

## **MARKET SURVEY SUMMARY FOR POST-GRADUATE DIPLOMA PROGRAMME IN PEATLAND MANAGEMENT**

A market survey for the Postgraduate Diploma Programme in Peatland Management was conducted in January 2004. The questionnaire (ANNEX 1) was sent out to 34 stakeholder agencies and individuals in the public and private sectors, nationwide (ANNEX 2). These include:

- State Secretaries
- Permanent Secretaries of the relevant ministries
- Head of relevant agencies in charge agriculture, forestry, public works, environment and resource management, drainage and irrigation, land development, geoscience etc.
- Consultancy firms

The respondents were given 1.5 months to respond. After 3 months only 14 agencies returned the questionnaire. The following are the responds (supported by frequency tables) received:

### **Part 1: CONTENTS OF PROGRAM AND ITS RELEVANCE TO THE NEEDS OF THE ORGANIZATION**

#### ***1. State the type of organisation / industry***

All organizations (100%) who participated are local agencies.

#### ***2. Does the programme fulfil the basic principles within the discipline?***

71.4% perceived that the program fulfilled the basic principles within the discipline.

#### ***3. Are the concepts and principles relevant to the present context?***

71.4% perceived that the program's concepts and principles are relevant to the present context.

#### ***4. Do the course contents help to build a strong programme?***

85.7% believed that the course contents help to build a strong program. 7.1% said it fairly helps, and another 7.1% said it doesn't.

#### ***5. Does the proposed programme cover all relevant subjects/topics?***

57.1% believed that the program covers all relevant subjects/topics. 42.9% thought the program fairly covers all that.

For this item, some respondents said that there are additional areas that need to be covered by the program. The suggestions are:

- a) Social Impact Assessment (SIA)
- b) Integrated Water Resource Management (IWRM)
- c) Integrated River Basin Management (IRBM)
- d) Peatland Rehabilitation and Threats
- e) Modelling
- f) Land Reclamation
- g) Peat Drainage
- h) Agriculture
- i) Infrastructure
- j) Engineering

#### ***6. Is there any subject that is not relevant in the programme?***

92.9% perceived that there are no subjects in the program which is irrelevant.

**7. State whether the programme fulfils the basic theories, current concepts, legal aspects, use of ICT, quantitative treatment and market/industry relevance.**

92.9% perceived that the program fully fulfils the basic theories.

64.3% perceived that the current concepts are fully fulfilled. The remaining 35.7% thought it partially fulfilled the current concepts.

57.1% thought that the program did not fulfil the legal aspect component. 35.7% perceived that it is partially fulfilled.

The majority 50% perceived that the ICT usage component is fully fulfilled in the program. 35.7% thought it is partially covered, and only 7.1% thought it did not fulfil the criteria.

64.3% believed that the Quantitative Treatment aspect is fully fulfilled in this program. The remaining 35.7% thought that it is partially fulfilled.

92.9% perceived that the program either fully or partially fulfilled the Marketing/Industry Relevance aspect.

**8. Is this programme sufficient in terms of the length of study and duration of practical training.**

78.6% thought the length of study for the program is sufficient. One respondent suggested that the length of the program should be at least 12 months. The respondent mentioned that "Peat itself needs detailed study – Peat is disappearing very soon."

64.3% perceived that the duration for Practical Training is appropriate. Three respondents indicated that the appropriate duration "depends" on some factors, which include "the practical training received/given in the first/basic/professional degree". One respondent said that "2 weeks is not enough even just to go around in Sarawak, what more to say doing some investigation. Please note that accessibility is 'very poor'."

**PART 2: CAREER OPPORTUNITIES**

**9. Do you think that graduates of this programme are suitable to work in your organisation? If yes, please indicate the areas.**

The bulk of the respondents did not answer this item (78.6%). Only three respondents (21.4%) thought that the graduates of this program are suitable to work in their organization as Environmental Managers.

**10. Please indicate relevant jobs in your organization for the graduate of this programme.**

Four respondents (28.6%) thought that the graduates of this program are suitable to work in their organization as Land & Survey Officers.

