# Review of Regional Policy Instruments, Developments and Trends in the Developing Countries of Asia and the Pacific[1]

# (Summary of Presentation)

## Convention on Biological Diversity

### *The Pacific Island Region*

Virtually all Pacific Island countries have a dual system of law. This consists of traditional laws, which may vary significantly from community to community within the countries, and present-day laws, which (in most Pacific Island countries) are based on the English legal system. Under the legal systems in most Pacific Island countries, present-day laws prevail over traditional laws, with the exception of customary land. Therefore any question on the ownership of plant genetic resources usually refers to present-day rather than traditional laws. No Pacific Island country has laws on ownership of plant genetic resources as yet.

Fourteen Pacific Island countries are Parties to the CBD. Within the Pacific region, there are islands that are territories of industrialized countries, such as France, New Zealand and the United Kingdom, which are Parties to the CBD, but not the United States. As required under the CBD, countries that are Parties to the CBD are developing National Biodiversity Strategies and Action Plans (NBSAPs).

The South Pacific Regional Environment Programme (SPREP) has an MOU with the CBD Secretariat, under which the two institutes agree to coordinate activities relating to the implementation of the CBD and the Cartagena Biosafety Protocol, and to exchange information on their activities in areas of mutual interest on a regular basis. SPREP, the World Wildlife Foundation–South Pacific Programme (WWF-SPP) and the Foundation for International Environmental Law and Development (FIELD) have collaborated on a project funded by the Darwin Initiative. The aim of the project was to assist policymakers in the region in introducing national regulations on access and benefit sharing (ABS). As part of this, national consultation workshops were held in several Pacific Island countries.

None of the countries that held workshops have developed an ABS legislative framework, but a model ABS law has been developed in collaboration with the participating countries and distributed by the collaborating organizations (SPREP, WWF-SPP, FIELD, Darwin Initiative). The existence of this model law should encourage consistency between the national regimes that each country will try to establish. Consistency is crucial within the Pacific Island region because many of the islands have common biodiversity. It is now up to national governments whether to give this matter priority. Countries may choose to use administrative or policy measures. The model law defines the whole process necessary for the application of a bio-prospecting permit, from the consultation process through to the renewal of the license. For enforcement, environment officers can carry out inspections of any activity, place or thing to which the license applies. The law suggests a significant fine, should there be any failure to comply with any part of the license.

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[1] Background paper prepared by Mary Taylor.

The majority of Pacific Island countries are in the process of addressing the CBD's Bonn Guidelines on ABS. In most of the countries, developing legislation is difficult because of the extent to which common ownership exists, both within and between communities and countries.

Fiji was an early signatory of the CBD and was early developing an access and benefit-sharing policy for their biodiversity. The basic policy framework originally recommended by the Fiji government was that agreements would be negotiated with the indigenous landowners (who control roughly 83% of Fiji's land resources) with the government playing a regulatory role. After some significant redrafting, the Fiji Parliament will consider an amended version in mid-2004. In the interim, there has been an ad hoc regulatory framework, under which an export permit and country-of-origin certificate are required. The export permit is issued on the basis of there being an MOU signed by (1) the Permanent Secretary of the Ministry of Fisheries and Forests, (2) the authorized signatory where the samples are to be collected and (3) the researcher involved. The complexity of the MOU depends on the nature of the collaborative partner.

The Secretariat of the Pacific Community's Regional Germplasm Centre (SPC RGC), based in Fiji, has a mandate to provide service to 22 Pacific Island countries. The Centre currently conserves a relatively large collection of taro, along with other crops important to the region, such as yam, sweet potato and banana. Material transfer agreements (MTAs) are used in the distribution of any germplasm and must be signed prior to any distribution of germplasm. The MTA complies with the CBD, particularly ensuring that the sovereign rights of the countries over their genetic resources are enforced. In signing the MTA, the recipient of germplasm also agrees to negotiate an equitable benefit-sharing agreement with the country of origin (supplier of the germplasm) if there is an interest in commercialization, and further agrees to seek no IPR over the actual germplasm or derived materials. To date, there has been no need to assess the practicality of this mechanism because there has been no attempt by any recipient of germplasm to obtain IPR over that germplasm or to use the germplasm in any commercial venture. Distribution has only been within the region to researchers or growers in SPC member countries.

