

## **Rural Regeneration in Egypt: A Review of Existing Typologies in Borderline Areas**

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### **Abstract**

Tracking rural areas and studying them may not be an easy task. The concept of whether the area at hand is urban or rural could be simple, but lately rural areas could carry many features that may deviate the definition into one which is unclear. In urbanized rural development, reversing the urbanization spotted may not be the ideal way to go, urban developers often suggest that to go back to the roots is to regenerate the area back into rural, however, regenerating rural areas using rural parameters and definitions may not be what the urban area in hand needs and the changes and challenges that are facing rural communities in Egypt need to be understood before any plan can be deemed as effective or even worthwhile. The rapid increase in urbanization and how it affects agriculture land, shorelines, and rural land, has affected badly the rural capacity, and led to a constant threat of overhaul in place of towns, cities, and other urban activities. However, rural areas are the lungs of the planet alongside forests and other green areas and having them diminish substantially will lead to an inevitable catastrophe. Regenerating rural areas should focus on revitalizing and embedding them into the social, cultural, and economic structure of the region, however, it may not always involve turning them back to what is commonly termed as rural.

This research attempts to review and discuss the meaning and definitions of rural regeneration with a view to propose a strategic plan to regenerate borderline areas in Egypt.

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### **Keywords**

*Regeneration, challenges, rural identity, urbanization, sustainability, rural developments ;*

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### **1. Introduction**

Regeneration in nature is the process of restoring or replacing parts or entire systems as part of the reformation of that being, (Sugimoto, et al, 2019) similarly, in the built environment, regeneration depicts the process behind the revitalization of existing areas to make better use of them and provide better opportunities for their inhabitants. The regeneration process may target some or all of the following: economic, infrastructure, social, environmental, and physical aspects of the area, all in an attempt to promote better living opportunities and health to the individuals and citizens. (Donnison, 1993; Osborne, S., Williamson, A., & Beattie, 2004) However, when addressing regeneration at large, defining the area at hand is a must, whether we are dealing with an urban area or a rural one will greatly influence the types and schemes needed to devise and implement, as well as the needs of the people benefitting from them. Whether it is renewal, redevelopment, regeneration, reform, or rehabilitation, across the different terminology

that exists, the idea of reassessing the situation at hand to come up with better solutions to aid in human development and prosperity stays at heart.

Regeneration is also dependent on several factors, which include (Sugimoto, et al, 2019):

- 1) Environmental inputs and existing surrounding characteristics, which may be in turn linked with physical aspects of the built environment,
- 2) Responses to those inputs, that lead to the development of a plan for the rehabilitation and regeneration of the area; and,
- 3) Criteria that may directly influence the development of the reformed area or space.

While the difference between urban and rural areas may be well known and established, whether through research, or through common knowledge and prevailing ideas, the concept of knowledge of what each of them means is in fact confusing. Of the somewhat many definitions of what rural is, one definition depicted it to be “The areas outside big towns where there are stronger connections of inhabitants with agriculture and forestry, which may or may not be their only source of income, are generally referred to as the rural areas”(Satterthwaite et al., 2010), with a focus that the core characteristic of any rural area is its’ direct linkage with land use and its value economically as a mean variance to what urban is (Perpar, 2002, Cox et al., 2017; Roca & Arellano, 2017)

The overspill of urbanization in rural areas has raised a new concept for dealing with the swift changes that affect those areas to discuss whether rural regeneration and revival, with all its features is the only mean to revive the rapidly disappearing rurality of the area. Developers, planners, and decision-makers each day have to work efficiently and holistically to help support and encompass this cancer-like spreading phenomenon. This fast and unplanned urbanization leads to poor infrastructure, unplanned areas, poor housing, inadequate living, unemployment, and a dramatic increase in crime rates and a decrease in the overall resources of the place. Urbanization also leads to pollution, degradation of land, and eventually climate change.

Although, humans started off as rural dwellers, it has suddenly become clear that the vast number of the population of the world would much rather live-in urban areas, this is evident through the projected rate of urbanization and the fact that by 2050, 68% of the world will be living in urbanized areas. Research has established that of the world’s 7.8 billion people, present on earth today, it is estimated that more than fifty percent live in urbanized areas, and with the ongoing rate of urbanization and population growth, predictions state that by the year 2050, there will be about 2.5 billion more people added to the urban population, mostly in the continents of Africa and Asia, reaching a rough estimate of 68%. (UNDESA, 2018).

Urban and rural areas are linked together economically, socially, and environmentally and despite the continuous spread of towns and cities, rural areas pose an important part of any country’s area and value. However, with the looming threat of urbanization and the development of urban areas caused by an increase in the population and the effect of migration from rural areas to urban areas, urbanization has in turn affected all the different types and sizes of communities; small villages turn into towns, and towns into cities, until it leads to the development of mega-cities, with more than ten million people.

