International Journal of Psychosocial Rehabilitation, Vol. 24, Issue 06, 2020
ISSN: 1475-7192

Cadastre for native land: a legal perspective from Malaysia and Indonesia

*[1]Toh Ming Liang, [2]Tan Liat Choon , [3]Looi kam Seng , [4]Tan Wee Vern,
[5]Muhamad Uznir bin Ujang , [6]Thoo Ai Chin ,[7]Nurlaila binti Ali

***ABSTRACT**--Cadastre is an indispensable element in land administration system to facilitate the land development and urbanisation across the globe. In pursuing for a more advanced, sustainable, and technological cadastre system, many countries tend to neglect the existence of the traditional-based tenure system, the native customary tenure system. Inevitably, the integration of modern land administration systems with native customary tenure poses a huge challenge for most of the developing countries. Towards bridging the gap between the two, this study aims to provide insights regarding the legal framework of cadastre for native land; at the same time enables the comparison between Sarawak, Malaysia, and Indonesia with the overarching objective to provide enhancements for the current practices. Being descriptive in nature, this study adopts comparative case studies between Sarawak and Indonesia. Guided by a conceptual framework, the comparison consists of 10 best-practice indicators with 3 hierarchical level of specifications. The study revealed that there are sufficient land legislations regarding the cadastre practice for native land in Sarawak and Indonesia, but the efficiency is somehow impeded by the implementation gap between policy and actual practice. Towards the end of the paper, the recommendations are provided.*

***Keywords--** Native Customary Tenure; Cadastre; Sarawak; Indonesia*

I. INTRODUCTION

Past decades have witnessed the significance of the cadastre and land policy in catalysing the land development around the globe. Indeed, a sound land administration system is indispensable in every country (Williamson *et al.*, 2010). As a part of the land administration system, the cadastre survey serves the purpose of recording ownership by precise survey and mapping of boundaries (Unece, 1996). From the historical context, the initial purpose of cadastre was intended to raise revenue through taxation of land; which is known as the fiscal cadastre (Williamson, 1985). However, cadastre continues to undergo evolutions to cater the growing demands especially from land development. From another point of view, cadastre is interrelated to modern land administration which encompasses two basic components; cadastral survey and land registration. Hence, a

[1]*Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, 81310 Skudai, Johor, mltoh217@gmail.com*

[2] *Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, 81310 Skudai, Johor.*

[3] *Department of Survey and Mapping Malaysia, Jalan Sultan Yahya Petra, Kampung Datuk Keramat, 54000 Kuala Lumpur, Malaysia.*

[4] *Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, 81310 Skudai, Johor.*

[5] *Faculty of Built Environment and Surveying, Universiti Teknologi Malaysia, 81310 Skudai, Johor.*

[6] *Azman Hashim International Business School, Universiti Teknologi Malaysia, Skudai, Johor, Malaysia.*

[7] *Land and Survey Department Sarawak, Tingkat 6, Menara Pelita, Jalan Tun Abdul Rahman Ya'akub, 93050 Petra Jaya, Kuching, Sarawak, Malaysia.*

Received: 27 Feb 2019 | Revised: 20 Mar 2019 | Accepted: 30 Apr 2020

paramount role is given to modern land administration, which is to deliver sustainable development in either developed or developing countries (Williamson *et al.*, 2010).

In pursuing for a more advanced, sustainable, and technological land administration system, many countries tend to neglect the existence of the traditional-based tenure system, the native customary tenure system. Inevitably, one of the major challenges faced by most of the developing countries is the integration of modern land administration systems with native customary tenure system (Kalabamu, 2000). This scenario is more obvious for the case in Sarawak, one of the State in Malaysia. As pointed by Ngidang (2005), it is arduous to codify the native *adat* system into statutory laws as the *adat* system is based on culture. The coexistence of native customary land rights and modern land right in not a new phenomenon in Sarawak, Malaysia and Indonesia. Ngidang (Ngidang, 2005) concluded that the current land policies and practices in Sarawak are weakening the harmony between the *adat* and formal land laws; leaving the natives vulnerable in claiming their rights. Similarly, legal dualism in Indonesia impedes good land management, causes conflicts from the contradiction between customary laws and formal laws (Bell *et al.*, 2012).

Native customary rights over land is a complex issue, involving the multi-ethnic, multi-religious, and multi-cultural of the native society (Bulan & Locklear, 2008). As such, the governance of native land is therefore a crucial aspect in ensuring the harmony between the communities and sustainability of the land development. Here, a question arises; are the land legislations in Sarawak and Indonesia sufficient and effective in handling the administration of native land? In answering the research question, the following subsection outlines the aim and structure of the study.

1.1 Aim and structure of the study

This study aims to provide insights regarding the legal framework of cadastre for native land; at the same time enables the comparison between Sarawak and Indonesia with the overarching objective to provide enhancements for the current practices. This study is organised into six sections. Section 1 introduces the background of study, research question as well as the aim of the study. Section 2 commences with the concepts of native land and native customary rights, and ends with reviewing the best-practices of native land governance. Section 3 shed lights on the institutional background of Sarawak and Indonesia. Section 4 discussed the methodology of the study and presents the conceptual comparative framework for the study. Section 5 presents the comparative analysis between Sarawak and Indonesia in terms of the legal framework of cadastre for native land. Finally, section 6 provides the recommendations and conclude the study.

