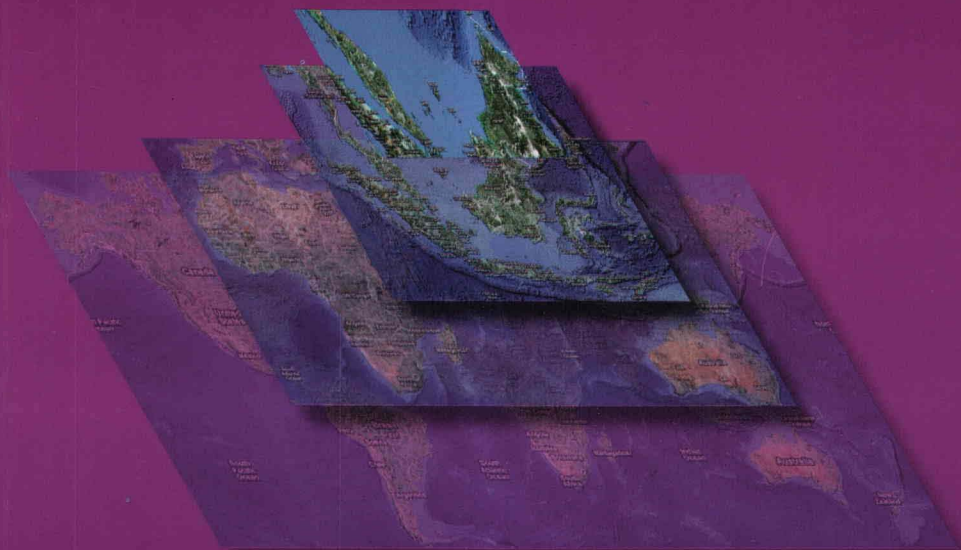


EXAMINING CONTEMPORARY MALAYSIA: Critical Knowledge From Research



Volume 2 Jilid 2

**RESEARCH KNOWLEDGE & INTELLECT APPLICATION SERIES
SIRI ILMU PENYELIDIKAN & APLIKASI INTELEK**

UfoRIA



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2009

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Foreword

This UfoRIA Research Knowledge and Intellect Application series has been evaluated and edited by a panel of expert and professional reviewers from within and outside the UiTM system. Most of the articles/papers in this special series has been presented at the 'Kontemporari' seminar series both at the state and national levels. A few articles/papers have even been presented and shared at regional and international seminar and conferences.

The articles/papers selected for this second volume discusses contemporary and also critical issues that need to be carefully examined and further researched by the academic community in Malaysia. This cycle of research effort and knowledge dissemination is a never-ending journey as we strive to make knowledge and learning more that just academic culture.

It is hoped that this Research Knowledge and Intellect Application series would continue the knowledge acculturation initiative that was started in 2002 when UfoRIA was born. This is the second out of two books, one in Malay and this particular volume in English, edited and published by the Unit for Research and Intellect Application (UfoRIA) with the support of the Campus Director of UiTM Seri Iskandar, Perak, Malaysia.

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Developing the traditional knowledge of the Orang Asli community in Malaysia

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ABSTRACT

It is generally recognised the estimated 190,000 Orang Asli in Peninsular Malaysia have traditional knowledge that could be further utilised for the development of bio-technology products. In the meantime, it is observed that such knowledge is dwindling and could possibly be lost in the wave of modernisation. It is essential to record and develop such knowledge for local and national interests. It is within this context that under the Ninth Malaysia Plan (2006-2010), the Ministry of Natural Resources and Environment (NRE) has made a special effort to document Traditional Knowledge (TK). This project is implemented by Forest Research Institute Malaysia (FRIM) and the main objective is to establish a database on traditional knowledge of medicinal and aromatic plants used by Orang Asli in Peninsular Malaysia. This paper concerns the partnership and involvement between researchers and Orang Asli community in documenting the traditional knowledge as well as capacity building. The whole process involves initial discussion with community leaders. This was followed by two awareness workshops held at RPS Iskandar, Bera, Pahang and at the RPS Banun, Gerik, Perak. Two socio-economic surveys were subsequently conducted in these two locations. The information gathered is being analysed and is expected to provide input to policy makers in terms of conserving and developing the traditional knowledge of the Orang Asli communities. Challenges in carrying out the project are also highlighted in this paper.

1.0 INTRODUCTION

Malaysia is a signatory to the International Convention on Biodiversity (CBD) (signed in 1994) and has developed National Policy on Biological Diversity (1998) committed to the conservation and development of TK for national and local interests. Under the Ninth Malaysia Plan (2006-2010), the Malaysian government through the Ministry of Natural Resources and Environment (NRE) has made a special effort to develop TK as stipulated under CBD. Under this special project implemented by Forest Research Institute Malaysia (FRIM), the main objective is to establish a database on traditional knowledge of medicinal and aromatic plants used by Orang Asli in Peninsular Malaysia.