This increasing density of population in urban areas has led to health problems, consequently, death rates, historically, are higher in urban areas in comparison to rural areas, however, urban areas, worldwide, have managed to sustain their existence through the continuous migration of people from rural areas. (Keyfitz, 1984). Different patterns of consumption have also complimented the difference between urban and rural; for example, urban populations consume much more food, energy, and durable goods than rural populations. Energy consumption for electricity, transportation, cooking, and heating is much higher in urban areas than in rural villages. Urbanization also affects the broader regional environments. Regions downwind from large industrial complexes also see increases in the amount of precipitation, air pollution, and the number of days with thunderstorms.

Urbanization and urbanity have encroached on the rural space and activities which were once only pertained to rural have become urban too. Agricultural activities, once the predominant economic driver of rural areas have decreased in status due to outdated laws and regulations which have failed to meet the expectations of the people living there,

also the continuous evolution in technology has made way for other economic potential to arise and take over. This constant evolution of spaces and economic drivers has led the rural capacity to diminish and take on urban traits, albeit in the same location. Another added factor is that of over-population; with the absence of proper litigations, and in the absence of a governed ecosystem, the land became prone to be built upon, deeming it useless for rural activities, or making it too expensive to rehabilitate. One of the most important questions is the size of a settlement to be functioning as an urban system. In our case the international criterion cannot be applied.

This paper focuses on the concept of regeneration of a given area which may not be identifiable as either rural or urban and how best to tackle the existing problems in a wider frameset. The following literature review presents available research regarding both rural and urban regeneration, then follows the methodological framework, the discussion comes next to highlight the urbanization that happened in select areas of the Delta Region and the intersection that exists in both developmental strategies needed to address its regeneration.

## **2. Research Methodology**

Rural and suburban communities in Egypt have faced severe limitations starting from the industrial revolution and the immigration of its inhabitants from the suburban areas near the delta region to urban areas like Cairo and Alexandria. As the inhabitants move to work in industry, agriculture land is abandoned, and the problem of rural areas versus urban areas comes to light. The research methodology utilized is bibliographical desk-oriented research that strives to understand the path forward to implementation of rural regeneration and developmental projects in Egypt.

Most of the problems that have come to surface are across whole community sectors, while other problems are linked to a certain nature-of-life of those areas. Most of the socio-economic problems facing those who left their agricultural land and moved to the urbanized community were that they lost their identity and as a reason the following generation is born into an urbanized habitat leaving behind their identity and damaging the patch of agricultural lands, making them urban dwellers in rural contexts. It is thus safe to say that the challenge that we face may be rooted more in demographics than in geography, however what is the appropriate nomenclature of the land that they live in and what are the optimum types of regeneration that is needed to enable them to become better living communities. City and rural areas extensions and development have become an urgency, such challenges cannot be easily or entirely handled without researching and applying appropriate development plans. Is the area classified an urban and rural based on specific criteria or is it possible to be living in an urban setting with rural characteristics?

## **3. Literature Review**

Connections of our rural areas with urban centers are still relatively intensive; the administrative-territorial distribution of urban and rural municipalities is not appropriate for their purpose, because some urban municipalities include also relatively widely extended and significant rural hinterland. From the viewpoint of integrated rural development planning the most applicable criterion between urban and rural space is an area defined as "the area of managed urban settlements" Such areas are in spatial plans exactly defined and they change in accordance with the development or with urban settlement growing in process of spatial planning. The settlements with urban character were summarized upon the geographical definitions in Slovenia, which sort settlements according to their central function into seven groups (Crnic, 2014; Perpar, 2002)

In addition to damaging quality of life, urban sprawl has a significant influence on the environment, social structures and economies. The Brundtland Report, written in 1980 when urban sprawl was already accepted as a serious problem, defined it as the 'uncontrollable physical expansion of cities. The same report stated that urban sprawl created 'serious problems in urban environments and economies', it was foreseen that 'if cities are developed without guidance towards rural areas and agricultural productive lands, additional agricultural area losses will arise' (Shkaruba et al., 2017; Wakode et al., 2014; World Commission on Environment and Development, 1985)

In 2005, Bookchin emphasized that urbanization destroys natural landscapes and the cities themselves. Evaluating urban sprawl as a negative phenomenon, which will endanger cities and the countryside, land transformation due to urban sprawl changes cities into synthetic environments (Clark, 1982; White, 2019). Thus, it is necessary to observe

land transformation as it occurs in parallel with urban sprawl in temporal and spatial scales.(Tayyebi & Pijanowski, 2014)(Gormus et al., 2019)

However, there is a very wide variation between the problems associated with the urban areas of the world; such as unemployment, high cost of land and housing leads to lack of suitable shelter (which inevitably leads to the development and expansion of informal settlements, squatter areas and sometimes even homelessness), inadequate or inappropriate services and/or infrastructure, deteriorated individual health and educational services, and often increased levels of pollution due to unawareness or accessibility.

