

Ten reasons not to join UPOV

Global Trade and Biodiversity in Conflict

Issue no. 2, May 1998

GAIA/GRAIN

The Union for the Protection of New Varieties of Plants (UPOV) unites 37 countries under a common regime to protect the interests of plant breeders. Although it was created in 1961, UPOV has never gained much of a following beyond industrialised countries. However, this is rapidly changing now.

The pressure to extend intellectual property rights (IPR) legislation to biodiversity in developing countries is gaining momentum by the day. In some countries this means being placed on the United States' Super 301 'Watch List' of free trade offenders. In other countries the heat comes from trade ministries responsible for implementing the agreements signed at the end of the General Agreement on Tariffs and Trade (GATT) Uruguay Round. Just about everywhere, developing countries are being told that patents and other forms of IPR are the key to attracting investment in biotechnology, which will uplift their economies and improve food security. These claims are utterly false. The only motivation behind the global IPR campaign is to increase profits for transnational corporations housed in the North.

Plant variety rights are one such form of IPR being aggressively imposed upon developing countries. Often touted as a 'soft' kind of patent regime, plant variety protection laws are just as threatening as industrial patents on biodiversity, and also represent an attack on the rights of farming and other communities at the local level.

The World Trade Organisation's (WTO) agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs) requires developing countries to provide either patent or *sui generis* (unique) protection for the ownership of plant varieties by the year 2000. Least developed countries must do the same by 2005. UPOV is currently selling itself as the ready-made solution for compliance with TRIPs. Even though the TRIPs agreement makes no mention of UPOV, UPOV wants every developing country to believe that joining its ranks is the simplest and most logical means to comply with the former trade regime.

Pressures on developing countries to join the UPOV Convention were doubled last month with the coming into force of the 1991 Act of the UPOV Convention. The 1991 Act provides very powerful monopoly rights to breeders and nothing in return to farmers. Countries wishing to join UPOV under the milder terms of its 1978 Convention have until April 1999 to do so. Governments might be tempted to join UPOV before that deadline, since it coincides neatly with their current obligation to implement TRIPs. However, 1999 is also the year in which the TRIPs *sui generis* option will be officially reviewed.

This briefing explores 'the dark side' of the UPOV system and the protection it offers to plant breeders, and has been written in the light of decades of international experience with these types of *sui generis* systems. It presents ten reasons why countries should resolutely avoid the UPOV trap and take the 1999 Review of the TRIPs Agreement as a legitimate opportunity to remove biodiversity from the grips of the WTO.

'IPRs appear to slow the free flow of germplasm exchange, slow the diffusion of new knowledge, upset the balance between basic and applied research, and erode scientific integrity'

Charles E Hess, University of California-Davis, 1993¹

1. Introduction

Developing countries are currently facing intense pressure to institute intellectual property rights (IPRs) for plant varieties. Despite the fact that the brief history of IPRs over plants and biological resources has undermined local biodiversity in the North and precipitated corporate monopolies over the food system, Southern countries are being forced to travel the same path. These pressures are centred now in the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement of the WTO. TRIPs obliges all member countries of the WTO to protect private rights to plant varieties by either patent or by an effective *sui generis* system².

Plant variety protection (PVP) is only one form of *sui generis* rights to plant varieties. It was designed in Europe in the late 1950s to give patent-like rights to plant breeders. Hess' remark, quoted above, results from years of experience with the consequences of exactly this type of PVP in the USA. Its very name is misleading: rather than protecting varieties, PVP actually protects the interests of large plant breeding and biotech companies.

PVP was a controversial issue well before the advent of commercial biotechnology, or, indeed, before industry's more recent push for full-scale patents on all life forms. In the 1970s, NGOs started alerting people to a double disaster. They warned that genetic erosion in agriculture was gaining tremendous ground, especially in the South's cradles of crop biodiversity, and that the world's seed supply was falling under the control of a few agrochemical corporations. The resultant genetic uniformity in agriculture is a disaster in itself. Monocultures are highly vulnerable to pests and disease, and thereby force farmers to use poisons to produce our food. Corporate domination of the world food economy is equally dangerous, as options for both producers and consumers become extremely narrow.

NGOs pinned part of the blame for this genetic and corporate erosion on plant variety legislation. Instead of being an incentive to put more diversity in the seed supply, such laws were encouraging agrochemical companies to claim ownership of the South's genetic resources and take control of public agricultural research systems simply to suit their market interests worldwide. PVP laws also encouraged an unprecedented spate of mergers and acquisition throughout the agro-industrial system in the 1970s and 1980s, leading to an ever-narrowing band of companies dominating the food chain. As Hess concludes, IPRs on plant genetic resources – be they patents or *sui generis* rights -- not only fail to serve public interests for research and innovation, but also erode scientific integrity.

Today, industry has the world outraged with its biopiracy. Farmers have been marching in the streets of Delhi to denounce a US patent on their basmati rice; developing countries are taking TNCs to court for theft of indigenous medicinal knowledge; Green Revolution scientists are up in arms about seeds they're responsible for keeping public being privatised by Australian companies. Meanwhile television viewers across the globe get their share of the unsettling reports. Corporate hunger for fully-fledged patents on all forms of life – from human genes to entire crop species – is now at the

centre of the world trading system. The WTO-TRIPs Agreement forces developing countries to adopt the same tools of intellectual property that have failed farmers and consumers in the North.

