

Housing for Employees in Vietnam

Review of Design Guidelines



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Recommendation report to Managing Board of Alliance JSC,.

Introduction

Housing for employees has become the top concern for every country, especially developing country with low income like Vietnam. This content should be studied and taken seriously.

In the context of housing in our country today, residential land and housing prices are very high, while the average income of employees is very low. In fact, the salary can not cover the housing rental fee. This circumstance makes the problem of housing for employees more difficult.

However, like it or not, we have to find out the solution for housing of employees and effectiveness are depending on selected solutions. Until now, finding better solutions for housing of employees is still a focus of the country. Many seminars have taken this as criteria, many professors are effort to find appropriate solutions. Some solutions have been found, as re-planned residential area for employees associated with industrial zones, investors can lease land of State Own to built housing for rent, to develop the social housing with the rights and obligations for tenants, buyers ... Many other solutions are being further studied and proposed, such as to develop housing funds for employees, operating form the installment purchase ...

As one of the architects, in this article, also would like to contribute a small part of the effort into finding solutions to the housing for employees.

1 Shelter Situation Analysis

1.1 Basic General Data

Geography and Administration

After the share split many times, in again, now Vietnam has 58 provinces and 5 cities directly under the central government, they are Can Tho, Da Nang, Hanoi, Hai Phong, Ho Chi Minh City.

Demography and Health ¹

According to statistics in 2000, Vietnam has 54 different ethnic minority groups. The King people account for 86% of Vietnam's total population. Major ethnic minority groups include the Tay, Thai, Muong, H'Mong, Dao and Khmer.

Population: 82,689,516

Estimated on 2008

Age structure:

Item	Years of Age	Percentage (%)	Male	Female
1	From 0 to 14	29.4	12,524,098	11,807,763
2	From 15 to 64	65.0	26,475,156	27,239,543
3	Over 65	5.6	1,928,568	2,714,390
4	Total	100	40,927,822	41,761,696

Estimated on 2004

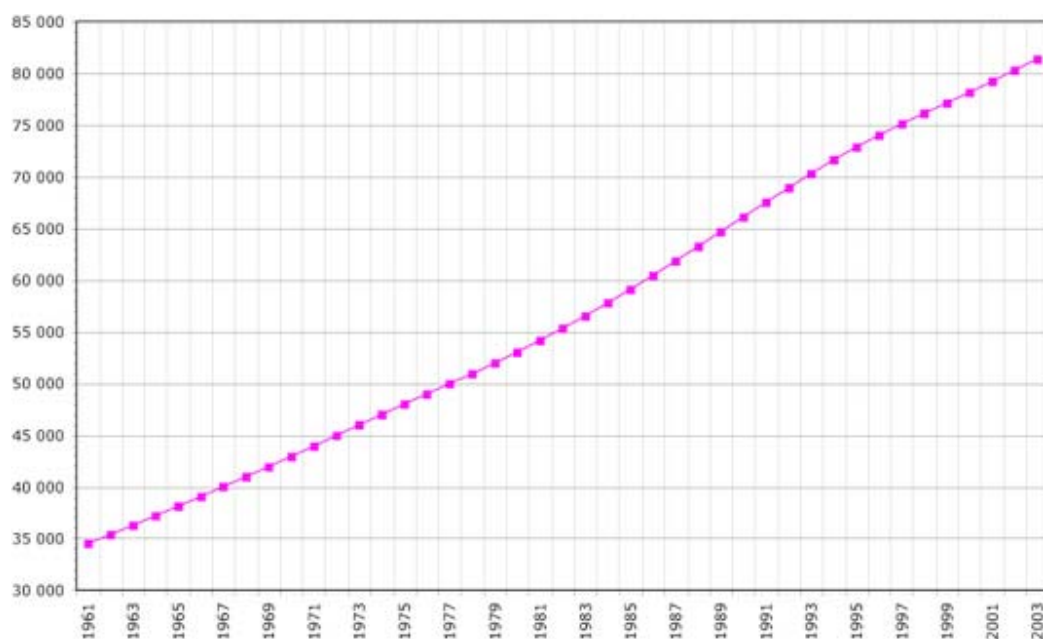
The ratio of population growth: 1.3%

Birth ratio: 19.58/1.000 people

Death ratio: 6.14 /1.000 people

Immigration ratio: -0.45 emigrant/1.000 people

Population of Vietnam, unit: thousand people ²



¹ Source: General Statistics office (GSO) 2005

² FAO's data in 2005

The gender ratio:

