

# **Development of Rural Housing in China: Transitions in Housing Development Patterns**

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## **Abstract**

In the last few decades of China's rapid development, housing sector has experienced substantial change and transition. Rural housing, in particular, has become a very crucial part of housing development in China. The conditions of housing market, significant demographic changes and transitions between the rural and urban population have all made huge impact on rural development strategies that include housing provisions and housing policies for the rural areas. On the other hand, the combined effect of Hukou system (a household registration system in China) and housing reforms has given a certain direction to policy development of rural housing in China.

This research paper aims to evaluate the current situation(s) of China's rural housing through brief discussions on selected case studies. Through this analysis, the authors aim to explore development patterns and strategies that are shaping-up and making the so-called transitions of rural areas in China. Through a selection of studied case studies in the context of rural China, this study will identify main elements of transitions in China's rural housing. The study will then explore each element in detail to discuss patterns of development and change. Finally, this research study will offer explanation about potentials and gaps in rural housing development of China.

This research study is part of an on-going EPSRC-DfID funded research programme, under the 'Energy and International Development' scheme. The project is titled 'Energy and Low-Income Housing in Tropical Housing' and has a huge scope of housing and community analysis in both rural and urban areas of China, Thailand, Tanzania and Uganda. The focus of this research paper is on China's rural housing.

## **Key words:**

Rural Housing, Housing Transition, Development, China

## **Introduction**

Rural housing is one of the most crucial but yet the least studied areas of housing development sector in China. Rural housing is often regarded as the traditional one or two storey dwelling that is often built from locally-resourced materials. However, in recent years this traditional trend of rural housing is changing rapidly. The transitions are becoming very apparent, and yet significant, that the national reports (such as the New Urbanisation Plan, March 2014) are considering different possibilities of approaching the rural housing development strategies. The critical view is on the transition of rural housing towards peri-urban model of housing or even urban housing, where medium-rise housing is common. The housing reforms, started from 1979, have mainly targeted the urban housing (Li and Li, 2006). In contrary, the rural land management system is developed to '*provide housing security to all rural residents in an egalitarian way and to protect limited arable land in China*' (Wang et al, 2012, p. 202). Since 1960s, the rural housing has witnessed a series of ups and downs in provision of market, land security and development plans; however, the biggest challenge of all is urbanisation with its impact on the transitions of rural conditions. In this study, these transitions will be discussed through the brief analysis of several case studies in the context of China.

### **1.1 Rural Transitions and Housing Transition Scenarios**

As identified by Xu (1993, p. 41), China's housing sector, both in the urban and rural areas, have their own problems of development. For the rural the problems of poverty are coupled with issues of population decline, ageing society and deprived living conditions. For the more prosperous areas, rural housing is developed steadily; but for the more deprived ones, rural housing lacks adequate maintenance and development plans. In this section three examples are demonstrated as part of the survey studies undertaken in 2013 and 2014.

#### *a) Haikou Rural Housing, North of Hainan Island, China*

The condition of rural development in the northern part of Hainan Island is very much dependant on the condition of economic growth from the tourism industry. The sub-urban and leap-frog development plans in the rural and outskirts areas indicate the growth of housing market for the growing demand of holiday houses and villas. The condition of rural areas, some still very remote in the mountainous regions, is subject to change due to mass housing construction or renewal housing strategies. In the studied areas (20km from the coast and about 30km from the City of Haikou), the tourism industry has its least presence in the area. Meanwhile, the rural communities are transferring in to industrial zones, supporting the growth of industry in the other regions of the island. These most visible industries include material and food production that are the core of rural production in the region.



Figure 1 – Old and New Housing in Rural Haikou, Hainan Island, China (Source: the authors’)

In the studied areas, the condition of rural housing is changing dramatically; i.e. from one-storey traditional stone housing to two or multiple brick and block housing. The traditional rural dwellings are mostly replaced by the new model of housing as part of the renewal development plan. Majority of old rural housing in the area are very deprived, waiting to get replaced in coming years or even months. Majority of these dwellings are left with no windows (only metal mesh for privacy and security), no indoor toilets, no water facilities, and [sometimes] with no electricity. Cooking activities take place outdoor and washing is central in the main public realm of the community. There is a huge gap between the conditions of old and new housing models. The new housing, accommodate several families in a smaller footprint while the older housing have more courtyards and back gardens for storage, food production and vegetation purposes. The transition of rural housing in the region is very significant, targeted to overcome the issues of poverty and deprivation that are still significant in the rural parts of Hainan Island.

#### *b) Fujian Rural Housing, South-East China*

Tulou housing is one type of traditional rural dwellings in South-Eastern China with rammed earth construction and wooden/timber framework. The use of rammed earth construction is common for most of the traditional housing (particularly rural) in the region. Some newer versions of Tulou housing are developed based on the previous plan and structural layouts. The older Tulou dwellings are the main tourism destinations for the rural parts of the Fujian province. The new form of rural housing and material use of building development have significantly changed in recent years. As part of the rural development, majority of the older housing are remained for tourism purposes while the new dwellings are built nearby or even adjacent to the older parts of the rural areas. Some of the new types of rural housing are replication of the traditional Tolou housing with new use of material and construction methods. The shift from locally-resourced materials to new and modern materials is a significant change of the rural housing in the region.



Figure 2- the contrast between the old (far left) and new housing in rural areas of Fujian Province; the old is kept for both living and tourism while the new development is to accommodate the poor population of rural areas and often replace the old dwellings (Source: the authors')



Figure 3 – the new type of housing from low-rise to multi-storey development with new materials, new form of building development and new building features such as large amount of windows (Source: the authors').