Five respondents (35.7%) thought that the graduates of this program are suitable to work in their organization as Resource Planners.

For this section, there are some additional suggestions from the respondents, about the type of work that the graduates of the program may be eligible for:

- a) Environmental Management
- b) Research & Development
- c) Developmental Planning

- d) River Management
- e) Project Planning
- f) Estate Management
- g) Forest Management
- h) District Forest Officers
- i) Forest Environment
- j) Forest Hydrology

**11. Please indicate relevant jobs in your organization for the graduate of this programme.**

Five respondents (35.7%) replied, and thought that the graduates could work as Environmental Officers.

28.6% thought they could work as Environmental Consultants.

Only 28.6% thought these graduates could work as Agriculture Officers.

For this item, some respondents indicated that the relevant jobs for these graduates at their organization:

- a) Research Officer
- b) Management Planning
- c) Estate Management
- d) Development Planning
- e) District Forest Officer

**12. State the number of posts in your organisation that can be filled by graduates of this programme.**

64.3% thought that the graduates of the program can fill about 1 to 3 posts in their organization. Only one respondent (7.1%) thought that the graduates could fill the post as an In-Service Officer.

***What is the appropriate range of salary payable to graduates of this programme?***

- a) RM1,000 – RM3,000 (1 response)
- b) RM1,500 – RM2,000 (1 response)
- c) RM1,500 – RM2,500 (1 response)
- d) RM1,800 – RM2,000 (1 response)
- e) RM2,000 – RM2,500 (1 response)
- f) RM2,500 – RM3,000 (2 responses)
- g) J41 and G41\* (2 response)

*\*J41 and G41 are government scales for jobs which are engineering and geological-oriented*

**13. Is this programme suitable for articulation to a higher level?**

92.9% perceived that the program is suitable for articulation to a higher level.

78.6% of the respondents thought that it is suitable for Masters level, and another 14.3% thought it is suitable for PhD level.

**14. For which level do you think this programme will have greater demand?**

The majority of the respondents (35.7%) thought that the program will have a greater demand at Master's level. The same quantity of responses (28.6%) was collected for the demand to be at Post-graduate Diploma level and at Bachelor's level.

**PART 3: OTHERS**

## **15. Sponsorship**

### ***Has your organisation sponsored students in this field / area?***

The majority of the respondents (71.4%) indicated that they have not students in this field/area.

### ***Would you encourage your staff to undergo this course?***

71.4% said that they will encourage their staff to undergo the course.

## **16. Outcome of the Programme**

### ***In your opinion, will this programme be able to produce the right kind of graduates for the employment market?***

57.1% answered YES. Only 14.3% answered negatively, and 4 respondents abandoned the item completely.

Those saying YES elaborated the relevance and needs of the Programme as follows:

- a) The program may provide opportunities for in-service officers to enrich knowledge on Peatland, which maybe of hand in land use planning. The employment market nevertheless is quite limited as more of the Peatland areas are converted into agriculture. Unless the profile or importance of Peatland/Peat forest is raised amongst the main stakeholders, the demand for such graduates may be very little.
- b) The state has abundance peat soil to be developed into commercial ventures and plantations.
- c) A comprehensive course outlines to cater for various issues regarding the Peat development.
- d) Sarawak is still lacking of graduates in this field. IPTAs should open up more opportunities to students to take up this course because the state of Sarawak has every potential to be a highly developed state in the future, especially in Agriculture and Industries related to it.
- e) In view of the extensive development going on in Peat soil areas in Sarawak.
- f) The subject matter may be more appropriately incorporated in Engineering courses or Environmental studies or degrees on Resource Planning.
- g) More equipped with basic technical knowledge on Peat Management, especially in Project Planning & Management in these areas.

