



On the cover, Toqk, with his forehead smeared with aromatic sap from the inner bark of a tree used in curing headaches, identifies yet another plant with medicinal properties. Like most of the Chewong in the Krau area, Toqk is not only able to identify the treasure trove of medicinal plants and other useful products in his forest home, he also relies on them in his daily living.

Above, a Semai man goes through the final stages of the tedious process involved in preparing the *ipoh* dart poison used when hunting with the blowpipe. The poison has potential applications in medicine because of the manner it works on the nervous system and on the heart.

Indigenous peoples are holders of a wealth of knowledge on the usefulness of the numerous biological resources in their forest homelands. This knowledge has been transmitted and expanded upon through the generations. Society can also benefit from this wisdom and experience. But the sharing has to be on terms that are equitable and that will benefit humanity. This report looks at why this is generally not the case and suggests ways by which the issues can be addressed.

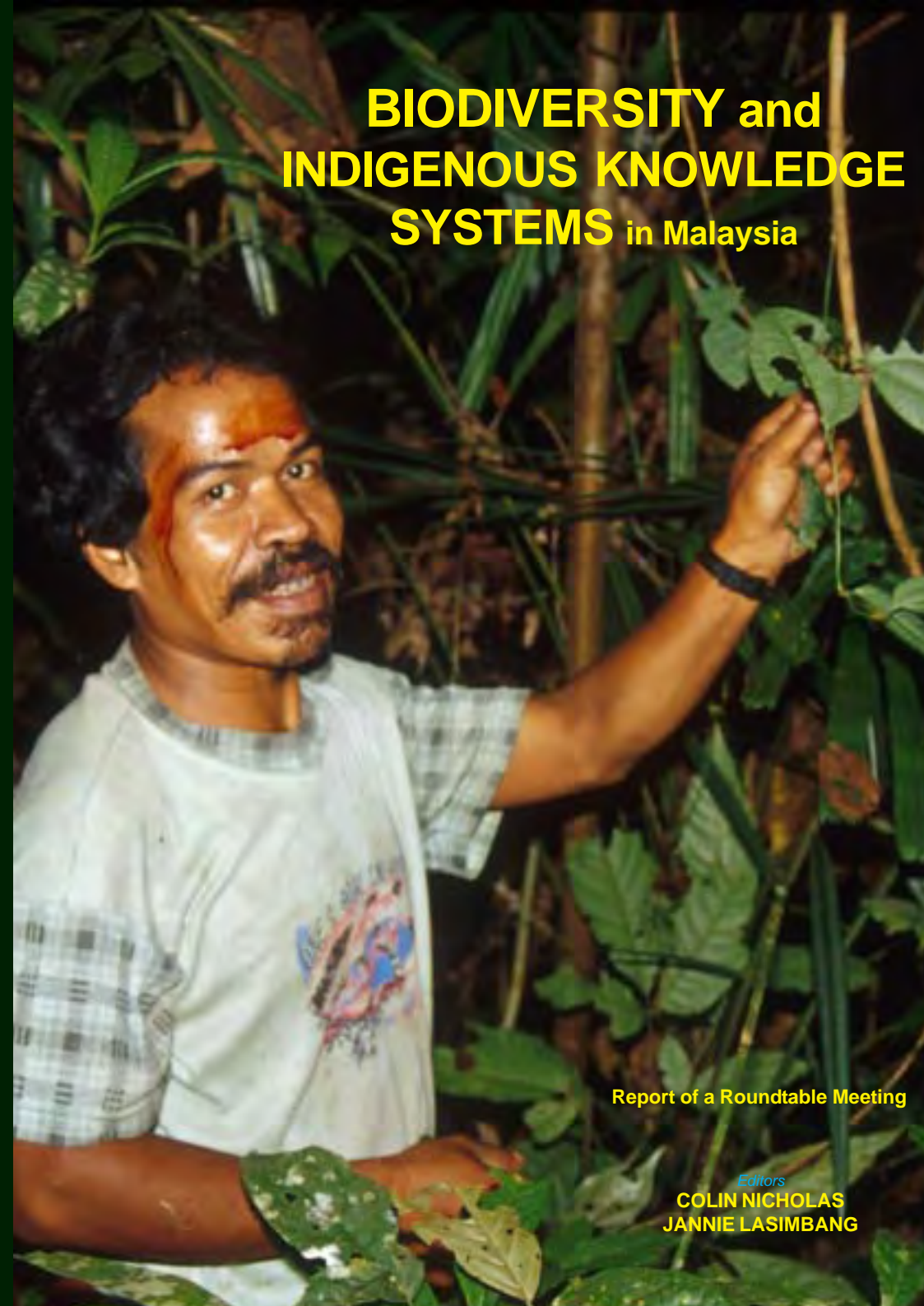
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BIODIVERSITY and INDIGENOUS KNOWLEDGE SYSTEMS in Malaysia



Report of a Roundtable Meeting

Editors
COLIN NICHOLAS
JANNIE LASIMBANG

Deliberations at the National Roundtable on
**BIODIVERSITY and
INDIGENOUS KNOWLEDGE
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Deliberations at the National Roundtable on

