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Sustainable affordable Housing Delivery System (HDS); A comparative study of Indonesia and United Kingdom best practices

To cite this article: M P Monika *et al* 2021 *IOP Conf. Ser.: Earth Environ. Sci.* **708** 012077

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Sustainable affordable Housing Delivery System (HDS); A comparative study of Indonesia and United Kingdom best practices

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Abstract. Every country has its way to provide a Housing Delivery System (HDS). The law of the Republic of Indonesia Number 1 of 2011 explained that the government provides and facilitates the people on housing and human settlement through the National Affordable Housing Program (NAHP) and One Million Houses Program. The United Kingdom's government is improving the quality and quantity of properties for renting and also providing housing support for vulnerable people based on the Housing and Regeneration Act 2008. The ambition of adding one million new homes by 2020 is very attractive. Indonesia and the United Kingdom have the same aims at planning and building better places to live for everyone with affordable prices. Although the countries got a similar program, the housing delivery system in Indonesia needs to transform for a better achievement of its housing delivery system. This study will be focusing on Housing Delivery System (HDS) differences between Indonesia and the United Kingdom for sustainable affordable housing programs. The objective of this study is to identify the differences between housing delivery systems in Indonesia and the United Kingdom for affordable housing. This study aims at investigating the comparative analysis of data about housing delivery systems in Indonesia and the United Kingdom. This study will provide valuable information to improve the housing delivery system in Indonesia based on the United Kingdom for affordable and social housing.

1. Introduction

1.1. Background of the study

“A housing delivery system can be considered as a social configuration, relating to the production and distribution of housing, with more or less formalized relations between the actors performing the necessary functions in the housing process” [1].

The law of the Republic of Indonesia number 1 of 2011 explained that the government provides and facilitates the people on housing and house settlement. Yet, according to Statistics Indonesia, by 2016 the homeownership rate in Indonesia is 78.7 per cent and the rest is either renting or have other arrangements. Therefore, the government committed to providing affordable housing and constructing



houses for low-income communities (LIC) through programs like One Million Houses Program and National Affordable Housing Program (NAHP).

The Republic of Indonesia has a large area and is located on the equator, in a cross position between two continents and two oceans that makes Indonesia has various advantages. But, Indonesia is also located in an area that has geographic, geological, hydrological and demographic conditions that are prone to disasters with quite high frequency. Located in the Pacific Ring of Fire, there is at least one significant volcanic eruption and one major earthquake in the country every year. With the result of that, Indonesia needs a good Disaster Risk Management (DRM) that systematic, integrated and coordinated.

DRM is defined as “The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities to lessen the adverse impacts of hazards and the possibility of disaster” [2].

The United Kingdom (UK) has an excellent housing delivery system (HDS). The UK’s government aim is improving the quality and quantity of properties for rent also providing housing support for vulnerable people. According to The National Audit Office (NAO), The quality of housing in England has improved in recent years. In 2001, the Department set out a definition of a decent home. By April 2013 there were approximately 1.1 million fewer non-decent social rented homes than when this standard was introduced. At the centre of the government’s plans is its ambition of adding one million new homes by 2020, the achievement of which does not require there to be a substantial increase in current levels of house building.

Indonesia and the UK are having the same aims to plan and build better places to live for everyone at an affordable price. Indonesia has a similar program to the UK which is One million houses program. Although they have a similar program, both of the countries are having a different HDS. HDS in the UK is known better than HDS in Indonesia. Therefore, Indonesia has to look up for HDS in the UK.

This study will be focusing on HDS differences between Indonesia and the UK affordable and social housing programs. The objective of this study is to identify the differences between HDS in Indonesia and the UK for affordable housing. This study aims at investigating the comparative analysis of data about HDS in Indonesia and the UK. This study will provide valuable information about HDS in Indonesia and the UK for affordable housing.

1.2. Objective and significance of the study

The objective of this study is to identify the differences between HDS in Indonesia and the UK for affordable housing by the regulatory framework, institutional framework, and implementation framework, including the DRM.

The Significance of this study is expected to provide a benchmark for improving the HDS in Indonesia by finding the gap between HDS in Indonesia and the UK for affordable housing from the issues obtained from the literature study.

