

Chapter 5

Principles' Appropriating Process

“New, post and other urbanism [...] However these urbanism are perceived, they do represent different values and sensibilities. They need to be situated in time and space, contextualized in different cultures and geographies”

(Kelbaugh, in Fishman, R., 2005: 9)

The research goes through several stages (Fig 5-1), stage one and two aim to give better understanding for the American principles, stage three and four aim to study the physical situation in the Egyptian cities from the New Urbanism perspective, and investigate the public responses toward the application of New Urbanism principles on Egyptian cities. Those four stages are working together as “layers”, in order to find out which principle is applicable on Egyptian culture and environment, and which is not, also to find out the possible adaptation that could be applied on each principle according to the field studies.

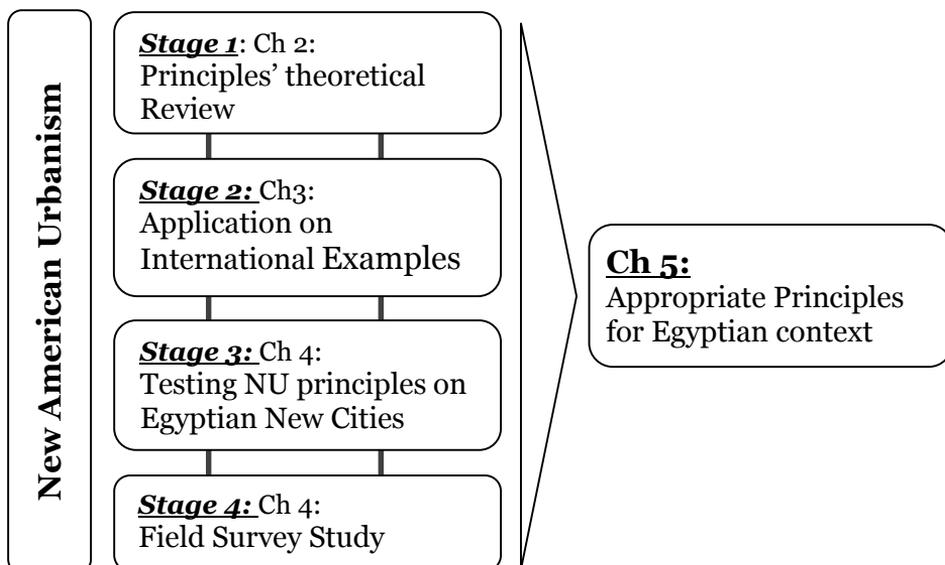


Fig 5-1: Stages of research – multi layer approach to end up with Egyptian Principles
Source: Researcher

1. Walkability

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answer to:		
			Current situation	Applying NU	
<p>Principle: Activities are within 5 to 10 min walk (1/4 mile, or 402 m) from home and work in a moderate weather</p> <p>Importance: Encourage walking, reduce dependency on car – specially for people who can't drive, and reduce pollution</p>	<p>Seaside Walking distances ranges from 180 m to 350 m = 4 to 8 min</p>	<p>6th of October Walking distances ranges from 250 m to 1000 m = 6 to 25 min</p>	<p>6th of October 42% of sample claimed it is not possible to walk to neigh. center</p>	<p>6th of October 41% of car owners are ready to leave their cars & walk their daily needs.</p>	<p>Walking distances depend on neighborhood size which can exceed (in Egyptian cities case) 1000m in diameter. Consequently, 44% (in average) of respondents do not think of walking as a possibility, especially in high temperature & humidity.</p> <p>On the other hand, since 71.75% of car owners claimed that they are ready to leave their cars and walk to their daily needs. So, walkability principle can be applied on Egyptian cities. However, it needs to be adapted to environment</p>
	<p>King Farm Walking distances ranges from 280 m to 425 m = 7 to 10 min</p>	<p>1st Community Walking distances ranges from 200 m to 1030 m = 5 to 25 min</p>	<p>1st Community 80% of sample claimed it is not possible to walk to neigh. center</p>	<p>1st Community 76% of car owners are ready to leave their cars & walk their daily needs.</p>	
	<p>Karow Nord Walking distances ranges from 300 m to 410 m = 7 to 10 min</p>	<p>Al-Rehab Walking distances ranges from 370 m to 750 m = 9 to 18 min</p>	<p>Al-Rehab 16.7 % of sample claimed it is not possible to walk to neigh. center</p>	<p>Al-Rehab 75% of car owners are ready to leave their cars & walk their daily needs.</p>	
	<p>Zannghui Zhang City is divided into 6 smaller villages, distances ranges from 120 m to 365m, 4 to 8 min</p>	<p>10th of Ramadan Walking distances ranges from 310 m to 400 m = 7 to 10 min due to small neigh. size</p>	<p>10th of Ramadan 34% of sample claimed it is not possible to walk to neigh. center</p>	<p>10th of Ramadan 95% of car owners are ready to leave their cars & walk their daily needs.</p>	

