

IDENTIFYING ECONOMICAL AND SUSTAINABLE ELEMENTS IN ENHANCING THE BTS (BUILD THEN SELL) CONCEPT FOR MALAYSIA HOUSING DEVELOPMENT

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Abstract:

The awaited anticipation of home ownership by the middle-income group in Malaysia has been marred by the stigma of abandoned housing developments. Abandoned projects are known to cause environmental degradation since most project sites are stripped of their green covers that cause speedier surface water runoffs into drains and streams. Those projects are becoming significant and are further negating the image of the construction industry in the country. The latest solution that was proposed to overcome this problem is the implementation of the *Built then Sell* (BTS) concept, which was launched by the Prime Minister in 2004. However, the proposal seems not well received by many developers, including the Real Estate and Housing Developers' Association (REHDA). The purpose of this paper is to develop a theoretical model on how we could address the problem of abandoned housing projects. Through literature survey, we intend to identify key elements in understanding the phenomenon and develop some theoretical point of departures for alleviating this problem through creative financial modeling. We are proposing the inclusion of sustainable elements into the financial model that we believe could provide incentives to housing developers and other stakeholders involved. The paper will compare and analyze existing BTS concepts from the Australia and other country. It will extract the key components and reasoning behind their inclusions so that we can make informed recommendations for BTS implementation in the Malaysian context. The analysis will then guide us in recommending key construct for further integration with the Malaysian Agenda 21 policy. This paper contributes towards the development of a financial model for developing affordable quality housing in Malaysia.

1.0 Introduction

The awaited anticipation of home ownership by the middle-income group in Malaysia has been marred by the stigma of abandoned housing developments. In view of the critical need to house people, Scott Leckie in a housing dialogue conducted in Bangkok has outlined as follows; "Housing rights are the collection of human rights concerning how and in which conditions people live. Housing rights are enshrined in law as a means to ensure everyone an adequate, affordable, secure and safe place to live"(2003). Housing rights are widely recognised throughout international human rights law. These same standards are also found increasingly within the domestic laws of countries throughout the world, including many Asian countries inclusive Malaysia.

In some countries, construction industry particularly housing projects has played a vital role in regenerating a nation's income. Most nations have turned over the table of responsibility towards the private sector to be the main key player for ensuring its success. However, housing costs in some countries have risen so fast that lower-income groups have become increasingly 'housing poor' as public and private investments are devoted entirely to middle—and upper-class housing projects—while the total available affordable housing stock becomes increasingly scarce.

As a result of these and other housing rights difficulties, a significant portion of this region's population do not currently have access to the adequate housing promised to them under the international and national laws already legally binding on this region's Governments. Given the continuing scale of non-enjoyment of housing rights in the Asian, it is abundantly clear that the time for new methodologies for achieving these rights is upon us (UNESCO, 2004).

To rub salt to the wound, some of the housing stocks made for the poor are being waived¹ in certain localities and the construction were abandoned which resulted in a total neglect of this lower-income groups as well as the middle-income groups to own their houses at least for another 9 to 10 years or some might even deceased. This paper attempts to provide the bitter truth on the real situation of housing development and discover the potential solutions and make recommendations to mitigate the problems in contributing towards sustainable development and affordable housing in line with Malaysia's local agenda 21.

2. Literature Review

2.1 Definition of Abandoned Housing Project

Historically, abandoned housing projects in Malaysia were identified as early as 1983. In order to salvage the project, an Abandoned Housing Project Revival Fund was established by Bank Negara in 1990 with the task to rehabilitate and a study on the abandoned house were given to Abandoned Housing Project Revival Sdn. Bhd. (Ministry of Finance, 1990). The abandoned housing project in Malaysia might be classified as follows:

- 1) Construction work in a project site has been continuously delayed without any physical works on site for 6 months or more, within the stipulated construction period or beyond stipulated date of completion as

¹ Though the development of low-cost housing has been made compulsory for each new development in Malaysia, some of private developers tend to make waive of such requirement from the authority for profit reasons.

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stated in the Sale & Purchase agreement.

