



EXECUTIVE SUMMARY

Adequate and affordable housing is a basic human need, and in the United Arab Emirates (UAE), housing is treated as a right of every Emirati national. This study examines the efficacy of the two national housing programs in the Emirate of Ras Al Khaimah that provide subsidies for affordable homeownership—the Sheikh Zayed Housing Program (SZHP) and the President's Initiative (PI). Beneficiaries of these two programs seem largely satisfied, but suggest improvement to the approval process, eligibility criteria, housing design and standards, and location decisions. Also, the growth spurred by the two programs, especially SZHP, has significantly shaped the current sprawling urban form of the Ras Al Khaimah municipality. The question of long-term sustainability of the two programs looms large, funded as they are entirely by the government, with little or no participation from the private or informal sector. To make housing programs financially and environmentally sustainable, every stakeholder must play a role: the federal government and the Emirate of Ras Al Khaimah need to enable other sectors of the economy to participate in housing provision; the Ras Al Khaimah Municipality will have to strengthen and enforce its development standards; and, individual beneficiaries need to follow local plans, embrace sustainable practices of building and use the programs in a judicious way.

Exploring the Provision of Affordable Housing in Ras Al Khaimah

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Introduction

Adequate and affordable housing is commonly recognized as a primary human need, as it provides stability, both economically and socially, and is integral to human well-being. The United Arab Emirates (UAE) has one of the most generous welfare policies in the world, including government-provided assistance for affordable and adequate housing for every citizen. The state provides social services free of charge to its nationals, with virtually no taxation, except for the recently introduced Value Added Tax. In 2017, 51.7% of the federal budget was allocated to social development welfare, encompassing free healthcare, education, and community development activities, which includes housing (Ministry of Finance, 2017). Only a handful of OECD countries surpass this allocation.

One goal of this significant budget allocation is providing housing assistance so that most Emiratis can affordably own their own homes. Federal government spending amounts to about 9.5% (4.6 billion AED) of the 2017 federal budget, dedicated to its flagship housing program—the Sheikh Zayed Housing Program (SZHP). The President's Initiative (PI), another federal program, is worth 10 billion AED and has been underway since 2011. Individual emirates, particularly Abu Dhabi, Dubai, Sharjah, and Ras Al Khaimah, also spend funds on housing, over and above these two federal housing programs. For instance, the Abu Dhabi Housing Authority in 2018 announced 5.3 billion AED for housing construction and loans (Arabian Business, 2018). As well, Dubai's Mohammad Bin Rashid Housing Establishment is spending 10 billion AED across Dubai (Government of Dubai, 2018). In fact, the combined spending of the individual Emirati governments matches, and perhaps exceeds, the federal government spending on housing.

This UAE orientation to a welfare policy that includes housing assistance is rooted in the state's constitution, which guarantees improved living standards and quality of life for every Emirati. It aims to eliminate poverty and deprivation in the country. Articles 10¹ and 24² of the UAE constitution stress the individual citizen as the main concern of the state

¹ Article 10: The aims of the Union shall be the maintenance of its independence and sovereignty, the safeguarding of its security and stability, defence against any aggression upon its existence or the existence of its member states, the protection of the rights and freedoms of the people of the Union, the achievement of close co-operation between the Emirates for their common benefit in realising these aims and in promoting their prosperity and progress in all fields, the provision of a **better life for all citizens** together with respect by each Emirate for the independence and sovereignty of the other Emirates in their internal affairs within the limits of this Constitution.

² Article 24: The basis of the national economy shall be social justice. The support of the national economy shall be sincere co-operation between public and private activity. The aim of the national economy shall be the achievement of economic expansion, increased production, **the raising of standards of living** and the achievement of prosperity for citizens within the limits of the Law (the UAE Constitution, 1971).

and pledge all government institutions and organizations to support their citizens' welfare. The constitution affirms the importance of providing a "better life" and high "standards of living" for all people in the country. Providing housing or housing assistance—as a quintessential element of standard of living—is thus foundational to the government's pledge.

Accordingly, various official documents show that an adequate house is a right of every Emirati, especially for those in low-income categories (Al-Mansoori, 1997). Unfortunately, precise definitions of what constitutes adequate housing or the needs of a household are missing. Also absent is a clear income threshold for low-income households. Nonetheless, various federal and emirate-based housing programs seem to peg low income at around 10,000 AED per month.

Despite spending considerable public funds, very few published studies of various government-run housing programs in the UAE are available. In light of this, this study aims to answer the following three questions:

1. How effective have the national housing programs—Sheikh Zayed Housing Program and the President's Initiative—been in making housing affordable to Emiratis in Ras Al Khaimah?
2. How satisfied are the beneficiaries of the programs with the approval process, housing design, and locations?
3. What impact has each housing scheme had on overall urban form and alignment with local policies?

Methodology

The study employed a mixed method approach, in which data were collected from both primary and secondary sources:

Primary sources included multiple field visits and observations of housing built under different schemes in Ras Al Khaimah. Also included in the primary sources are the interviews with various stakeholders, made possible with the help of local student interviewers and interpreters. 29 beneficiaries of SZHP and 11 residents of the PI projects were asked about their level of satisfaction with the housing cost, design, and locations. Eight public officials at SZHP's head office, the municipal government of Ras Al Khaimah, and the federal Ministry of Infrastructure and Development (MoID) were interviewed for relevant figures and statistics, how the decisions on the location and design of the projects were made, and the official view of the success of the housing schemes.