at birth:	1.08 male / female
under 15 years of age:	1.06 male / female
from 15 to 64 years of age:	0.97 male / female
over 65 years of age:	0.71 male / female
total population:	0.98 male / female (2004 estimate)

The death ratio of children:

total:	29.88 death/1.000 lives
boy:	33.71 death/1.000 lives
girl:	25.77 death/1.000 lives (2004 estimate)

The longevity prospects of birth:

total :	70.35 years old
male:	67.86 years old
female:	73.02 years (2004 estimate)

Total birth ratio:

2.22 children / woman (2004 estimate)

Ethnic minority groups:

86% of Vietnamese, Khmer 1.5%, 3% Chinese origin, the Muong, the Tay, the Hmong, the Man, the Cham ethnic and other minorities.

Economy

Vietnam is the 60th economy member of the member International Monetary Fund based on the total domestic product of 2009 list and ranked 133 by considering the total domestic product average per capita. This is mixed economy, high depending on export and Foreign investment. The Vietnamese Government advocates building in Vietnam a market economy-oriented socialism. Vietnam is a member of the United Nations, the World Trade Organization, International Monetary Fund, The World Bank, The Asian Development Bank, Asia - Pacific Economic Cooperation (APEC), Association of Southeast Asia Nations (ASEAN). Vietnam to participate in freedom trade agreements with ASEAN, South Korea, Japan, China. Vietnam has signed with Japan an agreement on economic partnership bilateral.

Economic Indicators ¹

Item	Economy	2000	2005	2006	2007
1	GDP (US\$ billions)	31.17	53.10	61	71.22
2	GDP growth (annual %)	6.8	8.4	8.2	8.5
3	Inflation, GDP deflator (annual %)	3.4	8.2	7.3	8.2
4	Exports of goods and services (% of GDP)	55	69	73	76
5	Imports of goods and services (% of GDP)	57	74	77	84
6	Gross capital formation (% of GDP)	30	36	36	35

¹ Source: World Bank, Key Development Data & Statistics

1.2 Shelter Related Fact and Figures**Housing in Vietnam*****Housing construction***

In 2007, the housing area in the country has increased more than 27 million m². National's Fund houses estimates reach 890 million m², of which about 260 million m² for urban area, and 630 million m² for rural area.

Thus, the average of current housing area per capita in a city reaches 10.8 m²; in rural areas is 10.5 m²/capita. Vietnam Construction's regulation/standard stipulates requirement of minimum land in the urban area is 11m²/capita, maximum is 50m²/capital. Currently, in Hanoi, land requirement in the average in some areas has reached about 20 - 25m²/capita.

Past few years, the real estate, stock market has booming to created good conditions for the organisations/enterprises in mobilizing funds to implement housing/township development projects. In the year of 2007, organisations/enterprises under the Ministry of Construction has implemented 280 projects with total investment cost of VND8,258 billion, however in the year of 2008, the requirement of housing and infrastructure development projects should be reached 297 projects, VND14,006 billion.

Building materials

On the world, to research, application new building materials, new technologies in construction has become a need and is actually trend of modern urban and regional population concentration. Vietnam in the innovation of technology, application new building materials in housing construction has also contributed to changes in urban physiognomy, created the hit points, model for urban areas. Design, construction technology, selected building materials for housing has been a concern of construction industry in Vietnam, by the architects, the design consultant. New building materials, new technologies has been often used in construction of civil works, especially in the splendid buildings, the energy saving buildings to improve living conditions, reduce noise, minimize solar radiation etc. The building materials, new technologies mentioned above has also been used in some projects in Hanoi, Ho Chi Minh City and has been bring effective social and economic to Vietnam.

