

PAPER ID: 11A07I



URBANISATION IN AJMAN PUSHING BY HOUSING DEVELOPMENT

Julaihi Wahid^{1*}, Bassim Saleh², Mohammad Shihadeh A.Arar², Jihad Awad²

¹ Department of Architecture, Faculty of Built Environment, University Malaysia Sarawak, Kota Samarahan, Sarawak, MALAYSIA.

² Department of Architecture Engineering College of Engineering Ajman University, Al Jurf, Ajman, UAE.

ARTICLE INFO

Article history:

Received 29 May 2019

Received in revised form 27
January 2020

Accepted 03 February 2020

Available online 10 February
2020

Keywords:

Urban Housing; Land-use
plan; Emirates of UAE;
Housing development;
Urban morphology;
Migrant workers; City
planning; Ajman
Emirate.

ABSTRACT

This paper establishes the context of housing and urbanisation in Ajman. Changes in land use are pressing on a pattern of settlement. One central issue concerning the UAE is the fast track development in the newly peri-urban areas with the construction of infrastructure, although most areas are barren desert. Due to the urban sprawl from Dubai and nearby cities, there is an issue of growing importance in light of urban urgency for housing in Ajman. The increasing housing demand is due to expatriates looking for accommodations. The UAE national housing program is catering to its citizens. However, the growth of housing development pushes for immediate action on the city systems planning. The rush to supply housing without paying attention to the detailed aspects of housing design, and focusing mainly on functional vitality requirements without considering the long-term impact on urban morphology and urban design will adversely affect the environmental policy of development in Ajman. As housing supply growth, a wise idea is to check the increasing concern over the long-run economic growth and the infrastructure connecting the other Emirates and the Gulf Cooperation Council (G.C.C) states. Hence, this paper delves into the nature of urban housing in the Emirates by focusing on Ajman in parallel to a projection of economic and physical development. The research mixed-method bases on primary and secondary data with mapping techniques, informal interviews, observations, photography and visual analysis to analyze the consequences of housing development and its impact on land-use and pace of urbanisation. The findings cover the morphology of Ajman city, the price index of housing affordability and patterns development according to urbanisation rate concerning the needs and progress of the Emirates.

Disciplinary: Architecture and Town Planning, Urbanization, Migration, and Mobility Studies, Sustainability Development.

©2020 INT TRANS J ENG MANAG SCI TECH.

1. INTRODUCTION

The influx of migrant workers from Asia, the Gulf Cooperation Council (G.C.C.) and East Asian countries is propelling the housing in the UAE. UAE became a haven for Arabs experiencing the turmoil of war and displacement in neighbouring countries. Open policies and the traditional hospitality of Arab culture established a relationship in global trade and business that gave an opportunity to expatriates (Muhammad, 2017).

The migration of population plays a vital role in the urbanisation process of the U.A.E. Experts attributed to the rapid increase of the UAE population by a massive influx of foreign labor. In 1975, Ajman was only inhabited by 14,351 people, the population increased eightfold (114,395) in 1995 and to 225,000 people in 2003 (Table 1). The annual growth rate per annum cannot be determined exclusively due to the sudden increase in the population. In 1983 and 1995 the population shift from 5.3% to 5.7% respectively, while in 2001 to 2002 it declines to 3.48%, however, in 2003, the rate of growth in the population increased to 6.3%.

Table 1: Population in Main Cities of UAE (Source: Tedad Census 2003).

City	1975	1980	1985	1995	2003
Ajman	14,351	33,651	49,108	114,395	225,000
Sharjah	58,053	125,193	173,787	320,095	519,000
Dubai	179,926	263,449	354,175	669,181	1,171,000
Abu Dhabi	127,763	243,257	283,361	398,695	552,000
Total	380,093	665,550	860,431	1,502,366	2,467,000

The majority of this growth has been attributed to the influx of migrant workers drawn by the hope of ready employment at attractive wages in Dubai. According to the Ministry of Labor, foreigners make up about 85 percent of the population where there are 4.5 million expatriates compared with only 800,000 Emirati citizens in 2005. By 2016 the population had reached 9.27 million, of which Emirati citizens comprised 1.2 million (Figure 2: World Bank Report 2016).



