Intellectual and Cultural Property Rights of Indigenous and Tribal Peoples in Asia

By Michael A. Bengwayan
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Note
In the main text of this report, the term ‘indigenous peoples’ is used to include tribal peoples.

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Contents

Preface 2
Introduction 3
Asian indigenous peoples’ struggle for ICPR 6
UN efforts to protect indigenous peoples' ICPR 12
Governments’ efforts to protect ICPR on biodiversity 18
Intellectual property rights regimes and biodiversity 20
Indigenous peoples’ struggles against biopiracy 23
Conclusion 32
Recommendations 34
Relevant international instruments 35
Notes 36
Bibliography 38
Preface

Indigenous and tribal peoples, worldwide, at international meetings, there is a growing appreciation of the complexity of indigenous peoples' discourse. Not only are they confronting complex threats to their survival by international agencies of the United Nations, but they are also faced with the appropriation of their collective knowledge developed through their lands and resources, and physical persecution, but the World Intellectual Property Organization (WIPO) has begun discussions on the issue of cultural property rights. Traditional knowledge of medicinal plants and crops is being taken by multinational companies, while traditional songs and designs are being commercialized for the tourism industry. The issue of indigenous peoples' cultural property rights is becoming more urgent for indigenous peoples.

On the international front, the Draft Declaration on the Rights of Indigenous Peoples is taking a long time to be adopted by the United Nations (UN), despite it being intended to be the minimum standard for the protection of indigenous peoples' rights. This is unfortunate as other international instruments are in the meantime being ratified and are adversely impacting on indigenous peoples' cultural rights. For instance, the General Agreement on Tariffs and Trade (GATT), the Trade-Related Aspects of Intellectual Property Rights agreement (TRIPS), puts both indigenous peoples and developing nations at a disadvantage by imposing an intellectual property rights regime that does not take into account the diversity of cultures. Article 8j of the UN Convention on Biological Diversity (CBD), gives minimal recognition of indigenous peoples' rights. Most Asian governments are cash-strapped and therefore need to exploit the drive by multinational companies to use all resources (including intellectual and cultural resources) in order to generate income. Indigenous peoples are being dispossessed of their ancestral lands to make way for mining, dams, logging concessions and tourism complexes. In many cases, they do not receive any compensation for lost lands.

Due to the active lobbying by indigenous peoples' representatives in various international meetings, there is a growing appreciation of the complexity of indigenous peoples' discourse. Not only are they confronting complex threats to their survival by international agencies of the United Nations, but they are also faced with the appropriation of their collective knowledge developed through their lands and resources, and physical persecution, but the World Intellectual Property Organization (WIPO) has begun discussions on the issue of cultural property rights. Traditional knowledge of medicinal plants and crops is being taken by multinational companies, while traditional songs and designs are being commercialized for the tourism industry. The issue of indigenous peoples' cultural property rights is becoming more urgent for indigenous peoples.

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When the trees are gone, the deer for ever lost and the forests are just memories, we will weep. Not for the land that is bare and dead. But for us, our children and their children. When there are no more tears to fall, we will weep with our own blood. This is what Salak Dima said to me when I met him in the Palanan Wilderness Area, in the Philippines in June 2001. Salak Dima personifies what journalists call a man of the forest, with his kulibewand pana (bow and arrow), and his chest scars — intentional disfigurement which years before tested a young man's bravery. He stands just over four feet and weighs no more than a hundred pounds. When I first met him, he lived in the most remote tropical jungles of the Palanan Wilderness Area of Isabela, Philippines. That was decades ago. Today, he and his small band of Agta people are moving deeper into the forest which itself may not be around much longer. They are seeking refuge from the invading mainstream population who scorn them, from the military and police authorities who provide them with no protection and from the government authorities who call them animals.

These people are one of Asia's indigenous peoples marginalized by incoming settlers. Indigenous and tribal peoples see themselves as distinct from the mainstream. They speak their own languages, are largely self-sufficient, and their economies are tightly bound to their intimate relationship with their land. Their culture is different from that of the mainstream, inherited from their forebears and adapted to their current situation. They have often lived on their lands for thousands of years.

It is difficult to generalize about Asia's indigenous and tribal peoples. They encompass a huge variety of peoples, living very different ways of life in a great variety of environments. One thing that they do have in common is the oppression and marginalization they experience. Often they suffer direct violence, for example in Papua New Guinea, in Burma/Myanmar and in the Chittagong Hills of Bangladesh. They also suffer from development efforts by their own governments and by multinationals, through the take-over of their lands and resources. In most parts of Asia where indigenous peoples land rights are recognized, the government retains the power to overrule these rights in the economic interest of the state. Any development, from logging to dam building, can be justified in this way, leaving no protection and providing little compensation for these millions of indigenous people who rely on their land for survival.

The intellectual and cultural property rights (ICPR) of indigenous peoples are also under threat. These include their beliefs, knowledge and intangible cultural properties.

Box 1: The indigenous peoples of Asia

It is estimated that there are 190 million indigenous people in Asia. Some 75 million live in India and 30 million in South-East Asia. Among Asian indigenous peoples are:

- Adivasi, Dalits, Assamese, Manipuris and Tamils of India and Sri Lanka
- Jarowa tribes of Andaman Island, India
- Uighurs of Tibet
- Ainus of Japan
- Lisu people of Thailand, India, China and Burma/Myanmar
- Philippine tribes
- Hani and Akha peoples of Yunan, China, Laos, Vietnam, Thailand, Burma/Myanmar and SW China
- Penans of Sarawak, Malaysia
- Karen tribes of Far East Asia
- Sakas of Central Asian Steppes
- Jummas of the Chittagong Hill Tracts of Bangladesh
- Amungme of Papua, Indonesia
- Mongol Uzbeks of Afghanistan, Uzbekistan, Papua tribes of Papua New Guinea
- Highland Tajiks of Tajikistan
- Siberian tribes of Russia
- Sindhs and Sindhis of Pakistan
- Udeo tribes of Russia
- Punjabis of India
- Khamty tribes of Russia
- Dayaks of Borneo, Malaysia
- Naga natives of Nagaland, India
- Tharus of Nepal and India
- Pangcach People of Taiwan
- Bentians of Indonesia
- Orang Asli of Malaysia
- Hmong of Cambodia, Vietnam and Laos
Indigenous peoples are concerned that the outside world has appropriated their arts and cultural expression, performances, musical arts and artistic works and other forms of intellectual and cultural expression, handed down through the generations.

These intellectual and cultural properties are living traditions that are vital to the identity and cultural survival of the indigenous peoples. They are holistic and cannot be divided. Given that indigenous knowledge is collectively owned, only the group as a whole may consent to sharing indigenous cultural and intellectual property.

### Box 2: Definitions

The United Nations (UN) has accepted the definition of indigenous peoples put forward by José Martínez-Cobo, the Special Rapporteur to the Subcommission on the Prevention of Discrimination and Protection of Minorities. In his report, entitled *Study of the Problem of Discrimination Against Indigenous Populations*, Cobo states:

"Indigenous communities, peoples and nations are those which having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of societies now prevailing in those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop, and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems."

In addition, the definition or ‘coverage’ used in the International Labour Organization’s (ILO) Convention 169, Article 1 is also widely accepted:

a. *tribal peoples in independent countries whose social, cultural and economic conditions distinguish them from other sections of the national community, and whose status is regulated wholly or partially by their own customs or traditions or by special laws or regulations;*
b. *peoples in independent countries who are regarded as indigenous on account of their descent from the populations which inhabited the country, or a geographical region to which the country belongs, at the time of conquest or colonization or the establishment of present state boundaries and who, irrespective of their legal status, retain some or all of their own social, economic, cultural and political institutions."

Moreover, and most importantly, in accordance with indigenous peoples’ perspectives, both definitions emphasize self-identification as one of the main variables. It should be noted here that, despite common characteristics, no single accepted definition of indigenous peoples that captures their diversity exists. Therefore, self-identification as indigenous or tribal is usually regarded as a fundamental criterion for determining indigenous or tribal groups, sometimes in combination with other variables such as language spoken and geographic location or concentration.

Indigenous peoples are also concerned about the unauthorized use and reproduction of secret or sacred material and spiritual resources for commercial purposes. This type of appropriation results in the disclosure of secret/sacred material to those not authorized to know or view such material.

Perhaps the most serious appropriation, however, and one that is taking place in almost all communities of indigenous and tribal peoples in Asia, is the appropriation of indigenous knowledge of biodiversity through biopiracy: indigenous peoples’ knowledge of plants, animals and the environment is being used by scientists, medical researchers, nutrionists and pharmaceutical companies for commercial gain, often without their informed consent and without any benefits flowing back to them.

Indigenous people have long been aware of the medicinal properties of plants in their own areas. Traditional knowledge is regarded as common heritage and not as a commodity to be patented for commercial exploitation, perhaps to the exclusion of traditional owners. As with many other aspects of indigenous culture, knowledge of different plants and their healing properties is restricted to a particular class of people. Knowledge of the therapeutic properties of plants is passed on orally, from generation to generation. Indigenous people gain access to such knowledge when they have attained the appropriate level of initiation.

Indigenous medicinal knowledge is sought after by medical researchers and pharmaceutical companies to save research time and money. When plants are identified as having commercial potential, their active properties are isolated and the pharmaceutical company takes out a patent on inventions relating to
those plants, even though their benefits have been known to indigenous people for years. Biopiracy has spread, indigenous peoples saw that the quest for plant and animal species necessitates access to their lands. Knowledge concerning the nutritional use of indigenous resources is being documented. They are concerned that such information is often given to researchers without indigenous people realizing how this information might be exploited. The food industry increasingly recognizes the value of indigenous knowledge concerning the nutritional benefits of particular plants and animals.

Indigenous peoples are alarmed that this has led governments to exercise rights over the land, and to the denial of the rights of indigenous people to their traditional lands. The process places indigenous people in positions where they cannot manage and develop their inherited medicinal and agricultural knowledge.