Possible adaptation for:

1. Walkability

Since the neighborhood size causes unwalkable environment, therefore, development of new cities in Egypt can follow the Chinese experience; both Egypt and China are building large scale new communities (target more than half million inhabitants). However, neighborhood sizes in both cases are considerably different, walking distances in Zhanggui Zhang case do not exceed 365 m, because the large city is divided into several convenient small sized villages, which are also divided into smaller neighborhoods.

By adding up the factor of natural environment (high temperature, sunny and humid weather), the research recommends a smaller neighborhood size of approximately 320 m radius, which is equivalent to 4 to 6 min walk instead of the 10-min rule¹. Otherwise, larger neighborhoods should be designed to be multi-centered to keep walking distances within 320 m range.

¹ The 10 min walk rule is for moderate weather

2. Connectivity

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answer to:		
			Current situation	Applying NU	
<p>Principle: Interconnected, hierarchal, and cul-de-sac free street network.</p> <p>Importance: Diffuse traffic congestion, and allows autos, bikes and pedestrian to travel on local street to any location without crossing or following an arterial</p>	<p>SeaSide Interconnected network on city, neighborhood, and block level.</p>	<p>6th of October Interconnected network on city, neighborhood, and block level.</p>	<p>6th of October Not Applicable</p>	<p>6th of October Not Applicable</p>	<p>The main aim of connectivity is to ease pedestrian movement and diffuse traffic; the Egyptian examples show that principle of connectivity is applicable on Egyptian cities. However, according to Al-Rehab case, connectivity principle can be adapted on block level to create a network of green open spaces and at the same time, the network is still efficient and eases pedestrian movement and diffuses traffic.</p>
	<p>King Farm Interconnected network on city, neighborhood, and block level.</p>	<p>1st Community Interconnected network on city level, cul-de-sac system on neigh. level.</p>	<p>1st Community Not Applicable</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Interconnected network, few cul-de-sac at the park, routs turns to be for pedestrian</p>	<p>Al-Rehab Interconnected network on city and neigh. levels, cul-de-sac system on block level.</p>	<p>Al-Rehab Not Applicable</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang Interconnected network, few cul-de-sac at the park, routs turns to be for pedestrian</p>	<p>10th of Ramadan Interconnected network on city and district levels, cul-de-sac system on neigh. level.</p>	<p>10th of Ramadan Not Applicable</p>	<p>10th of Ramadan Not Applicable</p>	

Possible adaptation for:

2. Connectivity

From the international examples, there is no separation between car and pedestrian movements at all levels of network. On the other hand, the Egyptian examples (New Cairo City - Rehab) showed that it is possible to create a hierarchal and efficient street network, and at the same time, pedestrian movement is separated from car movement at the local residential streets level, giving the chance to a series of open and green spaces be formed, those green spaces are connected by pedestrian routes passing through residential blocks (Fig 7-2,3).

Regarding network efficiency, the network on city level is highly interconnected, which reduces congestion and bottlenecked traffic problems. Moreover, on neighborhood level,

