

**CHAPTER 1: MAKING THE CASE AND SETTING THE BOUNDARIES
OF THE RESEARCH**

INTRODUCTION

After the 6th of October War in 1973 between Egypt and Israel, planning new industrial areas or extensions for the existing ones became one of the main aims of the Egyptian Government. This sought to speed up the industrialisation process started in 1957 after long periods of colonisation and exploitation of the country's natural resources by foreign powers. The guiding aims were to build a prosperous economy to maintain the rapidly growing population, to attract local and foreign private capital to the industrial sector, and to create job opportunities to raise living standards. This was coupled with attempts to reduce the degradation of the built environment in existing cities, specifically Cairo and Alexandria largely resulting from polluting industries, and to tackle a growing volume of rural-urban migration after the 23rd of July 1952 Revolution (Ayubi 1991; Aliboni *et al* 1984; Egypt 1985; Giugale and Mobarak 1996; Zaalouk 1989; Rivilin 1985).

It has been widely observed and documented that after decades of state-dominated economic activities, governments all over the world are increasingly relying on the private sector to foster economic growth and to build prosperous economies. Governments are becoming less engaged in the direct provision of goods and services and more active in developing markets, creating supporting institutions and providing safeguards to ensure equitable distribution. However, economists have come to believe that private sector decisions depend on the incentive structure¹ reflecting the scarcity of resources (including land) as well as incentive structure provided by the prevailing institutional framework (Serven and Solimano 1993; Clague 1997; Abou-Zeid 1995; Fawzy 1998)

Nevertheless, practitioners and theorists, who have studied the issue of economic growth in relation to the built environment, stress that building a prosperous economy that achieves high rates of economic growth but fails to protect the built environment surrounding economic activities not only increases the health hazards for its users (i.e. workers and residents surrounding the economic activities) but also runs the risk of international economic sanction through trading restrictions, the withdrawal of borrowing rights and other measures, such as tariff-based actions. Above all ignoring the need to manage the physical capacity and the quality of the built environment within

¹ “The broad definition of the incentive structure is often referred to as ‘business environment’. A sound business environment is based on two complementary preconditions: an appropriate and stable economic environment and efficient institutions” (Fawzy 1998, p. 1)

which economic and social development takes place, has proved to be costly and even fatal to the natural environment, economy and society at large (Cohen 1993, p.17; Walker 1994, p.28).

As a consequence, whilst trying to achieve a 'balance' between economic and social needs and environmental capacities² within given physical boundaries, the urban development planning field has attracted analysts and theorists trying to analyse, theorise, and create models for the urban development planning process, some of which are concerned with certain stage(s) within such process. For instance, some analysts, scholars and theorists are concerned with the process of setting goals and addressing the 'public interest', others with the decision-making process, and yet others are interested in the design and formulation of physical plans and the implementation process. Nevertheless, since the early 1970s, a few analysts, scholars, and theorists have gone beyond modelling and theorising the urban development planning process itself and have tried to understand and document the forces within society that are responsible for either the 'success' or 'failure' of such processes and how such forces affect the adoption and application of certain planning approaches rather than others in dealing with land and development in a specific 'time and space edge' (Rose 1981, see also chapter 2).

The urban development planning process and the built environment have become more and more explicitly analysed not only in connection to the economic environment but also to the political and social context within which the urban development process takes place. According to this viewpoint, it has become crucial to explicitly analyse such process through an in-depth understanding and examination of the institutional arrangements, power structures, and interests of key actors involved. This involves attempts to critically understand, analyse, and examine the evolving and ever changing relationship between the state institutions and agencies and the different societal groups and individuals who have different, and yet most of the time conflicting, interests and agendas in relation to the urban development process (Beck 1997, p.23; Dobson 1998, pp.12-30). In their analytical study on the British urban development planning process using different case studies, Brindley *et al* (1996, pp. 175-6) stress that such relationship not only affects the urban development planning approaches adopted and applied by the state to meet the different interests within society with respect to land

² Environmental capacities are the physical (including renewable and non-renewable resources and waste production), cultural, and aesthetic limits to what the environment can provide (Jacobs 1993, p. 11).

development, but also affects the built environment resulting from such process. The latter emphasis explicitly calls for a critical understanding of social structures³ within which the urban development planning process takes place. In this sense, the recognition of one of the main dichotomies in social science, the concept of structure and agency⁴, which aims at understanding social structures, is extremely important when analysing the urban development planning process in its real-life context (Walsh 1998).

1.1 THE RESEARCH PROBLEM AND OBJECTIVES

In Egypt, since the adoption of the Open Door Policy (ODP) in 1974, what determined the urban development decisions and planning approaches to land development had been the political values and interests of actors involved in the decision-making process all along the planning process. In their struggle for power, long-term management objectives had been displaced by short-term political and financial advantages and most of the planning decisions had involved political choices - choices between competing interests or claims; choices between alternative policies and physical plans with various advantages to different interests groups; choices between different organisations and institutions to decide, manage and implement planning policies and objectives; and choices between alternative uses of resources. The above choices often resulted in fierce political conflicts and clashes of interests between key institutions, agencies, and individuals involved in the urban development process of Tenth of Ramadan City (TRC). This study reveals that such conflicts of interests had considerable negative impacts on the physical planning practice and the outcome of the urban development planning process in Egypt at large and more specifically in TRC.

This study has both theoretical and analytical objectives. The main theoretical objectives are: first, to seek a clearer understanding of the different theoretical approaches to the understanding of social structures with specific reference to the concept of structure and agency. This provides the broader theoretical basis to describe,

³ *'Society'* is the various patterns of social relationships that emerge, structure, organise, and develop between its members; *'Social structure'* is the concept that sociology uses to capture and describe the organisation of these patterns and the shapes that they take (Walsh 1998, p. 8)

⁴ On the one hand, the concept of *'structure'* is usually employed in the literature to refer to any recurring patterns of social behaviour, which has constraining effect on individuals, groups, institutions, and co-operations (i.e. agency) within society acting in accord with the pressure exercised by social structures. On the other hand, the concept of *'agency'* refers to the degree of intensions combined by free will exercised by individuals, agencies, institutions, groups, and co-operations in their social actions, which enables them to meet their interests and needs (Giddens 1995)

analyse and explain the changes that took place in the relationship between the Egyptian government and the private sector since 1974. Such analysis helps in presenting a clearer perception of the context through which goals, priorities, plans, decisions and outcomes of the urban planning process were formulated both at the national and local levels. Second, to build an analytical framework upon which the empirical explanation and analysis of how in certain periods the changes in the political economy both at the national and local levels and the shifting allocation of power and resources within the 'triangle of power' (i.e. the institutions, agencies and individuals of the central government, local authorities, and private sector) influence the existing state-private sector relationship, which in turn affects the urban planning process and its physical outcome. A presentation of the theoretical debates in two flexible, dynamic and interlocking areas of knowledge, first, social structures, with specific reference to the concept of structure and agency, and second, urban development planning approaches in dealing with land development, provides the basis for defining an analytical framework to describe, analyse and explain the physical planning practice within the context of TRC, with specific reference to institutional arrangements, power structures, and interests of key institutions and agencies involved in the urban development planning process, planning politics, planning tools and procedures, and the decision-making process.

As regards to the analytical objectives, this study is an explanatory, descriptive and analytical one. It seeks a critical understanding of a socio-political and socio-economic phenomenon that affects the physical arrangements of the built environment, and thus, adopts the case study strategy as a research technique, focusing on refuting and supporting theories that explain how the social world operates (Merriam 1988; Eisner 1991; Bogdan and Biklen 1992). In other words, it seeks a deeper and clearer understanding of "a meaning of a process" (Merriam 1988, pp. 19-20; Cresswell 1994, p.2). However, it has to be stressed that this study does not aim to answer a policy question or to solve a pressing social problem, but rather to explain the causes behind and consequences of the politics of planning practice and decision-making. It aims to recount and analyse the urban development process of TRC within the context of the shifting allocation of power and resources within the 'triangle of power' and the changing political economy of Egypt since 1974 when a policy of promoting urban development (i.e. desert occupation) was adopted to assist with the resolution of Egypt's human settlement problems.

The study also discusses and explores the impact of the changes in the national political economy on the state-private sector relationship since 1974 with specific reference to the case study. It seeks to understand and to critically examine how such impact affected the institutional arrangements, values, interests, and motivations underpinning the planning practice. It also seeks answers to other questions, namely, how did the changes in the institutional arrangements and power structures at both the national and local levels and interests, values, and motivations of interest groups involved in the planning process, influenced the adoption and application of conflicting planning decisions and approaches in dealing with land development in the industrial areas within TRC? How did the adoption and application of such conflicting planning approaches and decisions impact upon the outcome of physical planning practice? What are the current perceptions of the workers and planners about the effectiveness of physical planning practice in creating an environmentally sound built up space (i.e. the green areas, services, utilities, buffer areas, location of industries, and the mix of industrial classes) in the industrial areas in TRC? In other words, the research directly addresses the call for more empirical studies that might support the theoretical analysis of the role and impact of interest groups and their relationship with the national and local government institutions, agencies and individuals (i.e. the triangle of power) on physical planning practice and on the urban development process as a consequence (also see appendix IV).