Government conservation authorities and multinational companies are collecting specimens from indigenous lands as part of their programmes to create inventories. The col
Asian indigenous peoples’ struggle for ICPR

Indigenous peoples’ ICPR defined

Indigenous people view the world they live in as an integrated whole. Their beliefs, knowledge, arts and other forms of cultural expression have been handed down through the generations. Their many stories, songs, dances, paintings and other forms of expression are therefore important aspects of indigenous cultural knowledge, power and identity. The Study on the Protection of the Cultural and Intellectual Property [Heritage] of Indigenous Peoples, by UN Special Rapporteur, Erica Irene Daes, of the Economic and Social Council’s (ECOSOC) SubCommission on the to a particular people. The guardians of an heritage includes all expressions of the relationship between the people, their land and the other living beings, and uniquely bound up with the indigenous spirits which share the land, and is the basis for maintaining social, economic resources. Indigenous peoples have the right to protect their intellectual property, including traditional knowledge. The heritage of indigenous peoples includes:

- language, art, music, dance, song and ceremony;
- agricultural, medicinal, technical and ecological knowledge and practices;
- spirituality, sacred sites and ancestral human remains;
- documentation of the above.

The cultural and intellectual heritage of indigenous peoples comprises the traditional practices, knowledge and ways of life unique to a particular people. The guardians of an indigenous peoples’ cultural and intellectual property are determined by the customs, laws and practices of the community, and can be individuals, a clan or the people as a whole. Any attempt to try to divide the heritage of indigenous peoples into separate legal categories such as cultural, artistic or intellectual or into separate elements such as songs, stories, science and technology, would be inappropriate.

The heritage of indigenous peoples is protected as a single, interrelated and integrated whole.

The cultural and intellectual heritage of indigenous peoples is the basis for maintaining social, economic relationships, through sharing with other peoples. All of these aspects of heritage are interrelated and inappropriate use or exploitation cannot be separated from the traditional. As science and technology advance while natural resources dwindle, there is increased interest in appropriating indigenous knowledge.

Included in indigenous peoples’ heritage is intellectual property, which includes the information, practices, beliefs and philosophies that are unique to each indigenous culture. When traditional knowledge is removed from an indigenous community, the community loses control over the way in which that knowledge is used. In many cases, this system of knowledge evolved over centuries and is uniquely bound up with the indigenous peoples’ customs, traditions, land and basis for maintaining social, economic resources. Indigenous peoples have the right to protect their intellectual property, including traditional knowledge. The heritage of indigenous peoples includes:

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edge for scientific and commercial purposes. Some research and pharmaceutical companies are patenting, or claiming ownership of, traditional medicinal plants, even though indigenous peoples have used such plants for generations. In many cases, these companies threaten to indigenous lands and the environment. Oil and mining companies have turned to indigenous lands to keep up with demand for global consumption are contributing to the ruination of traditional ways of life.

Worldwide, despite international recognition of the right of indigenous peoples to preserve and protect their traditional practices, knowledge and ways of life, the cultural heritage of many indigenous peoples is under threat, and many indigenous peoples are facing the recognition and elucidation of the connections between environmental destruction and human rights abuses. Asian indigenous peoples' close connection to the sites are exploited or destroyed by the tourism industry. Many of these sites of spiritual and ecological damage. Extractive activities and cultural significance are also ecological threats to patterns of subsistence, living conditions and cultural practices. In some cases, indigenous peoples are managed by indigenous peoples through governments deny indigenous peoples their traditional knowledge and practices and political rights in order to prevent them from resisting incursions. Some states and governments are challenges in reconciling international human rights commitments to indigenous peoples with the requirements of foreign direct investment.

Asian indigenous peoples' struggles

Asian indigenous peoples' struggles to protect intellectual and cultural rights have taken many forms. In some cases, indigenous peoples have confronted subjugation, territorial take-over, resource exploitation, the destruction of traditions, and infringement of customs and lifestyles, to fighting inhuman treatment, abuse and deprivation of human rights. The colonization of many Asian countries by working closely with international institutions has allowed indigenous peoples to wage their local struggles on a global front by working closely with international allies.

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nous organizations to gain legitimacy in their own countries.

Against the odds, indigenous peoples have NGOs like the Bangladesh Rural Advance Council (BARC), Bengalis Union intended to break down their opposition have led failed. Often, there are clear connections between resource extraction, human rights abuses and militarization. In some countries, governments have attempted to stifle the growing resistance of their indigenous populationslittle chance of success unless the government becomes genuinely concerned.

From the Philippines, Indonesia and Malaysia to Papua New Guinea, there is a burgeoning indigenous movement against both governments and resource-depleting companies. This movement has brought together concerns about human rights and the environment. It is rural-based, grassroots-initiated and multiracial. The movement also has concerns about globalization and unfair trade.

Multinational corporations have sought to undermine opposition to their activities through mass media campaigns, challenges to tribal sovereignty and to local authorities. The indigenous opposition remains vibrant and effective. International support has focused on a number of indigenous peoples initiatives, as discussed below.

Bangladesh. The struggle of the Jummas, the original inhabitants of the Chittagong Hill Tracts (CHT) is primarily to do with rights to land and resources. Many Jummas are losing their lands; they have been forcibly evicted by government military forces. Even when a government decree ordered that land should be returned, only a few were able to reclaim their lands.

The Jummas are also being displaced by the widespread plunder of germplasm (i.e. plant cells) and indigenous knowledge. Already, many plant resources have been lost, without recognition or recompense. Equally, they are being intimidated by the authorities, as discussed below.

India. Indigenous peoples in India are waging a struggle against widespread plunder of germplasm (i.e. plant cells) and indigenous knowledge. Already, many plant resources have been lost, without recognition or recompense. Equally, they are being intimidated by the authorities, as discussed below.

Nepal. The indigenous people of Nepal are campaigning for the amendment of the present Constitution to give indigenous peoples the right to self-govern. They also demand equal language rights, inclusion of ethnic identity in the population census and the bi nationalities (the National Foundation Bill passed in March 2002, means that 59 indigenous ethnic groups are now recognized), end to the traffic in women and an end to bonded labour of the indigenous people, the Thamus.

Under the government's new industrial policy, indigenous peoples' lands are being transferred to non-indigenous persons and to foreign investors. The Adivasis, in particular, are trying to restore their rights over forests and to resist mining adventures that have already spoiled much of the land that still remains to indigenous peoples.

Sri Lanka. The Wanniyala-Aetto (forest beings), the Sri Lankan indigenous people, are being uprooted from their forest lands because of the construction of the Kaptai reservoir. Jummas are Buddhists and they also suffer from religious intolerance and discrimination by the majority Muslim population.
dwellings, shot at, detained, placed in reservations and sold as slaves or prostitutes. The International Movement Against All Forms of Discrimination and Racism (IMADR), an NGO, campaigns on their behalf. The Wanniyala?Aetto women, in particular, bear the brunt of this inhuman treatment. But the government has done little to intervene. The Tibetans are denied their fundamental right to self-determination and suffer from human rights abuses, underdevelopment, marginalization and repression. The Chinese authorities do not consult with the Tibetans over development processes, and the Tibetans are discriminated against in terms of employment. Their culture is also under threat. It is important to note that there is explicit reference to indigenous cultural and political traditions. The government has also transferred some of its powers beyond international legal discourse. One power that is recognized is that of decentralized power. It gives traditional (traditional?based) villages powers beyond the standard notions of indigenous rights in determining the fate of their lands. Indigenous peoples' struggle for recognition of their rights is the government's recognition of decentralized power. It is an attempt to regulate and manage the movement, marginalization and repression. The authority to regulate and manage the?inter?national legal discourse. One power that is recognized is that of decentralized power. It gives traditional (traditional?based) villages powers beyond the standard notions of indigenous rights in determining the fate of their lands. Indigenous peoples' struggle for recognition of their rights is the government's recognition of decentralized power. It is an attempt to regulate and manage the?inter...
Thailand. In 1997, the Chao?Chaos, a mixed

Thailand numbering almost a million, were
grouping of indigenous tribes in northern

numbering almost a million, were

township which allowed them to participate in the
damming of the Mekong and Da

already been forcibly evicted.

Today, social activists working with and

for Vietnamese indigenous tribes plan and

work covertly, in danger of being imprisoned

of the Assembly of Indigenous and Tribal peo-

ples of Thailand (AITT).

Together with the Northern Farmers Network,

AITT is pressing for the adoption of a

community Forest Bill, which will give

indigenous peoples recognition of their right

to their traditional resources and manage

Cambodia. The year 2001 saw positive
developments in Cambodia with regard to

indigenous peoples struggle for land rights and the protection of their forests and natural resources. Local activists and NGOs
headed the campaign for a new law that
gave provision for land tenure for indigenous people. Those who now have ownership and control of their lands are
enjoying their rights to their resources, and allowed gold and copper mining to take place with the tapping of resin and development of inland fisheries.

The government created the Department of Ethnic Minorities Development in January 2002, and heeded the complaints of the
Khmers against a military general who almost defrauded the local peoples of their lands and forest resources.

Vietnam has a government that is oppressive towards its indigenous population and does not allow advocacy activities. In October 2001, the government's Ministry of Agriculture and Rural Development and the Department for Sedentary Farming announced a campaign to wipe out traditional nomadic life and swidden farming. The government is attempting to eradicate traditional shifting agriculture, which is the lifeline of most indigenous peoples including the generated during decades of conflict.

Banar, Ehde, Jarai, Koho and Mpong tribes, thousands of whom were imprisoned after calling for independence in February 2001.

The Mataatua Declaration

One initiative by indigenous peoples representing the lifestyle, customs and traditions of One initiative by indigenous peoples representing the lifestyle, customs and traditions of the indigenous peoples in Aotearoa/New Zealand on the International Conference on the Cultural and Intellectual Property Rights of Indigenous Peoples held in Aotearoa/New Zealand on 27 November 2002.
12–18 June 1993. It declared that indigenous peoples of the world have the right to self-determination and in exercising that right must be recognized as the exclusive owners of their cultural and intellectual property.

