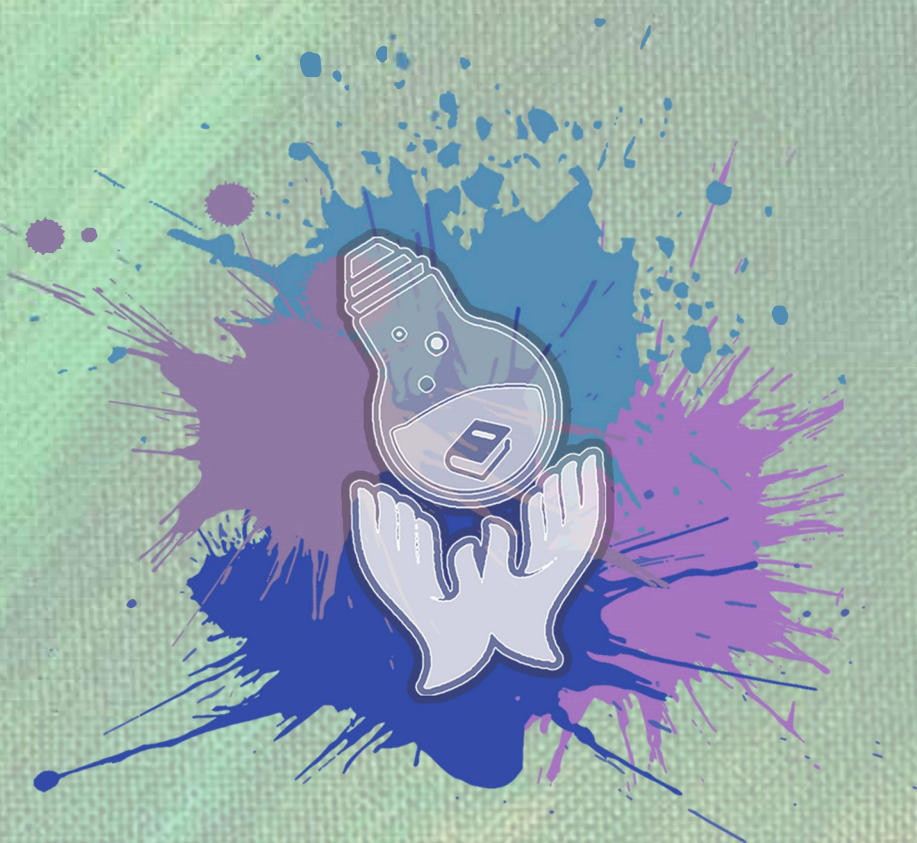




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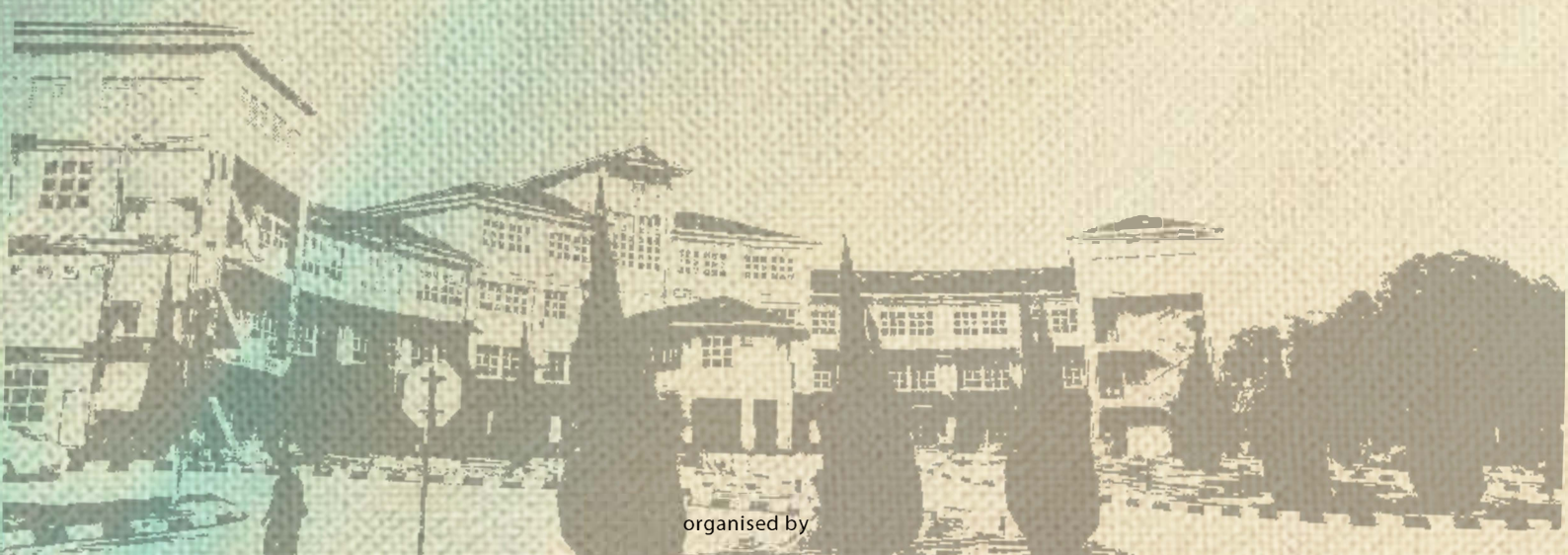
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SERI ISKANDAR CAMPUS