II. NATIVE CUSTOMARY RIGHT

Native customary right (NCR) is often associated with the cultural, tradition and belief of the native communities and it is more apprehensible from a historical perspective. Moreover, there is no international accepted definition of the term ‘indigenous people’ as the identifying criteria for a person to be an indigenous are broad and generally based on the historical context (Roy, 2005). Hence, the term native is used in this paper as the definition of indigenous people. In Sarawak, NCR is related to a body of customs known by the generic term ‘Indonesia Adat’ which is used to describe customary rules or laws (Porter, 1967). Customary rules or laws is the

norm encompasses the correct social behaviour, rules for ceremonies, lands, and dispute resolution mechanism (Bulan, 2007). In Indonesia, *adat* is perceived as a fluid concept, encompasses a wide range of customs and traditions which are unique for each of the major ethnic groups (Tyson, 2010). Generally, NCR or *adat* is a traditional governing system of the native communities to maintain the harmonious and cohesiveness of the society.

2.1Native land

Aforementioned, native customary right (NCR) covers a wide range of customs related to living. When NCR is associated with land, the expression becomes native customary rights over land or native customary tenure; which is amongst the most debatable issues in NCR (Fong, 2011). The term 'native land' is used interchangeably with native customary right over land in this paper, which refers to the land where the natives enjoy the rights to occupy, to hunt, to farm, etc., in accordance to their custom or *adat.* However, in this modernasation era, *adat* law has turned into an obstacle to establish a unifed national land law in Indonesia (Bedner & Arizona, 2019). Vast idle native land in Sarawak awaits and needs to be developed through proper survey, adjudication and issuance of title (Osman & Kueh, 2010).

2.2Best Practices of Cadastre in Native Land

The term 'best practices' included the recommendations for improvement as well as indicators for measuring the success in the native land administration. Land policy reflects on the way governments deal with land issues, it should include the objectives to eradicate poverty and strengthening the role of vulnerable groups such as the natives (Enemark & Molen, 2008);(Fao, 2012). In terms of the legal framework, the recognition and safeguard of customary land rights are equally vital for the natives. Burns (Burns, 2007) includes the formal recognition of customary rights as one of the qualitative indicators to assess the customary system. Also, as pointed by Fao (2012), the State should recognise and respect all legitimate tenure rights including the vulnerable groups. At the same time, there should be minimal overlapping rights and contradiction rules between customary law and statutory land law (Freudenberger, 2013);(Institute, 2015). To effectively safeguard the tenure rights, the legal framework must encompass the documentation that register and map the individual and communal land rights (Deininger *et al.*, 2012);(Fao, 2012).

Policy and legal framework open space and facilitate the cadastre of native land, which consists of land registration and cadastral survey. To ensure the completeness and reliability of the land registry, the procedure of service delivering should adopts simplified and locally suitable technology (Arko-Adjei *et al.*, 2010). Also, the records in the registry such as information on customary land should be transparent and accessible to community members (Fao, 2012). On the other hand, the cadastral survey of native customary tenure should be done in a participatory approach which involves the affected native land owners (Arko-Adjei *et al.*, 2010);(Sam, 2019). Additionally, SUHAKAM (Suhakam, 2013) added two other criteria to ensure the effectiveness of the cadastral survey practice, viz. clear guideline on the cadastral survey procedure and utilisation of appropriate survey technique in the boundary survey.

III. CASE STUDY BACKGROUND

Sarawak, Malaysia is blessed with abundant of land resources, covering an area of 124,450 square kilometers of land mass with the population of 2.79 million. Interestingly, the natives in Sarawak composed more than two-third of the total population in Sarawak (Dosm, 2010). On the other hand, Indonesia is an archipelago country with more than 17,000 islands and a home to diverse ethnic groups known as indigenous people of Indonesia (Roslidah & Komara, 2016). Land institutions are responsible to manage and administrate the vast land area in Sarawak and Indonesia. This make the institutional framework the main mechanism to operationalise the legal and policy framework. To put it simply, institutional framework transforms policies into actions. Hence, the following subsections shed lights on the institutional framework related to land in Sarawak and Indonesia.

3.1Land institutional framework in Sarawak

Under the ninth schedule of Federal Constitution of Malaysia 1957, land is categorised as a State matter. The powers to administrate and manage the land in Sarawak are vested under the government of Sarawak. Precisely, the Ministry of Urban Development and Natural Resources of Sarawak is responsible for the implementation of land polices through the Land and Survey Department. The Sarawak Land and Survey Department is a multi-purpose organisation with an integrated system of matters related to land, survey, planning and valuation (Osman & Kueh, 2010). It is a leading organisation in managing and administrating the land in Sarawak. Figure 1 shows the land institutional framework in Sarawak.