1.3. Scopes and limitations of the study

The scopes of this study as follow:

- Literature study aims to determine the parameters of the study and to analyze the differences between Indonesia and the UK HDS for sustainable affordable housing based on the literature study
- Data validation based on the literature study for HDS in Indonesia and the UK
- Data analyze
- Results
- Conclusions

The limitation of this study is to investigate the regulatory framework, institutional framework, and implementation framework of HDS in Indonesia and the UK for affordable housing based on Literature Study. For the DRM in Indonesia, is only up to the mitigation part for a natural disaster, man-made disaster.

2. Literature review

2.1. Housing delivery system in Indonesia

According to Ying, a housing delivery system can be considered as an organizational and institutional arrangement within a broad social structure that is related to the production, distribution and consumption of housing. It should be stressed that the housing delivery system is not limited to shelter. It refers to the overall housing environment which includes shelter as well as the related physical infrastructure at the neighbourhood level [3].

The law of the Republic of Indonesia Number 20 of 2011 is the primary source of affordable housing law and house settlement in Indonesia. This law defines the housing and house settlement as a unified system consisting of the development, housing implementation, residential implementation, maintenance, prevention and quality improvement for slum housing and slum area, provision of land, funding, financing system and community role.

The Flats, also known as affordable housing, is one of the types of the house based on The law of The Republic of Indonesia Number 1 of 2011 article 22 point 2. The scarcity of land is one of the considerations of the development of the flats, especially in the urban area. Also nowadays housing development concept with a landed house system is changing to strata title system due to the scarcity of land. The development planning of flats relates to policies taken by the government and/or local government about flats implementation. The flat development is regulated mostly in the Law of The Republic of Indonesia Number 20 of 2011 about Flats [4].

The Law of The Republic of Indonesia Number 20 of 2011 about Flats explained that The flats aim to guarantee the realization of affordable and sustainable flats, improve efficiency and effectiveness of space utilization, reduce the growth of slum areas, leads to the development of urban areas, meet social and economic needs, empower stakeholders, and provide legal certainty in the provision, occupancy, management and ownership.

The institutional framework of HDS for affordable housing consisted of the collaboration of the Governmental Institutions, Communities and Business Entities both at the central and in the regional area. These three institutions need each other to build better housing for Low Income Community (LIC).

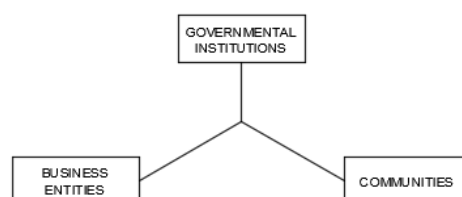


Figure 1. Institutional framework of HDS for affordable housing

2.2. Housing delivery system in The United Kingdom

The United Kingdom is a union consisting of four countries: Scotland, England, Wales and Northern Ireland. Each part of the United Kingdom has a distinct system of local government. The UK is surrounded by the Atlantic Ocean, the North Sea, the English Channel and the Irish Sea. It is governed by a parliamentary system, which is located at the capital, London. Local governments in the UK are responsible for a range of community services, including environmental matters, social services, planning and housing.

The Housing and Regeneration Act 2008 of the United Kingdom is An Act to establish the Homes and Communities Agency and make provision about. According to England Shelter, affordable housing is let at low rents on a secure basis to those who are most in need or struggling with their housing costs. Normally councils and not-for-profit organisations (such as housing associations) are the ones to provide social housing. Social housing is affordable housing that is made for low-income people. Affordable housing is distributed based on its local council's allocation scheme [5].

Affordable housing also known as 'Council Housing' is housing provided by Councils (local government) let to people in housing need. This type of housing is managed by local councils in each region. Not like Indonesia, everyone can buy affordable housing and we have to wait according to the waiting list by the local authorities. It is possible to apply for homes either directly through the housing association or the local council.

Some sections of the UK Government view DRM as one of the key areas that require future attention, as "important drivers of change could substantially increase future risks of disasters, notably the increasing frequency of extreme weather events due to climate change, and large population increases in cities exposed to natural hazards" [6].

3. Methodology

The top of the framework will begin with Literature Research to find a relevant reference. The objects of this research are construction projects in Padang, West Sumatera and London, United Kingdom. The next step is Identify Comparative Analysis to Identify the aspects of Indonesia and the UK HDS and the output is The differences table by aspects. For the conclusions, there will be the differences and the gap between Indonesia and the UK for affordable housing based on literature study.