The secondary sources included federal, emirate and municipal government websites, maps and publications such as statistical handbooks (census data from 2013, 2015 and 2017), national and local newspaper reports and Google aerial maps. Review of the academic and grey literature on affordable housing in the UAE and elsewhere in the world was also a key part of the data collection.

³ Which include personal/family savings, individual moneylenders, and remittances from family members.

Background

Ras Al Khaimah is the northern-most emirate of the seven emirates in the UAE. The government estimates 465,000 people inhabited the emirate in 2015 of which slightly over 100,000 were Emiratis. Just over half of these citizens live in urban areas, concentrated in the municipality of Ras Al Khaimah. The rest reside in remote settlements in coastal and mountainous regions, such as Ghalilah, Digdagga, and Khatt. In the last few years, more expatriates have moved to Ras Al Khaimah (in contrast to Dubai and Abu Dhabi, which usually attracts most of the expatriates)—116,000 work visas were issued in 2011, the highest to date, followed by 33,259 in 2014 (UAE Department of Economic Development, 2015). The emirate is blessed with a diverse landscape, including mountain ranges, sandy desert, the mangroves, and beaches. The economy is largely manufacturing, and natural resource-based. Most of the Ras Al Khaimah Emiratis are employed in retail trade, transportation, manufacturing, and construction (UAE Department of Economic Development, 2015).

This study draws on Al-Mansoori's (1997) conceptual framework for housing, founded on the three approaches detailed below:

The Provider Approach

Here, the public sector takes full responsibility for producing housing to meet deficits in the housing supply and to improve housing quality for those unable to house themselves to the standard set by public authorities. The government controls the whole housing process—planning, funding, design, construction, and allocation. Benefits of this approach include speedy construction, centralized production, and large-scale projects. In reality, this approach has mostly failed in both developed countries, such as Canada and the USA, and in developing countries, such as Brazil and Mexico. Several factors account for this: higher costs (World Bank, 1993; Van Huyck, 1987), fewer beneficiaries (Gilbert & Ward, 1985); and the socially-troubled spaces it creates (Burns & Ferguson, 1987). This approach frames housing as a welfare commodity, where it does not meaningfully contribute to the economy. Further, the role of the private and informal sectors³ in providing housing have no role here.

The Supporter Approach

This approach supports people to take responsibility for their own housing—by, for example, easing access to land, providing funds, building materials, technical assistance and infrastructure, and offering insurance or loan guarantees. Public institutions are thus not directly responsible. Critiques of this view highlight that it has not met the needs of the poorest of the society (Van Huyck, 1987), as it emphasizes cost recovery, keeping subsidies low, and ignoring the informal sector (UNCHS, 1994).

The Enabler Approach

The more integrated approach redefines and redistributes responsibilities among all housing actors—individual households, small-scale enterprises, co-operative groups, informal and formal private producers, and governmental agencies and ministries. Governments avoid direct involvement in housing production; instead, they primarily managing the legal, regulatory, and economic framework to maximize opportunities in the marketplace for land, building materials, financing, and finished housing products. In this way, they enable other housing actors to produce housing and related services more effectively. UN-Habitat’s (2005) report suggests since mortgage financing is beyond the reach of lower income groups in developing countries, new trends in housing finance are: microfinancing⁴ and community funds⁵.

The World Bank (1993) and the United Nation Centre for Human Settlements (UNCHS) (1987, 1995, 1996) both support the enabler approach. Many countries, like Canada, the USA, and the UK, have moved in this direction in the last few decades. However, Peattie (1987) and the UNCHS have questioned whether this approach can be implemented in the UAE or other Gulf states, where the political and social context is different from that of Western liberal democracies.

Overview of Housing Programs

Figure 1 shows the various housing programs in the UAE: the two national housing schemes of SZHP and PI and

four regional emirates programs, one each in Abu Dhabi, Dubai, Sharjah and Ras Al Khaimah for their own citizens. These individuals can also access the national program. The remaining three emirates, Ajman, Fujairah and Um Al Quwain, do not have regional programs, so their citizens can only rely on the national programs.

The MoID is responsible for implementing the SZHP and PI housing projects, including providing necessary infrastructure such as roads, bridges, water, sewer, and construction. The MoID also builds schools, police stations, community centers and mosques across the country.

Sheikh Zayed Housing Program

This program is named after the Federation’s first president, Sheikh Zayed bin Sultan Al Nahyan, and has been operational since 1999 (so is the oldest of these programs), and provides two kinds of assistance to Emiratis:

- Providing interest-free loans and non-repayable grants to enable citizens to purchase a home, build a new house, or maintain an existing property
- Constructing homes that are then owned by Emirati households⁶

Since its inception, the scheme has provided 58,863 housing subsidies worth over 30 billion AED across the country: 40,812 (~70%) were housing loans, and 18,051 (~30%) were grants.