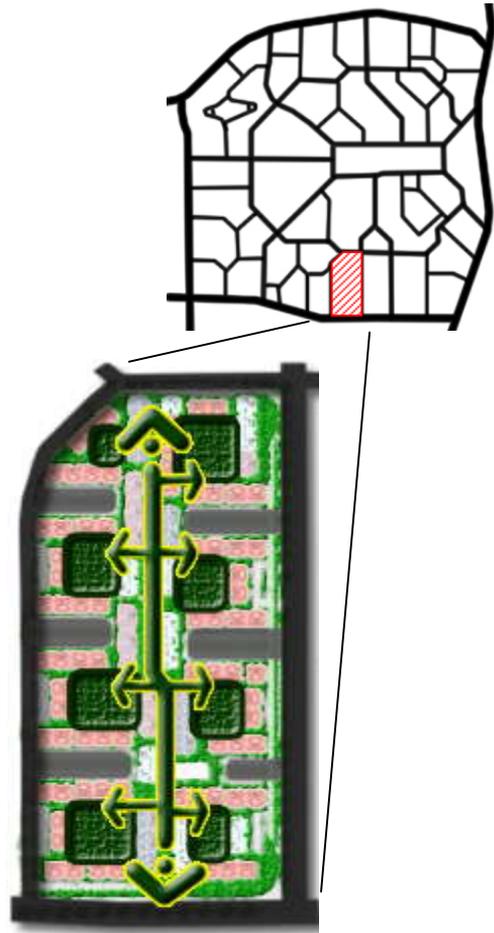


Fig 5-2:- Interconnected street network on city level, comparing to car free block
Source: Researcher



Fig 5-3:- Green public space connecting residential blocks
Source: Talaat Mostafa Group

although car movement is bounded in a certain way, network is encouraging walking and bicycling, people are free to move through blocks instead of turning around to go to other side.

Therefore, the research recommends a hierarchal street network on city level, mixing the interconnected street network with the cul-de-sac system only on local street level, and providing pedestrian routs to increase network efficiency and ease pedestrian movement.

3.1. Pedestrian Friendly Design – Human Scale

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answer to:		
			Current situation	Applying NU	
<p>Principle: Streets are tree lined, designed (width to height ratio) for both autos and pedestrian. Entrances and porches should face the street.</p> <p>Importance: Encourage walking, safer environment, and streets like public spaces</p>	<p>SeaSide Comfortable height -width ratio, entries and balconies are facing street</p>	<p>6th of October Tree lined streets, not all neighs. are human scaled, cars separate housing from commercial center.</p>	<p>6th of October 48.4 % claimed that their routs to neigh. center are not tree lined nor human scaled</p>	<p>6th of October 41% of car owners are ready to walk if streets are tree lined.</p>	<p>As 71.75% (in average) of car owners are ready to leave their cars and walk if streets are shaded and tree lined, and also for safer environment, human scale design should be applied on Egyptian new cities, to encourage walking and reduce dependency on car.</p>
	<p>King Farm Wide sidewalks, homes have front porches on streets, streets are treelined</p>	<p>1st Community Compacted plan led to comfortable height - width ratio, streets are not tree lined</p>	<p>1st Community 80 % claimed that their routs to neigh. center are not tree lined nor human scaled</p>	<p>1st Community 76% of car owners are ready to walk if streets are tree lined.</p>	
	<p>Karow Nord Comfortable height - width ratio and streets are tree lined</p>	<p>Al-Rehab Comfortable height - width ratio and streets are tree lined</p>	<p>Al-Rehab 0 % claimed that their routs to neigh. center are not tree lined nor human scaled</p>	<p>Al-Rehab 75% of car owners are ready to walk if streets are tree lined.</p>	
	<p>Zannghui Zhang Design supports pedestrian movement and bicycling</p>	<p>10th of Ramadan Not all neighs. are human scaled, collectors are dedicated only for car movement</p>	<p>10th of Ramadan 50 % claimed that their routs to neigh. center are not tree lined nor human scaled</p>	<p>10th of Ramadan 95% of car owners are ready to walk if streets are tree lined.</p>	