# THE CHALLENGES TOWARDS IMPLEMENTATION OF SUSTAINABLE HOUSING IN IPOH, PERAK.

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## **Abstract:**

Uncontrolled development in housing growth brings negative impact to the environment. Therefore, the concept of sustainable development was introduced to curb uncontrolled development. This research aims to identify the challenges of the developer and to determine the best way to encourage them to implementing the sustainable development in housing scheme project. Data was collected by the literature review and questionnaire. The questionnaire was distributed among the developer who were randomly selected that operating in Ipoh, Perak. Then, the data was analyzed by SPSS version 19. This research found that the level of the awareness and understanding on the sustainable development among the developer is moderate level. However, it shows majority of respondents ranked the lack of demands from homebuyer as the most challenges to implementation the sustainable development in housing scheme project. Therefore, more effort from the government and private sectors is necessary to boost this application and further stimulate action and strategies towards the sustainable development.

## **Keywords:**

Challenges; Sustainable; Development; Developer; Housing;

## **1.0 INTRODUCTION**

As a developing country, the growing of communities in Malaysia give a huge impact to the environment (Mohamed, 2015). These issues are often raised today as problems of uncontrolled development of housing growth as concern for the environment is not considered. With this concern in mind, housing and other social services become priority in today's development programs which aimed at improving the quality of life. However, the issue of sustainable housing are still new and not that familiar in this country. (Abu Bakar *et al*, 2009). Therefore, by adopting this sustainable housing concept, it could bring a lot a benefits in economy, social and most important is the environment. However, the implementation of sustainability concept in housing development in Malaysia is still in early stage (Zainul, 2010). Therefore, sustainable house is an effort made to reduce the impacts of conventional homes where is created to use less energy water, water and natural resources, to provide good air quality and comfort, and can be consider as sustainable development that improve the homeowners' lifestyle.

## **2.0 LITERATURE REVIEW**

Sustainable development comprises of three pillars which are social, economy and ecological which also has known as environment (Ekins, 2011). The three elements must be integrated to achieve sustainable development. In other words, emphasized of sustainable development is all about balancing the needs, demands and welfare of the natural environment with social fairness and development of economic (Bakar, 2007). The triple line bottom is the very famous theory related to the sustainable development which is this theory including the social aspect, economy and environment aspect.

### **2.1 Definition of sustainable housing**

According to US Green building Council (2011), in simple term, a green or sustainable house is uses less energy, water and natural resources, creates less waste and is healthier for the people living inside compared to conventional house. The application of green concept in houses is to focus on how to optimize the return to decrease the intake at the same time reduce the impact to environment. Sustainable house also must take the best use of direct lighting, wind rainfall to help supply directly energy and

water need by building's occupant in addition the building or sustainable house should be in multi-storey to maximize the land available for green space (Urban Ecology Austria, 2007).