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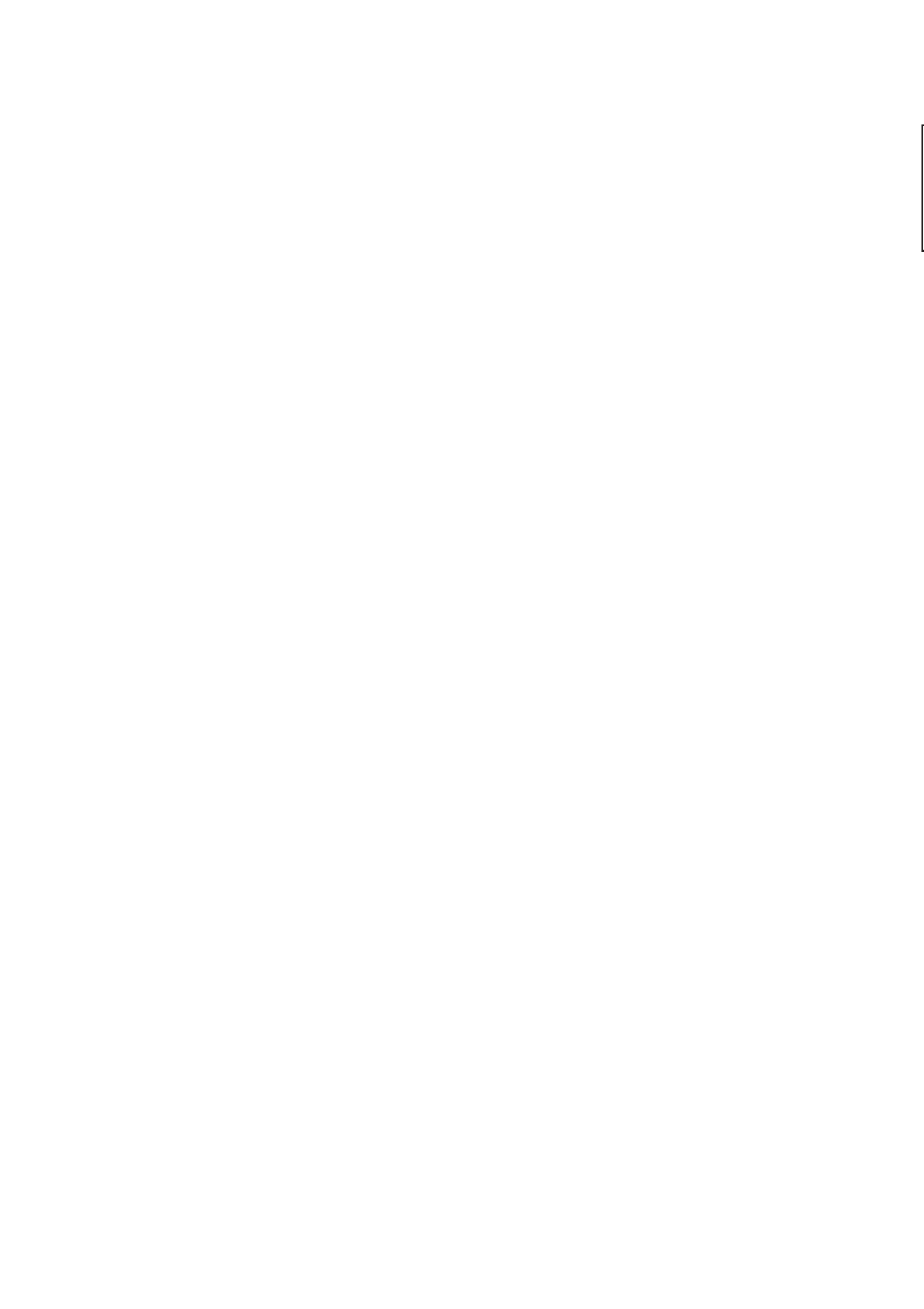
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1

BACKGROUND TO THE ROUNDTABLE



The indigenous peoples of Malaysia live in areas that are rich in biodiversity. These areas, once regarded as hostile and unproductive hinterlands by the mainstream community, are today much sought after for their natural resources, or simply for their lucrative or exotic locations. Because external opportunistic interests are widespread, indigenous communities have been dispossessed from their traditional territories or have experienced their traditional environments being degraded by others.

Today, it is widely known that the rich diversity of our biological resources – especially those in the traditional lands of indigenous communities – can bring immense profits to their exploiters. However, because indigenous peoples have an enviable body of traditional knowledge that can help bio-resource seekers narrow their search for potential

biological “goldmines” – and therefore enjoy great savings in their capital and research outlays – these bio-prospectors are now compelled to interact with indigenous communities.

The National Roundtable on Biodiversity and Indigenous Knowledge Systems was therefore organised to bring together the various stakeholders interested in maintaining the country’s rich biodiversity. The goal was to explore the links between indigenous knowledge, biodiversity and indigenous lives so that governments, the private sector and academia can better appreciate, and fairly reciprocate, the knowledge and resources of the indigenous communities.