Figure 1(a): Location of Ajman



Figure 1(b): Ajman City Map (Source www.google.ae, 2018)

This paper focusses on Ajman that is situated between the emirates of Sharjah and Umm Al Quinn and extends over a distance of 10 miles (about 100 square miles) which is only 0.3 percent of the total area of the U.A.E. As the smallest state in the emirates, it covers an area of 259 square kilometers as shown in Figure 1(a). The emirate is composed of three regions: the town of Ajman,

which includes the commercial district; Masfut, an agricultural zone in the south-eastern mountainous measure of the emirate; and Manama, in the eastern portion of the emirate as illustrated in Figure 1(b). The pace of urbanisation in Ajman started in 1980 with the petrodollar economy. The upsurge of the global economy led the government to take various steps to modernize its rural population to be able to participate fully in the modern economy competing with expatriates coming from all over the world.

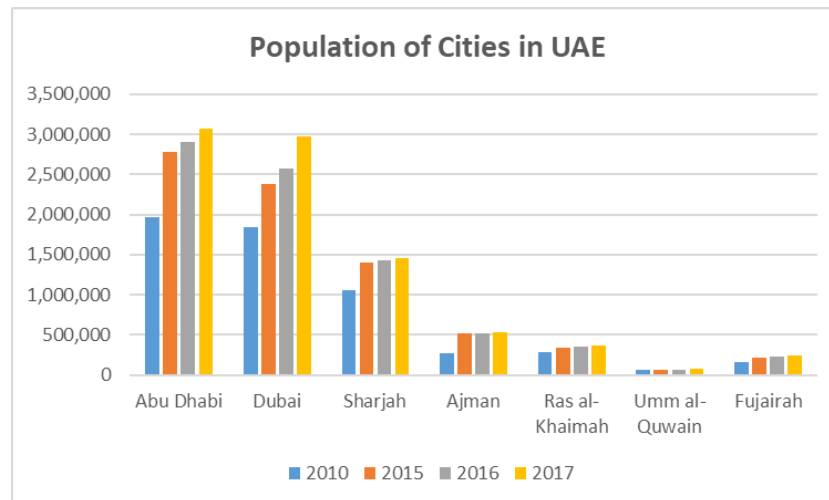


Figure 2: Population of UAE

(Source: Global Media Insight - Dubai Digital Interactive Agency 2017).

Infrastructure in UAE is the essential driving force, and they claimed to have the most advanced infrastructure in the region for their rapid urbanisation. The country is well connected with significant destination hubs and nodes of activity for economic progress by air, land, and sea (Elsheshtawy, 2009).

Ajman’s geographical location between Dubai and Sharjah in the south and Ras Al Khaimah and Umm Al Quinn in the north enable it to receive the expansion of infrastructure from all directions. Ajman Municipality is responsible for various socio-economic projects ranging from basic-needs projects to industrial growth investments and education. The proximity to Dubai and relatively low housing rents make Ajman an attractive place to live (Figure 2). The demand for housing in Ajman is not caused by internal rural-urban migration but rather by the influx of expatriates. The shift of the economy from oil-based industries to more diversified industrial and commercial sectors lead to the expansion of the region’s territorial boundary. The strategic location near the Arab Gulf and the GCC promotes industrial sectors, as well as other activities such as agriculture, trading, tourism, and fisheries. Hence, the gateway to most of the neighbouring regions reassures a strategic value of the core activities activated by the locals.

