Revitalizing Urban Governance: Integrating Smart Growth and Decolonial Perspectives for Municipal Empowerment in Shaping Growth Across Egyptian Desert Landscapes

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**ABSTRACT**
This article explores the connection between Smart Growth and the decolonization of urban growth management in Egypt, examining the impact of former colonial influence on present urban policy and practices. Drawing insights from the urbanization of Egyptian desert areas before and after the New Urban Communities Program (NUCP), it scrutinizes how historical influences adversely affect contemporary approaches, inducing socio-economic impacts. The primary objective is to identify the root causes of misguided urban growth practices, arguing that mono-institutional and sectoral development is rooted in Egypt's quasi-colonial history preceding the NUCP. The research employs a comprehensive methodological approach, using descriptive qualitative methods to investigate the growth of emerging cities based on Smart Growth principles and quantitative analysis to assess population decongestion resulting from the NUCP. It evaluates the implementation of Smart Growth principles during the NUCP and pre-NUCP, offering insights into adverse management practices. Despite the NUCP's goal to alleviate congestion, only 1.6 percent of the population was decongested by 2017. The research highlights the need for a new municipally guided growth model, emphasizing indigenous and locally validated approaches. This model aims to rectify inefficiencies in current urban management practices, fostering a responsive and sustainable approach aligned with local community needs.

**Highlights:**
- Study shows limited population movement from Nile Valley despite the 40-year-old NUCP; highlights need for specific urban planning reforms.
- To achieve Smart Growth, the review of NUCP suggests the empowerment of local communities in decision-making concerned with developing new growth areas.
- Research proposes governorate-led, sector-integrated, participatory planning for tailored urban development.
- National efforts in decolonization are yet to be accompanied by empowering local decision-making revitalizing indigenous development models for inclusive growth and decentralized governance in urban expansion.
- Aims to enhance planning expertise for holistic growth and local economic development, supporting Smart growth in new areas.

**Contribution to the field statement:**
This study contributes by examining the relationship between smart growth principles and the decolonization of urban growth management in Egypt, revealing how colonial legacies continue to influence current urban policies and socioeconomic dynamics. This study advocates for a new urban growth model based on revitalizing indigenous and context-specific approaches in Egypt, addressing the inefficiencies of current strategies and proposing more community-centred development methods.

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1. Introduction
A post-colonial verification of local urban growth policies contributes to ensuring their compatibility and efficiency in promoting inclusive frameworks that foster localized, inclusive, efficient and contextually relevant urban growth strategies. In the case of Egypt, I argue that the realization of Smart Growth appears to be hindered by the lack of efforts to deconstruct inherent colonial practices and their persistence during the post-colonial era, which influences the way urban growth is guided and managed. This research identifies a gap within the Egyptian context regarding the verification of urban management policies and their alignment with a context-specific production of urban growth.

Colonialism has been identified as a historical force that triggers urban transformations and influences the urban structure (Das, Nag, & Mitra, 2020). In the construction of postcolonial geographies, it is crucial for decolonial, anti-colonial, or postcolonial urban policies to address colonialism and its underlying legacies that have shaped the norms and dynamics of urban growth. By doing so, governments can avoid structural contradictions and promote more context-specific, participatory, and inclusive approaches to growth management. Colonial endeavours have often disregarded the invaluable knowledge and resources of indigenous communities. Instead, they have chosen autonomous approaches to governance, constructing housing and urban spaces that cater to specific social groups without incorporating local planning mechanisms. This approach not only perpetuates the marginalization of indigenous and local communities but also undermines the sustainable and context-specific development of urban areas. It is crucial to recognize and actively involve local communities in the planning and decision-making processes to create inclusive and equitable urban environments.

Although colonial activities have significantly declined in many parts of the global south since the end of WWII, their impacts continue to pose challenges to sustainability worldwide (Gerend, 2018). Colonialism has played a role in contributing to land-use changes, biodiversity loss, and climate change (Adger et al., 2001). The roots of the ecological crisis can be traced back to colonialism and its associated patterns of inequality and centralized power (Gerend, 2018; Lightfoot et al., 2013; Reo & Parker, 2014). Colonial policies have shaped urban landscapes with segregation, exclusion, and privilege based on race, power, and class (King, 2006). In the post-colonial era, the legacy of colonial urban policy is ingrained in active planning and management practices, influencing institutional structures, legislation, and administrative processes (Rakodi, 1986).