**Post-graduate Diploma Programme in Peatland Management  
– A Market Survey**

The greater proportion of the world's 11 million hectares of tropical peatlands occurs in the coastal regions of South-east Asia. Many of these regions, including those in Sarawak are earmarked for agricultural development. Being some of the largest remaining areas of lowland forest in South-east Asia, these peatlands have global ecological significance because of their unique and diverse ecosystem having vital roles as reservoirs of biodiversity, as carbon stores and as hydrological buffers. They also play an important regional economic role by providing forest products and land for settlement. Owing to a lack of awareness and understanding about sustainable land management practices, however, many peatland development projects fail to achieve their declared objectives, leading to serious environmental degradation and impoverishment of local communities.

In response to the above, PEATWISE, an EU funded education project undertaken by a consortium of two South-east Asian universities (University of Malaysia Sarawak and the University of Palangka Raya, Kalimantan, Indonesia) and two European universities (Wageningen University and Research Centre, The Netherlands and the University of Leicester, U.K.) have developed a curriculum on the management of peatlands, focusing on the peat-covered lowlands of Borneo. This unique curriculum uses innovative educational methods and tools to make available course materials and training modules that incorporate up-to-date research results and advice for enhancing skills and expertise needed to promote the sustainable use of natural resources in socio-economic development, particularly in the areas of Sarawak and Central Kalimantan.

The curriculum consists of six modules, five of them of equal weightage and the sixth (field course and research project) having twice the weightage of the others. Designed as a post-graduate programme, it can be completed in ten months of weekend classes, at the end of which successful candidates will be conferred the Post-graduate Diploma in Peatland Management.

We believe your organization, being an important agency directly involved or having interest in land development, would find this programme particularly relevant to the needs of professionals dealing with planning, implementation and evaluation/monitoring. And it is also with this in view that we are sending you the accompanying **Market Survey Questionnaire**. The market survey, as you are probably aware of, is part of the Ministry of Education's procedural requirement for the approval of new academic programmes to be offered by universities in Malaysia. We will be most grateful if you or your representative could kindly complete the questionnaire and return to us in the self-addressed envelope before 20 February 2004. We believe your valuable inputs can help us improve and correct whatever deficiency there is in the proposed curriculum.

We thank you in anticipation of your response.

**POST GRADUATE DIPLOMA PROGRAMME IN  
PEATLAND MANAGEMENT**

<i>Course Title</i>	<i>Credit Hours</i> *
1. Ecology, Natural Resources and Environment	4
2. Water Resources and Hydrology for Peatland Catchments	4
3. Human Dimensions and Resource Economics in Peatland Management	4
4. Peat Soils and Land Use	4
5. GIS and RS for Peatland Management	4
6. Field Course and Research Project in Peatland Management	8
	28

\* 1 Credit hour = 14 contact (lecture) hours or 3 hours of laboratory work.

**COURSE OUTLINES**

Course 1: Ecology, Natural Resources and Environment (NRM)

Ecology: Basis for environmental management  
 Biodiversity; introduction to ecological biogeography.  
 Ecological hierarchy; major ecosystems, communities, populations  
 Environmentally sensitive areas; assessment for conservation and protection  
 Environmental degradation, carrying capacity and new ecology, degradation and change, deforestation, and soil erosion.  
 Aquatic biodiversity and conservation: Bioindicators, biomonitoring, habitat management  
 Introduction to sustainability and criticality concepts in land use and NRM  
 Competing land use systems  
 Water rights and governance  
 Global and regional conventions (UNCED, Ramsar, Dublin, WWForum etc);  
 Agenda 21: Environmental politics and reality.  
 The Federal Constitution and legal framework for environmental management.  
 The National Policy on the environment.  
 Institutional framework for environmental management.  
 Principles of environmental enforcement and compliance.  
 Environmental Acts, Regulations/Orders, guidelines and standards  
 Paradigm Shift in Natural Resource and Environmental Management  
 Environmental Impact Assessment (EIA)

Course 2: Water Resources and Hydrology of Peatland Catchments

Hydrological cycle; Precipitation; Evaporation; Transpiration; Infiltration  
 Climatology; Hydrograph  
 Geohydrology  
 River basin and catchment area  
 River flow  
 Fundamentals of fluid mechanics and hydraulics  
 Water quality classification, standards and guidelines  
 Cleanwater treatment, storage and reticulation  
 Wastewater treatment and recycling  
 Impacts of engineering works on peatland rivers, estuaries and coastal areas

- Optimisation of water use
- Protection areas for drinking water
- Ethics in water resources management
- Concepts in modelling and modelling tools
- Model set-up, data collection, calibration, verification
- Model interpretation
- Case studies for surface, groundwater water and watershed/river basin modelling using MIKE-SHE, MIKE-11, MODFLOW, REPEAT and others packages.

