## Equalization of Public Service Facilities for Tourist Cities - Case Study of Sanya's Downtown Public Service Facilities in the Planning Process

Fei WANG, Wei Wei, and Ming LI, China academy of urban planning and design, China,

## 1. Background and proposition

The achievement of equalization is a core idea of public service facilities for a city. It is also an important way to achieve society justice, reduce the disparity between urban and rural areas, the rich and the poor, as well as other negative impacts of imbalanced development. The approaches to achieve the equalization of public service facilities are quite different, depending on the main function, spatial pattern and population composition in a city.

As one of China's most representative tourist city, tourism has become the pillar industry in Sanya, which is the strongest drive for economic growth and also a major factor impacts its sustainable progress. After ten years of growth, Sanya is experiencing an explosive increase in terms of both its tourist number and tourist production value. Seasonal population agglomeration brings huge challenges to the supply of public service facilities. Problems such as land for public service facilities occupied by the overwhelming development of tourism real estate, inadequate supply and low quality of service facilities for local residents are becoming more and more serious. Under the background of seasonal population vibration and periodic demand variety on public service facilities, how to satisfy the different needs of tourists, migrant people and local residents, taken the population distribution as a point of breakthrough, becomes the primary aspect to rationally allocate the public service facilities in the tourism districts featured by dramatic population change.

## 2. Problems and cruxes

## 2.1 The periodical change in demand on public service facilities caused by seasonal population change

With the proposal of global tourism island construction, as the most beautiful beach scenery all over Hainan Island, Sanya gets astonishing development in the tourism industry. Also, the amount of tourists and migrant people for rehabilitation are dramatically increasing year by year and take large percent in the foreign population. Considering the complexity of population composition and the feature of seasonal tourism population change, through the population census and calculation, the people in Sanya could be divided into three groups by the character of the seasonal movement and stay:

The first group includes about 500,000 people, comprised of local residents including registered permanent residents and floating population, the growth rate of which is comparatively stable. The second group, 200,000 people in all, is migrant people who usually live in Sanya for half a year mostly from November to next April for retirement leisure and rehabilitation. The third group consists of tourists for short-time stay at an average of 100,000 persons a day. Based on the statistics of 12 months in a year, the daily average number in the peak month could reach 130,000 while the lowest is about 70,000.



Considering these three groups, we have found that the periodical change of people in Sanya is obvious because the lowest amount is about 600,000 while the highest is up to 1,000,000 at the same scale as a city. (Figure 1) As a result, the generic approach of allocating public service facilities is apparently not applicable for we are confronted with 2 completely different urban sizes.

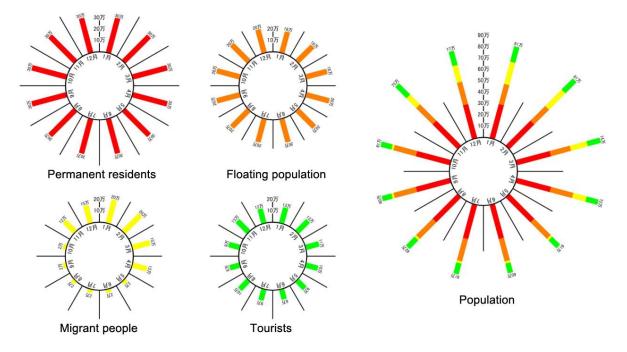


Figure 1: image of demographic composition in Sanya's central urban district (resource: drawing based on related data)

## 2.2 The land for public service facilities occupied by the overwhelming development of tourism real estate

The real estate has become the pillar industry in Sanya, making huge contribution to the tertiary industry in this area. In 2009, the real estate accounts for 40 percent in the gross value of tertiary industry of Sanya; the number grew to more than 50 percent in 2010. Apparently, this situation is closely related to tourism boom. The development of Sanya's real estate mainly relies on the growth of tourism. That is to say, the overwhelming and mighty development of tourism brings large opportunities and potentials to the real estate. Sanya's housing price, in Sanya in 2011, jumps into the top ten highest ones in the whole country, whose growth sits the first place nationally. From that we can see the development of real estate contributes a large part to the whole city's economic development.