1.2 THE RESEARCH HYPOTHESIS

This research postulates that the failure of the physical planning practice in achieving the goals and objectives of the successive urban development policies and local physical plans resulted from the continuous shift in the allocation of power and resources within the ‘triangle of power’, as the national political economy, institutional arrangements and power structures at the national and local levels changed in the period of 1974 till 2002.

1.3 THE NATIONAL CONTEXT

Egypt has an area of 1,001,450 square Km, nearly the size of Spain and France together (see figure 1.1), an estimated population of around 74 million, and an annual population growth rate of 1.88 percent (CIA 2003). Egypt faces a number of human settlements and economic challenges, discussed in further detail in chapter 4, that on the one hand, hinder all effort of development and economic growth, and on the other, have represented the major challenges to the successive Egyptian Administrations since the

The economic challenges are represented in the continuous struggle to sustain the economy from sources outside the country's own productive capacity (see chapter 3), the unsatisfactory performance of the agriculture and manufacturing sectors, high rate of unemployment, skilled labour shortage, weak Gross Domestic Product (GDP) growth rate, very low per capita income, strewed and worsening distribution of income, high rate of inflation, balance of trade and balance of payments deficits, and distorted and ineffective government subsidies (WB 2003; HSBC 2003; IMC 2003; Attia 1999; Ayubi 1989, 1991; Zaalouk 1989; Rivlin 1984, 1985; Cooper 1982).

Successive and divergent political economy regimes have imprinted the landscape of Egypt's urban centres in greatly dissimilar patterns. In 1952, Egypt experienced a radical shift when President Nasser (1954-1970) and a group of military officers overthrew the British-backed monarchy and established a republic-type governance system. At the time, the Egyptian Administration eventually adopted socialist principles as a result of its close relations with Russia and China. Accordingly, the government policy was characterised by property redistribution, housing reform, construction of large-scale urban projects, the promotion of a massive industrialisation programme in 1957 to substitute the agriculture sector in leading economic growth, and the construction of a powerful public sector to lead the national development process at the expense of the private sector. Such regime was inherently anti-imperialist in its stance, and the elite class and entrepreneurs, who dominated the imperialist period before the 1952 Revolution, found themselves directly threatened with respect to their political situation and their control of wealth. To the new regime, the elite class and entrepreneurs represented the bourgeoisie and the excesses of imperialism. In reaction to the previous imperialist phase, little efforts were made either to attract foreign capital or to encourage the domestic private sector to participate in the national development process (including urban development) (Stewart 1999; AUC 2003; Tripp and Owen 1989; Ibrahim 1987; American Development Bank 2000)

In line with its socialist ideology, the state became involved in large-scale provision of welfare functions including those related to housing, health, cultural and social services and food provision. It is widely documented that such political economy environment had a devastating impact on the private sector operation in Egypt through the adoption of a nationalisation policy applied during the second half of the 1950s till 1961 and the application of the five-year development planning system starting from 1960 (see chapter 3). Nevertheless, during the period of 1960 till 1965, although the

share of the manufacturing sector in GDP was 16.9 percent while employing 11.3 percent of the labour force at the time, the agriculture sector was still in the lead with a share in GDP of 35 percent and 52.5 percent of the labour force (Ayubi 1991; Aliboni *et al* 1984; Zaalouk 1989; Rivilin 1985; WB 1997; El-Hoseni and El-Sheikh 1988; Soliman 1981).

After 1965, the bulk of the Egyptian Administration's efforts was directed at strengthening the Military budget aiming at building an army that was capable of defeating Israel and liberating Palestine. Nevertheless, the Egyptian Army was defeated in 1967 and lost Sinai to Israel. Since 1967 till 1973, even after Nasser's death in 1970, the Administration focused on the military and on the military manufacturing industries to re-build the army with the aim of returning Sinai back to Egypt. In October 1973, the Egyptian Army managed to achieve its goals and returned Sinai to the Egyptian control. The period of 1966 till 1974 saw a steady decline in the rate of economic growth, with a marked fall in both the rate of investment and domestic savings. The economy was suffering from a multitude of problems. These included uncoordinated economic policies, which failed to recover the Egyptian economy from the impact of Yemen and Arab-Israeli wars in 1962, 1967, and 1973, and the correspondingly heavy defence burden; the inefficiencies of the public sector and the misadministration of prices, foreign trade and investment programmes; and the cumulative effects of the population explosion (Aliboni *et al* 1984; Egypt 1985; Giugale and Mobarak 1996; Zaalouk 1989; Rivilin 1985; Mabro 1974).

The above trend came to an end when President Sadat (1970-1981) began the process of reconnecting Egypt with the world economy through the launch of the Open Door Policy (*Al-Infatah*) in April 1974 composed of the Open Door Economic Policy (ODEP, *Al-Infatah Al-Iktisadi*) and Egypt's New Map Policy (ENMP, *Kharetet Al-Taameer*). Such new national development planning policies had three significant features that would guide the development process in Egypt till 1991, as discussed in further detail in chapter 3. The first feature was to re-introduce, encourage, and give the lead to private sector (foreign and domestic) investment, while reducing the role of the public sector in the development process. The second feature can be recognised as the natural response to some of the ongoing national development problems at the time (e.g. availability of land, water scarcity, and the high cost of land reclamation) hindering any efforts of economic development led by the agriculture sector. As a consequence, the Egyptian Administration focused its investments, laws, and economic incentives on the

manufacturing sector along side the encouragement of the private sector investment (Ayubi 1991; Attia 1999; Salem 1997; Aliboni *et al* 1984; Egypt 1985; Giugale and Mobarak 1996; Zaalouk 1989; Rivilin 1985).

The third feature was directly linked to both the human settlements and economic challenges (see chapter 3). The aim of constructing new settlements across the desert to accommodate economic activities, including manufacturing industries, and to help alleviate the pressure on infrastructure networks, utilities and services in the existing main urban centres (e.g. Cairo and Alexandria) became the focus of successive national urban development policies since 1974. In other words, the construction of new settlements through which Egypt would be able to tackle the human settlements and economic challenges, was seen as the prime link between successive national economic development policies (e.g. Open Door Economic Policy) and national urban development policies (e.g. Egypt's New Map Policy) (Attia 1999; Stewart 1999; Salah 2001; Shalata 1997)

Nevertheless, the ODP and its following policies under Sadat was never a complete transition to a capitalist economic system. The national economy remained dominated by the public sector and central planning, and only a very limited amount of capital was attracted from multinational companies due to some regional and national conflicts (see chapter 3). Moreover, it seems only a small circle benefited from the ODP, creating a new bourgeoisie with large amounts of wealth. During the period of 1974 till 1981 the share of manufacturing sector in GDP rose from 16.9 to 18.3 percent and employed 11.9 percent of the labour force compared with the reduced share of agriculture in GDP of 26 percent and 47.7 of total employment. Although the share of the manufacturing sector was still less than of the agriculture sector, the manufacturing sector had the largest share in total investment. The share of the manufacturing sector in the total investment increased from 25.8 percent during the period of 1960 till 1965 to 26.1 percent during the period of 1974 till 1981 where the share of the agriculture sector decreased from 6.75 percent to 6.3 percent respectively (Fawzy 2000; El-Hoseni and El-Sheikh 1988; Soliman 1981; Rivilin 1985; Moore 1995; Steinberg 1991).

Under President Mubarak (1981 till now), who succeeded Sadat after his assassination in 1981, Egypt was more fully, if somewhat reluctantly, pushed into a capitalist system. Egypt's transition to capitalism was heavily instigated by outside forces, especially the World Bank and other creditors, who viewed extensive economic

reforms as the only means to save Egypt from its debt-ridden and low-productivity economy. In May 1987, the Government announced economic reforms in order to meet the requirements for an IMF loan, gain access to credit and permit renegotiation of Egypt's \$40 billion foreign debt (Springborg 1989). Nevertheless, it was not until 1991 with the institution of the Economic Reform and Structural Adjustment Programme (ERSAP) that Egypt somewhat unwillingly embraced the World Bank ideology of free market enterprise. The ERSAP created sweeping changes in the Egyptian economy including the elimination of many consumer subsidies, privatisation of state owned industries, currency devaluation and large reduction in public spending (Holt and Roe 1993; Sullivan 1990; IMF 2003a and 2003b; World Bank 2003a).