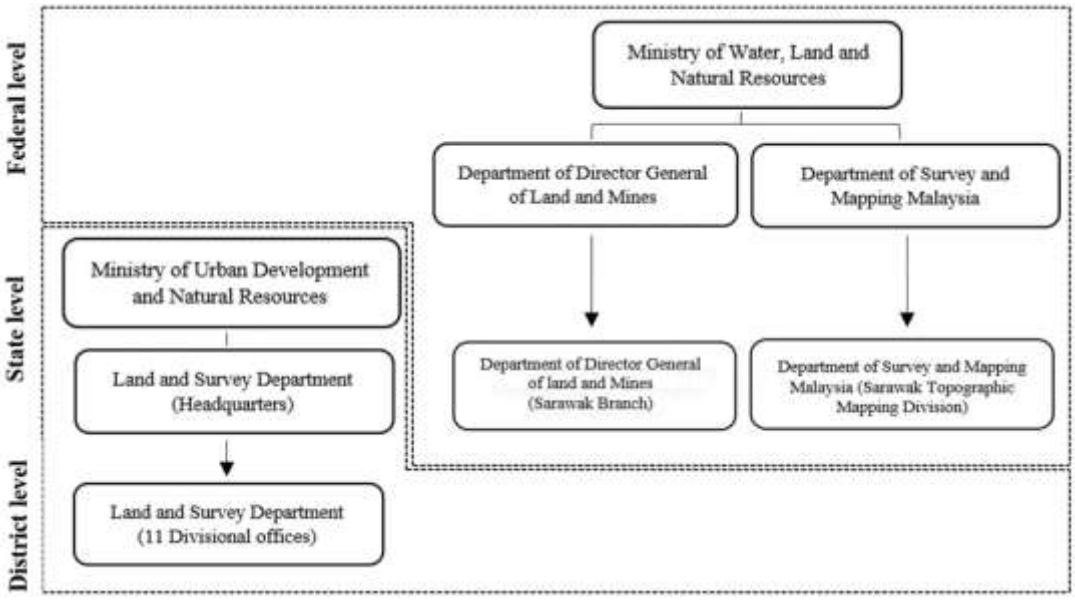

Figure 1: Land Institutional Framework in Sarawak

As illustrated in Figure 1, there are two federal organisations which have their branch established in Sarawak. However, their duties and powers are limited as compared to Sarawak Land and Survey Department. The Department of Director General of Land and Mines (Sarawak branch) mainly deals with land applications that involved Federal projects. On the other hand, Department of Survey and Mapping Malaysia (JUPEM) caters for cadastral survey and mapping in Peninsula Malaysia. In Sarawak, JUPEM is responsible for national boundary

survey. Hence, the Sarawak Land and Survey Department is the main land agency in Sarawak, with the integrated functions to cope with the 4 core functions of land administration, viz. land tenure, land use, land value, and land development (Osman & Kueh, 2010).

3.2 Land institutional framework in Indonesia

Under Article 33 of the 1945 Constitution of the Republic of Indonesia, State are vested with the rights to control resources including land, water and natural resources for the benefits of its people. Generally, the land administration and management in Indonesia can be categorised into forest and non-forest land. Out of 190 million hectares of land, 70% is classified as forest estate which vested under the jurisdiction of Ministry of Forestry; whilst 30% of the land is classified as non-forest areas which is administered by the National Land Agency (BPN) (Worldbank, 2014). Forest land, or known as Tanah Negara, is own by the Government of Indonesia where no formal land rights can be created (Yusuf, 2011). On the other hand, the National Land Agency is responsible for the implementation of land policies for the non-forest land. Figure 2 shows the administrative structure of National Land Agency (BPN) in Indonesia.

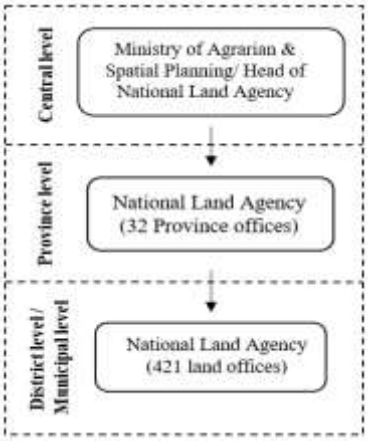

Figure 2: Administrative Structure of BPN

The land institutional framework in Indonesia is far more complicated than the above figure. In fact, out of the 30% of land that is classified as non-forest land, only 10% is administered by BPN whilst the rest are controlled by military, police and other government institutions (Bell *et al.*, 2012). On top of that, there are at least 11 ministries involved in land management, caused the complications of land arrangements that often contradict with one another (Institute, 2015).

IV. METHODOLOGY

This study adopts comparative case study approach to answer the research question outlined in Section 1. Case study research is a qualitative strategy which allows the researcher to explore a programme event, activity, process, or people. However, this study only utilises documentation and archival records as the data input, with some supports from the informal interviews with the officers in Sarawak Land and Survey Department. There are two main phases in the study; theoretical and empirical phase. To facilitate the comparative case study, the

theoretical phase is to conceptualise a comparative framework which is based on the best-practices in native land administration as discussed in Section 2.2. The conceptual framework is shown in Figure 3.