Course 3: Human Dimension and Resource Economics in Peatland Management

- Nature and scope of development planning
- Projects, plans, and development objectives
- Project cycles and planning processes
- Appraisals and human elements / issues in project evaluations
- Environmental and social impact assessment in development planning
- Project planning and management for the future
- Public health issues in peatland ecosystem
- Availability, distribution and uses of peat resources
- Natural resource accounting (NRA)
- Economic consideration in peat resource planning
- Potential Conflicts to Cooperation Potential (PCCP)
- Case studies: analysis of local project plans.

Course 4: Peat Soils and Land Use

- Introduction to peat soil genesis.
- Evolution and application of peat soil taxonomy.
- Basic principles of peat soil mapping.
- Basic principles of land evaluation.
- Soil performance and soil capability.
- Basic concepts in sustainable land resource management.
- Impact of peat soil degradation, spatial variability and soil diversity on sustainability.
- Soil quality and soil remediation.
- Significance of remote sensing techniques and GIS in precision land use.
- Impact of land use on quality of soils and natural waters – qualitative and quantitative considerations.
- Agricultural Systems.
- Land tenure and social institution.
- Tropical forestry and Agroforestry.
- Animal production in the tropics.
- Tropical crop production.
- Agricultural land and water management on peatland
- Integrated soil conservation and management.

**Course 5: GIS and Remote Sensing for Peatland Management**

- Decision support systems
- Introduction to mapping & surveying
- Environmental and landuse parameters for mapping*
- Earth observation (Eo) technology & system
- Principles of GIS and basic GIS operations
- Elevation and spatial modelling and manipulation
- GPS for Eo and GIS

Development of integrated water resource management system and system maintenance

Data/collection and storage/archive and dissemination

Web based technology for information sharing

**Course 6: Field Course and Research Project in Peatland Management**

Technical writing: organisation, illustrations/visuals, language, style, references (prints, on-line), exercises.

Natural science methodologies

Statistical methods

Peat soils monitoring, sampling and analysis

Biological methods and indices

Water sampling and analysis

River classification

Social science methodologies

Study population, sample & sampling procedures

Interviews and etiquette in social inquiry

Questionnaires & Household Surveys

Participatory Action Research (PAR) & Participatory Rural Appraisal (PRA)

Preparation and presentation of proposals for field course

10-14 days Field Course followed by report preparation and presentation

Dissertation projects.

Kindly return to us only this questionnaire (completed)  
using the self-addressed envelope

**UNIVERSITI MALAYSIA SARAWAK**

**MARKET SURVEY FOR POST-GRADUATE DIPLOMA  
PROGRAMME IN PEATLAND MANAGEMENT**

**PART I : CONTENTS OF PROGRAMME AND ITS RELEVANCE TO THE NEEDS OF  
ORGANISATIONS**

[Please tick ( ✓ ) where applicable]

**1. State the type of organisation / industry:**

I. Locally owned organisation / industry

II. Foreign owned organisation / industry

**A. Fulfilment of Theories, Concepts and Principles**

2. Does the programme fulfil the basic principles within the discipline?

Fully

Partially

None

3. Are the concepts and principles relevant to the present context?

Yes

Fairly

No

4. Do the course contents help to build a strong programme?

Yes

Fairly

No

5. Does the proposed programme cover all relevant subjects/topics?

Yes

Fairly

No

If your answer is 'Fairly' or 'No', please indicate other additional areas that need to be covered by the programme.