Since 1991, the government introduced far-reaching economic reforms and stressed that the transformation to liberalisation could never be fostered without the growth of the private sector. The main objectives of the ERSAP were: to continue targeting the manufacturing sector as a growth area and, in particular, to promote manufacturing exports; and to further the leading role of the private sector in the development process specifically in the manufacturing and tourism sectors. It can be said that the private sector responded positively to the encouragement of the newly promoted ERSAP where it is increasingly becoming the driving force for economic growth. For instance, in 1996, private investment was more than 50 percent of the total investment in the country indicating the commitment of the Egyptian Administration to dissociate from investment activities and instead facilitate and promote increased private sector involvement in the economy (Fawzy 2000, 2002; American Development Bank 2000; Salem 1997, Salah 200; HSBC 2003).

The share of the private sector in GDP has increased from 62 percent in 1993 to 74 percent in 1999. The increasing confidence in the private sector is exhibited in rising investment, increasing growth and incomes as well as continued active private participation in the manufacturing sector where the share of the manufacturing sector in GDP increased from 23 percent during the period 1987 - 1991 to 32 percent during the period 1997 - 2002 while the share of the agriculture sector declined from 17.6 percent to 17 percent respectively. Moreover, the share of manufacturing sector in total employment also increased from 12,6 percent to 22 percent during the same periods while the share of the agriculture sector declined from 39.4 percent to 29 percent respectively (Fawzy 2000; HSBC 2003, ACCE 1998; American Development Bank 2000; The Economist 1994, 1999; Daily Star 2003).

Nevertheless, although Egypt is faced with the fact that the manufacturing sector has a few dominant large-scale enterprises and a very large number of small and medium enterprises (more than 90 percent of total manufacturing establishments), the Egyptian Administration focused its attention on the large-scale enterprises given the ongoing economic challenges facing the country (see chapter 3). Guigale and Mobarak (1996) and Fawzy (1998) stress that small and medium-scale manufacturing enterprises, mainly serve low-income consumers, provide low-quality and low-price products, use obsolete technologies, and more than 90 percent of such firms take the form of partnership and run on a family basis rather than on a corporate basis. Conversely, while large-scale manufacturing enterprises are relatively well developed and are able to export their products, they are too few in number to generate linkages that foster a more active private sector. The above situation had its echo in the urban development process where the powerful entrepreneurs who own large-scale enterprises, backed by the state institutions and agencies, achieved control of the urban development process at the national level and more specifically within the context of the case study (Fawzy 2000; American Development Bank 2000; Attia 1999; The Economist 1994, 1999; Salah 2001; Salem 1997; Abdel-Latif and Selim 1999).

1.4 THE CASE STUDY CONTEXT

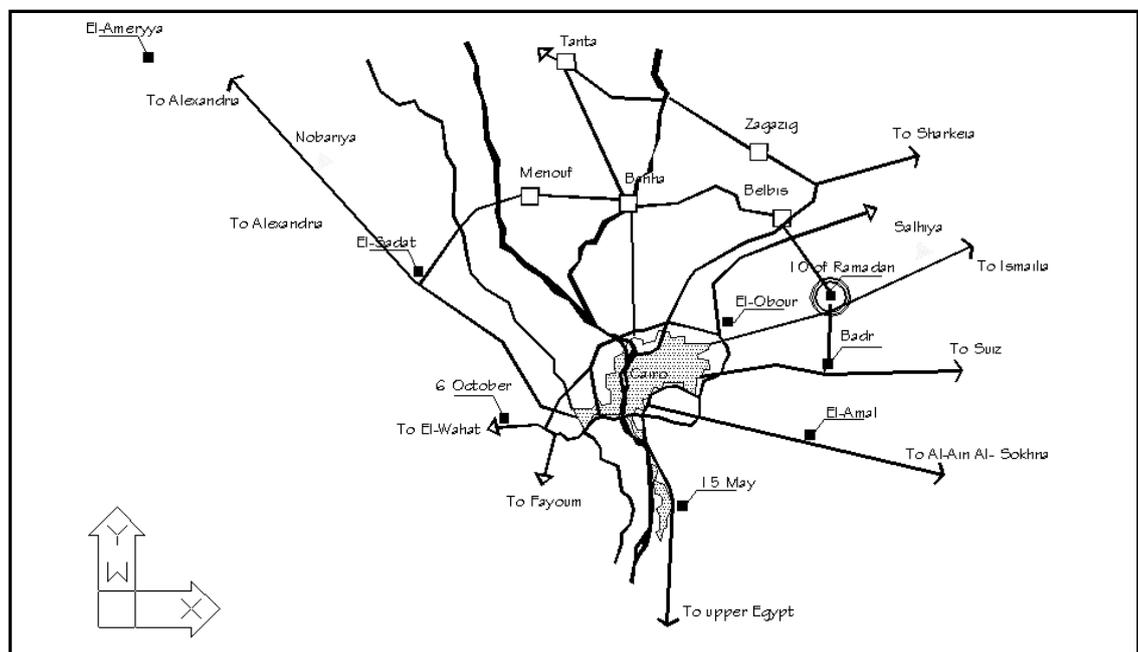
A justification has to be provided for, on one hand, the choice of one case study rather than multiple case studies and, on the other hand, the choice of Tenth of Ramadan City as the research case study. The adoption of a single case study approach was based upon two main reasons. First, the aim of this research, as discussed above, does not involve a statistical comparison or an attempt to generalise but it seeks instead to provide an in-depth analytical study of a process in its real-life context. Second, the researcher faced funding and time constraints during the fieldwork period, since, according to the research sponsor's regulations, the collection of the empirical evidence had to be conducted in a period limited to three months with half of the regular monthly maintenance budget.

In addition to the extensive knowledge the researcher has about TRC, having been one of the physical planners who participated in the physical planning formulation of the extension of the heavy industrial area in 1999, TRC was chosen as the research case study for many established facts. First, TRC has a unique political and economic profile among the new settlements planned around the period of the mid 1970s. TRC

was the first of the two new cities (TRC and Sadat City) to enter the physical planning formulation process in early 1975 and to enjoy significant political as well as funding support at the time from President Sadat and the Minister of Housing, Utilities, and Urban Communities (Osman A Osman). This was mainly because TRC was promoted, at the time, as the prime example of the new cities to follow what would serve as the physical link between the ODEP and ENMP as discussed in further detail later on. Moreover, the city was classified as the first city of the first generation of new cities to complete a first stage of urban development in 1989⁵.

According to several reports concerning the evaluation of the new settlements programme (e.g. Arab Republic of Egypt 1989, 1993; AAW 1999; Shetawy 2000), TRC was regularly ranked the top city among the new industrial cities in Egypt with respect to manufacturing development in terms of the number of producing manufacturing establishments, number of manufacturing employment, and the size of manufacturing investments and exports (see table 1.1). It was even claimed that in the year 1999/2000 TRC contributed 25% of Egypt's manufacturing exports (TRIA 2000).

Figure 1.2 The Regional Location of TRC



Source: (Shetawy 2000, p. 205)

⁵ According to the Ministry of Housing, Utilities and Urban Communities 1989, the first generation of new cities - cities completed their first stage of development – includes: TRC, Sadat City, New Ameriyya, 6 October, 15th May, and Salehia city. The second generation of new cities – cities within the process of construction of the first stage of urban development – includes: New Damietta, Badr, Noubariya, Beni Swef, New El-Menia, and El-Obour City. The third generation of the new cities – cities still in the physical planning formulation process – includes: El-Amal, and El-Safaa (i.e. New Assiut) City

Table 1.1 The Relative Importance of TRC in Comparison with the main New Industrial Cities

		10 th Ramadan City			Sadat			6 October City			New Ameriya City		
		7/6/1988	13/2/93	1/1/00	7/6/1988	13/2/93	1/1/00	7/6/1988	13/2/93	1/1/00	7/6/1988	13/2/93	1/1/00
No. of Manufacturing establishments	• Productive	259	531	923	39	96	126	104	286	392	30	146	231
	• Under construction	359	263	352	133	82	108	50	245	355	63	77	135
	• Total	588	794	1275	172	178	234	154	531	747	93	254	366
Capital invested (1000 L.E.) at factor cost	• Productive	329375	2542361	14015761	129265	309869	425300	211380	664674	258113	43330	439996	651800
	• Prospective	247826	904046	1249039	166513	501995	585380	51283	378487	291433	99668	281515	314960
	• Total	577201	3446407	15264800	295778	811864	1010680	262663	1043161	317246	142998	721512	966760
Employment	• Productive	19690	36625	104608	9254	5510	6545	5666	28899	102850	1360	8835	13723
	• Prospective	19136	16622	11114	5875	4327	5710	3745	12240	40617	5768	5294	5264
	• Total	38826	53247	115722	8829	9837	12255	9411	41139	143567	7128	14129	18987

Adapted from:

Arab Republic of Egypt, 2000, *Twenty Years of Achievements: We Build for People*, New Communities in Egypt, Ministry of Housing, Utilities and Urban Communities, Al-Ahram Commercial Press, Kalyoub, Egypt;