3.2. Pedestrian Friendly Design – Public Spaces

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Creating public spaces, plazas, and green areas. Public spaces should be well defined at the center of each neighborhood.</p> <p>Importance: Public spaces represent community identity and promote higher degree of social interaction.</p>	<p>SeaSide Network of public spaces, boulevard and walkways act as gathering areas</p>	<p>6th of October No well defined public spaces. Not all neighs. have parks or green spaces</p>	<p>6th of October 45.2 % of sample claimed they have parks in their neighs.</p>	<p>6th of October Not Available</p>	<p>More than half of new cities residents complained from insecurity and lack of green spaces. Therefore, it is important to create well designed parks and green spaces to increase security, reduce pollution, and raise quality of life.</p>
	<p>King Farm Public spaces and parks scattered in different spots.</p>	<p>1st Community No well defined public spaces, some neighs. are totally deprived from green spaces</p>	<p>1st Community 40 % claimed they have parks in their neighs. but need restoration and maintenance.</p>	<p>1st Community Not Available</p>	
	<p>Karow Nord Network of public spaces, green space at blocks centers, and in front of public buildings</p>	<p>Al-Rehab Green and public spaces are available, well defined community center</p>	<p>Al-Rehab 100 % of sample claimed they have parks in their neighs.</p>	<p>Al-Rehab Not Available</p>	
	<p>Zannghui Zhang Green network, separates and connects villages, with bikeways and pedestrian routs</p>	<p>10th of Ramadan Public spaces are bare lands, open area for dumping trash, not enough green spaces</p>	<p>10th of Ramadan 83.3 % claimed they have parks in their neighs. but need restoration and maintenance.</p>	<p>10th of Ramadan Not Available</p>	

3.3. Pedestrian Friendly Design – Safety

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Is a result of walkable and livable streets and open spaces</p> <p>Importance: Mutual security concept offers even more safer neighborhood, and supports the creation of energetic and livable community.</p>	<p>SeaSide Very low crime rate due to mutual security</p>	<p>6th of October High crime rate, residents hire private security services</p>	<p>6th of October Only 16.1% claimed that no crimes occur at their neighborhoods</p>	<p>6th of October Not Applicable</p>	<p>Safe environment is the product of intimate, human scale, pedestrian friendly design. In other words, by encouraging people to use the street, residents can have a reason to watch street from their balconies, and safety can be provided by surveillance and mutual policing of one another. So, it is important to give people reason to use the streets by creating activities, public spaces, and furnished human scaled streets.</p>
	<p>King Farm Relatively low crime rate: 3/5 according to residents' survey</p>	<p>1st Community High crime rates, street design doesn't support mutual security</p>	<p>1st Community Only 20.0% claimed that no crimes occur at their neighborhoods</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Not Available</p>	<p>Al-Rehab Security services are provided, mutual security only at city center where mixed uses take place</p>	<p>Al-Rehab 66.7 % claimed that no crimes occur at their neighborhoods</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang Not Available</p>	<p>10th of Ramadan High crime rates, isolated residential neighs. blacked out at night</p>	<p>10th of Ramadan Only 33.5 % claimed that no crimes occur at their neighborhoods</p>	<p>10th of Ramadan Not Applicable</p>	

4.1. Diversity – Mixed Uses

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Neighborhood should have balanced mix of activities: housing, offices, school, religious building, and recreational use.</p> <p>Importance: Accommodate different users' needs, create livable and energetic environment.</p>	<p>SeaSide Mixed uses, spatial diversity, activities are distributed in finger type</p>	<p>6th of October Mixed use, spatially concentrated, zoning is isolating activities</p>	<p>6th of October 38.7% of sample depends on Cairo for their shopping and schools.</p>	<p>6th of October 64.5% (most of them are car owners) prefer concentrating activities at neigh. center</p>	<p>From the Egyptian experience, residents of new cities (especially 6th of October and New Cairo) are depending on central Cairo for their work and even for their daily needs. Therefore, diversity principle should be applied to provide new cities with rich mix of activities especially work opportunities. Otherwise, the new community will be a burden on central city. However, spatial diversity needs to be adapted to the Egyptian environment, because the field survey study showed that respondents did not agree on the spatial organization of mixed activities.</p>
	<p>King Farm Mixed use, spatially concentrated, multi centers are connected with boulevards</p>	<p>1st Community Mixed uses, spatially concentrated, shops began to appear at the ground floor of the residential use.</p>	<p>1st Community 40.0% of sample depends on Cairo for their shopping and schools.</p>	<p>1st Community 80.0% of sample prefer concentrating activities at neigh. center</p>	
	<p>Karow Nord Mixed uses, linear centers offer spatial diversity.</p>	<p>Al-Rehab Mixed uses, linear neighs. centers form together finger type city center</p>	<p>Al-Rehab 32.0% of sample depends on Cairo for their shopping and schools.</p>	<p>Al-Rehab 66.7% (most of them are car owners) prefer concentrating activities at neigh. center</p>	
	<p>Zannghui Zhang Mixed use, spatially concentrated, neigh. center have residential use in typical floors</p>	<p>10th of Ramadan Mixed uses, spatially concentrated, shops began to appear at the ground floor of the residential use.</p>	<p>10th of Ramadan 50.0% of sample depends on Cairo for their shopping and schools.</p>	<p>10th of Ramadan Only 33.3 % of sample prefers concentrating activities at neigh. center</p>	