- 2) In the event that the developer is seen not able to complete the project, or when the Ministry of Housing and Local Authority views that the developer are not able to carry out their responsibility in finishing the project (Monitoring and Enforcement Division)

There are many reasons of housing projects being abandoned, which among others are:

- 1) The delays from Local Authority on the building plans approval includes land and other authority matters which resulted the property price escalated,
- 2) Financial problems from the developer to finance the works,
- 3) Poor management from the developers i.e. deposit money being transferred to other projects,
- 4) Unable to control the contractors for the project, in terms of work quality, works mobilization, workforce and project management,
- 5) Dispute between developers and consultants team and poor coordination between consultants and contractors,
- 6) Building materials escalates during construction period cause the contractors to pull over due to limited resources and financial backup,
- 7) Construction does not follow stipulated specifications and cause long overrun delays,
- 8) Delays in contractor's and consultant's payment from the developer and
- 9) Poor coordination between main contractor and sub-contractor and tender being awarded before the price escalating resulted giving the jobs back to main contractor due to unable to recover losses

In relation to this, under the Housing Development Act (Control and Licensing) 1966 (Act 118), amendment 2007 stated that any housing projects which is deemed seen unable to be completed within stipulated time under the SPA agreement will be no longer require Ministry of Finance approval for stop work order but instead the Ministry of Housing and Local Authority (MHLA) will be fully responsible to terminate the project whichever fits (HDA, amendment 2007). However, the question is that, we do not know how effective the monitoring system by the government is, in order to prevent the termination from happening at the early stage in the future.

Regretfully, abandoned project has been a big fallacy in country's development. The

intersection between saint efforts to provide housing for the mass and housing the poor has always being tarnished by the enormous fallout from unscrupulous developer who keeps 'robbing' the rights for house ownership among Malaysians. Thus, whatever the root cause—whether on the house-buyers', Ministry's, developer's part or financial institution—it has to be resolved.

2.2 Definition of BTS system (Build then Sell)

The BTS (Build then Sell) is nothing new in other countries house purchasing sectors. However, the system has main in road acceptance among house buyers in Malaysia due to the negative outcomes by its counterpart—STB (Sell then Built concept). The initial idea of the establishment of BTS system (Build then Sell) in Malaysia entered conversations as early as 2002. However, the concept of the BTS (Build then sell) only materialised by the Ministry of Housing and Local Authority (MHLA) in 2005 (MHLA, 2005)

There are currently two variants of BTS—the complete BTS 0:100 and partial BTS 10:90. The complete BTS is where the developer only sells the house when it is fully completed after the issuance of Certificate of Compliance (CCC), which there will be no down payments of progress payments as per schedule G & H involved. While in partial BTS, the developer can sell house units before the issuance of Certificate of Compliance (CCC).

Under this 10:90 concept, buyers will make a 10% down payment to reserve a particular house unit upon signing the sell and purchase agreement (S&P). The purchaser would resolve the remaining 90% when the house is ready. The benefits of this concept are that the rights and responsibilities of the buyers and financial institutions are able to fund housing projects, as there is proof of sales transactions.

In addition to stimulate private developer to adopt this concept, the government has introduced several inducements. Among them include faster development approvals and the exemption of RM 200,000 deposit for every license they have to apply for, and developers can build medium-cost houses in their schemes instead of including the obligatory low-cost housing quota in certain localities (MHLA, 2007).

The new introduction of the new concept will also help to boost the competitiveness of the house prices as it helps developers to cut costs in the long run. Former

Ministry of Housing and Local Government, Datuk Seri Ong Ka Ting quoted as saying that, "Logically, the BTS concept can lower developers' costs because the new system launched by the Government helps to save their time". He also added that in the long term, it will help to make house prices more competitive; but still, the property prices were determined by market forces and demand by buyers (The Star, 2007).

In responding to this idea, the OSK Investment Bank research analyst Mervin Chow (The Star, 2007) has argued that the large-scale adoption of the build-and-then-sell (BTS) concept is not likely, at least in the near term, because property developers would have to have deep pockets to actually implement it. He later added that, "The (Government) incentives are definitely attractive but not all property companies have sufficient capacity or the capability to adopt the BTS concept and only developers that have strong cash flows and good financial position will be able to successfully adopt the method.

In addition of being exempted from paying the license fees and waived from the low-cost housing requirement, the Government will also give fast-track approval to applications for, among others, change in land use to BTS developers within four months and the process of obtaining strata titles for strata land. (MHLA, 2007).

