16 Commentary on Thailand’s Plant Varieties Protection Act

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The Thai Plant Varieties Protection Act, 1999, (PVPA) is a sui generis system that contains three types of protections for plant varieties: (1) intellectual property protections for new plant varieties that are novel, distinct, uniform and stable; (2) intellectual property protections for local domestic varieties which are distinct, uniform and stable (DUS), but not necessarily novel; and (3) access and benefit sharing–style protections for general domestic plant varieties and wild plant varieties. Interestingly, while wild plant varieties do not have to be uniform, the Act stipulates that they must be stable and distinct.

Protection of new plant varieties

The conditions for protection of new plant varieties is very similar in some respect to those included in the UPOV Convention (International Convention for the Protection of New Varieties of Plants) system. In addition to having to be DUS, new plant varieties must not have been distributed in or outside the Kingdom by the breeder or with the breeder’s consent for more than one year prior to the date of application. This condition is, of course, roughly equivalent to the concept of commercial novelty included in the UPOV Conventions and many countries’ plant variety protection laws. The rights conferred with respect to new plant varieties are also roughly equivalent to those provided for under UPOV 1991, although the limits to the scope of protection differ in several manners, and the protection periods are shorter than those established by UPOV 1991.

Going beyond the UPOV Conventions, the Thai law requires applications for new plant variety protection to include details about the origin of the genetic material used for breeding, as well as a proof of a profit-sharing agreement when general domestic or wild plant varieties have been used for breeding of the variety. Accepted varieties are included in a national register of protected varieties.

Protection of local domestic plant varieties

‘Local domestic plant varieties’ under the PVPA must also be DUS. They do not, however, have to satisfy the novelty requirement. Instead, the PVPA
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requires that the plant variety ‘exists only in a particular locality within the Kingdom and which has never been registered as a new plant variety.’ Any person with full legal capacity may apply. The law also provides for a form of collective ownership of local domestic plant varieties stating that,

A *sui juris* person, residing and commonly inheriting and passing over culture continually, who takes part in the conservation or development of the plant variety which is of the descriptions specified in Section 43 may register as a community under this Act. For this purpose, there shall be appointed a representative who shall submit an application in writing to the Changwad Governor of the locality.13

The community concerned must have conserved or developed exclusively the plant variety.14

The application must include the method of conservation or development of the variety, the members of the community concerned, and details about ‘the landscape with a concise map showing the boundary of the community and adjacent areas.’15

Once registered, the community has the exclusive rights to develop, study, experiment on, research, produce, sell, export or distribute the propagating material of the plant.16 The scope of these rights is circumscribed in much the same way as the new plant varieties’ protection,17 with the exception of acts related to education and experimentation.18 The PVPA states that a profit-sharing agreement must be concluded with a legal representative of the community whose local domestic plant variety is being collected, procured or gathered for purposes of development, education, experimentation or research for commercial outcomes.19 The PVPA further specifies that this agreement has to be approved by the Plant Variety Protection Commission. Most importantly, the profits go directly to the community providing the resource.20 The profits generated are separated between the individuals having conserved or developed the plant variety (20 percent), the community having registered the variety (60 percent) and the local organization making the agreement in the name of the community (20 percent).21

The Act anticipates creating regulations that will further determine the ‘profit-sharing among the persons who conserve or develop the plant variety’ (section 49 art. 2).

Another particularity of local domestic plant variety protection is the possibility of renewing the term of the protection for an additional 10 years22 when the variety can still be considered as a local domestic variety and the community still respects the criteria of Sections 44 and 45.23

**Protection of general domestic plant varieties and wild plant varieties**

The PVPA defines wild plant varieties as ‘a plant variety which currently exists or used to exist in the natural habitat and has not been cultivated.’24 As noted
earlier, wild plant varieties do not have to be uniform, but they must be distinct and stable.

General domestic plant varieties, on the other hand, do have to meet the DUS criteria. In addition, a general domestic plant variety must be ‘a plant variety originating or existing in the country and commonly exploited and shall include a plant variety which is not a new plant variety, a local domestic plant variety or a wild plant variety.’ The main differences between local domestic and general domestic varieties are that the former exist only in one well-defined area of Thailand and are conserved by a community. A general domestic variety is commonly exploited throughout the country; it cannot be associated with any particular location or community.