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6. Is there any subject that is not relevant in the programme?

Yes

No

If your answer is 'Yes', what are the subjects that need to be omitted?

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7. State whether the programme fulfils these criteria:

Remarks  
(if any)

		Fully	Partially	None
a.	Basic Theory	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Current Concepts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Legal aspects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Use of ICT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Quantitative Treat <sup>mt</sup>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Market / Industry Relevance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Is this programme sufficient in terms of:

a. Length of study  Yes

No

If your answer is 'No', please suggest the appropriate length of study duration. Please explain your suggestion.

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- b. Duration of practical training  Yes  
 No

If your answer is 'No', please suggest the appropriate duration of practical training. Please explain your suggestion.

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## PART II : CAREER OPPORTUNITIES

9. Do you think that graduates of this programme are suitable to work in your organisation? If yes, please indicate the areas.  
e.g. a) Environmental Management  
b) Land and Survey  
c) Resource Planning  
d) Others (Please specify)

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

10. Please indicate relevant jobs in your organization for the graduate of this programme.  
e.g. a) Environmental officer  
b) Environmental Consultant  
c) Agriculture Officer

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_

11. State the number of posts in your organisation that can be filled by graduates of this programme.

1 – 3 posts

4 – 6 posts

7 – 9 posts

Others. Please specify: \_\_\_\_\_

12. What is the appropriate range of salary payable to graduates of this programme?

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13. Is this programme suitable for articulation to a higher level?

Yes

No

If your answer is 'Yes', please tick the appropriate level (s)

Master level

PhD

14. This programme will have greater demand at the following level:

Bachelor's level

Post-graduate diploma level

Master's level

### **PART III :OTHERS**

#### **15. Sponsorship**

a. Has your organisation sponsored students in this field / area?

Yes

No

b. Would you encourage your staff to undergo this course?

Yes

No

If your answer is 'No', please state the reason(s).

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**16. Outcome of the Programme**

In your opinion, will this programme be able to produce the right kind of graduates for the employment market?

Yes

No

Please elaborate.

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**Thank you**

**LIST OF AGENCIES INVITED TO PARTICIPATE IN THE MARKET SURVEY**

- 1 YB Datuk Haji Talib Zulpilip  
**Pengerusi**  
**Perbadanan Pembangunan Ekonomi Sarawak (SEDC)**  
Tingkat 11, Menara SEDC  
Sarawak Plaza  
Jalan Tunku Abdul Rahman  
Peti Surat 400  
93902 Kuching  
Tel: 082-426777/416777; Faks: 082-418266
  
- 2 YBhg Datu Hubert Thian Chong Hui  
**Pengarah**  
**Jabatan Kerja Raya**  
Ibu Pejabat JKR, Wisma Saberka  
Jalan Tun Abang Haji Openg  
93582 Kuching  
Tel: 082-203100/203005; Faks: 082-429679
  
- 3 Encik Winsel Ahtos  
**Pengarah**  
**Jabatan Pengairan dan Saliran**  
Tingkat 9 dan 10, Wisma Saberka  
Jalan Tun Abang Haji Openg  
93000 Kuching  
Tel: 082-243241/414212; Faks: 082-426400
  
- 4 YBhg Datu Cheong Ek Choon  
**Pengarah**  
**Jabatan Perhutanan**  
Wisma Sumber Alam  
Jalan Stadium, Petra Jaya  
93050 Kuching  
Tel: 082-319102/442553; Faks: 082-441377
  
- 5 Tuan Haji Mohd Sepuan bin Haji Anu  
**Pengarah**  
**Jabatan Pertanian Sarawak**  
Ibu Pejabat, Tingkat 12-17  
Menara Pelita, Petra Jaya  
93050 Kuching  
Tel: 082-441000/447632; Faks: 082-447639
  
- 6 YBhg Datu Haji Mohammed Bajjuri Kipli  
**Pengarah**  
**Jabatan Tanah dan Survei Sarawak**  
Ibu Pejabat, Tingkat 6, Menara Pelita  
Jalan Tun Abdul Rahman Yaakub  
Petra Jaya  
93050 Kuching  
Tel: 082-444111/446446; Faks: 082-446611

