

***“GazMIS 2.0 :
Solution For Management Of State Land
Reserves In Sabah”***

Joint Paper By
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- Introduction To Lands and Surveys Department.
- Reserved Lands In Sabah
- Pre - GazMis 2.0 : Challenges
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Sabah, Malaysia



**SABAH: Land mass : 73,620 Sq Km.
Population : 3.61 million (year 2013)**

The Sabah Lands & Surveys Department

A State Government
Department responsible
for:

- ✓ Cadastral Survey
- ✓ Land Alienation
- ✓ Land Dealings
- ✓ Land Developments
- ✓ Land Valuation
- ✓ Large Scale Mapping
- ✓ Geospatial Development
- ✓ Gazettement Of Land
- ✓ Collection of Land Revenue
- ✓ Mining licenses & permits

Vision

“To provide Excellent
Delivery Service.”

Mission

*To provide excellent services
through **modern management**
of land and survey matters
with the use of latest
technology and the
employment of human
resources who are
progressive, dynamic and of
high integrity and advocating
balanced and environmental
friendly land development,
that brings maximum land
revenue.*

Facts & Figures: (31 Aug 2015)

District Land Offices = 25

Divisional Survey Offices = 8

District Survey Offices = 11

Total Land Area = 73,620km²

Numbers of islands = 394

Land under Reserves = 52%

Alienated Land = 31.4%

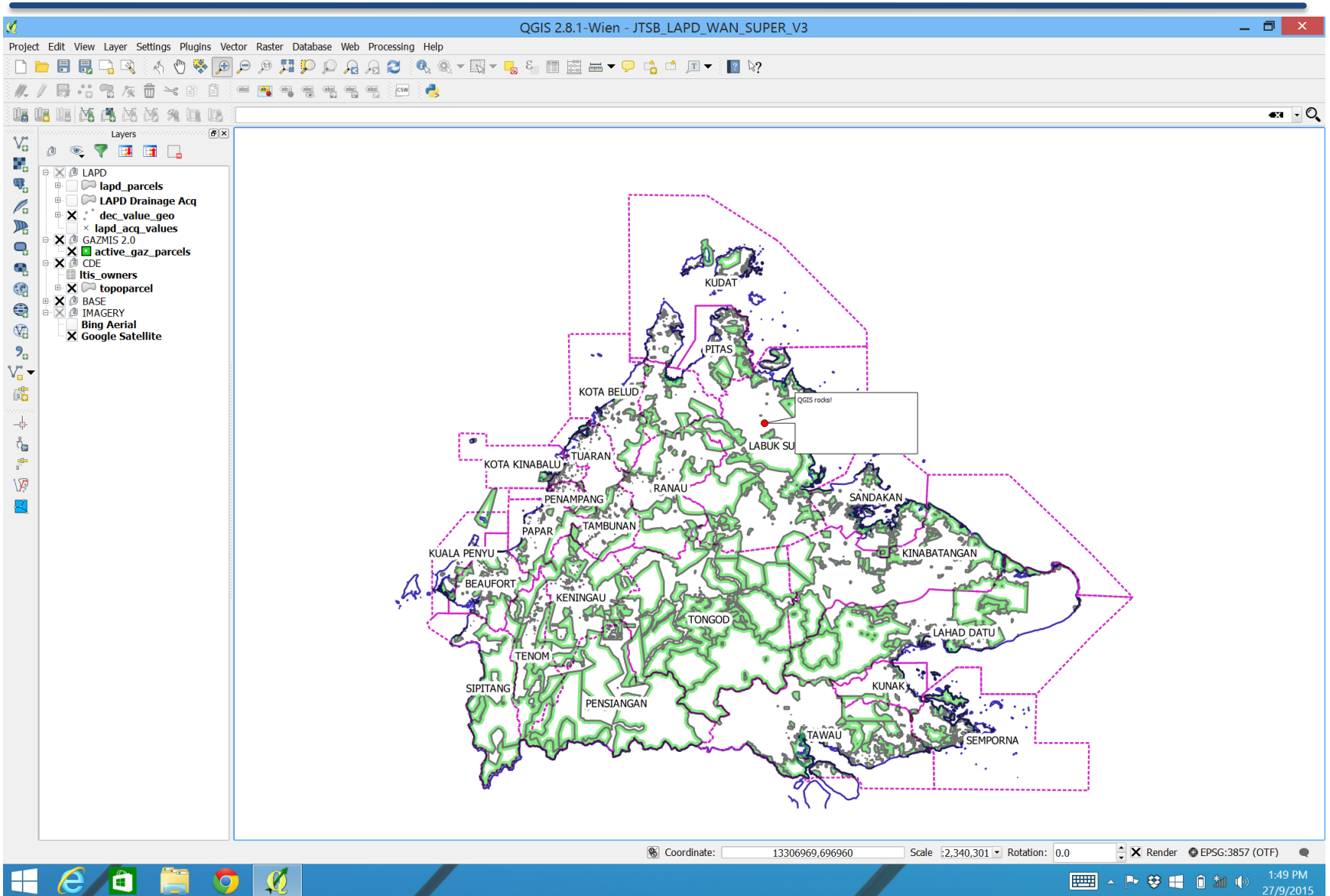
Numbers of Land Titles = 378,992



Land & Survey Administration Structure