The conference was held at a time when the UN had declared 1993 the International Year for the World’s Indigenous Peoples. Over 150 delegates from 14 countries attended the historic conference, including indigenous representatives from Aotearoa/New Zealand, Australia, the Cook Islands, Fiji, Japan, Panama, Peru, the Philippines, Surinam and the USA.

The representatives met over six days to discuss a range of issues — the value of indigenous knowledge, biodiversity and...
UN efforts to protect indigenous peoples’ ICPR

As indigenous peoples in Asia strengthen their effort to win recognition of their rights, a number of international instruments have been initiated by the UN to support the rights of indigenous peoples to protect and enjoy their cultural heritage. One was the Draft Principles and Guidelines for the Protection of the Heritage of Indigenous People, which recommends standards for governments to ensure that the heritage of indigenous peoples survives for future generations and continues to enrich the common heritage of humanity.

The UN Educational, Scientific and Cultural Organization (UNESCO) also co-established the Model Treaty on the Protection of Expressions of Folklore against Illicit Exploitation. The Treaty recognizes indigenous peoples as the traditional owners of artistic heritage, including folklore, music, and dance, created within indigenous territories and passed down through the generations.

Yet these international enactments have failed to provide a working system and applicable standards that could ensure the implementation and enforcement of the instruments. In particular, the nature of the UN indigenous peoples’ intellectual property is often inseparable from spiritual, cultural, social, and economic aspects of indigenous life, and the notion of collective ownership of such property, are not adequately addressed in existing international intellectual property law.

This is not to say that there have been no international efforts to address the problem of indigenous peoples’ resources. The Stockholm Conference, the debate on environmental protection, the priorities of economic growth and environmental protection. The governments of Northern countries, which have used up their own resources and appropriated the resources of the South through colonization, have begun to push for environmental protection. In contrast, governments of Southern countries have sought to exploit the issue of biodiversity has gained legal and political prominence.

Taking off from the Stockholm Conference, the debate on how to balance environmental concerns and economic development has continued. Also, the issue of biodiversity has gained legal and political prominence.

The World Commission on Environment and Development

The 1972 UN Conference on Human Environment in Stockholm was the first major international discussion on environmental issues. The conference started the process of investigating the contradictions between the priorities of economic growth and environmental protection. The governments of some Northern countries, which have used up their own resources and appropriated the resources of the South through colonization, have begun to push for environmental protection. In contrast, governments of Southern countries have sought to exploit whatever is left of their natural resources to bring about more economic growth. Since the Stockholm Conference, the debate on how to balance environmental concerns and economic development has continued. Also, the issue of biodiversity has gained legal and political prominence.

The Brundtland Report, in 1987. The report introduced the concept of sustainable development, which attempts to make economic growth and environmental protection complementary and mutually dependent. The Brundtland Report also emphasized the widespread and fundamental threat to the role of indigenous peoples in preserving biodiversity. (often by states) to respect and protect the right of indigenous peoples to control their resources. The isolation of many such people (i.e. own territories under their customary forms indigenous peoples) has meant the problem. Their very survival has depended on their ecological awareness and adaptation. These
communities are the repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems. It is a terrible irony that as formal development reaches more deeply into rainforest, deserts, and other isolated environments, it tends to destroy the only cultures that have proved able to thrive in these environments.

The Brundtland Report recommended:

- The starting point for a just and humane society for such groups [i.e. indigenous peoples] is the recognition and protection of their traditional rights to land and the other resources that sustain their way of life — rights they may define in terms that do not fit into the standard legal systems. These groups’ own institutions to regulate rights and obligations are crucial for maintaining the harmony with nature and environmental awareness characteristic of the traditional way of life.
- Hence the recognition of traditional rights must go hand in hand with measures to protect the local institutions that enforce responsibility in resource use. The recognition must also give local communities a decisive voice in the decisions about resource use in their area.

The Rio Earth Summit

The concept of sustainable development, introduced in the Brundtland Report, became the theme of the June 1992 UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, also known as the Rio Earth Summit. The Earth Summit was a watershed, and led to the production of documents, including Agenda 21 and the Convention on Biological Diversity (CBD). Despite their limitations, Agenda 21, particularly Chapter 26, recognizes and seeks to strengthen the role of indigenous peoples and local communities in sustainable development. Chapter 26, Section 3 provides that in full partnership with indigenous peoples and their communities, governments and, where appropriate, intergovernmental organizations should aim to set in motion a process to empower indigenous peoples.

Conventions on Biological Diversity

Critics say the Convention on Biological Diversity (1992) was produced at the behest of interests mostly from the North (governments, corporations and NGOs). One critic noted, the CBD actually evolved from the initiatives of Northern groups such as the IUCN (World Conservation Union), which led to the exploration of the possibility of negotiating an international treaty on biodiversity. The IUCN prepared various drafts on in situ conservation within and outside protected areas. It is not surprising that the initial driving force for Northern groups such as the IUCN was the issue of conservation, because Northern governments were concerned and continue to be concerned about how to access the South’s biodiversity. Before the 1972 Stockholm Conference, genetic resources were regarded as open-access resources, meaning anybody had the right to use these resources for free. Genetic resources are the heritable characteristics of a plant or animal of real or potential benefit to people. They include modern cultivars (i.e. cultivated varieties) and breeds; traditional cultivars and breeds; special genetic stocks (breeding lines, mutants, etc.); wild relatives of domesticated species; and genetic variants of wild resource species.

The situation that the CBD seeks to address is not only the alarming loss of biodiversity, but also its uneven distribution in the world. The developed North is biodiversity-poor but, in many cases thanks to indigenous peoples, the South has retained some of its biodiversity resources. Southern countries have found it necessary to assert their sovereign rights over intellectual and cultural property rights. Agenda 21, particularly Chapter 26, recognizes and seeks to strengthen the role of indigenous peoples and local communities in sustainable development. Chapter 26, Section 3 provides that in full partnership with indigenous peoples and their communities, governments and, where appropriate, intergovernmental organizations should aim to set in motion a process to empower indigenous peoples.

INTELLECTUAL AND CULTURAL PROPERTY RIGHTS OF INDIGENOUS AND TRIBAL PEOPLES IN ASIA
their natural and biodiversity resources. Principle 2 of the Rio Declaration, and the CBD, reiterated the sovereign right of states over their natural and biodiversity resources. Article 3 of CBD states:

States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other states or of areas beyond the limits of their national jurisdiction.

The national sovereignty principle answers key concerns of Southern governments. But critics like the Barcelona-based Genetic Resources Action International (GRAIN) say it does not necessarily work in favour of indigenous peoples, who are acknowledged to have helped sustain and nurture the world’s biodiversity resources. Governments of both North and South still do not recognize the rights of indigenous peoples to their territories and resources, much less their right to self-determination. Indigenous peoples leaders and advocates also complain that the CBD does not explicitly recognize that indigenous peoples have such rights.

Vandana Shiva, a noted Indian environmentalist and physicist, commented early on that the USA agenda was to have the CBD pave the way for free access to the South’s biodiversity while at the same time ensuring the conservation of biological diversity. The CBD affirms the sovereignty of nations over their biological resources. It also acknowledges intellectual property rights over living things and encourages bilateral arrangements between those who want access to resources and knowledge (for example, corporations) and governments. The Convention does not define protection at the level of the community, thus setting the stage for intercommunity conflicts or conflicts between a government and its communities. Overall, the Convention lacks teeth: it has no mechanisms to control outsiders’ access to indigenous bio-resources (for example, a binding code of conduct) and no mechanisms to determine the equitable sharing of benefits.

The objectives of this Convention, to be pursued in accordance with its relevant provisions, are the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources, including appropriate access to genetic resources and by appropriate transfer of relevant technologies, taking into account all rights over these resources and to technologies, and by appropriate funding.

The CBD’s Article 8j outlines what benefits should redound to indigenous peoples:

- respect and protection for the knowledge, innovations and practices of indigenous peoples and local communities;
- promotion of the wider application of these with the participation and prior informed consent of the knowledge-holders; and
- equitable sharing of benefits.

It should be noted, however, that the Article does not mention any rights at all. It merely calls for respect and protection of indigenous knowledge. In various arenas, such as the Conference of Parties, indigenous peoples representative and advocates have tried to lobby for the inclusion of indigenous rights in the CBD, but without success. Indigenous peoples can put the provisions of Article 8j to good use, however, particularly the three main components cited earlier.

The CBD’s Article 8j concept of intellectual property over living things and knowledge (for example, corporations) and technology, particularly biotechnology, are protected.

Critics have pointed out that the CBD is strong on patents but weak in protecting the rights of indigenous peoples and local communities to their biodiversity and knowledge.

According to those who have been monitoring the CBD’s formulation, the CBD is basically a framework convention which lays down the goals and policies for achieving the objectives stated in Article 1:
Draft Declaration on the Rights of Indigenous Peoples

Now almost a decade old, the Draft Declaration on the Rights of Indigenous Peoples has remained just that—a draft. The Draft was produced by a special UN body—the UN Working Group on Indigenous Populations (WGIP), which was created under the Sub-Commission on the Prevention of Discrimination and Protection of Minorities of the UN Commission on Human Rights (UNCHR).

The Draft is far from perfect, according to those who helped shape it, for example Vicky Tauli-Corpuz, who said the Draft has many limitations because it still operates within a statist framework of the UN. But she also said that the Draft seeks to address indigenous peoples’ collective rights, such as their right to self-determination, right to survival, right to cultural, religious, spiritual and linguistic identity, and the right to control of ancestral territories and resources.

Despite its imperfections and limitations, because it still operates within a statist framework of the UN. But she also said that the Draft seeks to address indigenous peoples’ collective rights, such as their right to self-determination, right to survival, right to cultural, religious, spiritual and linguistic identity, and the right to control of ancestral territories and resources.

