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DUBAI'S NEW URBAN LANDSCAPE: A CRITICAL LOOK AT ITS EMERGING HOUSING FORMS

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Abstract

Dubai, a city-state and the second largest city of the United Arab Emirates, is a fast growing hub with increasing need for infrastructure, housing and public facilities. Dubai is trying to market itself as an attractive holiday destination, which saw the launching and building of large scale housing developments. Some of these include reclamation of vast land areas along the city's coast line, in addition to creation of artificial lakes and the introduction of the sea inland to create more coastlines. This paper reviews the latest development in the creation of housing for both the local and foreign population of Dubai. In particular, it will examine housing forms borrowed from attractive European holiday destinations. Then, it will critically review the increasing spread of high-rise housing, and the reason behind its popularity in this part of the world. The emerging architecture which is predominantly housing is producing a new urban landscape reminiscent of Hong Kong and Singapore. A number of interviews with important property developers such as EMAAR and NAKHEEL, as well as the local planning authorities will be undertaken to discuss their aggressive development proposals, and to understand their development vision and philosophy. The aim will be to present a critical assessment of Dubai's emerging housing forms and resulting landscape on the one hand, and to identify the reasons behind the globalization of Dubai housing stock. This will be done by discussing globalization trends affecting this region, and the need for new housing forms to cater for emerging life styles.

1 Introduction

Dubai, the second largest city of the United Arab Emirates, is a city-state with an estimated population of 1.67 million inhabitants. It is a city that is constantly changing due to a very fast urban growth fuelled by its business and tourism-oriented development. Dubai started as a transit commercial port between the Gulf countries, Persia, the Indian sub-continent and East Africa. It was established near the coast for easy access to transportation by dhows and the search for food and pearls. Early history of Dubai suggests that the city started as a small and insignificant fishing village during the 18th

century. During the 1920s, an increasing trade with Persia attracted merchants to Dubai, some of which decided to settle down after that Dubai ruler invited them to do so with their families (Heard-Bey, F.: 244-245). During the 1950s, Dubai started to improve its creek due to the discovery of oil and increased activity in exploration, which required the import of large and heavy equipments. Dubai continued to grow and develop by widening its roads and hiring British town planners to produce urban growth plans. By 1961, an airstrip was built and was taking planes. Two year later the building of the airport begun and the runaway was complete in June 1965. The 1960s and 1970s saw more large-scale developments including the building of port infrastructure. Population growth continued and Dubai reached an estimated 120,000 inhabitants by 1973, and over 250,000 by 1981 mainly due to immigration. As a result, the population boom required considerable investments in public facilities and infrastructure. Dubai started its metamorphosis, as modern multi-storey buildings appeared, the building of a road tunnel under the creek, bridges over the creek, and reclaimed land. Dubai's future was to be based on manufacturing industries, re-export, trade and services, which lead to the creation of Jebel Ali industrial centre and the expansion of Dubai airport to allow for cargo shipment. (Heard-Bey, F.: 263-264)

During the 1980s and 1990s, Dubai started to strengthen and improve its tourism facilities. It is estimated that about 6.7 million tourists have visited the city last year, and over 15 million passengers have used Dubai airport in 2004. Dubai aims to increase its tourists' number to 12 million by 2010 (Sher, A., 2005). As a result, Dubai has started a multi-billion dollar urban development through 'mega projects' in order to establish itself as a Global business, tourism and leisure destination (El Sheshtawy, Y., 2004:180). It is now expanding its services portfolio by creating 'cities' such as Health care city, Academic city, Silicon Oasis, and International city, added to the already established Media city, Internet city, Dubai International Financial Centre, and Knowledge Village. At the same time, it is creating residential communities to support these mega projects. These housing projects and their developers will be reviewed in the next sections.