The roundtable was held on 7th and 8th March 2001 at the Law Faculty of the University of Malaya, Kuala Lumpur and was attended by almost 60 representatives from the indigenous communities as well as from the government, non-governmental organisations and academia. It was jointly organised by the Indigenous Peoples Network of Malaysia (Jaringan Orang Asal SeMalaysia, JOAS) and the Law Faculty of the University of Malaya, with financial support from the Minority Rights Group, London.



2

CONFLICTS WITH INDIGENOUS RESOURCE MANAGEMENT



Indigenous resource management, with its fund of intricate knowledge gained over generations, has been central to the conservation of resources in indigenous peoples' territories. The current global environmental crisis has even caused some people who advocate sustainable development and living to turn to indigenous peoples' knowledge, innovation and practices on biodiversity conservation for important answers.

However, resource management is only one part of an inter-locking system governing the way of life of indigenous peoples. This system also ensures the continued survival of communities as a whole. Without doubt, all indigenous systems – judicial, social, economic, cultural, political, religious, agricultural, technological, and also health and the arts – are crucial in ensuring the holistic development

and well-being of the community. Internal conflicts – such as disputes on land ownership and control, or the violation of community regulations on resource management – are within the experience and capacity of most communities and are consequently dealt with easily using customary laws and traditions.

However, indigenous resource management is no longer dictated merely by internal factors but is instead increasingly dictated by external ones. External conflicts, in particular, are more difficult to resolve as they involve outside actors who challenge the rights of indigenous communities to control and manage their own resources.

These outside actors encroach on, and often appropriate, indigenous lands, thereby directly threatening, for example, the continuity and viability of indigenous social systems. Or the outsiders, using indigenous knowledge, go bioprospecting in indigenous areas for wealth-bringing resources – and, when successful, invariably exclude the indigenous communities from an equitable share of returns and benefits.

The Roundtable Meeting looked at some of these conflicts and sought ways by which indigenous communities could strengthen cooperation between government, the private sector and academia in order to protect the indigenous resource base, as well as to acknowledge the integrity of the indigenous system of resource management.

The roundtable also sought to resolve some of these issues and discussed initiatives by some communities to set protocols in dealing with some of the external conflicts.

The roundtable further examined the extent to which the dominant legal system has been effective in resolving issues related to resource management. Improvements to the legal system were considered that would incorporate principles and practices found in the traditional indigenous legal framework.

3

INDIGENOUS KNOWLEDGE SYSTEMS AND BIODIVERSITY PRESERVATION



“The planet is delicately balanced. All life forms from the minutest micro-organisms to humans, in varied ecosystems, are self-regulating, yet interconnected and working in concert, in a complex web of relationships to create and maintain conditions conducive to life. These relationships are well understood by indigenous peoples.” So began the keynote address of University of Malaya Law Professor, Gurdial Singh Nijar.

He added that indigenous peoples maintain a symbiotic liaison with their habitat. Their survival, in fact, depends on their ability to live creatively off nature even as they help sustain it. This creativity is reflected in the body of knowledge they have developed to conserve and carefully utilise the rich biological diversity that abounds on this planet. This is the creativity that has healed, fed and clothed



the world, and still continues to do so.

The knowledge of indigenous peoples is often enshrined in rituals, ceremonies and magic, thus underlining how culture, language, religion, psychology and spiritual beliefs cannot often be separated from their understanding of the natural world. This knowledge has passed through generations and assures the survival of the forest environment, its component parts, and the people and cultures dependent upon it and the ecosystem as a whole. The ethos, in the main, of indigenous knowledge is holistic and ecological. It takes into account, and relies upon, the complexity of interrelationships of all that exists.

It comes as no surprise therefore that among the 120 active compounds currently isolated from the higher plants and widely used in modern medicine today, 75 per cent show a positive correlation between their modern therapeutic use and the traditional use of the plants from which they are derived. More than two thirds of the world's plant species – at least 35,000 of which are estimated to have medicinal value – come from the developing countries. At least 7,000 medical compounds in the Western pharmacopoeia are derived from plants. In Malaysia alone, as early as the 1960s,



at least 500 local plants used by the indigenous peoples were documented to have economic or medicinal properties. The economic returns from such traditional discoveries are also not insignificant. According to Rural Advancement Foundation International (RAFI) estimates, US\$32 billion of sales of pharmaceuticals worldwide are based on traditional medicines.

Indigenous knowledge and practices pertaining to medicinal plants are of particular relevance to Malaysia because of her desire to be a global player in the natural-products sector. Proponents see opportunities in the rising demand for speciality natural products, especially in the primary health care and cosmetics arena. They point to two of Malaysia's many strengths: the plants growing in her forests and the local know-how about the myriad uses of medicinal plants.

