

Island Urban Development: Experience of Some Countries in The World and Lessons For Vietnam

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ABSTRACT

Island urban is an urban area formed on islands, with the main characteristic located in the middle of the sea. Island urban development is a natural trend and benefits coastal countries. With many islands and potential for marine economic development in Vietnam, island urban development is a huge opportunity for developing tourism, aquaculture, agriculture, and real estate. However, reality shows that island urban development in Vietnam still faces many challenges, such as urban management, infrastructure construction, environmental protection, and maintaining local communities on the island. To achieve effectiveness in island urban development, the article mentioned four important lessons: (1) Respect the island's characteristics and promote its advantages; (2) Identify main functions and diverse activities; (3) Develop central areas and utilize space effectively; (4) Comply with ecological laws and protect the island environment. The lessons will help Vietnam and other countries develop island urban areas sustainably and effectively.

Keywords: lessons learned, island cities, sustainable island cities

1. Introduction

In the realm of geographical research and urban planning, island urban development has emerged as a compelling and globally relevant topic. While the definition of island urban areas is still evolving and lacks universal consensus, it generally refers to urban areas formed on one or more islands, be they in rivers, estuaries, or seas. This article specifically delves into island cities, one of the three types of coastal cities: coastal cities, island cities, and ocean-based cities, thereby contributing to the ongoing discourse on this significant urban development trend.

Island urban development is not just a trend but an inevitable and objective reality in the modern social development of coastal countries worldwide. The success stories are numerous and

inspiring. Many large cities, even national-sized urban areas, have flourished on islands. Among the world's ten most populous urban populations, four cities, Tokyo, Guangzhou, Jakarta, and Manila, are located on estuary islands; Mumbai started from a volcanic archipelago, and Mexico City developed from an artificial lake island. In addition, 8/10 of the world's busiest seaports based on the number of ships calling are also located on islands: Shanghai, Singapore, Tianjin, Rotterdam, Guangzhou, Ningbo-Zhoushan, Busan, and Hong Kong. Also, many extensive and populous cities, such as New York in the United States or Lagos in Sub-Saharan Africa, are island-based. Even the capitals of many European countries, such as Amsterdam, Copenhagen, London, Paris, and Stockholm, were established on small islands. These success stories serve as a testament to the potential and promise of island urban development.

The history of urban development in the world has demonstrated the great benefits of island urban development. This development is associated with the close connection between ocean and land. The maritime doctrines and strategies of major powers such as Russia's "Marine Doctrine," the US and Japan's "Marine Strategy," or China's "One Belt, One Road" initiative have emphasized the role of island urban development with many different functions and social characteristics. Some port cities have been formed long after a long history, typically Rotterdam, Marseille, and Le Havre. However, island cities have also been built and developed into megacities in just the last few decades, notably Shenzhen, the island nation of Singapore,...

Deeply aware of the role, importance, and benefits of the sea and its significant advantages and potential to develop unique island cities, the pillar and driving force for marine economic development, we should Vietnam have had specific development plans and strategies. Vietnam has been formed into an island city (Phu Quoc) in the true sense of urbanism, and other island cities are attached to district centers. However, the substantial rise of marine economic sectors such as sea and island tourism, Seafood exploitation and processing, shipping, etc., have contributed to promoting local economic growth and improving the lives of residents on the island. Many developed tourist destinations on the island have attracted many domestic and international tourists.

However, Vietnam needs to look straight at the current reality that the current island urban development process still has many shortcomings, has not really been given due attention, and still carries a heavy "mainland" mindset. ", causing Vietnam to inhibit its ability to develop the marine economy and coastal urban areas. At the same time, these cities are struggling with many problems, including overpopulation, environmental pollution, and underdeveloped infrastructure systems. Lessons learned from other countries worldwide can help Vietnam gain much profound knowledge, allowing sustainable development of island cities. This article will present some critical experiences compiled to help policymakers, urban managers, and researchers solve island municipalities' challenges.

2. Data and methods

To conduct this research, we use the method of synthesizing and analyzing documents, including the following documents:

Step 1: Collect documents from books and articles specialized in island urban research worldwide and in Vietnam.

Step 2: Synthesize and evaluate documents on island urban areas to select primary and reliable documents.

Step 3: Analyze documents to review and evaluate lessons learned in island urban development in some countries worldwide.

3. Results and discussion

3.1 Potential for Island Urban Development in Vietnam

Vietnam has a rich archipelago system, including 2,770 large and small islands, with a total area of about 2,700km². This area accounts for about 70% of the country's land area. However, nationwide, no island is recognized as a provincial administrative unit. Islands are only formed under the island district's or island commune's administrative level.