With the rapid increase in urban population, a new term was coined to address the areas that immediately surround cities and towns; peri-urban, while those areas that surround the peri-urban are dubbed as semi-urban. Peri-urban areas have been growing rapidly ever since the industrial revolution as inhabitants of rural areas seek to improve their status by immigrating from rural areas to urban ones. The result is a transition from villages and land (rural), to towns and cities (urban). (Madsen et al., 2010)

Classifying areas into urban, peri-urban, semi-urban and rural is a tedious task, in-order to define these boundaries, demographics, and area of land needs to be assessed (Figure 1). Boundaries of these areas do not neatly separate themselves by lines on a map. Needless to say, urban sprawl and development often leads to the merge of these areas onto each other, thus making it difficult to determine the size of cities and towns by their demographics. (National Research Council, 2019)

Defining the area is also augmented by the fact that defining characteristics of urban and rural areas vary from the global north to the global south, as well as from developed countries to developing or under-developed ones. The villages of the global North and of developed countries are more environment-climate friendly, the spawns of green areas and the preservation of land deem them healthier than those of cities, the cost of living may be greater, and some urban dwellers prefer moving to rural areas after retirement for a different experience. This is not the case of villages in the global south, or those of developing or under-developed areas, where the rate of urbanization is higher, and the agricultural land has shrunk due to lack of reinforcement of laws and regulations. In this paper, we will be dealing with villages of the global south and hereafter any reference to a village is in the location of the global south.

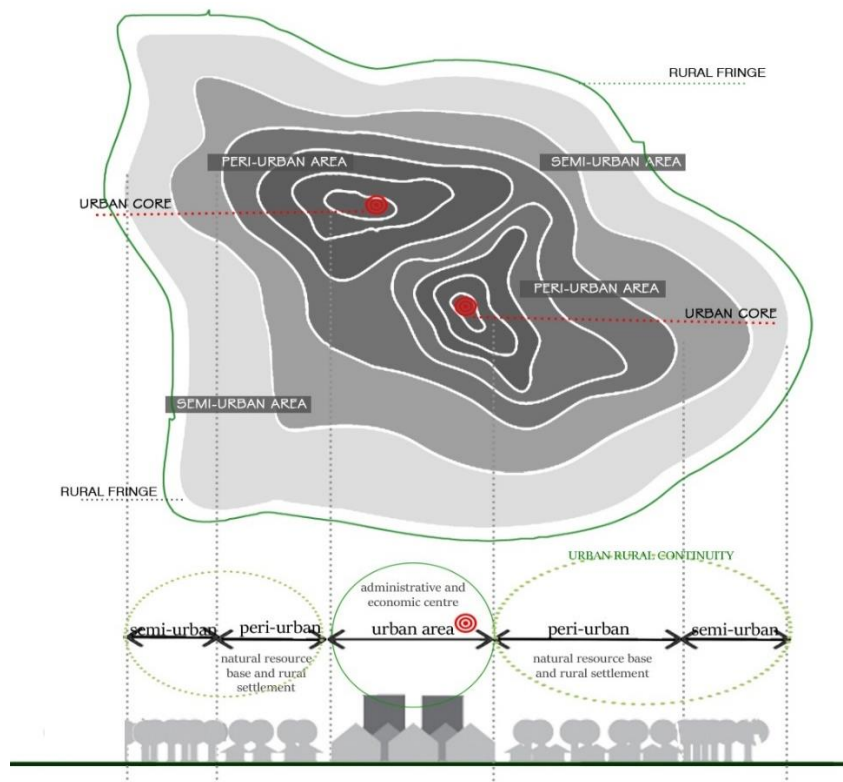


Figure 1: Diagram illustrating placement of urban, peri-urban, semi urban and rural areas. Source :Researcher

Urban cities face several challenges including but not limited to availability of affordable housing, poverty, increased rate of crime, poor traffic control, absence of clear air. However, with all the limitations of urban areas, it is no secret that inhabitants of rural areas are more and more fleeing from their rural surroundings and villages to the city in hope of a better quality-of-life and better socio-economic standing. Pull and push factors) (Figure 2). This migration, influenced by technological evolution and economic growth and development ((Marshall, F., Waldman, L., MacGregor, L., Mehta, L., and Randhawa, 2009) is possibly, also affected by conflict and social disruption.

This internal migration to the cities has left rural communities in a state of fragility and frailty and has affected parts of evolved cities into becoming areas of informal settlements and squatters.