Indeed, the creation of a depository of knowledge on the traditional uses of tropical herbs among Malaysians has been suggested as a way of expanding product development. Many allude to the unique confluence of Asian health traditions found in Malaysia and say this

cumulative knowledge could be used to advantage. They suggest that a continuous effort be made to document that knowledge to build up a rich database of medicinal plant applications. However, although many of these actors realise that the source of the “local know-how” has actually come from the indigenous peoples themselves, there is no concrete mechanism in place which ensures that the indigenous communities are able to participate directly and benefit equitably from the gains to be made from the use of the cumulative knowledge which they have acquired for millennia.

On the contrary, the tendency has been for mainstream society, particularly researchers and bio-prospectors, to appropriate indigenous knowledge for commercial gain.

“It should not become another commodity,” said Professor Gurdial, who is also with the Third World Network. “You must draw a balance between the commodification of indigenous knowledge and the undermining of that knowledge itself.”

How then can the alternative knowledge system of indigenous peoples be reasserted? Professor Gurdial felt that the first move must come from the national government and from those who determine national policy. They must show themselves to be genuinely concerned about ensuring just and equitable recognition and recompense of the gains derived from indigenous knowledge.



THE COMMUNITY POSITION



Three position papers were presented by representatives of indigenous communities from each of the three regions of Malaysia. The papers were prepared after consultation with indigenous representatives from the various regions.

ORANG ASLI OF PENINSULAR MALAYSIA

Biodiversity and the Survival of Indigenous Identity

Presented by Tijah Yok Chopil

The Orang Asli (literally original or first peoples) consists of three main groups, namely the Negrito, Senoi and Aboriginal-Malay. Of the 134,000 Orang Asli in the peninsular today, 88.7 per cent live in the interior and forest



fringe areas. Not surprisingly, therefore, the Orang Asli communities consider themselves to be a part of the natural environment and link their identity to this environment.

Orang Asli Principles on the Use of Resources

The Orang Asli subscribe to three basic principles in their use and control of resources. One is the collective ownership of resources within a village, which they see as analogous to *cak samak*, the Semai term for ‘eating together’. Sharing of the harvest – be it vegetables, hunted game or harvested fish – with one’s neighbour is the norm, although individual rights apply to agricultural produce, handicrafts and reared animals.

The second principle is based on the concept that all natural resources belong to the Creator and thus one has to have respect for natural resources, including the plants and animals. Ceremonies such as *cenagoh* – where permission is first sought from the friendly spirits before any land is opened for agriculture – are a form of respect.

Thirdly, land and the biodiversity within it is intrinsic to the Orang Asli’s identity. For this reason, the elders in the community take it upon themselves to ensure that traditional conservation and management practices of the resource base are passed down through the generations.

Orang Asli Resource Management Practices

One important practice is the zoning of the *nenggrik* or village area into eleven areas based on traditional use. These zones are for settlement, sacred sites, pathways/natural watercourses, hunting areas, fishing areas, forest areas for collecting products for commercial purposes, forest areas for collecting products for domestic use, commercial agriculture areas, home gardens, orchards and watershed areas. These areas are managed strictly according to customary law or *adat*.

Another important practice revolves around hill paddy cultivation, especially in the way field sites are selected and care is taken to ensure that soil fertility is restored over time so that the whole activity can be rotated with minimum erosion. Orang Asli communities are also careful to ensure that resources are not depleted. They practice controlled harvesting by taking only what is needed by the family or community. This also applies to hunting and gathering of food and materials from the surroundings.

Issues Related to Loss of Biodiversity and Indigenous Knowledge

A major problem is the non-recognition by outsiders of Orang Asli rights to their traditional land. Eventhough Orang Asli are categorised as *bumiputera* ('sons of the soil', or indigenous peoples, together with the dominant Malay population and the natives of Sabah and Sarawak), their land rights are not recognised under the Aboriginal Peoples Act (1954). Without such recognition, the sustained control, access and management of the land's biodiversity and, it follows, the protection of traditional knowledge, are endangered.

Another cause of both land and cultural loss is attributed to development policies that differ from the Orang Asli perspectives. Development programmes for the Orang Asli that resettle communities often lead to inferior economic, social and cultural conditions. This isolation from traditional

lands and resources, in particular, leads to severe loss of knowledge of biodiversity and of the indigenous management system. The imposition of mainstream religions and the policy of modern resource management, which are in conflict with traditional resource management systems, are also identified as causes of such loss.

The Orang Asli reiterated that they are not against development *per se* but maintain that such development must be appropriate and in accordance with their needs and culture. Programmes and policies aimed at changing their culture and way of life to one that is devoid of indigenous culture, identity, values and knowledge are not acceptable.

In order to guarantee their viability as a people, the Orang Asli want the following concerns addressed:

- Legal and permanent recognition of Orang Asli traditional lands;
- Dialogues/negotiations conducted and subsequent informed consent of communities to be obtained with respect to any proposed development project meant for them;
- Prior informed consent to be obtained from the communities affected in the event their traditional lands are to be converted to protected areas;
- The right to practise and protect their traditional culture and indigenous knowledge; and
- Encouragement and support to document and apply indigenous knowledge with respect to management, conservation and use of biodiversity, and to include this in the national curriculum.

