

## Research on Land Use Pattern and Employment-Housing Space of Coastal Industrial Town Based on the Investigation of Liaoning Province, China

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**Abstract :** During the Twelve Five period, China promulgated industrial policies promoting the relocation of energy-intensive industries to coastal areas in order to utilize marine shipping resources. Consequently, some major state-owned steel and gas enterprises have relocated and resulted in a large-scale coastal area development. However, some land may have been over-exploited with seamless coastline projects. To balance between employment and housing, new industrial coastal towns were constructed to support the industrial-led development. In this paper, we adopt a case-study approach to closely examine the development of several new industrial coastal towns of Liaoning Province situated in the Bohai Bay area, which is currently under rapid economic growth. Our investigations reflect the common phenomenon of long distance commuting and a massive amount of vacant residences. More specifically, large plant relocation caused hundreds of kilometers of daily commute and enterprises had to provide housing subsidies and education incentives to motivate employees to relocate to coastal areas. Nonetheless, many employees still refuse to relocate due to job stability, diverse needs of family members and access to convenient services. These employees averaged 4 hours of commute daily and some who lived further had to reside in temporary industrial housing units and subject to long-term family separation. As a result, only a small portion of employees purchase new coastal residences but mostly for investment and retirement purposes, leading to massive vacancy and ghost-town phenomenon. In contrast to the low demand, coastal areas tend to develop large amount of residences prior to industrial relocation, which may be directly related to local government finances. Some local governments have sold residential land to developers to general revenue to support the subsequent industrial development. Subject to the strong preference of ocean-view, residential housing developers tend to select coast-line land to construct new residential towns, which further reduces the access of marine resources for major industrial enterprises. This violates the original intent of developing industrial coastal towns and drastically limits the availability of marine resources. Lastly, we analyze the co-existence of over-exploiting residential areas and massive vacancies in reference to the demand and supply of land, as well as the demand of residential housing units with the choice criteria of enterprise employees.

**Keywords :** coastal industry town, commuter traffic, employment-housing space, outer suburb industrial area

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