



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

Baiwan Jiayuan social housing

Region	Asia and the Pacific
Themes	Housing
Sustainable Development Goals	Goal 11 - Make cities and human settlements inclusive, safe, resilient and sustainable
New Urban Agenda Commitments	Sustainable Urban Development for Social Inclusion and Ending Poverty Planning and Managing Urban Spatial Development

Summary

The Baiwan Jiayuan social housing project has demonstrated an innovative approach to social housing delivery in Beijing, creating a socially integrated and cohesive environment with high quality residential unit design.

Background and Objective

Baiwan Jiayuan is located in the city centre to help promote social integration among low-income groups through more dignified living. The project aims to build high-quality social housing on a large scale via the joint efforts of government, enterprise and society based on the concepts of open neighbourhoods, three-dimensional communities and access to adequate sunlight. This enables people who would be challenged to find affordable housing to rent property in decent living conditions and dignity, whilst facilitating their contribution to sustainable development in the city and society on the basis of community integration. Ma Yansong, the main designer of the social housing and an internationally renowned architect, focuses on 'people' in the course of her design, attaching importance to efficiency and functionality. Interviews were conducted with local communities to understand their needs, and the overall aesthetics of the buildings were also taking into account when planning for public activity spaces so as to increase the connection between the community and the city. The social housing project is managed by the Beijing Municipal Affordable Housing Construction Investment Centre, a state-owned enterprise established by the Beijing State Government in 2011. It is a representative and exemplary project among more than 100 social housing projects in operation across Beijing. Unlike other social housing which is located in remote areas where transportation is inconvenient, Baiwan Jiayuan is just outside the East Fourth Ring Road – a controlled-access expressway – and is also situated close to a metro station. The project covers an area of 93,900 m² with a total floor area of 473,300 m² and a capacity of 4,000 tenants.²⁴ In 2014, the Beijing Municipal Affordable Housing Construction Investment Centre invited MAD Architects to be involved in the design process. The construction of the housing was completed by the end of 2019, and the first allocation of rental places were initiated in the second half of 2020. By the end of 2021, the occupancy rate had reached 70 per cent with approximately 3,000 tenants. To strengthen urban connections, MAD Architects promoted integration of the Baiwan Jiayuan community to the rest of the city using strategic design, with roads passing by the six internal blocks ensuring connection with external urban roads. This has enabled cars to pass through the community and strengthened communication and connection between people inside and outside the social housing area. In terms of community building, MAD Architects has made Baiwan Jiayuan three-dimensional, integrated a raised second floor above ground to increase the green area and provided valuable community space for tenants to interact and for recreation. In regard to architectural appearance, Baiwan Jiayuan is composed of 6 small blocks surrounded by 12 residential buildings, each of which contains a 'Y' shaped structure with between 6 to 27 stories to maximize sunlight into residential units. Social housing has operated as a global welfare practice since World War II, and cities such as Paris and London have pioneered social housing concepts and projects. However, there have been unexpected side effects as a result. Confronting these lessons, the social housing in Beijing aims to solve the key challenges in order to increase success in the delivery of innovative social housing. Isolation in remote areas is a chronic problem for social housing, and tends to lead to informal settlement development. Extensive social housing built in France during the second wave of nationalization in the 20th century is a typical example. In 1958, with the surge in demand for short-term housing caused by the post-war baby boom and the influx of immigrants, the French government was urgently needed to create a balance between residents and urban space, and relieve the pressure caused by traffic and crowding in urban centres. Large numbers of social houses were built on the fringes of the city in the 1980s, envisioned to accommodate new arrivals and effectively integrate them into the urban economy. Residents in downtown Paris today know little about these densely distributed houses on the city fringes, with a large number of them having fallen into disrepair due to a lack of attention from the government. The entire social housing area appears desolate externally, hosting communities with a number of aggravated social problems. Where residential segregation often sparks social segregation, it is frequently associated with the operation of social housing. Social housing has not yet been able to effectively promote the communication and integration of different social groups in respect to design and operation, and hence social welfare policy has become an accelerator for social disintegration to a certain extent. The apartment complex in Marseille designed by Le Corbusier is a programmatic example among the mass-built social housing projects in France in the last century. The designer hoped to provide housing for more people from the working class and diversify public spaces through modern construction technology. However, settlements in remote areas failed to operate as successful places for people to connect to the urban economic system, and thus became desolate. This led to a split in the population with some individuals moving closer to Paris's city centre and



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

others further away. Some residents also chose to stay as they were unable to leave or were nostalgic for the community. With poorly lit spaces in the building complex and an insufficient police force on the outskirts of the city, these factors constituted favourable conditions for crime, and with an increasingly complex and dangerous environment, residents became reluctant to use any of the public spaces. Typically, over time, communication between the residents in the community and the wider city has become more fragmented, exacerbating issues of exclusion and segregation on the fringes of the city. Poor infrastructure quality is also a recurring problem in social housing development. The Grenfell Tower catastrophe on 14 June 2017 is a marked example of this. A 24-story block of flats built for social housing in the 1970's in west London, Grenfell Tower caught fire killing 72 of its residents and leaving the block largely uninhabitable. In recent years, an increasing proportion of old social housing estates have been dispensed into the private property market for sale under Right to Buy schemes, and non-profit organizations responsible for their maintenance lack the motivation to keep the buildings safe due to fragmented property transfers. Surface renovations are often prioritized to make the building look cleaner to attract potential buyers. Grenfell Tower underwent redecoration to its outer wall shortly before the tragic accident, with the materials used appearing to be inflammable. The commercialization of social housing and the inability to maintain public services are thus major challenges facing social housing today.