Application of new technologies, new buildings materials, concurrently construct low-price housing for low-income people are the concerning of entire Vietnamese. The concept of the housing with low price to make many people think that this type of how with low quality. Now with the new design method, use of reasonable materials and innovative construction technologies to create the reasonable cost with high quality of the housing.

The cost of basic services and infrastructure

The Government has assigned the Hanoi Planning – Investment Department not only developed infrastructure with large scale, but plan to spend capital bonds and state funds from Official Development Assistance (ODA). Ministry also is responsible for upgrading North-South Highway, the highway connecting the cities with the main ports and the traffic projects.

The Government hopes to attract more investor to the traffic projects, especially Foreign Direct Investment (FDI), form of investment is Built - Operating - Transfer (BOT) as well as investment resources from ODA.

At least USD 15 billion from FDI has been invested to our country in 2008. The investors from East Asia, including Japan, South Korea and Taiwan. The European Union and the United States will contribute more, and expected the year of 2009 will have a large number of investors from the Middle East.

Education costs

Quality education is now in Vietnam is low, although the costs to society for education not low. So comparison of educational costs based on the rate of GDP of Vietnam and the U.S. shows: American Society for the education 7.2% of GDP in the current Vietnam read at least 8.3% of GDP. Comparison with China shows that the cost of education by contribution fees of China's people and the surcharge to 20%, while in Vietnam is 40% etc

However, if comparison: the cost of the country, from the state budget and contributed directly by the people (through fees and other) for education in the U.S. is 2880 USD / person / year (2004), while in Vietnam is 50 USD / person / year (2006).

1.3 Housing Policy

Social housing was built by state or organizations or private companies for the following objects:

Objects are leasing, buying society-housing

- Civil servants, officials.
- The officers, professional army under the armed forces
- Workers in industrial parks, export processing zones, high technology areas.
- Other objects as stipulated by the Government.

Lease/buying conditions of housing society

Who are leasing, buying society housing must ensure the following conditions:

- a. Belonging to the object mentioned above.
- b. Who have no house ownership and not renting or buying housing under public ownership; average area of house less than 5m² / person; temporary house, damage or dilapidation house ignorance.

- c. Monthly average income does not exceed 5 times of the total amount of monthly renting fee for a maximum area of 60 m² and not less than 4 times of the amount of renting fee for the housing units with minimum area of 30 m², which calculated by the rental fee as regulations of the Provincial People Committee.
- d. Who are buying the society house, beside the above conditions 1, 2 and 3 also must pay the first 20% of the value of housing.
- e. The selected objects to rent or buy society housing is done in order of priority as follows:
 - The need for all housing (don't own any house, just get married, living in the house with low average area);
 - The objects receive salary from the state budget, young officers graduated from university and over, workers have the skills from level 5 and above are not supported housing in any form by the State;
 - A civil servant are entitled under the policy in the public service but has returned the house for which the State needs to rent, buy social housing in the province.
- f. Based on the above decision and conditions of the local People's Committees at provincial level specified and announced publicly on the subject and conditions rental, leasing fund social housing in the area in each period and each specific project.

1.4 Actors in Shelter Delivery and their Roles

MOC (Ministry of Construction)

MOC is responsible to implemented the unified state management of housing in the whole country and assist the Prime Minister in formulating the national objective, policies for housing and urban plan.

MONRE (Ministry of Natural Resources and Environment)

MONRE is responsible to perform the function of State management of land resources, water resources, mineral resources, environment, meteorology and hydrology, surveying, mapping and management of housing, public facilities.

MPI (Ministry of Planning and Investment)

MPI is responsible to general counsel of planning, economic development of Vietnam. Propose policies and manage foreign direct investment in the locality. Coordinate between the Ministries in the preparing and implementation plan.