There is no provision for registering general domestic and wild plant varieties under the PVPA. However, would-be users of these materials for ‘variety development, education, experiment or research for commercial interest’ must first obtain permission from ‘the competent official and make a profit-sharing agreement under which income accruing therefrom shall be remitted to the Plant Varieties Protection Fund.’ A number of details which must be included in the profit-sharing agreement are listed in the PVPA, with the indication that further rules, procedures and conditions will be provided in a subsequent regulation. The PVPA does not mention benefit sharing with the maintainers or developers of general domestic plant varieties, nor does it establish the percentages of benefit distribution (as it does with local domestic plant varieties) because the varieties are, as the name suggests, generally available, distributed and used across the country. The Plant Varieties Protection Fund’s administration is handled by a Fund Committee. This Fund will support communities in conservation, research and development of plant varieties. A Ministerial Regulation adopted by the Council of State of Thailand in January 2011 clarifies that benefit sharing may take many forms, including technology transfer and capacity building (and need not necessarily include monetary benefit sharing). It is understood that the benefits to be included in agreements will be subject to negotiation on a case-by-case basis. The absence of this regulation was a disincentive for some would-be applicants for protection under the Act, and prohibited progress in the processing of their applications (if they made them). Approval for protection required ‘a profit-sharing agreement in the case where a general domestic plant variety or a wild plant variety or any part thereof has been used in the breeding of the variety for a commercial purpose’ (emphasis added). So in these cases, in the absence of the 2011 Regulation, applicants could not complete their application, even though the competent authority would be willing to carry out the DUS standards’ test. The varieties that were not affected by this problem were those which were actually finished being developed before the Act entered into force or the ones developed from foreign countries, and therefore before the requirement of providing a benefit-sharing agreement did not apply to them.

As far as noncommercial uses of general domestic plant varieties or wild varieties are concerned, no benefit-sharing obligations are triggered. The Act states that the conditions of use will be set out in a subsequent regulation,
which was passed in February 2004: the Plant Variety Protection Commission Regulation in Study, Experiment, or Research on General Domestic and Wild Plant Varieties. The regulation requires that the Department of Agriculture’s director general be notified of such uses as well as the details of the project proposal submitted. The results of the study, experiment or research may also be submitted to the Department of Agriculture (DoA) for distribution.

It is widely understood that the protection of general domestic plant varieties and wild plant varieties does not cover the farmers’ use of germplasm. The benefit-sharing obligation hence does not apply to farmers who directly exploit plant varieties for example; farmers can collect the varieties for selling or exploitation without owing any profit-sharing.

The treatment of both general domestic plant varieties and wild varieties under the Act is more closely aligned to access and benefit-sharing laws than intellectual property rights. It does not establish a fixed set of rights that vest in an ‘owner’ that are enforceable against all potential users in the country. Instead, it creates a requirement to get the consent from or notify the competent authorities to use these two kinds of varieties.

**Incentives behind the adoption of a sui generis system**

As a World Trade Organization (WTO) member, Thailand had an international obligation, created by the Agreement on Trade-Related Aspects of Intellectual Property Rights, to develop a plant variety protection by the year 2000. Given uncertainties about which department had the competence to develop the law, both the Thai DoA and Department of Intellectual Property (DIP) drafted versions of a Plant Variety Protection Act between 1995 to 1998. The drafts, both similar in content strictly contained new plant variety protection, although the DIP version was modelled very closely on the UPOV 1978 Convention.