The Draft contains minimum standards that promote the rights and welfare of indigenous peoples, including their intellectual and cultural property rights. But many governments strongly oppose many of the principles and articles of the Draft. These governments were at one in rejecting, for example, the Draft’s provision recognizing indigenous peoples’ right to self-determination, arguing that this right to self-determination, right to survival, right to cultural, religious, spiritual and linguistic identity, and the right to control of ancestral territories and resources.

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INTELLECTUAL AND CULTURAL PROPERTY RIGHTS OF INDIGENOUS AND TRIBAL PEOPLES IN ASIA

15
international instruments generally speak only of individual and not collective rights. Those indigenous peoples who have been closely monitoring the Draft are united and firm in their stand that the UN should adopt the Draft in its original form. The Draft has become a key reference point in discussions of indigenous peoples' rights. Indigenous peoples' representatives always cited the Draft when they lobbied at the Rio Earth Summit and over the CBD. Some governments have referred to the Draft Declaration when drafting their national laws on indigenous peoples' rights.

One of the drawbacks of the Draft Declaration is that it is non-binding, even if adopted by the UN General Assembly. This means that the Declaration will not create any obligations for any country under international law. In other words, the adoption of a declaration on the rights of indigenous peoples will not render a nation legally accountable to the international community for its actions towards its indigenous people.

The Declaration will be an aspirational document, which imposes no obligations of implementation. It is likely, however, that the Declaration will contribute to a growing body of customary international law in the area of indigenous peoples' rights. Customary international law is associated with the concept of state practice.

ILO Convention 169

Like the Draft Declaration on the Rights of Indigenous Peoples, ILO Convention 169 not only international body which has produced an international legally binding instrument indigenous and tribal peoples on indigenous peoples — ILO Convention 169. It is an instrument which recognizes the rights of indigenous peoples to their territories, lands and resources, which include biodiversity and wildlife resources. The Convention was ratified an earlier international instrument adopted by the ILO in 1957 — the Indigenous and Tribal Populations Convention 107, which was the first attempt to codify indigenous peoples' rights in international law. The Convention can serve as reference and framework for future agreements, which bear directly on indigenous peoples and their natural resources.

Adopted in Geneva in June 1989, ILO Convention 169 is not only a recognition of the rights of indigenous peoples to their territories, lands and resources, but also of the right of these peoples to participate in the use, management and conservation of these resources.

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### Table 1: Some domestic laws and policies that impact on genetic resources and related traditional knowledge

<table>
<thead>
<tr>
<th>COUNTRY</th>
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<tr>
<td>Bangladesh</td>
<td>Draft Biodiversity and Community Knowledge Protection Act, 1998</td>
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<td>Draft Plant Varieties Act, 1998</td>
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<td>Draft Cooperation Agreement between the European Community and the People’s Republic of Bangladesh on Partnership and Development</td>
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<td>China</td>
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<td>Regulation of the People’s Republic of China on the Protection of New Varieties of Plants, 1999</td>
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<td>Fiji</td>
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<td>Hong Kong</td>
<td>Plant Varieties Protection Regulation, 1997</td>
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<td>India</td>
<td>Patent (Second Amendment Act), 2002</td>
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<td>The Protection of Plant Varieties and Farmers’ Rights Act, 2001</td>
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<td>Draft Biological Diversity Bill, 2000</td>
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<td>Draft Kerala Tribal Intellectual Property Bill, 1996</td>
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<td>Draft Karnataka Community Intellectual Rights Bill, 1994</td>
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<td>Act on Spatial Use Management, 1992</td>
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<td>Plant Cultivation Act, 1992</td>
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<td>Korea</td>
<td>Wild Flora and Fauna Protection Act</td>
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<td>Under revision Natural Environment Conservation Act</td>
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<td>Seed Industry Law, 1999</td>
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<td>Malaysia</td>
<td>Draft Plant Variety Legislation, 1999</td>
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<td>Biodiversity Policy</td>
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<td>Draft Access and Benefit Sharing Law</td>
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<td>Burma/Myanmar</td>
<td>Protection of Wild Life and Wild Plants and Conservation of Natural Areas Act, 1994</td>
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<td>Nepal</td>
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<td>Local Self Governance Act, 1998</td>
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<td>Plant Protection Act, 1973</td>
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<td>Traditional and Alternative Medicine Act, 1997</td>
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<td>Executive Order No. 247 on Bioprospecting, 1995</td>
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<td>Singapore</td>
<td>Proposed Policy Guidelines on access to genetic resources</td>
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<td>Draft Access to Traditional Knowledge relating to the use of Medicinal Plants Act, 2000</td>
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<td>Taiwan</td>
<td>Plant Seed Law, 1988</td>
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<td>Thailand</td>
<td>Thai Traditional Medicine Act, 1999</td>
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<td>Draft Community Forest Act, 1996</td>
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<td>Vanuatu</td>
<td>Under revision Environment Act</td>
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<td>Vietnam</td>
<td>Agreement between the US and Vietnam on Trade Relations, 2000</td>
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<td>Law on Environmental Protection, 1993</td>
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<td>Land Law, 1993</td>
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**Source:** TRADITIONAL KNOWLEDGE OF BIODIVERSITY IN ASIA-PACIFIC BY GRAN AND KALPAVRIKSH
Governments’ efforts to protect ICPR on biodiversity

Enactment of laws

Creating, modifying and implementing national laws on traditional knowledge and genetic resources is the most visible action taken by governments. This law-making is spurred on by pressure to meet international agreements. The general trend in Asia is towards the commercialization of genetic resources and the expansion of IPRs over traditional knowledge.

This trend is most visible in the adoption of Union for the Protection of New Varieties of Plants (UPOV)-style legislation that does little to recognize and reward farmers’ innovation in plant-breeding. UPOV is an intergovernmental organization with headquarters in Geneva, Switzerland. It was established by the International Convention for the Protection of New Varieties of Plants to oversee the protection of new varieties under an intellectual property right. Attempts have been made to slow down this trend until impact assessments of the proposed changes are fully explored, but with little success. Nevertheless, many developing countries are also attempting to promote legal changes to protect biodiversity and related traditional knowledge.

In some countries, governments have seemingly made efforts to empower local communities, such as in the Philippines with the Indigenous Peoples’ Rights Act (IPRA) and the formation of local units such as the Indigenous Peoples’ Organization (KAMPI). However, these efforts have had mixed success.

Databases

Electronic databases and digital libraries are gaining popularity in several government-initiated projects for documenting traditional knowledge. There is strongly divided opinion on the efficacy of such databases to prevent biopiracy. Some say that centralization makes information inaccessible to rural communities and alienates them. Others defend documentation in the light of dying oral knowledge and the erosion of the social processes by which the knowledge of a community or tribe is transmitted to the next generation.

There is consensus, however, that any collection of traditional knowledge data must have the prior informed consent (PIC) of the communities. In situations where such knowledge is already in the public domain, governments would need to ensure that the disclosure of traditional knowledge is voluntary. Also, much traditional knowledge that is currently in the public domain may not be related to medicinal plants; in Bangladesh, for example, where being taken out would only be building on an earlier wrong. There are other practical issues such as the valuation of the information collected, possible claims of intellectual property rights, and the administrative structures and accompanying bureaucracy, and often depend on political will.
Formal research

The number of research centres and research projects in the region has increased and includes domestic ventures, foreign collaborations and corporate sponsorship. Research in traditional knowledge raises questions about the relationship between academic institutions and industry.

In some cases, research is apparently carried out for the benefit of local and traditional communities. For example, in India, the All-India Coordinated Research Project on Ethnobotany has identified tribal and other community uses for several thousand species of plants, including medicinal plants. It remains to be seen whether the communities actually do benefit from this project. In Laos, a unique system of governmental promotion and protection of the populations traditional medicinal practices has evolved under the auspices of the Ministry of Health. A Traditional Medicine Research Centre has been set up, which is a potential tool for protecting traditional medicinal knowledge of the tribes in the country.

However, research does not always benefit the original knowledge-holders. In some cases, it provides income only for the pharmaceutical and medical companies and the states involved.

Research projects funded by international organizations do not necessarily challenge this phenomenon. Our objection is against the collection of traditional knowledge without proper benefits to locals, argued Hemantha Withanage of the Environmental Foundation Ltd, Sri Lanka, talking about a Conservation and Sustainable Use of Medicinal Plants project jointly funded by the World Bank and Global Environmental Facility. However, research does not always benefit the original knowledge-holders. In one research project, a custody battle arose between Thailand and a UK university over local fungi strains with potential medicinal uses. At issue was a collection of more than 200 strains of marine fungi, taken from mangrove and coastal areas in southern Thailand, that were stored in laboratories in the US and now being tested to determine whether they contain active ingredients in traditional Chinese medicines. Indigenous peoples are concerned that such projects provide income only for the pharmaceutical and medical companies and the states involved.

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Intellectual property rights regimes and biodiversity

Intellectual property rights (IPRs), as the term suggests, are rights to ideas and information, which are used in new inventions or processes for a specified period. These rights enable the holder to exclude imitators from marketing such inventions or processes for a specified time; in exchange, the holder is required to disclose the formula or idea behind the product/process. The effect of IPRs is therefore monopoly over commercial exploitation of an idea/information, for a limited period.

As IPRs are actually mechanisms to protect individual and industrial inventions, they are usually in effect for a specified period. These legal rights can be attached to information if the information can be applied to making a product that is distinctive and useful. Legal rights prevent others from copying, selling or importing a product without authorization. In essence, there are six forms of intellectual property: patents, plant breeders' rights, copyright, trademarks, industrial designs and trade secrets.

Currently, there are a number of IPR regimes in operation in Europe, the USA and elsewhere. The newer laws tend to cover a broad spectrum of life forms and grant astonishing degrees of ownership to the patent holder. Corporations are well aware of how cost efficient it is to tap the knowledge of communities that live with and depend on biodiversity for their survival. Pharmaceutical companies have realized enormous benefits from their free access to genetic materials, especially in the case of crop plants. After some modifications, this genetic material was patented, mainly in the USA, and the resulting seeds or products were marketed. Moving a single gene from one plant to another within a cell, whether or not
animals and plants from patentability.