Egypt, designated a British Protectorate in 1882, operated in a quasi-colonial manner, with the British discreetly overseeing and managing its affairs. During this period, the British exerted influence over the economy and deployed their military forces. Predating such a colonial influence, Egypt's development of municipalities as local organizing institutions for the built environment was already underway. The establishment of municipal councils as locally represented bodies for organizing the built environment at directorate levels was evident before Egypt's designation as a British Protectorate in 1882 and parallel to the establishment of the Egyptian Parliament in 1866 (Badr, 2017; Rageh, 2007; Allam and Abdelazeim, 2000). Since then, municipalities maintained a longstanding history of progress until they were dismantled and reinstated as Local Administrative Units by 1960 (Law No. 124/1960) (Alhowaily, 2020). During the quasi-colonial era, colonial urban planning resulted in inadequate transfers to the Egyptian city promoting patterns of segregation within societies and inducing problematic and unfavourable goals that altered societies in a permanent fashion (Libchaber, 2019). In this article, I argue that such inadequate transfers have been persisting with influence on institutional structures and programs managing urban growth. I problematize the underperformance of the present New Urban Communities Program (NUCP) in Egypt in decongesting the densely populated Nile Valley and Delta regions. I argue that the underperformance can be partly attributed to the legacy and influence of colonial planning policies deeply embedded within institutional and legislative structures. These policies are characterized by centralization, sectoral planning, insufficient institutional capacity, and fragmented, non-integrated approaches. The central argument emphasizes how these policies undermine the incorporation of Smart Growth, as a proactive strategy that addresses social inclusivity and environmental justice (Khodeir, Elsisy, & Nagy, 2001).
Smart Growth has become a central policy aimed at creating developments that serve society, the economy, public health, and the environment. It represents a paradigm shift in deconstructing policies of unchecked and misguided urban growth while promoting the development of economically stronger and socially diverse communities. By integrating and implementing the principles of Smart Growth alongside other fundamental subsystems that contribute to the umbrella of sustainability, it has the potential to effectively combat urban sprawl and address climate change in an integrated, comprehensive, and interchangeable manner (Freilich, Sitkowski, & Menillo, 2010). In the following discussion, I aim to elaborate on how post-colonial policies and practices can undermine Smart Growth, with a particular focus on three specific Smart Growth principles that are most affected: first, making development decisions predictable, fair, and cost-effective; second, encouraging community and stakeholder participation in development decisions; and third, intensifying and directing development toward existing communities.

1.1. The Encouragement of Community and Stakeholder Participation in Development Decisions

Citizen participation helps reinforce urban development plans and ensures the presence of community support when making difficult decisions (Duany et al., 2010). Encouraging community and stakeholder participation in development decisions at the local level helps reduce reliance on top-down approaches that have limited capacity to recognize the diverse needs and aspirations of the local community and indigenous growth patterns. A postcolonial city is prone to be influenced by the legacy of colonialism and its construction of knowledge (Radcliffe, 1997), where inclusive attempts to indigenize urban space can be undermined by external control of power and capital (Davey, 2021). Colonialism enforces social change through cultural domination as a colonial city resembles "a distinct settlement form resulting from the domination of an indigenous civilization by colonial settlers" (Horvath, 1969). In the lack of proper urban representation in placemaking, the indigeneity of urban growth patterns becomes absent or less intertwined with the local urban fabric.

1.2. Make Development Decisions Predictable, Fair and Cost-effective

Fair and cost-effective allocation of resources, considering social equity and spatial justice, is a key component of sustainable regional planning policies (Soja, 2013). In a colonial city, where economic exploitation takes precedence, land and resources are often consumed without transparency, consistency, and verification of development decisions. In the post-colonial era, governmental organizations with superior authority and jurisdiction may inherit such practices, which conceal and withhold development decisions from the scrutiny and input of the local community. This prevents critical examination of the costs associated with development projects by the local community.

1.3. Intensifying and Directing Development toward Existing Communities

Directing development away from existing communities results in a disconnect between new developments and the needs of indigenous communities, their culture, and socio-economic conditions. This approach may also indicate an intention to economically separate the new development from the existing power dynamics of the old community, redirecting it outside their jurisdiction and control. The physical distance from existing communities can be exacerbated by the creation of gated communities and the physical segregation of social classes. It is important to highlight here that in formerly colonized countries, colonial capitalism was intertwined with racial segregation (Lightfoot et al., 2013). Traces of this policy can be observed in the planning and construction of new settlements during the postcolonial era, where the segregation of social classes is promoted to generate exclusive economic benefits for certain state authorities and market powers.

Table 1 provides a summary and further elaboration on how colonial/post-colonial associated policies/practices can impact the three specific Smart Growth principles discussed above. The impacts will be addressed while investigating the pre-NUCP and NUCP eras.
Table 1. Exploration of the main Smart Growth principles impacted by colonial policies/practices.

<table>
<thead>
<tr>
<th>Smart Growth principles</th>
<th>Colonial/post-colonial associated policies/practices</th>
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| (j) Encouraging community and stakeholder participation in development decisions. | - Centralized and mono-institutional development with superior authority and jurisdiction, often lacking coordination with the local community.  
- Exclusion of local vision and objectives, with a failure to consult the collective wisdom of the local community and potential stakeholders in guiding urban growth.  
- Prioritization of colonial/post-colonial interests over local interests.  
- Use of imported masterplans for new settlements, enforcing them without local verification and often overriding local needs. |
| (I) Make development decisions predictable, fair and cost-effective. | - External institutions and economic factors play a dominant role in managing and realizing urban growth, often overriding local structures.  
- Mono-institutional planning and development, without sufficient collaboration between different stakeholders.  
- Top-down decision-making and non-participatory governance and master planning processes.  
- Lack of bottom-up decision-making and consultation with the local community.  
- Open-ended concession and exploitation without proper regulation. |
| (g) Intensifying and directing development toward existing communities. | - Spatial segregation favours more affluent classes and contributes to social disparities.  
- Lack of spatial justice in the distribution of resources and services.  
- Absence of integrated regional projects that consider existing communities and their growth potential.  
- Unbalanced development schemes resulting from exclusive exploitation of suburban land. |