One research conducted by Citigroup Research indicates that, "Developers with strong balance sheets and in niche developments could benefit from the BTS concept. The adoption of BTS will give developers more pricing power because homebuyers may be willing to pay a best price for completed units in primary locations. Clearly, the quality of the houses will also be improved and lower the insolvency rates on the projects quantum. It also noted that the faster processing would be a boon for property developers and thus reduce the land holding costs which normally taken to launch projects. This new concept of 10:90 of BTS (Build then sell) can be seen as the most feasible and appropriate in the conditions of Malaysian economy and perhaps will create an alternative other than the traditional STB and 0:100 BTS concept.

2.3 Definition of affordable housing

Affordable housing according to Oxford Dictionary can be best describe as dwelling units whose total housing costs are deemed "affordable" to a group of people within

a specified income range. Although the term is often applied to rental housing that is within the financial means of those in the lower income ranges of a geographical area, the concept is applicable to both renters and purchasers in all income ranges.

According to census (The Star, 19 July 2008) only 5% of households in the country have a monthly income of RM10,000 or more, which means the remaining 95% of the total population in Malaysia have a monthly income of RM 9,999 and below. With the recent fuel price hikes and worsened by the increased cost of living with inflation may require an abstemious assessment of the local property and construction sectors (The Star, 19 July_2008). This larger group focuses on the lower and the middle-income group, which are the dominant house buying powers in Malaysia. In fact, the real demand in the market place is for properties between RM300,000 and RM700,000 that has been sorely lacking. However, the most anticipated affordable housing among Malaysians are still roaring between RM100,000 and RM300,000 and considered as affordable to many (The Star, 19 July 2008)

In anticipation due to supply and demand, the most "affordable" places are where there is the least demand relative to supply. Where the supply of available housing is less than the demand, low- and moderate-income households often struggle to obtain housing that is affordable. In these housing markets, rising land values often outpace rising incomes. Such housing markets often have a limited supply of residential land, or a number of regulations that make it difficult or costly to increase housing supply at rents affordable to consumers at income ranges below the local average.

Herewith, measuring demand is complicated, and is subjected to multiple views. It can be measured in terms of the costs for housing, housing type (such as apartments vs. single-detached homes, or the size and configuration of units, or number of bedrooms) and location for housing (relative to commercial and employment centers, transportation infrastructure, schools and other community resources.) A key element in measuring housing demand is differentiating between the "ability to pay" that some households have, and the "willingness to pay" of households for certain housing types in certain locality. When a place has attributes that trigger high degrees of "willingness to pay", prices often rise due to the finite supply. Thereby, changing that place's relationship to household "ability to pay". When a place has attributes that make it undesirable, the willingness to pay is reduced and the price falls. This explains why some places within an otherwise

unaffordable area (measured in the aggregate) remain very affordable, such as a distressed inner city neighborhood in an otherwise expensive city.

The BTS (built then Sell) concept, while it may be capital intensive, actually has its merits. For one, it can command premium pricing as house buyers are more assured of the time delivery. Similarly SHL Consolidated Berhad, one of the premier developers in town generally launches its projects once it is 70% completed. Some of the products are even marketed after completion, resulting in limited supply thus better-than-average profit margins (Tee Lin Say, 2007)

In addressing the issue, the director of SHL Consolidated Bhd, Datuk Yap Teiong Choon has quoted the following:

“The population in the Klang Valley is growing fast, with prime areas like Bandar Utama, Damansara Jaya, Petaling Jaya and Mont Kiara becoming increasingly expensive, people will move to more affordable areas. In Sungai Long, our house prices have almost appreciated quite substantially” (2007)

Although land prices has a big impact in determining the house prices, the definition of affordable is still subjective to other factors which are able to being offered within certain localities. Therefore, we might see some sustainable elements might be introduced in order to promote affordable housing among the lowest and middle income group. The purpose of the introduction of the new concept of BTS (Build then Sell) concept was hoped to be a catalyst for a total new system, which indirectly promote affordable housing in Malaysia despite the exemption being made towards low-cost housing in the future.

In conclusion, abandoned projects have been a big fallacy in country's development. The intersection between saint efforts to provide housing for the mass and housing the poor has always being tarnished by the enormous fallout from unscrupulous developer who keeps 'robbing' the rights for house ownership among Malaysians. Thus, whatever the root cause—whether on the house-buyers', Ministry's, developer's part or financial institution—it has to be resolved. This new concept of 10:90 of BTS (Build then sell) was seen as the most feasible and appropriate in the conditions of Malaysian economy and perhaps will become a feasible alternative instead of the traditional STB and 0:100 BTS concept. The moved made by the government to introduce this new concept of BTS (Build then Sell) concept was

hoped to be a boon towards national construction sectors, in term of quality and competitiveness, and at the same time helps to promote the affordable housing in Malaysia despite the exemption being made towards low-cost housing in the future.