SAABH LAND DISTRIBUTION



Reserved Lands In Sabah



Biodiversity Protection & Conservation – Forest, Wildlife, Parks



Natives Usage - Kampung, Grazing Grounds, Burial Grounds

Reserved Lands In Sabah

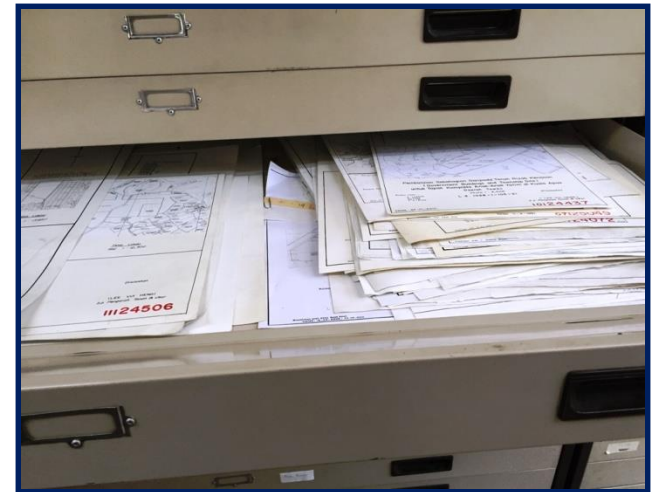
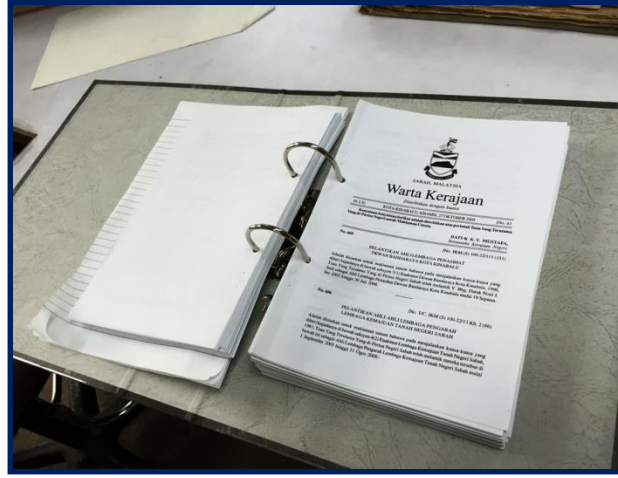
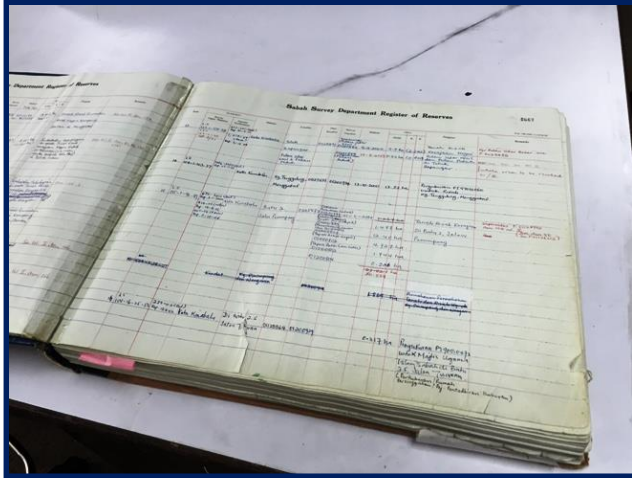


Public Infrastructures – Roads, Irrigations, Dams, Reservoirs



Public Buildings & Spaces – Government offices, Sport facilities, Open spaces

Pre-GazMis Recording & Processing Methods



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Pre-GazMis 2.0 : Challenges

- Deterioration and lost of registers / records
- Uncertainty of status & boundaries
- Difficulties in accessing records
- Difficulties in generating reports & Statistics
- Delay in preparation of gazettes
- In-correct administration & management decisions



GazMis 2.0 : The Project (2014)

- ✓ To capture gazette notification information which are presently in the form of hard copy “Register of Reserves” and “Gazette Plans Register” into a database
- ✓ To create a web based reporting interface for searching and printing of gazette notifications
- ✓ To link captured database textual information to scanned gazette documents
- ✓ To link captured database textual information to parcels in the Digital Cadastral Database (DCDB)
- ✓ To study possible integration with Land Acquisition System (LAPD).