El-Toukhy A., 1995, "Regional Planning and Urban Development in Egypt", Center for Human Settlements (UNCHS), The Arab Ministerial Council for Housing and Construction, *The Future of the New Settlements Conference, 22-25 May*, Cairo, Egypt;

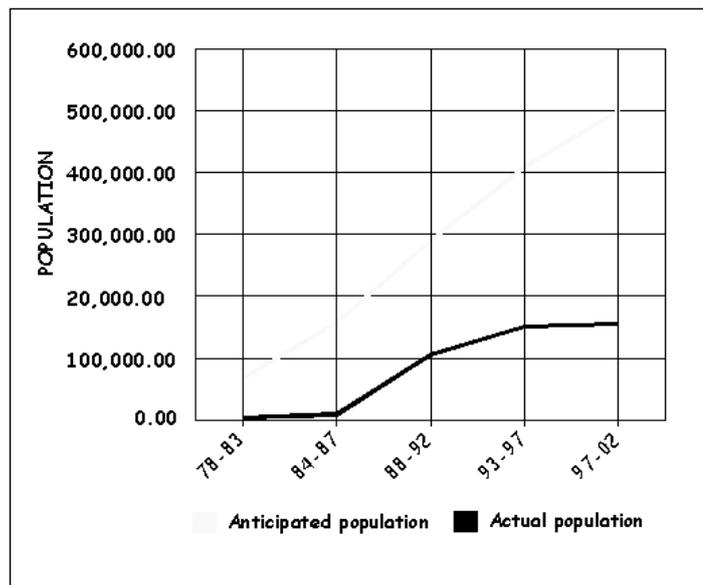
Shetawy A., 2000, *Distribution of industrial activities within the industrial areas and its environmental impact, case of Tenth of Ramadan City*, -Ain Shams University, MSc Thesis, Cairo;

TRIA, Tenth of Ramadan Investors Association, 2000, *10th of Ramadan Investors Association Directory*; and

TRC 2002, *General Information*, Tenth of Ramadan Development Authority, Alpha Co. Press, Six of October City, Egypt.

Second, the location of the city is a unique one. As may be seen from figure 1.2, the city is located on one of the six development corridors of the Greater Cairo Region (GCR), the Cairo/Ismailia highway, 55 km east of down town Cairo (i.e. El-Tahrir Square), 65 km from Ismailia City located on the west bank of the Suez Canal, and 25 km from Blebis City (AAW 1999, P.1/2). The choice of the city location was mainly due to political and economic reasons. For instance, Abdel-Aziz⁶ (2002) stresses that the city was located in the east desert towards Sinai as a part of a defence strategy in case of future threats from Israel and near to the Suez Canal to facilitate the export of its industrial production. In addition to the political and economic aspects of the location choice, there were interests of specific powerful agencies and individuals involved the choice of such location. Such location proved to be a strong incentive to the private sector to invest in this specific city compared to any other new industrial city (see table 1.1).

Figure 1.3 Population Growth in TRC



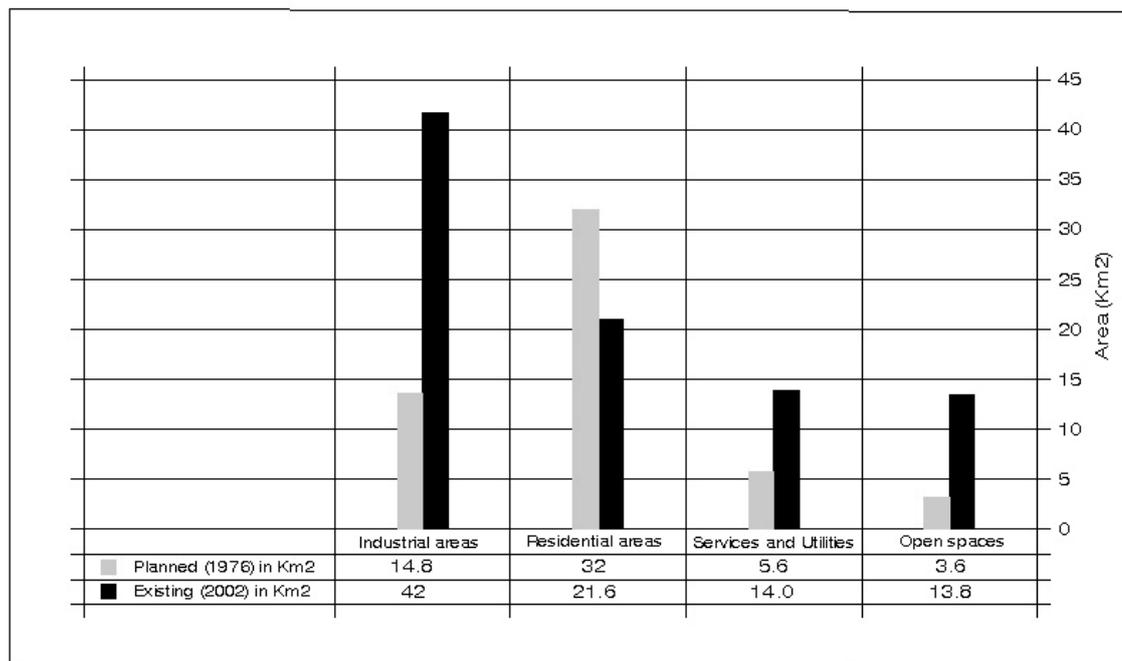
Source: Ain Shams University 2002

Third, the City had an exceptional urban development process that can only be described as ‘up-normal and irregular’ (see chapters 4 and 5). Although a high rate of growth characterised the urban and economic development of its industrial areas, TRC had failed dramatically to attract the target population planned for (i.e. 500.000 inhabitants by the year 2000) (see figures 1.3 and 1.4). Moreover, as it is discussed in greater detail in chapters 4 and 5, it has been documented that there is a dramatic

⁶ In an interview with the researcher in March 2002

deviation between the original land use plans and the implemented patterns of the industrial areas in TRC. Such gap is often explored, analysed, and documented in relation to industrial location within the urban agglomeration of the city as a whole and more specifically within each industrial area, the buffer zones between the industrial and residential areas, the lack of local facilities and services within the industrial areas, and the buffer zone of the flood plain in the heavy industrial area (A1) (for instance, see table 1.2).

Figure 1.4 The Development of Land Use Activities in TRC



Source: Ain Shams University 2002

Table 1.2 The Deviation of the Industrial Allocation in a Sample of the Industrial Areas in TRC

Plot Size \ Area*	Area*								
	A1	A2	A3	B1	B2	C1	C2	C3	Total
Large (no.)	29	18	6	12	7				72
Medium (no.)	11	47	18	15	29	2			122
Small (no.)		6	19	4	16	53	10	6	114

Source: AAW 1999, 40/2

* There are three types of industrial areas in TRC: the heavy industrial areas (type A), the medium industrial areas (type B), and the light industrial areas (type C). Such classification was based upon specific environmental criteria related to the type, size, and requirements of manufacturing establishments. The analysis of such arrangements will be discussed in further details in the physical planning formulation analysis chapters.

Fourthly, the city was physically planned three times, which are represented in the 1976, 1982, and 1999 physical plans (see Appendix I). Each of such plans took

place within different political economy environment, institutional arrangements, power structure and interests of the key actors involved in the planning process. The city also went through three main periods of macro-economic and political change in which the above-mentioned aspects had a major impact on the outcome of the implementation process, as discussed in further detail in chapters 4 and 5.

Finally, TRC represents an appropriate case study through which the impact of the changes in the political economy since 1974 and, as a consequence, in the state-private sector relationship on the physical planning practice in the urban development process of the industrial areas can be traced, analysed and documented. It has a fairly moderate size in terms of population and urban agglomeration that could be managed, given the time and funding limitations of the fieldwork.

1.5 THE THEORETICAL SCOPE

The substance of this research relates to a wide range of theoretical and applied disciplines including urban development planning, development administration, urban management, social and political science, economic development planning, environmental planning, and public policy analysis. Given the limited time and funds, emphasis has been given to the socio-political and socio-economic dimensions of the urban development planning process, public sector management, institutional arrangements, and the decision-making process of urban development planning practice and the extent and nature of the state and private sector interventions in such practice. It has to be stressed that no attempt is made to conduct a comprehensive review of the urban development planning practice literature in this research. Nevertheless, many of the key English-language works in this field were consulted (for example see, Healey 1983a, 1983b; 1996, 1997; Beauregard 1996; Sandercock 1998; Moser 1993; Campbell and Fainstein, 1997; Faludi 1986; Innes 1995; Davidoff 1996; Scott and Roweis 1977; Krumholz 1994; Harvey 1989a, 1989b; 1996; McDougall 1982; Albrechts 1991; Rees 1999).