Users wishing to access genetic resources may voluntarily agree to be bound by a set of rules or a code of conduct regarding the legal as well as ethical collection of material. A code of conduct was established between the participants of a regional project on taro genetic resources in the Pacific so that taro germplasm could move freely between the countries donating the germplasm, the SPC and Australian Universities. This code of conduct specified that the taro germplasm could be used for research purposes only and could be freely exchanged between the project participants, but could not be transferred beyond the project participants without the prior informed consent (PIC) of the country of origin. In order to facilitate the exchange of tree germplasm, five Pacific Island countries and three Australian organizations participating in the South Pacific Regional Initiative on Forest Genetic Resources (SPRIG) have been operating under a code of conduct since 1996.

### *Asia*

The majority of countries within Asia are Parties to the CBD. The exceptions are Cambodia and the Lao People's Democratic Republic. In contrast to the Pacific, the Asia region is far more advanced in its development of access and benefit-sharing models and agreements. This reflects to a large extent the availability of resources (human and financial), but also the significant genetic diversity held within the Asian countries and therefore the need to have in place systems that protect both these resources and their owners.

The Association of South East Nations (ASEAN), which includes Brunei, Cambodia, the Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam, has drafted the ASEAN Framework Agreement on Access to Biological and Genetic Resources. It addresses 'fair and equitable sharing of benefits', providing for a minimum set of requirements to be included in the benefit-sharing arrangements. An annex to the agreement provides options and guidelines for appropriate benefit sharing. Article 12 of the agreement also provides for establishing a common fund for conservation of biodiversity. Such a fund would be based on a share of the benefits derived from commercializing resources, and the fees imposed by States for access to their resources.

At the national level, countries have drafted and adopted a number of different approaches to address access and benefit sharing.

### India

In India the Biological Diversity Act was finally approved by Parliament in December 2002. This Act is the first such legislation by any of the 12 mega-diverse countries. The Act focuses on asserting sovereign rights over its resources. The Act operates through a three-tier structure of national and state boards and local committees. The National Biodiversity Authority (NBA) will deal with all matters relating to (1) requests for access by foreign individuals, institutions or companies, and the transfer of results to any foreign source, (2) the terms and conditions for equitable sharing of benefits and (2) approval for seeking any form of IPR in or outside India for an invention based on research or information pertaining to biological resources obtained from India. The State biodiversity boards (SBBs) will deal with matters relating to access by Indians for commercial purposes and restrict any activity that conflicts with the objectives of conservation, sustainable use and equitable sharing of benefits. Biodiversity management committees will be set up by institutions of self-governments in their respective areas for conservation, sustainable use and documentation of biodiversity. The NBA and SBBs will consult these committees on matters related to the use of biological resources and associated knowledge. Benefit sharing can take several forms, from joint ownership to the transfer of technology to the development of local production units. It is proposed to set up biodiversity funds at central, state and local levels. To date, the NBA has been constituted, as have the SBBs, although only a few states are proactive. The local biodiversity management committees will be constituted after the SBBs are in place. Although passed by both Houses of Parliament, the Act has not yet become operational.

There has been some criticism of the Act from several sectors. Although it promotes farmers' rights, it is questionable as to how easy it will be for farmers to assert their rights. It would seem that significant power has been granted to the NBA to decide who receives benefits. For example, where benefit sharing is in the form of money, the NBA can decide whether it is paid to the benefit claimers or used generally for biodiversity. Further, the Act does not provide rights holders, such as farmers, with the same capacity to defend their rights as it does the State in any bio-piracy debate. There is also poor treatment of traditional and local knowledge. Environmentalists fear that a section of the Act, which states that the rules restricting access will not be applicable to collaborative research projects provided the Federal government approved of the projects, provides an outlet for interested multi-national parties. Further concerns have been raised in that the Act does not make any distinction among foreigners, so there are no exemptions for small and least-developed countries, promoting their basic food and health needs, who could benefit from India's vast resources.