2. LITERATURE REVIEW

There is no single specific literature on Ajman that can be referred for this research to elaborate on the geography or the process of urbanisation. Instead, the researcher comprehended the information from the news of U.A.E, Dubizzle statistics and related articles from Khaleej Times available from google data. This information is expanded as follows:

2.1 THE URBAN POPULATION OF AJMAN, SHARJAH, DUBAI AND ABU DHABI.

The average population growth rate in U.A.E. stood about 6.4 percent between 1980 and 1985 while it picked up to 7.7 percent from 1986 to 1995 and 8.8 percent from 1996 to 2003 respectively, however, U.A.E. citizens account for 18 percent of the total population according to an independent estimate. In 1980 U.A.E. population reached 1.04 million; it surged to nearly 4.041 million at the end of 2003 and is projected to exceed 4.3 million by 2005 (Ministry of Planning, 2000). Table 2 shows the growth and distribution of the inhabitants in major cities of the U.A.E. The 2010 – 2030 strategy for Ajman sets out three possible population growth rates; from 1995 to 2005, the population in Ajman doubled from 114,395 to 225,000. By 2030 to 2050 it is expected to increase from 800,000 to 1,500,000 people respectively if the economic growth remains as it is. Sharjah, Dubai and Abu Dhabi are also experiencing a similar advance in the city. The increase in urbanisation has occurred in Ajman, Ras El Khaimah and El Fujairah that were once sleepy emirates. Compared with other developing countries, this remarkable increase is one of the highest in the world. Urban sprawl is implicit within the context of its system. The total building limits of the emirate are 142 square kilometres, and the built area comprises 40 percent of that. Generally, cities, towns, and neighbourhoods are interrelated complex entities - the changes in the city of Ajman is indeed far-reaching and brings into question the conventional understanding of urban problems and solutions. It is recorded that within a period of ten years (1995 to 2005), there are 20 percent increase in urban development. However, the concentration of the development is proximity to the existing urban centres that served the community since the 1970's (Table 1: Tedad Census).



Figure 2: UAE location of population concentration (source: Google Earth satellite image).

2.2 CAUSES OF URBANISATION

Urbanisation has gained momentum over the world, especially in developing countries. Cohen (2004) states that 60.8 percent of people are living in cities and the pace of urbanisation is unmanageable, especially in developing countries. The United Arab Emirates is another fast-growing country. The population of the U.A.E has reached 9.2 million people (U.A.E. Worldometer, 2018) and Ajman as the smallest emirates also increased tremendously from 14,351 people in 1975 to 225,000 in 2003 and 262,186 in 2011. The growth of the population led to the demand for housing and the expansion of infrastructure in the city (Table 2). The correlation between the supply and demand for housing with population change is evident as clarified by Glaeser et al. (2005). In some cases with the developing world, the pace of urbanisation does not rely on the push and pull theory of the old school of thought of urban planning. There are a conscious diffusion

and adaptation brought about rationally by the introduction of the urban experience. Here, the idea of the urbanisation process almost reverses where the development of large tracts of land in the peri-urban zone became the focus of housing development in almost every corner of the world.

The physical development of Ajman in 2004 only concentrated along the main artery of Sheikh Zayed Road while after 2014 it spreads as far as the Zorah and Helio regions (Figure 4). The artery road that links Ajman to Sharjah continues, linking Umm Al Quinn and Ras Al Khaimah (RAK). It opens the opportunity for physical development to the north of the country (Table 2). The Emirates has structured planning for physical development. The long planning strategy of Vision 2021 aims to enhance economic and social progress through high-quality infrastructure. Since October 2014, the government has built seven hospitals, seven dams, three mosques, thirty-five roads, four harbors, three water and sewerage disposal plants and three projects for water and electricity.

Table 2: Comparing the three Emirates of the North
(Source: U.A.E. population and statistic.gulfnews.com).