The aim is to focus on and critically examine the gap in the literature with respect to the link between urban development planning theory and practice and the different approaches to social structures, with specific reference to the concept of 'structure and agency', where an analysis of the institutional arrangements, power structure, interests, values, motivations and behaviour of the key actors involved in

urban development planning practice and decision-making process is often considered to be part of a 'black box' for researchers.

The theoretical context of this research addresses the need for developing an analytical framework particularly applicable to the context of the non-western developing world. There is a rich body of English-language literature on physical planning practice and urban development planning theory with specific reference to the socio-political and socio-economic dimensions of urban change in the context of the developed industrial world (for example Beauregard 1989, 1996; Harvey 1985, 1989a, 1989b, 1996; Healey 1996, 1997; Vance 1990; Cybriwsky 1991; Rowntree and Conkey 1980; Davidoff 1996; Rees 1999). While the current body of literature has greatly expanded our knowledge of the dynamic of the relationship between the economy and political forces and urban development planning practice within the western context, it is of limited utility for understanding non-western countries, which engage with the world capitalist system in a different manner (Stewart 1999; Healey 1997). Countries of the developing world, such as Egypt, neither share the common history of the industrial economic development model, which originated in Europe and the United States, nor do they share the exact forms of social structures, culture, politics, and governance, which are rarely comparatively examined. This further limits the applicability of such western-based analytical frameworks to the context of many developing countries.

In striving to develop a more relevant analytical framework for the analysis of physical planning practice in the context of developing countries as well as more sensitive to the key social structures within which such practice is carried out, and to the national and local socio-political and socio-economic forces that shape the form of the city, urban development planning practice, therefore, is viewed as a social product that reflects changing societal values, perceptions, interests, behaviour and motivations. It also echoes the institutional arrangements of the urban development process and the power structure of the various societal groups. This is theoretically examined through a critical analysis of the extent of intervention of state institutions and agencies and private sector agencies and individuals in urban development planning practice. Putting on such analytical spectacles, it has become pressing to examine the different theoretical approaches to the understanding of social structures, with specific reference to the concept of 'structure and agency' and to critically analyse the various urban development planning theory and practice while exploring the interlocking relationship between the above areas of knowledge.

1.6 THE METHODOLOGY OF THE RESEARCH

This section describes the process of research and discusses some of salient methodological issues regarding the nature and shortcomings of the information used. The reader will come across additional short methodological explanations at different points of the dissertation in connection with analytical procedures, and the use of terms, concepts and data in specific contexts. The research sought to understand the politics of the planning practice simultaneously from the viewpoints of different actor groups within the study population, which involved consulting both primary and secondary information. The research comprised a series of stages that include a review of the literature in connection with both the analytical framework and case study, discussions with experts on the subject and other informants concerned with, and influenced by, the research problem, acquisition and analysis of both qualitative data acquired from the interviews and quantitative data including official (secondary) and non-official (primary) statistical data. It also involved a design of a sample survey, collecting and processing of sample data using the statistical software SPSS, and finally the process of writing up.

1.6.1 The Research Strategy

Although there are many research strategies, the more common used ones, as Yin (1994, p. 3) states, are the experiment, survey, history, computer analysis of archival records, and the case study research strategy. Each of these research strategies is a different way of collecting and analysing empirical evidence and follows its own logic and assumptions. Many scholars and analysts emphasise that any research strategy can be used for all research purposes (i.e. exploratory, explanatory, and descriptive). In this sense, there may be exploratory case studies, explanatory case studies, and descriptive case studies; and the same can be applied to any research strategy (Yin 1981; Cooper 1984; Hedrick *et al* 1993; Yin 1994). There is an agreement among scholars and researchers that the choice of research strategy depends on the nature of the research question(s), the extent the researcher has control over behavioural events, and the degree of focus on specific events rather than the purpose of research (Hedrick *et al* 1993). Yin (1994) summarised the relation between research strategies and types of research questions as follows:

“... The first and most important condition for differentiating among the various research strategies is to identify the type of research question being asked. In general, “what” questions may either be

exploratory (in which case any of the strategies could be used) or about prevalence (in which surveys or the analysis of archival records would be favoured). “how” and “why” questions are likely to favour the use of case studies, experiments, or histories” (Yin, 1994, p. 7)

Given the main research questions stated above, it is obvious that this research could be located within the boundaries of either history or case study strategy. However, as Platt (1992a; 1992b) points out, history strategy is usually adopted in situations when a researcher is dealing with the “dead-past” when no relevant persons are alive to report, even retrospectively, what occurred, and when the researcher must rely on primary documents, secondary documents, and physical and cultural artefacts as the main source of evidence. Nevertheless, in certain cases historians have to deal with contemporary events. In this situation, history strategy begins to overlap with the case study strategy. In such situation, many analysts (Campbell *et al*, 1982; Cooper, 1984) claim that it is preferable to adopt a case study strategy. This is because in these situations case study strategy has two main advantages that are the ability of using systematic interviewing and direct observation methods. Supported by the later arguments and discussions, this research adopts the case study as a research strategy in collecting and analysing the empirical evidence.

1.6.2 Limitations of Case Study Strategy

It must be said that there are theoretical and practical advantages and disadvantages of the case study strategy. Schramm (1971) argued that the essence of case study, the central tendency among all types of case studies, is to illuminate a decision or sets of decisions: why they were taken, how they were implemented, and with what results. Platt (1992) emphasises that, as a logical way of design research methodology, case study strategy has both a scope of study and data collection and analysis techniques. Regarding the scope of study, a case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 1994, p.13). Furthermore, in relation to the technical characteristics, including data collection and data analysis techniques, the case study inquiry, as Yin (1994) claims,

“... copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as one result it relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result it benefits from the prior

development of theoretical propositions to guide data collection and analysis” (Yin, 1994, p.13)

Given the main features of case study strategy and its potential, case study strategy has often been criticised for specific disadvantages that affect the process of data collection and data analysis. First, the greatest concern has been over the lack of rigour of case study research. This is because, as Sudman and Bradburn (1986) claim, too many times the case study researcher has allowed equivocal evidence or biased views to influence data collection and data analysis process, in other words the direction of finding and conclusions. Although this disadvantage is not different in any other research strategy, it has been more frequently encountered and less frequently overcome in case study strategy (Yin, 1994, p.10).

The second common concern about case study strategy is that it provides little basis for scientific generalisation. The repeated question among scholars and analysts is how can we generalise from one single specific case study? Like the first disadvantage, this one can be found in any other research strategy. It can be argued how can we generalise from a single experiment, specific historical position, single annual archival record, and sample survey conducted in a specific context? Although the later argument can be the answer to scholars who criticise case study strategy, many scholars defend the case study strategy by claiming that the main aim of case study strategy is not statistical generalisation but rather analytical generalisation that supports the research goal to expand and generalise specific theoretical propositions (Creswell, 1994, pp.143-171).

The final and frequent complaint about case study strategy is that it requires too much time and the resulting data is so large that it cannot be easily organised and categorised. However, this disadvantage, as Feagin *et al* (1991) point out, appears in the case study strategy because of the misunderstanding and continuous lack of distinction between case study as a research strategy and the techniques used by such strategy to collect and analyse data. Hoaglin *et al* (1982) claim that in the past, case study strategy was usually connected with ethnography and participant observation techniques (or methods), which require too long time to be carried out. Nevertheless, there are many other techniques that can be used with the case study strategy and would not require such long time. These include interviews, sample survey, documentation, archival records, and direct observation.

1.6.3 The Research Methodology Approach

Many scholars and analysts, such as Van Maanen (1988); Strauss and Corbin (1990); and Yin (1994) point out that the case study strategy should not be confused with qualitative research. Case studies can include, and even limited to, quantitative evidence. Lincoln and Guba (1986) claim that the contrast between qualitative and quantitative evidence does not distinguish the various research strategies. In this sense, case study strategy can be based on both qualitative and quantitative evidence and as a result can use mixed techniques (or methods) to provide such evidence. On the one hand, qualitative research is an investigative process within which the researcher gradually makes sense of social phenomena by contrasting, comparing, and analysing the responses of informants. On the other hand, quantitative research seeks facts about specific phenomena, events, roles, groups, or situations rather than seeking an in-depth understanding of a specific phenomenon or process in its real-life.

Given the main research questions and objectives, a combination of both qualitative and quantitative research methodology was adopted as an approach in dealing with data collection and analysis. The aim of the adoption of the quantitative research methodology, as stated above, was to provide the evidence that supports the outcomes of the qualitative research methodology seeking an in-depth understanding of the phenomenon being studied. Cresswell (1994, p. 184) claims that this situation called a “dominant-less dominant” research methodology situation within which the research methods and results relate to a dominant research paradigm in use (qualitative research methodology in this research), with a small segment for methods and results for the less dominant paradigm (the quantitative research methodology in this research).