Regarding urban areas, up to now, Vietnam only has the island city of Phu Quoc and island towns. At the district level, Vietnam's island districts include Bach Long Vy and Cat Hai (Hai Phong), Co To, Van Don (Quang Ninh), Con Co (Quang Tri), Hoang Sa (Da Nang), Ly Son (Quang Ngai), Truong Sa (Khanh Hoa), Phu Quy (Ninh Thuan), Kien Hai and Phu Quoc city (Kien Giang). On these island districts, island urban areas and towns have been formed on islands such as Van Don, Cat Ba, Con Lon, and Phu Quoc.

Residents' quality of life on the islands still faces many difficulties, mainly due to the lack of basic infrastructure. In terms of urban areas, although island urban areas have a close relationship with provincial urban areas, there is no close connection between island urban units. However, with strong economic and tourism development, the islands in Vietnam are increasingly attracting investment attention from both domestic and international businesses. This promises great potential in improving island residents' quality of life while promoting the country's socio-economic development.

Island urban development is an excellent opportunity for tourism investment. Developing hotels, resorts, resorts and recreational activities on the islands, such as scuba diving, fishing, forest visits, etc., can bring high profits and attract many tourists. In particular, when island urban areas

develop by the island's inherent rules, still retaining unique landscapes and cultures such as Phu Quoc, Con Dao, or Cu Lao Cham, they attract the attention of domestic and foreign investors. Developing tourism on island cities not only brings economic benefits but also contributes to protecting the environment, preserving the unique landscape and culture of the islands, and creating conditions for local people to develop.

Island urban development - a golden opportunity for the aquaculture industry. With limited productive land area on the mainland, investing in aquaculture and agricultural projects on islands is considered an intelligent solution that brings big profits to investors. Thanks to technological advances, farming high-end seafood such as lobster and red sea fish is no longer a distant dream but has become a potential agricultural industry on the islands. These projects not only generate significant profits but also contribute to promoting economic development for coastal areas. Besides, the islands are also an ideal place to develop an agricultural economy. With favorable climatic conditions, the islands can provide abundant, fresh agricultural products to meet the needs of domestic and foreign markets.

Island urban development contributes to promoting the real estate industry. Developing island urban areas with modern buildings and amenities has attracted the attention of many investors. These urban areas are built with dual purposes: as long-term residences for people and to serve the resort needs of residents of neighboring areas on weekends or during vacations. The outstanding feature of island urban areas is the close integration between living space and marine ecosystem. Residents can enjoy fresh air, immerse themselves in nature, and experience unique living values. Compared to traditional coastal urban areas, island urban areas have lower population density, complete synchronous infrastructure systems, and meticulously cared-for landscapes, providing an ideal and sustainable living environment desirable for every family.

Besides the need for high-end living space, island urban areas have become attractive to real estate investors. Due to the islands' scarcity and ecological value, real estate projects here often have high liquidity and attractive profitability. Investing in island urban areas brings financial profits and offers the opportunity to own a classy living or resort space close to nature, creating a valuable investment for the future.

With the rising demand for green and unique living spaces and the country's abundant tourism potential, finding investment opportunities in island urban areas in Vietnam is becoming increasingly popular. It can be ignored. Investors can choose from various projects, from large-scale resort urban areas to island urban areas dedicated to ecological and conservation activities or high-end resort villas. Each project brings different values and investment opportunities suitable for investors' diverse needs and expectations.

3.2 Lessons learned for island urban development

Firstly, island urban development respects its uniqueness to maximize advantages and minimize risks in the development process to maintain its identity. It is impossible to apply the same urban development formula to all islands because each island has its geographical characteristics, cultural resources, and residential communities with different characteristics. Therefore, island urban development must protect and promote the values of the natural landscape, historical culture, and traditional economic sectors. At the same time, it must overcome limitations in land area, freshwater resources, connectivity to the mainland, and access to essential services. Only then can we ensure three benefits of island urban areas: defense benefits, economic benefits, and territorial benefits, especially for small islands.

Burgazada Island, whose ancient names were Panormos and Antigoni, is currently the third largest island of the Marmara Archipelago. The island is only connected to the mainland by sea but is still strongly influenced by the urbanization process in Istanbul. However, to focus on urban development in sustainable development, exploiting the unique characteristics of marine ecosystems, forests, and multi-ethnic culture, the urban area of Burgazada island still maintains its own identity and is considered a popular destination recognized as a heritage since 1976(Kahya, 2019).

Second, each island city is associated with a unique formation history, creating main functions and diverse combinations of activities. Each island city is associated with a unique history. This history includes the specific events and processes that took place on the island, creating the unique characteristics of that municipality. These features may include architectural structures, historical sites, cultural traditions, and unique economic activities. Each island city's formation history also affects the city's primary functions. For example, an island municipality with a history as a commercial center may continue to serve as a commercial center in modern times. Likewise, an island municipality with a history as a military base may continue to serve as a military base or be converted into a tourist center.

In addition to the main functions, each island city can also have a variety of combined activities. For example, an island municipality whose primary function is tourism may also have fishing, agricultural, or industrial production activities. These combined activities could help diversify the island municipality's economy and make it more attractive to residents and visitors.