Year/Emirate	Area(km ²)	Population					
		2005	2010	2015	2020	2025	2030
Ajman	259	179	460	441	463	490	577
R.A.K	1684	102	250	235	245	258	272
Uum Al Quin	777	30	73	67	70	73	77

2.3 HOUSING POLICY

The U.A.E. vision for 2021 has allocated AED 16 billion for the improvement of infrastructure for it is running concurrently to catch up with the growing urban population. The demand for housing, public amenities, clean water, drainage and refuse dumpsites accelerates problems with which municipal administrators must cope. In the efforts towards urbanisation, one gain and sacrifices much. In a traditional society, the permanence of culture is challenged most strongly by its dynamics in the process of urbanisation. Taking culture into account for a progressive society by balancing traditional Muslim values with modernization and development is not a hindrance to the Emirates. How traditional culture can tolerate and change with urbanisation relies entirely on the component of culture that can sustain itself in the process of change brought about by urbanization. Proponents of cultural resiliency believe that there is a need to root oneself in a cultural tradition, in an established way of seeing the world (*weltanschauung*), and a set of values and evaluation premises to be able to gain optimally from the process of urbanisation. Otherwise the sense of drifting apart that accompanies urbanisation has often brought about various problems; social, economic and political.

Ajman Emirate is experiencing the process of urbanisation as elsewhere in the developing world, and at the same time, the government is ensuring that settlement undergoes a structured process to eradicate urban poverty or informal housing in the city. The residents are expected to adapt to the changing environment. This concept, however, needs to be understood since many would interpret differently in the spatial changes of urban space without understanding the underpinning of the environment. Thus, the process of housing design needs to be defined by cultural norms and the needs of the local population. On the other hand, the image of forwarding progress according to western civilization should not be copied and embedded in the current urban development. Instead,

the image of “modernisation” is reflected through image building housing provision in Ajman. Although the provision of housing in Ajman is in its infancy, the problems of over-supply have not yet arisen. The ruler of the Emirates is responsible for the welfare of its citizens. The Sheikh Zayed Housing Program (SZHP) was started in 1999 to plan for housing development in U.A.E. The Sheikh Zayed Housing Program caters for its nationals, while expatriates are allocated a housing allowance from their employer, enabling them to choose housing typologies according to their affordability. The program helps to solve the problem of low-income people by giving interest-free loans repayable for over 25 years to its nationals. Parallel to the country’s vision to modernise and build world-class infrastructure, the government has granted a policy of giving away houses, plots and housing loans to its people (Table 3). The people are provided with various housing schemes, including loans to buy, build, renovate and maintain an existing house. The SZHP gives priority to the poor, widows, senior citizens and people with special needs. The federal government since 2010 has allocated 1.8 billion Dirhams to increase these activities, and from the year 2000 to 2012 it is estimated that 15,500 Emiratis have benefitted from this program. In 2013 the ruler also approved housing projects for new homes and reforming of existing houses.

Table 3: Number of New Residential Units Added by the MoPW in the Emirates
(Source: Ministry of Public Work 2015).

EMIRATES	PERIOD			
	1974 - 1979	1980—1989	1990-1999	2000-2009
Sharjah	539	777	876	103
R.A.K	1369	530	-NA-	400
Ajman	330	390	589	124
Uum Al Quinn	385	56	511	27
Fujairah	1021	540	690	772

2.4 HOUSING STOCK IN AJMAN

Ajman grew from a trading post for pearls off the coast of the Arabian Gulf. The physical development spread inland with buildings providing services related to maritime activities. Ajman is not designed as a continual interrelated urban system judging from the evolution of its city. The downtown as the core reference for the town centre is a misconception by locals. They refer to the shopping mall comprised of hypermarkets and few retail outlets under one roof as the city centre. The conglomeration of city functions is scattered and only frequented by automobiles. Since Ajman University is the central hub of urban activities, the concentration of infrastructure is distributed around and connected to this campus. The distance to the Ajman University does matter to the new expatriates, and the demand for housing within the vicinity became a preferred place. Hence, the prospective developers will choose the nearest location to the university.

With regard to that, the four main areas of attraction for housing developments are Emirate City, Al Jurf, Al Sawan and Rashidiya (Figure 4). Al Jurf was once a sleepy barren-desert valley but now houses the main campus of Ajman University. This major hub of activities became the main concentration of development. The district of Al Jurf was once the location of the last government office in the north, the Department of Traffic and Licensing office. With the establishment of the new campus of Ajman University, the price of land soared to 67 Dirhams/square feet, leading to further development of urban facilities such as the China Mall and Al Jurf Industrial Zone. These extensions allow the linear pattern of change along the trunk roads from the south until the northern region of the U.A.E.