1.6.4 Study Population and Units of Analysis

The study population involved in the physical planning practice and the urban development process falls into four categories: the government (both at the central and local levels), the interest groups, the consultants and advisors, and the manufacturing workers. The central government officials include: officials in the Ministry of Reconstruction, Housing and New Communities (MOH), which includes Authority for New Urban Communities (ANUC), General Organisation for Physical Planning (GOPP), Advisory Committee for Reconstruction (ACR), Tenth of Ramadan Environmental Inspection Unit (TREIU), and Agency for Research and Projects (ARP); Local Government Officials include: Tenth of Ramadan Development Authority

(TRDA), and Board of Trustees (BOT). In addition to administrators, permanent staff, and politicians.

The interest groups outside the central and local governments structures include: Tenth of Ramadan Investors Association (TRIA), Department of Environment within TRDA, and Association for Developing Small and Medium-Scale Industries in the New Cities (ASMINC), manufacturing establishments owners and managers, manufacturing workers within the industrial areas A1, B1, and C3.

The consultants and advisors include: the Egyptian consultancy firm (COPA), Ahmed Abdel Warith Consultancy Firm (AAW), academics, experts and advisors including planners, sociologists, economists, environmentalists, lawyers. For each study population, a specific methodology technique and research method was adopted to collect data. The workers included: a sample from workers in A1, B1 and C3 industrial areas working living and commuting everyday to and from TRC. Appendix II presents research methods and related study population and sampling techniques. In section 1.6.6, such research methods and their advantages and shortcomings in the process of data collection in the fieldwork will be discussed.

1.6.5 The Fieldwork Constraints

Three specific fieldwork constraints hindered the process of data collection in connection to specific study population groups. First, as a consequence of currency devaluation in August 2001, almost all manufacturing establishments tended to cut back their spending to cope with the newly established economic situation. One of the main policies was to pressure their workers by reducing their salaries by half (in some cases by two thirds) or being fired. Given the above situation as well as the need for money to support their families, almost all of the workers preferred not to register with the national insurance system and employment offices. This is to save some extra money from not paying the monthly insurance fees automatically deducted from their salaries. This led to the situation where they had to accept the entrepreneurs' (i.e. establishments' owners and managers) blackmailing and manipulation. With the continuity of the crushing economic situation and the loss of every hope that the economic situation would get better and their salaries would be the same again, the workers could not support their families solely with their newly imposed salaries. As a consequence, there were several demonstrations and protests within the industrial areas in TRC and other new cities, which were dealt with by a heavy-handed police force. Such social unrest

made the industrial entrepreneurs anxious and irritated about interviewing their workers and the subject that would be discussed.

The second constraint was in connection to the tragedy of September 11th 2001. After such tragedy, the Egyptian government took very strict security measures all over Egypt. One such measure, as it was discovered when interviewing the workers, was to arrest every single adult male living and working in TRC, under the emergency law initiated after president Sadat assassination, to be questioned and investigated for having any connection with terrorist groups in both the national and international levels. Such situation created an environment of fear among residents to give any statement or to be interviewed thinking that the researcher is from the intelligence.

Thirdly, it was confirmed by a senior police officer that the intelligence seized a spying operation that was about to be terminated in TRC where two MOSAD agents were arrested while operating as two planning students from the UK. This situation led to, first, the local police to be vigilant regarding my movements and to arrest the researcher several times for taking photos within the industrial areas and the city residential neighbourhoods. Second, it also led the residents to be over-suspicious about the researcher and not willing to participate in any interview. Finally, there were clear and strict orders from senior government officials both at the local and central government levels to limit handling and circulating any information or documents with the 'public'.

1.6.6 Conducting the Case Study: Collecting the Evidence

The empirical evidence of this research originated in different sources (or research methods). No single source of evidence, as Yin (1994) claims, has complete advantage over all the others. Sources of evidence for this research are documentation, archival records, interviews, direct observation, and a sample survey. The characters of each source and the way that contributed to the data collection process was as follows:

1.6.6.1 Documentation

Documentation source plays an explicit role in data collection process in dealing with case study research. The forms of documentary evidence could be unlimited, however, the documentary information supporting this research is based on specific forms. These forms included books, articles, research reports and proposals, postgraduate dissertations, and published and unpublished studies and evaluations for

the same case study; in addition to newspapers clippings. A number of libraries and documentation centres in both the UK and Egypt were consulted throughout the research (see Appendix III). The strengths of documentation evidence was in its given advantage to be reviewed repeatedly, to help verifying the correct spelling of titles and names of organisations that might have been mentioned in the interviews and questionnaires, to include exact references and details of the case study, to corroborate information from other sources, and in most cases to contain a broad coverage of long span of time and many events.

In spite of the overall potentials of the documentation source of evidence, some of the documents provides data that are extremely biased, in the sense that such documents provide information directed to specific audience or were written for some specific purposes rather than those of the case study analysis. Such concern was recognised in the case of local government's reports that aim only to show its achievements rather than providing and presenting non-biased information. At the beginning of the fieldwork, some specific documentary information had been deliberately blocked from being accessed as been classified or politically sensitive. For instance, I was blocked from having access to the specific maps that show the specific terms of reference of the land uses and type of industries to be established in each industrial areas, the official decision-making steps to locate land for specific use and approve industrial projects, and the ministerial decrees regarding the creation of the BOT and its official role in managing the urban development process in TRC and its relation with TRDA. However, the later problem was overcome through direct personal contacts with senior government officials both at the central and local government levels.

1.6.6.2 Archival Records

The usefulness of the archival records varies from case study to another. For some case studies, archival records can be the main sources of primary information and in other case studies, archival records can serve as supporting sources of evidence or providing background evidence. For this research, archival records were not the main source of information but were rather a supportive one. Like the documentation source of evidence, archival records can take many forms. For this research, the forms of archival records were maps of the geographic characteristics of the case study, list of

names, addresses, and other relevant information, and survey data previously collected during the MSc fieldwork trip⁷.

Although archival records share the main strengths of documentary information, they have a distinctive advantage. Archival records are supposed, if not biased, to be precise and quantitative and to provide direct and hard scientific evidence. However, archival records can be extremely difficult to obtain specially if personal and/or categorised information are included in such records. As mentioned above the problem of inaccessibility to such records was extremely noticeable in the context of Egypt specially when dealing with records related to the economic development and political fields. Such problem drives partly from, as many reports, articles and newspapers confirm, the steps that the Egyptian government took regarding currency devaluation in August 2001 and the rise of basic goods prices (e.g. wheat, rice, cooking oil, sugar) and the resulting social unrest. Nevertheless, data collected for economic records were mainly obtained from the online World Bank site, The Economist, and other documents published by the Egyptian American Chamber of Commerce.

1.6.6.3 Interviews

“Interviews are an essential source of case study evidence because most studies are about human affairs. These human affairs should be reported through the eyes of specific interviewees, and well-informed respondents can provide important insights into a situation”

(Yin 1994, p. 85)

This research adopted face-to-face semi-structured and structured interviews techniques (see Appendices IV and V). On one hand, regarding the semi-structured interviews, a list was prepared for key actors identified to be interviewed before the fieldwork. Some actors in such list were contacted both by phone and email if found. All key actors that had been contacted before the fieldwork agreed and welcomed to be interviewed, seeing the research as both interesting and worthwhile, and gave their time unstintingly. The only refusal, disappointing in view of willing participation of very senior planning consultant and academic staff, was the senior planner for the third and fourth phase of residential and industrial areas in TRC. This was a result from his personal and financial dispute with AAW, his view that such interview would not make

⁷ TRC was the case study of the researcher’s MSc research in 2000. The researcher had to collect primary data about the demographic, micro-economic contexts as well as the gap between the successive original physical plans and the implemented land use patterns at the time.

any difference for the existing situation in TRC industrial areas, and his concern about the politically sensitive nature of discussion⁸.

Such list was continually enlarged during the period of the fieldwork in a snowballing manner, as some interviewees recommended others to give more detailed discussions about some specific points that they do not know about. Appendix VI presents the last updated list of informants interviewed. In all cases, interviewees were contacted by phone, it was possible to hold a relaxed discussion with the subject even with the most senior politicians or administrators, and the researcher's intervention was limited as necessary that the key issues were covered. Given the tragedy of September 11th and its consequences on the security environment in Egypt at all levels, as discussed above, it was impossible to record a single interview. In four cases (i.e. the secretary of the BOT, the director of the department of development in TRDA, and two members of the department of public relations in TRDA) detailed written record or just taking notes was absolutely refused mainly because of the politically sensitive discussions. In such cases, the researcher had to remember the key answers to the interview questions and record them instantly after each interview.

The discussions generally took between one and two hours each, occasionally longer, and in some cases more than one discussion was held with the same person (mainly with the above mentioned interviewees). The aim was to test accuracy by checking such discussions for internal consistency, checking the validity of recorded notes, checking for consistency between stories as reported by others who were interviewed and has been involved. The research utilised only the information, gathered from the semi-structured interviews that was consistent in discussions with at least three interviewees in order to guarantee the reliability and quality of data. In case of mismatch between stories presented, this was of a particular interest.