2.0 ORANG ASLI, FOREST AND TRADITIONAL KNOWLEDGE (TK)

In 2009, it is estimated that there are about 190,000 Orang Asli in Malaysia. They are divided into 3 main groups namely Negrito, Senoi and Proto Malays. Each group can be further divided into 6 subgroups (Table 1).

Table 1: Groups and subgroups of Orang Asli in Peninsular Malaysia

Orang Asli groups in Peninsular Malaysia			
No.	Negrito	Senoi	Proto Malays
1	Kensiu	Temiar	Temuan
2	Kintak	Semai	Semelai
3	Lanoh	Semoq Beri	Jakun
4	Jahai	Che Wong	Orang Kanak
5	Mendriq	Jahut	Orang Kuala
6	Bateq	Mah Meri	Orang Seletar

Source: JHEOA 2005

The Orang Asli communities have a very strong affinity with their natural surroundings, mainly the natural forest and almost all of them are depending on the forest resources for livelihood in varying degrees. Forests became important sources of their income, food, materials for shelter as well as raw

materials for handicrafts. Their traditional knowledge on forest biological resources also has economic, religious and medicinal values to the Orang Asli community (Lee *et al.* 2007).

There are over 20,000 plant species in Malaysia, some unique only to Malaysia. It was estimated that there are about 2000 species of plants used by many local communities, including Orang Asli in their traditional medicinal systems (Soepadmo, 1995). In the remote areas, the Orang Asli has used various medicinal and aromatic plants to meet their daily needs (Burkill 1935).

Traditional Knowledge (TK) of Orang Asli generally refers to a combination of ancient indigenous practices and techniques, locally adapted and distinctive to a community in a particular area. It is normally passed on orally through generations via daily practices such as, stories, legend, folklore, rituals, songs, dances, poetries, and customary laws. In the context of Malaysia, TK of Orang Asli refers to the knowledge, know-how, wisdoms, cultural manifestations and practices including spiritual aspects. Despite modernisation, the Orang Asli still practise traditional medicine using forest resources. The Orang Asli communities have accepted both modern and traditional medications.

3.0 THE IMPORTANCE OF TK

CBD, of which Malaysia is a signatory, is a legally binding international treaty that commits its Parties to the triple objectives of conserving biological diversity, using natural resources sustainably, and fairly and equitably sharing benefits deriving from the use of genetic resources. With regard to TK, article 8(j) of CBD stipulated that:

“Each contracting party shall, as far as possible and as appropriate:
(j) subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the

equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices."

Based on the article above, it showed that TK plays the important role in conserving, sustaining and using genetic resources. A large population of the rural community still rely on traditional medicine which is a common practice in many parts of the developing world (Moran, 1996). The use of medicinal and aromatic plants has emerged in industrialised nations, where a growing proportion of the population is using crude drugs for self-medication. For the Orang Asli community, the traditional knowledge regarding medicinal plants used to treat diseases or illnesses are still used even though the modern medicines are used in their healthcare and livelihood. Nowadays, many medicinal herbal products are produced and commercialized as supplements in the form of pills, decoctions, external medicine, health drink and salad (*ulam*).

TK contributes to sustainable resources management. In the forestry sector, TK has been used in the management of natural forests via joint-forest management where the forest department and the local communities apply both modern and traditional knowledge to achieve sustainable forest management. There is increasing recognition that TK has a role to play in forest management and biodiversity conservation, in particular identification of valuable genetic resources.

TK documentation also can prevent the biopiracy activity. Biopiracy is defined as the unlawful appropriation of biological material including TK resources and patenting them without any acknowledgement and benefits due to the holder of such resources (Suryana, 2007). Biopiracy activities were undertaken without the consent of the relevant communities and intellectual protections were made without any acknowledgement and benefits to the local contributors. At most, the local community are only paid fees for manual labour work. Other than that, it is believed that proper documentation of associated TK could help in checking bio-piracy. It is assumed that if the material or knowledge is documented, it can be made available to patent examiners the world over so that prior art in the case of inventions based on such materials or knowledge are readily available to them. It is also hoped that such documentation would facilitate tracing of indigenous communities with benefits of commercialization

of such materials or knowledge has to be shared (Protection of Biodiversity and Traditional Knowledge; The Indian Experience: <http://www.twinside.org.sg/title/cteindia.htm>). TK related activities such as in situ and ex situ cultivation of biological resources also have been identified as a source of income that helps to address issues relating to unemployment and poverty.