The typology of two bedrooms plus hall, and kitchen (2 BHK) is the typical housing plan layout in Ajman. The adverse effect on the land cost is shown by the house price in Table 4, disclosing that the sizes range from 1,000 square feet to 2,000 square feet. Generally, the dimensions of the rooms are rather generous; however, the Muslim culture of the expatriates (usually from Middle-East and Pakistan) does not suit well to two bedrooms if the tenants have both male and female children. After 2015 the attention of the housing development spread to Emirates City, Al Jurf, Al Salwan and Rashidiya (Figure 3). These areas underwent a concentration of business centres as well due to the need for services for the neighbouring tenants.

Table 4: Selling Price of Two Bedroom Apartments in Ajman (Source: Dubizzle, 2018)

No	Type	Location (Ajman)	Size (Sq. Ft)	Price AED
1	2 BHK	Conquer Tower, Sheikh Maktoum Bin Rashid Street	1,478	872,724
2	2 BHK	Jasmine Tower, Garden City	1,087	295,000
3	2 BHK	Pearl Tower	1,312	360,000
4	2 BHK	Ajman Cornice	2,125	700,000
5	2 BHK	Sulfa Tower	1,566	390,000
6	2 BHK	Lake Tower C4	1,410	375,000



Figure 3: Popular Housing Areas of Ajman (Source: Bayut 2018).

On the other hand, this scene only occurred in the post-urban environment in western cities where decentralised loosely connected neighbourhoods and zones of activities appeared in the locality (Andrew et. Al. 2004). The demand for housing from staff and urban services from students became the magnet for all physical improvement. On top of that, the increasing housing growth in Ajman is also affected by the spill-over of the development in Dubai and Sharjah. Judging from the proximity of Ajman with Dubai and Sharjah as compared to RAK and Umm Al Quinn, infrastructure is well connected and became the main determinant in the migration of workers looking for cheaper housing. Lately, the development is increasingly moving towards the northeastern side of the region. Since then, the key property players in U.A.E. started to focus on Ajman (Table 5). The three typologies, i.e. townhouses, villas, and apartments are commonly built in the area at different prices ranging from 400,000 to 1.2 million AED. The major players in the property markets are investors from India, Pakistan, and G.C.C. countries. The investment in each project seems very encouraging and each development is providing services to attract potential buyers. Expatriates are not keen to invest in property due to the security of the appointments, where security is reliant on loyalty. As

Marcade (2016) pointed out, the organisation may fire the employee upon disagreement although he or she may have served for 12 years.

The location and facilities play a significant role in private sector development. The site at the beach and the city centre are preferable. Ajman Corniche Residence, located near the beach and the city is a new image of seven high-rise towers exclusively for high-end tenants (Table 5). However, the concentration of urban facilities does assure to lure the buyer as that of Al Zorah Mixed-use Development which is furnished with a gated community concept. The location which is far from the town and trunk road discourages the buyer.

Table 5: Housing Developments in Ajman By Private Sectors.

Developer	Project Name	Area	Cost	No. of Residential Units
Aqaar Properties	Ajman Corniche Residence	GFA = 2,200,000 Sq. Ft.	US\$163 million project	7 high rise towers
Al Zorah Development Company	Al Zorah Mixed -Use Development	5.4 million m2	US\$ 6 billion project	800 residential units, 200 villas and 600 apartments
Sweet Homes Holding	Ajman Uptown	4 Million Sq. Ft.	US\$953 million project	1504 G+2 Townhouses/Villas with 7 G+4 commercial and residential buildings
Aqaar Properties	Ajman One Mixed - Use Development	72,000 m2	US\$898 million project	12 freehold residential towers
Sweet Homes Holding	Rainbow Towers Residential Development	1,797 m2	US\$463 million project	Six residential towers of 31 storeys