1.5 Shelter Design

Further to Housing Law Reference number 56/2005/QH11 dated 29 November 2005 and Decree 90/2006/NĐ-CP regarding guideline on the implementation of Housing Law, the summary as follows:

a. Standard design of housing society

Social housing in urban areas is designed as apartments to ensure the standards of the law of building and floor number stipulated the following:

- Five to Six floors for the apartment in special urban category (for capital or cities directly under the central government, more than 1,5 million habitants and the average density is more than 15,000 habitants/square meter)
 - For apartments with remaining urban categories, should not exceed six floors.
- b. Area of each housing unit must not exceed 60m² and finishing complies with the level, ranked of the house but not less than 30m² floor.
- c. Social housing should meet the requirement of standards in infrastructure and social infrastructure as stipulated by each city.
- d. Outside areas defined, other region having good conditions of land can build a low-floor apartment or the individual house but it must ensure the quality of construction with the corresponding level three and above.

2 Organisation

Alliance Construction and Design Consultant Joint Stock Company (Alliance., JSC) is an organization of business, production activities in key areas:

- Design consultant.
- Developer

Alliance was established on June, 2004. During the operation, Alliance regularly implements domestic projects, mainly the small and medium range.

The design and built of housing is including the apartment, villas and link-house, besides a couple of projects of houses for rent, resorts etc.

Characterized by the construction activities in Vietnam, housing will be built by owner so lack of synchronization, waste in the use of materials. For apartments, apartment's owners are often required to renovate and improve a lot before use. This has many reasons, but basically by the low construction quality and structure family of Vietnam is quite complicated (many generations in a family etc). With such a unique, housing construction in Vietnam lack of synchronization and waste.

Not many employees of the Alliance have house, like many other companies. Many of them have to rent a housing unit in the low quality building. This is the common current status of employee in Vietnam. Wishing to improve the situation, we propose research projects for the people who are civil servants, workers - Employee.

3 Shelter Problem

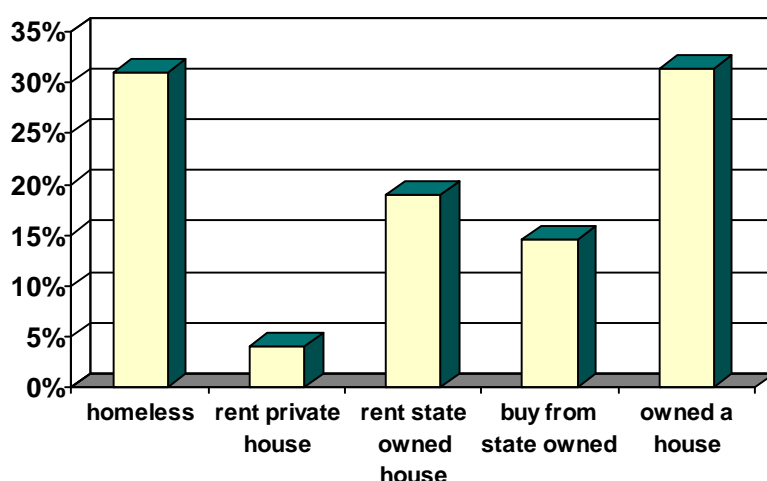
Housing for employees

Houses in Vietnam are top concern issues, however access to it on a large scale, this article can not be performed. Look at the reality in Vietnam at present, can see that the majority of those who work in large urban areas (such as Hanoi, Ho Chi Minh City etc) can not be purchased a house or apartment, as the price is too high compared to income of them. With such comments, I choose to access the topic "Housing for employee."

3.1 The Housing status of employee.

Who enjoy salaries mainly include civil servants, state officials and employees working in all types of enterprises (state, private, foreign investment). By 2005, Vietnam has over 7 million workers of which, approximately 1.6 million civil servants, members of the state.