However, some social problems come along with the boom of real estate, for example, the migrant people causing high housing vacancy rate in Sanya up to 95 percent in some residential area; local residents are forced to move to the fringe area of city because of high housing price. Comparing the master plan in 1999 and the situation in 2008, the percentage of residential land increases more than 20 percent while the green space decreases 30 percent, and public service facilities remains almost at the same level. On the data of granted land types from 1991 to 2007, large amount of residential land were sold. Conversely, the amount of public service facilities land goes down. The planned lands for city political center



in the master plan of 1999 were adjusted for real estate use in 2008; the land for sports center was used by tourism facilities land. It is a specific example to demonstrate the impact of real estate on public service facilities.

Recently, the tourism development has been more focused, which would bring huge and immediate economic benefits while the investment in the fields on education and culture reduced. Taking the advocacy plan of key projects in 2010 as an example, we can see these programs on tourism and real estate are still the top priority. (Figure 2)

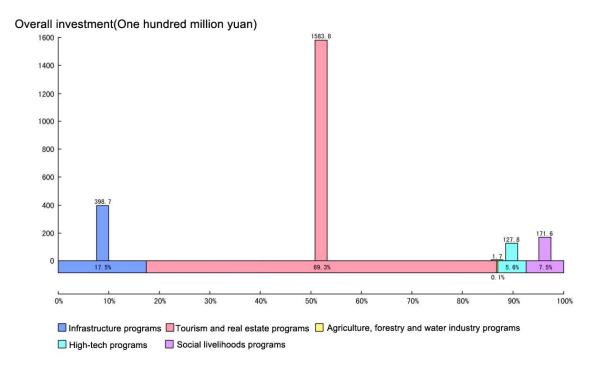


Figure 2: statistics chart of investment in Sanya's key projects in 2012(resource from: Sanya Sta. Almanac)

## 2.3 The issue of public service inadequacy and backwardness for local residents is increasingly prominent

With the boom of tourism, the high-qualified waterside resources attract large number of real estate investors. Public welfare and tight profit service facilities can hardly maintain under this market-oriented seaside district. The vitality center designed in the master plan is almost the last high-quality space for public service facilities. At the same time, the good landscape resources in the inland waterfront have been occupied by real estate. (Figure 3)

The old districts renovation in high-quality waterside resources is facing the same problem: local residents move out while many foreigners crowd in. The high-incentive development cannot help to better the transportation in old districts but bring more stress. After renewal,

the facilities will be upgraded to a higher level that will virtually worsen local residents facilities-inadequacy problem.



The inappropriate renewal to old districts actually destroyed the local culture accumulated for a long time. The time visitors stay in Sanya is shorter than the other scenery resorts in foreign countries (Table 1). One of the most important reasons is that Sanya need more experience and exhibitions about local culture to attract visitors. The visitors enjoy the first several days in the hotel, however when the fresh feeling for the sea view diminished, they of course hope to experience the local culture and way of life, so the holiday resorts that could provide colorful local cultural experience will maintain visitors long time here.



2010年

Figure 3: comparison of Google maps on inland waterfront real estate in 2002 and 2010 (resource: Google maps)

Table 1: comparis	on tourism deta	ails in globa	l famous sc	enery re	esorts (resource	from: Sa	anya's m	aster
plan)		-		-	-		-	