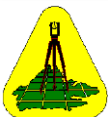
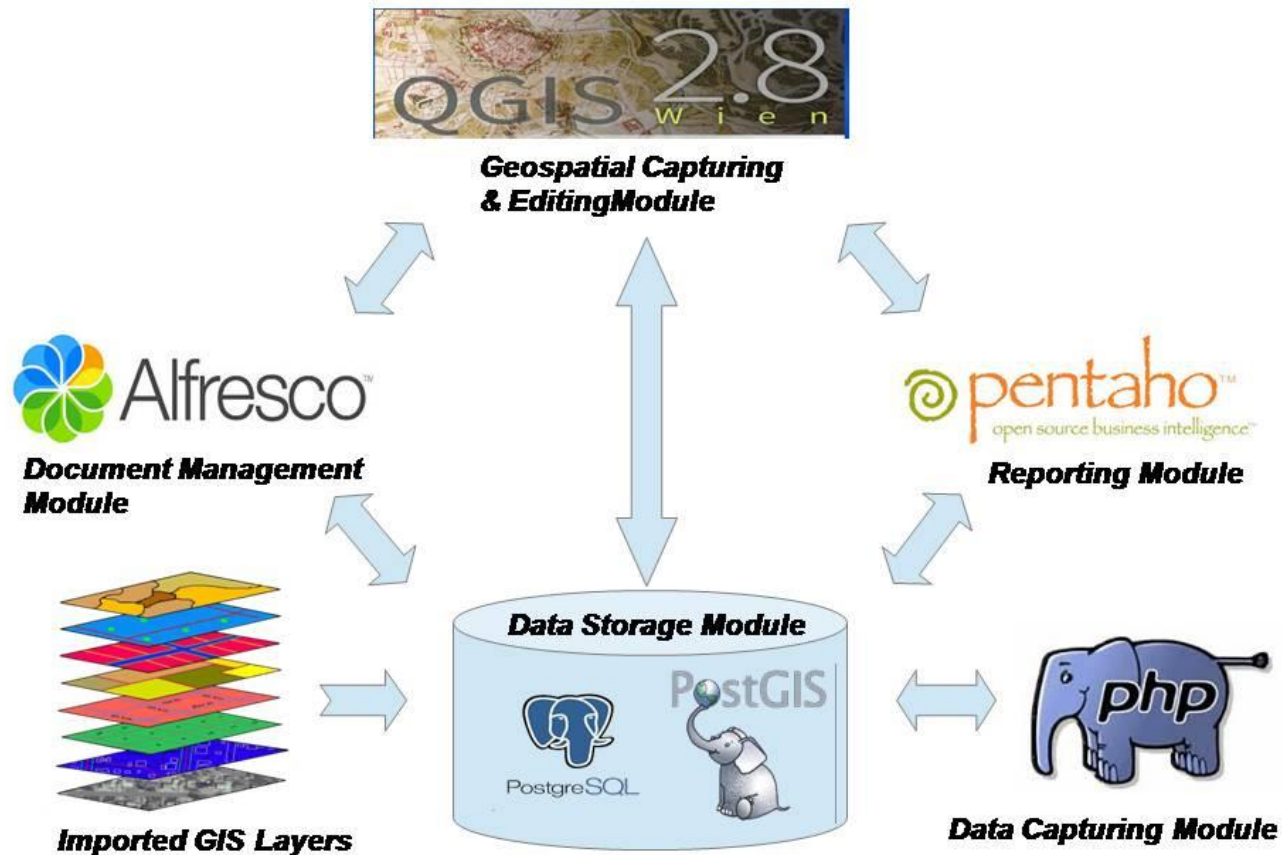


Open Source Software Used GazMis 2.0

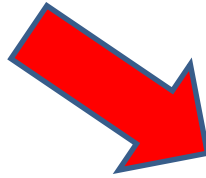
- ✓ Postgis 2.1 – *open source spatial database extender for the PostgreSQL Database Management System*
- ✓ PHP - *widely-used open source general-purpose scripting language*
- ✓ Alfresco DMS – *open source document management system*
- ✓ Pentaho Reporting - *Open Source reporting tools*
- ✓ QGIS 2.8.1 Wien - *Open Source Geographic Information System*



Open Source Software In GazMis 2.0



Textual Data Entry



Jabatan Tanah dan Ukur
Land Gazette System (Gazmis 2.0)

