Country Report 2003

(Based on the PCGIAP-Cadastral Template 2003)

Malaysia

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I. Country Report

A. Country Context

Geographical Context

Malaysia covers an area of about 329,758 sq. km, consisting of 11 states in Peninsular Malaysia, 2 states in the island of Borneo (Sabah and Sarawak) and 3 Federal Territories. Peninsular Malaysia, covering 131,598 sq. km. has its frontier with Thailand and Singapore while the states in Borneo covering 198,160 sq. km. borders the territory of Indonesia's Kalimantan to the South and Brunei to the North. Malaysia lies close to the equator between latitudes 1°and 7° North and Longitudes 100° and 119° East. The population is approximately 24.92 million, with a growth rate of about 1.7%. Malaysia is a muti-racial country and the majority of the population resides along the west coast of Peninsular Malaysia.

Historical Context

In Peninsular Malaysia, the States of Perak, Selangor, Pahang and Negeri Sembilan formed themselves into a loose federation known as the Federated Malay States (FMS), with a system of centralized government. These four states, together with the states of Kedah, Perlis, Kelantan, Terengganu and Johor, had an administration link with the British Straits Settlements of Penang, Malacca and Singapore, through the High Commissioner for the FMS being also the Governor of the Straits Settlements.

Following the end of World War II and the period of British military administration, Malacca and Penang were joined to the nine Malay states to form in 1946, the Malayan Union; this being superseded by the Federation of Malaya, in 1948. The Federation of Malaya became an independent country, with a constitutional monarchy, on 31st August 1957.

On 16th September 1963, Malaysia became a federation comprising the 11 states, as abovementioned, and the states of Singapore, Sarawak and North Borneo, (now known as Sabah). Singapore left Malaysia in August 1965, thus leaving 13 states, of which Sarawak and Sabah are jointly known as East Malaysia, and the remaining 11 states are commonly referred to as Peninsular Malaysia.

Current Political and Administrative Structures

Malaysia's government is modelled after the British system, somewhat modified because Malaysia's federal structure incorporates 13 states and 3 federal territories. Nine of those states have rulers or sultans and they elect a monarch, the supreme ruler, every five years. The government is based on a parliamentary system, headed by an elected Prime Minister. The Parliament consists of a partially appointed senate and a house of representatives whose members are elected by universal adult suffrage.

The Federal Government has powers such as over external affairs, defence, internal security, civil and criminal law, federal citizenship and naturalization, finance, trade, commerce and industry, taxation, customs and excise duties, shipping, navigation and fisheries, communications and transport, federal works and power, education, medicine and health, social security and tourism. The States' powers include over land and its administration, Islamic law, Malay customs, permits and licenses for mines prospecting, agriculture, forests, local government, states works and water, and riverine fishing.

Historical Outline of Cadastral System

The Torrens system, based essentially on the Fijian Act, was introduced into the FMS between the years 1879 and 1890. Through succeeding political changes in the country, it finds present statutory expression in the National Land Code, 1965 (NLC) in Peninsular Malaysia, the Sabah Land Ordinance, in the state of Sabah and the Sarawak Land Code, in the state of Sarawak.

The National Land Code (NLC) was enacted to establish a uniform land system to replace the existing systems. Prior to the passing of the NLC, two quite different systems of land tenure existed side by side. The former British Colonies of Penang and Malacca retain a system peculiar to the pre-war "Straits Settlements" (modelled on the English laws of property and conveyancing) whereby privately executed deeds are the basis of title to land while the remaining nine Malay States, by contrast, employ a system based on the principle that private rights in land can derive only from express grant by the State or secondarily from state registration of subsequent statutory dealings.

B. Institutional Framework

Government Organizations

Peninsular Malaysia is a federation of States, each of which is responsible for its own land matters. All States operate a Torrens system of registration, administered by the State Land Offices and coordinated by the Department of Land and Mines. On the other hand, cadastral surveys are controlled by the Department of Survey and Mapping, Malaysia (DSMM) which is a federal department. DSMM is responsible for undertaking cadastral survey work within Peninsular Ma-

laysia but is supported by a growing number of licensed land surveyors, whom are primarily responsible for engineering and subdivision surveys.