Emiratis wishing to build new homes make a request to their local municipality for a piece of serviced land free of

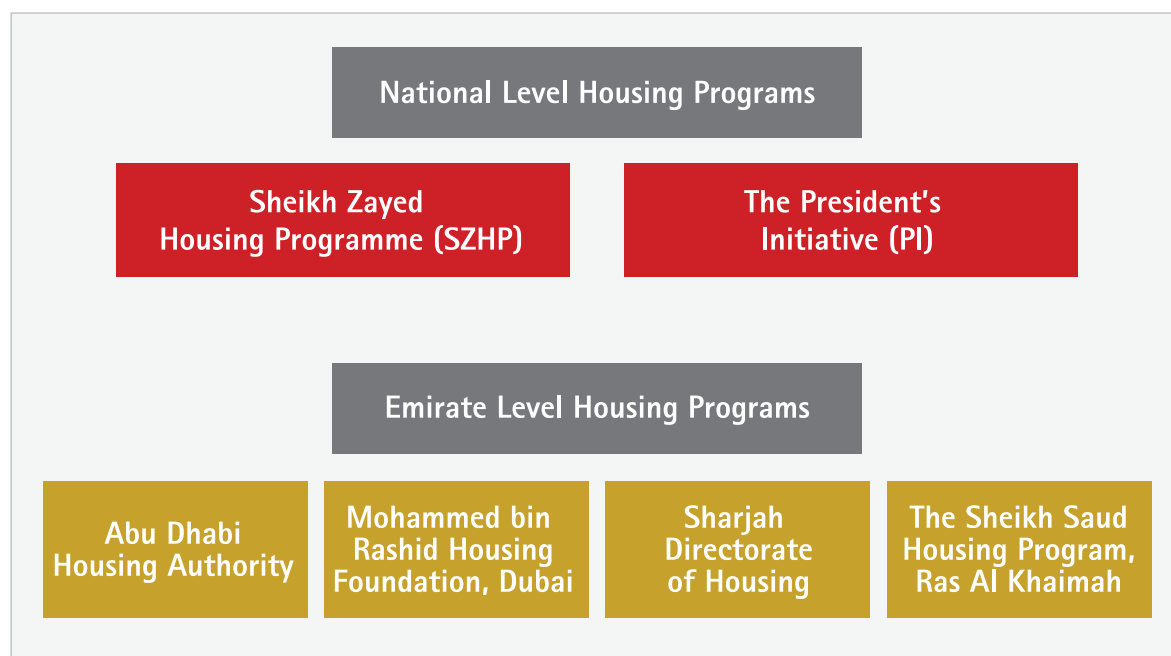


Figure 1. National and regional housing programs

⁴ Microfinance for shelter offers small loans suitable for significant housing improvements.

⁵ In the community fund approach, lending is typically to communities for land purchase, infrastructure and service investment, and (in some cases) for housing construction.

⁶ Pre-constructed homes are typically about 400 m2 with four bedrooms, five baths, and a maid room, with an estimated cost in Ras Al Khaimah of 800,000 AED if it has quality finishing. Another configuration is 250 m2, with three bedrooms and four baths.

charge, which includes electricity, water, road, and sewage services. In Ras Al Khaimah, the municipality allocates a 90m x 90m plot of land for villa construction (as is the case in Al Riffa). The loan or grant helps the applicant to build the home; however, the contractor gets paid directly from the approved loan or grant, which is administered by SZHP. Occupants can sell or rent the property once the loan is paid, but those who receive a grant must live in the property for at least 15 years. If they choose to sell the house before then, they are required to pay the grant back to SZHP. Further, they cannot make a future claim for assistance for a house.

Among different emirates, residents of Ras Al Khaimah have benefitted the most from the SZHP scheme, followed by Sharjah and Fujairah residents. Between 2000 and 2017, 30% of all approved applications were from Ras Al Khaimah even though Ras Al Khaimah applicants accounted for only 25% of all applicants to the program (Figures 2 and 3). Al -Mansoori (1997) argues that low cost housing programs were always in high demand in Ras Al Khaimah, making up roughly 37% to 50% of all applicants between 1971 and 1991 respectively. Multiple factors account for a higher rate of applications in Ras Al Khaimah:

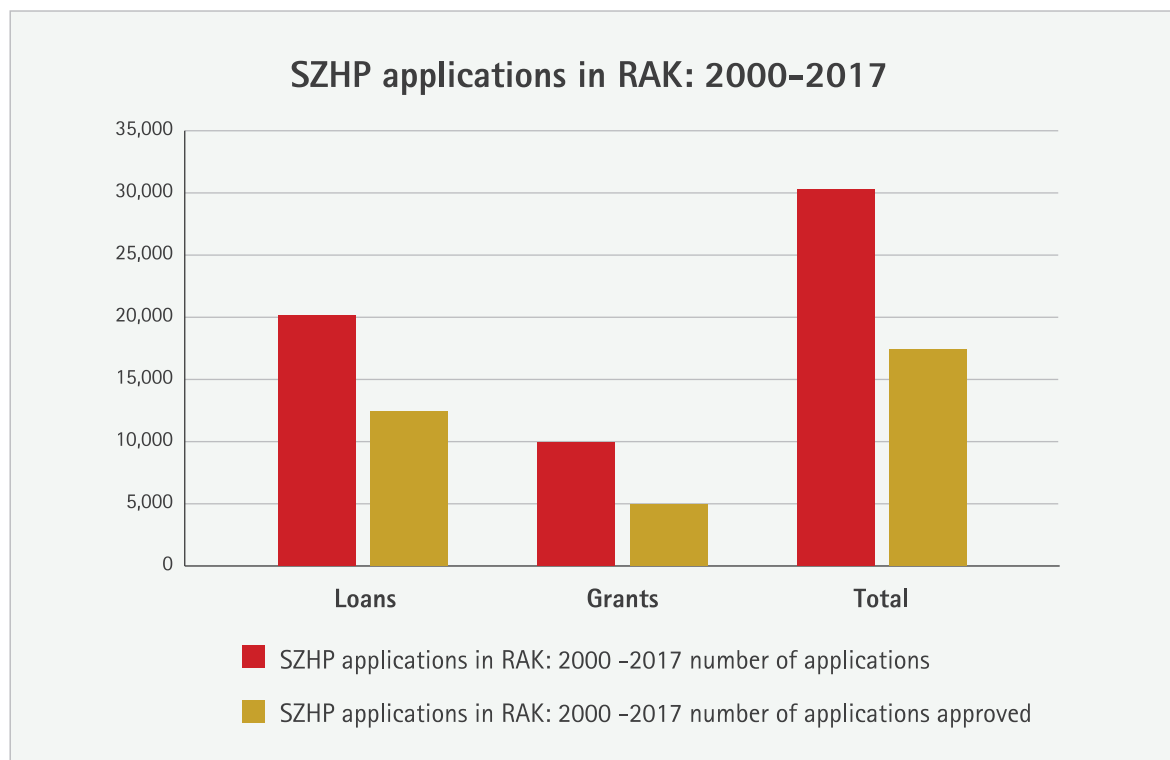


Figure 2. SZHP applications in Ras Al Khaimah: 2000-2017

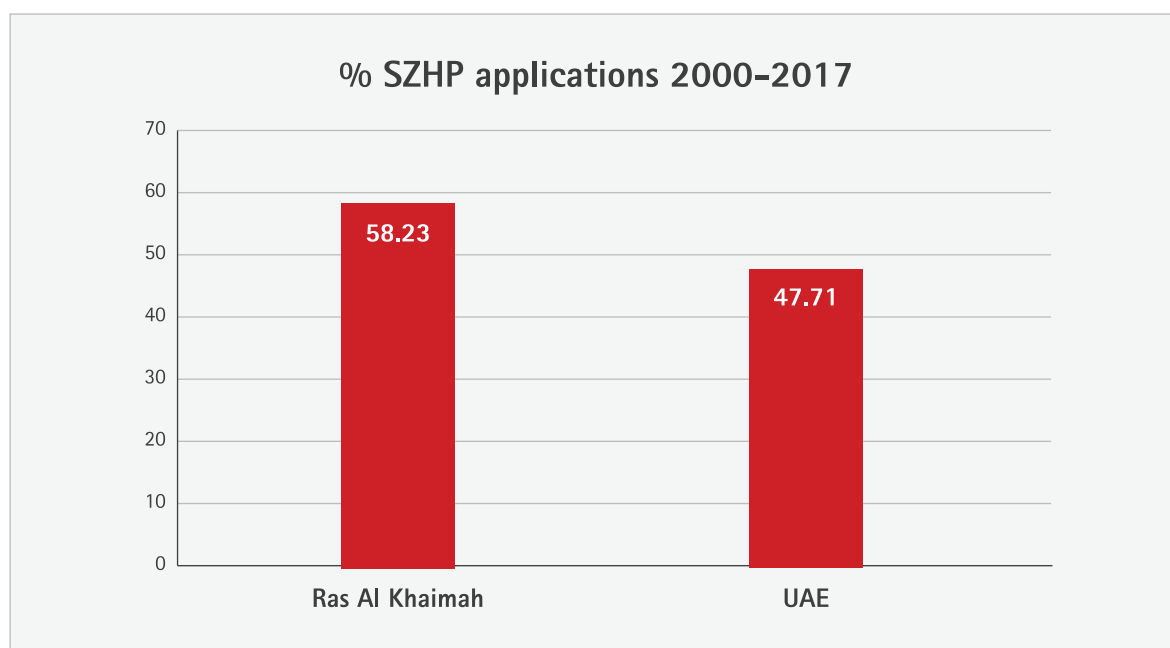


Figure 3. Total housing assistance by SZHP in the UAE and in Ras Al Khaimah, 2000-2017