The Thai Council of Ministers considered that the DoA, which has the mandate to conduct research on plant varieties, should lead the drafting process of the plant variety protection law. The cabinet of Thailand demonstrated its preference towards the DoA’s draft, electing to adopt it. The DoA conducted a series of public hearings regarding the draft, upon which occasions it became clear there was opposition. Nongovernmental organizations (NGOs), national companies (small and large) and the general public were not in favour of becoming members of UPOV. Moreover, some of these protesting groups asserted the need to protect extant varieties, an approach that appeared to have been inspired by access and benefit-sharing concepts set out in the Convention on Biological Diversity (CBD), and the draft International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA, under negotiation at that time) including text regarding access and benefit sharing, the creation of an international benefit-sharing fund, and farmers’ rights. All these inputs were taken into consideration by the Committee for Plant Variety Protection Bill Drafting, which was created especially by the Thai government for the purpose of writing the final draft.
The process for elaborating the PVPA was enriched by much input by the Thai people through the NGOs, academics and civil society groups. Before they voiced their opinions, the draft PVPA contained only protection for new plant varieties. The powerful NGOs influenced the public opinion, thereby applying considerable pressure on the government. The Assembly of the Poor (AOP), with the concert of academics and NGOs, was able to sway the drafting process to extend protection further and to include protection for local domestic plant varieties, as well as general domestic and wild plant varieties. The aim was to include all plant varieties in the sovereign domain of Thailand within the scope of the Act. The felt need to achieve this was motivated largely by concerns about recurring cases of alleged biopiracy and misappropriation of Thai resources, including the very high profile case of ‘Jasmati’ which the Thai people discovered only in 1998. Such cases made the Thai people very sensitive to these issues. The name Jasmati was registered as a trademark in the US by the American company RiceTec, Inc. in 1993. The company claimed Jasmati was the Texas-grown copy of Thai jasmine rice, when in fact the variety is not derived from any Thai rice variety.

In 1999, the Council of State finally passed the PVPA, which also came into effect that same year.

The implementation and its difficulties

One outstanding regulation

In order to go forward with the implementation of the Act, one further important regulation needed to be adopted concerning the process applications involving local domestic plant varieties.

As of 9 September 2011, there have been only 94 registrations since the adoption of the PVPA more than 10 years prior. However, there have been 773 applications: 169 are in the process of consideration the breeding process, 457 in the process of DUS testing, and 34 in the process of reporting testing results.

The most significant factor contributing to the low numbers of registrations was the absence of the regulation concerning access and benefit sharing, described earlier.

Defining locality

While the absence of a regulation concerning local domestic varieties application has created some challenges, this actually has not been the core problem until now. Instead, the more fundamental problem turns out to be that it is difficult to find plant varieties that correspond to the requirement of locality. Under the Act, for a variety to be local, the geographic region where the variety is found must be limited to a well-defined, geographically limited locality. The problem with this criterion is that varieties are often taken from one community to another with cross-community
marriages. The entire Kingdom of Thailand cannot be considered a locality, as this would rather qualify the plant variety as a ‘general domestic’ variety. There has not been any variety registered under the local domestic category. Hopes of finding a local variety were raised when a certain rice variety was found only in a specific area. In 2007, Mr. Somchai Asaiboon applied for registration for the Homhuang Chaiya rice variety that was planted on his premises in the Thoong subdistrict of the Suratthani province. The authority, after investigation, found that the Asaiboons were the only family cultivating this rice. As a result, the authority rejected the application, as it did not qualify under Section 44 of the PVPA because the Asaiboons were a family, and not a community. The number of registered local plant varieties is still at zero.

Plant Varieties Protection Fund

Another challenge to the full implementation of the Thai PVP law concerns the Plant Varieties Protection Fund. Ministerial regulations creating the fund were adopted in 2007, but there is still no money in the fund. A total of 94 registrations have been granted, which have generated a modest income for the fund. Subsidies from the government have not yet been provided, and donations from other sources have not materialized.

Conclusion

Although NGOs, large and small national companies, and the Thai public were generally not in favour of Thailand becoming a member of the UPOV Convention some years ago, there are signs that opinions are starting to shift due to higher levels of awareness of related issues. Some members of the public and most local companies are in favour of signing the UPOV Convention. Partly as a result of the implementation setbacks described in this chapter, there is talk within the Plant Variety Protection Division, and within some groups of stakeholders, of modifying the legislation so as to render it similar to UPOV 1991.


The UPOV Office abstained from evaluating the *sui generis* segments of the Thai Act by claiming that ‘the Office of the Union is not in a position to provide comments on the protection of general domestic plant varieties, wild plant varieties and local domestic plant varieties.’ However, the UPOV Office did opine that the provisions for the protections of local domestic, general domestic and wild varieties should be separate from the new plant variety protection law. In other words, to be in compliance with UPOV, the Thai government should keep the *sui generis* protections for another law. To this day, Thailand is not yet a member of UPOV.
Notes