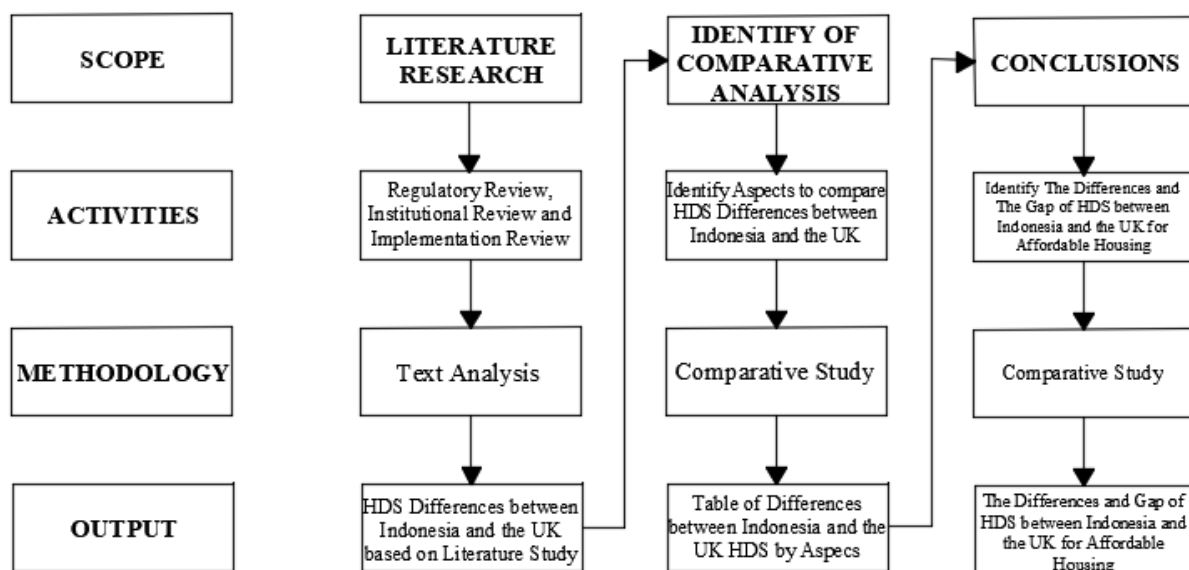


Figure 2. Conceptual framework

The parameters or aspects of study require information about the regulatory framework, institutional framework, and implementation framework of housing delivery systems in Indonesia and the United Kingdom for affordable housing, which will be examined and described by various theoretical based. There are several steps taken; problem identification; aims of the study; literature study; and determine the required parameters. The literature study using library books, scientific journals and the internet as a study source.

The results of this study are to find out the differences and the gap of the housing delivery system in Indonesia and United for sustainable affordable housing and social housing, by the law, regulatory

framework, institutional framework, and implementation framework including its DRM. This study will provide valuable information about affordable HDS in Indonesia and the United Kingdom.

4. Results and discussion

From the literature study, we can get the summary on the differences of the regulatory, the institutional and the implementation framework of HDS for affordable housing between Indonesia and the UK. Following the signing of this study, which is expected to provide a benchmark for improving the HDS in Indonesia by comparing and finding the gap about HDS in Indonesia and the UK for affordable housing, this study required data validation to get more details about the implementation of the frameworks in real life.

4.1. Literature study for Housing Delivery System (HDS) in Indonesia and the United Kingdom (UK)

4.1.1. *The regulatory framework in Indonesia and the UK* From the study that had been done in Indonesia and the UK, of the differences for the regulations of HDS for affordable housing are obtained as follow:

Table 1. The Differences for The Regulatory Framework of HDS for affordable Housing in Indonesia and the UK

THE ASPECTS	HOUSING DELIVERY SYSTEM	
	INDONESIA	UNITED KINGDOM
Complexing of Law	Complex, The regulations are separated in several laws	Simple, all regulated in The law of
Access to the regulations	Quite Difficult	Easy
Type of house	<ul style="list-style-type: none"> • Affordable house • Public house • Self-help house • Special house, and • Statehouse 	<ul style="list-style-type: none"> • Ownership by discounted purchase • Shared ownership • Fixed shared ownership • Rented housing, and • 'Conventional' local authority housing
Procurement Process	Not Complex but tricky	Complex, especially at the planning process. It takes a long time.
Tariff	<ul style="list-style-type: none"> • Value Added Tax (Pajak Pertambahan Nilai or PPN), free of charge if the income is less than Rp. 4,500,000 for a month • Commercial tariff • Basic Tariff • Social Tariff 	<ul style="list-style-type: none"> • Land Tax • Stamp duty tax • Capital gains tax, and others tariff that arranged in Community Infrastructure Levy (CIL) and section 106
Disaster Risk Management	There's no regulation focusing on HDS only but all arranged in The law of The Republic Indonesia Number 24 of 2007 concerning Disaster Management	The regulation is more focusing on water resource management, Flood (single-hazard) risk management and climate change
Problems	Data access to the report is quite difficult and not transparent enough	