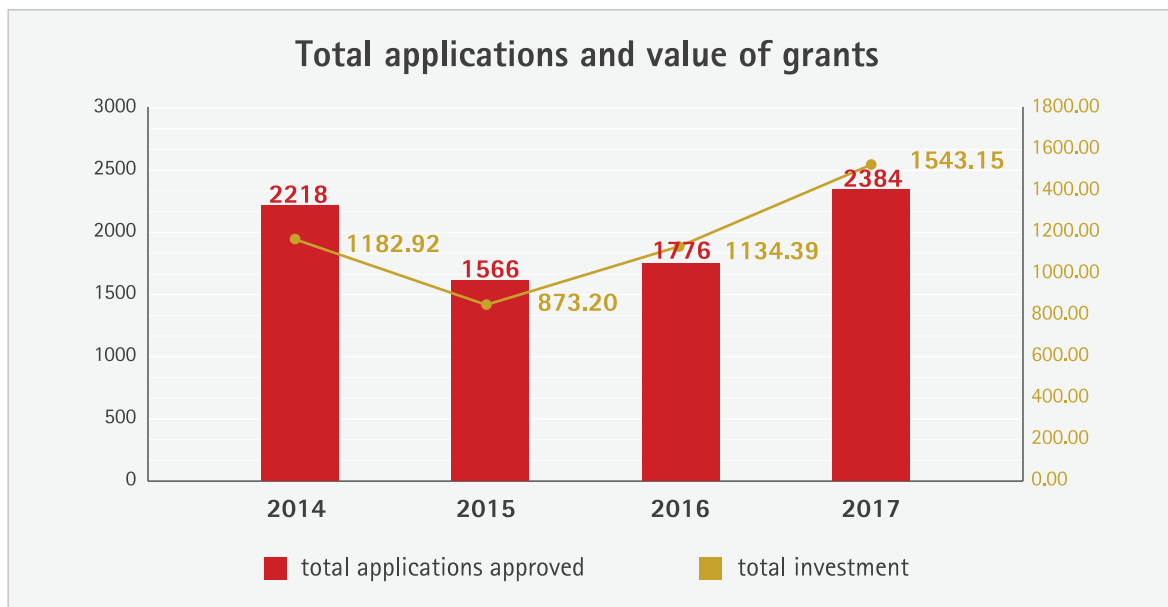


Figure 4. Total applications approved and the value of grants and loans in Ras Al Khaimah (in millions)

1. Ras Al Khaimah's population has a higher proportion of Emiratis⁷.
2. Ras Al Khaimah has a growing economy (but pales against the growth of Dubai and Abu Dhabi).
3. Ras Al Khaimah's own housing scheme—Sheikh Saud Housing Program—is limited in scope.

Figure 3 shows the volume of applications and approvals in Ras Al Khaimah since the inception of the SZHP program. The approval rate of applications from Ras Al Khaimah is close to 60%. The remaining 40% must have declined the loan, cancelled their applications, or found another grant. Figure 4 shows increasing government investment in housing in Ras Al Khaimah between 2014 and 2017.

The value of the approved grants and loans depends on the household income. Allocated funds work on a sliding scale, with the loan value decreasing as the per capita household income increases. A household income of less than 10,000 AED (with three or more members) is considered low income and such households receive a non-repayable grant of up to 800,000 AED. Other criteria are that the applicant must be a UAE national, married, and the head of the household, and does not own suitable housing. Priority is given to widows, divorced women with children, orphans, senior citizens, disabled individuals, and households of six persons or more. Of note—the value of grants and loans, and income criteria were under review and were being considered for changes at the time of writing this report.

President's Initiative Program

The PI is a relatively new program administered through a committee at the Ministry of Presidential Affairs, which makes key decisions that are then implemented by the Ministry of Infrastructure and Development. This initiative provides pre-constructed homes to low-income families experiencing housing issues, which distinguishes it from SZHP that mostly provides loans and grants. Between 2014 and 2016, 400 units were completed across Ras Al Khaimah. In 2016 and 2017, another 216 housing units were built. The projects built under this program are spread across the emirate in small towns and villages outside of Ras Al Khaimah's urban area.

Regional Programs

The Emirates of Abu Dhabi, Dubai, Sharjah, and Ras Al Khaimah offer their own housing programs, specific to their respective citizens. They vary in their eligibility criteria, especially income, and in the corresponding loan or grant values, both of which determine the program a person or family may find most appropriate to their needs.

Abu Dhabi: Housing Authority—This scheme began in 2011, offering a housing loan of 500,000 to 2 million AED for a period of 25 years. Eligibility criteria are a monthly income of at least 15,000 AED, with a monthly household income of at least 2,500 AED.

Dubai: Mohammed Bin Rashid Housing Establishment—This program has had over 12000 beneficiaries from 2007 (the first year) to 2014. It provides grants up to

⁷ According to the UAE Department of Economic Development (2015), in 2015, 100,000 Emiratis resided in Ras Al Khaimah. In the same year, Abu Dhabi and Dubai were homes to 507,479 and 222,875 Emiratis respectively. In Dubai, the expatriate population was over 10 times than that of Emiratis while in Abu Dhabi, they were five folds. In Ras Al Khaimah, expatriates were four and a half times than that of Emiratis. More recent population estimates including the 2018 census are publicly available for Dubai and Abu Dhabi, but not for Ras Al Khaimah.

750,000 AED. Families earning less than 10,700 AED are considered low-income. As the bar for low income varies from one program to the other, it affects who qualifies for which program and for what loan or grant amount.

Sharjah: Directorate of Housing—Since 2010, this program has offered citizens housing assistance of up to 800,000 AED for Emiratis with a total monthly income below AED 10,000.