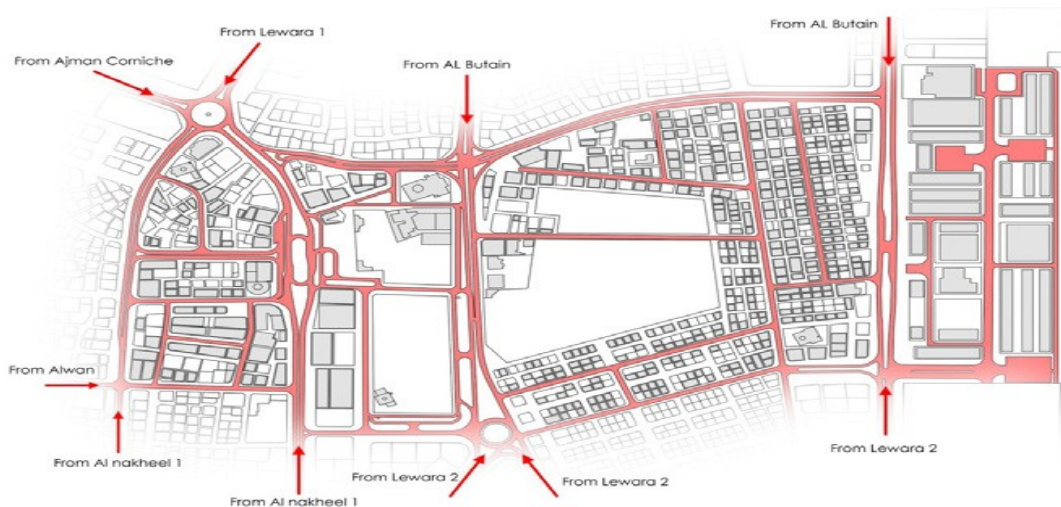


Figure 4: Locations of Projects in Ajman (Source: www.google.ae 2018)

3. METHODOLOGY

Ajman is a newly developed city dating from 1973 according to the petrodollar industry (Table 3). Ajman became the focus of this research due to its central location between Dubai, Sharjah and the two northern emirates i.e. Umm Al Quinn and Ras Al Khaimah. Ajman University is an important higher education centre in this region and attracts property growth for staff and student support facilities. This research employs a mixed-method approach, through the analysis of printed materials, interviews, reports and guidelines from the municipality. This paper highlights the pattern of changes in morphology and the pace of urbanisation and draw attention to the past urbanisation to monitor the changes. Published data from the municipality and interviews with the officer at Ajman

Municipality supplements the data, while the technique of mapping and longitudinal evidence from the archives of Ajman will be used to support the data. This study is limited to Ajman Emirate, although an overview of the United Arab Emirates is mentioned.

4. HOUSING DELIVERY SYSTEM

Public sector participation in housing delivery in Ajman is crucial. In 2000 and 2010, the developer focused on high-rise living. High-rise apartments of two and three bedrooms with two and three baths respectively and a hall (referred to as 2 BHK and 3 BHK) were built up along the Sheikh Zayed Road and Ittihad Road as of 2004. After 2015, the concentration of apartments lingered around Ajman University. The campus and surrounding areas also became the focus of new developments with shopping malls and retail outlets, providing fast-food chains and tandoori shops. It serves the nearby apartment complex. The boxy shaped buildings perfectly fit six units per floor while the ground level is utilized for retail shops and public services. The mix of two bedrooms and three bedrooms are the features of the design in most areas. The tenants are often Arabs, Pakistani and Indians. In UAE, the rent is paid in advance for one whole year, ranging from 3,000 Dirhams/month to 7,000 Dirhams/month depending on location and finishes (Table 7).