### Thailand

In Thailand, the Cabinet passed the 'Regulation of the Office of the Prime Minister on Conservation and Use of Biological Resources' in January 2000. The Regulation has principles, conditions and instructions for drafting access contracts to ensure fair and equitable benefit sharing when genetic resources are used. The Royal Forest Department (RFD) is the primary institution for biodiversity conservation in Thailand. In 1999, the RFD passed the 'Regulation of the RFD on Access and Benefit Sharing in Studying and Research in Forestland and Protected Areas 1999'. The Regulation covers agreements on royalties to be paid if commercial use is derived from the resources taken; there is no mention in the Regulation conditions of IPR. In April 1996, the Thai Cabinet approved Thailand's Community Forest Act. The government created this policy to encourage citizens who live in communities, closely linked to the forest, to participate in the conservation and development of the environment and to have the citizens in the communities manage and use forest resources sustainably. The policy does not encourage individuals or groups of people to encroach on the forest in order to gain rights or benefits.

### Philippines

In the Philippines several guidelines and acts are in force relating to access and benefit sharing (Guidelines on Bioprospecting, 1995; Implementing Rules and Regulations on the Prospecting of Biological and Genetic Resources, 1996: Traditional and Alternative Medicine Act, 1997; Indigenous Peoples Right Act, 1997). However the Community Intellectual Rights Protection Act (CIRPA), drafted in 2001, is an interesting development. The objective of this bill is to provide for a system of protection of the intellectual rights of local and indigenous cultural communities with respect to the development of genetic resources and the conservation of the country's biological diversity. The bill acknowledges that biodiversity has been, and should remain, the commons of local communities, with both resources and knowledge being freely exchanged among communities, which are also users of the innovation. The bill seeks to recognize the more informal, communal system of innovation through which farmers and indigenous communities produce, select, improve and breed a diversity of crops and livestock. In addition, the bill's definition of innovation recognizes indigenous knowledge, whether recorded informally or formally, acknowledging that many indigenous communities in the country do not have a written tradition of culture. Local communities can register as an organization that will have legal rights; however, failure to register does not reduce the ownership that the community has over any innovation. The bill is a strong assertion of sovereignty over natural resources.

### Bhutan

The Biodiversity Act of Bhutan was endorsed in August 2003. The Act asserts the sovereignty of the country over its genetic resources, and states that access to genetic resources is subject to the prior informed consent of a competent authority of Bhutan, which will represent national interests and the interests of local communities. Applications will be processed within 30 days from the time of application. The six-chapter Act lays down conditions for grant of access, benefit sharing and protection and will promote technology transfer and capacity building at the national and local levels.

### Bangladesh

Bangladesh has also drafted a Biodiversity and Community Knowledge Protection Act. This Act fully acknowledges the role of communities in conservation of genetic diversity and the importance of the informal knowledge system and collective innovation. The Act therefore

aims to provide appropriate mechanisms for the fair and equitable sharing of benefits and to ensure participation of communities in the decision making process.

It is not easy to draw any conclusions from these national approaches, because the period of time for implementation has been limited. Concerns have been expressed by stakeholders, such as the private sector and the research community, regarding the procedures established in some of these systems. They feel they are too bureaucratic and therefore discourage access to genetic resources.

All of the biodiversity legislation referred to in this text is available on the Genetic Resources Action International (GRAIN) website (http://www.grain.org/brl/?regionid=2).

## Cartagena Biosafety Protocol

Many of the Asian and Pacific countries (27 in total) have signed the Cartagena Biosafety Protocol but have yet to ratify it. Of the Asian countries, Bangladesh, Vietnam, Cambodia, Malaysia, Bhutan, India, Sri Lanka and the Lao People's Democratic Republic have ratified it. Within the Pacific region, Palau, Samoa, the Fiji Islands, Solomon Islands, Kiribati, Tonga, the Marshall Islands, Nauru and Niue have ratified the Protocol.

Following the adoption of the Cartagena Protocol on Biosafety in January 2000, in November of that year the Council of the Global Environment Facility (GEF) adopted the GEF Initial Strategy on Biosafety, which is aimed at assisting countries in their preparation for the coming into force of the Biosafety Protocol.