Source: Author

2. Material and Methods
This research commences with a systematic literature review on Egypt's establishment of new cities in both desert and non-desert areas throughout its modern history. Using qualitative research methods, the study aims to understand the objectives, growth patterns, and institutional and governmental frameworks that drive the development of these new cities. Furthermore, the research investigates the principles of Smart Growth implementation to identify any contradictory urban management policies that may be influenced by colonial practices and evaluate their potential to hinder Smart Growth. In this study, the focus is on examining the underperformance of Egypt's New Urban Communities Program in its aim to alleviate congestion in the densely populated Nile Valley and Delta regions. It is argued that this underperformance can be attributed to the longstanding influence of colonial planning policies, which have deeply influenced the institutional and legislative structures of the program. These structures are characterized by centralized decision-making, sectoral planning approaches, inadequate institutional capacity, and a lack of integration and cohesion in planning strategies.

In a quantitative approach, the research analyzes the national demographic census to provide insights into the population of Egypt's new urban communities. This analysis includes the percentage of the population in relation to the total population and its distribution across urban and rural areas. The demographic census used in the study is sourced from the Central Agency for Public Mobilization and Statistics (CAPMAS) and is based on the agency's most recent detailed census from 2017.

The research examines newly constructed towns and cities in both desert and non-desert regions, incorporating a historical context that references the colonial and post-colonial periods. By analyzing this information and the resulting findings, the research proposes a new urban policy model aimed at effectively managing growth in both the Egyptian desert and non-desert areas. This model seeks to
eliminate potential practices associated with the colonial era and emphasizes the importance of reforming the institutional structure. The research categorizes Egypt's construction of new cities into two eras: The Pre-New Urban Communities Program (Pre-NUCP) and the New Urban Communities Program (NUCP) (Figure 1). While the objectives of building new cities should have differed significantly between these two eras, this article aims to identify similarities and draw associations between the practices during the colonial and post-colonial periods. The discussion will also emphasize the impact of colonial policies/practices on the main principles of Smart Growth.

![Figure 1](image)

**Figure 1.** Survey of Pre-NUCP and NUCP cities and the research methods applied for investigation. Source: Author.

### 3. Results

The following two sections aim to highlight the results of the literature review regarding the development of Egyptian cities and towns during two eras: the pre-NUCP and NUCP. Additionally, the pre-NUCP section investigates the colonially influenced cities and post-colonially influenced cities.

#### 3.1. Egypt's Pre-NUCP Colonially Influenced Cities

This part attempts to present a thorough review of the establishment of new desert cities, towns, and suburbs before the NUCP era and during Egyptian modern history. Despite the considerable effort put into the review and investigation of these settlements, it is possible that many others could not be listed, for either being relatively small urban extensions or since these settlements are not sufficiently cited in the literature. Figure 2) presents the mapping of pre-NUCP cities.
For centuries, Egypt's earliest settlements adhered to a consistent pattern along the Nile Valley, leveraging the water source, transportation corridor, and fertile areas along the Nile coasts. These communities relied heavily on agriculture having access to freshwater and fertile land. Throughout its modern history, the transition from this pattern to urbanization in remote desert areas seems to have been influenced not only by technological advancements in transportation but also by diverse socio-economic factors, including those attributed to foreign and quasi-colonial interests. One of the key arguments made by Mitchell (1988) is that colonial urban development in Egypt was not just about physical infrastructure or the spatial reorganization of cities; rather, it was deeply intertwined with power structures, ideologies, and the imposition of new forms of governance by the colonial authorities. Colonial Powers transformed cities reorganizing social hierarchies, land ownership, and the creation of distinct zones that segregated different populations based on ethnicity, class, and nationality (Mitchell, 1988).

Cairo, the old traditional and compact city, has witnessed various urban extensions and suburban developments throughout its history. In many Arab cities, social, economic, legislative, and functional changes have contributed to the introduction of new architectural and urban forms (Mohamed, 2021). One such development during the precolonial era was Shubra. In 1809, Shubra was chosen as the location for a new palace for Muhammad Ali and was further developed to the north of Cairo on fertile agricultural land. Over time, it gradually merged with Cairo after being connected by tramways in 1904. In addition to Egyptians, Shubra gradually experienced increasing dominance of European occupants, mainly Italians, Greeks, Armenians, and French, until the colonial era (Afifi, 2016).