- 7 Encik Sung Siew Eng  
**Pemangku Pengurus Besar**  
**Lembaga Air Kuching**  
Jalan Batu Lintang  
93200 Kuching  
Tel: 082-240371/254911; Faks: 082-244546
- 8 Encik Daniel Wong Park Ing  
**Pengurus Besar**  
**Lembaga Air Sibul**  
KM 5, Jalan Salim  
Peti Surat 405  
96007 Sibul  
Tel: 084-211001/211567; Faks: 084-211543
- 9 Encik Vasco Sabat Singkang  
**Pengurus Besar**  
**Lembaga Penyatuan dan Pemulihan Tanah Sarawak (SALCRA)**  
Tingkat 1-3, Bangunan Majlis Luar Bandar, Kuching  
Kota Padawan, Batu 10  
Jalan Penrissen  
Peti Surat 1981  
93740 Kuching  
Tel: 082-616177/610766; Faks: 082-616801
- 10 Encik Abdullah Chek bin Sahamat  
**Pengurus Besar**  
**Lembaga Pembangunan dan Lindungan Tanah (PELITA)**  
Tingkat 5, 8 & 12, Wisma Satok  
Jalan Satok  
93400 Kuching  
Tel: 082-235944/235975; Faks: 082-236001
- 11 Encik Muhamad Yakup bin Kari  
**Controller**  
**Lembaga Sungai-Sungai Sarawak**  
Tingkat 2, Bangunan electra House  
Lebuh Power  
93000 Kuching  
Tel: 082-207108; Faks: 082234096
- 12 Encik Yong Chiong Vun  
**Ketua Pegawai Eksekutif**  
**Lembaga Air Kawasan Utara (LAKU)**  
6<sup>th</sup> Floor, Soon Hup Tower  
Lot 907, Jalan Merbau  
98000 Miri  
Tel: 085442020/442008; Faks: 085-442042/442005
- 13 Tuan Haji Mohamad Bolhair Reduan  
**Pengarah Kawasan**  
**Lembaga Kemajuan Tanah Sarawak (SLDB)**  
Lot 1174, Block 9, MCLD, Miri Waterfront

Jalan Permaisuri  
98000 Miri  
Tel: 085413814/233550; Faks: 085-416192

- 14 YBhg Dato' Dr Haji Shahir Bin Nasir

**Setiausaha Kerajaan Negeri Johor**

Pejabat Setiausaha Kerajaan Negeri Johor  
Aras 2, Bangunan Sultan Ibrahim  
80503 Johor Bahru  
Johor  
Tel: 07-2237344/7345; Faks: 07-2235253

- 15 YBhg Dato' Zainal Abidin bin Haji Mat Said

**Setiausaha Kerajaan Negeri Pahang**

Pejabat Setiausaha Kerajaan Negeri  
Wisma Sri Pahang  
25503 Kuantan  
Pahang  
Tel: 09-5521600; Faks: 09-5523443

- 16 YBhg Dato' Dr Isahak Bin Yeop Mohd Shar

**Setiausaha Kerajaan Negeri Perak**

Aras 3, Bangunan Perak Darul Ridzuan  
Jalan Panglima Bukit Gantang Wahab  
30820 Ipoh  
Perak  
Tel: 05-2415668/2531957 ext 5000; Faks: 05-254323

- 17 **Setiausaha Kerajaan Negeri Sabah**

Pejabat Setiausaha Kerajaan Negeri  
Jabatan Ketua Menteri  
Tingkat 26, Bangunan Yayasan Sabah  
88502 Kota Kinabalu  
Sabah  
Tel: 088-225633/223599; Faks: 088-421125

- 18 YBhg Dato' Annuar Ma'aruf

**Ketua Setiausaha Kementerian Pertanian**

Kementerian Pertanian Malaysia  
Wisma Tani  
Jalan Sultan Salahuddin  
50624 Kuala Lumpur  
Tel: 03-2982011; Faks: 03-2913758