Gazette Parcel Export Print all pages Print current page

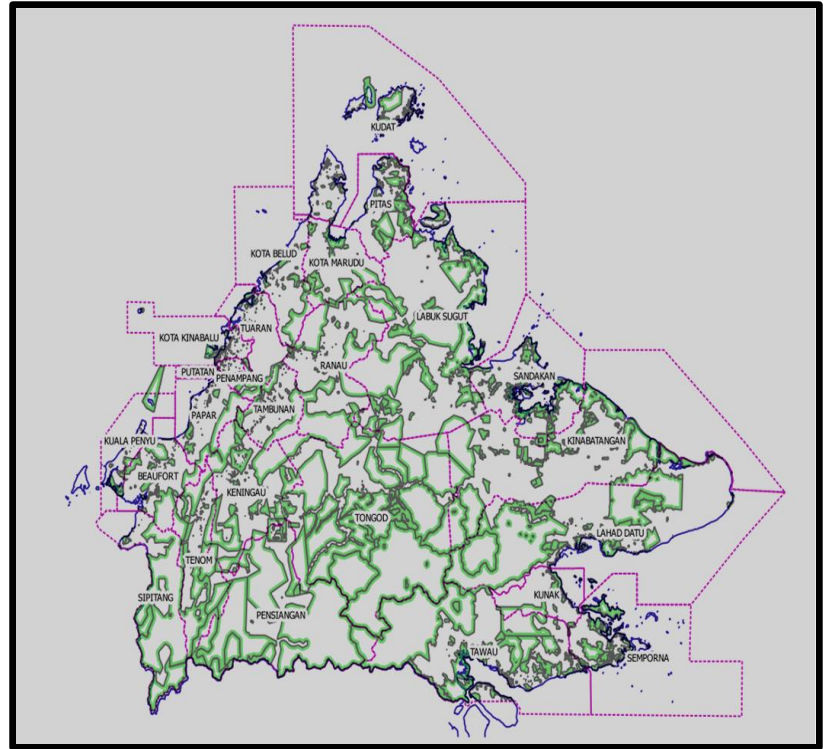
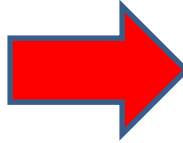
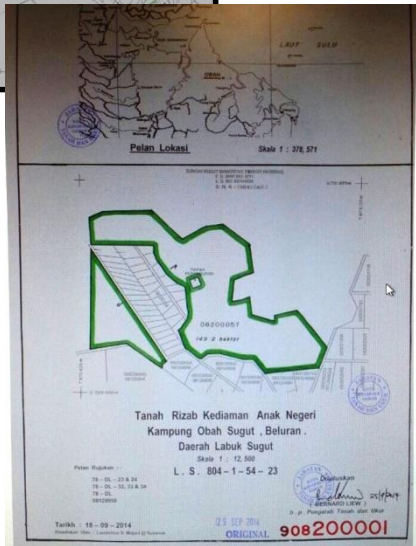
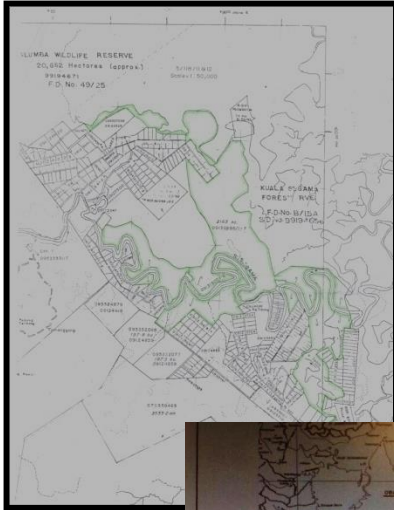
1 2 11 51 105 Define page size

Actions	Pranalar 12	Plan 1d	Gaz 1d	Gid	Reg Item	Lot Number	Surv Ed No	Catcodan	Parcel Desc	Gazetted Use	Parcel Area	Area Unit	Tanf	Vfnum	District	Status	Remarks
	S.D. 316.25	1838.846.901.1759	99-1923	NULL	GEN010_002	NULL	NULL	NULL	FOREST	FOREST RESERVE	3,000.00	Ac	SEE ITEM GEN010_009	NULL	JESSSELTON	Cancelled	CANCELLED VIDE GAZ. NOTH. 311/53
	L.S. 1814.1.1	1812405	NULL	NULL	GEN010_026	2001180596	NULL	NULL	PEMBATALAN TANAH SIMPAHAN LARANGAN TERBANG KUALA PENYU	TRANSPORTATION : AIRPORT	6.48	Ha	SEE ITEM GEN010_009	NULL	KUALA PENYU	No Gazette	NULL
	S.D. 915.26	977	160-1929	NULL	GEN010_004	NULL	3822	NULL	R.C. CEMETERY	CEMETERY : CHRISTIAN : R.C.	1.62	Ac	NULL	NULL	JESSSELTON	Gazetted	NULL
	L.S. 4315.9	99194541	NULL	NULL	FR01_057	NULL	5273E	NULL	KLIANG FOREST RESERVE CLASS II (2) (RECLASSIFICATION)	FOREST RESERVE : CLASS 2	3,630.00	Ha	SEE ITEM FR01_173	NULL	BEAUFORT	Superseded	SUPERSUED BY P.99194690 CLASS 2
	L.S. 1002.1.33	1012405	NULL	9208	GEN0210_045	NULL	10200127	NULL	PEMBATALAN SEBAGIAN DARAGADA TANAH SIMPAHAN PERAKAN AIRS BULING UNTUK PEHBA...	AMENTY : DEVELOPMENT	8.08	Ha	SEE ITEM GEN010_094 SEE ITEM GEN010_009	NULL	TAWAU	Superseded	SUPERSUED BY SEE ITEM GEN0210_006