The UNEP-GEF global project on the development of National Biosafety Frameworks (NBFs) began in June 2001. The majority of Asian countries (with the exception of India, Malaysia and Thailand) have joined, as have 14 Pacific Island countries: the Cook Islands, the Fiji Islands, the Federated States of Micronesia, Marshall Islands, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, Palau and Vanuatu. The objectives of the UNEP-GEF project are as follows:

- to assist with NBFs
- to promote information sharing and collaboration, especially at the regional and sub-regional level
- to promote collaboration with other organizations to assist capacity building for the Protocol

Similarly, the IUCN Regional Biodiversity Programme, Asia, is currently implementing an initiative on 'Capacity Building to Implement the Biosafety Protocol in Asia'. The initiative aims to help countries in Asia to implement national and international regulations concerning biosafety.

None of the Asian or Pacific countries are yet at the stage where they are implementing NBFs.

# WTO

## *TRIPS*

### The Pacific

In the Pacific, WTO membership is limited to Papua New Guinea, Solomon Islands and the Fiji Islands; however, because major trading partners are members of WTO, there is a regional effort to get non-WTO members to be WTO compliant or to work towards WTO compliance in their trading activities.

Members of the WTO are obliged to implement a number of agreements administered by that body, including TRIPS. Article 27.3(b) of TRIPS states that, 'Members shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by a combination thereof.' This means that members need to provide for a legally enforceable right either to exclude others from the unauthorized use of a protected plant variety or to obtain remuneration for its use. An effective *sui generis* system is plant breeders' rights (PBRs), based on the 1991 UPOV Convention or an entirely new system. There is no system in place in the Pacific to protect plant varieties as such. Although, as stated above, only three countries in the Pacific are members of WTO, there is an effort for countries to be WTO compliant. Apart from the pressure for WTO membership or compliance, countries themselves see the need to have some form of protection in place, either through an access and benefit-sharing framework or through a more specific PBR system. There is genuine concern in the region about the vulnerability of farmers and communities to their genetic resources being exploited. This, of course, is more of an economic threat when plants have pharmaceutical potential, such as kava, but there is a general feeling, especially from the larger countries, that traditional agricultural varieties also need to be covered by some form of protection.

The Pacific region is fairly unique in that there are few active plant breeders developing new varieties, although there is significant variety selection carried out by farmers. Very few countries in the Pacific have the resources with which to carry out breeding programmes, and those that exist are usually funded by donor agencies as part of a specific project. Most crops are vegetatively propagated traditional varieties—landraces—and as such, do not fit the criteria required for PBRs. There are some new varieties that are shared or have been introduced into the region, but these are public varieties. Vegetable seeds have a limited market and are imported from Australia, New Zealand, the United States or Asia. Despite the diversity found within the Pacific, especially in countries such as Papua New Guinea, there is a demand to bring in crop genetic resources from outside the region. Improved yams, cassava and banana varieties have all been imported from the CGIAR genebanks. This flow of germplasm from the CGIAR genebanks to developing countries was discussed by Fowler et al. (2003),[2] although it is interesting that in the period they studied (1972-1991), the 15 countries studied received more germplasm than they contributed, for all crop categories except roots and tubers.

Most Pacific Island countries have patent laws, but as inventions are very few, these are infrequently used, and patents are available for mechanical inventions only, not for plants. The need for patent protection over plants has not yet arisen in any PIC. As with PBRs, the criteria for awarding a patent are not applicable to landraces. Patents are granted for an

[2] Fowler, C., M. Smale and S. Gaiji. 2003. The demand for crop genetic resources from international collections. (Brief 12). In M. Smale and B. Koo (eds), Research at a glance: Biotechnology and genetic resources policies. What is a genebank worth? International Food Policy Research Institute (IFPRI), Washington, DC. http://www.ifpri.org/pubs/rag/br1002.htm.

invention and the definition of an invention is that it must be new, not obvious, and capable of industrial application.