In cosmopolitan Alexandria, Reimer (1988) illustrated, referencing the remarkable work of Ali Mubarak's al-Khitat, that unlike many urban expansions in Alexandria that were contiguous to the main city, al-Ramleh or al-Raml emerged as a suburban development near a small village called al-Ramlah (Reimer, 1988). Situated ten km away from downtown Alexandria, this area began gaining importance and attracting residents due to soaring land prices in Alexandria and the limited opportunities for expansion within the established city. Initially, al-Raml was illegally occupied by the Franks despite the regulations imposed on its location due to its military importance. However, when they were not easily...
relocated, al-Raml was soon spared from military use. It was physically planned to accommodate the increasing population and connected by railway to Alexandria, allowing people to commute with ease (Reimer, 1988). The railway connection was made through a concession granted to a British national named Sir Edward Firmin. In 1862, he established a joint-stock company named Strada Ferrata tra Alessandria e Ramleh, later recognized as the Alexandria and Ramleh Railway, operating under a concession from the Alexandria Municipality (Raafat, 2018). The railway, which was electrified in 1904, played a significant role in al-Raml’s development and helped to subdivide the suburbs into districts that were clustered around the stations.

Within the Suez Canal Region, the development of Port Said, Ismailia, Port Fouad, and Port Tawfik was not solely a result of the Suez Canal project. It was also a crucial part of the creation of a new canal built by the Khedive Ismail Pasha, known as the Sweet Water Canal or Isma’iliyya Canal, which branched from the Nile Delta and traversed the desert to reach the hinterland of the Suez Canal region (Mitchell, 1988). It is important to emphasize that the Universal Company of the Maritime Canal of Suez, with the French being the most prominent and influential stakeholders, had a major influence in the development of both Ismailia and Port Said, having obtained concessions from the Egyptian Government (Crosnier-Leconte, Ghitani, & Amin, 2006). Additionally, during the early stages of their growth, both cities operated independently of any municipal jurisdictions associated with state municipal jurisdictions. Port Said was established in 1859, while Ismailia was transformed from an old village into a city in 1864 (Carminati, 2019). The planning of both cities revealed a colonial influence, particularly evident in the design of the European neighbourhoods and Arab quarters. There were noticeable disparities in the quality of urban design and housing types between these areas (Abbas et al., 2006).

The development of the Isma'iliyya Canal propelled the reclamation of vast desert lands for agriculture. Simultaneously, it spurred the urban development of settlements, both rural and urban spanning from Cairo to Port Said. The canal played a vital role in establishing a new regional capacity, which served as the economic foundation for the newly established cities in the Suez area, including Ismailia, Port Said, and Port Fouad (Rageh, 2007), as well as several new towns and villages such as al-Qassasin, Fayd, al-Qantara and others (Sims, 2014). Another integral aspect was the construction of a railway line parallel to the new Ismailia Canal, which served to connect the newly developed cities and villages. This railway line facilitated efficient connectivity between these areas and the old urban centres.

In Cairo, after the development of Shubra, new developments emerged with the increasing migration to Cairo. These included al-Waily, Qoubba, Zamalek, Garden City, al-Helmina, and Sakakini. Many of these areas benefited from the development of railway and tram networks, which contributed to a thriving real estate market. During this period, numerous private companies began purchasing land in the peripheral areas of Cairo. They developed infrastructure and built housing stocks for sale or rent to individual customers. Some notable companies involved in these developments were the Egyptian Delta Land & Investment Company, Cairo Electric Railways and Heliopolis Oases Company, the Qubba Company for Development, and al-Dokki Land and Investment Company (Mahrous, 2006).

Concessions were granted to companies of European origin, the English were to develop the suburbs of Maadi south of Cairo, a Belgian investor was to build Heliopolis to the east, and an Italian company was to develop al-Mokkatam Hills (Hegab, 1985). Furthermore, railways and tramlines were prosperous, during this era, and the development of a railway network along water canals helped establish a development corridor south of Cairo including the cities of al-Maadi, Ma’sarah and Hamamat Helouan. The latter was built in 1879, at a location about 25 km to the south of Cairo. The city was dependent on a railway line built in 1872 to provide a connection with Cairo. Hamamat Helouan was annexed to Cairo Tanzim Organisation from its establishment until Helouan had its first Municipal Council in 1891. The establishment of the railway preceded the establishment of the suburbs in 1871 (Israel, 2018), and the Junction of Helouan Railway, holds the distinction of being the oldest suburban station in Cairo region. The first tram network in Cairo was inaugurated in 1894 (Dobrowolska & Dobrowolsky, 2006). Just two years later, seven tram lines were operational, including one that connected downtown Cairo and the al-Abbassia area. This line was later extended to the new city of Heliopolis.
Concessions were granted to European companies during this period. The English were granted concessions to develop the suburbs of Maadi, located south of Cairo. A Belgian investor was responsible for the development of Heliopolis to the east, while an Italian company took charge of developing al-Mokkatam Hills (Hegab, 1985).

During this era, the construction of railway networks along water canals played a crucial role in establishing a development corridor south of Cairo. This corridor included the cities of al-Maadi, Ma'sarah, and Hamamat Helouan, which were built in 1879, approximately 25 km south of Cairo. The city of Hamamat Helouan relied on a railway line built in 1872 to connect with Cairo. It was annexed to the Cairo Tanzim Organization until Helouan established its first Municipal Council in 1891. The establishment of the railway preceded the establishment of the suburbs in 1871 (Israel, 2018).