Global famous tourism resorts	Cote d'Azure		Costa del	Gold Coast	Miami	Southeast Asian		Hawaii	Cankun	Sanya
	Nice	Cannes	Sol in Spain	in Austria		Bali	Phuket Island			
Tourists amount(millions)	4	2.5	9.5	4.55	10.4	1.66	5	7.62	3.27	10
Annul income (billions)	€2	€1	€7.7	A\$2.5	\$1.5	\$0.7	\$1.2	\$12.8	\$3.6	\$2.6
Personal spending	€ 500	€400	€810	A\$550	\$114	\$415	\$257	\$1680	\$1110	\$260
Average stop days	7.4									
Daily spending	€	€	€	A\$	\$	\$	\$	\$	\$	\$



## 2.4 The imbalance distribution of public service facilities

From Sanya's spatial development of urban form in recent years, the development of the water overweighs the development of land. From the 1989 to 1999, the city sprawl is mainly along the sea side; from 1999 to 2009, the development came forward in great number of the high-qualified landscape resources inland when the seaside land is continuously been used; after 2008 till now, the high-qualified resources land in old city has been renewed and reconstructed came out one after another.

From Sanya's existing distribution of the public service facilities; the development in central city is much more advanced than that outside of it. The public service facilities concentrated in the center(Figure 4). For a long period, all kinds of public service facilities locate mainly in the old city along the both sides of the river, which largely decide the democratic distribution of different districts. Seeing from the relation between locations of all kinds do public service facilities and migrant communities, the new communities where most foreigners chose to live in show the trend of embracing the area alone the both riversides where public service facilities while contribute less for the city's facilities. The facilities in old city are overused while those in new city are inadequate. This brings several urban problems such as population agglomeration and space density and traffic jam. Using public service facilities to attract population flow is an important way to release the transportation pressure in old city, to lead the completion of public service facilities in new city by placing major construction facilities. Meanwhile, the seaside could be leaf for cultural facilities which could much more present the essential characters of city and provide service for local residents and tourists.

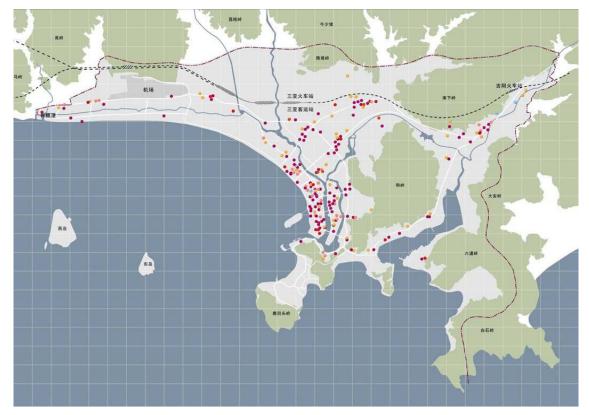


Figure 4: map on Sanya's existing facilities distribution of public management and public service (resources: imaged on data)



## 3. Strategies and methods

## 3.1 The public service facilities zoning by the population distribution

If we analyze Sanya's urban spatial structure from the view of population distribution, we can find three classes of region: the first is the population agglomeration area in Yalong bay district, Luhuitou mega east sea district and Haipo district, which three districts largely affect Sanya's urban space structure; the second area highly mix local residents, tourists and migrants people including Jiyang district, west side of river and Sanya bay. These three groups of people correspondingly locate in these tourism districts; the third is the main area where inhabitants and migrant people concentrated including east side of river and Yuechuan district. Sanya's urban space structure(Figure 5) is clearly collated that the peripheral area function as tourism containing three seaside tourism districts and north face mountain tourism district; the neighbor area consists of three tourism service living districts; the local urban living districts were surrounded by the formal area. From the angel of human usage of facilities, this spatial structure is the ground how we locate public service facilities. (Figure 6)

The core value of public service facilities is to be utilized by people. It is apparent that different people have various demands for facilities, like in Sanya, local residents do not necessarily go in the tax-free shops but cannot live without the food market; migrant people may not have children who need to go to school but hard to avoid to go to hospitals; tourists could stay without the need to see a doctor for several days but must go to have seafood. All groups of people have different needs for facilities and their activity areas differ from the distribution of all facilities, which in fact deny the realizing of impartial principle. So actually, what we try to do is not to achieve the impartial on space but on service, which means all kinds groups could be satisfied.