Santorini is a mark on the world tourist map, famous for its romantic beauty and peace. One of the highlights of this island is the white houses with green domes on vertical cliffs(Katsigianni, 2016). Tokyo is a bustling megalopolis, seamlessly combining tradition and the future. Visitors here can immerse themselves in countless fascinating experiences, from ancient temples to

modern shopping centers (*Murayama, 2010*). Hong Kong is a unique blend of mountains, forests, and sea, with 236 large and small islands. The city is known for its modern skyscrapers, advanced transportation system, and vibrant culture (*Kelleher, 2016*). The Lion Island Nation of Singapore is a tourist paradise with 63 islands. This is a great place to shop, enjoy diverse cuisine, and explore attractions like Gardens by the Bay or Marina Bay Sands (*Creighton Connolly, 2021*).

Third, famous coastal cities do not aggressively build million-dollar coastal villas and do not take up all the most valuable land funds for tourism; instead, they focus on developing commercial and financial centers. , transportation and maritime services, building luxury apartments and high-rise buildings close together to make optimal use of space, creating many interwoven amenities to bring convenience to residents, and creating an infrastructure foundation to develop the seaport system and maritime trade. These cities have created natural and cultural masterpieces thanks to their unique architecture. Singapore is not naturally favored; its terrain is dull and unattractive (*Creighton Connolly, 2021*). Instead of relying on natural landscapes like some countries, Singapore has boldly proposed creative architectural solutions to turn these disadvantages into strengths. Over time, high-rise structures arose, combined with many modern public spaces, creating Singapore's unique appeal. In recent years, Singapore has continuously developed high-rise buildings to optimize land use areas. These buildings meet the need for living and working space and provide beautiful panoramic city views, turning them into tourist attractions. Singapore also takes advantage of less attractive lands to create attractive tourist destinations. Originally a small and sleepy island, Sentosa Island has been transformed into a vibrant entertainment resort with beaches, theme parks, and cultural attractions. The Singapore Riverfront, once a run-down industrial area, has been transformed into a bustling urban area with trendy restaurants, bars, and art galleries. At the same time, Singapore also pays great attention to building modern public spaces. Parks, botanical gardens, and entertainment areas are beautifully designed, creating an ideal relaxing space for residents and visitors. These spaces increase Singapore's attractiveness, making the city greener, fresher, and more livable.

Fourth, island urban development needs to follow natural ecological laws. Island urban development is the transformation of natural ecosystems into artificial landscape ecosystems according to human subjective consciousness. However, it is necessary to ensure nature's ecological laws, thus ensuring sustainable development of island urban areas. The harmonious combination of the natural landscape and artificial landscape is the core goal of sustainable island urban development. Protecting the natural environment and meeting socio-economic development needs will bring long-term benefits to the development of the island's urban area. To comply with ecological laws, planners must consider the following factors: biodiversity conservation, pollution reduction, efficient use of resources, and adaptation to climate change.

By following the laws of ecology, island cities can ensure sustainable environmental, social, and economic development, creating a prosperous future for its people and the world.

Barbados is a small island in the Caribbean, but it is a beautiful example of how a city thrives within the framework of nature. Barbados is praised by many urban planners as a model of a city that develops sustainably, following the laws of nature. Barbados' economy relies heavily on tourism, so the country has adopted a strict environmental approach to preserving its stunning natural landscape. Nature-based planning refers to an urban development approach that values the conservation of natural ecosystems and the services they provide. In urban contexts, nature-based planning integrates green spaces, such as parks, forests, and wetlands, into the built environment. This brings many benefits to urban residents, including improved air and water quality, reduced noise and temperature pollution, and increased mental and physical health. Barbados has been implementing the principles of nature-based planning in its urban development for decades. The country has many public green spaces, including the island's largest Graeme Hall Country Park. The park protects a large area of mangrove wetlands, providing habitat for many species of wildlife and helping to regulate storm water flow, preventing flooding. In addition to public green spaces, Barbados also promotes lower-density urban development, which helps reduce pressure on natural resources. This differs from many modern cities, where increased urbanization leads to the construction of high-rise buildings and loss of green space. In addition, Barbados also applies water and energy conservation measures.

4. Conclusion

Promoting island urban development opens new prospects for the aquaculture and agriculture industries and entails many other potentials, such as mineral exploitation, tourism development, or providing logistics services. These promises are the driving forces that will help the islands become dynamic economic centers, contributing to the country's sustainable development.

With great potential for island urban development, Vietnam must have a proper development strategy to exploit these advantages fully. Only then can Vietnam's island urban areas achieve a worthy position and contribute effectively to the overall development of the country and the region.

In the developing world, developing and managing island urban areas is a complex problem many countries are trying to solve. However, by learning from and applying the successful experiences of previous countries and proactively finding appropriate directions, Vietnam can build sustainable, stable, and prosperous island cities.

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