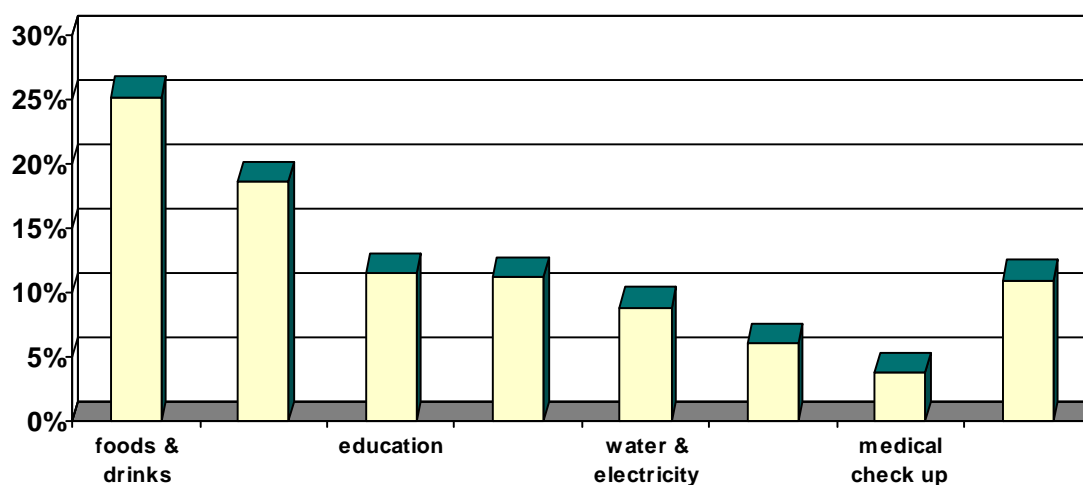
According to results of the investigation on housing of civil servants, state officials, show that: 31% of households, mainly of young families, have not owned house; 4% rent a private house with low quality, 19% rent old housing unit of state owned (built before 1990); 14.6% was purchased by the Decree 61-CP, 31.4% has been built a house ¹.



Average area per capita by civil servants, state officials is low, especially in large urban areas like Hanoi (from 7m² to 7.5 m²/capita). For the quality, permanence housing about 55%, semi-permanence is 40%, the rest is temporary. Especially, now there are tens of thousands of old housing units (equivalent to about 4 million m²) was built from the 60's and 70 centuries before is serious degradation, but not improving, rebuilding.

In general, most civil servants, state officials has primarily income from salary, the accumulate ability is low. Survey/statistics data on 2007 show that: the average income of civil servants, officials around VND1.600.000/month; including 25.2% for the foods and drinks, 18.6% for housing equipment; 11.5% for education, 11.2% for social communication; 8.9% water and electricity, 6.1% for clothing; 3.8 % for medical check up, 11% for housing etc. ²

^{1,2} Source: General Statistics office (GSO) 2005



In fact, up to 96% of people interviewed would like to improve housing conditions in the 32% required to rent housing. To meet the current housing needs of civil servants, state officials, there should be more than 5 million m², equivalent to 120,000 housing units. Up to 2010 there should be 7 million - 8 million m², equivalent to 180,000 housing units.



Housing at Central of Hanoi



Housing at new urban area

According to statistics on housing of workers in the industrial parks, export processing zones: in 2005, 740,000 employees has been working in the industrial parks, export processing zones in which, approximately 400,000 workers from other places need a house. To the average income of workers in state enterprises from VND600.000 to 800.000/month; in foreign investment company, the average income from VND800.000 to VND1.000.000/month, employees only can pay rental fee from VND100.000 to VND150.000/month.

Although, Decree No. 36/1997/ND-CP dated 24-4-1997 regarding regulation of the construction of housing for workers in industrial parks, export processing zones, however most of provinces only stop at planned housing development, not the orientation and the issuing of policies, setting up housing for employees of industrial parks, export processing zones. Therefore, approximately 90% of workers in the industrial parks, export processing zones have to rent a house at the price from VND50.000 to VND100.000/month in the average area from 4m² to 5m²/person.