The history of IPRs shows that the monopolistic hold of governments, corporations, and some individuals over biological resources is continuously increasing. A substantial amount of hybrid fertile plants, such as wheat, into this monopolization is built on and through the appropriation of the resources conserved and knowledge generated by indigenous peoples.

**IPRs adversely affect Asian farmers**

The demand of corporations to apply IPR regimes to biodiversity is based on the false premise that only their investments need to be rewarded. The toil of Southern farmers in domesticating, breeding and conserving biological diversity over centuries is conveniently forgotten. The existing IPR agreements fail to recognize the rights of indigenous and local communities to their own knowledge and innovations.

Countries in the South have strongly argued that multinationals from the industrialized world exploit their biological wealth, and then sell the patented products back to Asian farmers at excessive prices. The growth of the biotechnology industries, combined with the loss of biological diversity worldwide, has focused the attention of governments, corporations and others on access to and control of genetic resources — mainly because of the tremendous potential for generating commercial profits. The traditional lifestyles, knowledge and biogenetic resources of indigenous peoples have become commodities, to be bought, sold and traded.

As a rule, farmers save some of their crop to use as seed in the following year. Under US IPR regimes, farmers would have to pay royalties on the seeds from patented seeds, and even where farmers were the source of the original stocks, they would not be allowed, under GATT rules, to market or use them. The IPR to a folk variety would include the rights to control the use of the folk variety, and the rights to the information coded in the DNA as a result of selection by farmers and their farming systems.

The WTO's TRIPS

While the success of indigenous peoples' leaders and advocates in lobbying for the provisions integrated into documents such as the Draft Declaration on the Rights of Indigenous Peoples and ILO Convention 169 should be celebrated, much remains to be achieved. The rights to control the use of genetic resources and related knowledge are still not fully protected. The WTO's TRIPS Agreement continues to evolve in this direction, farmers will have to pay royalties for patented seeds; will become dependent on one supplier for seed; and, in the case of hybrid, sterile plants, will have to buy new seeds each year.

The WTO's TRIPS Agreement calls for the protection of a non-physical entity such as oral indigenous knowledge (that is, farmers' knowledge as to the use and conservation of plants, shaman's preparation of herbal remedies, or women's conservation practices of seeds which are passed orally from generation to generation).

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Commercial plant breeding is in the hands of a few TNCs that now control all the significant gene banks. TNCs are developing plants that respond to their own agrochemicals. TNCs are also working on genetic modifications aimed at converting non-hybrid fertile plants, such as wheat, into sterile hybrids. If a gene from another plant could induce sterility, seeds would have to be purchased each year. If IPR systems continue to evolve in this direction, farmers will have to pay royalties for patented seeds; will become dependent on one supplier for seed, fertilizers, herbicides and pesticides; and, in the case of hybrid, sterile plants, will have to buy new seeds each year.

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Farmers must decide what type of mechanisms to adopt to protect themselves: IPR systems or other types of mechanisms. The costs and administrative implications of adopting some of the new IPR systems are great: US$250,000 per patent. At the very least, farmers must retain the absolute right to save seed, to experiment with exotic germplasm (that is, the genetic material which forms the physical basis of heredity and which is transmitted from one generation to the next by means of the germ cells) and to exchange seeds.
and many Asian countries — such as Indonesia, Malaysia and the Philippines — have yet to ratify the vital document. Lobbyists admit that even if the Draft Declaration is finally adopted, it will remain a "soft law" like the UN Declaration on Human Rights, which is not legally binding.

In contrast, the World Trade Organization (WTO) is very powerful. The WTO is an intergovernmental entity that was set up to formulate a set of rules to govern global trade and capital flows through the process of member consensus, and to supervise member countries to ensure that the rules are followed. Many countries are now feeling the far-reaching effects of its well-instituted policies and enforcement mechanisms. Its intellectual property rights regimes have been set up very efficiently. Some international lobbyists have concerned that indigenous peoples, who have contributed their age-old knowledge to develop and protect biodiversity in their communities, could be accused of bio-piracy if the rights to this knowledge are held by TNCs through IPR regimes.

The WTO's TRIPS presents a tough challenge for indigenous peoples. The policies and rules of TRIPS now govern and influence the economic policies of member countries. The CBD and Agenda 21 talk about sustainable development, but the WTO policies favour the free market or globalized free trade paradigm. The result is a clash of paradigms with the globalized free trade paradigm emerging as dominant.
Indigenous peoples’ struggles against biopiracy

The extraction of biodiversity resources from the genes of indigenous peoples to supply raw materials for the biotechnology industry of the North has alarmed many indigenous peoples. Northern corporations, for example, have applied for patents on the neem plant and turmeric in India, the kava in the Pacific, the ayahuasca and quinoa in Latin America, and the bitter gourd in the Philippines and Thailand. When processed or genetically engineered, these raw materials can be transformed into marketable commodities.

The use of resources found mostly in indigenous peoples’ lands is increasing. Recently, a German agrochemical and pharmaceutical giant, Hoechst Co., was able to apply for and win several US patents on preparations derived from the medical plant Coleus forskohlii, which grows in India, Nepal and Thailand. The plant has long been used and protected by indigenous peoples of these three countries.

Since 1998, another company, Glaxo Wellcome has successfully completed ethnomedical research in Asian countries, including the Philippines, India and Indonesia. The Singapore Centre for Natural Products Research (CNPR), a Glaxo Wellcome-funded bio-prospecting institution, is alleged to have an agreement with Indias Tropical Botanical and Garden Research Institute, which allows the results of the work carried out by CNPR and Wellcome, along with the samples and any information relating thereto, to be confidential property of CNPR or Glaxo Wellcome.

Such arrangements can seriously threaten indigenous peoples’ access to and control of their collective property and their traditional knowledge of the uses of exotic and endemic plants, which they have been using as food and medicine for centuries. On the global level, international NGO efforts of Western science to negate the complexity of any life form by isolating and reducing it to its minute parts.

In September 1995, more than 200 organizations from 35 countries filed a petition at the US Patent and Trademark Office. The petition seeks to revoke a patent given to W.R. Grace Company to use a pesticidal extract from neem, an endemic tree in India. The petitioners charged the company of usurping an age-old biological process (see Table 3).

Indigenous peoples have found an ally in the international church community. As early as 1989, the World Council of Churches came out with a statement calling for a ban on experiments involving the genetic engineering of the human germline (i.e. cell block). Indigenous peoples themselves have spoken out against the Human Genome Diversity Project (HGDP), condemning it as sacrilegious and unethical. Indigenous peoples lobbyists in 1994 also asked the UN Commission on Sustainable Development to ban the HGDP.

In February 1995, Asian indigenous peoples presented a statement at the European Parliament calling for a halt to the project. At the Fourth World Conference on Women in Beijing, the Asian Indigenous Womens Research Institute, which allows the results of the work carried out by CNPR and Wellcome, called on the Beijing Declaration a condemnation of the HGDP, and to call on its members to be considered. Also in 1995, indigenous peoples from the Americas, which signed up to the Declaration of Indigenous Peoples of the Americas, won the backing of 17 organizations in the Americas, which signed up to the Declaration of Indigenous Peoples of the Americas. Regarding the Global North, the Declaration condemned Western science for its manipulation of life forms, using as food and medicine for centuries. On the global level, international NGO efforts of Western science to negate the complexity of any life form by isolating and reducing it to its minute parts.
by] alter its relationship to the natural order.

Indigenous peoples representatives have organized parallel activities to coincide with major WTO activities such as the WTO Third Ministerial Meeting in Seattle. After a caucus, the indigenous peoples leaders produced the Indigenous Peoples Seattle Declaration, which protested, among other things, about the patenting of life.

Some indigenous peoples representatives have also participated in negotiating for the adoption of a Biosafety Protocol in the Convention on Biological Diversity. Adopted in 2000, the Biosafety Protocol regulates the transboundary transfer of genetically modified organisms (i.e., their movement across national borders).

Action against biodiversity exploitation

India

It is in India that some of the most significant struggles to protect biodiversity are taking place. For more than 2,000 years, Indian indigenous communities have used the sap of the Commiphora mukul tree to lower blood pressure. It is in India that some of the most significant struggles to protect biodiversity are taking place.