2.4 The Developers' Dilemma

Since the period 1990-2007, a total of not less than 300 projects were abandoned, involved 90,000 houses and over 100,000 buyers (House Buyers Association, 2008). Those who are affected by these abandoned projects are not the giant corporations or millionaires but, the labourers, government officers and clerks with salaries less than RM 4,000 per month. Therefore, the STB (Sell then Build) concept is no longer sensible in Malaysian property scenario, which has posed so many risks towards the potential house buyers.

On the other hand, the main worry under the BTS system (Build then Sell) is that, developers can only start selling after they have completed the properties. Hence, they would have to source for finance from either banks or internal funds. Therefore, support from the financial institution to allow funds provision towards non-booked unit should be allowed for competitive pricing.

REHDA's past president Datuk Eddy Chen in 2002 was quoted saying that the BTS (build then sell) concept could only work in Malaysia if the banking sector is willing to accept a higher risk. At this point, when banks are reluctant to give bridging loans to developers, this is unlikely to happen. He later stated that, "Currently, banks would not finance the build then sell concept as it is not their policy to finance the construction of buildings that have not been sold. Banks will only extend bridging loans to developers provided we have proof that we have sold between 70 and 80 per cent of the houses. If the concept is implemented, how are developers going to build without loans?" he also queried. "Even those few developers who can afford to implement this concept will only be able to build limited quantities of about 100 units a year. If all developers follow this concept, it will lead to speculative building and in time, there will be a shortfall. Although the demand is there, developers would not be able to produce houses in a large volume and this will cause house prices to escalate and go out of reach for ordinary folks," (The New Straits Times, 2002)

Citibank Investment analysts (2007) argued developers might suffer a cash-flow squeeze because they would not be collecting progress payments from the buyers

before a project's completion. And they could be strapped for cash if they happened to be working on a few projects simultaneously under the BTS scheme. However, SHL Consolidated Bhd. and See Hoy Chan Holdings Group are among the few property developers that have successfully used the BTS method. Analysts believe IOI Properties Berhad and SP Setia Berhad have the financial strength to do that (The Star, 2007).

Umpteen reasons were cited, headed by argument that developers would have to bear the cost of financing construction. This is because the 10:90 variant would only require buyers to put a 10% down payment upon signing their Sale & Purchase Agreements and only settle the remaining balance after their units have been completed. The increasing cost of building materials, authority requirements, and the cost of additional social obligations such as infrastructure facilities, low-cost requirements and Bumiputera discounts were among others. In a stern response to this effort, the then president of the Real Estate and Housing Developers (REHDA), Datuk Jeffrey Ng, was quoted saying that the BTS (Build then Sell) concept would cause house prices to increase by between 30% to 100%.

Nonetheless, in an immediate response, the former Minister of Housing and Local Government, Minister Datuk Seri Ong Ka Ting refuted this argument. He countered that the government would monitor prices so that buyers' interest would be protected. In stating so, he argued that the example was an extreme one. In a recent convention on BTS (Build then Sell) conducted by Institute of Surveyors Malaysia (ISM), the former president of ISM, Sr. Ong See Lian examined in great detail the various inputs for the construction of terrace housing and condominiums. He determined that under the 10:90 variant, the selling price of terrace house could only go up by three to four percent, while a condominium can only cost seven to eight percent more.

In addition, he also concluded that, although the 10:90 variants will increase the total development cost, the option of medium-cost housing quota in lieu of low-cost housing would recuperate the loss towards the developer and further be mitigated by a simpler and faster approval from the authority and with further support from the financial institutions. In supporting the idea, H.H. Low & Associates' principal and chief executive officer Low Han-Hoe added that, "The fact that we are now discussing ways to fine tune this concept shows the maturing of the property sector and its players, including financial institutions". He also added later that there might

be some teething problems initially, but if everyone supported the concept, the property sector would continue being buoyant (2007).

Therefore, meticulous analysis as well as theoretical creative financial modeling is desirable. Moreover, the potential of the developers to unlock the value from their developments will be more exhilarating especially towards the shareholders of the property companies in longer term. Therefore, the efforts in developing the theoretical models are encouraged in order to tune the momentum into same frequencies, which at the end granted merits towards the house buyers and also the stakeholders involved.

