the following questions and sub-questions:

- c- How to find a working definition of secondary cities in Egypt?
 - What are the potential secondary cities in Egypt?
 - How to differentiate between the different cities in Egypt?
- d- Does the national regional development planning in Egypt foster the concept of secondary cities development?
 - How did the previous regional development attempts in Egypt deal with secondary cities concept?

Chapter 6 narrows down the focus of the study to the NWC region. This chapter reviews the previous and current development plans addressing the region, exploring how the different attempts approached the potentials of the region. As

well as reviewing the development plan of new Alamien city, the design objectives and the expected outcomes. The main objective of this chapter is to study the effect of new Alamien city, as a new secondary city, on the overall regional development and furthermore the national development.

This last part focuses to answer the following question and sub questions:

- e- How can New Alamien city affect the development of NWC region?
 - What are the previous development attempts of NWC region?
 - What are the main planning objectives of new Alamien city?

7.2. Main Findings

Over the progression of this research, the following findings were comprehended, as an attempt to answer the research questions.

Regional inequality is a common phenomenon emerged due to the different characteristics of the different regions, that results in an unequal degree of attractiveness of some areas. The reasons behind these inequalities are contextual, but they can either be grouped as hard factors or soft factors. Researchers and practitioners established regional development theories and strategies to alleviate regional inequalities. Secondary cities promotion and growth pole theories are part of the spatial strategies of the top down regional development approach, that should be initiated and directed by the government or any upper authorities.

Secondary cities doesn't have one globally agreed on definition, it can significantly vary according to the context. It's rather a hybrid definition that integrates size, function and the role within the national and the global systems. They are considered as a population diffusion in order to relieve pressure exerted on primary cities. As well as playing a significant role serving their surrounding region and rural hinterlands.

The urban hierarchy discourse in Egypt is quite limited. based on some defining characteristics derived from the literature review, a list of 48 potential secondary cities in Egypt is determined. Egyptian cities with population over 100,000 inhabitants and all governments capitals, can be considered initially as potential secondary cities.

The regional development attempts in Egypt didn't adopt the concept of secondary cities directly. The development plans started gradually to realize the consequences of the booming of Cairo. The developments plans were strongly directed towards constructing new cities in the periphery of the capital, then moving to the desert. Most of the development plans used the new towns and new cities construction as their main developing tool, neglecting the existing cities that might have the capacity to attract more people and investments.

NWC is one of the most important development regions in Egypt. Most of the previous development attempts for the region were based on the promotion of one economic activity neglecting the urban base of these developments. Using a different approach, which is developing a growth pole in the region, can be a such great potential for a significant shift on the regional and national economic development.

7.3. Recommendations

This research concluded that secondary cities development is a top-down regional planning approach. A number of potential secondary cities in Egypt can be developed, in order to change their functions and work more efficiently in the national urban system. Each city can be addressed differently according to its characteristics and the needs of the region it's located on. Accordingly, this research proposes the following:

Developing an official discourse from the Egyptian side about the urban hierarchal system. Elaborating how the different urban settlements sizes and functions should integrate and work together.

Reconsidering the definition of urban areas in Egypt. It leads to a gross underestimation of the urbanization, which gives an unrealistic image of the urban situation in Egypt.

Directing governance policies towards de-centralization. In order to provide more autonomy to the decision making process in both regions and cities.

The horizontal integration between the different development plans from the different authorities. In order to avoid the conflicts, and to speed up the development process.

The focus of the development plans on the urban base of any development instead of just promoting one or more economic activity.

7.4. For further research

This research can be considered as a conversation starter for secondary cities development in Egypt and how this concept can be applied in the Egyptian regions. However, a wide number of issues have been touch upon briefly without in depth examination, due to the time limitations and the focus of the study. The following issues can be subject for further in depth research, which might be of a significant value to the topic:

- Improving the defining characteristics of secondary cities in Egypt in a more convenient way for the context and the available data.
- Applying the concept of city profiling on the top potential secondary cities, in order to be able to compare between the different cities and their need and how they can be addressed.
- Categorizing the Egyptian secondary cities according the secondary cities typologies.

- A detailed analysis for the Egyptian urban system and the functions of the different human settlements.
- Exploring how to develop existing secondary cities, focusing on one case study of an existing secondary city development.
- Examining the 4 generations of secondary cities while studying the factors of failure and success for each city.
- Detailed social analysis for the current situation in NWC region and how can new Alamien city affect the community.