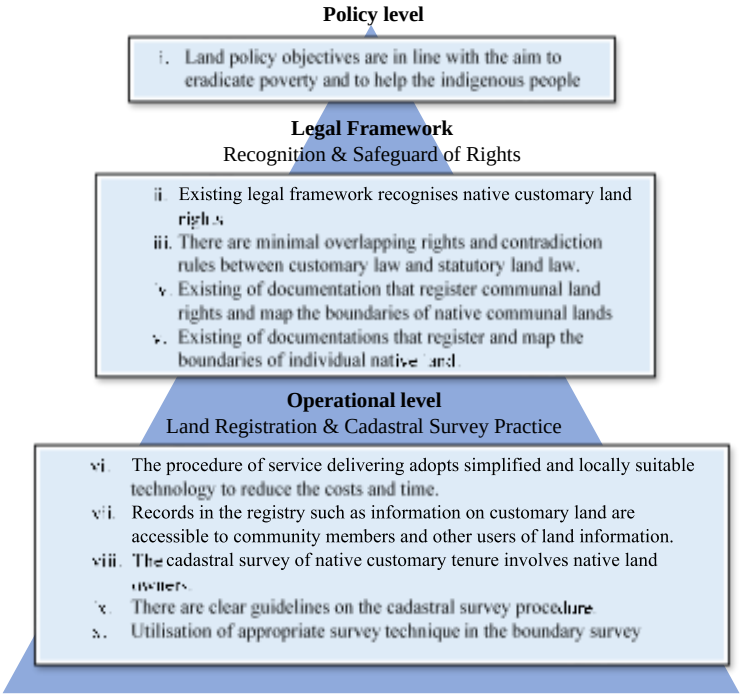

Figure 3: Conceptual comparative framework

Next, the empirical phase will be the highlight of the paper. It aims to explain and compare the legal framework of cadastre for native land in Sarawak and Indonesia. The findings from the comparative analysis will enable the formulation of enhancements for the current practices.

V. RESULTS AND FINDINGS

As stipulated in Figure 3, there are three levels of hierarchy in the comparative framework, associated with their own indicators to measure the success of the cadastre in native land. Each of the indicators is explained in the following subsection.

5.1 Policy level

For the purpose of this study, there is only one indicator at the policy level which intended to identify whether the land policy objectives are helping the natives or not. In Sarawak, the land policies have been formulated to improve the living standards of the rural by systematic development of agriculture land (Osman & Kueh, 2010). One of the land policies is the initiative is known as the *Konsep Baru* which aims to promote the joint venture scheme (JVS) between native communities and private oil palm plantations (Cramb, 2011). Under this scheme, customary land owners can place their land in trust with the Land Custody and Development Authority (PELITA), which forms a joint venture scheme (JVS) with private investor. However, the effectiveness of this JVS is very much questionable. Amongst the concerns raised by the involving native land owners are the land indiscriminately

by the developers without taking account of fruit groves and cemeteries; inconsistency of upfront payment received; poor wages for the native workers; monoculture practice; uncertainty about the future dividends and the status of the projects (Cramb, 2011). Despite the project provides the facilities and infrastructures for the natives, the overall impact of JVS is biased and in favour of the investing company (Ngidang, 2002).

On the other hand, the National Long-Term Development plan (RPJPN 2005-2025) of Indonesia is a 20-year development plan with three stages of implementation, aims to achieve the development goals and keep the country in pace with other countries. However, in the second stage, amongst the 11 national priorities discussed by the National Medium-Term Development Plan 2010-2014, there is an absence of any reference related to improving land administration (Worldbank, 2014). Also, in Indonesia, there is a political norm which priorities the rich over the poor in terms of natural resources distribution (Institute, 2015). This common practice impedes the efficiency of the national laws and regulation in resolving land tenure issues.

.

5.2 Legal Framework

Legal framework empowers the cadastre system of the native land, allowing the system to be shaped and implemented accordingly to the provisions in the land legislations. Thus, it is vital to delve into the legal framework which includes the recognition and safeguard of native customary rights over land. There are 4 indicators under this theme as discussed in the following subparagraph.

i. Existence of legal framework that recognises native customary land rights

In Sarawak, the current main land legislation is the Sarawak Land Code (Cap. 81) which inherited some of the provisions from the previous land legislations that recognised NCR over land (Fong, 2011). In other words, the Land Code itself does recognise NCR to an extent as shown in Figure 4.

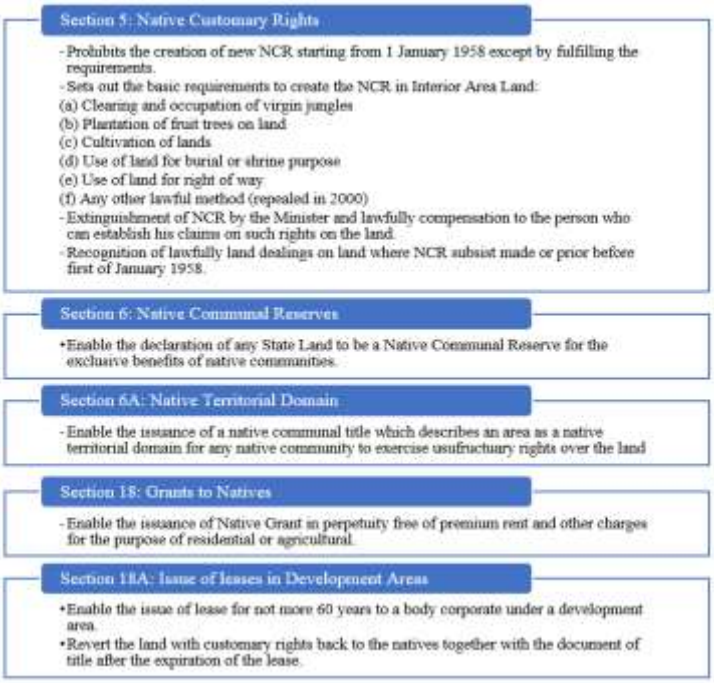

Figure 4: Legal framework for NCR

In Indonesia, the famous national land law, the Basic Agrarian Law (BAL) 1960, serves the purpose to bridge the gap between the western land laws and the traditional *adat* land laws by recognising the traditional concepts and institution while providing the formal registration of individual rights to land (Heryani & Grant, 2004). Under Article 16 of BAL, the rights on land that can be granted includes the rights of ownership, exploitation, building, use, lease, opening-up land and collect forest product. Generally, the BAL recognises private ownership and allows the State to control all unregistered land which is not classified as forest land. In Indonesia, the native customary land law is known as *Adat*, which includes a communal-based approach to regulate the land rights traditionally (Ter Heegde *et al.*, 2011). *Adat* land can only be registrable once it has been rendered into one of the seven private land rights recognised under Article 16 of BAL (Bakker *et al.*, 2008). Article 5 of the BAL stated the agrarian law shall be the *Adat* law as long as it does not contradict to other National and State legislations. Thus, the Government regulation No.24/1997 stipulated the regulation of the land registration and vested the duty of land registration under the National Land Agency.