4.2. Diversity – Mixed Housing

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Neighborhood should have wide range of housing types, differ in size and price.</p> <p>Importance: Different housing types are appropriate for variety of income and family sizes.</p>	<p>SeaSide Mixed housing, spatially diverse, and individual buildings variety</p>	<p>6th of October Mixed housing, spatially segregated. Repeated prototype</p>	<p>6th of October Not Applicable</p>	<p>6th of October Not Applicable</p>	<p>Egyptian New cities offer different housing types and prices, so mixed housing principle is applicable On Egyptian cities. However, from architectural point of view, there are two types of residential buildings, first; repetitive prototypes, second; unregulated individual buildings, both types are ugly and distorting the city image. This principle should be adapted to avoid the chaotic city image.</p>
	<p>King Farm Mixed housing. Spatially diverse.</p>	<p>1st Community Only lower class housing, and spatially segregated. Repeated prototype</p>	<p>1st Community Not Applicable</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Mixed housing. Spatially diverse. Repeated prototype in housing built by authority</p>	<p>Al-Rehab Only upper class housing, and spatially segregated. Repeated prototype</p>	<p>Al-Rehab Not Applicable</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang Not Available</p>	<p>10th of Ramadan Mixed housing, spatially segregated. Individual buildings variety and repeated prototype.</p>	<p>10th of Ramadan Not Applicable</p>	<p>10th of Ramadan Not Applicable</p>	

Possible adaptation for:

4. Diversity

From field survey study, what people think about spatial diversity doesn't only depend on car ownership status; it also depends on neighborhood size, because people who do not drive need activities to be near and accessible, while neighborhood size does not make a difference for people who drive.

Putting in consideration the reasons that people stated for not mixing activities (noise, congestion, parking spaces shortage....etc), and also since New Urbanism seeks to create safe and walkable community. Therefore, the research recommends that in small sized neighborhood (approximately 350 m radius); activities should be concentrated in neighborhood center, to prevent the side effects of mixing activities, and at the same time the center will be accessible by everyone especially people who do not drive. In case of larger neighborhood size, center could be divided into two smaller centers, so that the 350 m limit is still achieved, and it is possible to connect both centers with activities that do not contradict with residential use.

Regarding mixed housing types, to avoid the monotony of repetitive prototypes, and the chaos of unregulated individual buildings. The research recommends that every city council should define some guidelines such as; colors, floor height, and openings heights....etc, also the city council should avoid the misapplication of those guidelines by activating the penalties stated by the New Communities Law.

5. Smart Transportation

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Encouraging the use of bicycles, scooters, and walking as daily transportation, as well as providing light rail network or shuttle buses</p> <p>Importance: Reduce dependency on cars, promote efficient and connected city plan.</p>	<p>SeaSide Bicycling and scooting.</p>	<p>6th of October Internally: tok tok & trucks Externally: insufficient public buses</p>	<p>6th of October 54.8% of sample claimed they have no suitable mean of transportation at their neighborhoods.</p>	<p>6th of October Not Applicable</p>	<p>Egyptian new cities suffer lack of well organized transit system, and transportation is manipulated by individuals. Putting in consideration that almost half of new cities residents have no private car, Therefore, transportation principle should be applied on Egyptian new cities. But if city council is not able financially to create a public transit system, then city council can has a rule in controlling and improving the network which is currently controlled by individuals, regulating routs, fees, and stops location.</p>
	<p>King Farm bicycling & shuttle bus between centers and to regional metro station</p>	<p>1st Community Microbuses and regional buses pass through community, connecting neighs.</p>	<p>1st Community 88.0% of sample claimed they have no suitable mean of transportation at their neighborhoods.</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Not Available</p>	<p>Al-Rehab Shuttle buses connecting the city internally and with central Cairo.</p>	<p>Al-Rehab 0.0% of sample claimed they have no suitable mean of transportation at their neighborhoods</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang bicycling & shuttle bus connecting villages and activity centers</p>	<p>10th of Ramadan taxi and microbuses control internal transit, east delta buses connect city with other cities.</p>	<p>10th of Ramadan 66.7% of sample claimed they have no suitable mean of transportation at their neighborhoods</p>	<p>10th of Ramadan Not Applicable</p>	