HDS for affordable housing, or in this case flats in Indonesia is arranged in The Law of The Republic of Indonesia Number 20 of 2011 on flats. The regulations of the UK and Indonesia are quite different. However, each framework is related to both regulations that relate to affordable HDS. Based on the literature study that has been done, there are about 20 laws and regulations related to HDS in Indonesia. In this study, the laws and regulations summarized are limited to Ministry Regulation. Provincial Regulation and Regional Regulation are not included due to its differences in every regional area. The list of regulations can be found in the Appendix.

Unlike Indonesia, the regulatory framework in the UK for affordable housing arranged in The Housing and Regeneration Act 2008 and Town and Country Planning Act 1990. In this study, the laws and regulations summarized are limited to UK regulation. State regulation is not included due to its differences in every state area.

4.1.2. The institutional framework in Indonesia and the UK. The institutional framework of HDS for affordable housing consisted of the collaboration of the Governmental Institutions, Communities and Business Entities both at the central and in the regional area. These three institutions need each other to build better housing for Low Income Community (LIC).

Table 2. The Differences for The Institutional Framework of HDS for affordable Housing in Indonesia and the UK

THE ASPECTS	HOUSING DELIVERY SYSTEM	
	INDONESIA	UNITED KINGDOM
The Institutions	<ul style="list-style-type: none"> • The central government (owner) • The regional government (user) • The contractor 	<ul style="list-style-type: none"> • The central government • The people (user) • The contractor • The housing agency
Disaster Risk Management	National Agency for Disaster Management (<i>Badan Nasional Penanggulangan Bencana or BNPB</i>)	The Civil Contingencies Committee (COBRA)
Provider	<ul style="list-style-type: none"> • The government • The developer (private sector) 	<ul style="list-style-type: none"> • The government • The landlord • The developer
Communities	There is no specific community or public consultant that heard people's aspiration	There are neighbourhood planning communities that may draw up their plans for the area and later might be adopted as a formal plan if the community agrees and the plan accords with the local development framework
Problems	<ul style="list-style-type: none"> • There are actors from the institutions who do not understand the written regulations • Some conflicts between institutions due to misunderstanding and provocation 	

The institutional framework of HDS for affordable housing in the UK is quite similar to Indonesia. Indonesia has the same Business Entities Institutions with the UK but for the Government Institutions and the Communities are different due to the law and regulation in each country. The summary of the institutional framework of HDS in Indonesia and the UK can be found in the

Appendix. The following table is the institutional framework differences between Indonesia and the UK HDS for affordable housing;

DRM is very important in Indonesia since its one of the world's most disaster-prone countries. The National Agency for disaster management or known as BNPB was formed as a coordination centre between various institutions and agencies that related to disaster management, both natural disaster and man-made disaster.

Unlike Indonesia, the UK is not putting DRM as its top agenda. For more than nineteen years, there has been a shift and dramatic change in purpose and organisation of 'civil protection' in the UK. The term of civil protection is used to refer a government-approved system to protect its people either from a natural disaster like floods and man-made disaster like a terrorist attack.

4.1.3. The implementation framework in Indonesia and the UK. The implementation framework of HDS for affordable housing in Indonesia is based on the Regulation Framework. The implementation framework for both of the countries was concluded from the law and regulatory from each country. The important points of the implementation of flats based on the regulatory framework in Indonesia and the UK can be found in the Appendix.