Notwithstanding the above, the cadastre in the states of Sabah and Sarawak are administered by the Department of Land and Surveys (DLS). They have the ideal setup of having land administration and cadastral surveys under the control of a single organisation, which is a State entity.

Private Sector Involvement

A substantial portion of cadastral surveys (roughly about 80%) are undertaken by the private land surveying firms. However, their work will have to be submitted to the Department of Survey and Mapping for checks and approval. With some exceptions, all of the engineering surveys are conducted by the private sector. Additionally, a major part of the task of creating the Digital Cadastral Database for the whole of Peninsular Malaysia, as well as some cadastral survey tasks assigned to DSMM has been outsourced to the said sector as well.

Professional Organization or Association

The Institution of Surveyors, Malaysia (ISM) is the main professional organisation representing the surveying profession in Malaysia, whereby membership are open to those in both the government and private sectors. It consists of 4 main divisions, namely those of land surveying, property valuation, quantity surveying and building surveying. Apart from that, the licensed land surveyors do have their own association, called the Malaysian Association of Authorised Land Surveyors (MAALS). To a certain extent, MAALS has obligations pertaining to the professionalism of licensed land surveyors and the improvement of their surveying services.

Licensing

Land surveyors (with the exception of those serving with DSMM or DLS, in the case of Sabah and Sarawak) carrying out cadastral surveys are required by law to be licensed by the Land Surveyors Board of Peninsular Malaysia (LSBPM), and in the case of Sabah – the Land Surveyors Board of Sabah. Sarawak does not, up to now institute a Land Surveyors Board of its own, and as a consequence cadastral surveys were placed under the jurisdiction of the Sarawak Department of Land and Surveys. While it is not a legal requirement in the case of topographical and engineering surveys as yet, registration with the LSBPM is insisted upon by most clients and all government agencies.

It is a statutory requirement that the Board (LSBPM) keeps a register where prescribed particulars of all Land Surveyors admitted into the Register such as names, addresses, qualifications, etc. are noted. This Register is maintained and kept by the Secretary at the office of the Board, and is open for inspection by any person on payment of a prescribed fee.

A license to practice is issued annually to a surveyor whose name appears on the Register. Any LLS who has not renewed his license before the 1st February of each year will find his name removed from the Register. However, the Board may restore to the Register any name removed there from with the payment of registration and other fees.

To obtain admission into the Register, one must be a citizen of good character, 21 or more years of age, has passed all professional and competency examinations, has the required period of practical training, is not under any disability, and has paid the required registration fee.

Government surveyors, as long as they are employees of the Government, are not issued with licenses, but they can perform cadastral survey work required by the Government under the overall supervision of the Director General of Survey and Mapping.

Education

The professional surveyor is required to undergo and receive an effective and proper formal surveying education in a tertiary institution. Surveying programmes are offered at two universities, namely the University of Technology Malaysia (UTM), and University Institut Teknologi MARA (UiTM). At both universities, the land surveying course is designed in such a way that it blends academic requirements with the overall government policy on education and other requirements considered beneficial to the nation. About 40 graduated annually from both universi-

ties, with about 15 or so postgraduate students involved in surveying or related research areas. Currently, about 10% of students studying at undergraduate level are women.

The LSBPM accept any creditable survey degree qualification from local and overseas institutions / universities, subject to a detailed consideration of their syllabus, lecture times and practical training before any recognition is given. However, in the past quite a substantial number of land surveyors have entered the ranks of professional licensed land surveyors through the articleship system. Because of the self-study, the articled student was often not in a position to learn much more than what was required of a professional surveyor. Even so many made the grade, and many became successful surveyors, through professional examinations of the Australian and New Zealand Boards of Surveyors and later of the LSBPM.

C. Cadastral System

Purpose of Cadastral System

The objects of the Malaysian cadastral system are to provide security and simplicity to all dealings with land. It establishes and certifies, under the authority of the Government, the ownership of an indefeasible title to land and simplifies, hastens and cheapens all land dealings. The title is conclusive proof that the person mentioned therein is the owner of the land described therein. Valid titles require an accurate description of boundaries and as such cadastral survey plays an important role in the system.

Types of Cadastral System

Cadastral Concept

The Malaysian cadastral system has essentially two basic components, which are the very pillars of the system's reliability and credibility, i.e. the land registration and the cadastral survey components.