6. Parking Alternatives

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Parking lots should be located in the interior of a block and accessed by alleys, on-street parking, or Parking structure wrapped with shops at with ground floor</p> <p>Importance: Reduce dominant physical and visual effect of parking lots, on-street parking slows traffic speed and buffers pedestrians on sidewalks</p>	<p>SeaSide On-street parking instead of parking lots.</p>	<p>6th of October On street parking is the only alternative, some resi. buildings have underground parking</p>	<p>6th of October 41.2% of sample park their cars at their underground parking</p>	<p>6th of October 94.1% of sample are ready to park their cars on street if safety is provided</p>	<p>According to the New Urbanists, parking lots should not dominate neighborhood plan. The field survey study showed that new cities' residents park their cars on street because there is no other possibility, for the time being parking on street is not a problem (except for safety). Therefore, parking principle is applicable on Egyptian new cities. However, it needs to be adapted, because population density is low and parking spaces are available, but when city population increase, shortage in parking spaces may occur.</p>
	<p>King Farm On-street parking instead of parking lots.</p>	<p>1st Community Parking lots at the cul-de-sac ends, and on-street parking</p>	<p>1st Community 85.0 % of sample park their cars on street</p>	<p>1st Community 100 % of sample are ready to park their cars on street if safety is provided</p>	
	<p>Karow Nord On-street parking instead of parking lots. Underground parking at the commercial center</p>	<p>Al-Rehab Every 4 or 5 residential buildings share a parking lot, on street parking is not considered</p>	<p>Al-Rehab 30.0 % of sample park their cars on street</p>	<p>Al-Rehab 75.0 % of sample are ready to park their cars on street if safety is provided</p>	
	<p>Zanghui Zhang Not Available</p>	<p>10th of Ramadan Parking lots at the cul-de-sac end, and on street parking at commercial centers</p>	<p>10th of Ramadan 87 % of sample park their cars on street</p>	<p>10th of Ramadan 96 % of sample are ready to park their cars on street if safety is provided</p>	

Possible adaptation for:

6. Parking Alternatives

From the Egyptian examples (especially Al-Rehab), parking lots can be an efficient possibility, but it should not dominate the city plan, so it is important to equalize the area dedicated for parking lots by creating open green spaces, spatially organized to dominate the image of the city. The research recommends that each residential block should have parking space, or underground parking for the individual buildings, on street parking should only be for visitors. Commercial centers and public activities should be provided with underground parking.

7. Sustainability

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Design should be based on strategies such as: energy conservation, natural ventilation, day lighting, landscape treatments, micro-climate, urban growth boundaries, and greenbelts.</p> <p>Importance: Sustainable communities are healthy: socially, economically, biologically.....etc</p>	<p>SeaSide Natural ventilation, micro-climate & landsc. treatments and greenbelt</p>	<p>6th of October No green buffer or landsc. treatments, only garbage system is available</p>	<p>6th of October 83.9% of sample has garbage collecting system. People suffer inefficiency of green belt.</p>	<p>6th of October Not Applicable</p>	<p>Sustainability in any community implies its balance and permanence. Therefore, sustainability principle <u>should be applied</u> on Egyptian new cities, with <u>no additional adaptations</u> Planning cities toward sustainability as follows:</p> <ol style="list-style-type: none"> 1- Environmentally: Energy conservation strategies should be essential part of plans at all levels, from city master plan to buildings design. 2- Economically: Mixed use plan that creates balance between people living in a community and the jobs available there 3- Socially: Creating more livable and diverse public domain by increasing social activities and interaction.
	<p>King Farm Landscape treatments and greenbelt.</p>	<p>1st Community Lack of green spaces, no green buffer, only garbage system is available</p>	<p>1st Community 100% of sample has garbage collecting system.</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Green network and greenbelt.</p>	<p>Al-Rehab Landsc. treatments, green network, green buffer, and garbage system are available</p>	<p>Al-Rehab 100% of sample has garbage collecting system.</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang Green network available</p>	<p>10th of Ramadan No green buffer or landsc. treatments, only garbage system is available</p>	<p>10th of Ramadan 83.3% of sample has garbage collecting system. People suffer inefficiency of green belt.</p>	<p>10th of Ramadan Not Applicable</p>	

