Singapore’s monumental achievements in public housing have dumbfounded supporters and critics alike. Many praise the Singapore government for transforming a tiny, overcrowded, poor and slum-ridden, Third World island into a spotless haven for foreign investors within a space of 25 years (see Dale 1999; Wong and Guillot 2005). Today, 85 percent of Singapore’s population reside in high-rise flats designed and built by the Housing and Development Board (HDB). Some 92 percent of HDB’s residents own their apartment units, leaving only eight percent as renters. Having virtually achieved a “roof over every head” (see Wong and Guillot 2005), Singapore’s public housing programme is impressive in ownership access in a city-state with a high population density of 6,220 per square kilometre. Right from the early 1960s, high-rise, high-density public housing model has been adopted in order to satisfy the housing demand. This model is expected to continue in a sustainable way, and would be the principal housing form to meet future needs.

However, how and why high-density living has started out as the provision of basic housing needs and has, over time, evolved into a sophisticated political and social engineering process associated with a model of sustainable housing merits further investigation. From land-saving initiatives, Singapore’s high-rise and high-density public housing has captured a greater concern and debate about its sustainability since the energy crisis of the 1970s. There is an evolutionary process in terms of the form of sustainable housing. The present chapter is organised in three dimensions of analysis about sustainability. Firstly, it is the social sustainability that was imprinted in the origin of the public housing of affordability, through the central provident fund’s self-financing mechanism. Public housing has been made operational and as a function of social infrastructure to act as a social stabilizing agency. Secondly, public housing has been built into the frame of economic sustainability in which Singapore’s nation-building and growth-driven economic system has been
strongly associated with its industrialization and urbanization processes. Public housing has also acted as a generator for domestic demand of building materials, professional and sub-professional services and other contractual works. In so doing, HDB as the public provider at moderate and affordable costs for the populace has made the statutory board a sizeable agency of employment (see Phang 2001). Environmental sustainability is the third issue. As a useful instrument in countering urban sprawls (see Simmonds and Coombe 2000; Ravetz 2000), the Singapore high-density and high-rise model has been equipped with ample open space and greenery at ground level and it has become a compromised form of land use intensification and artificial greenery provision in a Western-modelled landscaped living space.

8.1 Social Sustainability

Two fundamental elements in terms of the social sustainability of public housing are its affordability and social living environment. Affordability for lower income groups is symbolic of equitable redistribution of national resources integral of social sustainable development as socially disadvantaged groups are a temporally sustained existence par excellence. In retrospect, the primary reason for the chronic housing shortage during the pre-colonial era was the concentration of Chinese immigrants in search of better life in the downtown areas adjacent to the port at the southern tip of the island. Highly dependent on the port activities and retail services, low-income “coolies” and petty traders lived in poor living conditions. Their plight included crowdedness, inadequacy of sanitary facilities and the lack of light and ventilation. Attempts by the British colonial administration began in 1927 with the Singapore Improvement Trust but the scope was extremely limited as social housing investments were perceived as non-contributors to economic returns (Goldblum 1986; Wong and Guillot 2005). This perception was twisted around from the early 1960s when the newly elected self-government led by the People’s Action Party that took the opportunity to turn social housing not only into a mass social movement but also an economic sector with the state as the leading and monopolizing actor.

In 1960, after the Island obtained its self-government status, a “Public Housing Programme” was established under the newly formed “Housing and Development Board” (HDB) to tackle the acute housing shortage and deplorable living conditions. Measures undertaken included a legislative and self-financing ownership mechanism known as the Central Provident fund in line with the basic principle of affordability and building quality control.

8.1.1 Legislative Support

The Housing and Development Act (1960) legislatively enabled the HDB to have absolute control over the use of private property and the restriction of private property rights through the use of the Land Acquisition Act (1964). The Housing and