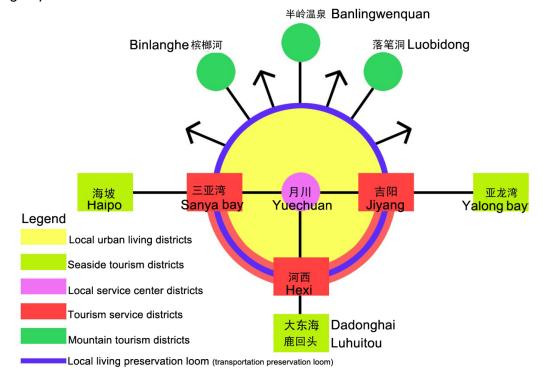


Figure 5: image of Sanya's urban special structure



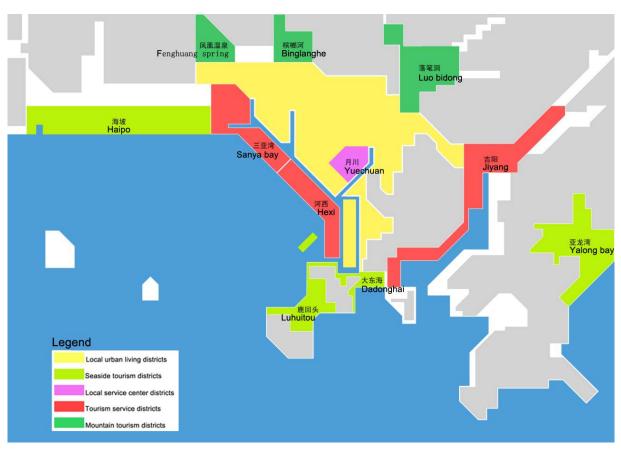


Figure 6: map on Sanya's existing facilities distribution of public management and public service (resources: imaged on data)

# 3.2 The classification of Sanya's public service facilities basing on urban spatial structure

On experience in Sanya and other cities, there are three grades of Sanya's public service facilities, besides the public construction on city level, the facilities for residents could be divided into two grades in terms of residential district and dwelling district. The facilities on the residential area have direct connection with jurisdiction management as well as the political grade in the future. Within the wards of neighborhood political management range, which could be divided into several communities, the public service facilities both on the neighborhood level and community level could be constructed and assessed by city management departments together with neighborhood management organizations.

Depending judgment on Sanya's urban function structure, we recommend service centers on city level to be classified on the service subject groups, which two kinds are integrated service centers for visitors and diverse residents and local service centers for local residents. The integrated service centers separately locates in three tourism districts which are featured by retail and catering in west riverside, cultural district in Sanya bay and local landscape style in Jiyang town. Local service centers are Yuechuan district functioning as commercial district and Baolingpo district centered for administration. Differing from master plan, we take Jiyang town as city service center to enhance service quality for Yalong bay and local residents, which would benefit to release old city's pressure and to extend Jiyang's urban function. In all, there are five service centers on city level.



On different service subjects, service centers on neighborhood level could be divided as tourism service centers and residential service centers. Tourism service centers are in Yalong bay, mega east sea district and Haipo; while residential service centers are in north city, Haidong, Jixiang and Hedong. Service facilities on neighborhood level will respond to the management district by municipal district office in the future. Each office will in charge for forty to sixty thousands of people. In all, there are three tourism service centers and four residential service centers. (*Figure 7*)