Figure 4 – the traditional Tolou housing in the same studied area with rammed earth construction and timber framework, small openings and the courtyard layout (Source: the authors').

In general, the development pattern of rural housing in the region has kept the traditional and added the new to the rural setting. Similar to the previous case of Hainan Island, the rural communities face severe decline and deprivation. The tourism industry and food production are two major rural activities. The traditional Tulou dwellings are no longer popular for living amongst the local

residents and have critical conditions of maintenance and spatial use. The new additions of washing facilities (such as laundry), indoor toilets and indoor kitchen have supported daily activities of the ageing communities in the rural areas. In some cases, occupancy level has dropped by 300% due to the growing demand of rural-to-urban migration. The new rural development in the region is comprised of both renewal and preservation development strategies for the traditional dwellings, which are to respond to community demand for better living conditions and housing provision.

*c) Yinzhou rural housing, Southern part of Ningbo, Zhejiang Province, China*

Yinzhou district is a fairly prosperous part of Southern Ningbo in Zhejiang Province, which includes a mixture of rural, urban and peri-urban settlements. The rural areas in this district are varied and range from remote and deprived communities to rural resort development areas. One of these areas is an ancient village, called ZouMaTang. The condition of rural development in this region is very much dependant on the overwhelming economic growth and urban development of the City of Ningbo. The local industries and industrialised zones in the region are mostly developed alongside with the urbanisation of the region. In recent years, the impact from this pattern of development has been significant on conditions of the rural areas.

The village of ZouMaTang, as an example, is a small ancient village divided in to two parts, one side is the preserved old area and the other side is the new development zone. The tourism industry has not yet picked-up in this particular area and some leisure activities are introduced over the past few years. The new development zone mainly includes new housing, commercial market street and the village committee and administrative buildings. On the other side, the old district is ancient with many temples, listed buildings, market streets and traditional housing.



Figure 5 – the combination of traditional and new housing in the ancient village of ZouMaTang, Zhejiang Province, China (Source: the authors’).

Similar to previous cases, the condition of rural housing is changing from the traditional form to new peri-urban housing. The one to two storey traditional courtyard dwellings are less populated

than before (due to the population decline) and are mostly occupied by old residents or extended families. The old part of the village includes a mixture of traditional courtyard housing, new housing, traditional one storey and two storey dwellings. In the new part, the new housing is typically two to three storey buildings with new material use and construction methods. The condition of living quality and living environment of the new development area is significantly better than the old part of the village. The transition of rural housing in ZouMaTang is still controlled but there remains a contrast between the new and traditional housing.

## **2. Introduction to Four Pillars of Rural Housing Transition in China**

Based on the three studied cases, we can identify four major transitions that are significant as part of rural housing development strategies in China. In this part of the paper, these four transitions are discussed briefly.

### ***a) Transition of Space and Spatial Use for Housing***

One of the significant transitions in rural housing is the change for requirements and usage of spaces. These include both internal (e.g. room layouts, thresholds, and etc.) and external (e.g. garden, courtyard and etc.) spatial uses that are different between the old and new rural housing. The requirement for internal spaces is significantly higher for the new houses, while the traditional rural housing has more external and open spaces where shared activities were traditionally accommodated.

### ***b) Transition of Material Use for Housing***

The most tangible transition between the traditional and new rural housing is the change of material use for construction and facades of the dwellings. This transition has created a significant contrast between the old and new housing. Commonly, concrete and new brickwork are replaced with traditional materials, such as, stone, timber and old brickwork. The ratio of glazing in new housing is also significantly higher than the traditional dwellings. Furthermore, this transition is also occurring in maintenance of the older dwellings.

### ***c) Transition of Floor Spaces for Housing***

In China, the traditional rural housing is typically a one or two storey building while the new dwellings are commonly three to five storeys. The transition is due to the significant demand for larger internal spaces (i.e. mainly demand for more bedrooms) and a higher compact housing development in the rural areas. This, to some extent, contradicts the phenomenon of rural population decline.

### ***d) Transition of Rural Housing Occupancy***

In contrast to transition of floor spaces between the old and new rural housing, the occupancy level is changing very rapidly. This, in favour of China's rapid urbanisation, has a negative impact on rural settlements, particularly the most deprived ones. In the studied rural areas, majority of traditional rural housing are occupied by either extended families or senior residents. On the other hand, the new housing is commended amongst the younger families with children. The traditional courtyard housing, separated into few residential units, often have lower occupancy in comparison to single residential units. This is mainly due to the rural-to-urban migration, through which the younger residents of the extended families are attracted to larger cities. In most cases, the declining rural housing occupancy has significant impact on rural development strategies that are undertaken by the local committee or the township administrations. Furthermore, the transition of rural housing occupancy is a direct result of deprivation and lack of maintenance for some of the older houses.

### **3. Conclusions**

China's rural housing is a major part of rural development and transitions that are occurred over the last few decades of China's rapid urbanisation and demographic changes between the rural and urban areas. The housing development patterns in the three studied cases demonstrate the variety of approaches for the rural areas of China; some of which are potentially viable, some need financial support and some are yet to be assessed. In this study, four main elements of transitions in China's rural housing are introduced. This introduction is an opening-up discussion to potential future research on China's rural housing. Currently, there remain gaps in research for rural housing analysis and its transition in the process of urbanisation. More importantly, it is almost inevitable to discuss rural development of China without consideration of urbanisation. Finally, the potential for housing policy development and rural housing strategies are of major interest for researchers, planning authorities, township administrations and the local governments.

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