2 Dubai's Emerging Housing Sector

Dubai confirmed its arrival on the international scene by hosting the IMF and World Bank meetings in September 2003. For that, impressive building facilities and infrastructure were completed to host the event. Dubai's development has also been encouraged by its tax-free environment, excellent infrastructure and services, and strategic location being in the Gulf, one of the world richest regions, and near the Indian subcontinent. Dubai is also trying to market itself as an attractive shopping and holiday destination, which saw the launching and building of large scale housing and retail developments, also referred to as mega-projects. The important property developers behind the creation of these mega-projects such as Burj Dubai and the Palms are EMAAR¹ and NAKHEEL² respectively. Interviews were conducted with the Development Directors of these two companies in order to examine their housing developments, with an attempt to answer questions related to their development vision and philosophy with regards to Housing projects; their preferred housing typologies and architectural styles; population target for their housing projects; and whether or not these companies have carried out Post Occupancy Evaluations of their housing products. Dubai has a unique housing delivery system due to its large and diverse expatriate population and mostly wealthy local inhabitants. Housing delivery is shared between the local government and the private sector. The

¹ EMAAR Properties is a 32.5 per cent government-owned public joint stock company listed in Dubai Financial Market with an asset base of \$7.7 billion including the land bank.

² NAKHEEL is a state-owned Dubai development company. It has total projects of US\$30 billion currently under development. NAKHEEL's share amounts to US \$ 12 billion.

local government provides land and assists with finance to UAE citizens, and the private sector caters for the expatriate community on a free market basis.

2.1 Dubai Government Housing Policy

Dubai Government through its Municipality manages the housing delivery for the UAE citizens or 'nationals'. The policy is straightforward and consists in allocating a parcel of land at no cost to all UAE nationals once they reach the age of twenty. The area of the parcels was around 15,000 sq.ft. (1,393 sq.m.) at the beginning of the 1990s, and was lowered to 10,000 sq.ft. (929 sq.m.) in 1999, due to the growing need for land. In addition to the land and in order to build a house, land owners are given a free-interest loan of around Dirhams 500,000 (\$135,000) to be repaid over twenty-five years. Land owners should build their house within five years, otherwise the land will be repossessed. Those nationals that are unable to afford the repayment of the loan or to build a home with their own resources (those will an annual income less than Dirhams 120,000 (\$32,600)), the government provides them with "social housing" in the form of villas of two to three bedrooms built on a plot of land having an area between 3,000 to 5,000 sq.ft. (278 to 464sq.m). During the 1990s, the government built an average of 300 houses per year.

The government also provides assistance with maintenance, repair and expansion projects of social housing. Given that the local population is usually composed of large extended families, extension to their relatively small housing is very common. However, this comes at a cost that the government has to meet. This has been increasing over the years, and has now been evaluated as being an average of Dirhams 160,000 (\$43,500) per house. In addition, the government has the duty build the infrastructure and public facilities for all types of housing developments. In 2000, there were 23 neighborhoods for the nationals. There are at the moment serious concerns about the increasing consumption of land in Dubai. This is in fact a pattern across the UAE. The planning authorities are now faced with the dilemma of providing its citizens with decent housing in the shape of villas given that the national population is not interested and cannot live in apartment blocks. This means a plot of land for each family or individual. Dubai has decreased the size of the plot to 10,000 sq.ft. in order to retain urban growth within the planned boundaries by 2015. (Dubai Municipality, 1999b:1-5)

It should be noted here that the nationals still retain their traditional way of life that is also predominant in the rural areas. The new housing forms produced by the nationals are a combination of tradition and modernity. They have retained the original layout and segregation of spaces and uses, and allow for an independent area for visitors. The architectural styles however are borrowed from magazines and international villa type housing, symbol of modernity (see Figure 1). This is of course a worrying aspect given that it does not create a rich housing heritage. In addition, houses are built in the middle of the plot and are circled by high fences to ensure privacy. Unfortunately there are no studies dealing with the design tendencies amongst nationals and their level of satisfaction with the new housing forms and the neighborhoods. The issue of cultural expression is crucial here in order to understand how the locals relate to the heterogeneity of Dubai's housing styles as well as its population. The nationals are in fact segregated communities part of the "multi-clustered agglomerations" making contemporary Dubai. (Marchal, R., 2005:99)