ii. Minimal overlapping rights and contradiction rules between customary law and statutory land law.

In Sarawak, customary laws are the rules and norms of a native society that are established through long usage. One of the customary laws is the rights to claim for the territorial domain and communal forest in accordance to the *adat* system, and such rights are initially codified by Section 5(2)(f) of the Land Code (Table 1). The deletion of Section 5(2)(f) is contrary to the original *adat* system, it is biased against the natives and in favour of the State to have more lands for development (Ngidang, 2005). The claimant against the native territorial domain and communal forest is then replaced by the issuance of native communal title under the Land (Native Communal Title) Rules, 2019. However, according to the rule, the native communal title is issued to a trustee appointed by the Minister instead of the natives themselves. Also, usufructuary rights are given instead of indefeasible rights. Besides, Nelson *et al.* (2015) identified the contradictions between the Forest Ordinance 1958 (Cap. 126) and the Bidayuh Native Customary Law in terms of ownership, loses of rights, and management of forest. Based on their findings, the Bidayuh Native Customary Law (Adat Bidayuh Order, 1994) is currently inadequate to protect the rights and guarantee the future of the Bidayuh ethnic.

In Indonesia, *Adat* is declared as a primary source of land law but simultaneously restricted by formal land laws under the BAL. This ambiguity causes the problematic areas in land management. Legal dualism impedes good land management, causing conflicts and contradictions between the customary land laws and the formal land laws (Institute, 2015). One of the main contradictions is that the customary land laws mostly cater for the usage of land while ignoring the absolute or exclusive rights and ownership to the land. Also, as stated by World Bank Worldbank (2014), the land laws, regulations and policies in Indonesia are mutually inconsistent with a variety of interpretations. The complexity of the legal framework on non-forest land is evidenced by a total of 582 laws, decrees and regulations related on land (Bell *et al.*, 2012).

iii. Existence of documentation that register communal land rights and map the boundaries of native communal lands

In Sarawak, prior to the Land Code (Amendment) Ordinance 2018, the provision related to communal usage of land falls under Section 6 of the Land Code (Figure 4). This Section 6 enables land to be declared as a Native Communal Reserves for the usage of the native communities in accordance to their customary law. However, no communal title to be issued under this provision. In year 2018, a new initiative for communal title is launched

under the Land Code (Amendment) Ordinance 2018 which come into force on the 1st August 2019. To facilitate the initiative, the State Cabinet has published a subsidiary legislation known as the Land (Native Communal Title) Rules 2019. According to the rule, a provisional native communal title (Section 7) is first being issued in favour of the person or body or persons entitled, with the specification of the land description, approximate area and land location. For the native communal title to be issued, a survey under Section 8 is mandatory to mark out and survey the land which has been issued with a provisional native communal title.

In Indonesia, the communal land right is known as the *ulayat* right. Before the ruling of the Constitutional Court No. 35/2012, the land registration system does not attempt to register *ulayat* rights of forest-dwelling communities that fall under the category of forest land (Mitchell *et al*., 2004). The ruling of the Constitutional Court No. 35/2012 enables the customary lands to be excluded from the State forest land which in turn open spaces for the acknowledgement of the customary communal land (Institute, 2015);(Bedner & Arizona, 2019). This is followed by a series of ministerial regulations on the registration of communal land in forest areas. The latest Regulation of the Head of the National Land Agency No.18/2019 provides the procedure for the administration of communal land (*Hak Ulayat*). Under Article 5 of the regulation, the administration of the communal land consists of three crucial parts, viz. surveying, mapping, and registration. However, the process of the recognition is draggy and there are many customary land claimants who are not entitled to the benefits from the ruling (Myers *et al*., 2017). Also, the practical implications of such legislative changes are limited (Bedner & Arizona, 2019).

iv. Existence of documentations that register and map the boundaries of individual native land.

In Sarawak, individual native title is issued under Section 18 of the Sarawak Land Code 1958 (Cap. 81). The requirements for the creation of NCR is spelled out in Section 5(2) of the Land Code. Therefore, document of title is issued to the natives who had acquired the ownership in accordance to Section 5(2) with free of premium and all charges for a term not more than 99 years. To facilitate the process, Survey Circular 3/2010 on the standard survey operation procedure for NCR land is issued as a guideline to conduct the survey. According to the circular, the first step is the identification of the NCR land by conducting a perimeter survey for the purpose of gazetting the area as Native Communal Reserve under Section 6 of the Land Code. The second step is the issuance of individual title to the respective native land owners within the gazetted Native Communal Reserves.