Finally, ...

The uncontrolled population growth and regional inequalities are both huge challenges harshly facing Egypt. Secondary cities may be an alternative approach for population diffusion and investment attraction, in the face of these challenges. Working on the country`s potentials on both national and international scales can be extremely pushing towards an overall development.

References

Abdellatif, M. M., 2013. *Paradigms for Spatial Planning (Doctoral Dissertation)*. s.l.:Ain shams University.

André TORRE and Frédéric WALLET, 2016. Policies of Regional Development and Planning. In: *Regional development in rural areas:Analytical tools and public policies* . s.l.:s.n.

<https://www.arcgis.com/>

Egypt today. [Online]

Available at: <https://www.egypttoday.com/>

New Alamein city. [Online]

Available at: <https://www.northcoast-eg.com/>

[Accessed 2020].

New Urban Communities Authority. [Online]

State Information Service. [Online]

Available at: <https://sis.gov.eg/>

The Arab Contractors. [Online]

Available at: <https://www.arabcont.com/>

Asef Bayat, E. D., 2000. Who is afraid of ashwaiyyat?Urban change and politics in Egypt. *URBAN CHANGE IN EGYPT*, 12(2), pp. 185-100.

Associated Consultant Team, 2014. *Conceptual Design Al-Alamein New City (ANC)*, s.l.: s.n.

ATTIA, A., 1999. *PLANNING FOR SUSTAINABLE TOURISM DEVELOPMENT(Doctoral Dissertation)* . s.l.:s.n.

Batty, M., 2006. Hierarchy in Cities and City Systems. *University College London*.

Brian Roberts, L. E. I. a. R. P. H. C. A., 2014. The Systems of Secondary Cities: The neglected drivers of urbanizing economies. *CIVIS series by the Cities Alliance*.

Brian Roberts, L. E. I. R. P. H., 2014. *The Systems of Secondary Cities: The neglected drivers of urbanising economies*, s.l.: CIVIS,Cities Alliance.

Christaller, W., 1966. *Central Places in Southern Germany*. s.l.:s.n.

Cities Alliance, 2019. *Connecting Systems of Secondary Cities*. Brussels: Cities Alliance/UNOPS.

Egypt projects map, n.d. مشروع تنمية الساحل الشمالي الغربي. [Online]
Available at: <https://egy-map.com/project>
[Accessed 19 8 2020].

ESPON, 2013. *Second Tier Cities and Territorial Development in Europe: Performance, Policies and Prospects*, s.l.: s.n.

European Commission , 1999. *ESDP (European Spatial Development Perspective)*, s.l.: s.n.

Filip De Boeck, A. C. ., S. V. W., 2009. *Recentring the City:An Anthropology of Secondary Cities in Africa*. s.l., AFRICAN PERSPECTIVES 2009. The African Inner City: [Re]sourced.

Frank Moulaert and Abid Mehmood, n.d. Analysing regional development: From territorial innovation to path-dependent geography. In: *The Elgar companion to social economics*. 2005: s.n.

Frick, S. A., n.d. Urbanization, cities and economic growth:trends, recent evidence and policy. *Regional Studies Association* .

Friedmann, J., 1986. The World City Hypothesis. *Development and Change*, pp. 69-83.

GOPP, 2015. *Integrated Sustainable Development Plan for the North Coast Region (NCR)*. [Online]
Available at: <http://gopp.gov.eg/>
[Accessed August 2020].

GOPP, 2017. *Strategic National Plan for Yrban Development*, s.l.: s.n.

GOPP, 2017. *The urban development strategy for coastal frontiers :NWC region*, s.l.: s.n.

H.G. Overman, A. J. V., 2005. Cities in the Developing World. *Centre for Economic Performance*.

Hall, P., 1997. *Megacities, World Cities and Global Cities*. s.l., s.n.

Hall, P., 2005. *THE WORLD'S URBAN SYSTEMS: A EUROPEAN PERSPECTIVE*, s.l.: s.n.

Ibrahim, M. A., 2000. *استراتيجية التنمية الحضرية في المدن المصرية* , s.l.: s.n.