Recently, EMAAR has been mandated by the Dubai's Executive Council to build 10,000 high quality housing units for nationals at a cost of \$2.7bn (Gulf News, 2005b). This housing will be sold to nationals at special prices. This will enable nationals to purchase good quality housing cheaply. It is not clear where this type of housing fits within the existing housing policy particularly for the nationals. This confirms that there is not an established public housing policy in Dubai owing to its

relatively smaller and richer national population. In fact, the locals do not exceed 20 percent of the current total population of just over one million. (El Sheshtawy, Y., 2004:169)





Figure 1: Villas built by Dubai Nationals





Figure 2: Low- and Middle-income Housing for Expatriates

2.2 Dubai Housing Developers and Mega Projects

Dubai has two types of expatriate population; the 'workers' on single status, and the 'expatriates' either single or with families. 'Workers' refer to the very low-income laborers brought to the emirate by companies for a short term i.e. construction, cleaning and so on. These workers are provided with very basic dormitory-like accommodation either on- or off-site (Dubai Municipality, 1999c). About 40 percent of Dubai population is the expatriate community whose housing is paid for by the employer and provided by the private sector. The housing market for the expatriates which constitutes of about 80 percent of the housing stock varies from luxurious to low-cost. However, market prices are not affordable to all, and as a result many families, about 50,000 families in 1999, decided to live in neighboring Sharjah where rents are much lower. In addition, some old quarters in Dubai are experiencing overcrowding and decrease in sanitary conditions, and strangely some families have started sharing apartments in order to reduce costs. This is being so despite the fact that 30 percent of the luxurious housing is empty. The housing forms produced for the expatriate community are primarily medium- and high-rise apartment blocks for the low and middle-income, and luxury villas in exclusive areas for the high-income (see Figure 2). (Dubai Municipality, 1999a:1-3)

Despite the fact there is an excess of luxury housing, a number of wealthy public and private developers have emerged to supply Dubai with a variety of housing forms to suit the increasing disparate and wealthy expatriate population and visitors. This is after Dubai's rulers allowed expatriates to buy freehold properties, in order to attract more foreign buyers (Marchal, R., 2005:102). The two main actors at the moment are EMAAR and NAKHEEL. There are several other growing developers such as DAMAC Properties. It is understood that EMAAR and NAKHEEL cooperate on a number of projects like the newly launched Dubai Waterfront, and also subcontract smaller developers. They also allocate the design of their projects to local and international design offices. This has brought famous architectural design offices to the Dubai scene, such as Norman Foster and

Partners, and Skidmore Owings and Merrill whose architect Adrian Smith designed the Burj Dubai (Dubai tower), due to become the tallest building in the world after it is completed in 2008.

2.2.1 EMAAR

EMAAR's mission "is to build a global property-related brand that delivers world class customer service, provides sustainable value, attracts and retains the best people, builds upon local tradition and heritage". It states that its goal is "to create thriving and livable Communities". EMAAR has currently 12 exclusive housing projects, and is building the world's highest tower, over 610m, at a cost around \$2bn. The aim is to surpass Taiwan's highest tower by a large proportion. EMAAR portfolio is very impressive given that it is building a variety of large scale housing developments (Raitt, D., 2004:4-5; www.EMAAR.com). EMAAR's has implemented the on-line sales through e-Registration scheme which appears to be a success owing to the fact that hundreds of housing units in the newly launched Travo and Una developments were sold in a matter of hours. Previously launched projects were also completely sold in a very short time. This illustrates the fact that Dubai's property market is very active and invertors and speculators have continued to stimulate it. It is not clear however, how the end users are responding to the increased property prices. There are no figures available to identify the proportion of end users for all developments, a part from the fact that they are all sold, but to whom?

