IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT PRACTICES (AFFORDABLE) IN THE HOUSING INDUSTRY

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Abstract

"The implementation of sustainable development practices (affordable) is indeed a must in the housing industry in Malaysia in general. Sustainable development practices promotes positive activities that will ensure fairness, effectiveness, divergence, less disparity, less discrimination, inexpensive, reasonable priced, pleasant design, serenity, mutual comfort and many other characteristics to the future house buyers. The developer and house buyers must converge at a point where no one is short changed due to limitation in the implementation mechanism of sustainable development practices in the housing industry. So, the housing industry needs to rectify and address the pressing issues related sustainable development. The objectives of the study are to investigate the relationships between inequalities, affordable and comfortable and implementation of sustainable development practices in the housing industry. This study adopted quantitative methods. The quantitative survey method, as the dominant approach, was used to collect data using convenience sampling from 384 respondents living in the District of Kubang Pasu, Kedah, Malaysia. Pearson correlations were used in analysing the data to answer all the objectives. In

general, the findings showed that the score for inequalities, affordable and comfortable in the sustainable development practices and implementation in the housing industry area good with an average value between 4.02 and 4.26. The results of Pearson correlation analysis show implementation of sustainable development practices that is also significant at level p≤0.01 and r = 0.143".

Key Words: sustainable development practices, housing industry, affordable

Introduction

"Buildings and structures enabled mankind to meet their social needs for shelter, to meet economic needs for investment and to satisfy corporate objectives. However, the satisfaction of these needs usually comes with a high price i.e. an irreversible damage to our environment. This lead to a growing realization around the world to alter or improve our conventional way of development into a more responsible approach which can satisfy our needs for development without harming the world we live in". "The opportunity for improvement arrived when a new philosophy called 'sustainable development' was introduced in 1987 [1] "Since that, many progressive world events had taken place to increase the awareness on environment and sustainability agendas such as Rio Earth Summit 1992, Maastricht Treaty 1992, Kyoto Conference on Global Warming 1997, Johannesburg Earth Summit 2002 and Washington Earth Observation Summit 2003 [2] "The ideas and strategies initiated by these world events have prompted positive actions and plans by many countries to implement and absorb this philosophy within their industries. Subset to this philosophy is sustainable construction, which described the responsibility of the construction industry to attain sustainability. Through sustainable construction concept, the construction industry can contribute in a positive and proactive manner towards environmental protection. Delivering sustainable construction requires action from all engaged in constructing and maintaining the structure or building including those providing design, consulting and construction services. It requires willingness to explore new territory in construction approach and prepare to adopt new products, ideas and practices[3] "As global interest on sustainability has steadily blooming, Malaysia should not fell short in its attitude on sustainability and sustainable construction. Malaysia needs to demonstrate that it can abide by this new interest and can compete in the global market. This research delves into the actions undertaken by the Malaysian government, non-government organizations and construction players in promoting sustainability in construction. Through extensive literature review, this research will discuss the commitment of the Malaysian government on sustainability agenda and the progress so far in the construction industry[4] This paper is an extension of a research on sustainable practices in the housing industry in Malaysia.

Literature Review

"Construction practitioners worldwide are beginning to appreciate sustainability and acknowledge the advantages of building sustainable. For example, the concept of green building costs lower than conventional method and saves energy as demonstrated by Hydes and Creech[5]This was further supported by [1, 6-8] who added that sustainable buildings will contribute positively to better quality of life, work efficiency and healthy work environment. [7, 9, 10] explored sustainability the business benefits of sustainability and concluded that the benefits are diverse and potentially very significant". "The approach of sustainable construction will enable the construction players to be more responsible to the environmental protection needs without neglecting the social and economic needs in striving for better living[11, 12]

Sustainable development has been intensely debated for more than twenty years, but real progress of our societies to become more sustainable is very slow. Therefore this special issue provides a forum for critical perspectives of Sustainable Development Research and Practice. Although a single special issue cannot address the entire array of issues pertaining to progress of sustainability related research, the selected papers highlight special aspects of sustainability research either due to their theoretical contributions or because they report on valuable empirical evidence[4, 13, 14] "The main goal of sustainability research should be to contribute to our understanding of sustainability problems and to develop and help to implement solutions to solve them. This can be described as the relevance of sustainability research. A precondition to gain relevance is the rigor of sustainability science: it has to be based on solid scientific principles and methods. Additionally it has to be regarded that Sustainable Development is dynamic and that it has both normative and practical aspects. It is concluded that sustainability science and practice should be based upon these four central aspects: rigor, relevance, normative aspects and dynamic ([2, 6, 15]