At the fifth ministerial conference of the WTO, the African, Caribbean and Pacific Group of States submitted a declaration urging the review of Article 27.3(b) so that it clarifies that no living organisms in any form should be patented. The declaration stated its support for the LCDs as declared in the Dhaka Declaration that WTO members 'shall select their own *sui generis* system for plant variety protection, including recognizing traditional knowledge and the rights of farmers to use, save, re-sow, exchange or sell seeds', and also the position of the Africa Group that members should have the right to adopt plant variety protection regimes that are appropriate to their needs.

## Asia

In contrast to the Pacific, the majority of Asian countries, with the exception of the smaller countries such as Bhutan and Nepal, are WTO members. There is a greater need for plant variety protection in many Asian countries because of the level of breeding that occurs in these countries. Farmers in Asian countries are also more reliant on seeds than are those in the Pacific region, so there is a need to acknowledge their role in seed production and improvement, along with the importance of farmer-saved seeds. However, it can also be argued that the developed member countries of WTO have been putting pressure on developing countries to become members of UPOV. Most of the countries that have acceded to the WTO have accepted this condition as a part of their accession deal. More recently, Nepal asked to join the WTO but was not prepared to become a member of UPOV. In Bangladesh, China, India, Indonesia, Korea, Malaysia, Pakistan, Philippines, Taiwan, Thailand and Vietnam, UPOV-style plant variety protection laws are already in force or are in the process of being formulated. Table 1 shows some of the Acts either being implemented or in the draft stage.

India's Plant Variety Protection and Farmers' Rights Act, 2001, constitutes the Indian Government's response to, among other things, its obligations under TRIPS concerning plant varieties. The existing Indian Patent Act, 1970, excluded agriculture and horticultural methods of production from patentability. The *sui generis* system for protection of plant varieties was developed, integrating the rights of breeders, farmers and village communities, and addressing the concerns for equitable sharing of benefits. The plant breeders' rights largely follow UPOV, so the criteria for registration are novelty, distinctiveness, uniformity and stability. The Act not only contains elements from the 1978 version of UPOV but also includes some from the 1991 version, such as the possibility to register essentially derived varieties.

The second main aim of the Act is to introduce farmers' rights. The Act makes provisions for farmers' varieties to be registered and allows the farmer to save, use, sow, re-sow, exchange, share and sell farm produce of a protected variety, except for sale under a commercial marketing arrangement (brand-name seeds). Further, farmers have been afforded protection from innocent infringement, if at the time of infringement, the farmer is not aware of breeders' rights. The rights of farmers and rural communities are further acknowledged through their role as contributors of landraces and farmers' varieties in the breeding of new plant varieties. Breeders have to get permission from farmers before they can use their varieties. A farmer, who is engaged in the conservation of genetic resources of landraces and wild relatives of economic plants, and their improvement through selection and preservation, will be entitled to recognition and reward from the National Gene Fund, provided the material selected and preserved has been used to provide genes for a variety registered under the Act. The expected performance of a

**Table 1. The Status of Plant Variety Protection Acts in Asian Countries**

| Country | Name of Act | Year | Status |
|---|---|---|---|
| Bangladesh | Plant Variety Act | 1998 | Draft |
| India | Plant Variety Protection and Farmers' Rights Act | 2001 | In force |
| Malaysia | Protection of Plant Varieties Act | 1999 | Draft |
| Pakistan | Plant Breeders Rights Ordinance | 2000 | Draft |
| Philippines | Plant Variety Protection Act | 2002 | Enacted |
| Philippines | Implementing Rules and Regulations of the PPPVA of 2002 | 2003 | In force |
| Sri Lanka | Protection of New Plant Varieties | 2001 | Draft |
| Thailand | Plant Variety Protection Act | 1999 | In force but not implemented |

variety must be disclosed to farmers at the time of sale of seed/propagating material. If a variety or the propagating material fails to perform as expected under given conditions, as claimed by the breeder of the variety, then an individual farmer or group can claim compensation as per the Act. The Act seeks to put farmers' rights on a par with breeders' rights. However, there has been some criticism of the Act regarding the registration criteria which the farmers have to use – the argument being that these criteria have been developed exclusively with commercial breeders in mind and can generally not be applied to the registration of farmers' varieties since these are unlikely to fulfil all the conditions.