4.0 STEPS TO DEVELOPING DATABASE OF TK OF ORANG ASLI

Before starting to develop Orang Asli database, research teams in FRIM have conducted a literature review regarding the use of medicinal and aromatic plants by Orang Asli in Peninsular Malaysia. Many plants are used by Orang Asli community in their livelihood. Our main focus is to establish a database of medicinal and aromatic plants of Orang Asli in Peninsular Malaysia. To achieve it, the partnership and involvement between researchers and Orang Asli communities in documenting their traditional knowledge is most important. Other than that, we also communicate with the other agency such as Jabatan Hal Ehwal Orang Asli (JHEOA) which plays an important role as a gate keeper. Co-operation from JHEOA enables us to have a better understanding on the community in aspects like socio-economic conditions, education, culture, lifestyle of Orang Asli. The whole process involves initial discussion with community leaders and the JHEOA.

Several visits were made to their villages to meet their community leaders to explain about the project. In this stage, the research team in FRIM tried to explain about this project and the issues about TK to the community at their level of understanding. The community discussion involved knowledgeable persons of the community such as *Bomoh*, Mid-wives, *Puyang* (medicinal experts of Semelai community) and traditional practitioners.

For this project, we are focusing on two areas. The first area is RPS Iskandar, Bera, Pahang which the community is Orang Asli Semelai and the other area is RPS Banun, Gerik, Perak where they are Orang Asli Jahai and Temiar. Based on rapid rural appraisal, we found that there are two different situations of the economic activities in these two different locations. The Semelai community in Bera can be categorised as a developing community which the majority of

the villagers are involved and contributed in the economic sector as business and agriculture sectors. Most of them work as rubber tappers in their own land. Some of them are successful in the education and work in government and private sectors. The Jahai and Temiar groups in Banun are a community which still depend on their natural surrounding for their livelihood. They are mainly hunters and gatherers, fisherman and farmers. Unlike the Semelai in Bera, most of them do not have rubber land.

4.1 TK awareness workshops

After engagement with the leaders and the medicinal and aromatic experts of the communities, we held two TK Awareness workshops at the community level with co-operation from JHEOA in RPS Iskandar, Bera, Pahang (on 15 April 2008) and RPS Banun, Gerik, Perak on 10 June 2008. TK awareness workshops acted as a platform for exchanging of experiences relating to TK issues in Malaysia and held with a two-way interaction process. The community was briefed about the importance of the project provided and the local views on the project were raised during the dialogue session. TK awareness workshops also involved exhibition of the medicinal plants and TK video show (based on the experience by the Sarawak Biodiversity Centre (SBC) in documenting TK).

4.2 Household surveys

To enhance local understanding on the project, two socio-economic surveys regarding the use of medicinal and aromatic plants of Orang Asli in Peninsular Malaysia were conducted. The first socio-economic survey was carried out in RPS Iskandar, Bera, Pahang on 7-14 April 2008. There were 184 respondents from 14 villages in RPS Iskandar interviewed during the survey, which were assisted by six Orang Asli undergraduate enumerators. The second socio-economic survey was done in RPS Banun, Gerik on 14-19 July 2008 which focused on the Jahai and Temiar groups where 187 respondents from 15 villages in RPS Banun were interviewed.

The objective of the survey is to understand the knowledge and use of medicinal and aromatic plants by the Orang Asli using face to face interview. These surveys provided an opportunity to explain about the project to the villagers

besides gathering their traditional knowledge regarding the use of medicinal and aromatic plants. The information gathered is expected to provide input to policy makers in terms of conserving and developing the traditional knowledge of the Orang Asli communities.

5.0 OTHER ACTIVITIES PLANNED

To develop the database of the use of medicinal and aromatic plants of Orang Asli in Peninsular Malaysia, other activities to be carried out include a capacity building workshop for the community on the methods of documenting their traditional knowledge. We also plan to collect their species specimens based on the finding in the surveys and then screen the chemical and biological contents of selected medicinal and aromatic plants. Other than that, we also will come out with the National strategic and action plan in 2010.

6.0 ISSUE AND CHALLENGES

The main issue in carrying out this project is obtaining Prior Informed Consent (PIC) from the local communities. In carrying out activities listed such as the capacity building workshop, specimen collection and lab analysis of chemical and biological content of the selected plants species, we have to obtain PIC from the community involved; based on the CBD Article 15 (5) regarding Access to Genetic Resources mentioned that:

5. "Access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, unless otherwise determined by that party".

Another issue concerns benefit sharing. In the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the benefits arising Out of their Utilization, article no IV(Steps in The Access and benefit Sharing Process), it was stated that:

24. "As provided for in Article 15 of the Convention on Biological Diversity, which recognizes the sovereign rights

of States over their natural resources, each Contracting Party to the convention shall endeavour to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties and fair and equitable sharing of benefit arising from such uses. In accordance with Article 15, paragraph 5, of the Convention on Biological Diversity, access to genetic resources shall be subject to prior informed consent of the Contracting Party providing such resources, unless otherwise determined by that party”.