The first tram network in Cairo was inaugurated in 1894 (Dobrowolska, A., and Dobrowolsky, J., 2006). Just two years later, seven tram lines were operational, including a line that connected downtown Cairo with the al-Abbassia area. This line was later extended to the new city of Heliopolis. The Egyptian Delta Land & Investment Company took the initiative to purchase land adjacent to the railway tracks to plan the development of al-Maadi. Similarly, the development of al-Koubbeh to the Northeast was influenced by its spatial proximity to the railway. The Qubba Company for Development also purchased approximately 100 feddan of land in that area. As the suburbs continued to expand, they eventually merged with the existing settlements of Cairo.

Although both al-Maadi and Heliopolis were established in 1905 and had similar scales, they can be differentiated in terms of their contribution to the existence of more diverse and extensive activities, facilities, and infrastructure. Garden City, located south of the new centre of Cairo, had an organic plan with winding streets, primarily serving residential purposes. On the other hand, al-Maadi was primarily comprised of villas and some local businesses (Ilbert, 1981).

### 3.1.1 Egypt’s Pre-NUCP Post-Colonially Influenced Cities

After the British domination of Egypt had gradually subsided during the 1940s, Egypt’s post-colonial cities and towns started to emerge. After Cairo became a municipality in 1949 (Abu-Lughod, 1971), the growth of new districts and cities have been municipally regulated such as al-Awaqaf City, later known as al-Mohandeseen, and Nasr City (Allam and Abdelazeim, 2000). However, national plans were aimed at industrial development and the creation of labour cities that were integral to new industrial complexes located in close proximity to existing cities or villages within the Nile Delta. Some notable examples of these cities include Ghazl al-Mahala labour city, Egypt Silk Company Labor city in Kafr al-Dawar, and the Labor City of Railway Complex in Abu-Zaabal (Rageh, 2007).

When examining the location of these cities on historical maps, it is important to note that they were not constructed in desert areas, but rather on agricultural land near newly established factories or existing cities and villages. One such example is the development project of the Tahrir Directorate, situated west of the Nile Delta, which aimed to expand agricultural land by creating new irrigation canals and establishing new villages. This project played a crucial role in increasing agricultural space and productivity.

Following 1952, the responsibility for the development of numerous new cities primarily fell on a government company known as Sharikat al-Ta’meirWalmasakin al-Shabeia (The Construction and Popular Housing Company). It is important to note that the development of these cities was not solely a result of President Nasser’s new scheme, but rather a continuation of the policy that had already established new developments like Ghazl al-Mahala Labour City and Kafr al-Dawar Silk Company City in the preceding era (Rageh, 2007).

Consequently, the policy of constructing new settlements within the Nile Valley continued, but there was a gradual shift towards developing desert areas to fulfil the housing needs of major industrial projects. For instance, the Sahara Labor City, established around 1960 in Aswan, was designed to accommodate both Egyptian and foreign workers involved in the construction of the High Dam (Reynolds, 2017). Similarly, the Labor City for Aluminum Industries in Nag Hammadi was established around 1971. Overall, the development of these new settlements was implemented as an integral part of the agricultural development.
and industrial development strategy (Rageh, 2007). Because these industrial settlements are small-sized towns intended to serve the industry and specifically tailored to meet the needs of temporary residents and labourers, they are not included in the survey of pre-NUCP cities listed in (Figure 1).

3.3. Egypt’s NUCP Cities

In contrast to the diverse planning and development institutions responsible for Egypt's pre-NUCP cities, all of Egypt's New Urban Communities (NUCs) established during the NUCP era (Figure 3) fall under the responsibility of NUCA, the New Urban Communities Authority. However, the idea of building new cities through a system synonymous with concessions still persists, with the top-down, non-participatory establishment of cities. NUCA is a national government body that operates under the Ministry of Housing, Utilities, and Urban Communities. It was established as the driving force behind conquering the desert and implementing the New Urban Communities Program (NUCP), the government's primary program for planning future housing supply and managing urban growth in Egypt. The NUCP represents a much more centralized development model not only representing the regulator but also the planner and owner of public land.

According to the New Urban Communities Law, the sole responsibility for planning and developing new settlements outside of existing cities and villages is designated to NUCA, as stated in (Article No. 1 of Law No. 59/1979). Although these settlements may be situated within the governing jurisdiction of Local Governorates, NUCA holds the authority to select suitable sites and prepare both general and detailed plans in accordance with the General State Plan. Figure 3 illustrates the locations of Egypt's new cities, also referred to as NUCs, developed by NUCA. According to law, NUCA has the exclusive right to plan and development of new settlements outside the current cities and villages, even if these settlements are located within the jurisdiction of Governorates, as stated in (Law No. 59/1979, Article No. 1). NUCA has the authority to select suitable sites for new settlements, as well as plan and prepare general and detailed plans in accordance with the General State Plan.