The Act has been passed as per procedure, but the Protection of Plant Varieties and Farmers' Rights Authority (PPVFR) has not yet been constituted. The rules and regulations of this Act are on the table of the Parliament House in India. After the PPVFR and the rules are in place, the Act will become operational.

India also has a Patent Second Amendment Act, 2002. According to this Act *process* patents will be allowed on microbiological, biochemical and biotechnological processes. Processes and methods for making plants resistant to disease and for increasing their value, or the value of their products, will be patentable. This appears to deliberately address the *Bt* cotton situation, and other *Bt* and *Bt*-like approaches to introduce resistance to disease.

India has played an active role in WTO negotiations. On behalf of Brazil, Bolivia, Cuba, Dominican Republic, Ecuador, Thailand, Peru and Venezuela, India submitted a paper to the TRIPS council requesting the Council to amend the TRIPS Agreement so that patent applicants (1) disclose the source of origin of the biological resource and associated traditional knowledge and (2) provide evidence of prior informed consent and benefit sharing. The group is concerned that the TRIPS Agreement allows patents to be granted for inventions that use genetic material and associated knowledge without requiring compliance with CBD provisions.

In Malaysia, the Protection of New Plant Varieties Act came into force in 2004. The Act provides for the protection of breeders' rights with new plant varieties and also the recognition and protection of the contribution made by farmers, local communities and

indigenous peoples towards the creation of new plant varieties, as well as encouraging investment in and development of new plant varieties in both the public and private sectors.

The Plant Varieties Protection Act (1999) is in force in Thailand but has yet to be implemented. Chapter IV of this Act addresses the protection of local domestic plant varieties, enabling communities to register a plant variety, but only when it exists in a particular locality and when it has been conserved or developed exclusively by a particular community. Once registration is granted, that locality has the exclusive right to develop, study, carry out research, produce, sell, export or distribute by any means the propagating material. Any person who uses the registered local plant variety or any part thereof for any activity of commercial interest will have to enter into a profit-sharing agreement with the registered owner of that plant variety. Chapter V of the same Act also addresses general domestic plant varieties and wild plant varieties. Any use of plant varieties covered by this Chapter of the Act for commercial interests will have to come to a profit-sharing agreement through the official channels established by this Act (the Minister of Agriculture and Cooperatives shall have charge and control of the execution of this Act and shall have the power to appoint competent officials).

In the Philippines, the Plant Variety Protection Act is in force. Under this new law, the National Plant Variety Protection Board (NPVPPB) would manage the implementation of the Plant Variety Protection (PVP) system, which will determine ownership over new varieties. The Act also sees the establishment of the Gene Trust Fund for supporting the preservation of germplasm by government and private-sector groups. The Act is aimed at protecting and securing the exclusive rights of plant breeders with respect to a new plant variety. A provision exists that acknowledges the traditional rights of farmers to save, use, replant and sell produce from a protected variety, provided that propagation is not being done for commercial purposes.

There has been significant criticism of this Act by farmers' groups, organizations for indigenous peoples, NGOs and scientists, who claim that the PVP Act of 2002 violates farmers' inherent and traditional rights to seeds and associated knowledge. The critics argue that the provisions for farmers to use and exchange seeds are meaningless. They claim that overall the law is vague and subject to interpretation by the current Plant Variety Protection Board, which is dominated by corporate and government interests.

Some of the US Free Trade Agreements have clauses in place that could have an impact on plant variety protection. Under an agreement with Chile, Chile is required to put patent protection in place within four years. That would arguably extend to plant tissues and genes. Some argue that the provision for patenting plant varieties will only be included in Agreements with biodiversity-rich countries.

Some argue that developing countries have been subjected to undue pressure from industrialized countries to provide ever stronger forms of IPR's on plant varieties.

All of the legislation for plant variety protection referred to in this text is available on the GRAIN website (www.grain.org/brl/region-asia-brl-en.cfm).

### *SPS Agreement*

There are two specific WTO agreements dealing with food safety and animal and plant health and safety, as well as with product standards. The agreement, which has some impact on the management of plant genetic resources through its influence on biosecurity, is the Sanitary and Phytosanitary Measures Agreement (SPS). The SPS allows countries to set their own

standards for the protection of human, animal or plant life or health, but member countries are encouraged to use international standards, guidelines and recommendations where they exist. All countries with membership in WTO have to adhere to the conditions of this agreement.