Problem of Statement

"The housing industry faces various challenges due to demand and supply factors. The industry also needs to accommodate changes according to development of new technology. Meanwhile Construction Industry Development Board of Malaysia has guidelines for the organization members. The sustainable development guidelines practices for developers are not specifically spelled out[5, 10] "Although the relevant federal ministry or agencies has rules and regulations as well as guidelines to be monitored by the developers during construction of any buildings, there are no specific guidelines for sustainable development practices. Construction industry must inevitably change its historic methods of operating with little regard for environmental impacts to a new mode that makes environmental concerns a centerpiece of its efforts. Previously, the concern on environment is relatively a small part of most of construction development. However, with the growing awareness on environmental protection due to the depletion of nonrenewable resources, global warming and extremity of destruction to ecology and biodiversity impact, this issue have gain wider attention by the construction practitioners worldwide. Many efforts are being directed to build sustainably in construction world. The direction of the industry is now shifting from developing with environmental concern as a small part of the process into having the development process being integrated within the wider context of environmental agenda. So, the housing industry needs to rectify and address the pressing issues related sustainable development[5, 9, 10]

Objectives and Methodology

The objectives of the study were to investigate, analyze the level of implementation, inequalities and affordable issues in the housing industry. Quantitative approached was used and random sampling was employed to collect data from 384 respondents.

Findings and Discussions

"This paper will discuss inequalities in the housing industry. Table 1 illustrates the outcome of the tested items on inequalities. Table 1, illustrates the relationship between house price and inequalities. The findings shows one hundred percent of the respondents agreed that the developers decides the property price. [16]Dirk Wittowsky et al. (2020), discussed in detail the determining factors of pricing of houses. Classical factors such dwelling characteristics also plays important role, accessibility also

determines the prices, but most importantly the developers ultimately decides the housing prices".

Table 1

Inequalities and the Sustainable Development Practices

Test Item	Scale	Frequency (%)	Min	Median	SD
The house price is determined by the developer.	HNA - Highly Not Agreeable NA- Not Agreeable LA- Less Agreeable A- Agreeable HA- Highly Agreeable	0 (0.1) 0 (0.1) 10 (2.5) 251 (65.2) 123 (32.0)	4.29	4.00	0.528

N = 384; Overall Min = 4.40

"Table 2, illustrates the findings on house buyers do not emphasis on sustainable development practices. Surprisingly only 0.4% of the respondent's belief that potential house buyers emphasis on sustainable development practices in the housing industry. So, 99.6% of the respondents register that house buyers do not emphasis on sustainable development practices in the housing industry. Studies analysing the behaviour of potential property buyers have been carried out for a long time, especially on developed markets [4, 11, 12, 15]., "They revealed that buyers rely on similar criteria when choosing residential property, although they attach different importance to those factors. The most important criteria for buyers were related to the technical aspects of property, including the building's architectural style, age, usable area, number of rooms and the availability of transport and public services. The results of studies which analysed primary data and attempted to model the property market also revealed that selected qualitative factors, which are difficult to define, may also be underestimated[2] 1988). "The above particularly applies to the influence of residential appeal and scenic value of property on the buyers' choice of location. Such studies are important because they directly address the subject matter which may be disregarded in preference analyses. They shed a new light on the consumers' environmental awareness, pointing to neglected areas and the need for changes in environmental education. The choice of residential location is largely determined by the consumers' financial standing, preferences and needs which arise in view of their personal circumstances, such as the number of children. The relevant literature and the applicable appraisal standards indicate that property prices are influenced not only by technical and functional considerations, but also by location, including commuting time and distance between the property and important destinations[12]

Table 2

I Inequalities and the Sustainable Development Practices

Tested Item	Scale	Frequency (%)	in	Median	SD
House buyers do not emphasis on sustainable development practices.	HNA -Highly Not Agreeable NA- Not Agreeable LA- Less Agreeable A- Agreeable HA- Highly Agreeable	0 (0.0) 2 (0.4) 4 (1.0) 140 (36.5) 238 (62.1)	.60	5.00	0.533

N = 384; Overall Min = 4.40

[4, 11]" strongly suggests that the availability of sustainable architectural practice in the United Kingdom, which is characterised by the contrasting approaches of participatory/low-tech design and technical/performance-orientated design and is represented on an original framework. The absence of simultaneous technical and participatory working reveals opportunities for new forms of practice currently not recognised in a profession, which favours more conservative approaches. Furthermore, the relative complexity of high-tech solutions, which require specialist design engineering, may alienate users from the design process. Traditional building techniques and low-impact solutions may foster non-architect engagement, through tangible and simple methods. Yet, by allowing for alternative theoretical possibilities, this research suggests there may be approaches beyond mainstream architectural validation. Greater engagement with innovative technologies for smaller firms and stronger participatory approaches for those that are involved in high performance and technical design could enhance practice".