The most important element in the land registration component is the type of title called for by the system of land tenure and the nature of Government guarantee. The system provides for registration to confer indefeasible title or interest, except in certain circumstances, such as through fraud or misrepresentation or registration obtained by forgery or by means of an insufficient or void instrument. Essentially, for alienation under final title, it only becomes effective from the time of the registration of the Register Documents of Title (RDT) at the Land Office or the Land Registry, whereby the Issue Document of Title (IDT) would be simultaneously issued to the registered proprietor of the land. Both the RDT and the IDT have affixed to them and appropriately sealed, a plan of the land, certified as correct by or on behalf of the State Director of Survey.

The proprietor of any land enjoys the right of effecting dealings with respect to his land and the interest therein. Such dealing is effected by an instrument being registered into the documents of title. The instruments capable of being registered include any transfer of land, lease or sublease, charge, or surrender thereof. Effectively, the register is conclusive evidence that the person named in it as the proprietor of an interest in land is the legal owner of that interest. More importantly, the system compels that interests in land can only be varied or changed by registration.

The Government having decided the nature of the land registration system and given statutory expression to it, it is then the business of the cadastral survey authority to decide the scope of the surveys and the standards of accuracy essential to the validity of the type of title called for by the law. The law specifies the manner in which surveys are to be carried out for the purpose of the issuance of a final title. It is only after this survey that other transactions such as subdivision, amalgamation, etc, of that parcel of land can be carried out.

As mentioned, the law requires every parcel of land to be surveyed and demarcated on the ground prior to the issuance of final title. It provides for 'fixed' rather than 'general' boundaries. Parcel definition is by officially emplaced and mathematically coordinated boundary marks

rather than by topographical details. The surveyor emplaces the boundary marks which demarcate the parcel and carries out a survey of these boundary marks based on the state survey controls provided. On the completion of the survey, a plan is drawn and when authenticated by the Director of Survey becomes a certified plan. Copies of the certified plan are utilised in the preparation of title documents.

One important aspect of the registration system is the peculiar practice of issuing temporary land titles, termed as qualified titles (QT). The purpose for this is to enable land to be alienated in advance of survey or prior to survey and in the broader context, to speed up land development.

Content of Cadastral System

The Malaysian cadastral system provides for textual as well as spatial information that is consistent with the two aforementioned components of the system. They are as follows:

a) Textual aspect – the land register furnishes all necessary information, the basic ones being the name of the proprietor and the actual land alienated – through a description of its area and location, and the survey plan showing the limits. Other information include those on owner's rights, encumbrances, express conditions, caveats and prohibitory orders, if any. However, not all imposed conditions and restrictions are stated in the register; there are some that are provided by law and have to be abided by the proprietor.

b) Spatial aspect – the country's cadastral parcel fabric can be conveniently viewed from the cadastral map produced and maintained by DSMM. With the exception of land parcels that are held under temporary titles (awaiting surveys and finalisation of boundaries) the map depict all land parcels (i.e. surveyed) together with their unique lot numbers or identifiers, as well as the certified plan numbers for ease of reference and search. Hard copy maps are now completely replaced with digital ones through a conversion exercise which ended in 2002.

Although not strictly part of the cadastral system, valuation, local government and planning authorities are heavily reliant on the cadastral system. They made use of the information provided by the system in the conduct of their businesses and work in close coordination with the institutions supporting the system.

There are approximately 7.2 million land parcels throughout the country, of which 2.5 million are still held under temporary titles (awaiting surveys). Surveyed parcels are now completely in digital form and kept in each States' digital cadastral database (DCDB). Current surveys would also result in data being immediately captured in digital form and would eventually be automatically deposited in the DCDB through the "field-to-finish" concept. Cadastral survey data in the form of certified plans and cadastral maps are made available through the Internet for a fee.

On the other hand, the Computerised Land Registration System (CLRS) was implemented in 1990 and currently access to title information can be made at the computer terminals of all Registry and Land Offices of the concerned States. However, all land dealings will have to be conducted at the appropriate office in which the land title was formerly registered. The information in the CLRS database are based on the records kept in the land registers and relevant files. They include information on ownership, land identification, restrictions and record of dealings. The system also produces various outputs amongst which are the RDT and IDT, search certificates and specific reports.