On the other hand, regarding the structured interviews, before the field work it was planned that the researcher would carry out two sample surveys with two different study population to guarantee data reliability. It was planned that a sample survey is to be carried out with manufacturing workers within A1, B2 and C4; and another sample survey to be conducted with residents around such areas. The choice of such industrial areas was mainly based on one of the city reports confirming that such areas were the first to be planned, and thus it would be a justified choice for tracing the urban

⁸ I have not displayed a structured cross-referencing of the interviews to protect the identity of the interviewees.

development process and planning practice within the industrial areas in TRC. Nevertheless, after two days in the field, it was recognised that such industrial areas were not the first to be either planned or constructed instead they were A1, B1 and C3 industrial areas. Given such circumstances, the two samples (i.e. workers and residents samples) had to be redesigned.

It has to be said that it was assumed and planned that the researcher would be able to meet the workers in front of the manufacturing establishments on their way in and out, in mornings and evenings on their way home; and would be able to knock at the sample residents' doors and conduct the face-to-face structured interviews. However, this proved to be extremely dangerous and naïve as the researcher was nearly arrested by the local police several times for security reasons. The strategy for the workers sample had to be changed to an official one that depended on contacting the manufacturing establishments and asking for their permission to interview their workers. This proved more effective although the researcher had some doubts about data bias in terms of expecting establishments to choose the workers to be interviewed rather than the researcher himself using less biased methods. This was a false expectation, as almost all the establishments' managers gave the researcher full access to any worker of his choice while touring the establishment accompanied by an engineer away from managers and other colleagues. To the researcher's satisfaction, the interviewees were checked carefully not to have any previous knowledge about either the interview or the subject that would be discussed.

There were only three refusals to provide such access and even face-to-face interviews and asked for the interviews forms to be collected later on, after two days of their delivery. It was discovered, in each of such cases, that all the collected forms were the exact copy written by the same person and even the same pen. The reason for such action was connected to the very politically sensitive posts that their owner holds, as all of them are Members of the Egyptian Parliament. In A1 industrial area, out of the original sample there were four refusals to conduct interviews, five closed down establishments, and four with no reply to my request. In B1 industrial area, there was only one refusal, one did not reply my request for interviews, and one closed down establishment. In C3 area, all the original sample establishments and their workers had been interviewed. For those refusals, closing down, and no reply establishment, the researcher chose other establishments to conduct the structured interviews with their workers and managers.

Although the obstacles that faced the conduct of the workers sample could be overcome, it was extremely difficult, if not impossible, to conduct a single structured interview with any resident. The residents' sample survey had to be cancelled because of security reasons stated above. It has to be mentioned that because of the good relations that the researcher had built with the public relations employees in TRDA during the first month of the fieldwork, the researcher was offered several times by such employees to fill in the survey forms as a favour. However, such offers meant to turn a blind eye on such process, as the data to be collected would neither be valid nor reliable and oppose research ethics, as all forms would be filled in by such employees.

1.6.6.4 Direct Observation

There is a common agreement between scholars and analysts such as Cresswell (1994), Yin (1994), and Woodhouse (1998) about the importance of the direct observation method when dealing with case study research. Direct observation refers to the visits that a researcher may carry out to the case study site in order to observe relevant behaviour or environmental conditions to the phenomenon being studied. Direct observation method is often very useful in providing additional information about the topic being studied to support other empirical evidence. Dabbs (1982) claims that direct observations are valuable when the observer may consider taking photographs to support his/her observations and to convey important case characteristics to outside observers.

The direct observation method was adopted to achieve three main objectives: to update existing land use patterns of the industrial areas in TRC, to observe investors who need to apply for industrial land regarding their reaction and response to rules and regulations at both the central and local government levels, and to take photos of the utilities and services within the studied industrial areas. Although the first objective was achieved with no obstacles, the second objective had to be dropped for two main reasons. The first was the total blockage to gain access to meetings between government officials and investors at any level. The second reason was the fact that such meetings are rarely carried out through official channels. The third objective was achieved, however after the researcher had been arrested. After checking the needed documents that confirmed the approval for conducting such research, permission was provided to take photos and even video recording of the industrial areas.

1.6.6.5 The Sample Survey

As mentioned above, this research adopted the sample survey method to collect evidence regarding the perception of workers about the decision-making process regarding land development and the effectiveness of physical planning practice in providing an environmentally sound built up space in the industrial areas. Prior to the fieldwork trip, it was recognised that the demographic statistics provided by TRDA were extremely biased and unreliable. This is because such statistics aimed at showing the central government and the people's assembly the success of TRDA to attract workers and residents to TRC. The empirical findings of the pilot fieldtrip in May 2001 confirm that the procedures and basic factors upon which such statistics were gathered are unreliable.

For instance, TRDA demographic statistics claim that the total population of the city reached 100,000 in 1996 (AAW, 1999, p.2/14) and 148,000 in 2001 (Pilot field trip, May 2001). However, from the pilot trip findings in May 2001, such statistics were based upon calculating (and not surveying) the total population at daytime not at nighttime. This means that workers, who work in the industrial areas and then return back home to the neighbouring cities at the end of the working day, were counted in such statistics. The Chief Engineer in TRC stresses that the nighttime population is, at most, 48,000 inhabitants and the number of manufacturing establishments in the official records neglects the production status of each establishment (i.e. under construction, producing, or closed down). In addition to the bias of such statistics and records, the official national statistics and records provided by the Central Agency for Population Mobilisation and Statistics (CAPMAS) do not include any separate demographic statistics for either the workers or residents of TRC. This is because, as revealed by the findings of the pilot fieldtrip in December 2000, the population of TRC were simultaneously added to either the population of Belbis City (the nearest existing city) within Sharkia governorate or the population of Cairo City where TRC was seen as one of their suburbs. Furthermore, The exact number of workers in each establishment was difficult to obtain. This is because the actual archival records of workers in each establishment are seen as classified internal information because of their direct connection to taxation and employment rights.

A combination of up to date EEAA land use plans and the TRDA and TRIA lists of producing establishments were used to provide the sample framework⁹. For instance, in the heavy industrial area (A1), according to the TRDA statistics, there have been 140 registered working establishments. However, according to EEAA (2002), there are only 81 establishments currently in production. The same case is applicable within both industrial areas (B1) and (C3). Moreover, the EEAA maps and reports provide a helpful updated sample framework regarding the number of workers in each working establishment classifying them into three categories that are: establishments that have more than 50 workers, establishments that have from 10 to 50 workers, and establishments that have less than 10 workers. With the help of the computer software Excel under Windows 2000 operating system, a systematic random sampling technique was processed to provide the logic of choosing the exact establishments needed to interview their workers in recognition to the EEAA establishments' classification in relation with the number of worker within each establishment.

Three industrial areas were chosen to conduct a sample survey within each. Such choice was crucial since the time and funds of the fieldwork were limited. From the five heavy industrial areas in the city, the heavy industrial area (A1) was chosen. The choice of this area was due to three main reasons. First, the heavy industrial area (A1) was the only heavy industrial area that both a foreign, Swedish (SWECO) and Egyptian (COPA) urban development planning consultancy firms designed detailed land use plan models for. Second, it was re-planned by the Egyptian private consultancy firm (COPA) to meet the market needs within the local context and yet modified several times by the department of planning in TRDA. Finally, it was the first heavy industrial area to be implemented in the city. From the four medium industrial areas (i.e. B1, B2, B3 and B4) in the city, the medium industrial area (B1) on the western side of the city was chosen. The choice of the medium industrial area (B1) was based on three reasons. First, like the heavy industrial area (A1), the medium industrial areas (B1) and (B2) were the only medium industrial areas to be planned by both the Swedish and Egyptian consultancy firms. Second, the B1 area was re-planned and modified by the TRDA. Finally, it was the first medium industrial area to be implemented in the city. Furthermore, the light industrial area (C3) was chosen from the four light industrial areas in the city because of

⁹ Such land use maps and information about the number of workers and environmental status within each industrial establishment were provided by an environmental research project to announce TRC as the "first environment friendly" city in Egypt. This project was run during the period of August 1998 to January 2001 under the authority of the EEAA Environmental Inspection Unit, funded by the Canadian International Development Agency (CIDA), and managed by Roche-Intelec Consortium.

its location next to the medium industrial area (B1). This gave the researcher the chance to concentrate his efforts on one specific zone to save time, fund and effort.