Table 2: Bioprospecting: the tip of the iceberg

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<thead>
<tr>
<th>COUNTRY</th>
<th>BIOLOGICAL RESOURCE</th>
<th>COUNTRY</th>
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<td>China</td>
<td>Bitter melon (Momordica charantia)</td>
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</tr>
<tr>
<td>China</td>
<td>Xi Shu/Happy trees (Camptotheca lowreyana)</td>
<td>USA</td>
<td>US Patent No. PPI1,959</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Bintangor tree (Calophyllum lanigerum)</td>
<td>Singapore</td>
<td>US Patents including Nos 6420571, 6160131 and 6277879</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>Kava (Piper myristicum)</td>
<td>USA</td>
<td>US Patents including Nos 6405948, 6277396, 6080410, 6025363, 5976550 and 5770207</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>Nonu [Indian Mulberry] (Morinda Citrifolia)</td>
<td>Europe</td>
<td>In 1995 Nonu Samoa Enterprises began export of nonu, a tree with medicinal properties, to the US with US collaboration</td>
</tr>
<tr>
<td>PNG</td>
<td>Basmati rice</td>
<td>USA</td>
<td>US Patent Nos 6274183 and 5663484</td>
</tr>
<tr>
<td>Philippines</td>
<td>Soil microbes</td>
<td>USA</td>
<td>The multinational company Eli Lilly has earned billions of dollars from the erythromycin antibiotic, which was developed from a bacterium isolated from a soil sample that Filipino scientist Abelardo Aguilar collected in his home province of Iloilo. Neither Aguilar nor the Filipinos received any royalties.</td>
</tr>
<tr>
<td>Philippines</td>
<td>Llang-llang (Cananga odorata)</td>
<td>France</td>
<td>The use of the extracts from llang-llang in the cosmetic industry is perhaps as old as perfume in France. There are several perfumeries in France that have used and continue to use it in their products.</td>
</tr>
<tr>
<td>Philippines</td>
<td>Banaba (Lagerstroemia sp)</td>
<td>Japan, USA</td>
<td>US Patent No. 5980904</td>
</tr>
<tr>
<td>Philippines</td>
<td>Nata de coco</td>
<td>Japan, USA</td>
<td>US Patent Nos 6280767, 6140105, 5962277 and 5795979</td>
</tr>
<tr>
<td>Philippines</td>
<td>Snails (Corus)</td>
<td>USA</td>
<td>US Patent nos 6369193, 6344591, 6197535, 6153738, 6079734, 5633347, 5595972, 5589340 and 5514774</td>
</tr>
<tr>
<td>India</td>
<td>Basmati rice</td>
<td>USA</td>
<td>US Patent Nos 5663484 and 4522938</td>
</tr>
<tr>
<td>India</td>
<td>Tumeric (Curcuma longa)</td>
<td>USA</td>
<td>US Patent Nos 5401504, 5135796 and 5047100</td>
</tr>
<tr>
<td>India</td>
<td>Neem (Azadirachta Indica)</td>
<td>USA</td>
<td>Several US Patents including Nos 5420318, 5391779 and 5371254; the US multinational company W.R. Grace's EPO Patent No. 0426257</td>
</tr>
<tr>
<td>India</td>
<td>Guggul (Commiphora mukul)</td>
<td>USA</td>
<td>US Patent No. 6113949 and US Patent Application 20020018757</td>
</tr>
<tr>
<td>Thailand</td>
<td>Jasmine rice</td>
<td>USA</td>
<td>A US plant geneticist has developed a strain of jasmine rice to be able to grow it in the US; he received the original seeds of the Thai Khao Dok Mal 105 (KDM 105) jasmine rice variety from the International Rice Research Institute (IRRI) in 1995.</td>
</tr>
<tr>
<td>Thailand</td>
<td>Plao-nol (Croton sublyratus)</td>
<td>Japan</td>
<td>In 1975 Sankyo of Japan extracted the active ingredient of the Thai plant local product to produce the patented product Kelnac.</td>
</tr>
<tr>
<td>Samoa</td>
<td>Mamala tree (Homalanthus nutans)</td>
<td>USA</td>
<td>US Patent No. 5599839</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Kothala himbutu (Salacia reticulata)</td>
<td>Japan, USA</td>
<td>Takaria System Ltd (Yamaguchi, JP)'s US Patent No. 6376682</td>
</tr>
</tbody>
</table>

SOURCE: TRADITIONAL KNOWLEDGE OF BIODIVERSITY IN ASIA-PACIFIC BY ORAN AND KALPAVRISH.
cholesterol level and treat other forms of illness. Now, the patent  (Patent No. 6436991)
on the use of tree's sap is owned by the New Jersey?based Sabinsa Corporation The extract
from the tree is said to be an antioxidant and has cancer chemopreventive roles for
cancer. Theinvention relates to a compos?
ition and method for products extracted from
Commiphora species for use in the prevention
and treatment of abnormal cell growth and
proliferation in inflammation, neoplasia and
cardiovascular disease.

Indian indigenous peoples and sympathetic NGOs are asking the government for com
munity rights to protect their indigenous pen
sion for the knowledge shared on the know?how and biodiversity, is the Centre for
growing, care and management, use and pro Indian Knowledge Systems (CIKS). CIKS's
cessing of the tree and its extract, which is chanel in imparting and popularizing Andige
local people perfected over so many years.

Indigenous peoples in India have con
tribution much to the identification, Indian plant science. The system is being
conservation and use of medicinal plants implemended in 35 villages with a network of
continue to do so, although now they are 1,200 farmers. In the Kancheepuram district of
wary of this. One active indigenous people is Tamil Nadu, for instance, farmers make use
organization, the Foundation for the Revital ancient pest control practices called the
ization of Local Health Traditions (FRLHT) Tharu Marundu This involves filling pots with
drawing up the Peoples' Biodiversity Pe
r serves from a variety of plants with known
This local NGO is supporting sustainable pesticidal properties, adding cow's urine and
heath traditions in Karnataka, Kerala and little water. The pots are covered, buried
Tamil Nadu. FRLHT believes that, with regard to brevet for at least two weeks. The
re to intellectual property rights on medicinal thletic liquid is diluted with water and used
plants, it is a misconception that traditional broad?spectrum pesticide for crops. The
knowledge can be patented when it has bee plants used in the decoction are known only
documented and published.

As the general rule in patenting is that In April 1997 villagers in Pattuvam village, anything published cannot be patented as in.

Table 3: What the parties want

<table>
<thead>
<tr>
<th>IN TERMS OF ...</th>
<th>MANY COMPANIES AND INDUSTRIAL COUNTRIES</th>
<th>MANY GOVERNMENTS IN ASIA-PACIFIC</th>
<th>MANY NGOs, LOCAL COMMUNITIES AND SMALL FARMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant varieties</td>
<td>Plant breeders’ rights and patents</td>
<td>Willing to provide plant breeders’ rights, with some provision for a farmer’s “privilege”</td>
<td>Farmers’ rights and community rights</td>
</tr>
<tr>
<td>Sui generis</td>
<td>UPOV standards</td>
<td>Not clear what they want, but most in favour of UPOV</td>
<td>Real alternatives to IPR</td>
</tr>
<tr>
<td>Patents</td>
<td>No exclusions for any subject matter</td>
<td>Certain exclusions</td>
<td>No patents on life</td>
</tr>
<tr>
<td>Ownership</td>
<td>Market control</td>
<td>State sovereignty</td>
<td>Community sovereignty and collective control</td>
</tr>
<tr>
<td>TRIPS review</td>
<td>No amendments that lower standards of IPR protection</td>
<td>Amendments to conform with CBD, but not challenging patents on life or traditional knowledge</td>
<td>Exclude biodiversity and do not introduce traditional knowledge, or introduce protection for traditional knowledge</td>
</tr>
<tr>
<td>Access</td>
<td>Free and unregulated</td>
<td>State control</td>
<td>Community control</td>
</tr>
<tr>
<td>Benefit sharing</td>
<td>Through IPR</td>
<td>Through IPR</td>
<td>Through community intellectual property regimes or comprehensive resource rights</td>
</tr>
</tbody>
</table>

SOURCE: TRADITIONAL KNOWLEDGE OF BIODIVERSITY IN ASIA-PACIFIC BY GRAN AND KALPAVRISH.
ern state of India), issued a declaration plac-erning controls on identified genetic resources available and used in the village for ages. The declaration was made after the village youth prepared a detailed register of every species and all the crop cultivars in the village. The register included 26 traditional rice varieties, 93 bird species, 30 fish varieties (freshwater and saline), a number of crabs, molluscs and tortoises, 32 species of mangroves, 14 wild mammals, and other tree and plant species by complementing them with recently developed environmentally friendly practices. One such project is in Dibya Nagar, where Tharu Elders teach ECOS staff about age-old farming practices while learning about the Forum for the Protection of Peoples’ Biodiversity. The Forum, together with the villagers, would thus have to be consulted by any person or company seeking access to the register and the genetic material listed. Pattuvam villagers have concluded that younger generation. More often than not, it therefore was items of considerable economic interest. These women activists, opined: “The declaration gives recognition to community rights to the intellectual and biological commons and provides a new interpretation to the sui generis option of TRIPS.”

Indian people also hold festivals to renew their connection with nature’s resources and the local culture. At one such biodiversity festival, the villagers realized that almost 100 traditional rice varieties were still in use, though they had long disappeared from the market. Recognizing the importance of traditional knowledge, leaders at Sahabat Alam, Malaysia are helping the villages of Long Sayyan and Uma Bawang Keluan to create botanical conservation sites. These sites will be a repository for many different species of rattan, bamboo, fruit trees and medicinal plants. With funding from the Borneo Project (a project aimed at improving the life and welfare of the indigenous peoples of Borneo) these pilot programmes are helping villagers to manage, preserve and restore rare plant species lost elsewhere in the region (up to 250 of rice and 170 of medicinal plants).
West Timor, are banned, and the identity of biodiverse species that are important in farming and for the treatment of diseases is being lost as the older people die. But a few Atoni tribesmen are reviving old practices and traditional lifestyles related to the Atoni cosmology underground, with the help of the Timor Integrated Rural Development Programme (TIRD), a consortium of four NGOs working to promote sustainable agriculture and to prevent biopiracy in West Timor.

In Thailand, the UK Foundation for Ethnobiology attempted bio-prospecting activities among the indigenous Karen communities in northern Thailand. Foundation representatives initially sought access to information about medicinal plants. Through the Riche Monde Initiative for Ethnobiology in Thailand, the Foundation sought to make an inventory of the traditional medical and biological knowledge of the Karen people. Thai NGOs discovered that the Foundation for Ethnobiology had not sought the approval of Thailand's National Science Council for its activities. Contrary to its claims, the Foundation had not consulted groups and communities who were opposed to the project. The Foundation was able to start the inventory project under the guise of gaining access to Karen environmental insights.

A landmark achievement in the prevention of biopiracy in Thailand was when the Thai government, in 1997, as a result of lobbying by indigenous peoples, drafted a bill to recognize and protect the knowledge of traditional healers and Thailand's medicinal resources from private appropriation by pharmaceutical companies.

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In Bangladesh, an activity facilitated by UBINIG (the Bangla acronym for Policy Research for Development Alternatives) is the Nayakrishi Andolan — the New Agricultural Movement, a peasant initiative for biodiversity-based farming. It aims to incorporate traditional and indigenous knowledge of farming based on the principles of preservation, conservation and enhancement of biodiversity and genetic resources. A landmark achievement in the prevention of biopiracy in Thailand was when the Thai government, in 1997, as a result of lobbying by indigenous peoples, drafted a bill to recognize and protect the knowledge of traditional healers and Thailand's medicinal resources from private appropriation by pharmaceutical companies. A university botanist was intercepted by customs at Colombo Airport trying to smuggle out some plant extract. In the same month, customs officials discovered a container of Kothalahimbuto — 1,512 cups weighing some 4 tonnes — being shipped to Japan through a Sri Lankan-owned firm.