Ibrahim, S., 2004. *The Role of Local Councils in Empowerment and Poverty Reduction In Egypt*. s.l.:The American University in Cairo Press.

- Jefferson, M., 1939. The law of the primate city. *Geographical Review*.
- John, L., 2012. *Secondary cities in South Africa: The start of a conversation*, s.l.: South African Cities Network.
- Karim Badr, S. H., 2012. *Internal migration in Egypt : levels, determinants, wages, and likelihood of employment*, s.l.: The World Bank, Middle East and North Africa Region ,Poverty Reduction and Economic Management Unit.
- Khalifa, M. A., 2012. A critical review on current practices of the monitoring and evaluation in the preparation of strategic urban plans within the Egyptian context. *Habitat International*.
- Magda Metwally, S. S. A., n.d. *An Approach to Sustainable Tourism Development in Coastal Area-Egypt*, s.l.: s.n.
- Marais, L., 2016. Local economic development beyond the centre: Reflections on South Africa's secondary cities. *Local Economy*, Volume 31.
- Mardiansjah, P. R. a. F. H., 2018. *Characteristics of peri-urbanization of a secondary city: a challenge in recent urban development*. s.l., IOP Conf. Series: Earth and Environmental Science.
- Massey, D., 1979. In what sense a regional problem?. *Regional Studies*.
- Meyer, W. B., 2019. Urban Primacy before Mark Jefferson. *Geographical Review* .
- Ministry of Housing, Utilities & Urban Communities, n.d. *مدينة العلمين الجديدة*. [Online]
Available at: <http://www.mhuc.gov.eg/>
[Accessed 19 8 2020].
- Peter Hall, M. T.-J., 2020. *Urban and Regional Planning*. 6th ed. s.l.:s.n.
- Raheem, W. M., 2014. Regional Imbalances and Inequalities in Nigeria: Causes, Consequences and Remedies.
- Robert Potter, Tony Binns, Jennifer A. Elliott, Etienne Nel and David W. Smith, 2018. *Geographies of Development*. 4th ed. s.l.:s.n.
- Roberts, B. H., 2014. *Managing Systems of Secondary Cities: Policy Responses in International Development*. Belgium: Cities Alliance.
- Rondinelli, D. A., 1983. Dynamics of Growth of Secondary Cities in Developing Countries. *American Geographical Society*.
- Rondinelli, D. A., 1983. *Secondary cities in developing countries : policies for diffusing urbanization*. s.l.:Beverly Hills : Sage Publications, ©1983.

Serag, Y. M., 2008. *Networking and Networks as Tools for Regional Spatial Development and Planning (Doctoral Dissertation)*. s.l.:Katholieke Universiteit Leuven.

Seyed J. Faraji, Z. Q. V. K., 2016. URBAN PRIMACY IN URBAN SYSTEM OF DEVELOPING COUNTRIES; ITS CAUSES AND CONSEQUENCES. *HUMAN*, 6(1).

Shalabi, A. M., n.d. *Land Development on the North Western Coastal Zone of Egypt*, s.l.: s.n.

Simmons, J., 1981. Urban systems : the new regional geography. *Espace géographique*, pp. 135-142.

Tamer El Khorazaty, M. E. M. E., n.d. *Sustainable Development on the Strategic Level: An Approach to the Formulation of Development Constraints for Urban Touristic Projects in Marsa Matruh*. [Online]
Available at: <http://www.cpas-egypt.com/pdf/Mohamed%20Eid/Research's/005-Marsa%20Matrouh1.pdf> [Accessed August 2020].

The Cities Alliance, 2006. *Guide to City Development Strategies: Improving Urban Performance*, s.l.: s.n.

The World Bank, 2008. *ARAB REPUBLIC OF EGYPT URBAN SECTOR NOTE*, s.l.: s.n.

Toema, A. M., 2012. *Urban Rural Balance (Doctoral Dissertation)*. s.l.:Ain shams University.

UNDP, 2011. *Regional Integration and Human Development:A Pathway for Africa*, s.l.: s.n.

United Nations, 2018. *The World`s Cities in 2018*, s.l.: s.n.

Venables, A. J., 2005. Rising Spatial Disparities and Development.

Wei, Y. D., 1999. Regional inequality in China. *Progress in Human Geography*.