ANAK NEGERI OF SABAH

Towards the Recognition of Traditional Knowledge

Presented by Gallus Ahtoi

The Anak Negeri (or Natives) in Sabah, who make up 60 percent of the state's population, comprise 39 ethnic groups. Many of them still live in their traditional territories. For the Anak Negeri, the management of biodiversity is closely related to their traditional knowledge and their control over resources, particularly their *adat* on customary land.



However, unsustainable development, conflicting resource management systems and external and internal influences have begun to take a toll on both the Anak Negeri's biodiversity and their indigenous knowledge.

Anak Negeri Resource Management System

The indigenous belief system of the Anak Negeri is based on the worldview that all matter, including spirits, are created by God. As such, the principal tenet of Anak Negeri spirituality is: respect for all beings – living or dead. Thus, for example, in their traditional resource management system, the guardian spirit of the forests and the land must be respected.

Also, the principle of “use and protect” in Anak Negeri resource management ensures the integrity and sustainable use of the biodiversity. Community members are taught from a young age to take and use natural resources in a



responsible manner so as to avoid depletion or destruction. Management practices are incorporated into everyday life and elders make certain that this knowledge is passed to the next generation.

Main issues

Some important problems were identified as impacting the lives of the Anak Negeri with respect to traditional knowledge and biodiversity conservation. The first is the conflict between the traditional system and the policies pursued by the government in resource management. In particular, the policies on the management of parks, sanctuaries, forest reserves and other protected areas that prohibit indigenous peoples from using these areas and/or that require the people to be relocated.

Secondly, the influence of religious institutions and modern thinking has forced many native people to stop practising indigenous resource management. This has curtailed the transmission of traditional knowledge to the younger generation. Due to the completely different system of education in schools, young Anak Negeri are unable to grasp the traditional way of passing down knowledge. Lack of understanding by authorities of the indigenous

management system also underlies the non-recognition of indigenous conservation practices.

The third problem identified is the commercialisation of indigenous knowledge and of biodiversity, particularly medicinal plants, which distorts the holistic value of knowledge and of biodiversity and permits bio-prospectors to exploit communities. There is growing concern about the Anak Negeri themselves falling into the trap of selling the resources from their forest for small, but quick, monetary returns. Lack of adequate protection, poor enforcement, and lack of strong local leadership have also contributed to many communities being exploited for their knowledge and biodiversity.

In order to ensure that their rights and interests are upheld, the Anak Negeri seek the following:

- To review policies and laws that impact on indigenous knowledge and biodiversity;
- To impress upon religious authorities the importance of understanding the values and concepts of indigenous belief systems;
- To correct general misconceptions about (the absence of) indigenous knowledge systems;
- To reverse the trend that sees biodiversity and indigenous knowledge as something to exploit for private profit; and
- For the formal education system to acknowledge the contribution and importance of indigenous knowledge and to include it within the national curriculum.

DAYAK AND ORANG ULU OF SARAWAK

Our Resources, Our Life, Our Heritage

Presented by Komeok Joe and Jacqueline Insham

Sarawak covers an area of 12.5 million hectares and has 36 ethnic indigenous groups. The Dayak and Orang Ulu (peoples of the hinterland) consider the forest as an important part of their life, since living in a healthy forest means having a healthy life, as all their needs are taken care of there. They also see the forest as a heritage to be passed down to future generations.

The implication and impact of development on biodiversity and indigenous knowledge

The Dayak and Orang Ulu of Sarawak depend very much on their diverse biological resources and the land. Their daily life, cultural heritage, social values, traditions, medicinal knowledge, belief system and quality of life are dependent on the biodiversity of the resources. The forest is also a place for learning, recreation and for ceremonies. Biodiversity and knowledge, as such, are interlinked and are the foundation of the indigenous peoples' lives.



For NGOs

- To work with indigenous peoples to handle issues related to indigenous knowledge and biodiversity;
- To help disseminate information that is precise and easy to understand; and
- To help organise conferences where indigenous peoples, government and NGOs can dialogue.

For Governments

- To be perceptive of the needs of indigenous peoples in their effort to conserve and revitalise biodiversity;
- To implement the Biodiversity Ordinance that was enacted in the state; and
- To ensure good governance by recognising indigenous peoples' customary rights to lands and resources;
- To have a more open attitude and be more trusting towards indigenous peoples, instead of always ascribing the actions taken by indigenous groups to protect their resources as being instigated by others; and
- To base policies on international laws.

For Dayak and Orang Ulu Peoples

- To continue to protect resources from further encroachment; and
- To strengthen traditional systems and practices of indigenous peoples.