2 PVPA, S.11.
3 The distinctness criterion exclusively for the new plant variety protection includes the notion that such distinctness must be ‘related to the feature beneficial to the cultivation, consumption, pharmacy, production or transformation.’ This specification equivalent to the value for conservation and use (VCU) standards is absent in the ‘plant variety’ definition and was later added in the descriptors of the new plant variety. Therefore, the VCU standards were dropped for the local and general domestic plant varieties.
4 UPOV has longer grace periods in S.6(1), UPOV 1991, which are 4 years before the application date for all varieties, or in the case of trees or vines, earlier than 6 years. The PVPA is therefore not in compliance with UPOV standard delays.
5 The terminology differs in a few aspects, although the idea conveyed is identical.
6 The protection against parallel imports which is detailed in Article 14(2) of UPOV, is missing. Also, the concept of essentially derived varieties found in Article 14(4) UPOV is absent in the PVPA. Moreover, the Thai law incorporates two more exceptions to the protection of the rights holder (33(1) and (4) PVPA).
7 The protection is for 12 years for plants giving fruits within a period of not over two years of the cultivation, 17 years for plants giving fruits after more than two years of cultivation, and 27 years for tree-based plants giving fruits after two years or more of cultivation; PVPA, s.31.
9 PVPA, S.19(3).
10 Ibid., S.19(5).
11 The requirement that they also be distinct uniform and stable is incorporated through the definition of plant variety. See supra note 1 and discussion.
12 PVPA, S.3.
13 Ibid., S.44.
14 Ibid., S.45.
15 Ibid., S.44(3).
16 Ibid., S.47(1).
17 See supra, note 6.
18 PVPA, S.33 & 47.
19 Ibid., S.48
20 Ibid., S.48.
21 Ibid., S.49(1).
22 The initial periods of time attributed for the protection are the same as those for new plant varieties.
23 PVPA, S.50.
24 Ibid., S.3.
25 Ibid.
26 Ibid., S.52.
27 Anon. (2011). ‘Ministerial regulation on defining of permission procedures and conditions for collecting, procuring or gathering general domestic plant varieties, wild plant varieties for the purposes of variety development, education, experiment or research for commercial interest and a profit-sharing agreement B.E. 2553’, Royal Gazette, 128, section 5.
28 There is also no direct benefit sharing with ‘suppliers’ of wild varieties.
The Fund Committee is composed of: ‘Permanent Secretary of the Ministry of Agriculture and Co-operatives as the Chairman and not less than seven other members appointed by the Commission and the Director-General of the Department of Agriculture shall be the secretary and a member.’; PVPA, S.56.

Ibid., S.55.

Anon. (2011). ‘A profit-sharing agreement from utilization of general domestic plant varieties, wild plant varieties or any part of such plant varieties according to Plant Variety Protection Act B.E. 2542’. This agreement is an attachment to the ‘Ministerial regulation on defining of permission procedures and conditions for collecting, procuring or gathering general domestic plant varieties, wild plant varieties for the purposes of variety development, education, experiment or research for commercial interest and a profit-sharing agreement B.E. 2553’.

Ibid., S.53.


Agreement on Trade-Related Aspects of Intellectual Property Rights, Annex 1C of the Marrakesh Agreement Establishing the World Trade Organization, art.27.3(b), online: WTO [www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm].


Robinson, Daniel. ‘Governance and Micropolitics of Traditional Knowledge, Biodiversity and Intellectual Property in Thailand,’ at p. 62, Table 5.

There was a clear division within the country between the multinational and bid national companies in the field of agriculture and the important body of NGOs, which swayed the public, concerning the ratification of the UPOV Convention.


The Assembly of the Poor is an NGO in Thailand which was established on International Human Rights Day in 1995. The AOP is a grassroots people’s movement consisting of the following social networks: rural poor, farmers, urban poor, workers, indigenous peoples and NGOs [http://blog.world-citizenship.org/wp-archive/427].


The Council of State also passed the Thai Traditional Medicines Act in the same period which further demonstrated the desire of the government to protect local culture and stop biopiracy.

See PVPA, S.44, which states that ‘The submission of the application and the consideration and approval thereof shall be in accordance with the rules and procedure prescribed in the Ministerial Regulation.’

In January 2010, there are still only 56 plant variety registrations, of which 18 are orchids.


As of January 2010.

The Ministerial Regulation on determining procedure and allocation rate of PVP fund to the local government organization, promulgated in the Royal Gazette of Thailand, No. 134, issue 39 Kor, 3 August 2007.

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