EMAAR has introduced the model villas in order to sell projects, but it appears that this has not matured as very few visitors decide to buy, unlike in more mature markets in the UK or Australia, where 5 to 10 percent of the visitors in fact buy a property (See Fig. 3). EMAAR has also carried out a number of customer surveys in order to establish design preferences. Again the findings of these surveys are not available, but EMAAR claims that most potential end users are concerned by the quality of the finishes, and some by the design of the living and kitchen area.

2.2.2 NAKHEEL

"NAKHEEL, the company, grew out of The Palm project, and caters to a large variety of residential markets; from state-of-the-art luxury residential villas and apartments for 109,000 residents on The Palm, to more accessible, family-orientated developments such as The Gardens". The first Palm Island which involved the reclamation of some 70 million cubic meters of sand was completed by the end of 2003 (de Jonget, R. E. et al., 2003:14). NAKHEEL concentrates on the production and design of iconic projects in conjunction with the Dubai Executive Office. These are confidential projects that take years of development and impact assessment evaluations, particularly for environmental and transport management. The Dubai Executive Office is the Rulers' office where the vision of Dubai is created, then assigned to NAKHEEL for further development and implementation. NAKHEEL has currently 14 mega-projects, of which 11 are residential with a variety of typologies some inspired from ancient civilizations (The Lost City), international themes and styles (International City: 60,000 - 70,000 residents), UAE style (The Gardens), and modern designs (The Palm Jebel Ali). Most of these developments are part of mixed-use developments. NAKHEEL understands that transportation is a big issue in Dubai, and believes that the creation of mixed-used developments will help generate "self sustained communities... thus reducing the need to travel".

Two more islands are currently under reclamation, and another mega-project, The World, which consists of 300 private islands that represent the earth landmass. Another project has been announced, Dubai Waterfront, for 500,000 residents, will cover the Jebel Ali Palm, and will be "an unprecedented 81 million meters squared of mixed-use landmark development". (http://www.dubaiwaterfront.ae/)

The Palm development 'Signature Villas' are available in 12 different architectural themes and styles. Most villas have now been sold to end users (Ghosh, R. 2005). The Gardens Phase 1 is the only

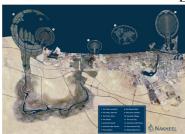
residential development that has been completed. NAKHEEL claims that there are extensive waiting lists to rent at the Gardens, and "there is continual positive feedback from the residents". It cites that the Gardens as "an affordable and family-oriented development with excellent facilities". More user feedback would be very useful in understanding the cultural and social character of Dubai's new exclusive communities. NAKHEEL is now targeting international markets to increase not only its market share but also "to increase the pie". It aims at bringing in more investors and end users from Europe, CIS countries, and North America. Currently, the property interest is coming from UK, Germany, the Gulf countries, and the Indian Subcontinent. As a result it has embarked on an aggressive marketing strategy. In fact, Dubai's iconic projects have started to win global recognition. Sultan Ahmad Bin Sulayem, executive chairman of NAKHEEL, said that "Never before have projects of this magnitude been imagined, let alone undertaken" (Gulf News, 2005a). Turning these iconic projects into reality is a challenge to most engineers, architects, urban designers and urban planners.