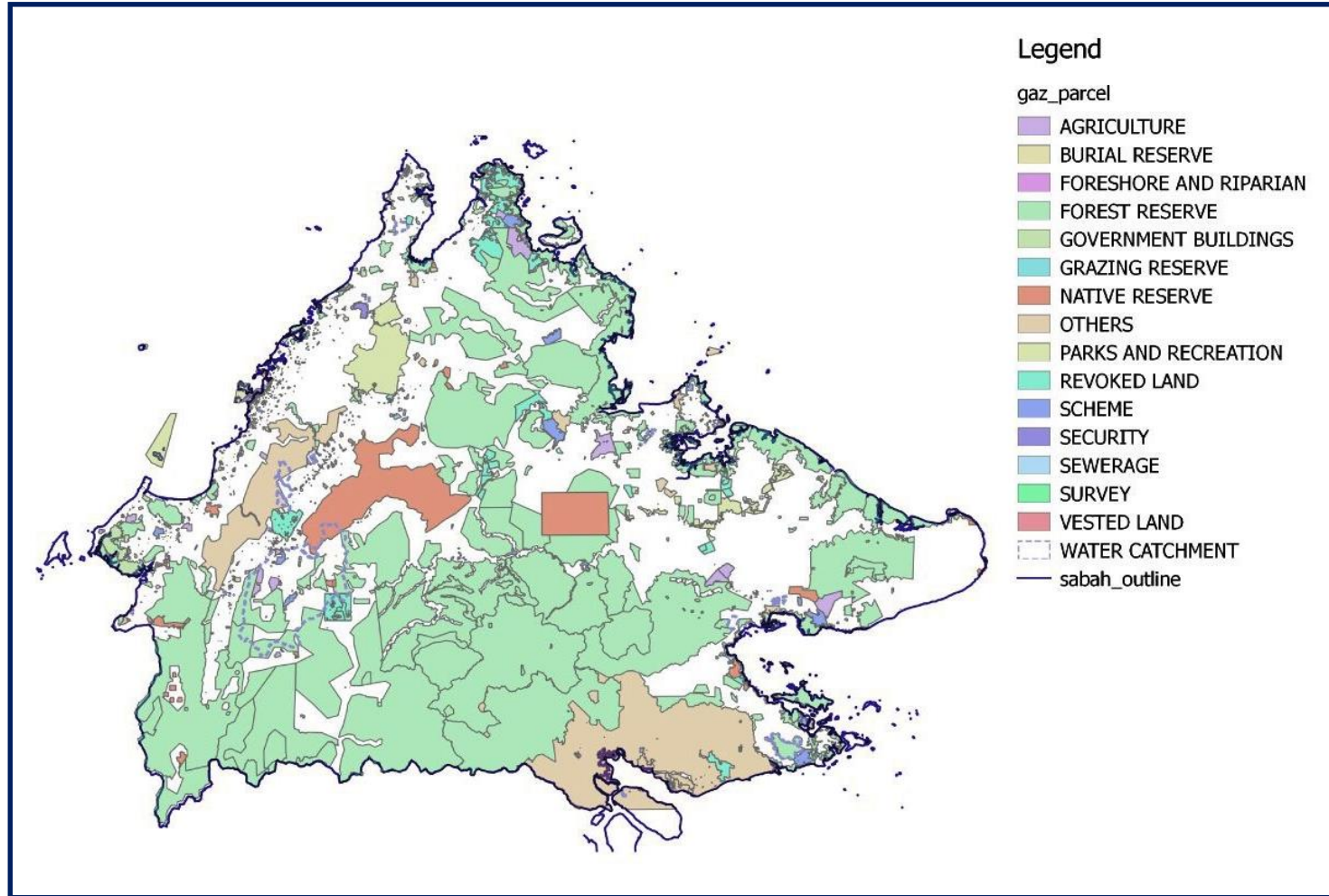
1 2 11 51 105 Define page size



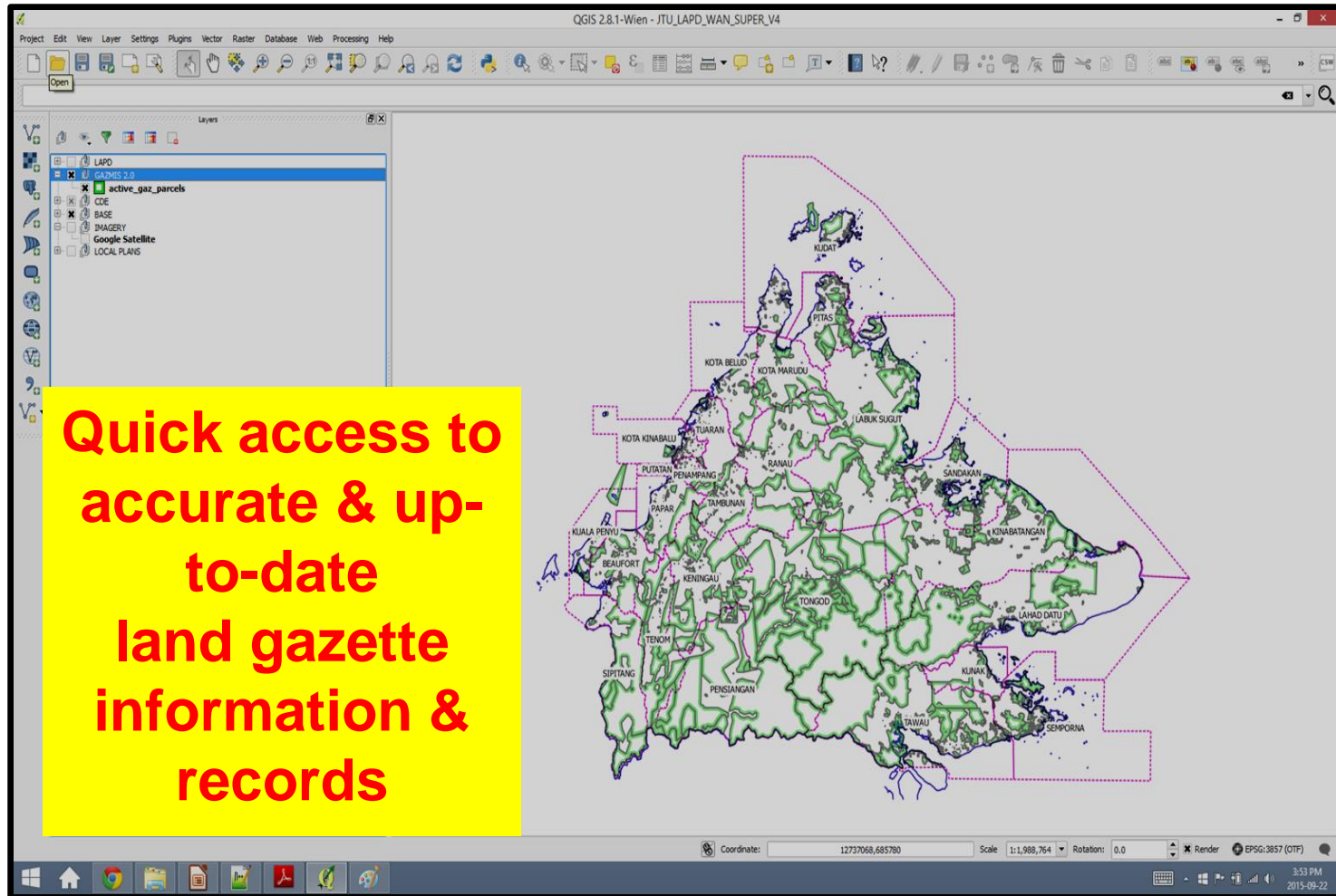
Graphical Data Capturing



Distribution Of Reserved Lands in Sabah



Capabilities Of GazMis 2.0



Quick access to accurate & up-to-date land gazette information & records

The screenshot displays the QGIS 2.8.1-Wien interface. The main map area shows a detailed land gazette map of Sabah, Malaysia, with various districts labeled: KUDAT, PITAS, KOTA BELLU, KOTA MARUDU, LABUK SUGUT, KOTA KINABALLU, TIARAN, RAMAU, SANDAYAN, PUTATAN, PENAMPANG, PAPAR, KUNIA PERIU, BEAUFORT, KENINGAU, TAMBUNAN, KUNAK, TENOM, TONGGOD, LAHAD DATU, SIPTANG, PENSIANGAN, TAWAU, and SEMBORNA. The left sidebar shows the 'Layers' panel with 'GazMis 2.0' and 'active_gaz_parcels' selected. The bottom status bar shows the coordinate 12737068,685780, scale 1:1,988,764, and rotation 0.0. The system tray at the bottom right shows the time 3:53 PM on 2015-09-22.