Ras Al Khaimah: The Sheikh Saud Housing Program—This program focuses on rehabilitating old housing stock, however few citizens have benefitted from the program and it is largely defunct now. Nonetheless, field observations showed that several residential and other structures displayed sponsorship signs of the Ras Al Khaimah Municipality. It is unclear whether they are funded through this program.

Findings

Our interview questions for the beneficiaries of the SZHP and PI programs concerned why they applied for the housing assistance, what made them eligible for the program, and how satisfied they were with the design and location of their homes. We also asked for their suggestions for improvement.

Responses from SZHP Beneficiaries (loan or grant)

The SZHP respondents (locations are mapped in Figure 5) seemed satisfied with the program, and the design and location of their homes. About 75% of them said they were married and citizens of Ras Al Khaimah, and about 50% were low-income. Presumably, those who were in the low-income categories received grants up to 800,000 AED as

opposed to loans. For about 66% of respondents, two reasons accounted for their application to the program: limited space to accommodate their family in their previous homes and the interest-free nature of the program. Additional reasons, stated by a few others, were insufficient money to buy a house, living in poor housing conditions, or widowhood and living on government assistance. Regarding construction practices, interestingly, several respondents exceeded the local government standards and used the *Estidama*⁸ green standards in their designs and building material.

Negative commentary concerned the lengthy delays in receiving an approval. A few respondents were also dissatisfied with the remote locations of their new homes. Suggestions for improvement included the following:

1. Make the program available not just to married Emiratis but also to bachelors (the idea here is that homeownership will motivate bachelors to marry).
2. Make the program available to Emiratis of all incomes, based on a first-come, first-served basis.
3. Provide social infrastructure, such as schools, mosques, hospitals, and parks in the neighborhood before the residents move in.
4. Hasten the approval process.
5. Offer more design options.
6. State eligibility criteria explicitly.
7. Minimize lobbying and favorite-ism during the approval process.
8. Obligate owners to follow sustainable standards, such as the Pearl Rating System (PRS) developed by the Abu Dhabi Urban Planning Council as part of their sustainable development initiative, *Estidama*.



Figure 5. Locations of SZHP interviewees

⁸ "Estidama" is the Arabic word for sustainability and is a key aspect of the "Plan Abu Dhabi 2030" aimed at making Abu Dhabi more sustainable.



Figure 6. Locations of the President's Initiative interviewees

Responses from PI Beneficiaries

Most respondents in this group (locations are mapped on Figure 6) expressed pride that this grant came from President Sheikh Khalifa. More importantly, it was easy to access and approvals came quickly. Satisfaction with the location of the projects was fairly evenly split between those who were pleased with this aspect and those who found their locations in remote areas of the emirate to be too far from the city and essential amenities. However, most were satisfied with the housing design and found it culturally appropriate. Some did express that the units were small, and they would have preferred a one-floor "bungalow" style housing over two-level split units.

Suggestions for improvement were the following:

1. Build one-floor houses.
2. Improve communication between the agency and the applicants during the approval phase.
3. Prepare infrastructure, such as schools and hospitals, before the houses are built and occupied.
4. Change some design elements: replace wooden doors with another kind, increase room sizes, and build higher walls around the house for more privacy.

Growth Patterns and Housing Programs Across Ras Al Khaimah

Our final question addresses how the housing schemes are affecting the urban form and growth patterns in Ras Al Khaimah. To generate an answer, we extracted 30 years of Google's time lapse data from satellite imagery and analyzed changes to the surface and density. We then overlapped the above data with the land use patterns and plans from the Ras Al Khaimah Municipality from 2013, 2015 and 2017. This was then complemented by field observations and personal interviews with government officials.

Our analysis reveals the following findings:

1. Between 1984 and 2000, urban expansion took place mostly southwards along Sheikh Mohammad bin Rashid Al Maktoum Street in a southeast direction and northward along the coastal strip building up areas, such as Al Rams, Al Hulailah, and the Khor Khwair industrial area.
2. Since 2008, urbanization has accelerated—it fills a vast portion of the sandy desert between Al Maktoum Street and Sheikh Mohammad Bin Zayed Road and continues further south and southwest. The developments are predominantly residential, generating areas such as Al Riffa, Al Hamra, Al Dhait South, and Mohammad bin Zayed City. Recreational areas like Al Marjan and industrial areas like the Al Hamra industrial zone were also developed as a result.
3. Most of the new residential development has been supported by SZHP, but some are PI projects, such as in Khor Khwair, Al Dhait, and Al Hamra, which add to the urban sprawl.
4. Comparing the 2017 land use map with the 2013 map reveals further expansion in residential areas and government-sponsored projects (see Figure 8).
5. Population distribution patterns show non-contiguous development, with sporadic low-density residential development that includes leap-frogged higher density regions (see Figures 7 and 8). Such population and density patterns lead to higher economic costs to the municipality in providing and maintaining hard infrastructure such as water, roads and power as well as soft infrastructure such schools, parks and so on. Furthermore, travelling long distances by car to get to basic amenities and ever-expanding network of roads and highways have both environmental and social costs.