D. Cadastral Mapping

Cadastral Map

Cadastral mapping is based on the Cassini-Solder Coordinate System. Each State has its own origin and reference meridian resulting in a total of 9 different State coordinate systems. Cadastral maps are used primarily for identification of land parcels for land management. On these maps are plotted all lots that are surveyed by both government and licensed land surveyors. Prior to their conversion to digital form, the scales of these maps vary from 1 inch to 1 chain in

urban areas, to 1 inch to 8 chains, in rural areas. All states currently have cadastral maps in digital form based on a graphical representation of geometric components, through the implementation of the Cadastral Data Management System (CDMS) project, which was completed in 2002.

Examples of Cadastral Maps

Below are two examples of the aforementioned cadastral maps. Fig. 1 shows the conventional type that is prepared in hard copy form – commonly referred to as standard sheet. It basically depicts the land parcel, parcel number, boundary marks, boundaries, parcel area (if unconstrained by space), number of the certified plan on which the dimensions and other details of the surveyed parcel would be shown, road names, etc. Fig. 2 shows the current cadastral map produced from the DCDB.

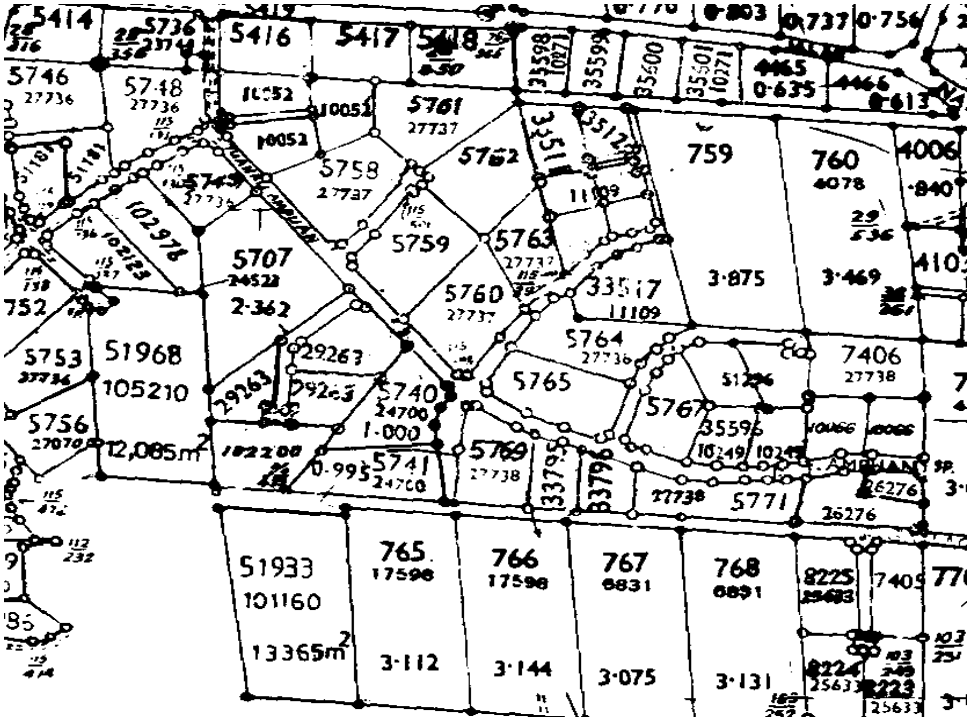

Fig. 1: The Standard Sheet (survey accurate)