Table 3. The Differences for The Implementation Framework of HDS for affordable Housing in Indonesia and the UK

THE ASPECTS	HOUSING DELIVERY SYSTEM	
	INDONESIA	UNITED KINGDOM
Slums	A lot of slums area	there is none, redesigned and replaced with better public housing
Sustainability	Lack of sustainable development around the building area	Sustainable development with some programmes like climate change act, energy act and renewable and low carbon strategies for the building area.
Development steps	From down to top but not as complex as the UK	From down to top but with more complex requirements
Affordability	Quite Affordable	Not that affordable
HDS process	Not too complicated and the process is not as long as the UK, for example, the tendering lasts in one or two months	complexities of the planning process, the tendering is lasted up to six months
Modification	The tenant is allowed to modifying subsidized houses such as rebuilding the house and added some new parts	The tenant should ask some permission from the council before modify their house
Housing tenant	The government already had a list of the tenants of the house before the house builds	everyone can live in the house, there is no specific list for the tenants
Disaster Risk Management	National Agency for Disaster Management (<i>Badan Nasional Penanggulangan Bencana</i>)	The Civil Contingencies Committee (COBRA)

THE ASPECTS	HOUSING DELIVERY SYSTEM	
	INDONESIA	UNITED KINGDOM
Problems	<ul style="list-style-type: none"> • Construction if the affordable houses are not right on target. There are still found where the tenant of the house is not from the low-income community • There are found tenants who owned more than one units of affordable houses and then leased to others with a higher price • Unevenness of the affordable housing development in each area • Although HDS has been regulated by laws and regulations, in its implementation, there are still found the housing development that is not following written regulation • The housing development not sustainable and integrated enough. also inconsistency of adjustments between the law and regulations 	<ul style="list-style-type: none"> • Imbalance in supply and demands • Affordability Issues • Supply of Land for affordable housing • HDS takes a long time due to its complexity

From the table, we can conclude that there are different problems for each country, which means every country faces different problems, and the problems itself need a different solution. The above problems are obtained from HDS for affordable housing in West Sumatra, Indonesia and from London, the UK. These problems can be found or not in other regional areas in Indonesia and the UK due to the cultural differences, regions and conditions in the area.

5. Results and discussion

5.1. Conclusions

- From the study that has been done, The regulatory framework in the UK is way better than in Indonesia. Indonesia has a different Housing Delivery System with the UK due to the law of the country. Housing Delivery System (HDS) for affordable housing in Indonesia is regulated in more than 20 laws and because of that, there are still found the people who did not recognize some of the written regulations. In the other hand, the UK only has two laws that regulate the HDS. The differences in the regulatory system make a difference in the institutional framework and the implementation framework in each country.
- The institutional framework in the UK is better than in Indonesia. because the institutional framework in the UK is more detailed. The institutional framework in Indonesia is a little bit similar to the Business entity of the UK's, but the government institution and the communities are different. In Indonesia, there still be found problems that happened between the actors so the HDS not works that well.
- The implementation framework of Indonesia and the UK are different, both of the countries also having different problems. Good HDS policies will not achieve a magnificent sustainable development if they are not implemented properly. Also, effective implementation of policies depends on good governance.
- Both of the countries did not have a special regulation for DRM in HDS. However, there are regulations in building construction, but not specifically for affordable housing. The two

countries also have different concerns about written DRM regulations due to the different geographical location and priorities of each country. Just like HDS, DRM protocols are formulated in an integrated and systematic manner both from the central government, provincial and local governments.

5.2. Suggestions

5.2.1. Suggestion for the regulation. The government needs to update the regulations regarding HDS periodically following the development of the knowledge so that Indonesian regulations are not left behind by existing regulations at the international level and also, Indonesian regulations can be equivalent to international standards for a better HDS in Indonesia. The policy in HDS should be referred to sustainable integrated development, by combining the environment, economic and social aspects so it would improve the welfare of the LIC.

5.2.2. Suggestion for the institutional framework. The socialization for updated regulations is expected to be done to the actors involved so that the actors can understand the updated regulations. Each of the actors involved is recommended to be more cooperated because it requires goal-directed intervention to increase our potential in achieving well sustainable development.

5.2.3. Suggestion for the disaster risk management. Indonesia is very vulnerable to disasters, nowadays and the government needs to update the DRM regulations because several points have not been regulated like DRM in HDS regulations. Also, because of the lack of public knowledge about hazard and DRM, the government needs to conduct socialization about it to the community.

5.2.4. Suggestion for the colleagues. Because this research is far from perfect, for colleagues who wish to continue research HDS are suggested to do the following:

- Adding more research respondents to get more accurate results.
- Verified the questionnaire for better results
- Use this research as a reference for the next research

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