Table 3

Inequalities and the Sustainable Development Practices

Tested Item	Scale	Frequency (%)	Min	Median	SD
House buyers do not emphasis on sustainable development practices.	HNA -Highly Not Agreeable NA- Not Agreeable LA- Less Agreeable A- Agreeable HA- Highly Agreeable	0 (0.0) 2 (0.4) 4 (1.0) 140 (36.5) 238 (62.1)	4.60	5.00	0.533

N = 384; Overall Min = 4.40

Table 3, shows that the property design does not reflect the seriousness of the developer about sustainable development practices in the housing industry. The result shows 100% of the respondents indicate that the property design does not reflect the sustainable development practices. This is seriously evident in the lower and middle range of residential units.

Table 4 illustrates the results of the tested items of inequalities and sustainable development practices. The average min was registered 4.40, which denotes majority of the respondents feel that neglecting sustainable development practices may foster inequalities among potential house buyers. The rich and famous has more say in terms of design, location, price, materials and other components compare to the community in the lower income bracket. "Jibrin Katun [14] commented in their research paper that major influencing factors were environmental/neighbourhood factors, urban form, location, socioeconomic characteristics, national economic performance (micro and macro) and policy were major determinants of housing prices. The paper also stressed that monetary status also plays vital in deciding the house prices. Strangely, sustainable development practices do not display any kind of influences in the house prices".

Table 4

Inequalities and the Sustainable Development Practices

Test Item	Scale	Frequency (%)	Min	Median	SD
The house price is determined by the developer.	HNA	0 (0.1)	4.29	4.00	0.528
	NA	0 (0.1)			
	LA	10 (2.5)			
	A	251 (65.2)			
	HA	123 (32.0)			
Market forces are the sole determines of the house quality.	HNA	0 (0.0)	4.30	4.00	0.474
	NA	0.0)			
	LA	3 (0.8)			
	A	264 (68.8)			
	HA	117 (30.4)			
The property design does not reflect the serious of the developer about sustainable development practices.	HNA	0 (0.0)	4.43	4.00	0.531
	NA	0 (0.0)			
	LA	7 (1.8)			
	A	205 (53.4)			
	HA	172 (44.8)			
Dot know the properties of sustainable development practices used the housing industry.	HNA	0 (0.0)	4.28	4.00	0.487
	NA	0 (0.0)			
	LA	7 (1.7)			
	A	261 (68.2)			
	HA	116 (30.1)			
Do not understand the importance of sustainable development practices in the housing industry.	HNA	0 (0.0)	4.39	4.00	0.517
	NA	0 (0.0)			
	LA	5 (1.4)			
	A	223 (57.9)			
	HA	156 (40.7)			
Not given opportunity to express opinion on sustainable development practices in the housing industry.	HNA	0 (0.0)	4.43	4.00	0.527
	NA	0 (0.1)			
	LA	5 (1.2)			
	A	206 (53.8)			
	HA	172 (44.9)			
No forum on sustainable development practices in the housing industry.	HNA	0 (0.0)	4.53	5.00	0.518
	NA	0 (0.0)			
	LA	4 (0.9)			
	A	175 (45.5)			
	HA	205 (53.5)			
Sustainable development practices in the housing industry will erase discrimination due to status	HNA	0 (0.0)	4.37	4.00	0.516
	NA	0 (0.0)			
	LA	6 (1.6)			
	A	228 (59.4)			
	HA	150 (39.0)			
Sustainable development practices in the housing industry is alien to buyers.	HNA	0 (0.0)	4.33	4.00	0.516
	NA	1 (0.3)			
	LA	5 (1.4)			
	A	243 (63.40)			
	HA	135 (34.9)			
House buyers do not emphasis on sustainable development practices.	HNA	0 (0.0)	4.60	5.00	0.533
	NA	2 (0.4)			
	LA	4 (1.0)			
	A	140 (36.5)			
	HA	238 (62.1)			
Average			4.40	4.00	0.515

N = 384; Overall Min = 4.40

Note:

HNA Highly Not Agreeable NA Not Agreeable LA Less Agreeable

A Agreeable HA Highly Agreeable

Conclusion

"The implementation of sustainable development practices (affordable) is indeed a must in the housing industry in Malaysia in general. Sustainable development practices promotes positive activities that will ensure fairness, effectiveness, divergence, less disparity, less discrimination, inexpensive, reasonable priced, pleasant design, serenity, mutual comfort and many other characteristics to the future house buyers. The developer and house buyers must converge at a point where no one is short changed due to limitation in the implementation mechanism of sustainable development practices in the housing industry. The objectives of the study were answered, the respondents expressed mere shortage of understanding, education, and effective communication between the stockholders must not deter the bigger issues at hand, which is sustainable development practices which will benefit the community, developers and the government (Raman .M. 2019).

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