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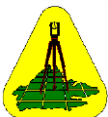
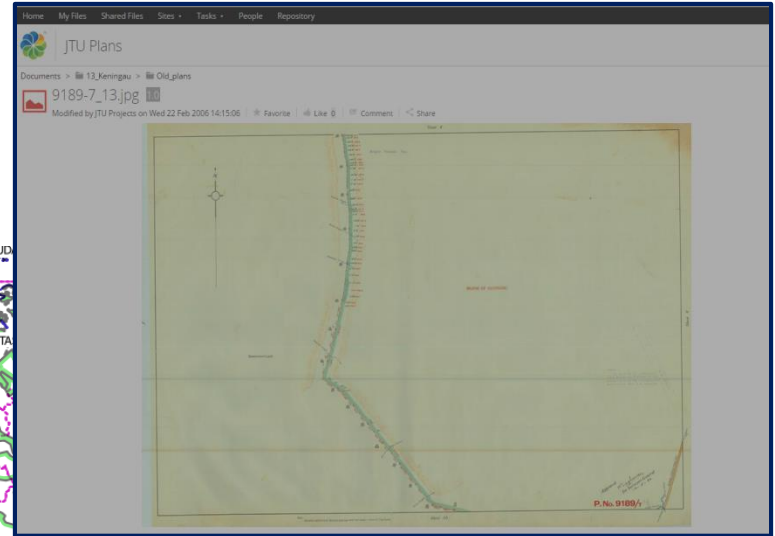
Capabilities Of GazMis 2.0

**Quick access to
Survey Plans &
Gazette Plans**

The screenshot shows the main interface of the GazMis 2.0 application. On the left, there is a 'Feature' table with the following data:

Feature	Value
active_gaz_parcel	
featureid	1334
(Derived)	
(Actions)	
rcv_date	NULL
reg_date	NULL
parcel_desc	PROVISIONAL NATIVE RESERVE
custodian	NULL
parcel_area	35127.46
area_uom	Ac
gazetted_use	AMENITY : NATIVE
la_number	NULL
status	Gazetted
comp_area	1759116655.69
remarks	CSO.968.47, R.L.I.171.46 (G.N.518-78, P.131243...
gaz_num	445-1950
ordinance	Section 78, Ordinance No. 9/30 : Land Ordinance ...
gaz_type	DECLARATION
pub_date_1	1950-08-15
pub_date_2	NULL
plan_number	9189

Below the table, there are controls for 'Mode' (set to 'Layer selection') and 'View' (set to 'Tree'). A large yellow arrow points from the 'featureid' row in the table to a red-shaded area on the map of Sabah.



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Capabilities Of GazMis 2.0

**Quick access to
Gazette Notifications**

The screenshot shows the 'Identify Results' window in the software. The 'Feature' table lists the following details for feature ID 1334:

Feature	Value
active_gaz_parcel	
feature_id	1334
(Derived)	
(Actions)	
View feature form	
Search Gazette	
Gazette Plan	
Pentaho Report	
rcv_date	NULL
reg_date	NULL
parcel_desc	PROVISIONAL NATIVE RESERVE
custodian	NULL
parcel_area	35127.46
area_uom	Ac
gazetted_use	AMENITY : NATIVE
la_number	NULL
status	Gazetted
comp_area	1759116655.69
remarks	CSO.968.47, R.L.I.171.46 (G.N.518-78, P.131243...
gaz_num	445-1950
ordinance	Section 78, Ordinance No. 9/30 : Land Ordinance ...
gaz_type	DECLARATION
pub_date_1	1950-08-15
pub_date_2	NULL
plan_number	9189

The map on the right shows the state of Sabah with various districts labeled: KUDAT, KOTA MARUDU, TUARAN, KOTA KINABALLU, PUTATAN, PENAMPANG, RANAU, PAPAR, TAMBUKA, KUALA PENYU, BEAUFORT, KENINGAU, TENOM, SIPPITANG, PENSIANGAN, and TONGOD. A red shaded area is visible in the central part of the map, and a large yellow arrow points from the 'Identify Results' window towards this area.

162 WARTA KERAJAAN NEGERI SABAH 3 Februari 2000
No.51-5 (C4-1-30/41) [No. JKM. PHB. 600-42/2/344]

ORDINAN TANAH
Bab 68
PENGISYTHARAN TANAH RIZAB PERUMAHAN ANAK NEGERI KAMPUNG PULAU SEPANGAR DAERAH KOTA KINABALLU

Pada menjalankan kuasa-kuasa yang diberikan kepadanya oleh seksyen kecil (1), (2) dan (3) seksyen 78 Ordinan Tanah, Yang di-Pertua Negeri telah mengisytiharkan Tanah Kerajaan sepertimana yang diperibadikan di dalam Jadual ini sebagai Tanah Rizab Anak Negeri Kampung Pulau Sepangar (kemudian daripada ini disebut sebagai Tanah Rizab) untuk kegunaan sepenuhnya oleh Anak Negeri Kampung Pulau Sepangar untuk kegunaan perumahan tertakluk kepada syarat-syarat berikut:-