Table 7: Rental rate and distance to metro/city centre in Ajman and Dubai (Source: Dubizzle, 2017)

Location	UNIT	LOCATION	RENTAL (Thousand Dirhams per year)	DISTANCE To Metro
DUBAI	1 BHK	Dubai Silicon Oasis	65	1 min
	1 BHK	Sulata Tower	80	1 min
	1 BHK	Jumeirah Lake Tower	70	1 min
	2 BHK	Al Jadaf Village	85	1 min
	2 BHK	Business Bay	118	1 min
	2 BHK	Al Jadaf Culture Village	110	1 min
	3 BHK	Dubai Marine	235	1 min
	3 BHK	Al Qusab	115	1 min
	3 BHK	Sulfa Tower	130	3 min
				To City Centre
AJMAN	1 BHK	Naiyimia Tower	25	31 min
	1 BHK	Garden City	22	34 min
	1 BHK	Horizon Tower	30	34 min
	2 BHK	Ajman Jasmine	30	34 min
	2 BHK	Rashidiya Tower	35	34 min
	2 BHK	Ajman Pearl Tower	32	34 min
	3 BHK	Falcon Tower	48	34 min
	3 BHK	Horizon Tower	45	34 min
	3 BHK	Naiyimia Tower	49	31 min

5. DISCUSSION

A long coastline and flat, undulating land annexed to the fast-growing emirates of Sharjah and Dubai gave an opportunity for Ajman to grow along with other emirates. The infrastructure is well established and linked by roads, sea and air. The two trunk roads of Sheikh Zayed Road and Ittihad Road are the linkages to the northern part of the Emirates from Abu Dhabi, Dubai and Sharjah that open the frontier for the physical development in Ajman. The housing program is important for urbanization. The demand for housing in Ajman itself is dependent on incoming expatriates.

Expatriates also rely on job opportunities to survive in a foreign land. The contract for each expatriate ranges from three to five years, rendering it impossible to expect them to purchase the property. With respect to design, the boxy form of apartments of six units per floor of up to eight-storeys high is the typical utilitarian housing in Ajman. Instead, Dubai and Abu Dhabi have stylish architecture as compared to the new faces of apartments in Ajman that only cater to the increasing housing demand of the expatriates. Subsequently, the prices of the houses are unreasonably high and culturally inappropriate for the majority of Muslim workers from the Middle East and Pakistan. On the other hand, the economy in the coming years is uncertain and the demand for housing may fluctuate. Evidently, in 2018, the world economy in advanced countries is challenged with technological change and the complex impacts of globalization (Ali et al., 2020). Ironically, the developing countries show a reduction in poverty level and an increase in the middle-class population. These indicators may encourage the demand for goods and services across the world (Schwab, 2018). As a result, the improvement in their own country will lead them to leave Ajman and return to their mother's homeland. There is a possibility that the ambitious housing project in Ajman will be uninhabited.

6. CONCLUSION

Ajman is pushed by urban changes. The possibility to gazette the land in the urban fringe is necessary in the long term for the development plan of Ajman. Ajman is expected to grow and expand through intensifying economic development to compete with Abu Dhabi, Dubai, and Sharjah. Furthermore, the SZHP is fueled by economic benefits from the federal government. Thus, affordable housing for the Emirates is not a problem. Possibly, a well-structured land-use plan is needed to cater for the future growth and demand for housing in Ajman. The districts of each housing sector should be linked by public transport. Perhaps the new concepts of Transit Oriented Development and Smart Cities approach have to be integrated into the SZHP. Further to the long planning of housing in Ajman, the involvement of the private sectors must be tallied with the five-year development plan of UAE in the long-run as well as urban consolidation or containment of development has to be established by the municipality as soon as possible. This study is crucial to the future projection of housing in Ajman and the expansion of the conurbation of Sharjah, Umm Al Quinn and Ras Al Khaimah Emirates.

7. AVAILABILITY OF DATA AND MATERIAL

Data can be made available by contacting the corresponding author.

8. REFERENCES

- Ajman. (2018). The official portal of the UAE Government. <http://www.government.ae/en/about-the-uae/the-seven-emirates/ajman> (Retrieved March 18).
- Ali, H., Malik, A.M., Siddique, H.M.A., Rizwan, M. (2020). Impacts of Urbanization and Energy Consumption on Climate Change in Pakistan. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 11(4), 11A04S: 1-11.
- Cohen, M. (2004). Draft Report for Chapter 1 of the Global Report on Human Settlements 2005. New School Univ. New York.

