



Available online at www.sciencedirect.com



Procedia Engineering 198 (2017) 707 - 719

Procedia Engineering

www.elsevier.com/locate/procedia

### Urban Transitions Conference, Shanghai, September 2016

# Urban fringe land use transitions in Hong Kong: from new towns to new development areas

A.Q. Wang\*, Edwin H.W. Chan, Stanley C.W. Yeung, J.B. Han

The Hong Kong Polytechnic University, Hong Kong, China

#### Abstract

Land in urban fringe area is the primary source for land supply and development. In Hong Kong (HK), nine new towns have been built in New Territories since 1970s, providing 172.6 km<sup>2</sup> built-up land and large amount of residences for 3.4 million people. However, due to land scarcity, development restriction, and social opposition, New Development Area (NDA), as the small-scale extension of New Town (NT), was designated as one of the main approaches for HK medium and long term land supply. To demonstrate the characteristics of urban fringe land use transitions in Hong Kong, literature review and case study were used in this research. The history of new town development and the scheme of new development areas were introduced firstly. Afterwards, the land use features of NT and NDA were compared and the case of Hung Shui Kiu NDA was illustrated. It is concluded that while housing, infrastructure and facility were the main elements in NTs, employment, vibrancy and environment were suggested to be the new compulsory elements in NDAs integrated to the traditional planning concepts. As for the development approach, lease modification was adopted in NDA to allow private landowners directly develop their land, in addition to the traditional development approach of land resumption in NT. It is suggested to ensure the development of NDA, the proposed development plan should be persuasive to provide the optimal land use distribution as a trade-off among the profits of developers, the interests of local villager, government concern and the provision of land for future residents. Also, community engagement will play a more important role in NDA planning process. Referring to the analysis of urban fringe land use transitions and strategies for planning and development, the study would also be helpful to others growing cities.

© 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/). Peer-review under responsibility of the organizing committee of the Urban Transitions Conference

Keywords: New Development Area (NDA), New Town (NT), urban fringe, Hong Kong

<sup>\*</sup> Corresponding author. Tel.: +852-27665829 *E-mail address:* wang.anqi@connect.polyu.hk

#### 1. Introduction

Land supply in Hong Kong (HK) has been highly concerned and discussed in a long term. Due to its limited land development resource and dense population, new built-up land has been required and provided in various ways, such as reclamation, New Town (NT) development, urban renewal, brownfield revitalization, etc., among which the new towns developed in urban fringe areas contributed most land supply in the last decades. The New Town Development Programme in Hong Kong initiated in 1973, targeting to provide public and private housing for millions of people supported by essential infrastructure and community facilities. Nine new towns were developed in three generations. Tsuen Wan, Sha Tin and Tuen Mun started works in the early 1970s as the first generation, the second of Tai Po, Fanling/Sheung Shui and Yuen Long in the late 1970s, and the third in the 1980s and 1990s, including Tseung Kwan O, Tin Shui Wai and Tung Chung. The population of these nine new towns was 3.47 million in 2016, and it is expected to rise to 3.63 million in 2021. [1] However, due to land scarcity, development restriction, and social opposition, new town project has not been proposed since 1990s, instead the New Development Area (NDA), as the small-scale extension of NT, was designated as one of the main approaches in 2007 for HK medium and long term land supply.

From new towns to new development areas, it indicates land use transitions in the urban fringes of Hong Kong. According to "2007-08 Policy Address" [2], three features of NDAs were identified. Firstly, smaller scope in less than one fourth of the existing new towns such as Tuen Mun and Sha Tin; secondly, land supply for various uses such as housing, employment, high value-added and non-polluting industries; and thirdly, provision of quality living space and convenience to both residents and users. Compared with the targets of houses, infrastructure and community facilities in NT, the NDA contains more uses and sustainable planning concepts. However, few research concerned about NDA and its difference from NT in HK. Therefore, this study aims to illustrate how the NDA was planned and to understand how land use was transited in the urban fringe of HK.

Background and literatures about NT development and the commencement of NDA were reviewed. The characteristics regarding transition from NT to NDA were then illustrated. The case of Hung Shui Kiu NDA was introduced to illustrate the planning process of NDA and its differences from Tin Shui Wai NT were compared. Regarding the changing situation and new challenges, strategies for suburban land development in HK were discussed, which could also be helpful to others growing cities.

#### 2. Background and Literature Review

Achievements in new town programme were obvious. Supported by essential infrastructure and community facilities, housing supply is the most greatest contribution made by NTs, and public and private housing were provide for millions of people. It was suggested that policy direction, project management approach, planning standards, resource mobilisation, professional input, community support, as well as innovative ideas on design and construction technique contributed to rapid NT development. [3, 4] The area, planned population, current population and planned population density [1] were showed in Table 1.

Download English Version:

## https://daneshyari.com/en/article/5027432

Download Persian Version:

https://daneshyari.com/article/5027432

Daneshyari.com