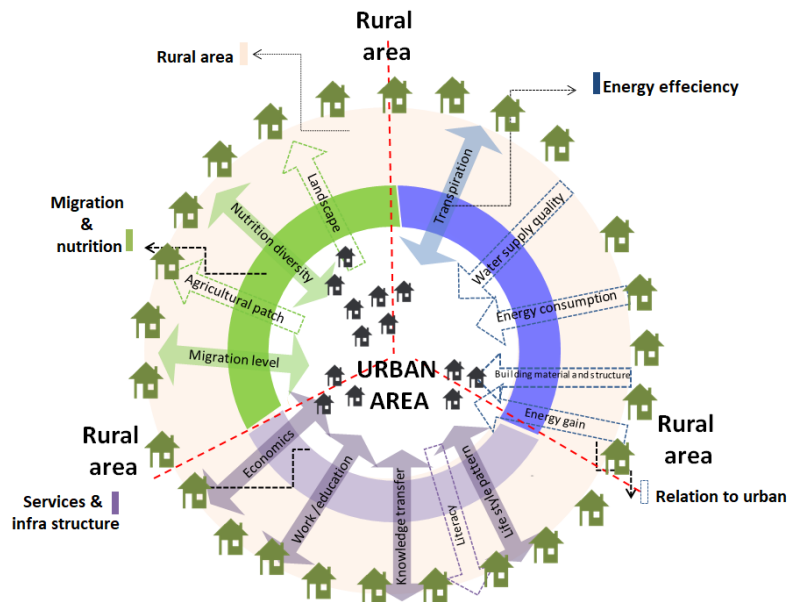


Figure 2 Exchanges and interactions of the rural-urban-metabolism

Source: Adapted from Repp et al. 2012 by researchers

Rural communities are facing the constant threat of being overhauled in place of towns, cities, and other urban activities. However, rural areas are the lungs of the planet alongside forests and other green areas and having them diminish substantially will lead to an inevitable catastrophe. That is why the rural regeneration act was developed; to focus on revitalizing rural areas and embedding them into the social, cultural, and economic structure of the area(Chang & Chou, 2011). The challenges facing rural areas are diverse however, they are more or less one or more of the following: illiteracy, poverty, lack of access to infrastructure (water, sanitation, fuel, internet, etc.), decayed or nonexistent accessibility to road networks, lack of existing healthcare facilities and educational services, basic amenities like retail and recreational areas, not to mention lower income and higher unemployment rates. (Figure 3), while those that face urban areas may be classified into social, behavioral, and economic issues.

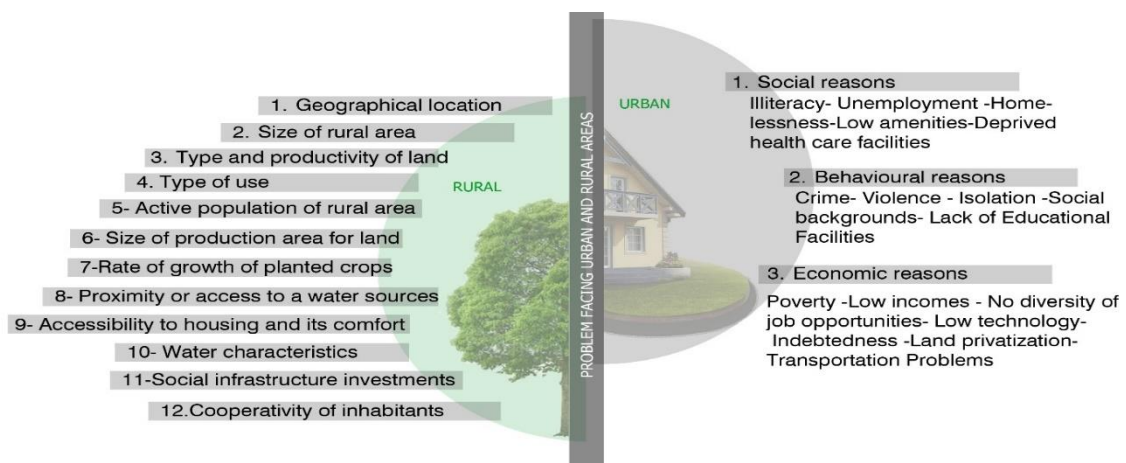


Figure 3 Challenges facing rural and urban regeneration Sources: modified by researchers from ((Yilmaz et al., 2010) , (Donnison, 1993) and (Nassar et al., 2016))

When closely examined, some of the challenges in the rural case of Egypt may in turn deem some areas, which were once classified as rural, now change status, and become peri-urban or even urban, due to the vast encroachment on land and the long years of decay and lack of proper solutions.

Administratively, Egypt is divided into 27 governorates categorized as following: urban governorates (Cairo, Alexandria, Port Said, and Suez) with no rural population mentioned, and the other 23 governorates are divided into urban and rural areas. The increase in migration between urban and rural areas and the incapability to meet the rising in inhabitants' essentials led to the appearance of new and diverse social problems within the urban structure. Which led also to the transferring of the behavior and traditions of rural inhabitants to the city; resulting in creating informal areas on agricultural lands, If the situation remains as is, it is expected that Egypt loses about one million acres of its best lands during the coming years.(Mohammed Emam Hammad, 2019)(Kruseman, 2007).