Feisal Samath cites the ability of an indigenous doctor in the north-central town of Polonnaruwa to treat patients with heart problems who would otherwise require bypass surgery, which costs at least US$4,500 in hospitals in the country. Sri Lankan wisdom, extracting chemicals from medicinal plants and patenting them abroad, is kept alive by women, and village seed banks can be seen throughout the region.
Philippines. In the Philippines, the first item collected in an act of bioprospecting was a soil isolated in a cemetery in Iloilo province in 1949 by a Filipino scientist, Abelardo Aguilar, then working for the American company Eli Lilly. The soil turned out to produce an antibiotic, a drug now known as erythromycin. Aguilar never received any recompense from his company, even after the Philippine government intervened on his behalf.

The Philippines Department of Environment and Natural Resources (DENR) does not know what happened to specimens of a mountain yew called *Taxus sumatrana*, which two American researchers took from Mount Pulag in 1993. A 8,000-foot peak in Luzon island, one of the most active volcanic areas in the world, is a national park, and thus a protected area. The DENR regional office in Baguio City in northern Luzon informed the DENR that they would analyze the needle and stem of the yew for taxol, an anti-cancer agent. Whatever their findings, they said, in a handwritten letter still filed with the DENR regional office in Baguio City in northern Philippines, they would report back to the DENR. The DENR regional office therefore issued the two Americans a gratuitous permit required under Presidential Decree 1175. A decree by the late President Ferdinand Marcos, PD 1175, grants a gratuitous permit to individuals who seek to collect certain wildlife species for educational and research purposes. Nothing has been heard from them since.

In their letter, Shemluck and Nicholson set out their intentions:

- to discover what levels of variation are found in wild populations of yew and to identify superior trees for possible plantation in the Philippines;
- to identify high-taxol clones, which may be the first step to utilizing this species in plantations;
- to subject the plant material for enzyme and possibly DNA analysis, a process which would attempt to understand the genetic relationship of Philippine and other species in Asia and throughout the world.

The removal of Philippine genetic resources is in part being made possible by the government, which has embraced globalization agreements. The Philippines became a member of the WTO in 1995 and since then, its trade policies have hurt its ecology badly. An Asian Development Bank (ADB) report, *Challenges for Asias Trade and Environment*, said that the country's trade policies are harming the environment, causing loss of biodiversity, infringing property rights and increasing deforestation. Trade liberalization and the facilitation of technology transfer is happening.
ing at a high environmental cost. The loss of biodiversity and property rights, especially those of ethnic and tribal peoples, is causing a widespread tendency to mismanage resources because no proper price is being paid for their exploitation. Biopiracy has increased in the Philippines and the preservation of the ecosystems has become more controversial.

The threat to Philippine biodiversity has become more serious as the government has agreed to a US$60 million biodiversity research project on drugs and medical products with the US National Institute of Health. Companies that do not have agreements with the Philippine government are continuing to carry out covert research.

In 1995, indigenous peoples leaders in southern Philippines confiscated sacks of plant specimens collected by researchers from the Philippine National Museum. The researchers insisted their collection was legitimate and important for the National Museums Philippine Plant Inventory Project. But the indigenous people asserted that the researchers broke both legal and traditional protocols as they failed to get the prior informed consent of the people, in accordance with Executive Order 247 which seeks to regulate research and bio-prospecting in local communities. The indigenous tribal leaders imposed a fine on the researchers of eight water buffaloes, 27 chickens, 8 metres of cloth, and one-peso coins amounting to P150.00 (almost US$3). The researchers protested, but the indigenous people prevailed.

In 1995, indigenous peoples leaders incooperating in the business of biotrade. Governments and companies alike are key players in the movement of biological resources across borders. More and more governments in the region, unwillingly or unwillingly, are allowing overseas companies to operate in the sector. Cash-poor governments like Laos, from the Philippine National Museum. The Burma/Myanmar and the Philippines, for instance, often strike biotrade deals that legitimate and important for the National Museum's Philippine Plant Inventory Project. Knowledge holders.

But the indigenous people asserted that the Oxford Natural Products (ONP) from the UK researchers broke both legal and traditional protocols with PT Indofarma, which will bring Jammu medicines onto the international market. ONP has also signed an agreement with one of the leading natural medicine institutes of Vietnam. The two-part agreement embraces both development and future commercial rights.

This thriving trade in traditional medicine has been promoted by the company exclusive access to traditional local botanical communities. The indigenous tribal medicines widely prescribed for those who need treatment.

In the Cordillera Region of the Philippines, the two-part agreement embraces both several villages are now engaged in a project to develop and future commercial rights. The Human Genome Diversity Project is another serious concern worldwide, particularly among indigenous peoples since the
1990s, is the ambitious US$20 billion Human Genome Project of the National Institute of Health (NIH) and the Department of Energy in the United States. Scientists working on this project belong to what is called the Human Genome Organization (HUGO); they seek to map the genetic basis of diversity among humans.

As part of the project, HUGO set up a committee in 1991 to develop the Human Genome Diversity Project (HGDP). The HGDP aims to collect, analyze and preserve genetic samples from a host of vanishing human populations. These vanishing human populations are indigenous peoples, including the Aetas of the Philippines, the Guaymi of Panama, and the Hagahai people of the highlands of Papua New Guinea, among others. They were selected because their genes contain certain characteristics absent in mainstream populations, like resistance to some diseases and tolerance to cold, heat and pain.

The HGDP seeks to project an idealistic aim. Proponents say they will map the hereditary bases for differences in human susceptibility to disease, which may help find treatments for diseases such as AIDS. But itage or their intellectual and cultural property rights are concerned about the motives of biotechnology corporations involved in mainstream populations, like resistance to some diseases and tolerance to cold, heat and pain.

The HGDP's aim of preserving genetic diversity, living securely in their ancestral lands, means taking full control over their territory. They designate areas as sacred forests, where they worship gods and spirits who, they believe, are keeping watch over their community. The sacred forest, a 30-minute climb from the community proper, is also a vital headwater and watershed of springs and brooks that supply the community's potable water and irrigation needs. But they are worried because they are living in a territory that the government considers as a national park. Their aim is that the land where they have lived for 70 years, will be awarded to them.

Indigenous peoples have also found the HGDP methods of collecting gene samples questionable. One example is the attempt by Hoffman-La Roche to collect genetic materials from the Aeta peoples of the Philippines. The Hmong people of Mae Sa Mai, an upland community north of Chiang Mai in Thailand, have communal knowledge about particular herbs and plants that can cure rheumatism, women's painful menstruation, coughs and colds, and asthma. They grow medicinal plants in a communal herbal garden, which they consider their community pharmacy. The Hmong people have handed down traditional knowledge on the medical importance of certain plants through generations. As part of their spiritual practice, they designate part of their land as a sacred forest, where they worship gods and spirits who, they believe, are keeping watch over their community.

The HGDP under the guise of medical missions, has approached the Hawaii-based Aloha Medical Mission, which often visits the Aeta communities, to collect genetic materials from the people of the over their community. The sacred forest, a 30-minute climb from the community proper, is a vital headwater and watershed of springs and brooks that supply the community's potable water and irrigation needs. But the Aeta people were worried because they were living with medical problems following the eruption of Mt Pinatubo, a volcano in Luzon island, which is a national park. Their aim is that the land where they have lived for 70 years, will be awarded to them.
In the Philippines, the effectiveness of the Indigenous Peoples’ Rights Act (IPRA) has yet to be fully tested. Signed into law in October 1997, the law recognizes the rights of indigenous peoples to own, protect, use and manage their ancestral lands and domains according to their customary laws and traditions. Before the IPRA came into effect, the DENR issued special administrative orders, which paved the way for the issuing of Certificates of Ancestral Domain Claims or CADCs to indigenous communities. These CADCs are temporary though, until they become Certificates of Ancestral Domain Titles (CADTs).

In July 2002, Bakun town in Benguet Province in northern Philippines was awarded its CADT, the first in the country and the only one issued so far. Through this CADT, the Kankanaey-Bago peoples of Bakun can have full control over their biodiversity and wildl...
Conclusion

Conclusion – what indigenous peoples can do

In the indigenous peoples' struggle to protect their biodiversity resources, cultural and intellectual property, the think global act local framework remains relevant; or, as some might say, go glocal.

There are those who shun global lobbies and international conferences, dismissing them as mere festivals of words, but policies and declarations created in the global arena can have far reaching effects. Decisions of ministers attending the WTO conference in Seattle, for example, can affect the lives of villagers in Timbuktu. International lobbies and international networking should not be underestimated by activists. On the other hand, some organizations and indigenous peoples, who are so focused on the international arena that they are distanced from the communities where the impacts of international policies are felt.

The best arrangement is a marriage of the two. Indigenous peoples organizations need to inform themselves as to developments in the international arena and, at the same time, should relate these developments to what is happening on the ground.

Some indigenous peoples' groups and organizations also avoid working or engaging with governments. They would rather struggle for their rights outside government processes. It is time to rethink this position.

Alternative regimes

Some countries, such as the Philippines, Sri Lanka and Thailand, have regulatory policies and international declarations on biodiversity resource protection.

Indigenous peoples and their networks should study previous declarations and other documents and conventions and recommend mechanisms and structures through which these declarations can be made more effective. Some countries, such as the Philippines, Sri Lanka and Thailand, have regulatory policies on biodiversity and international, networking should not be underestimated by activists.

On the other hand, some organizations and indigenous peoples, who confiscated the collections of plant collectors, must be shared with other indigenous peoples and their networks. Such actions can encourage similar initiatives elsewhere.