3.0 The Advantages of BTS (Built then Sell) Concept

The initial idea on BTS first came about in July 2004 after the then Minister of Housing and Local Government, Datuk Seri Ong Ka Ting's trip to Australia to study the concept of BTS (Build then Sell) concept practiced there. It was also learned that the concept was modeled after section 9AA of the Sale of Land Act 1962 of the State of Victoria. (The Star, 2005)

A study on BTS (build then Sell) concept in Australia posed a different treatment as developers in most developed countries only build a few hundred houses compared with Malaysian counterparts. In comparison, section 9AA is not about selling and delivery of a housing unit. It is about a sale of land prior to the approval of plan. Thus in comparison, the issue of fairness does arise whether 10% is a reasonable sum to bind a developer as it is more akin to a situation where the winner takes all and the loser loses everything. Moreover, the developers in those countries have to finance land costs and interest during construction before taking loans from banks to complete the development. On contrary, this will result to the making of 'quality' developer who is financially sound and have adequate capital requirements for existing project and being responsible for the feasible of the project until handover stage.

For both Malaysia and Australia, the study indicates that the system is also applicable for high-rise buildings and 10% of deposits will actually go into a trust account that the developers are not allowed to touch until the project is completed.

The concept also comes with various clauses that buyers must fulfill (John E. Osborn, 2008). In term of risks distribution in those countries, the risks are borne by

both the developer and banker. But due to clauses on specific performance, the developer can sue the buyers if they decided to back out after signing the sale and purchase agreement. Hence, this will give assurances to both parties and safeguard them from unnecessary losses.

REHDA has expressed its concern on the possibility of housing projects will only be able to build limited quantities of about 100 units a year. The president of REHDA also added, "If all developers follow this concept, it will lead to speculative building and in time, there will be a shortfall. Although the demand is there, developers would not be able to produce houses in a large volume and this will cause house prices to escalate and go out of reach for ordinary folks" (New Straits Times, 2002). On the opposite, smaller developments will help the developer to come out with multiple concepts and variety designs compared to conventional mass housing projects. They tend to create more problems in terms of providing additional infrastructure and services yet, at the same time, benefiting the stakeholders involved.

Studies in most countries such as United States, UK and Singapore show most of the developers opt for a smaller development encompassing less than 50 units of houses per project which helps them to concentrate on their quality, decency in planning, and well coordinated project management beside a smoother authority process. (The Star, 2007)

4.0 Recommendations

Until to date, the solutions made to enhance the BTS concept is still unlikely to form a solid conclusions and deter the idea of having only one system in Malaysian housing buying scenarios. In addressing this, to Housing and Local Government Minister, Datuk Seri Ong Ka Chuan said, " We are still compiling feedback from the legal profession, developers and financial institutions to decide whether to make it mandatory for all developers to adopt the BTS. We are refraining from drastic action for fear of killing the construction industry". (The Sun, September 2008). Nevertheless, the move to promote the system is a noble approach and therefore shall be focused into two aspects of solutions, which is:

1) Economical/Financial: The never-ending issues related to abandoned housing project calls for the need of a creative financial model, which requires support of

financial institutions in the nation. The local financial institutions are urged to play a bigger role in supporting the Build-Then-Sell (BTS) mode of housing delivery since the Government has approved the 10:90 variant of BTS concurrent with the existing Sell-Then-Build (STB) system. Therefore, financial institution must share the burden of the developer by providing attractive financial packages that could help restore the glory of the construction industry in Malaysia.

At a dialogue session with managers from banks and financial institutions in the country at *Institut Bank-Bank Malaysia* in Kuala Lumpur in 2007, the National House Buyers' Association (HBA) said banks could also encourage builders who come to them for financing to adopt the 10:90 variant. At the briefing by HBA vice-president Datuk Goh Seng Toh, secretary-general Chang Kim Loong and other officials, the association pointed out that the 10:90 variant would be a "safer bet" for banks, as they will be dealing with developers with good financial positions and track records (New Straits Time, 2007). Thus, the housing industry will create a fair competition resulting the best housing scheme towards house buyers.