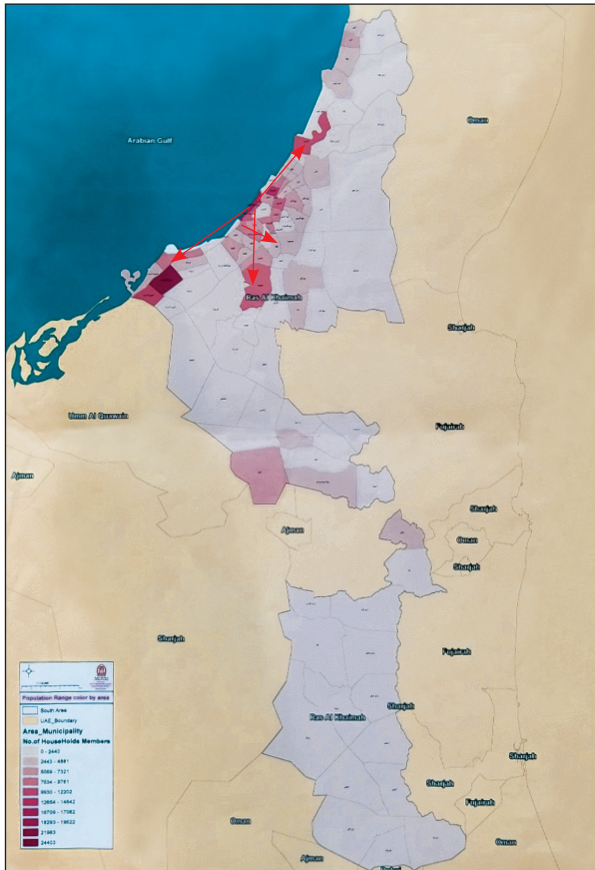


Figure 7. Population distribution map
 Note. The red arrows show the directions of growth in the city.

Discussion

The UAE currently follows a housing approach situated between the provider and support approaches. Over the years, SZHP increasingly took a support approach—providing funding packages and housing design options, facilitating connections with contractors, offering discounts on government-approved building material traders, and offering technical help through guidebooks. These actions replaced direct involvement in constructing the housing.

In contrast, PI is based entirely on a provider approach—the government builds the large-scale housing projects and makes move-in ready housing for eligible applicants. More recently however, SZHP is increasingly taking a similar provider approach, collaborating with PI to build projects like the Butain Al Samer on the outskirts of the Ras Al Khaimah Municipality (with over 2000 villas planned, 354 villas are currently under construction in the first phase). One official hypothesized that this reorientation to the provider approach is partly to cater to the demands and preferences of the new generation of young Emiratis, who want hassle- and stress-free move-in ready accommodation. The younger Emiratis also tend to have smaller families compared to their parents.

Despite its well documented failure in both developed and developing countries, the provider approach has been working in the UAE as is the case in Singapore. Three reasons may account for this: the state's aim to improve living conditions for its citizens, the relatively small Emirati population, and the ongoing availability of funds to

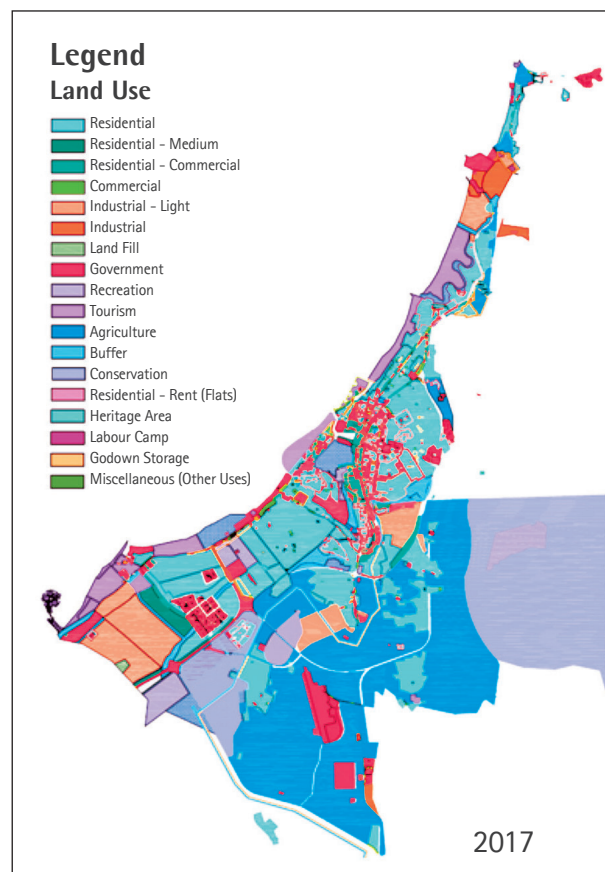
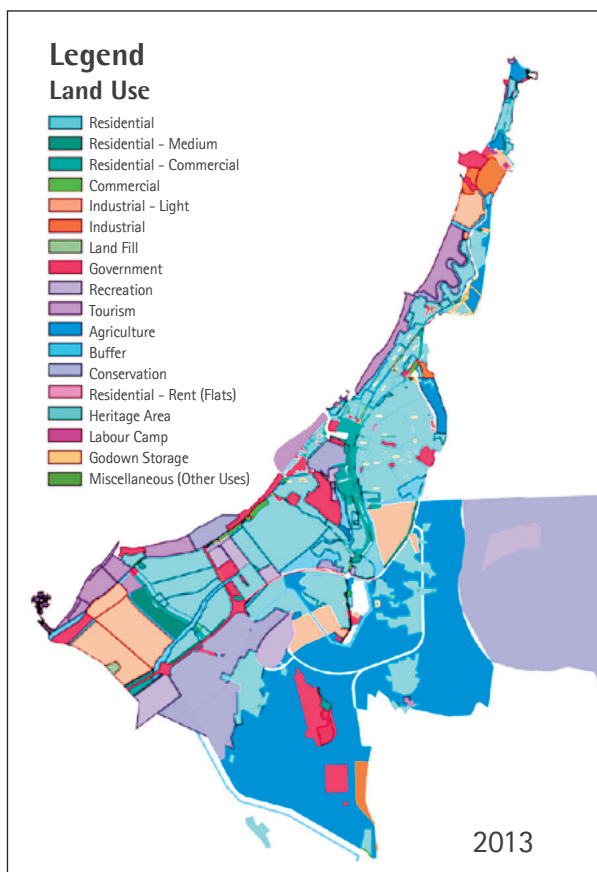