### **3.1. Rural verses urban regeneration**

Rural regeneration in context refers to the implementation of combined policies and strategies that aim to enhance social, economic, physical, and environmental and community standards to counteract existing formations including urbanization, immigration and abandonment of the area. It often appears after the area at hand becomes nearly derelict or faces continuous challenges. (De Luca et al., 2021; Edwards et al., 2000)

Rural regeneration, as a solution to the problem of land abandonment and population decrease resulting from migration, was developed in the UK in 1997, Focusing on reliant infrastructure, economic equality, employment availability and land renewal, through partnerships to facilitate and utilize existing resources in an aim to reach governance and give precedence to equality in citizenship. (Edwards et al., 2000; Osborne, S., Williamson, A., & Beattie, 2004). Urban regeneration, on the other hand, addresses institutional governance, social inclusion, economical mobility, and environmental cohesion, all while focusing on community participation and social responsibility and inhabitant perception. The synergies between both rural and urban regeneration shed light on the concept of utilizing public community participation to better develop an overall needs assessment of the current needs of each individual area and to better tailor a development or regeneration plan that fits to that specific layout. (Abdel-Razek et al., 2009).

### **3.2. Challenges facing regeneration in Egypt**

To be able to better understand the rural regeneration problem in Egypt, first a definition should be developed that does not conform to any of the present norms, (which could be the main problems that developers may face). The idea that rural areas should be regenerated and returned back to their original context may not be what the overall public rural population need. On contrary, the public rural population may well be in need of evolving their surroundings that have evolved more into urban than through regenerating the underlying realm that is present between rural and urban, and neither case may be applicable, merely because that sense of space and sense of place of the rural area may well be lost. When discussing the parameters that have to be included in the idea of regeneration, prioritizing what is important is a key. What is it that needs to be kept and what needs to be left to change is part of the development and regeneration plan.

One of the main drivers of migration is rural poverty, in a survey done in 2010; it was found that most of this poverty lies amongst youth. Rural youth account for 59% of Egypt's total youth, comprising of 85% of Egypt's poor youth (Soliman & Gaber, 2010) Therefore, it is a deduction that poverty is very much a characteristic of rural Egypt and thus having less access to public services and goods, of these services, the inevitable lack of access to schooling in turn becomes a major determinant of low quality work opportunities throughout life and thus the poverty vicious cycle reproduces itself. (McCormick & Wahba, 2004; Zohry, 2005)

The Egyptian Government across the last 50 years has devised several rural developmental reform programs, most of them focusing on the upgrade of rural poverty, one of these projects was the national program to improve the livelihood of the poorest 1000 villages, implemented over a course of two stages. The stages aimed to regenerate 150



villages and 850 respectively. However, the project was not completely implemented due to the uprising in January 2011 and lately as this research was being finalized, the 1500 village regeneration project.

One of the previous research done on the global experience of urban regeneration discussed the main issues that helped in the urban regeneration initiatives in London and Lebanon and concluded that the main key for the regeneration process was the development body which panels the authority of the regeneration process in terms of (regeneration through partnerships, single regeneration budget, new deal for communities, city challenge, enterprise zone, urban development corporation, and other approaches have marked a transition into a more participatory historical process). (Nassar et al., 2016; Osborne, S., Williamson, A., & Beattie, 2004)

### 3.3. The Rural development initiative in Egypt

Egypt is considered to be one of the main growing countries in the Arab world today that faces a lot of urban, economic, social, environmental, and political challenges. It faces a continuous increase in population annually, besides the continuous migration from rural areas. This growth in population has caused many urban problems in the city, where urban development started out in the past decades and centuries and where uses of urban areas have changed over time.