Housing needs of employee in some localities in the key economic region is very high. Especially Hanoi and Ho Chi Minh City in 5 years (2006 - 2010) is estimated to be built over 200,000 housing units, with over 11 million m² used for household with low. With the minimum housing area for a worker is 10m², currently, total housing area need is 4 million m², equivalent to 100,000 housing units and up to 2010 is 12 million to 15 million m², equivalent to 300,000 to 350,000 housing units with area from 40m² - 45m² / unit.

According to a forecast by the Ministry of Construction, up to 2010, the total housing area for employee is 154 million m² with about 2.7 million housing units (57m²/unit) and 2020 will be 291 million m² with 4.4 million housing units (65m²/unit). Thus, the housing area need to build more for employee during 2005 - 2010 is 71 million m², with 1 million housing units and 10 years later it is 137 million m², with 1.7 million housing units.

The average construction cost of housing about 3.5 million VND per m² currently. On average, construction cost of a housing unit with 50 m² is 180 million. If selling price about 200 to 300 million VND per unit, the buyer, who has average income is 1.6 million will be paid gradually within 20 to 30 years if they spent half the salary for housing. However the enterprises has to consider for the design solution, material used and construction methodologies to limit construction costs are lowest and ensuring the project quality.

Residential B4/B14 Kim Lien has been downgraded,
need to renovation



Inhabitants has been displaced before renovation



B14 Kim Lien will be replaced by towers, 14 and
17 storeys with podium for commercial



3.2 The cause of lack of housing and low quality of housing for employee.

Reality of the housing for employee over here is derived from a variety of reasons, but mainly:

- a. Results of the process of industrialization and urbanization as the number of employee, especially workers in the industrial parks, export processing zones are increasing rapidly. According to reports, employee in 2010 is 10,278 million, increase 34.8% compared with 2005 and 2020 is 14,552 million, increase 41.6% compared with 2010.
- b. Lack of a housing policy as a policy of sync, stable long-term, strategy, broad social, for employee in the market-oriented socialist.

The State has not achieved the leading role in ensuring housing for eligible salary's people, to relax the management, to entrust to enterprises for housing development under the rule of market economy. Moreover, the current policies for low-income people also inadequate.

The hoarding of low income people is very small, can not afford to buy house/apartment, including the instalment plan. Therefore, housing for low income people is expected of the owner, sometimes become incompatible, and even in the case of supported by the State. State has implemented of supporting low-income people through enterprises, but lack of checking, supervising, so most of incentives is belong to enterprises, a low-income people are not beneficiaries. The housing projects that relate to incentives for low-income people are hand over to enterprises full of won, so the state can not check and monitor construction progress, quality of work, construction cost; so the housing in poor quality and high solving price.

- c. The mission, development objectives for employees are not identified as mandatory criteria in planning of economic - social development of provinces and of the country. Therefore, the policies of the State of preferential investment for housing development are not in reality.
- d. Most of the government, research institutes, and consultants of the housing are lacking of experience staff, professional in management and development of housing. Therefore, it is not timely detect and prevent the common situation is the enterprises exploiting land fund for sale to collect money quickly, employee or speculator was buy are not interested, especially on the Hanoi and Ho Chi Minh City.

Lessons from Singapore

Since a majority of people living in the slum, so far 91% of Singaporeans own houses, of which 83% of them own the low cost house . Singapore and Hong Kong are the two famous countries in Asia in good development and problem solving of social housing for employees. To obtain this result, since the 1960s, Singapore has established the important institutions in planning and developing low-cost housing.

Since 1960, Singapore has established Development Agency housing specialist in charge of land planning funds, construction and loans for buyers of low prices housing. They also established the Central Government Savings Funds, these funds are responsible for directing the organization of recruitment, which contribute 13% and employees contribute 20% of the monthly salary to the fund as a savings amount to buy houses.