The stories of village initiatives, such as the Pattuvam villagers in India who declared their resources, the southern Philippines' initiatives, must be shared with other indigenous peoples and their networks. Such actions can encourage similar initiatives elsewhere.

Given the reality that existing IPR/trade regimes are not appropriate to protect indigenous peoples' intellectual and cultural property rights, there is a clear need for alternative regimes and measures to safeguard the interests of conservation, sustainable use, and equity in the use of biodiversity.

Alternative regimes

Some countries, such as the Philippines, Sri Lanka and Thailand, have regulatory policies and international declarations on biodiversity resource protection.

Indigenous peoples and their networks also need to study previous declarations and other documents and conventions and recommend mechanisms and structures through which these declarations can be made more effective.
of Traditional Resource Rights, which encompasses not just intellectual rights but also physical resources and cultural right.

Countries like the Philippines are attempting to experiment with such regimes, though it is not yet possible to make any judgements of their efficacy.

Civil society resistance and challenges to dominant IPR regimes. Another strategy for countering inequitable or destructive IPR regimes is the mobilization of civil society. In a number of countries, notably India and Thailand, farmers groups, NGOs and scientists have led the struggle against the piracy of indigenous and local community knowledge, and the imposition of IPRs on lifeforms and related knowledge. Legal challenges have been taken to the US and European patent offices (e.g. in the case of turmeric, by the Indian government; in the case of neem tree products, by several NGOs; and in the case of the sacred ayahuasca plant, by a combination of North and South American groups).

Revival of farming and medicinal systems. The revival of aspects of more traditional farming and medicinal systems would allow communities and citizens to be more self-reliant, reducing dependence on corporate and state-controlled seeds and drugs, among other things. Of course, given existing economic and social structures, and the increasing incursions of the global economy into the everyday lives of even remote communities, this form of resistance is difficult. But there are significant movements that have kept alive its possibilities, for example the widespread revival of biodiverse farming systems in India and other parts of South and South-East Asia.
All governments, who have indigenous peoples in their territories, should:

1. Ratify ILO Convention 169 if they have not already done so.
2. Ensure the immediate adoption in its current form of the UN Draft Declaration on the Rights of Indigenous Peoples.
3. Ratify the UNESCO Cultural Property Treaties if they have not already been done so.
4. Provide funding mechanisms to enable indigenous peoples to participate directly in negotiations relevant to the protection of their intellectual and cultural property rights, at local, national and international levels.
5. Incorporate the concept of Prior Informed Consent into national legislation (the Philippines has already done so) relevant to intellectual and cultural property.
6. Facilitate the repatriation of cultural property to rightful indigenous owners.
7. Ensure that the rights of indigenous peoples to own and benefit from their ancestral lands and territories are fully protected in their domestic laws and policies.
8. Integrate biodiversity resource protection and environmental education into their school curricula.
9. Suspend projects in indigenous peoples' territories that were initiated without full and prior informed consent.
10. Disseminate information to all indigenous national policies on intellectual and cultural property rights.

All states should also:

i. Establish defensive IPR regimes:

   Countries should establish regimes for certain IPRs whereby the right holder cannot monopolize knowledge or its use, but is guaranteed the ability to stop others from appropriating or misusing their knowledge or resources. A country could pass legislation stating that its resources were accessible to all, provided they were accessible to all, provided they

ii. Develop alternative patent initiatives:

   1. New Deposit Rules. National regulations and, where appropriate, international conventions, should be altered to ensure that all inventions deposited for the legal record in gene banks or cell libraries must include passport data identifying all available information about the origin of the material, including, where appropriate, the names of individuals and of communities that have contributed material (or information related to material) on deposit. The same information should be attached to all new deposits.

   2. Gene Bank Accessions. Material held in gene banks and cell libraries whose passport data indicates that it has been collected from indigenous communities should be regarded as forming part of the intellectual property of that community. No part of that material should be subject to patent claims by others. This material should be regarded as published information precluding patent applications.

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Relevant international instruments

Universal Declaration of Human Rights, 10 December 1948

Article 17
Everyone has the right to own property alone as well as in association with others. No one shall be arbitrarily deprived of his property.

Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities, 18 December 1992

Article 1
1. States shall protect the existence and the national or ethnic, cultural, religious and linguistic identity of minorities within their respective territories and shall encourage conditions for the promotion of that identity.
2. States shall adopt appropriate legislative and other measures to achieve those ends.

Article 2
1. Persons belonging to national or ethnic, religious and linguistic minorities (hereinafter referred to as persons belonging to minorities) have the right to enjoy their own culture, to profess and practice their own religion, and to use their own language, in private and in public, freely and without interference or any form of discrimination.
2. Persons belonging to minorities have the right to participate effectively in cultural, religious, social, economic and public life.
3. Persons belonging to minorities have the right to participate effectively in decisions on the national and, where appropriate, regional level concerning the minority to which they belong or the regions in which they live, in a manner not incompatible with national legislation.
4. Persons belonging to minorities have the right to establish and maintain their own associations.
5. Persons belonging to minorities have the right to maintain, without any discrimination, free and peaceful contacts with other members of their group and with persons belonging to other minorities, as well as contacts across frontiers with citizens of other States to whom they are related by national or ethnic, religious or linguistic ties.

Article 3
1. Persons belonging to minorities may exercise their rights, including those set forth in the present Declaration, individually as well as in community with other members of their group, without any discrimination.
2. No disadvantage shall result for any person belonging to a minority as the consequence of the exercise or non-exercise of the rights set forth in the present Declaration.

Article 4
1. States shall take measures where required to ensure that persons belonging to minorities may exercise fully and effectively all their human rights and fundamental freedoms without any discrimination and in full equality before the law.
2. States shall take measures to create favourable conditions to enable persons belonging to minorities to express their characteristics and to develop their culture, language, religion, traditions and customs, except where specific practices are in violation of national law and contrary to international standards.
3. States should take appropriate measures so that, wherever possible, persons belonging to minorities may have adequate opportunities to learn their mother tongue or to have instruction in their mother tongue.
4. States should, where appropriate, take measures in the field of education, in order to encourage knowledge of the history, traditions, language and culture of the minorities existing within their territory. Persons belonging to minorities should have adequate opportunities to gain knowledge of the society as a whole.
5. States should consider appropriate measures so that persons belonging to minorities may participate fully in the economic progress and development in their country.

International Covenant on Civil and Political Rights, 16 December 1966

Article 26
All persons are equal before the law and are entitled without any discrimination to the equal protection of the law. In this respect, the law shall prohibit any discrimination and guarantee to all persons equal and effective protection against discrimination on any ground such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

International Covenant on Economic, Social and Cultural Rights, 16 December 1966

Article 3
The States Parties to the present Covenant undertake to ensure the equal right of men and women to the enjoyment of all economic, social and cultural rights set forth in the present Covenant.

Article 6
1. The States Parties to the present Covenant recognize the right to work, which includes the right of everyone to the opportunity to gain his living by work which he freely chooses or accepts, and will take appropriate steps to safeguard this right.
2. The steps to be taken by a State Party to the present Covenant to achieve the full realization of this right shall include technical and vocational guidance and training programmes, policies and techniques to achieve steady economic, social and cultural development and full and productive employment under conditions safeguarding fundamental political and economic freedoms to the individual.

International Convention on the Elimination of All Forms of Racial Discrimination, 21 December 1965

Article 5
5. ... States Parties undertake to prohibit and to eliminate racial discrimination in all its forms and to guarantee the right of everyone, without distinction as to race, colour, or national or ethnic origin, to equality before the law, notably in the enjoyment of the following rights:
... (d) Other civil rights, in particular:
... (v) The right to own property alone as well as in association with others.
Notes

4. Ibid., p. 3.
5. Ibid., p. 3.
7. Daes, Supplementary Report, op. cit., p. 3.
20. Ibid., p. 6.
24. Ibid., p.5.
28. UNCED, Agenda 21, Chapter 26.4b.
30. Ibid.
31. Ibid.
32. Ibid.
33. Ibid.
34. Ibid.
41. Article 3, Principle 2 of the Rio Declaration and the CBD reit-erated the sovereign right of states over their natural and biodiversity resources.
42. Shiva, Monocultures, op. cit.
43. Article 1, Rio Declaration and the Convention on Biological Diversity (CBD).
44. Article 8j, CBD.
50. Ibid.
64. MIT Notes, ‘Inventor of the Week – Ananda Chakrabarty’, Massachusetts Institute of Technology, Department of Engineering, 26 April 1998.
67. www.grain.org/publications.
68. Ibid.
79. Alvarez, op. cit.
87. Ibid.
101. Ibid.
105. www.grain.org/publications/dtc953-en.cfm


Center for Indigenous Knowledge and Agricultural and Rural Development (CIKARD) Notes, May 1997, Iowa State University, USA.


CIMI (Indianist Missionary Council), ‘Law may expel foreign research mission’, CIMI (Brasilia, Brazil), 1997.


FWIIS (Four Worlds International Institute for Indigenous Sciences), Summary, 1995–6, Lethbridge, AB, Canada, Four Directions International Inc., 1996.


UN Department for Policy Coordination and Sustainable Development, Critical Trends: Global Change and Sustainable Development, New York, UN, 1997.
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Indigenous and tribal peoples worldwide are faced with the appropriation of their collective heritage developed through the ages. Their traditional songs and designs are being commercialized for the tourist industry, and their traditional knowledge of crops and medicinal plants is being appropriated by multinational companies, often without any recompense, a phenomenon which has come to be known as ‘biopiracy’.

This report looks at efforts by the United Nations and governments to protect this heritage from exploitation; the pressures on governments to allow exploitation of indigenous knowledge; and the effects of the General Agreement on Tariffs and Trade and the Trade-Related Aspects of International Property Rights agreement on indigenous peoples’ intellectual property rights.

The many initiatives taken by Asian indigenous and tribal peoples to protect their heritage are also discussed, and some strategies for the future are put forward in the Conclusion.