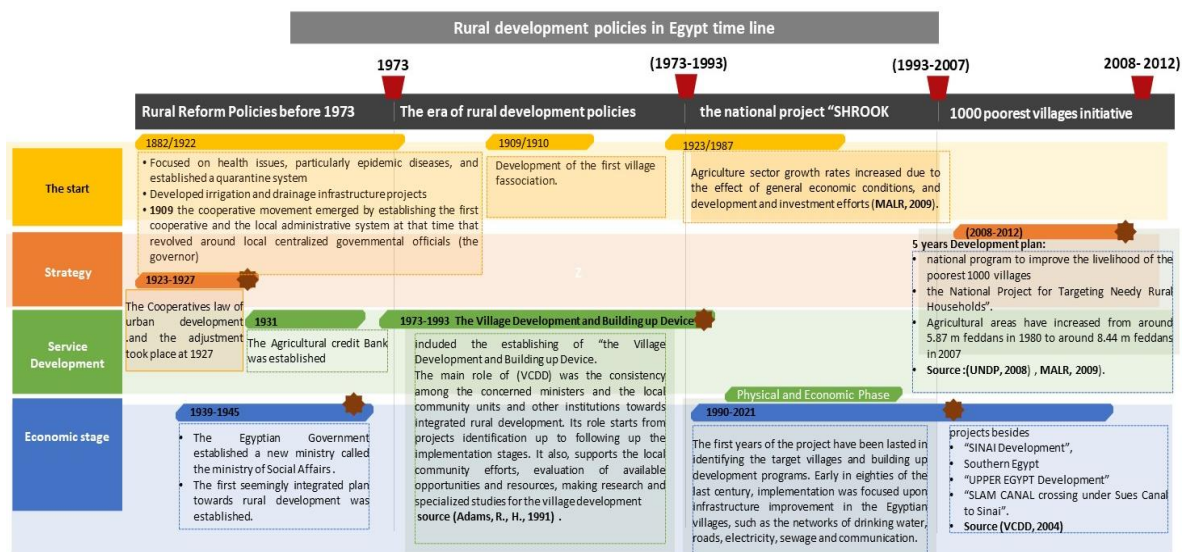


Figure 4 Timeline of rural development policies in Egypt Source: Authors

The existing present-day agricultural area on the rural delta lands and valleys are considered marginal if compared to the modernized agricultural lands that represent the horizontal expansion of those cities. Like what is happening on the western delta land the current or traditional agriculture in the old is performing quite well under the existing limitations of: small holdings, labor-intensive methods, traditional irrigation (Elmenofi et al., 2014; Kruseman, 2007; Soliman & Gaber, 2010)

Resilient rural development plans could increase the impact of the product, but that would be at the cost of unemployment, bio-diversity and it would also indicate a loss of social cultural values for the identity in the old land, and one of the many issues that may disillusion our idea of regeneration is the concept of what is aesthetically acceptable.

Malcolm Smith in his book, "urban regeneration", discusses that there are three different approaches to tackling issues that arise within a city to be able to reform it; inerrability, agility, and stewardess, all embedded in the institutional governance pillar of urban regeneration.

Rural regeneration in Egypt passed through five different eras; (Figure 4)

- Rural reform (Before 1973)
- Rural development policies based on liberalization of the Egyptian economy (1973-1993)
- Establishing the SHROOK national Project (1993-2007)

- Targeting the 1000 poorest villages (2008-2012)
- An Honorable life (Haya Kareema) (Ongoing-2019-2030)

These first four eras showcased that developmental projects need a holistic integrated approach that targets the inhabitants and community cohesion and live-ability, hence resulting into establishment of “a decent life”, an initiative spearheaded by the Egyptian government to provide water and sanitation, appropriate housing, medical and educational services and establishments, economic support through job creation and welfare. The aim of the project is to improve standard of living and quality of life with investment of human capital at the heart of the project. (UN, n.d., 2021)