Actions and Implementation

In the development of the social housing in Baiwan Jiayuan, attempts have been made to address the key problems as highlighted. Efforts have sought to optimize the project site selection, residential design, community planning and operations management, among others. Houses should be built in core urban areas instead of suburban areas; Baiwan Jiayuan is located in the east of Beijing's central urban area. Baiwan Jiayuan is well equipped for the various socially disadvantaged groups, and social integration has been addressed through its strategic location in the city centre. Tenants are comprised of migrant workers, senior citizens and individuals who have been released from prison. Migrant workers are mostly engaged in basic services work where the close proximity to the centre affords them reduced commuting costs and more increased job opportunities. Whilst most of the senior citizens are retired and have no commuting needs, many of them have an interpersonal circle close to the city centre and if they move too far away it will be difficult for them to maintain their social relations. The delivery of a fixed and formal residence therefore helps the seniors maintain tighter-knit social circles. Critically, it also increases the stability of those persons released from prison in regard to gaining employment and ensuring close ties with the social system, reducing associated obstacles to aid their reintegration into society. The Baiwan Jiayuan project has therefore made key breakthroughs compared to previous social housing project model, because of its strategic site selection. To ensure high-quality design in the development of Baiwan Jiayuan's social housing, Ma Yansong provided innovative spatial and architectural solutions in the housing design process and in the establishment of social rental housing standards, addressing specific social challenges. The project manager has stated said that Ma Yansong was invited to design the social rental housing not for the design itself but for setting the benchmark in this regard. Social challenges were addressed through bold and innovative means, and were targeted through architectural design as opposed to solely tackling issues of spatial relationships. The project has also targeted the issue of housing exclusion caused by inflated housing prices. In 2014, Ma Yansong's team initiated a research project on the 'sociality of social housing', investigating the development history and design concepts of social housing in various countries. During the design of Baiwan Jiayuan, designers aimed to reconfigure the impression of social housing among the general population, challenging the common notion that social housing offers no further benefit than simply just living (conclusions that were drawn from focused studies and social dialogue). Where many interviews were conducted with local residents to understand their needs and hopes regarding living space during the design process, this helped create a participatory and inclusive design process. Crucial to informing the design process, many key design concepts were drawn. It was highlighted that the happiness and contentment of local people in social housing communities is largely generated from a strong sense of community, the openness and integration of the community with the rest of the city, and the availability of space available for human interaction and connection. The principle of living with dignity has been emphasized and the experience of decent living popularized. Where the project has sought to ensure all residential units are afforded adequate levels of light it could have been difficult for individual apartments to access sunlight evenly from different orientations. The design team aimed that all housing would be oriented toward the south to receive maximum levels of daylight it is particularly important for residents in small social houses. Covering issues of accessibility, design quality and spatial functionality to social empowerment, Baiwan Jiayuan promotes self-governance among tenants as well as awareness on rights in reserved public spaces. To foster strengthened connections and increased integration from the community to the wider urban area, Baiwan Jiayuan was designed to be open, with greater routes into and out of the development, and more public spaces. A 3D design approach was applied to the community with park space and landscaped areas allocated to an elevated tier (functionally the second floor), whilst individual units within the community are inter-connected by open streets and bridges in the elevated space. These measures have helped to reduce the issues of segregation and isolation between the open block and the internal public space. Preserving open space has encouraged more diverse community participation, whilst features such as the integration of a sunken plaza provides an activity space for children and youth, as well as older residents. Informal public space has also been appropriated by residents, for example, a dance group has converted an unused road into a dance square, spatial transformation that has stemmed from the participation of women in the community.

Conclusion

As a fundamental right in the city, it is essential that all tenants are afforded the right to adequate housing. Social housing reflects this by serving for the collective good, and constitutes a core part of the social welfare system. Cities must ensure that both rental properties and those for sale are promoted through an equal rights approach, providing equal opportunity for both tenants and homeowners. The design and functionality of social housing



Urban Agenda Platform

The global platform for sharing progress, action and knowledge on the implementation of the New Urban Agenda to achieve sustainable urban development.

development must be of a high-quality and work for those residents. Through the project design process, field research and consultations should be conducted with local residents to ensure their needs are understood. The production of space in urban areas has long been characterized by commercial properties based on land rent with the centres of cities typically occupied by expensive houses. Only in terms of social attributes can public housing be located in the city centre, whereby people not only want a lower cost of living but also higher-quality living conditions and convenient transportation. The social housing delivered in Baiwan Jiayuan has achieved a balance among various needs such as site selection, cost and living quality, and has crucially realized the sociality of public housing. In pursuit of security, privacy and private claims to public space, most residential buildings in China are situated within gated communities. When discussing the value of open communities, Ma Yansong says that gated communities create ‘black holes’ within cities where walled barriers create areas void of social interaction and instead produce enclosed spaces that are socially isolated from the rest of the city. Eliminating the barriers between housing and individual urban communities, and promoting connection and integration between different communities thus generates significant social value to create more cohesive and inter-connected urban societies. It is important that cities facilitate housing developments that maintain compatibility and ensure fluid transitions between inter-linked communities so as to encourage social stability, connectivity and prosperity. Promoting self-organization among tenants is important within shared living environments built upon common interests or through voluntary organizations formed for mutual support. Regardless of the motivation for its formation, self-organization can enhance the connection and trust among community members and become an important part of the social support network for individuals in the community. In addition, well-developed mobilization-action patterns created by various self-organizations in daily operation can enable self-organizations to respond quickly to external shocks. As a result, tenants’ self-organizations can help enhance the resilience and stability of their communities against crises.