In Indonesia, individual rights are clearly stipulated in BAL and further detailed in other regulations such as the Government regulation No.24/ 1997, Regulation of the Head of the National Land Agency No 3/ 1997, No 1, 2010, No 7/ 2019, to name a few. The mentioned regulations mostly cater for the land registration in Indonesia. Under Article 19 of BAL, the land registration covers the survey and mapping of land, the registration of land rights and the issuance of certificates of rights on land. There are two types of first-time land registration under the Government regulation No.24/ 1997, namely, systematic land registration and sporadic land registration. Systematic land registration is implemented in area involving large number of contiguous parcels while sporadic land registration is implemented upon request by a single right-holder. In terms of the customary land, a Customary Land Statement Letter, or known as the *Surat Keterangan Tanah Adat*,, is issued by the customary institutions in Central Kalimantan, Indonesia for the natives to obtain a certificate for individual land ownership (Institute, 2015). Generally, *Adat* land can only be registrable by a certificate after it has been rendered into private land rights that are recognised under Article 16 of BAL (Bakker *et al.*, 2008).

5.3. Operational level

As the third level of the conceptual framework, the comparison focusses on the institutional aspect in administrating the native land. There are 5 indicators which cater for the effectiveness of the land registry and the cadastral survey practices.

i. Simplified and locally suitable of the service delivering procedure

In Sarawak, the land administration systems are integrated under a single department known as the Sarawak Land and Survey Department. According the respondents in the study conducted by Salfarina (2014), there are no overlapping processes or excessive requirements in the land service delivering where every single procedure is clear and apprehensible. Also, the process of service delivering such as the issuance of native title under Section 18 of the Land Code is outlined in land administration circular 2/2006. The circular provides simple guidelines to facilitate the process of native title delivering, viz. attachment of a rough plan showing the location, boundary, and the access to lot; ensuring the area is clear of any disputes; assisting the natives in preparing the rough plan; investigate the status of land with aerial photo; notification of the claimant schedule. However, in practical, some cases showed that the handling of native applications for NCR land is inconsistent, cased the delay in delivering the titles (Suhakam, 2013).

In Indonesia, the procedures for land service delivering are stipulated in the Head of the National Land Agency Regulation No. 1/2010. The regulation encompasses the type of service, requirements, cost, time, procedure and reporting for the land registration. However, as stated by World Bank (Worldbank, 2014), the land offices did no provide an acceptable standard of service and failed to keep pace of the land titling process. Also, the high cost of the initial registration including the survey costs, stipulation of certificate and unrecorded informal fees is impeding the effectiveness of the land registration (Mitchell *et al.*, 2004).

ii. Accessible of the records in the land registry

In Sarawak, the 'under one roof' principle enables the public to get all the information from one department. In this information era, the records are also accessible via the Land and Survey Information System (LASIS) by using the internet and mobile application platforms (Liang *et al.*, 2019). However, the internet platform is ineffective especially for the rural areas with no internet access. Hence, it is vital for the State to consider multiple aspects in serving the needs from different level of communities (Salfarina, 2014).

In Indonesia, the information about the land owner and the corresponding land book and survey certificates and can only be accessed authorised government officers as stated by the Head of the National Land Agency Regulation No.6/2013. Also, the service standard of the land registry is not accessible by the public with the help of any media expect by visiting to the Land Agency Offices (Institute, 2015).

iii. Participation of natives in the cadastral survey of native land.

In Sarawak, there is no any provisions in the law which require the free, prior and informed consent (FPIC) principle in the land development projects. Although FPIC principle is not require by the laws, the State government is practising effective communication with the affected natives through the dialogue sessions. As stipulated in Section 5.1 of the Survey Circular 3/2010, it is mandatory to conduct dialogue with the relevant native community before the commencement of any cadastral field work. The main purpose is to explain the nature of the survey operation and the related survey personnel in conducting the cadastral survey. In additional, Section 5.5 encourages the surveyors to seek full cooperation and involvement of the natives during the field survey operation.

In Indonesia, it is compulsory for the communities to participate in the spatial planning process according to the existing regulations (Institute, 2015). Under Article 6 of the Government Regulation No. 68/2010, the role of the public is to provide information related to the spatial planning and collaborate with the Government or community members in the planning process. As explained by World Bank (Worldbank, 2014), the communities are engaged in a titling process to produce a community land profile that encompasses the information on village boundaries, land distribution and existing land disputes. After that, the villagers are recruited as a part of the systematic adjudication teams and given appropriate training.

iv. Clear guidelines of the cadastral survey procedure for native land

In Sarawak, the survey of land, including native land, for the purpose of title issuance is stipulated under Part VI under the Land Code. This part of the Land Code is supported by the Land Surveyors Ordinance 2001 (Cap. 40) which controls the cadastral activity in Sarawak. To further facilitate the issuance of native title under Section 6 and Section 18 of the Land Code, the Survey Circular 3/2010 clearly explains the Standard Operation Procedures (SOP) for the survey process. Aforementioned, the circular generally consists of two main steps; the first step involves the perimeter survey of the boundary of the whole area to be gazetted as Native Communal Reserves; the second step involves the survey of individual lot within the Native Communal Reserves. Overall, in the delivery system, the state land administration follows a standard procedure for the land services (Salfarina, 2014).