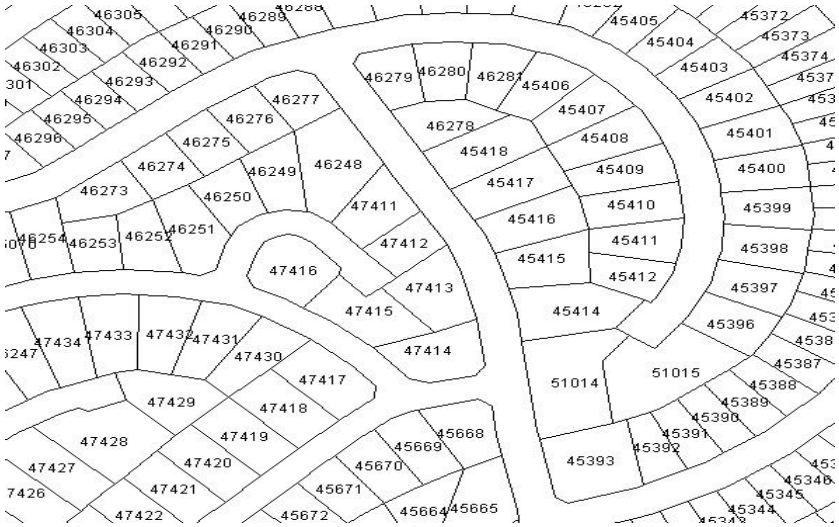

Fig. 2: Cadastral Map From DCDB (survey accurate).

Role of Cadastral Layer in SDI

The Malaysia SDI (acronymed NaLIS) was formally established in 1997 through a directive from the Secretary General of the Government. It is based on an open system platform of distributed databases, whereby data is kept in the databases of land related agencies and not in a centralised system.

The information that can be made available to land information users under NaLIS consist of datasets obtained from the land related systems, or more specifically, the databases of agencies linked to NaLIS. They are essentially data that the agencies maintain in their systems for their business operations. Notably, of importance in the said arrangements is the acceptance of the base map as the basic building block for the NaLIS data model and that the cadastral layer is one of the main constituents of this base map.

E. Reform Issues

Cadastral Issues

1. Existence of Different Coordinate Systems

Malaysia has a rigorous cadastral system, which provides a secure basis for land and property ownership. However, it is not altogether flawless. One of the major drawbacks includes the incompatibility between cadastral and mapping data due to the use of different coordinate systems. The establishment of DCDB which is based on different State Cassini-Soldner cannot be integrated with other spatial data such as topographic which is based on the RSO Projection. To overcome those deficiencies, studies had and are still being carried out to determine the feasibility of implementing a coordinated cadastral system for Malaysia.

2. Legalising the DCDB

This issue goes hand in hand with the intention of having a continuous Certified plan (CP), which may eventually result in the termination of the use of the said document and the consequent need to give legal significance to the DCDB. The adoption of a continuous CP seems favourable over the long term; however, for the present it appears apt for the move to be put on hold until the CDMS properly uses and related issues such as on reliability, currency as well data quality and integrity are adequately resolved.

3. Complete Cadastre

The absence of Qt information in the DCDB is the biggest hurdle in creating a complete and up-to-date DCDB for the whole country. Such information is either in graphic form from Land Office or digital form of pre-comp plans from licensed land surveyors. Although the previous CDMS has limitation in dealing with large amounts of data due to its storage problem the recently completed upgrade of CDMS should be able to handle the deposition of extra information. Nevertheless, the challenge is to overcome the estimated 0.7 million land parcels where QT plan is not readily available or recoverable.

Current Initiatives

1. Accreditation of Surveyors

Significant steps have been taken in Malaysia to adopt the quality philosophy both within the public and private sector. DSMM has introduced a system of field auditing, apart from office checks, which is considered essential for monitoring professional standards. However, DSMM could not afford the conventional approach as the workload had over the past years increased tremendously. Thus, there is this current move to look into the introduction of an amicable form of accreditation that would be able to address the issue of quality assurance over cadastral survey work conducted by licensed land surveyors.

2. Enhancing the DCDB

The importance of the DCDB has been recognised; without a complete DCDB, it is unlikely that NaLIS would be able to meet the expectations of the government. Already there is an increased demand for spatial information in government agencies. Increased pressure has been placed to

further develop the DCDB for not only the obvious role it has in the cadastral process but, just as importantly, in national spatial planning. In this regards efforts are underway to capture other data in the recently upgraded CDMS, which include those on graphically accurate surveys (demarcation and 3rd class surveys), administrative boundaries as well as road and street addresses.

3. Integration of CDMS and CLRS

There could evidently be extensive benefits if the CDMS of DSMM and the Computerised Land Registration System (CLRS) of Land Office are linked together. With the integration of spatial data from CDMS and attribute data from CLRS and through identified applications, efficiency of land administration can be greatly improved. As such, efforts are currently underway to integrate them with a pilot project being undertaken to develop operational systems that can subsequently be implemented throughout the country. Although conceptually tenable, the eventual implementation would need substantial negotiation and compromising in between the concerned authorities.