In facilitating cooperation with FRIM, the Orang Asli Semelai in RPS Iskandar formed the *Jawatankuasa Pengetahuan Tradisi Semelai RPS Iskandar Tasek Bera Pahang* in 2008. This Traditional Knowledge Committee was well presented by all five *batins* (Orang Asli traditional leaders), the traditional medicine practitioners such as the *bidan*, *bomoh* and *puyang*, youth organisation, local social workers, Semelai Association of Boating and Tourism (SABOT) and women organisation and nurses of local clinics. In principle, this committee agreed to working with us.

Initially, we planned to obtain the PIC from this TK committee viewed as representing all villagers. After discussions, this local TK committee proposed some conditions on collaborations. While conditions on publications and scientific use of the knowledge could be accepted, conditions related to employment, business opportunities and benefit sharing posed some difficulties to FRIM. The matter was referred to NRE's legal advisor. It was felt that obtaining PIC from this local committee was inappropriate as the TK Committee does not have “legal status”. It is not a legal association (i.e. not registered).

This issue was further discussed among the legal officers of NRE, FRIM and Ministry of Rural and Regional Development. It was proposed that perhaps we could follow what Sarawak Biodiversity Centre (SBC) did earlier by obtaining PIC from the local *Jawatankuasa Keselamatan dan Kemajuan Kampung* (JKKK). Again, this could not be implemented as JKKK is politically appointed and it also does not have *locus standi*. After lengthy discussion, it was finally decided in April 2008 that the PIC will be signed by the community

on an individual basis. This action is viewed fair to the community as they are holders to their own knowledge and at the same time agreed to contribute in this project. We are in the process of discussing with the local TK committee again on the government decision. Hopefully, we will obtain PIC from all household heads in RPS Iskandar regarding their involvement in this project.

7.0 CONCLUSION

The implementation of traditional knowledge among Orang Asli is expected to open a new chapter in Malaysian history when the Orang Asli was consulted and their Prior Informed Consent (PIC) is obtained to source their traditional knowledge for sustainable utilization. The developing of database of medicinal and aromatic plants used by Orang Asli not only can conserve their knowledge from being lost, but it also can sustain the use of biodiversity that brings benefits to the local communities in the long run.

REFERENCES

1. Burkill, I.H. (1935). *A Dictionary of the Economic Products of the Malay Peninsula*. London: Crown Agents. Convention on Biological Diversity, 1992. (<http://www.cbd.int/convention/convention.shtml>) (accessed on 2007). Jabatan Hal Ehwal Orang Asli (JHEOA), 2005. *Data maklumat asas JHEOA Malaysia*. JHEOA.
2. Lim Hin Fui, Norini Haron, Norshakila Yusof, Intan Nurulhani Baharuddin & Suryana Ali (2008). *Implementing Malaysia's commitment to CBD: experience in seeking collaboration from the aborigines in Malaysia*. Pp.71-73 in Proceedings of the first International conference on Forest related Traditional knowledge and culture in Asia.
3. Lee S.S, Sugumaran M. & Wong K.M. 2007. Tasek Bera: A Semelai Medicine Chest in the Malaysian Rain Forest. Petaling Jaya: WETLANDS International-Malaysia, Malaysia, 1998. *National Policy on Biological Diversity*. Ministry of Science, Technology and the Environment.
4. Moran, K. 1996 "Compensating forest-dwelling communities for drug-discovery: the work of the healing Forest Conservancy", *Unasylva* 186, Vol 47, 1996, pp40-46.

5. Norshakila Yusof, Intan Nurulhani Baharuddin, Lim Hin Fui, & Suryna Ali (2008). Traditional knowledge and Conservation of Biodiversity in Malaysia. Pp468-471 in Proceedings of the first International conference on Forest related Traditional knowledge and culture in Asia.
6. Protection of Biodiversity and Traditional Knowledge; The Indian Experience (<http://www.twinside.org.sg/title/cteindia.htm>). (Accessed on 2008). Secretariat of the Convention on Biodiversity, 2002. *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the benefits arising Out of their Utilization*. Montreal: Secretariat of the convention on Biodiversity.
7. Soepadmo, E. 1995. *Status pemeliharaan tumbuhan ubatan di Semenanjung Malaysia. Prosiding Seminar Kebangsaan etnobotani pertama "ke arah menghidupkan penggunaan tumbuh-tumbuhan tempatan*. Serdang:16-18 Sept 1991 (229-244).
8. Suryna Ali. 2007. A technical report on traditional knowledge: Development of Law and Policy from international and national Perspectives – A case for documenting TK in Peninsula Malaysia