In Indonesia, at the national level, Article 14 of the Government Regulation No 24/1997 articulates the activities of survey and mapping, namely, making cadastral base maps, fixing parcel boundaries, producing cadastral maps, making land registers (*daftar tanah*) and survey document (*surat ukur*). This government regulation is facilitated by the Head of the National Land Agency Regulation No.3/1997 which undergone second amendment by the Head of the National Land Agency Regulation No.7/2019. The principle of 'from whole to part' is reflected in the regulations where a cadastral base map showing the boundaries of an area intended to be registered is tied to the national coordinate system. Within the base map, a land parcel map is produced and followed by the land registration and issuance of the survey document.

v. Utilisation of appropriate survey technique for the cadastral survey of native land.

In Sarawak, Rule 4 of the Survey Circular 3/2010 sets out the survey standard for the native land. The perimeter survey and individual lot survey should be conducted in First class cadastral survey standard as stipulated in Land Surveyor Ordinance 2001 (Cap 40). Hence, under Section 31 of the ordinance, the Land Surveyors (Conduct of Cadastral Land Surveys) Rules 2003 was published. According to the second schedule of the rule, the permissible angular misclosure for the first class cadastral is 60" or better while the permissible linear misclosure is 1:8000 or better. Also, as stipulated in Rules 25 (2), the survey technique used in connection with NCR clams is limited to the marking and recording of survey measurements of the perimeter boundaries only.

In Indonesia, terrestrial ground survey, photogrammetric survey or other suitable methods of the survey techniques are used to make the cadastral base map as well as the survey of land parcel as stated in the Government Regulation 3/1997. Plot identification number (*Nomor Identifikasi Bidang Tanah*, NIB) is given to the land parcels that has been demarcated in either systematic land registration or sporadic land registration. A measuring image (*gambar ukur*) is another mandatory document showing the land parcels together with their respective NIB. To increase the efficiency of the survey, satellite images with inexpensive GPS measurements are recommended to be include in the regulations (Worldbank, 2014);(Mitchell *et al.*, 2004).

VI. CONCLUSION AND RECOMMENDATIONS

This research provides insights about the cadastre for native land, particularly from the legal perspective in Sarawak, Malaysia and Indonesia. There are 10 indicators with 3 vertical levels of specifications as illustrated in the conceptual framework (Figure 3). Based on the above findings, the recommendations are provided in 3 thematic areas. Firstly, at the policy level, there are implementation gaps between the policy and the real practice. Of course, the formulation of the land policy might be just a political mean with the unknown intention behind the decisions. Therefore, a native-oriented land policy focusing in helping the natives is much needed in Sarawak and Indonesia. Secondly, legal framework plays a crucial role in the process of formalising the native customary right. In Sarawak and Indonesia, the legal framework to recognise the native customary tenure is somehow limited to a certain extent, exacerbated by the contradicted rules between customary law and statutory land law. Therefore, it is recommended to seek a balance between the customary law and statutory land law in drafting new laws or new initiatives. This imperative step is to ensure the development of native land is in tandem with the development of the nation; at the same time facilitates the formalisation of the native customary rights in Sarawak and Indonesia. Thirdly, at the operational level, the service delivering procedure, i.e. the issuance of native title, has failed to keep pace with the current demands. Also, there is a lacking of the accessibility and transparency principle in administrating the native land. Records in the land registry is difficult to be accessed by the natives especially in rural areas. Hence, the corresponding recommendations including the enhancement of the institutional capacity in dealing with native affairs, appropriate consultations with the native communities and enabling the mechanism to detect and deal with illegal staff behaviours.

In answering the research question outlined in Section 1, the study deduced that the land legislations in Sarawak and Indonesia is sufficient, but somehow ineffective in handling the administration of native land. In this case, the more does not necessarily means the merrier. In Indonesia, there are a total of 582 laws, decrees and regulations related on non-forest land, added to the confusion and complexity of the legal framework (Bell *et al*., 2012). In Sarawak, there are 10 statutes (excluding subsidiary legislations that may affect the native customary rights) (Sam, 2019). The ineffectiveness of the legal framework is probably caused by the implementation gaps between the policy and the actual practice. Too often, policies are never been directly translated into actions without undergo various changes and adaptions during the process. Of course, there are many factors that caused the implementation gaps which are beyond the scope of the study. Hence, this study serves as a stepping stone that might postulate to more study on this field.

REFERENCES

1. Arko-Adjei, A., Tuladhar, A., De Jong, J., & Zevenbergen, J. (2010). Customary Tenure Institutions and Good Governance. Paper presented at the FIG Congress 2010: Facing the Challenges - Building the Capacity, Sydney, Australia
2. Bakker, L., Semedi, P., Bakker, L., Berkeley, U. C., Barbara, J., Michael, P., . . . Han, R. (2008). "Can we get hak ulayat?" Land and community in Pasir and Nunukan. Asia Pacific Journal of Anthropology, 15(4), 376-390.