ملخص البحث

لطالما كانت التفاوتات الإقليمية من أكبر التحديات التي تواجه مصر. إن النمو العمراني المركز في القاهرة ووادي النيل يجتذب باستمرار السكان والاستثمار، ويترك المناطق الأخرى متخلفة بالإضافة إلى الضغط على الموارد والبنية التحتية في مناطق التركيز. زادت التفاوتات الإقليمية بشكل ملحوظ في العقود الأخيرة، خاصة بسبب تفوق منطقة القاهرة الكبرى، باعتبارها واحدة من أكبر مدن العالم وأهمها. تقوم الحكومة المصرية بجهود مختلفة بهدف تحقيق تنمية متوازنة في جميع أنحاء الأقاليم المصرية. على الرغم من أن الأحداث السياسية هي أكثر العوامل فاعلية في خطط التنمية المختلفة، إلا أن استراتيجية اللامركزية هي أحد الأهداف المستمرة لمصر الحديثة على الرغم من الاتجاهات السياسية المختلفة.

يركز هذا البحث على واحدة فقط من استراتيجيات التنمية الإقليمية ألا وهي بناء وترويج المدن الثانوية. كثير من البلدان في الآونة الأخيرة تولي اهتماما لتطوير المدن الثانوية كنهج بديل للتوسع الحضري اللامركزي وإعادة توزيع السكان. يمكن أن تختلف المدن الثانوية بشكل كبير وفقاً للسياق، لكنها تلعب أدواراً حيوية اقتصادياً واجتماعياً وعمرانياً.

تبحث هذه الدراسة دور المدن الثانوية في تحقيق التنمية الإقليمية. وكذلك إمكانية تطبيق مفهوم المدن الثانوية في السياق المصري. مع محاولة استكشاف التسلسلات الهرمية والمقاييس والوظائف في المدن المصرية من أجل التعبير عن الفكرة بشكل صحيح لتعادل المستوى المقابل لها في المفاهيم العالمية. بالإضافة إلى إلقاء نظرة عامة على التنمية الإقليمية في مصر وكيف تتبنى استراتيجية تطوير المدن الثانوية. مع تركيز نطاق الدراسة على دراسة حالة مدينة العلمين الجديدة وكيف يمكن لهذه المدينة الثانوية التأثير على تنمية منطقة الساحل الشمالي الغربي.

إقرار

هذه الرسالة مقدمة في جامعة عين للتحصول على درجة العمران المتكامل والتصميم المستدام. إن العمل الذي تحويه هذه الرسالة قد تم إنجازة بمعرفة الباحث سنة...

هذا ويقر الباحث أن العمل المقدم هو خلاصة بحثه الشخصي وأنه قد اتبع الأسلوب العلمي السليم في الإشارة إلى المواد المؤخذه من المراجع العلمية كل في مكانه في مختلف أجزاء الرسالة..

وهذا إقرار مني بذلك،،،

التوقيع:

الباحث: رانا عاصم محمد رضوان

التاريخ: 23/08/2020

صياغة مفهوم المدن الثانوية فى السياق المصرى

مقدمة للحصول على درجة الماجستير فى العمران المتكامل والتصميم المستدام

أعداد :رانا عاصم محمد رضوان

لجنة اشراف

أ.د. مروة عبد اللطيف
أستاذ التخطيط و التصميم العمرانى
جامعة عين شمس

أ.د. محمد صالحين
أستاذ التخطيط الاقليمى
جامعة عين شمس

لجنة الحكم

التوقيع

أ.د. الممتحن الخارجى
أستاذ
جامعة

أ.د.
أستاذ
جامعة

أ.د.
أستاذ
جامعة

تاريخ المناقشة:

الدراسات العليا

أجيزت الرسالة بتاريخ:

ختم الإجازة

موافقة مجلس الجامعة .../.../...

موافقة مجلس الكلية .../.../...

23/08/2020



صياغة مفهوم المدن الثانوية في السياق المصري

رسالة مقدمة للحصول على درجة الماجستير في العمران المتكامل والتصميم المستدام

إعداد

رانا عاصم

المشرفون

أ.د. مروة عبد اللطيف

أستاذة التخطيط والتصميم العمراني

جامعة عين شمس

أ.د. محمد صالحين

أستاذ التخطيط الإقليمي

جامعة عين شمس