8. Increased Density

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Density should be higher than the suburban development which is 15 person/acre, to reach around 65 person/acre</p> <p>Importance: Encourages diversity, reduces first costs and operating costs, and opens up the opportunity for a level of social interaction</p>	<p>SeaSide Gross density: 25 person/acre. Residential density: 65 persons/acre</p>	<p>6th of October Gross density is 8.26 person/acre, Residential density is 19 person/acre</p>	<p>6th of October Not Applicable</p>	<p>6th of October Not Applicable</p>	<p>Increased density is vital for generating diversity, it is also important for making infrastructure networks feasible.</p> <p>From the Egyptian examples, diversity is already established, also the targeted number of population can support a feasible and efficient infrastructure networks. Therefore, increased density principle is already applied and number of targeted population should not be increased. However, marketing strategies should be applied in order to increase the accomplished number of population to reach the targeted number.</p>
	<p>King Farm Gross density: 80 person/acre. Residential density: 100 persons/acre</p>	<p>New Cairo city On New Cairo level, gross density is 28.5 person/acre, residential density is 46 person/acre</p>	<p>1st Community Not Applicable</p>	<p>1st Community Not Applicable</p>	
	<p>Karow Nord Gross density: 54 persons/acre. Residential density: 85 persons/acre</p>		<p>Al-Rehab Not Applicable</p>	<p>Al-Rehab Not Applicable</p>	
	<p>Zannghui Zhang Not Available</p>	<p>10th of Ramadan Gross density is 9.75 person/acre, Residential density is 30.6 person/acre</p>	<p>10th of Ramadan Not Applicable</p>	<p>10th of Ramadan Not Applicable</p>	

9. Self-Governing Neighborhood

American New Urbanism		Egyptian New Urbanism – Field Studies			Principle's Applicability
Theories	Applications	Current Urban Conditions	Residents Answers to:		
			Current situation	Applying NU	
<p>Principle: Encourage citizens to take responsibility for their maintenance, security, physical changes, and evolution.</p> <p>Importance: Enhance sense of belonging to the community.</p>	<p>SeaSide Not Available</p>	<p>6th of October No self governing, governing only on “city as a whole” level</p>	<p>6th of October Not Applicable</p>	<p>6th of October 83.9 % of sample are ready to participate in self - governing process</p>	<p>Self-governing enhance residents’ sense of belonging to their city, and they become more satisfied by their built environment. Based on the field survey study, 82.6% of sample (in average) are ready to participate in self-governing process. Therefore, self-governing principle is applicable on the Egyptian new cities, the research recommends encouraging and facilitating establishment of such non-governmental organizations formed by residents themselves to be responsible for governing on neighborhood street level.</p>
	<p>King Farm Not Available</p>	<p>New Cairo city City is divided into smaller & separated communities; therefore governing is on district level. In 1st Community and Al-Rehab case, governing is on “city as a whole level”, no self governing</p>	<p>1st Community Not Applicable</p>	<p>1st Community 80.0 % of sample are ready to participate in self - governing process</p>	
	<p>Karow Nord Not Available</p>	<p>10th of Ramadan No self governing, governing only on “city as a whole” level</p>	<p>Al-Rehab Not Applicable</p>	<p>Al-Rehab 66.7 % of sample are ready to participate in self - governing process</p>	
	<p>Zannghui Zhang Not Available</p>	<p>10th of Ramadan No self governing, governing only on “city as a whole” level</p>	<p>10th of Ramadan Not Applicable</p>	<p>10th of Ramadan 100 % of sample are ready to participate in self - governing process</p>	

PRINCIPLES' APPROPRIATING PROCESS