It has to be stressed that the sample survey is not a strictly representative sample. Given the time and funding limitations of the fieldwork, the aims of the ample survey, as less-dominant quantitative method, are to explore a wide range of manufacturing workers' perceptions about the urban development process and physical planning practice as well as to endorse the validity and reliability of the primary data collected by the dominant quantitative methods. Therefore, a sample survey was designed to choose 20% of the establishments in each industrial area, with four workers to be interviewed from each establishment. This gave a total of 116 workers that had been interviewed. A total of 17 establishments from (A1) area, 8 establishment from (B1) area, and only 4 establishments from (C3) area were randomly chosen to provide the list of establishment that were to be contacted to have their permission to interview their workers. Nevertheless, since the establishments have been classified into three categories regarding the workers size factor, the sample of establishments was based on the percentage of every category as seen in table 1.3

Table 1.3 The Sample of Manufacturing Establishments

Industrial areas	No. of establishments in production (TRDA)	Size (No. of workers)	Actual no. of establishments in production				Systematic random sampling
			Census	Total	Sample (20%)	Total	
(A1)	140	>50	55	81	11	17	1:5
		10-50	22		5		1:4
		<10	4		1		1:4
(B1)	59	>50	20	36	4	8	1:5
		10-50	14		3		1:4
		<10	2		1		1:2
(C3)	34	>50	2	12	1	4	1:2
		10-50	8		2		1:4
		<10	2		1		1:2
Total			129	129	29	29	

1.6.7 Data Validity and Reliability

Given the criticism of case study strategy, discussed earlier, the problem of data validity and reliability had to be overcome to avoid data bias. The following measures were adopted to support and strengthen the validity and reliability of data collected:

- 1- *Triangulation of data*: Woodhouse (1998) defines triangulation as “the use of multiple source of evidence to test or modify one’s understanding of a given problem or situation” (p. 137). In this sense, the researcher used different sources of evidence that are documentation, archival records, structured interviews (questionnaires) in a sample survey, semi structured interviews, and direct observation.
- 2- *Creating a case study database*: a case study data base was constructed throughout a case study to record personal feelings, thoughts, perspectives, and notes about interviews, observations, and documents; *case study documents* which were collected during the fieldwork from the local and central government and from different documentation centres and libraries; *tabular materials* which were created from the sample survey.
- 3- *Repeated observations at the research site*: regular and repeated observations of the phenomenon being observed were repeatedly done on-site over the three months fieldwork.
- 4- *Participatory modes of research*: the researcher was involved in all phases of this study, from designing of the fieldwork to analysing responses and presenting the conclusion.
- 5- *Peer examination*: my supervisor served as a peer examiner to help maintaining the chain of evidence and to help reducing both sampling and non-sampling error.
- 6- *Carry out several pilot trips*: to help the researcher to refine, organise, and sharpen the questions of the interviews and questionnaires. The research carried out two pilot trips one in December 2000 and the other in May 2001. The first pilot trip was carried out among TRDA’s staff who are current residents around the industrial areas in TRC and the second pilot trip was conducted among the academic staff of the Department of Urban Planning, Ain Shams University, with the attendance of my supervisor.
- 7- *Fieldwork plan*: given the fieldwork time factor, a timetable was set for the activities that were held in the field trip. A list that was amended in

the course of the fieldwork, was prepared prior the fieldwork with those identified as key actors to be interviewed (see Appendix VI).

- 8- *Clarification of the researcher's bias*: my bias towards the choice of the case study and the relation to the field of physical planning in this specific case was clearly stated before.

1.7 DATA ANALYSIS PROCEDURES AND THESIS ORGANISATION

The data collection phase resulted in producing both qualitative and quantitative data, each of which was dealt with in different procedures. Merriam (1988) and Marshal and Rossman (1989) claim that data collection and data analysis must be a simultaneous process in qualitative research. This simultaneous process includes a continuous classification of things, persons, responses, and events. Jacob (1987) points out that this classification of information is always carried out throughout the data analysis process by indexing or coding the outcome data. This is to help the researcher to identify and describe patterns and themes from the perspective of the participants, and then attempt to understand and explain these patterns and themes (Agar, 1980). Therefore, during the qualitative data analysis, data were organised categorically and chronologically, reviewed repeatedly, and continually coded; and the field notes and diary were regularly reviewed. In addition, the resulting quantitative data were analysed using the statistical software package (SPSS) and all maps and figures were produced using Autocad, Photoshop 6, and Microsoft Office 2000 software packages.

The thesis is organised in a logical manner to support research arguments and to highlight research findings as follows: this first chapter aims at providing a brief background on the national context while illustrating the relative importance of the industrial sector recognised as the prime economic base of the case study among the economic sectors of the Egyptian economy. It also justifies the choice of the research case study by illustrating the relative importance of the TRC among the major new towns built since 1974 all over Egypt with specific reference to achieving national and regional urban development planning objectives. Moreover, it introduces a brief background regarding the context of the case study in specific and its relation to the changing national and regional urban development planning objectives in the period of 1974 till 2002.

As well as providing such brief contextual background, this chapter sets the basic lines of arguments and key conceptual framework upon which the theoretical and analytical contexts of the research was built. This, according to Neuman (1997), provides a background or a context setting by placing the research within the broader theoretical and practice context. This chapter, moreover, while providing the research focus, objectives, and context, outlines and justifies the basis upon which the methodology of the research has been built to conduct the case study and to collect the empirical evidence. It also states the precautions taken to provide and present valid and reliable empirical evidence as well as the data analysis procedures. Finally, it outlines the contributions and limitations of the research.

Chapter 2 presents the theoretical debate upon which the research constructed an analytical framework to analyse the empirical evidence collected from the field. It critically focuses the theoretical discussion on the gap in literature related to the connection between the approaches to social structures, with specific reference to the concepts of structures and agency, and urban development planning theory and practice. To achieve such objective, the chapter is divided into three main sections. The first discusses the different stands of scholars, analysts, and researchers to explain and describe social structures with specific reference to the concept of ‘structure and agency’. It stresses the argument that social structures cannot be explained using approaches to social structure stressing one concept of the conceptual dichotomy of ‘structure and agency’.

The second section critically debates and examines urban development planning theory and practice within a chronological taxonomy. To theoretically overcome the complexity of the ‘planning’ paradigm, this section breaks down the paradigm in its three basic components. The first is planning traditions referring to the different professions (i.e. practice) related to the paradigm; the second is planning methodology introduced to carry out such practice; and thirdly, planning approaches (styles) adopted and applied by governments in dealing with land and development. This section stresses the fundamental theoretical arguments, debate, and views about the form of social structure within which urban development practice is carried out. It also emphasises the role of the state, the role of planners, attitude to market processes, purpose, scope, and planning processes of each theoretical stand.

The third section aims at supporting the theoretical positions that underpins this research. It constructs the analytical framework that makes use of the different theoretical arguments, claims, discussions, principles, and stands of the approaches to social structures theory and of the theories and approaches to the three components of the 'planning' paradigm (i.e. urban development planning practice, methodology, and theory). It also provides the analytical criteria and entry points to the analysis of the urban development planning process and physical planning practice in the context of Egypt at large and more specifically in the context of the case study.

Chapter 3 provides a critical analysis for the changing political economy of Egypt between 1974 and 2002. It explores and analyses the political, social, economic and institutional contexts at the national level. It also critically examines the main national development challenges and policies adopted during the concerned period to deal with such challenges; and the objectives of subsequent national and regional urban development plans. The aim is to highlight the systematic socio-political and socio-economic factors that affected the urban development planning process and physical planning practice at the national level. Moreover, the chapter stresses the direct link between the socio-political and socio-economic context of the case study (TRC) and those at the national level. It also emphasises the impact of the above-mentioned national and regional urban development objectives on the micro-scale of the case study context. The chapter highlights, through illustrative empirical evidence, the gap between policy and practice stressing the impact of institutional arrangements, power structures, and interests of the key actors involved in the urban development planning process on such gap.

Chapter 4 analyses both the primary and secondary data collected from the field. It explicitly explains what happened during the formulation processes of the different physical plans of the industrial areas in TRC (i.e. the 1978, 1982, and 1999 physical planning formulation) in light of the changing objectives of the national urban development planning policies. It focuses on the relationship between the institutions, agencies, and powerful individuals in the central and local governments as well as in the private sector at the national and local levels. It also critically examines the impact of institutional arrangements, power structures and interests of the key actors on planning decisions. The aim is to provide the empirical evidence for the impact of the changing socio-political and socio-economic environment at the national level on the case study

context and on urban development planning process and practice, with specific reference to the resulting successive physical plans.

Chapter 5 focuses on the how and why the gap between the original physical plans and the existing land use patterns of the industrial areas during the study period. This chapter focuses on the politics of the implementation process of the successive original physical plans. It discusses the relations between the different government levels, the interest groups, power structures, motivations and interests of the key actors and institutions involved in the decision-making process and their impact on the implementation process. It illustrates how decisions affecting the implementation process as well as the nature of the state and private sector intervention evolve from fierce political conflicts and struggle for political and financial gains. This chapter empirically confirms that the failure of physical planning practice in achieving its prime resulted from short-term political expediency, promoted by powerful interest groups, which directed and controlled the implementation process during the concerned period.

The final chapter presents the conclusions arising from the research and identifies some issues for future investigation.