Developers will also become more committed to the industry, as they will have to use more internal funds for a project. Goh later added that the collateral of a bank will also not be affected, as the sale of units in a project will not be completed until the Certificates of Completion and Compliance (CCC) are issued. (2007) On the other hand, the bank will have a lesser job and made selling housing property simpler towards potential house buyers. The low holding costs and high gross development (GDV) of the group's land bank will help to cushion any unexpected downturns. As fittingly expressed by the executive director of SHL Consolidated Berhad:

"Property development is a game of the big boys. It is easy to buy land, but it is not easy to complete the project. Malaysia's properties are one of the cheapest in the world. I don't think Malaysians homebuyers lose out, if they were to compare themselves with the rest of the world" (New Straits Times, 2007).

With the implementation of the concept, the developer will save a big chunk of money in lieu of low-cost housing which involves almost 30% of the total development to be channel into new profitable projects and normal property development. Besides, the developer's earnings will surge by omitting the construction of show houses and having longer land holdings while launching those

show houses. While revenue will drop initially, the developer should have expected this as the properties will not be sold or launched unless they are completed. Yet, the net profit may jump when the units are completed.

Nonetheless, the price of a completed house is surely much more attractive as the completed properties has a certain leverage on the price factors. It is also learnt that, the financial institutions will be able to operate in a more secure environment, because it will have absolute control over loan disbursement and full control of the collateral. This concept additionally will secure the end-financier, as they will only be financing completed properties with titles and all ownership papers during vacant possession period in the exchange of the balance of the purchase price.

In short, the inclusion of financial model will provide the followings:

- 1) Personal hands-on from the financial institutions in providing more incentives towards developers who adopt the BTS concept i.e. attractive financial loans.
- 2) Lower land holding cost during construction period from the authority.
- 3) Faster authority process means shorter construction period and also means faster investment return towards developers.
- 4) The state and federal government should start imposing adequate 'capital requirements' for existing projects and new projects.
- 5) Lower financial loan towards small developers for housing construction fund sourcing.
- 6) Mutual agreement between government with private developers for vacant and unsold units to be sold to government staffs or bought by SPNB for national property (for renting and other return investment purposes)
- 7) Lower stamp duty and lower home loan interest.

Sustainability: Sustainable issues and development has currently becomes the global topic discussed by our societies since 1992 after the Earth Summit at Rio de Janeiro, Brazil. In responding to Local Agenda 21, the direction of Malaysian housing development should be in line towards sustainable development.

The Environment Quality Order of 1987 has identified 19 categories of development activities that require environmental impact assessments. The purpose of this order particularly focusing on the report established rather than the project itself. The essential of environmental clause will be included in every project development as to strengthen environmental control and preventive measures. Various acts related to

sewage and solid wastes, soil erosion and watershed management need strengthening. Local planning authorities are responsible for planning approvals, but face a shortage of technical personnel to regulate activities.

Malaysia's step in formulating a National Urban Policy is deemed to ensure a more organized urbanization process and well-integrated rural-urban development linkage. The main objective of Malaysia's housing policy is to give emphasis to the provision of adequate, affordable and quality housing for all Malaysians. The government is encouraging the private sector to work with public agencies. The scarcity and high cost of land in urban areas as well as the rising cost of labour and materials plague low-cost housing schemes.

The introduction of the new BTS (Built then Sell) concept was seen to cause a hindrance towards developing more low-cost housing in the nation with the exemption of the scheme under the new concept. However, the Prime Minister, Datuk Seri Abdullah Badawi in response has assured that the government guarantees that there will be a constant supply of low-cost houses. In areas where there is a need for low-cost houses, He later added that, "We will make sure that the government builds a certain number and the private sector — those that do not adopt the BTS system — covers the rest. There is a target under the Ninth Malaysia Plan for JPN, SPN, state agencies and the private sector to build low-cost housing. There is also a high demand for medium-cost houses. With the BTS system, a part of this demand will be met. Don't forget that medium-cost housing is also important. Many mid-level income people want this type of houses as opposed to low-cost houses, which have only 650 square feet of space. We are looking for a more balanced situation. We don't want to have just low-cost and high-cost housing. We want to address the medium gap as well" (The Star, 2007).

Private developers should start gearing towards a system, which encompasses sustainable design. In a recent price hike situation, according to Masters Builders Association of Malaysia the main materials for local contractors have raised by 25% on average since January this year. Following the recent electricity tariff hike, they should be looking at another 5% - 10% increase in the coming months. Hence one can safely conclude that the normal construction using post and beam should be made an alternative due to materials shortage and increase in the market. A new system shall decrease the reliant towards steel and cement product.