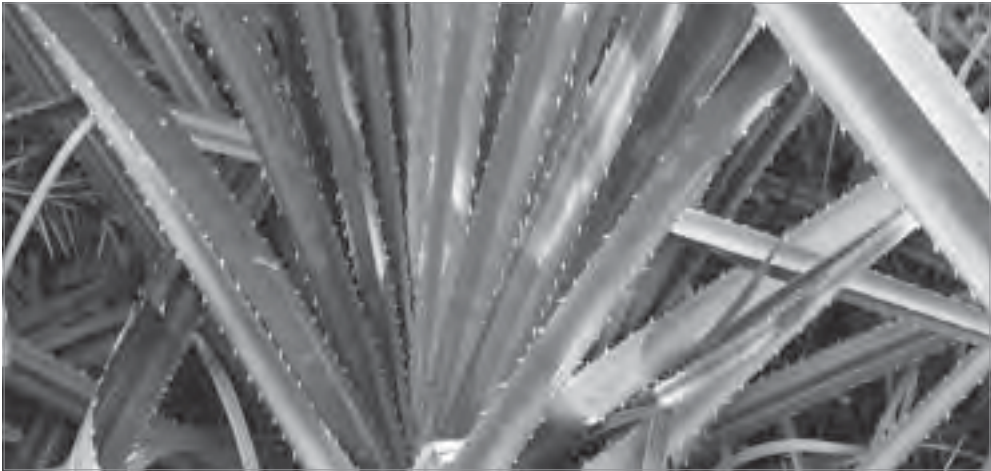
Encroachment and destruction of resources by large-scale development projects such as logging, the Bakun hydroelectric dam, and oil palm commercial cultivation have caused very serious impacts on both the Dayak and Orang Ulu, as well as on the environment.

Actions Taken

The Dayak and Orang Ulu communities have been analyzing and organizing discussions among themselves and have come up with viable solutions on the issues they face. Community mapping was one of the ways to ascertain the borders of their customary land. Stronger actions have also been taken on the ground to stop encroachments, as well as resorting to the courts to challenge the encroaching companies. Some of these actions have brought about recognition of indigenous peoples' right to their customary land, but they have not influenced the policies of the government to protect indigenous knowledge and biodiversity.

With regards to benefit-sharing, the Dayak and Orang Ulu felt that the enjoyment of a clean environment and adequate resources should not be underrated and cannot be valued in monetary terms.





Malaysia signed the Convention on Biodiversity on 12 June 1992. A National Committee on Biological Resources was established in 1993 under the auspices of the Ministry of Science, Technology and Environment (MOSTE), which became the focal point for all matters concerning the management of biological resources in the country. Malaysia became a member of the Conference of Parties on 22 September 1994.

According to Dr. Nadzri Yahaya, head of the Environmental Conservation and Management Division of MOSTE, the National Biological Resources Policy aims to conserve the nation's biological resources by ensuring that its components are used sustainably for the social and economic development of the country.

As far as the relationship between indigenous knowledge

and biodiversity is concerned, the government accepts, in principle, the need for an equitable partnership between itself and the local stakeholders. This presupposes that local communities and their knowledge be recognised and that legal safeguards be put in place to protect their interests. The way to go about this, from the perspective of MOSTE (Ministry of Science, Technology and Environment), is to introduce intellectual property rights especially by way of patents. However, developments in this regard, both internationally and more so locally, are still at the initial stages.

Biodiversity Management in Sarawak

The East Malaysian state of Sarawak is blessed with its uniqueness and diversity of flora, fauna and other organisms. According to Eileen Yen Ee Lee, the executive director of the Sarawak Biodiversity Centre, the state began addressing the globally agreed objectives of the Convention on Biological Diversity (CBD) when it enacted the *Sarawak Biodiversity Centre Ordinance 1997* and the *Sarawak Biodiversity (Access, Collection and Research) Regulations 1998*. The Ordinance and the Regulations provide for administrative and regulatory mechanisms to facilitate and authorize access to, and promote sustainable utilization of, the State's biological resources as well as to ensure that the State and its people receive appropriate economic and other benefits from access to these resources.

In addressing Article 8(j) of the Convention – which recognizes the knowledge, innovations and practices of the indigenous and local communities embodying traditional lifestyles – Sarawak has taken the initiative to put in place procedures to better enable traditional communities to protect and control their knowledge, innovations and practices. In this context, Sarawak is initiating programmes both to raise public awareness of the value of traditional knowledge as well as to educate traditional communities on the importance of documenting their ethno-biological

knowledge, as an initial step towards identifying potential benefits to be derived from ethnobiology-related research and ultimately for directing appropriate benefits back to the local communities.

Nevertheless, governmental activities thus far fall short of the goal of genuine community participation (because the local communities and stakeholders are not involved at the decision-making levels at the outset). Also, while the intention is to allow local communities to benefit from any gains from the use of their traditional knowledge, mechanisms for equitable benefit sharing have not been developed.