EMAAR housing projects and typologies







NAKHEEL housing projects and typologies







DAMAC Properties High-rise Jumeirah Beach Residence

Figure 3: EMAAR, NAKHEEL and DAMAC Properties Housing Projects and Typologies

2.2.3 Dubai's Emerging Housing Forms

Given that Dubai master plan is in constant change, any housing policies would also be influenced by the dramatic urban dynamics. It is not clear from the information gathered if there is a consistent housing policy for Dubai. The local authorities have left housing delivery to the private developers and market forces. As a result of the increasing cost of living in Dubai, including housing rent, Dubai's low-income workforce resides in neighboring Sharjah. There is a wide variety of housing styles and

types to fit the full spectrum. Styles borrowed from famous holiday destinations in Europe are predominant given that some potential customers can easily relate to them. Others are attracted to them due to their exclusiveness and luxury. There are also projects on Iconic locations such as the Palms which can be very attractive to famous people. Nonetheless, compared to some European destinations such as Spain or Portugal, properties in Dubai are more expensive for 'the common people' who would spend around \$150,000 for a holiday home. Properties in Dubai around that price are not very exciting and would not attract holiday home buyers from Europe. It appears that the Dubai market is destined to the wealthier margin of the market. Both EMAAR and NAKHEEL have not carried out any Post Occupancy evaluations. Their properties are still not fully inhabited and one has to wait a few years before an assessment of their housing forms can be made.

Dubai identity including its housing forms are being constructed by its expatriate community, and "parts of the city are exclusively associated with 'elite' global elements... The city is being created to respond to globalizing tendencies ... thus increasing catering to transient populations". This has led to the creation of hybrid urban and living environments catering primarily to the elite and as a result excluding a large section of the expatriate population (El Sheshtawy, Y., 2004:172). Some architects complain that little is done about context and aesthetic control, leading to a variety of architectural styles and forms, making a representation of the local culture impossible (Finch, P., 1998:32). Others such as Sir Michael Hopkins said that "the city was uninspiring architecturally and a difficult place in which to produce good design". The RIBA previous president George Ferguson also criticized Dubai's architecture by agreeing with Sir Michael Hopkins saying "Dubai is a model of unsustainability. It is exciting for all the wrong reasons. Dubai is like a great theme park" (Bardsley, D., 2005). All these comments are generating an exciting debate that will continue as long as the dramatic and widespread urban development that is shaping new Dubai and its local and expatriate communities continues. The other UAE Emirates should learn from Dubai's expansion and should aim at generating sustainable developments and communities by preserving the fragile natural environment and coastline.

3 Conclusion

The current dramatic economic growth of Dubai is not coming without its social costs. More emphasis should be given to the quality of housing forms being provided as part of the social housing programs, and more architectural control should be given to the privately produced housing, in order to reduce the spread of foreign and inadequate styles. More research is needed to investigate the design tendencies amongst nationals and their level of satisfaction with their new housing forms, and urban design of new housing developments and how these are affecting the way of life of nationals. Clearly the government will not be able to sustain the current housing provision policy for nationals due to a growing number of applicants and increasing cost. There is a serious lack of land and the cost of large scale urban development is extremely expensive particularly in desert environments. Dubai government needs to concentrate on finding ways to resolve this crucial problem by developing and promoting sustainable housing forms and developments to its nationals.

On the other hand, the expatriate market is booming by offering foreign styles and themes with the principal aim to make a quick profit. The speed by which this market is growing is extremely worrying. Little information is available on the environmental impact assessment, and no post-occupancy evaluations have been carried out up to now. The large amount of properties traded by speculators and investors is making it very difficult for end users to penetrate the market and own a property at a reasonable cost. The free market in this particular case is not favoring some end users. Unfortunately, there are no details regarding the potential end users and whether these new housing forms are adequate or not, apart from the fact that they are borrowed from European destinations and

have attractive names and appeal to 'the common people'. It is not clear why developers are aggressively building high rise housing either. There is no evidence that this housing typology will be attractive to home buyers in this part of the world. It may be that Dubai is trying to save land or copy cities like Singapore and Hong Kong and try to attract people who are familiar with similar living standards and environments. Dubai in fact "offers the view of a highly segmented population in terms of social class, income and racial conditions" (Marchal, R., 2005:97-102). One has to wait a few more years to understand Dubai's housing and property development pattern and its consequences.

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