- Elsheshtawy, Y. (2009). *Dubai: Behind an urban spectacle*. Routledge, London, United Kingdom.
- Florida, R., (2016). *A New Typology of Global Cities*, Brookings Metropolitan Policy Program, www.citylab.com/life/2016/10/the-seven-types-of-global-cities-brookings/502994 (Retrieved March 2018).
- Glaeser, E. L., Gyourko, J., & Saks, R. E. (2005). Urban growth and housing supply. *Journal of economic geography*, 6(1), 71-89.
- Golland, A., & Blake, R. (Eds.). (2004). *Housing development: Theory, process and practice*. Psychology Press, Routledge, London.
- Infrastructure and Vision 2021. (2018). The official portal of the UAE Government, Retrieved from <http://www.government.ae/en/information-and-services/infrastructure/infrastructure-and-vision-2021> (Retrieved March 2018).
- John, I. (2007). Sharjah rents are falling, that is why: The increase in affordable housing in Dubai is having a negative effect on rents in the Northern Emirates. *Khaleej Times, Local Business*,
- Marcadé, F. (2016). What is a job security in UAE for white collar expats from India? <http://www.quora.com> (Retrieved May 2018).
- Muhammad, A. (2017). *The Influx of Migrant Workers in Dubai and Emirate Culture: Living in Dubai*. Mudawana.com, (Retrieved June 2018).
- Schwab, K. (2018). *The Global Competitiveness Report 2017–2018*: World Economic Forum, Columbia University, USA. <http://www3.weforum.org>. (Retrieved May 2018).
- Wahid, J., Shah, A.H.H., & Sulehan, J., (2008). Urbanisation and Cultural Resilience in Newly Urbanized Communities, *Sarawak Museum Journal*, LXV(86).



Professor Dr. Julaihi Wahid is Professor at the Department of Architecture, Faculty of Built Environment at University Malaysia Sarawak. Formerly he taught at Department of Architecture Engineering, College of Engineering at Ajman University, UAE. He received his PhD in Housing and Architecture at the University of Newcastle Upon Tyne, Newcastle, England, his M.Arch. (Community/Urban Design) from Kansas while B.Arch and BSc (Architectural Studies) from Washington, USA. His research encompasses Commercial Complexes and Mixed Development, Community and Urban Design and Housing Studies.



Dr. Bassim Saleh is an Assistant Professor at Department of Architecture, College of Engineering, Ajman University. He received his M.Arch and PhD in Architecture from University of Strathclyde, Scotland, UK, his BSc. Architecture from University of Ain Shams, Cairo. He did Post Doctorate Research at University of Arizona, Tucson, USA. His research is Urban Design Pedagogy, Desert Architecture, Sustainable Architecture.



Dr. Arar is an Associate Professor at the Architectural Engineering Department, College of Engineering at Ajman University (AU). He completed his PhD study in Urban and Environmental Studies from Rensselaer Polytechnic Institute in New York, USA, his Master of Architecture from California State Polytechnic University, Los Angeles, California. Dr. Arar received two Undergraduate degrees: Bachelor of Architecture and Bachelor of City and Regional Planning from University of Louisiana, USA. Dr. Arar's research focuses on Urban Planning and Design, Sustainability in Architectural and Urban Development, Architectural Design Development.



Dr. Jihad Awad is an Associate Professor and the Head of Department at Architecture Engineering Department, College of Engineering at Ajman University. He receives his Dr. Ingr. in Architecture (Doctor in Architecture Engineering) from University of Stuttgart, Germany, his M. Arch. (Community/Urban Design) from Kansas, while his B.Sc. Arch. Engineering from Yarmouk University, Jordan. Dr. Jihad Awad's research is Traditional Architecture and Heritage Conservation, Architecture of the Islamic World, Housing, Smart Cities.