- (1) Tanah Rizab ini adalah untuk kegunaan sepenuhnya oleh Anak Negeri Kampung Pulau Sepangar untuk pembinaan rumah kediaman dan bangunan-bangunan tambahan:-
- (2) Penduduk-penduduk Kampung tersebut adalah dibenarkan menjalankan adat-resam perindustrian, memelihara ayam, binatang ternakan dan berkebun tanam-tanaman kontan di dalam kawasan Tanah Rizab tersebut.
- (3) Tiada seorang Anak Negeri yang bukan pada biasanya bermastautin di Kampung Pulau Sepangar dibenarkan mendiri dan membina sebarang bangunan di dalam Tanah Rizab tersebut tanpa mendapat persetujuan daripada Para Pemegang Amanah.
- (4) Ketua Kampung, Ketua Anak Negeri dan Ketua Daerah Kota Kinabalu dengan ini dilantik sebagai Pemegang Amanah Tanah Rizab itu tertakluk kepada arahan-arahan Penolong Pemungut Hasil Tanah, Kota Kinabalu.
- (5) Para Pemegang Amanah hendaklah memagar atau menyebangkannya dipagar sempadan Tanah Rizab tersebut dengan cara yang memuaskan hati Penolong Pemungut Hasil Tanah, Kota Kinabalu dan kemudian memelihara pagar tersebut dengan cara yang memuaskan hatinya, dan
- (6) Seorang yang terkilan oleh sesuatu tindakan atau sesuatu yang tidak dilakukan oleh Para Pemegang Amanah atau Penolong Pemungut Hasil Tanah, Kota Kinabalu atau kedua-duanya, boleh memohon kajian semula kepada Setiausaha Hasil Bumi di mana keputusannya adalah muktamad.

JADUAL				
Tempat	Daerah	Perihal Lot Ukur Bil.	Bil. Pelan	Luasnya Lebih Kurang
Pulau Sepangar	Kota Kinabalu	01200814	01125203	91.054 hektar (225 ekar)

Bertarikh di Kota Kinabalu, pada 29 Disember 1999.

Dengan Perintah Tuan Yang Terutama,
DATUK SERI PANGLIMA OSU HAI SIKAM,
Ketua Menteri Sabah.



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Capabilities Of GazMis 2.0

JABATAN TANAH DAN UKUR
SEARCH GAZETTES USING PUBLICATION NUMBER OR DESCRIPTION

LS Ref	Description	Gazette Num	1st Pub Date	2nd Pub Date	Gazette Type	Area	Plan Number	Date Plan Approved	Lot Num	LA Num	District	Status
1 6.315	PROVISIONAL NATIVE RESERVE	445-1950	15-Aug-1950		DECLARATION	35,117.46Ac	9189	19-May-1942	1346		KENINGAU	Gazetted
			Section 78, Ordinance No. 9/30 : Land Ordinance 1930				PROVISIONAL NATIVE RESERVE					
2 6.316	PROVISIONAL NATIVE RESERVE	445-1950	15-Aug-1950		DECLARATION	35,149.26Ac	9189	19-May-1942	1346		KENINGAU	Superseded
			Section 78, Ordinance No. 9/30 : Land Ordinance 1930				PROVISIONAL NATIVE RESERVE					

Identify Results

Feature	Value
active_gaz_parcel	
feature_id	1334
(Derived)	
(Actions)	
View feature form	
Search Gazette	
Gazette Plan	
Pentaho Report	
rcv_date	NULL
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gaz_num	445-1950
ordinance	Section 78, Ordinance No. 9/30 : Land Ordinance ...
gaz_type	DECLARATION
pub_date_1	1950-08-15
pub_date_2	NULL
plan_number	9189

Easy generation of accurate & up-to-date reports



More benefits...

- ✓ Digital registers and records
- ✓ Scanned Gazettes and Plans are online and easily accessible (Web-Based)
- ✓ Digital Workflow for Gazette System being implemented
- ✓ Eliminate redundant work processes
- ✓ Enable better and accurate decision-makings.
- ✓ Improved administration & management of Reserved Lands



Way Forward

- Improving the accuracy of Reserve Boundaries
- Fully digital workflow (Application - Gazette)
- Connection to other Government agencies.



Conclusion

- ❑ State Land Reserved covered more than 52% of Sabah Land area.
- ❑ Accessibility to Manual information and records of State Land Reserves is slow and not up to date.
- ❑ GazMis 2.0 is designed to provide users with rapid and ready access to gazette information pertaining to reserved lands.
- ❑ The project involved the conversion of hard copied land gazette records into digital formats and creating a database that enable easy accessibility of the records.
- ❑ GazMis 2.0 has contributes towards better administration and management of State Land Reserves development outcomes



Thank You



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