One cannot deny the fact that the new concept of BTS (Build then Sell) will increase the price of the property by 2% - 3 % since only completed units are being sold. Therefore, further studies to develop a new model for affordable housing using alternative materials would be the best long-term solution to address the problem. This will also help provide a new model of low-cost and middle cost housing scheme.

Therefore, the sustainable elements may be emphasized by introducing the followings in the new concept of housing development in Malaysia: -

- 1) Options for alternative design, by applying the absence of column and concrete beam (such as load-bearing wall partitions) for a low-key construction, therefore a large portion of money will be saved from steel usage and concrete works.
- 2) Allow for underground drainage with spotted maintenance manhole to avoid soaked drainage systems.
- 3) Increase the green portion at each house development and minimize earth cutting and earthworks.
- 4) Promote 'green' neighbourhood with providing ample guarded open space and parks.
- 5) Promote recycle programs and establish recycle centre in every housing area.
- 6) Integrated rubbish disposals program with systematic rubbish collected system being made under maintenance to be put under government monitoring.
- 7) Alternative individual septic tank for sewerage system with self-disposal design and at the same time minimizes usage on public sewerage.

5.0 Conclusion

The *Built then Sell* (BTS) concept seems not well received by many developers, including the Real Estate and Housing Developers' Association (REHDA). The paper compares and analyzes existing BTS concepts from the Australia and other country. The paper has extracted the key components in their context and execution of that system in their country and reasoning behind their inclusions so that we can make informed recommendations for BTS implementation in the Malaysian context.

In literature survey, the paper identifies key elements, particularly in the limitation of financial institutions in establishing the support links for the concept to be realized and more spurs from the government not only for the developers but also for the financial institutions, this is also supported by several studies made by professionals and related institutions that could be used for developing a theoretical model for BTS concept through financial modeling. The paper are proposing the inclusion of sustainable elements into the financial model that we believe could provide incentives to housing developers and other stakeholders involved by acknowledging alternative design with faster delivery towards house buyers and cheaper materials without compromising the quality of the final product.

The analysis will then guide us in recommending key constructs in determining the right policies, recommendations for Local Authority Planning approval and a new systematic and well coordinated acts which will benefited the Malaysian context for further integration with the Malaysian Agenda 21 policy. This paper contributes towards the development of a financial model for developing affordable quality housing in Malaysia.

6.0 References

- 1) Abdul Jalil, R. (2008, January, 21). *Pemaju konsep bina jual rumah diber insentif. Berita Harian.*
- 2) Dali, S. (2008, July 19). *A Frank assessment of property & construction.* The Star, pp. BW4
- 3) Geetha, K. (2008, May 29). *Puchong image at stake.* The Star, pp. M2,M3
- 4) Giam, S.K. (2008, September, 12). *Build-then-Sell concept not deferred, says Ka Chuan.* The Star. pp. 8
- 5) Jade, C. (2008, August 14). *Selangor to implement build-then-sell concept.* The Star, pp BW12
- 6) Low, C. (2008, June, 24). *Hope for Residents.* The Star, pp M7
- 7) Mokhtar, Alang,A. (2008, May 31). *Pembeli gesa pemaju siapkan rumah.* Sinar Harian, pp S14
- 8) Mujap, A. (2008, June, 24). *Pembeli boleh pindah status pinjaman.* Sinar Harian,pp S11
- 9) Ministry of Housing and Local Authority, (2006). *Agenda 21 for Housing development in Malaysia.* Retrieved July, 29, 2008, from <http://www.kpkt.gov.my/kpkt>

- 10) National House Buyers Association, (2008). *Abandoned, stalled, revived projects*. Retrieved June, 28, 2008, from <http://www.hba.org.my>
- 11) Scott. L (2004) Proceedings from the housing rights dialogue: *Finding New ways to protect and promote Housing Rights in Asia and the pacific*. Bangkok.
- 12) Tan, Y. (2008, May, 15). Contractors asking for price revision of projects. The Star, pp B3
- 13) The Editor. (2008, August, 11). *Smokescreens and detractions*. *New Straits Times*.
- 14) The Editor. (2008, May-June). *Abandoned Housing Who suffers & What Can be Done?*. *Utusan Konsumer* , pp. 12,13
- 15) Tee, L.S. (2007, June,30). *SHL banks on build and sell with success*. The Star