Some Statistics on Sarawak's Biodiversity

- 8,000 species of flowering plants
- 2,000 species of vertebrates
- 10,000 species of invertebrates
- 250 species of freshwater fish
- 700 species of marine fish
- 200 species of birds
- 160 species of snakes
- 100 species of lizards
- 4,500 species of fungi
- 2,500 species of trees
- 900 species of orchids
- 200 species of palms
- 600 species of ferns



Indigenous Knowledge Systems and Biodiversity Management in Sabah

Like Sarawak, the other East Malaysian state of Sabah has established its own Biodiversity Council and has drafted the Sabah Biodiversity Act (2000). In their paper, Joseph Pounis Guntavid and Sintiong Gelet, the director and deputy director respectively of the Sabah Museum, gave an assurance that the Sabah Biodiversity Act seeks to ensure that the state as well as the traditional and indigenous communities are able to benefit equitably from any gains made by the use of biological resources that are derived from elements of indigenous systems and knowledge.

They added that the Sabah Biodiversity Act puts no restrictions on novel approaches from indigenous systems and knowledge that can be applied to resource management, conflict management, or to ensuring sustainable development for the nation in general or for Sabah in particular. There are also provisions which allow the enactment to be amended from time to time, as and when necessary, in order to solve issues and problems relating to indigenous systems and knowledge, including intellectual property rights.

However, they added that, as in the case of Sarawak, the realisation of these well-intentioned provisions in the Sabah Biodiversity Act comes to very little if important stakeholders such as the indigenous communities are not represented. At the present time, even the Sabah Museum is not involved in the decision-making process.



6

PROTECTING INDIGENOUS
KNOWLEDGE

The importance of indigenous knowledge on forest products cannot be denied. This is evidenced from the growing number of pharmaceutical companies signing agreements with national or state governments to screen medicinal plants found in the traditional territories of indigenous peoples.

However, indigenous peoples are invariably excluded whenever any financial remuneration or compensation is paid for the right to use their knowledge. The main reason for this, according to Ong Chui Koon, the Senior Manager of the Intellectual Property Services Section of the Standards and Research Institute of Malaysia (SIRIM), is that the law on intellectual property in Malaysia does not adequately protect indigenous knowledge and forest products. On the contrary, intellectual property in Malaysia covers copyright,

trademarks, patents and registered designs, of which only patents are remotely applicable to indigenous knowledge and indigenous use of forest products.

However, patent law in Malaysia will not permit the patenting of knowledge *per se*. Knowledge *per se*, such as knowledge about the identity and medicinal properties of plants, is not an invention within the definition of patent law. One cannot patent a new medicinal plant just by being the first to catalogue it. However, collection and preparation methods may be patented if they embody some practical, technical or industrial application. If indigenous peoples themselves have used these methods for generations, and these methods are available to the public and clearly lack novelty, they are not entitled to enjoy patent rights.

Furthermore, as contended by Ong, although the Patents Act provides for the protection of a new use of a known compound, this provision is not suitable for the protection of plant or animal extracts. The reason is that patent law only allows the patenting of single, pure, active substances, not a complex mixture. Moreover, patent law protects individual property rights, whereas indigenous knowledge is collective. Such knowledge, developed over a period of time and codified in texts or retained in oral traditions over generations, cannot satisfy the patentability criteria necessary for the grant of a patent.

Having noted that the existing patent law cannot adequately protect indigenous knowledge and forest products, some other options are available.

Amending the Patents Act

It is proposed that a provision be provided in the Malaysian patent law specifically for the protection of plant and animal extracts. Under this special provision, in order to be patentable, the new extract or a new use of a known extract shall not have been made available to the public and shall not be part of the prior art. The examination of a patent



application claiming an invention in the field of plant or animal extracts can be carried out under the International Patent Classification group A61K dealing with pharmaceutical inventions.

Documentation of Indigenous Knowledge and Forest Products

If indigenous knowledge and forest products are properly documented, they can be used to check, even nullify, the grant of patents based on indigenous knowledge and forest products that are already available in the public domain. Documentation may also identify the indigenous groups who have contributed the knowledge and provide some kind of protection of their rights.

Sui Generis System

for Protecting Indigenous Knowledge and Forest Products

It is noteworthy here that various *sui generis* ('alone of its own kind') systems providing for the protection of intellectual property rights in plant varieties, integrated circuits and databases are currently available. The availability of *sui generis* solutions means that the categories of intellectual property rights are not closed. Therefore, a *sui generis* system could be designed to protect indigenous knowledge and forest products. Such a system would be within the spirit of the TRIPS Agreement.

Dr. Tay Pek San, of the Law Faculty of the University of Malaya, concurred that a *sui generis* system appears to be

the most appropriate scheme for the protection of indigenous knowledge and forest products. A *sui generis* system will be able to accommodate the peculiar characteristics of indigenous knowledge and to prevent the surreptitious use of the knowledge by bio-prospectors.

Speaking primarily in the context of protecting works of intellectual creativity of indigenous peoples, Dr. Tay also asserted that other intellectual property protections, especially the Copyright Act, do not afford indigenous peoples the protection they need, nor should indigenous peoples resort to such protections. In fact, she contended, the significant differences between the underlying reasons for the creation of indigenous works of art and the Western style works raise the question of whether copyright law is the appropriate framework for protection of indigenous art, for example.