Figure 8. Ras Al Khaimah land use plans

finance the housing construction. Further, these programs allow the government to invest in the local economy,⁹ The government recognition of housing as a welfare right also justifies its involvement in housing production, as does maintaining social stability.

Nonetheless, these projects are vulnerable to potential financial risks, such as economic slumps like the real estate crash in 2008 and a heavy reliance on revenues from non-renewable resources such as oil and gas. Engaging private and informal sectors in providing rental or owned housing could be a way to redistribute such risks—essentially, using multiple sectors of the economy to provide housing.

The Abu Dhabi Urban Planning Council and the Abu Dhabi Municipality have taken some initial steps to involve the private sector in solving the issue of affordable housing. The Council recently considered mandating that private developers of multi-unit buildings allocate 20% of their residential gross floor area to middle income groups. The Abu Dhabi municipality is also providing incentives to private developers to either construct new buildings or convert existing ones into appropriate residential rental units, to be available at affordable rates to low-income groups (Abu Dhabi, 2017). All this is expected to increase housing supply for the middle- and low-income groups without direct investment or involvement of the government. This aligns with the enabling approach followed by many developed countries like Canada and the USA.

The widespread construction of villas and related structures, funded through SZHP and PI, add to rapid urban expansion in the emirate often in conflict with the Ras Al Khaimah Masterplan¹⁰. Respondents suggested that favorite-ism and lobbying are possible reasons why the Masterplan is flouted. Some SZHP beneficiaries insist on land allocation far away from the city core and build away from existing hard infrastructure such as water, power lines, and roads. The new areas are thus not well planned, adding long-term costs to the municipality to service these non-contiguous low-density developments.

Recommendations

The findings and discussion lead to the following few recommendations:

1. There is a need for a better coordination between the national housing programs and local master plans and land use patterns to combat further urban sprawl.
2. SZHP should require new construction to adhere to existing municipal plans and policies as a condition of their grants or loans.

3. The emirate of Ras Al Khaimah and the Ras Al Khaimah Municipality should take steps to elevate their development and building standards. These efforts could lead to developing 'green buildings' that are environmentally responsible and resource-efficient throughout buildings' life-cycle.
4. Both emirate and municipality should offer incentives to those who meet the Pearl Rating System, such as fast-track the permit process.
5. The emirate of Ras Al Khaimah should provide further financial assistance (perhaps via the Sheikh Saud Program) to those who wish to stay in existing housing and repair, maintain, and improve or enlarge the property—which would also incentivize people to stay in their existing houses.
6. The Ras Al Khaimah Municipality should prioritize compact development over villa construction, and new development should be accompanied with public amenities, such as schools and health care facilities. This will help develop 'complete communities', which will meet the basic needs of all residents, thereby reducing economic and infrastructural challenges and consequences as well as environmental and social costs.

Limitations and Future Study

The small sample size of survey respondents limits the generalizability of our findings. Future studies could aim for larger sample sizes to improve reliability, validity, and generalizability factors. We also need to learn more about housing programs in the other three emirates, and to compare and contrast them with the national programs. Such comprehensive study could lead to a roster of best practices to improve all housing programs.

Access to information is a significant issue when conducting research in the UAE. To overcome this, future researchers would be wise to intimately involve local Emirati researchers, government officials, and institutions. Further, an ethnographic study, where Emirati families can be followed and their experience documented pre- and post-occupancy of a government- assisted housing, would help to develop a clearer and more nuanced picture of the housing trajectory, choices, and preferences of those who use these housing programs.

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⁹ It is a fact that the construction and building sector is a major sector and a key economic engine (contributing over 10%) of the country's GDP in 2017 (Clifton, 2018) as well as of Ras Al Khaimah, where it contributed over 9% to the emirate's GDP in 2014 and employed roughly 13% of workers in 2013. The SZHP investment in Ras Al Khaimah alone was over 1.5 billion AED and another 1.5 billion was poured in by the Ras Al Khaimah Ministry of Public Works and the Federal Ministry of Infrastructure and Development for building other housing projects, schools, hospitals, mosques, and other public institutions and facilities.

¹⁰ Long range plan that guides new growth of development of land, community and infrastructure.

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