Figure 3. Egypt’s NUCP new cities.
Based on the proposal of the Ministry of Housing, Utilities, and New Urban Communities, once the basic components of NUCs are completed, they can be annexed to the local governance units to fulfill their responsibilities (Article 50). Without this proposal, NUCs remain independent of the local supervision of the municipalities in the hosting governorates and are not subject to administrative or financial annexation by the governorates (Article 50). The funds of the Authority belong to the State's Private Funds and are not included in the General Budget of the State or the Governorate (Law No. 59/1979, Articles No. 31 and Article 50). Foreign planning firms were entrusted with providing plans for new cities due to their expertise and practical experience in the field of planning (Hegab, 1985). The names of NUCs combine the name of the nearby established city with the addition of the word 'new,' or 'el-gedeeda' in Arabic, such as New Mansoura, New Qena, and New Aswan. For example, New Mansoura, or 'al-Mansoura el-gedeeda' naming implies a top-down perspective on the location of the new settlement but does not sufficiently highlight the local contextual name of the NUC, which ought to be derived from the local history culture, geography, narratives, or community preferences.

It's worth emphasizing that many of the first-generation NUCs were initiated by foreign consulting firms (Sims, 2014). According to Law No. 59/1979 law, NUCA is not obliged to include community and stakeholder participation in development decisions during the planning process of NUCs. Unfortunately, the existing urban local administrative system lacks inclusivity and fails to facilitate local participation (Ibrahim & Singerman, 2014). If the decision is that the social and economic dimensions are not to be subject to community consultation, the environmental challenges are critically important to address, and the involvement of public participation in environmental decisions is crucial (Hegazy et al., 2017).

Currently, there are a total of 40 New Urban Communities (NUCs), with 7 NUCs currently in the planning phase. Most of these NUCs are physically separated from their original cities and are located in desert areas. The initial goals of the New Urban Communities program, as stated by Abdel-Kader and Ettouney (2009), included addressing the lack of urban land for development and the housing shortage, improving the deteriorating urban fabric, weak infrastructure, and facilities, as well as overcoming low-quality living conditions. Although the progress achieved over the construction of NUCs is significant in terms of the physical expansion of urban structure and infrastructure, Many NUCs at present are notorious for expanding in low housing densities contributing to urban and suburban sprawl (Gouda, Maryamsadat, & Houshmand, 2016). Furthermore, notable drawbacks are manifested in failing to achieve their target population, maintaining a balanced socio-economic ratio, assisting lower-income groups in attaining relative independence and autonomy, and creating a sustainable and high-quality living environment, as pointed out by Abdel-Kader and Ettouney (2013). Egypt, as a predominantly rural country, has 57.8 percent (54,558,420 inhabitants) of its population living in rural areas and 42.2 percent (40,240,470 inhabitants) living in urban areas, as reported by CAPMAS in 2017 (see Figure 4).

![Figure 4](image-url)  
**Figure 4.** Urban and rural population in comparison to NUCs population in 2017  
Source: (CAPMAS, 2017).
In 2006, after 27 years since the initiation of NUCP, the population of NUCs amounted to 783,103 inhabitants (Sims, 2014), which accounted for 1.1 percent of the total national population at that time. Surprisingly, 11 years later, after 40 years of building NUCs, all NUCs in Egypt recorded a population of 1.6 percent of the total inhabitants of Egypt, with 1,583,517 inhabitants out of 94,798,827 in 2017 (CAPMAS, 2017). This percentage is consistent with the findings presented in the study by Hegazy and Moustafa (2013) and the data provided by CAPMAS (2017), which estimated the earlier population in all NUCs in 2006 to be 1.06 percent of the national population. The detailed population numbers per NUC are presented in (Figure 5). The largest population numbers are concentrated in the cities of 6th of October, New Cairo, and 10th of Ramadan. Among the least populated cities are New Teibah, New Fayom, New Sohag and New Aswan. The latter, despite being initiated in 1999, has the lowest population number.

It is crucial to emphasize that the detailed national population census from CAPMAS 2017 enumerates the permanent population residing in NUCs. However, the daily commuting population to NUCs, although significant, is not included in this census. This discrepancy might explain the population estimate of NUCs reported on NUCA's website, which is equivalent to 8.9 million per capita by 2023.

Furthermore, the NUCP primarily focuses on decongesting the urban population rather than the rural population. If we consider all NUCs to be urban, their population represents only 3.9 percent of the total urban population in Egypt, as shown in the preceding (Figure 4). These numbers provide compelling evidence that the NUCP, during 40 years of building new cities, is significantly underperforming in terms of decongesting Egypt's rural areas. The continuation of such an unchecked policy clearly indicates the program's incompatibility with the national objective of meeting the needs of a larger segment of Egyptian society. The rate of national population growth, in
relation to the population growth of NUCs, is illustrated in (Figure 5), presenting that the national population nearly tripled between 1986 and 2017, the NUCs have shown limited ability to cope with such exponential growth.