- 19 **Setiausaha Tetap**

**Kementerian Pembangunan Pelancongan Alam Sekitar Sains & Teknologi**

Tingkat 5 & 6, Menara Sabah Bank

Wisma Tun Fuad Stephens, Karamuning  
88300 Kota Kinabalu  
Sabah  
Tel: 088-258472; Faks: 088-236005

- 20 Dato' Ir. Haji Keizrul Abdullah  
**Ketua Pengarah**  
**Jabatan Pengairan dan Saliran**  
Jalan Sultan Salahuddin  
50626 Kuala Lumpur  
Tel: 03-2954708; Faks: 03-2914282
- 21 Ketua Pengarah  
FELCRA Berhad  
Tingkat 1-7, Bangunan LTAT  
Jalan Bukit Bintang  
P O Box 12254  
50772 Kuala Lumpur  
Tel: 03-2422488; Faks: 03-2485318
- 22 **Ketua Pengarah**  
  
**FELDA**  
Wisma FELDA  
Jalan Perumahan Gurney  
54000 Kuala Lumpur  
Tel: 03-2935066; Faks: 03-2920087
- 23 **Pengarah**  
**Jabatan Konservasi Alam Sekitar**  
Kementerian Pembangunan Pelancongan Alam Sekitar Sains & Teknologi  
D/a Tingkat 5 & 6, Menara Sabah Bank  
Wisma Tun Fuad Stephens, Karamuning  
88300 Kota Kinabalu  
Sabah  
Tel: 088-251290/1
- 24 **Ketua Pengarah**  
**Jabatan Pertanian**  
Kementerian Pertanian dan Industri Makanan  
Ibu Pejabat Pertanian  
Tgt Bawah, 1, 2, 3 & 4  
Menara Khidmat, Jalan Belia  
88632 Kota Kinabalu  
Sabah  
Tel: 088-283283/211306; Faks: 088-239046
- 25 **Pengarah**  
**Jabatan Perhutanan Negeri Sabah**  
Beg Berkunci 68  
90009 Sandakan  
Sabah  
Tel: 089-660811; Faks: 089-669170
- 26 **Pengarah**

**Unit Pembangunan Sumber Manusia**  
Jabatan Ketua Menteri  
Tingkat 10, Wisma Bapa Malaysia, Petra Jaya  
93502 Kuching  
Sarawak  
Attn: Mr Malcom Yong  
Ph: 082-492458; Fax: 082-448214

- 27 Ketua Pengarah**  
**Jabatan Alam Sekitar**  
Kementerian Sains, Teknologi & Alam Sekitar  
Tingkat 3 – 7 Blok C4  
Pusat Pentadbiran Kerajaan Persekutuan  
62662 Putrajaya  
Ph: 03-888 58200; Fax: 03-8888 9987
- 28 Timbalan Pengerusi**  
**Natural Resource and Environment Board (NREB)**  
Tingkat 19 Menara Pelita, Petra Jaya  
93050 Kuching  
Sarawak  
Ph: 082-319502; Fax: 082-448254
- 29 Project Manager**  
PPES Works (Sarawak) Sdn. Bhd  
3<sup>rd</sup> Floor, Lot 619-623,  
Section 62, Jalan Padungan  
93100 Kuching  
Sarawak
- 30 Dr Tie Yiu Liong**  
Agrosol Soil Survey Srevice (M) Sdn Bhd
- 31 Chief Executive Officer**  
Samling Bhd  
Miri, Sarawak
- 32 En. Wan Zawawie Wan Akil**  
Ground Water Technologies Sdn. Bhd.  
Lot 7415 No. 9 First Floor  
Jalan Simpang Tiga  
93300 Kuching
- 33 Dr Abdul Rahim Nik**  
Forest Research Institute Malaysia  
Kepong  
52109 Kuala Lumpur
- 34 Dr Abd Rahman Awang**  
Pengarah  
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