3. Bedner, A., & Arizona, Y. (2019). Adat in Indonesian Land Law: A Promise for the Future or a Dead End? The Asia Pacific Journal of Anthropology, 20(5), 416-434.
4. Bell, K. C., Srinivas, S., & Martinez, J. (2012). Reforming Indonesia'S Complex Legal Environment for Land Governance: Complementary Top-down and Bottom-up Approaches - A Review of the Land Sector Issues (Forestry and Non-forestry) Paper presented at the International conf. in Regulatory Reform on Indonesian Land Laws for the Peoples Welfare Jakarta, Indonesia
5. Bulan, R. (2007). Native Title in Malaysia A 'Complementary' Sui Generis Right Protected by the Federal Constitution. Australian Indigenous Law Review, 11(1), 54-79.
6. Bulan, R., & Locklear, A. (2008). Legal perspectives on native customary land rights in Sarawak Kuala Lumpur: Suhakam.
7. Burns, T. (2007). Land Administration Reform Indicators of Success and Future Challenges. Washington DC: World Bank.
8. Cramb, R. A. (2011). Re-inventing dualism: Policy narratives and modes of oil palm expansion in Sarawak, Malaysia. Journal of Development Studies, 47(2), 274-293.
9. Deininger, K., Selod, H., & Burns, A. (2012). The Land Governance Assessment Framework: Identifying and Monitoring Good Practice in The Land Sector. Washington, D.C: The World Bank.
10. DOSM. (2010). Total population by ethnic group, sub-district and state, Malaysia. Department of Statistics Malaysia.
11. Enemark, S., & Molen, P. (2008). Capacity Assessment in Land Administration Capacity Assessment in Land Administration. Denmark: The International Federation of Surveyors (FIG).
12. FAO. (2012). Voluntary Guidelines on the responsible governance of tenure of land, fisheries and forests in the context of national food security. Rome: Committee on Food Security, Food and Agriculture Organization of The United Nation.
13. Fong, J. C. (2011). Law on Native Customary Land in Sarawak (1st ed.). Selangor, Malaysia: Thomson Reuters Malaysia Sdn Bhd.
14. Freudenberger, M. (2013). The Future of Customary Tenure. Options for Policymakers. Retrieved from
15. Heryani, E., & Grant, C. (2004). Land Administration in Indonesia. Paper presented at the 3rd FIG Regional Conference, Jakarta, Indonesia
16. Institute, E. I. (2015). Central Kalimantan Land Governance Assessment. Retrieved from
17. Kalabamu, F. T. (2000). Land tenure and management reforms in East and southern africa. Land Use Policy, 17(4), 305-319.
18. Liang, T. M., Choon, T. L., Vern, T. W., Ujang, M. U. B., & Chin, T. A. (2019). A Preliminary Study on The Formation of Land Legislation and Cadastre System in Sarawak, Malaysia. International Journal of Engineering and Advanced Technology, 8(5C), 788-797.
19. Mitchell, R., Prosterman, R., & Safik, A. (2004). Land Policy Challenges in Indonesia: Final Project Report of the Land Law Initiative. Retrieved from
20. Myers, R., Intarini, D., Sirait, M. T., & Maryudi, A. (2017). Claiming the forest: Inclusions and exclusions under Indonesia's 'new' forest policies on customary forests. Land Use Policy, 66, 205-213.
21. Nelson, J., Muhammed, N., & Rashid, R. A. (2015). An Empirical Study on Compatibility of Sarawak Forest Ordinance and Bidayuh Native Customary Laws in Forest Management. Small-scale Forestry, 15(2), 135-148.

22. Ngidang, D. (2002). Contradictions in land development schemescthe case of joint ventures in Sarawak, Malaysia. Asia Pacific Viewpoint, 43(2), 157-180.
23. Ngidang, D. (2005). Deconstruction and Reconstruction of Native Customary Land Tenure in Sarawak. Southeast Asian Studies, 43(1), 47-75.
24. Osman, S., & Kueh, H. U. (2010). Land Administration, Land Management and Spatial Information in Sarawak, Malaysia. Paper presented at the FIG International Congress, Sydney.
25. Porter, A. F. (1967). Land administration in Sarawak: an account of the development of land administration in Sarawak from the rule of Rajah James Brooke to the present time, 1841-1967. Government Printer: Kuching.
26. Roslidah, N., & Komara, I. (2016). Bridging Differences: Indigenous Culture Preservation Through Non-Verbal Communication. Paper presented at the International Conference of Communication Science Research Surabaya, Indonesia
27. Roy, R. D. (2005). Traditional Customary Laws and Indigenous. London, UK: Minority Rights Group International.
28. Salfarina, S. (2014). Decentralisation and Governance In Land Administration System. (PhD PhD), University of Ulster,
29. SAM. (2019). The Land We Lost: Native Customary Rights (NCR) and Monoculture Plantations in Sarawak. George Town: Sahabat Alam Malaysia (SAM).
30. SUHAKAM. (2013). Report of the National Inquiry into the land rights of indigenous people. Kuala Lumpur, Malaysia: National Human Rights Commission of Malaysia.
31. ter Heegde, M., Hilhorst, T., & Porchet, N. (2011). Indonesia : food security and land governance factsheet. Land governance for equitable and sustainable development (LANDac).
32. Tyson, A. D. (2010). Decentralization and adat revivalism in indonesia. New York: Routledge.
33. UNECE. (1996). Land Adminstration Guidelines. Meeting of Officials on Land Administration, United Nations Economic Commission of Europe ECE/HBP/96.
34. Williamson, I. P. (1985). Cadastres and land information systems in common law jurisdiction. Survey Review, 28, 114–129.
35. Williamson, I. P., Enemark, S., Wallace, J., & Rajabifard, A. (2010). Land Administration for Sustainable Development (1st ed.). California: ESRI Press.
36. WorldBank. (2014). Indonesia - Land Management and Policy Development Project Washington DC: World Bank Group.
37. Yusuf, H. (2011). Land administration system in Indonesia Paper presented at the Pre-17th AVA Congress, Siem Reap, Cambodia