Due to the legal detachment of the subordinated NUCs apparatuses of NUCA the jurisdictions of local governorates, predicting development decisions from a regional perspective and coordinating the development of NUCs become extremely challenging. In other words, development often neglects the inside-out approach, where 'inside' represents the heart of existing cities and 'outside' represents the new growth frontiers of NUCs. It's essential to note that, as of the publication of this article, Law No. 116/2011 has been in effect dismantling elected popular councils in all governorates (article 1) and replacing them with temporarily appointed councils by the Prime Minister, based on the presentation of the Ministry of Local Development and the Governors. In this way, the governance mechanism and legal structure offer limited transparency and local verification of future decisions.

Since NUCA is a state authority and not an enterprise or corporation entrusted by the municipal level at governorates, economic decisions and activities are top-down and centralized, lacking joint verification and mutual review from multiple stakeholders, particularly at the local level or even shareholders in the case of being an enterprise. Consequently, community and stakeholder participation in development decisions is legally restrained on the level of governorates, thus, the local validation mechanisms that these decisions will be predictable, fair, and cost-effective are limited. Legally, according to Article 50 of Law No. 59/1979, NUCs are supposed to be transferred to the local governorate and integrated into its governance and financial structure, subject to approval by the Housing Utilities and Urban Communities Ministry and the completion of their basic components. However, in reality, such transfers have never taken place, resulting in NUCs operating without the involvement of participatory governance and municipal jurisdictions during the planning, construction, and operational phases.

To intensify and direct development towards existing communities, it is crucial for the NUCP to prioritize rural development. Until recently, in 2018, NUCA was legally prohibited from establishing NUCs within areas undergoing re-planning in existing cities and villages under the control of governorates. However, with the approval of the cabinet and the competent authority of the corresponding area, NUCA has been
4. Discussion
This research examined different urban policies related to the construction of new cities in Egypt, focusing on both the colonial and post-colonially influenced eras. The unique nature of planning new cities in Egypt arises from the impact of various governance and planning systems that have been employed under changing geopolitical and economic conditions. Each era had its pros and cons; however, the NUCP era is still questionable in terms of meeting its initial planning objectives and responding to local development needs. It is essential to emphasize the importance of assessing how good urban governance aligns with the existing legal and institutional frameworks in Egypt. Proactive measures should be taken to address inadequate institutional arrangements, limited comprehension of legislation, and ineffective management structures for urban development, (Elsisy et al., 2019).

Decolonization is interpreted as the process of achieving political independence and the transfer of authority from colonial powers to local and native governing bodies (Ashar, 2015). There is no doubt that Egypt has already made this shift to a large extent on the national level. However, it is vital to address the legislative and institutional methods of managing urban growth at the local level and review their efficacy in reinforcing indigenous and local representation. Egypt's approach to spatial strategic planning has been inconsistent when it comes to preserving and promoting the progressive development of indigenous knowledge and expertise. This inconsistency hampers the establishment and sustainability of municipal institutions, which are crucial for effectively managing and regulating urban growth (Alhowaily, 2020).

Population growth rates in NUCs in relation to old cities and villages can be considered as one of the indicators for the decolonization of urban policy. Those rates reveal that these cities do not cater to the specific housing needs of most Egyptians. With only 1.6 percent of the total inhabitants decongested from the Nile Valley and Delta until 2017 (CAPMAS, 2017), the performance of the NUCP in attracting the population is significantly underperforming and contributing to various socio-economic impacts of overcrowding in old cities and villages.

According to the (CAPMAS, 2017) census concerning the population growth rate, Egypt's population is growing at a rapid pace with a 2.56 percent average population growth rate between 2006 and 2017. The country nearly adds an equivalent size of the population of Ireland or New Zealand every two years, and Finland or Denmark every three years (Ikram, 2018). This underscores the necessity for new cities to efficiently accommodate population growth, especially considering the limited agricultural land already facing encroachment from uncontrolled urban sprawl. Egypt has recently paid special concern to linking NUCs within their proximate existing cities especially within the Greater Cairo Region through various transit systems (Kafrawy, Attia, & Khalil, 2022), a step that ought to accelerate population growth in NUCs. Additionally, NUCA started to offer denser urban models of urbanization in the New Administrative Capital and many other NUCs.

However, to effectively channel development towards the existing communities within the congested Nile Valley and Delta, post-colonial new city planning must depart from the colonial legacy of establishing new towns and cities that primarily benefit a narrow segment of society. This approach disregards the collective well-being and the need for coordinated growth management between existing and emerging urban patterns. Greater attention should be paid to the needs of the broader societal segment, which remains predominantly rural rather than urban.

The NUCP's primary limitation, before the 2018 legal amendment (Law No. 1/2018), was its inability to engage in rural development projects and initiate integrated urban development initiatives that revitalize rural housing in both rural areas and their desert hinterland. This responsibility lies within the domain of the GRPAD Authority, which oversees agricultural development in desert regions. The question remains whether the NUCP or GARPAD, the General Authority for Rehabilitation & Agricultural Development Projects, should undertake this role in a centralized and non-integrated manner, or whether it should fall under the responsibility of governorates and their local planning and governance structures, adopting a...
decentralized yet coordinated approach. In this manner, new cities hold the potential to make significant contributions to the implementation of Smart Growth principles and foster community and stakeholder participation in development decisions, thereby rendering these decisions more predictable, fair, and cost-effective.