The principles of copyright law tend to be prompted by concerns irrelevant to indigenous peoples. Concepts of private ownership of works, material fixation and the limited duration of copyright protection are contrary to the rights of indigenous peoples in their works of intellectual creativity. To attempt to accommodate indigenous works of art into copyright law in a manner that preserves the integrity of both types of work and at the same time is beneficial to both would likely be an exercise in futility. The subject matter of protection of copyright law and indigenous art forms are two very different systems – and therefore are an inappropriate mechanism to protect the interests of indigenous peoples.

Again, a *sui generis* system for the promotion and protection of indigenous works that addresses indigenous artistry in its cultural context would be more appropriate. A regime of protection should be neither so broad that it prevents it from being practical and effective, nor so rigid that it is an obstacle to the expansion and regeneration of indigenous creativity.



Drawing heavily from the paper of Professor Gurdial, several legislative options were identified. But first, the rights of indigenous peoples and of the policy options discussed below should be affirmed. Indigenous political and social structures and institutions must be recognised and insulated from any encroachment or abridgement. This could be entrenched as a fundamental right and formally incorporated into the Federal Constitution.

Laws would then be needed that give effect to this right. In respect of biological resources managed by and within the territorial control of indigenous peoples, there could be a law on access. This would require prospectors to apply for consent from indigenous peoples for access to the biological resource and knowledge related to it. The law would provide punitive and compensatory measures for

any access that is in violation of this mandate. The law would govern all bio-prospecting activities prior to, during and after the access is granted. It may require the prospector to specify why access is requested, how much of a sample will be taken, how the resource will be used; how the access will be carried out, how the indigenous people will collaborate in collecting the resource, where a sample of the collected resource will be deposited, and finally, what the benefit sharing arising out of the use of the resource and associated knowledge will be.

A law relating to the recognition of the knowledge systems of indigenous peoples may also be a necessary corollary. This could, for example, state that indigenous knowledge is, and will always remain, the right of indigenous peoples and will be inviolate. It cannot be taken away from them. It becomes, like land, inalienable, because it is inextricably a part of their social and cultural identity. The content of this right will be determined by the indigenous peoples' own social and institutional structures.



8

POLICY RESPONSES REQUIRED



The first option for national governments would be to affirm indigenous peoples' right to exist as a people with their culture and practices intact. This affirmation must be both formal (as in fundamental constitutional guarantees) and real (both by removing all conditions that threaten their culture and survival and by establishing measures that support the preservation and enhancement of their culture and practices). One of the impediments to indigenous cultural survival is the lack of secure tenure of land. In Malaysia, native customary land titles are being extinguished at an accelerating pace to permit lands upon which indigenous peoples have lived for millennia to be parcelled out, often for questionable commercial enterprises.

Governments, as a matter of policy, must engage indigenous and local communities in decision-making in

relation to all matters relating to biological resources. This will concretize the recognition of the role of indigenous peoples, their culture and their knowledge accorded them by the Convention on Biological Diversity. Wherever biological resources are concerned, then indigenous peoples should have the final say.

Governments could undertake research as determined and directed by indigenous peoples. Others (researchers, NGOs, experts) could participate but the indigenous peoples must have a veto power over the choice of participants and the direction and purpose of the research. To the extent possible, indigenous peoples must be involved in the research activities. There must be appreciation and humanistic value accorded to research in situ. The integrity of local ecosystems, and the need to conduct research within these ecosystems, must be respected at all times.

Policies that enhance the use of indigenous technologies must also be promoted.

Policies that give indigenous communities control over their knowledge should be developed. This would involve the recognition or promulgation of rights that give them control and management over both their physical resources and the knowledge associated with the use of plants and other materials.

The policies suggested here must, of course, emanate from, and be acceptable to, the indigenous peoples, who will necessarily determine their content and manner of implementation. The policy makers then can play an important supportive role.





In order to ensure that indigenous communities are not further marginalized and that the rights of indigenous peoples to their land and their cultural and biological resources are fully recognized, the indigenous participants of the roundtable meeting resolved as follows:

Indigenous groups and communities are to draft the Community Protocol and present this to the authorities for recognition and endorsement. This protocol will include conditions and regulations for the procurement of biological specimens, information, etc.

To work towards ensuring indigenous representation in the national and state Biodiversity Councils, and to secure the genuine participation of the indigenous communities.

To strengthen cooperation and collaboration between indigenous peoples, government and academics, for

example, by getting biodiversity conservation and indigenous knowledge issues into the national education curriculum and by strengthening and recognising the relevant Council of Elders or Native Chiefs to regulate and enforce such issues.

To undertake more joint research and documentation and jointly to monitor theft and biopiracy of biological resources.

And to re-examine all existing laws that are in conflict with indigenous rights to traditional lands and biological resources.



The full papers of the roundtable meeting have been published under the title, *Indigenous Peoples' Knowledge Systems and Protecting Biodiversity*. The book is edited by Azmi Sharom and Gurdial Singh Nijar and published in 2004 by Advance Professional Courses. The articles are either in English with Malay summaries or Malay with English summaries.