4. Propagating Work in the Digital Environment

To complement the initiatives of DSMM, the LSBPM has also initiated several programmes of its own, which are aimed at providing the impetus for licensed land surveyors to modernise and increase the cost-effectiveness of their own operations. In one of the programmes, the Board allocated computer software that will standardize cadastral survey processing on a basic desktop computer. Although the computer software is very basic, it not only satisfy the requirements of the regulations, but more importantly, it serves as the vehicle to introduce digital processing techniques to the smaller surveying companies that would not have so readily ventured into the digital arena.

II. Questionnaire

1. Cadastral Principles

Deed or title registration

1.1 Is your cadastral system based on deeds registration or on title registration ?

- ☐ deeds registration
- × title registration
- ☐ other: ……

Registration of land ownership

1.2 By law, is registration of land ownership compulsory or optional ?

- × compulsory
- ☐ optional
- ☐ other: ……

1.3 If felt necessary, please, comment on the actual practice and the legal consequences.

Description on registration made in the write up of the country report.

Approach for the establishment of the cadastral records

1.4 Are landowners required to register their properties systematically during the initial establishment of the cadastre or is registration sporadic, i.e. triggered only by specific actions (such as for example sale) ?

- × systematic
- ☐ sporadic
- ☐ both
- ☐ all properties are already registered
- ☐ other: ……

2. Cadastral Statistics

Population

2.1 What is the **population** of your country ?

24.92 million (2003)

2.2 Please, estimate the **population distribution** between urban and rural areas.

urban:	…62… %
rural:	…38… %
total:	…100… %

Number and distribution of land parcels

2.3 Please, estimate the approximate **total number of the smallest uniquely identified land units**, often called "land parcels" in your country, including urban and rural areas ?

The total number would include all freehold and state owned land, regardless of registered, non-registered or informal holding.

7.2 million

2.4 What is the approximate **total number of registered strata or condominium units** ? This number would be in addition to the number of land parcels indicated in 2.3 ?

260,000 units

2.5 For **URBAN areas**, please, estimate the **distribution between the smallest uniquely identified land units, often called "land parcels"** (i) that are legally registered and surveyed, (ii) that are legally occupied but not registered or surveyed, and (iii) that are informally occupied without any legal title (this may include illegal occupation or squatting).

If the estimation is too difficult or complex using land parcels, you may base your estimation alternatively on the number of people occupying these forms of land parcels.

legally registered and surveyed:	…98… %
legally occupied, but not registered or surveyed:	…0… %
informally occupied without legal title:	…2… %
total:	…100… %

2.6 For **RURAL areas**, please, estimate the **distribution between the smallest uniquely identified land units, often called "land parcels"** (i) that are legally registered and surveyed, (ii) that are legally occupied but not registered or surveyed, and (iii) that are informally occupied without any legal title (this may include illegal occupation or squatting).

If the estimation is too difficult or complex using land parcels, you may base your estimation alternatively on the number of people occupying these forms of land parcels.

legally registered and surveyed:	…99… %
legally occupied, but not registered or surveyed:	…0… %
informally occupied without legal title:	…1… %
total:	…100… %

Number of professionals

Please estimate the total number of *academic professionals* that are active within the cadastral system and the proportion of the time that they actually commit for cadastral matters (as opposed to work outside of the cadastral system) ?

2.7	Total number of **professional land surveyors**, such as licensed surveyors active within the cadastral system:	300
2.8	Proportion of the time that these land surveyors commit for cadastral matters:	75%

2.9	Total number of **lawyers/solicitors** or equivalent active within the cadastral system or land market:	7,000
2.10	Proportion of time that these lawyers/solicitors commit for cadastral matters or land market:	70%

Remarks and Comments

Please, identify the best aspect of this questionnaire ?

Clear guidelines, simple and short answers required (boxes to tick and direct questions) make responding convenient and less time consuming.

Please, suggest the area in the questionnaire that could be improved ?

Some questions are difficult to answer due to the lack of statistics.