During the colonial era, many Egyptian towns and cities were built with concessions granted to foreign entities. Similarly, during the national era, the NUCP has exclusive rights to build NUCs without adopting an integrated and inclusive model of development that addresses local interests. Developing a new town without local authority and coordination poses significant challenges to coordinated growth, self-organization, and the involvement of governorates’ urban and rural centres in mutual growth dynamics. It also eliminates opportunities for consultative decision-making in a participatory approach and reinforces top-down planning and governance. In order to balance growth and de-growth dynamics, there is a need to shift the focus toward establishing and promoting a dynamic and inclusive urban political environment. (Vansintjian, 2018).

Not all colonially influenced cities in Egypt were inherently flawed in their approach to addressing social integration between classes. For instance, Heliopolis was initially designed with two separate oases, one for the working class and the other for the more affluent classes. However, in response to the financial crisis of 1907, it evolved into a relatively integrated entity to save construction and infrastructure costs (Ilbert, 1981). On the other hand, while several architectural features in Heliopolis were culturally appropriated from traditional Islamic architecture, its architecture demonstrates the potential for having sensitivity towards local identity. This sharply contrasts with many of today’s New Urban Communities (NUCs), which implement standardized social housing models across various contexts and climate regions without considering climate or local identity. This lack of consideration is evident in NUCs in Cairo and Aswan (Alhowaily, 2022).

During the pre-NUCP quasi-colonial era, the planning of new cities in Egypt was influenced by foreign interests rather than local ones. In this era, the needs of foreign target groups took precedence over the needs of the local Egyptian community. Similarly, during the NUCP, the decision-making process for new urban communities follows a centralized approach that utilizes a limited and ineffective toolbox in addressing the local development needs. The focus remains on targeting a narrower segment of society. In both eras, we observe separate and mono-institutional governance mechanisms that operate independently without the obligation to share the benefits of growth with the governorates or municipalities in which they operate. Furthermore, land governance policies are based on unverified and outdated planning theories, leading to segregation and monotonous land utilization (Alhowaily, 2022).

5. Conclusion

Egypt, having endured various colonial eras, has experienced significant political transformations and instabilities throughout its colonial and post-colonial history. The national efforts in the decolonization of urban growth policy and practices are yet to be accompanied by empowering local decision-making and building context-specific frameworks and strategies for urban development. Decolonization is a complex process that involves actively dismantling the legacies of colonization in governance. This includes critically examining historical injustices, acknowledging and addressing grievances, and challenging the limitations of former Eurocentric approaches to justice (Asadullah, 2021). Efforts to harness collective intelligence in customizing housing and infrastructure to respond to the socioeconomic needs of local communities will help accelerate the population growth rates in new towns and cities. With an achievement of only 1.6 percent of the total population decongested to NUCs until 2017, and after nearly 40 years of initiating the NUCP, Egypt’s New Urban Communities Program has significantly fallen short of reducing population congestion in the Nile Valley and Delta.

This is a wake-up call to review and re-evaluate the management policy for building new cities in Egypt in terms of compatibility with addressing community needs and serving the wider section of Egyptians. To initiate Smart Growth, new efforts should consider reviving indigenous and consistent models of development that reflect a decentralized approach to governance. This approach would prioritize spatial equity and inclusive development while offering local feedback verifying and adjusting centralized, non-
municipal decision-making processes. While authorities may have more power of enforcement and response to decision-makers during times of uncertainty and instability, municipalities offer a rather significant long-term impact and efficiency in actively managing collective growth.

The suggested model for planning and developing new growth territories in desert areas aims at the implementation of a pilot project to develop a new city under the jurisdiction of a governorate, yet with economic influence comparable to NUCA and with land jurisdiction belonging to the governorate. This approach would leverage the expansion and intensification of planning and management expertise at different municipal levels among the old and new territories reinforcing sustainable urban development.

In this model, the governorate would play a leading role in driving internal growth dynamics towards achieving the desired development objectives. Unlike the limited tunnel vision that focuses solely on urban growth for a new city and does not prioritize the integration of other regional aspects of growth, the suggested model envisions the governorate having a bottom-up adjustment role in the spatial strategic planning of a new city. This would involve taking active control of planning and development over both desert and arable areas, with comprehensive coordination between the sectors of urban development, transportation, industry, agriculture, and tourism.

The governorate's capacity would ensure adjusting and tailoring national and regional plans to local needs, considering regional dynamics and fostering participatory and collective decision-making. On the other hand, ministries and their subordinate authorities, besides their essential role in developing national and regional plans, will ensure the delivery of mutual feedback on the harmony and integration of spatial strategic planning plans and objectives at all planning levels. Further research can explore the financial model of building a new city under the governorate jurisdiction and promotion of local economic development along the existing and new growth frontiers.

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