#### 4. Urban-rural case in Egypt

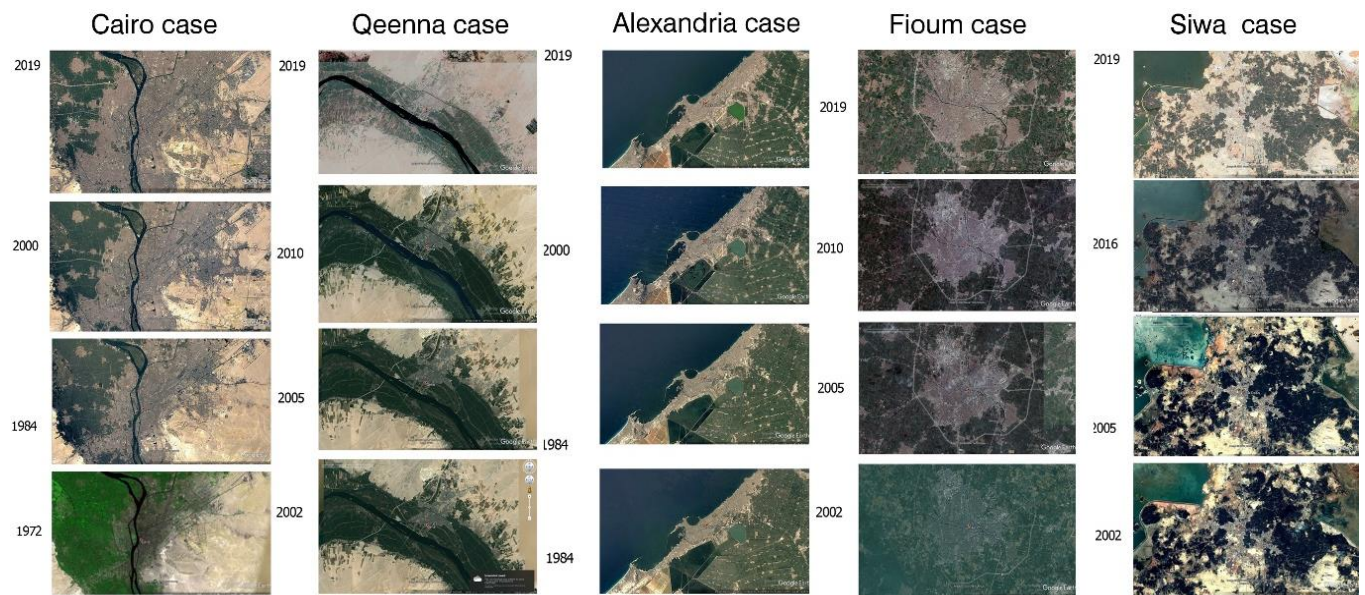


Figure 4: Illustration of the case of urbanization in Egypt from 1972 to 2019

Source: Google maps extracted by researchers

In response to the raised calls for narrowing the rural – urban gap and overcoming the development constraints in rural Egypt, participation and decentralization are seen by many as key mechanisms for reform and promoting sustainable development in Egypt in general and in rural areas in particular. Egypt is an urbanized country that is characterized by rural-urban migration, low agricultural contribution to growth (11.7% of the GDP in 2017) and half or more of the poor population living in urban areas. The expected income differentials between rural and urban areas influence the migration decision. Although rural dwellers migrate to urban areas looking for formal sector jobs, which often pay higher, the sector only hires a small portion of migrants, while the rest goes to the informal sector absorbing non-skilled and zero-skilled labor. (UN-Habitat, 2004; Wakely & Riley, 2011)

#### 5. Discussion

Determining the nomenclature of the area assessed; whether urban or rural, is the first step to planning an effective, efficient, resilient, and sustainable plan in-order to allow it to cope with the rapid and fast changes around it. Rural development and regeneration are essential for economic growth and since formal jobs in the industrial sector are in limited supply, and because job creation and social services are less costly in rural areas, highly efficient agriculture should be able to produce more than its own consumption, which is not the case in all developing countries.

As urbanization and industrialization are on the rise, and rural-urban migration persist in emerging economies, developing the technical skills of citizens in rural areas would help them get jobs in different industries without them having the informal sector as the only option. Developing and improving the rural areas to cope with the urbanization process without harming the identity and the patch of the agricultural land should be through improving their living conditions and to stark a link between the rural and urban areas all together (urban-rural relationship).



Understanding and addressing the rural problem to relieve the urban areas from rural migrations which will by default need more housing unit, jobs, services, healthcare facilities and various environmental services. As evident in figure 5, urbanization in different Egyptian governorates has greatly impacted the quality and type of land; rural areas have become desolate and in some areas have even become part of the urban corridor due to it being impossible to restore them as before. This has led to depreciation in the agricultural value of the land, although the economic value of the land has increased. This is a common problem that some inhabitants also focus on, in some cases, urban land value is higher than agricultural land value, and thus inhabitants may intentionally destroy the agricultural realm of the land in hope for better economic value.

Development of human resources represented in the non-tangible force like education and knowledge management, entrepreneurship, physical infrastructure, and social inequity, also play a big role in rural development not only the tangible one like agriculture and the built environment; building a resilient social frame for comprehensive rural development through providing technical assistance, increasing awareness, empowering youth and entrepreneurship ventures, enhancing economic utility (based in form, time, place and possession), and maintenance of individual rural culture, enforcing a link between the public and the government to disseminate governance concepts, utilizing public opinion. All the previous can be established through broad analysis of social and economic conditions, and motivation of public participation and mobility to evolve the society needs, planning local society development individually to help complete the overall image, and to follow up the plan and to produce an evaluation that helps in redirecting the plan if needed.

The foremost essential developers of regeneration in a defined area are economic empowerment, access to sustainable and efficient infrastructure, presence of affordable land and housing, access to knowledge, access to basic services and environmental sustainability and resilience. Regeneration whether urban, rural or the fusion of both should focus on the importance of economic empowerment, as most of the rural population depends on land-related vocations. Regeneration policies should enhance, empower, and support small and local businesses as well as identify and embed cultural and heritage initiatives to help each individual rural community to take advantage of its resources and manage and utilize its potentials to achieve economic growth.

Also, to be able to achieve better results of regeneration, public policy and regulations regarding land use, and building regulations should be addressed, despite the increased interest in rural housing in recent years, access to a home in rural areas remains highly inaccessible due to highly restrictive building policy, and accessibility.

The proposed regeneration plan for any of the defined areas should be divided into the following steps:

**Step 1:** Defining whether the area at hand is urban or rural utilizing community participation and perception, as well as previous governmental plans.

**Step 2:** According to the stimulated definition, main pillars of the development plan should then address regeneration tactics inclined towards urban regeneration, rural regeneration or a mix of both or a new derivative all together, while taking into consideration a new established set of design principles of both rural and urban areas. The development plan should be assessed through community participation and public needs, the plan should they be implemented and monitoring and evaluation should be an ongoing process to ensure effective reform and regeneration, all this should be while keeping an eye on governance and social cohesion. The idea of coming up with cultural triggers to be implemented in economic empowerment should also be addressed and focused on through community assessment. (Figure 8). Developmental plans should also address land value and tariffs in an attempt to decrease the idea of urbanizing for gain. Laws and regulations concerning land value and accordingly building laws should be revisited to ensure that proper empowerment is given to these citizens.