## International Treaty on Plant Genetic Resources for Food and Agriculture

The International Treaty (IT) entered into force on 29 June 2004. Numerous Asian governments, particularly those from India, Malaysia and the Philippines, were very active in the negotiations on the Treaty text. As of August 2004, seven countries (including India and Malaysia, but not the Philippines) had ratified, accepted or acceded to the Treaty. Thailand has signed, but not ratified. The Ministry of Agriculture and Cooperatives in Nepal has internally decided to become a Member of the IT but as there is currently no parliament, ratification has been delayed.

The only country from the Pacific region to sign the treaty is the Marshall Islands. The Secretariat of the Pacific Community Land Resources Section hosted a meeting late in 2004, where Ministers and Heads from Agriculture and Forestry were present. A Working Paper on the International Treaty was presented to raise awareness of the Treaty and to facilitate national decision making for its ratification.

The Treaty has been criticised, by some on the basis that the Annex 1 list of crops to be included in the multi-lateral system is not as extensive as it should be. (It will be possible, if all parties agree in the future, to extend the list.) Provisions relating to farmers' rights are included in Article 9. Farmers' rights are of particular significance in Asia, where over two-thirds of the population are small farmers or live in farming communities. However, the statement on farmers' rights leaves responsibility to national governments without an international enforcement procedure. The provision in the Treaty that addresses the right of farmers to save, use, exchange and sell farm-saved seed, subjects that right to national legislation.

It is argued by some that these laws do not adequately provide for farmers' rights. Nevertheless, the farmers' rights provisions of the Treaty could be used to gain greater protection for farmers in Asia. The Treaty does bring together many of the issues faced by farmers in Asia and the Pacific. Issues relating to farmers' rights, intellectual property rights and international agricultural research can now be dealt with at the international level.

## Networks for Genetic Resources

The International Plant Genetic Resources Institute (IPGRI) has a regional office, based in Malaysia, that serves Asia, the Pacific and Oceania, covering an area of 45 countries characterized by diverse ecosystems and cultures. IPGRI policy is focused on strengthening the capacity of national PGR programmes, and success has been achieved in China, India, Japan and Malaysia. Some countries do not have the necessary resources, human or financial, to establish national programmes, and efforts are put into these countries to develop essential skills in areas such as management and planning. The National Programme InfoBase has been established by IPGRI-APO to assist countries in developing a better understanding of the various components of a national programme on PGR. Thirteen components have been identified, which can be considered as the essential components of a national programme and include policy and planning. Four regional networks operate in the Asia-Pacific region (table 2).

**Table 2. Regional PGR Networks in Asia and the Pacific**

| Network | Date established | Membership |
|---|---|---|
| Regional Network for Conservation and Utilization of Plant Genetic Resources in East Asia (EA-PGR) | 1991 | China, Japan, Rep of Korea, Dem People's Rep of Korea, Mongolia |
| Regional Cooperation in Southeast Asia for Plant Genetic Resources (RECSEA-PGR) | 1993 | Indonesia, Malaysia, the Philippines, Papua New Guinea, Thailand, Singapore, Vietnam |
| The South Asia Network on Plant Genetic Resources (SANPGR) | 1990 | Bangladesh, Bhutan, India, Nepal, Maldives, Sri Lanka |
| The Pacific Agricultural Plant Genetic Resources Network (PAPGREN) | 2001 | Cook Islands, Fiji, Kiribati, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu |

## Crop-Specific Networks

### *Banana Asia Pacific Network (BAPNET)*

BAPNET arose because of the need to have an initiative truly based in the national agricultural research systems (NARS). In the International Network for the Improvement of Banana and Plantain (INIBAP) there was an existing structure for collaboration, but this was aimed at establishing priorities for INIBAP rather than for the activities of the participating NARS. It was felt that collaboration in banana research could also help countries in the region overcome threats posed by

- restrictions on the exchange of germplasm and technologies related to IPR
- unfavourable policies related to WTO rulings, etc.
- fluctuating economic conditions in the region resulting in unprofitable ventures in banana cultivation
- movement of pests and diseases

The voting members of BAPNET are representatives from Australia, Bangladesh, Cambodia, China, India, Indonesia, Malaysia, Papua New Guinea, Philippines, Sri Lanka, Thailand, Vietnam, the Taiwan Banana Research Institute and SPC. Programmes are in place for countries in the region to share and evaluate germplasm. INIBAP MTAs are used to facilitate germplasm exchange.