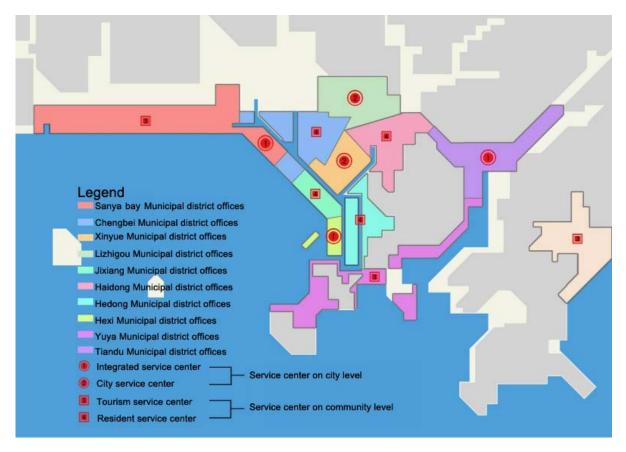


Figure 7: map of distribution Sanya's graded public service facilities

Service centers on residential sub-district level could be defined as divided neighborhoods based on the rules of six to twelve thousands of population and service radius.Each community can form its own service center. Its specific bound could be decided by each district and town or the probable municipal district office as well as concrete conditions with community residential committees.

## 3.3 The pointed strategies to Sanya's existing conditions

With the responsibility to build Hainan's international tourism island, Sanya still looks no big difference with other Chinese general county towns having several city problems. So we should not only be object-oriented and allocate public service facilities at the highest quality to respond the targets, but also problem-solving-based to find the crux of urban problems, that is how we fix the diseases and prescribe a medicine catered to them, so to speak. The following three points represent how we would do that.

The first is using plans and guidance to overcome uneven distribution, which is aimed to lead the completion of public service facilities in new city by placing major construction facilities.



We highly recommend central administrative function planned in center of new town, because administrative center has the strongest power on urban layout in all the city government controllable resources, which could also effectively affect other urban facilities gather around to solve impartial distribution of public service facilities. Meanwhile, the seaside could be leaf for cultural facilities which could much more present the essential characters of city and provide service for local residents and tourists.

The second point is to end the real estate sector's strong presence by management, which means strictly enforcing and implementing the plans, to insure public facilities, especially the public service facilities. To build classification of municipal district offices and community residential committees, so that these service facilities on residential level and community level can have clear jurisdiction subjects. The construction, management, operation of these two grades of public service facilities should be connected with the working achievement of municipal district offices and community residential committees.

The third point is to rebalance the people and housing by policies, specifically to make zoning policies on different zoning characters. Within tourism districts, the real estate development types should be restricted mainly in range of vocation and tourism use, only permit for timeshare and property resorts; in the districts about tourism service, encourage family hotels to help more local residents enjoy the benefits from tourism industry. Some percentage of real estate is handed over to government for use of affordable housing. In the local living districts, the dominant function is service for local dwellers' living and working, where development on affordable housing should be incentive.

## 4. Conclusions and revelations

In conclusion, we explored the effective methods for allocating public service facilities in areas with a complex population composition and proneness to changes. Under the core principle of public service facilities development, we try to establish a specific system plan of public service facilities to represent Sanya's city characters and the achievability of plan production assisting local government to implement and manage. The achievement of equalization of public service facilities is not solely an even distribution of facilities, but to provide public service equalization according to the requirements of different crowd.



### References

Luo,zhendong, Wei,jianglv,and Zhang,Jingxiang,(2011), "The definition of equalization development on fundamental public service facilities in urban and rural area", *Journal of modern urban research* 

Urban land classification and land use on planning and construction standards (GB 50137-2011), ministry of housing and urban-rural construction of the People's Republic of China.2012,

Allocation order on public service facilities in urban planning in Hangzhou city, Hangzhou city government, 2009

Allocation standards and plan guidelines on public service facilities in Qingdao urban districts, Qingdao planning department, 2010

Allocation standards and plan guidelines on public service facilities in urban and rural planning, Chongqing city planning apartment, 2007

Sanya city master plan from 2008 to 2020, Sanya city planning department

Sanya Statistics Almanac, Sanya statistics department,2010