While in Vietnam today, one of the inadequacies make the real estate's business less interesting in the investment in social housing construction for low-income is low profit, the procedure of getting construction permit, paying land use fee ...are complicated, affecting the Investment cost. Meanwhile, in Singapore, the private organizations involved in construction of housing for low-income people, which often receive support from state and these administrative procedures are clear and implemented quickly. To support the housing project for low-income, land fund are also problems with the real estate business.

To develop housing of low income people, the Government plans to use wasted public land to provide to housing development funds, exempt land use fees, taxes, then lower Investment cost, lower housing cost to meet the housing needs of people.

According to social housing schemes of the Ministry of Construction, the period 2009 - 2015, the country will invest more than 18,000 housing units, of which nearly 50,000 billion VND to meet the needs of 30% of households in housing difficulty in urban areas.

In difficult economic times, to promote the construction of social housing are very interested by the Government. Therefore, reference from the successful experiences of neighbouring countries to develop the construction investment projects will be very useful.

4 Proposals for Change and Improvement.

There are two proposals will be made and submit to relevant organisation/authorities for their further study, consideration and action.

- Design solutions will be proposed to Managing Board of Alliance Construction and Design Consultant JSC.
- Recommendation on Housing policy will be submitted to Vietnam Architectural Association, Hanoi Urban planning Association and Ministry of Construction.

4.1 Design solutions to the construction of housing for employee.

General Solutions

Planning land use, it should ensure the requirements to avoid trends dedicated convenient, high-value placement for commercial projects, and the housing for employee is extramural . Combine the projects for employee and commercial projects. Adjust projects planning in urban area to create more land fund for housing development of employee.

Planning for employee's housing to pay the appropriate of economic – social development, urban planning, construction schedules, ensuring the inhabitants settlement and re-settlement, architecture, landscapes, environmental in good conditions. To create conditions to employees to enjoy living conditions with the community in residential areas, access to the public services (schools, hospitals, kindergarten, commercial centre ext) and opportunities to find jobs and increasing income. To study planning development for housing of employee with specialized planning such as planning development of office buildings, industrial parks, export processing zones, planning development of urban traffic system ext. To create better living conditions such as improving sanitation conditions, improve infrastructure and services system.

Design for housing of employee to pay the suitable natural conditions, habits and culture of each region, locality and urban area. Various types of houses and apartment types to suit the employee's income and the housing development needs of families and employees. Able to control and ensure security and safety for habitants. Housing of employee should be in multi-storeys building, and multi- units and designed to ensure common standards stipulated by the Construction Law .

- Projects for the employees must closely manage the entire process of investment such as selection of site location, feasibility study, assessment and approval of projects, design, estimate of total investment cost, tender, contractor selection, inspection, handing over, operation and management to ensure quality projects, limit losses, wasted according to the law of construction investment and management. Decentralization of

the People's Committee of provinces and cities directly under central government to perform tasks: preparation, evaluation and approval of construction projects for housing for rent, authorized to local authorities to take charge of the specialized work for projects of houses for rent, to tender and consultants, contractor selection and contractors in accordance with the law to ensure the requirements of master schedule, quality of construction and reasonable construction cost; Department of Finance and other departments, related sectors to control, manage construction costs to eliminate corruption of implementation stages.

Detail Design solutions

General Planning Solution

- To locate employee's housing next to their working place as the dormitory, the new urban area, industrial area, in the inefficient used areas in the inner city, the polluted enterprises, the slum area need to be replaced, the sub-urban village.
- Living space should be open and to maximize access to the essential public facilities such as schools, kindergartens, markets, hospital, the club house ...
- To optimize the building density.

Scale

- To minimize the land area and the building height in order to minimize investment costs and operating costs of user.
- Should be designed around 9-15 floors and the gross floor area of about 40 to 65m².
- To design open space for living/dining rooms and kitchen.
- To design upper floor motorcycle/ car parking, average 2.1 to 2.4m high.

Facades

- Simple design to avoid the waste, to exploit maximum natural energy such as wind and light ... to reduce energy consumption for households.

Layout plan of function areas, to study:

- Location of the transportation system in the vertical and horizontal.
- Location of the housing units in the general layout.
- Location of the technical system.