### *The International Coconut Genetic Resources Network (COGENT)*

COGENT has 35 member countries and five sub-networks, three of which are in the Asia-Pacific region, operating in Southeast and East Asia, South Asia and the South Pacific. Eleven Asian and eight Pacific Island countries are COGENT members. Regional genebanks have been established in Southeast Asia, South Asia and the Pacific as the components of a multi-site international coconut genebank (ICG). Countries provide germplasm to the ICGs using germplasm access agreements and germplasm is distributed using material transfer agreements.

### *Other crop-specific networks*

Other crop-specific networks operating in the region are shown in table 3.

**Table 3. Crop-Specific Networks in the Asia-Pacific Region**

| Network | Member countries |
|---|---|
| International Buckwheat Research Association (IBRA) | China, Japan, India, Nepal and the Republic of Korea |
| Asia Pacific Forest Genetic Resources Programme (APFORGEN) | In collaboration with the Asia Pacific Association of Forest Research Institutions (APAFRI) |
| International Network for Genetic Evaluation of Rice (INGER) | Asia and some linkages to NARS in Africa, South America and the Caribbean |
| South Pacific Regional Initiative on Forest Genetic Resources (SPRIG) Phase 2 | Cook Islands, Kiribati, Nauru, Niue, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu and Samoa |
| Lathyrus Genetic Resources Network (LGRN) | Bangladesh, India, Nepal, Pakistan, Syria, Jordan, Ethiopia, China, Canada and the European Union |
| Safflower Network | Being developed in cooperation with the International Safflower Germplasm Advisory Committee (ISGAC) |
| Asian Network on Sweet Potato Genetic Resources Answer | China, Thailand, Malaysia, Indonesia, Japan and the Philippines |

## Regional Initiatives

### *Model Law for the Protection of Traditional Knowledge and Expressions of Culture*

The SPC Cultural Affairs Programme, in partnership with the Pacific Islands Forum Secretariat (PIFS) and UNESCO, have developed a Pacific Regional Framework to help ensure that Pacific Island communities maintain control over and profit from any commercialization of their traditional knowledge and expressions of culture. This Framework includes a Background Note, a Model Law and an Explanatory Memorandum. The Pacific Regional Framework has been developed in close consultation with SPC, UNESCO, FORUM member countries and territories, and the Council of Pacific Arts. It reflects developments taking place internationally at both UNESCO and the World Intellectual Property Organization (WIPO). The model law establishes a new range of statutory rights for customary owners of traditional knowledge and expressions of culture. Countries wishing to enact the Model Law are free to adopt and/or adapt the provisions in accordance with national needs, the wishes of their traditional communities, and their legal drafting traditions. Fiji, Palau and Papua New Guinea are enacting this Model Law. In further response to the interest in this area, a regional convention for the extra-territorial protection of traditional knowledge and expressions of culture is being planned.

### *Pacific Islands Forum Countries Intellectual Property Development Plan*

The overall objective of this plan is to assist countries in their efforts to establish a regional infrastructure based on legislation, which takes into account international standards, including those under TRIPS and the major IP treaties administered by WIPO.

This project/plan has taken several approaches in order to achieve its desired aims. A regional seminar on IP modernization was conducted and countries given model laws, which they can

adapt or modify for their own purposes. Countries have been assisted in the preparation of the draft IP laws. On the issue of regional collaboration, a regional facility on IP management is being proposed, which will allow countries to access a central facility for lodging applications, and where searches can be undertaken. In addition, collective management of copyrights is also being promoted. Decisions were made on these two facilities late in 2004 for recommendations to be made to the Forum Trade Ministers in 2005.