**Step 3:** Implementation, monitoring and evaluation of the success or hindrances of the initial plan and continuous update and review of the situation. This phase should also take into account the pillars of governance to ensure public acceptance, transparency, integrity and accountability being the foremost three needed.

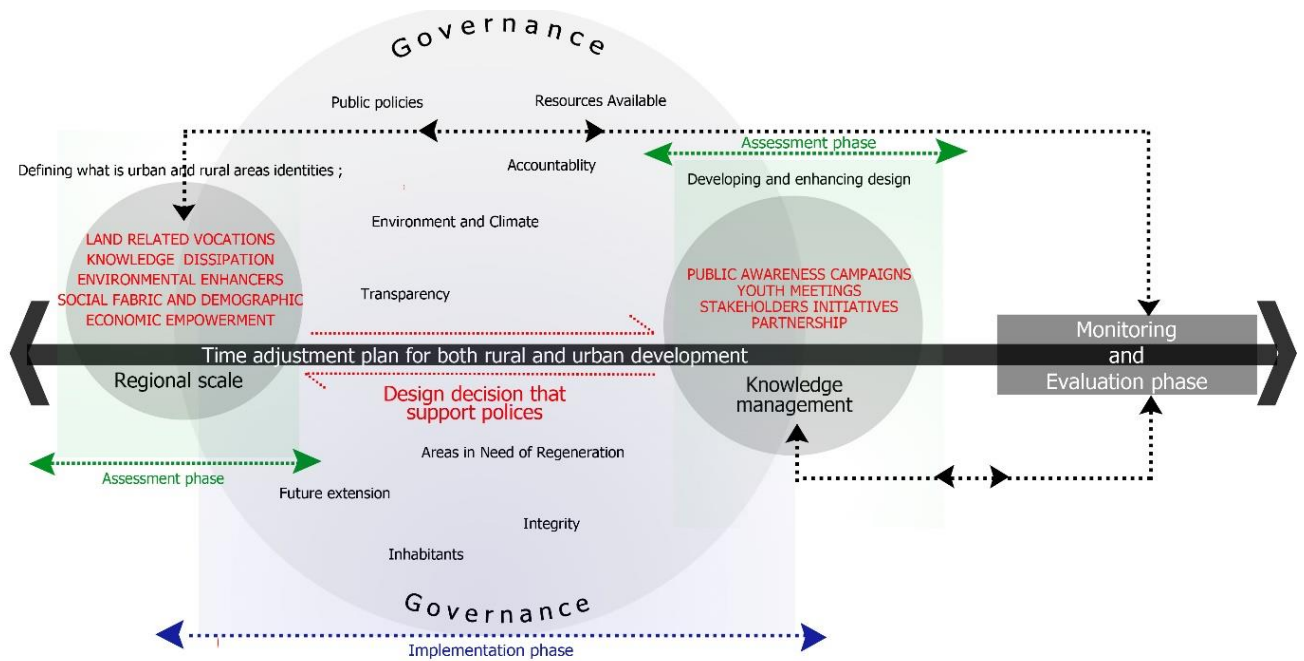


Figure 5: Proposed regeneration plan (Sources: Authors)

## 6. Conclusion

In conclusion, several areas that were once deemed as rural areas in Egypt have now crossed the paths to being urbanized and no amount of regeneration will be able to change its status back to rural. These areas while not yet fully urbanized have lost the characteristics of rural areas and may only be associated with their rural identity through the acquisition of land, nevertheless, these areas cannot be termed urban either as the characteristics of the people living there may still be under influence of tradition more than their urban counterparts and may be closely knit as is. The regeneration of these areas should focus on empowering the families that still live there through economic solutions and piping of investments that may or may not be linked to their land origin, it also involves the development of their infrastructure and services as well as the promotion of better job opportunities and economic growth. The circular economy behind urban areas may well need a lease in the rural void that may not be achievable in urban settings. Thus, whether dubbed as urban or rural, these areas need regeneration that focuses on the essence of what individuals need and their evolving everyday challenges. This will decrease the number of migrants that move into urbanization yearly as well as decrease the urban sprawl that occurs from this unplanned migration and may offset the presence of squatters and slum areas. Further research utilizing community participation and public mobility in previously defined areas is recommended and will be followed up on by the researchers, additional research should also address the importance of revisiting laws and regulations regarding rural land policies, a metric system for both urban and rural land and a survey to the actual needs of the inhabitants of each particular part.

The limitations to this research include:

- Rural inhabitants' acceptance of the idea of rural regeneration and staying where they are, most rural dwellers want to live in urban communities and may shun the advances of the project.
- A decrease in agricultural land and agricultural practices has rendered many rural regions as obsolete and thus need a different mode of action.

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