Layout plan of housing units .

- To design flexibly, should be divided in 2 main areas:the living area and the auxiliary.
- Living area (dry zone) consists of bedroom, living room, dining room.
- Auxiliary area (wet zone) focus features items such as kitchen, toilet, balcony ...
- To ensure all function spaces with ventilation and natural lighting.

All design solutions including land prices must be reasonably calculated to bring the price of housing unit as low as possible to meet with employee's requirement, however the housing quality and living conditions should be ensured.

4.2 Proposal for setting the policy for employee.

Solving for the housing of employee is important, providing the strategic

Implementation socialization of resolution for employee is necessary, but the state must play the role of owner, not the delivery business, for investors and the market.

Development for housing benefit to pay on the principle: no subsidies, implementing non-profit and supported by the State.

Housing development for employee should pay in accordance with the economic and social needs of housing employee in each region, locality and urban area.

Housing development to ensure that employees, especially people with low incomes, the beneficiaries of social services (health, education, culture ext).

Housing development for employee should pay a combination of the improve environment, urban landscape to promoting market of real estate development and contribute to promote growth economy is sustainable.

State will construct and manage the Housing Fund for employee to rent, not for sale (referred to the housing fund for rent). The employees required to buy (buy or purchase contract) will be satisfied with the other type of housing.

Besides, the State should minimise the subsidy of housing, perform the socialization of the housing settlement for low-income objects. Housing construction in conjunction with management, at the right audience and reasonable. People who have the right to by the house should be permanence employee (minimum 5 years experience), stable income and can afford to pay. And, the government, through banks, make a loans with preferential financial charge to organize fund of construction investment of housing for low-income audience, employees to buy or leas.

Based on an example "If you buy a housing unit has an area of 65m² from bank interest loan, with interest rates at the moment, after 12 years the amount which buyers must pay interest will be more than two times the housing units cost. Therefore, we need the need a fund for housing development for low-income with low interest rate.

Below are some solutions to develop housing for low-income people in urban areas and industrial areas:

- In particular, on tax policy: it is recommended to exempt VAT, corporate income taxes and other relevant taxes for residential houses invested by State
- Exempt land use fees, land rental fees within project scope, whose infrastructure investment outside the boundary is supported
- Propose to Vietnam State Bank: research and propose solutions to credit loans to improve housing in accordance with conditions of the low-income households; study to improve the mechanism of mortgage to the low-income households to buy on instalment through bank.
- To develop housing fund for rent, exploitation of existing housing funds of households in urban areas and industrial zones for rent and support to the low income employees.
- Encourage the forms of rent - buy houses to give opportunity to solvable employees to own the rental house.

4.3 Contribution of Organisation on the proposals for change and improvement.

Our organization is a leading company on the design consultancy on the housing, we can advice, planning, design in detail for housing's projects, especially housing for employee, detail as follows:

- Study feasibility of investment project.
- Housing planning with the reasonable construction's density.
- Combine the residential and commercial and the public services to enable people to use the maximum of the public services.
- Review of design for transportation system and urban infrastructure.
- Study and develop the commercial, industrials park ext concurrently.
- Combine open space and landscaping.
- Create various type of houses and apartments.
- Use reasonable local materials in employee's housing .

We can organize conferences and invite the professors in this field to discuss and seeking the advice from them on how to improve living conditions for employees and speed up the progress of projects implementation.

With this proposal, through the support of the company, we will soon implement and expand the housing projects for employee with all of above mentioned criteria.

References.

Vnexpress.net

23/03/2009 19 storeys building will be commenced on the location of downgraded apartment building

<http://vnexpress.net/GL/Xa-hoi/2009/03/3BA0D34C/>

Tienphong.vn

25/03/2008 Apartment Building B14 Kim Lien will be replaced by two high-rise buildings

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Vietbao

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6/9/2006 guideline on the implementation of Housing Law

Execution to Copenhagen

4/5/2009 The Albertslund Syd new town