## 2.2 Challenges of implementation sustainable house

Even tough sustainable concept has been introduced in Malaysia many years ago, but the development of the sustainable development is still in early stage. Many developer or practitioner in construction industry are not aware of this concept (Chen et al, 2015). Other, the professional practices such as project manager or contractor are not have an appropriate qualified, skill and knowledge in sustainable development in housing. The limited number of expert in development field cause developer and practitioner less implement the sustainable house concept in their project (Chen *et al*, 2015). Developer have to appoint the foreign expertise in order to implement the sustainable housing concept (Jamaluddin *et al*, 2008).As developer they need strong finance due to higher initial cost toward implementation the sustainable housing (Shafiei *et al.*, 2013). Based on the Chau (2014), mention that green technology is not available in Malaysia and if the developer trying to import technology from the overseas it will added extra cost on the housing development.

## 3.0 METHODOLOGY

A questionnaire survey was conducted by the researcher to collect the data. A total 100 of questionnaire were distributed among the developer. The list developer's companies was obtained from the Real Estate and Housing Developer's Association (REDHA). SPSS version 19 was used to analyze the data. The each part of the questionnaire was investigates to ensure the date reliable.

## 4.0 ANALYSIS AND FINDINGS

A total of 100 respondents have responded to this survey. Majority developer are male and these developer have experience from 1 to 30 years in this industry. About 59% of respondents have not been involve any sustainable development project due to lack of knowledge in the green project. 74 of 100 respondents (74%) consists of residential developer while only 26 respondents (26%) for non-residential developer in Ipoh, Perak.

Table 1: The challenges towards the implementation of sustainable development in housing scheme

Challenges	Frequency (n)	Percentage (%)	Ranked
Lack of demand from homebuyer	389	18.8	2
Lack of awareness from the industry practitioner	319	15.5	4
Lack of knowledge on green building technology	312	15.1	6
Lack of expertise in new green building	332	16.1	3
Lack of enforcement and incentives from government	318	15.4	5
High initial cost	391	18.9	1

The challenges have been clarified in the rank from the most challenges to least challenges by all the 100 respondents. 18.9% out of 100 respondents stated that the high initial cost is the most challenges lead to the less involvement and implement the sustainable house in Malaysia. Following, the lack of awareness among the industry practitioner was ranked forth (4) with 15.5% of respondents agreed with this as the less challenges implementing the sustainable development in housing scheme project. The lack of knowledge on green building technology are the least challenges ranked by the developer with the 15.1% respondents.

Table 2: the best way to encourage developer to implementing the sustainable development

No	WAYS	Min	Max	Mean	Median
1.	Conduct the conference ,seminar and workshop	2.00	4.00	3.52	4.00
2.	Introduce sustainable practice in institution of higher learning	2.00	4.00	3.39	3.00
3.	Incentives from the government	2.00	4.00	3.51	4.00
4.	Do more research and development (R&D) on sustainable development	2.00	4.00	3.08	3.00
5.	Introduce GBI for housing	2.00	4.00	3.02	3.00
6.	New enforcement/ revised regulation	2.00	4.00	2.81	3.00

Majority of the respondents strongly agreed with professional bodies should conduct the conference, seminar and forums to promote the awareness among the developer, the mean score 3.52 on a 4 point scale. The respondents also agree by incentive provide by the government as the important medium to encourage the developer to implementing the sustainable development. Majority 43% are agree that enforcement new or revised the regulation and guideline on the green home development but there are 38% are disagree with the 2.81 mean score.

## 5.0 CONCLUSION

Based on this overall research, the researcher found that the implementation of sustainable housing development in Malaysia especially in Perak is still in inferior level. In order to make successful it must a few factor and challenges that must be consider. According to the research, high initial cost are most challenges to implement of sustainable development. Therefore, public awareness about sustainable housing is an important component that lead to high demand. The government shall not increase the public awareness campaign but also improves their enforcement on regulation and guideline on the sustainable development. Finally, the government should highly reconsider to provide financial incentives to encourage the developer as a booster elements in increasing the implementation of sustainable development in housing scheme.

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