2. UPOV: Basic Principles of PVP

The Union for the Protection of New Varieties of Plants (UPOV, from its French derivation) is a multilateral agreement that has been adopted by countries offering common rules for the recognition and protection of the ownership of new varieties by plant breeders. Set up in 1961, UPOV went from six original European members to around 20 by the early 1990s. Today there are 37 members, including several Latin American newcomers. UPOV has a small secretariat inside the UN's World Intellectual Property Organisation in Geneva.

The original UPOV Convention has been subsequently revised in 1972, 1978 and 1991. All members today are either party to the 1978 or the 1991 Act, which only came into force last month. The 1978 Act will be closed to further accession in April 1999. After that point, any country wishing to join UPOV will have to adhere to the terms of the 1991 version.

UPOV Membership as of April 1998

1978 Act

ASIA: Japan

EUROPE: Austria, Czech Republic, Finland, Hungary, Norway, Poland, Portugal, Slovakia, Ukraine

LATIN AMERICA & CARIBBEAN: Argentina, Chile, Colombia, Ecuador, Mexico, Paraguay, Trinidad & Tobago

OCEANIA: Australia

1991 Act

AFRICA: South Africa

EUROPE: Belgium, Bulgaria, Denmark, France, Germany, Ireland, Italy, Netherlands, Russia, Spain, Sweden, Switzerland, United Kingdom

MIDDLE EAST: Israel

NORTH AMERICA: Canada, United States

OCEANIA: New Zealand

Have applied for membership in conformity with either 1978 or 1991 Act

AFRICA: Kenya, Morocco

ASIA: China

EUROPE: Belarus, Croatia, Moldova, European Union

LATIN AMERICA: Bolivia, Brazil, Nicaragua, Panama, Venezuela

Through the successive revisions of the UPOV Convention, the protection offered to plant breeders has become more and more similar to patent rights to plants. The 1991 revision was in fact meant to put the UPOV system on nearly equal footing as the patent system. Patents are exclusive monopoly rights over inventions that are new, industrially applicable, and non-obvious to experts in the relevant field of technology. By publicly disclosing and describing the invention, a patentee gets legal power to stop anyone from making, using or selling the invention. PVP rights are granted for varieties that are distinct, uniform and stable. Distinctness simply means that a variety of rice, for example, is different from any other variety. Uniformity means that all the plants in question should display the same characteristics. Stability means that the rice variety should display the same characteristics in each successive generation. In this way breeders become recognised as creators of plant varieties much like copyrights and patents honour authors and inventors. This is how they get exclusive and private ownership rights to biodiversity.

In practice, the right granted to a breeder under UPOV is powerful. The breeder gets full commercial control over the reproductive material of his or her variety. This means that farmers growing PVP varieties are prohibited from selling the seeds they harvest from the crop, and, increasingly in many UPOV member countries, from saving and exchanging seeds on a non-commercial basis. It also means that farmers pay royalties on every purchase of seeds. Furthermore, only licensed growers can multiply the variety for sale. Under the terms of the 1978 Act, UPOV makes two exceptions to the commercial monopoly. Farmers are allowed to save seed for their own use and breeders are allowed to freely use PVP varieties to develop newer ones. These exemptions are restricted in the 1991 Act.

The revision of the UPOV Convention in 1991 strengthened up the rights of the breeders dramatically. The reason for this is that companies engaged in genetic engineering are getting broad patent rights to genes and species. Patents are thus threatening the economic survival of conventional breeders who depend on PVP. If you have a patent on a gene, it is very easy to insert that gene into a plant variety and claim the 'new' variety as yours.

Controversial features of UPOV 91

Harvest belongs to the breeder: Countries party to the 1991 Act now extend the breeder's monopoly to the harvest of the farmer's crop. If the farmer sowed his or her field to a PVP variety without paying the royalty fee, the breeder can claim ownership of the output (e.g. wheat) and the products of the output (e.g. wheat flour). This means that breeders can directly control trade in processed foods, ornamentals and other high-value commodities.

Further breeding is restricted: Anyone using a PVP variety in creative research has to make major changes to the genotype or else the 'new' variety will not be considered 'new' -- it will be considered an 'essentially derived' variety, falling to the ownership of the first breeder. The idea, according to UPOV, is to discourage small changes in the variety's characteristic from being passed off as true innovation. In particular, conventional breeders want to avoid genetic

engineers taking PVP varieties, inserting one new gene inside them, and thereby gaining PVP on the 'new' plant variety.

Farmers cannot freely save seeds for their own use: The 1991 Convention does not protect the rights of farmers to freely use their harvest as further planting material. In practice, the right to reuse seed will be restricted to those countries which make special provision for it.

Varieties can be patented: Aside from PVP protection, varieties can also be patented now. Under previous versions of UPOV there was a specific ban on such 'double protection.' The specificity of PVP for plant varieties has thus been abandoned.

3. TRIPs: breathing new life into UPOV

Members of the World Trade Organisation (WTO), set up in 1994 at the close of the GATT negotiations, are obliged to privatise genetic resources and biodiversity through IPRs on plant varieties. Developing countries have until 2000 to pass laws in this direction whilst the least-developed countries have until 2005. Under the WTO-TRIPs, the South has to rapidly extend patent laws to plant varieties or enact some *sui generis* form of protection (Article 27.3b).

The whole idea of harmonising IPRs as part of the global trading system, and extending it to biodiversity, was resisted by the South for good reason. Plant varieties are the seeds that farmers sow; the backbone of food security; and the basis of millions of communities' livelihoods. Most food crops originate from the South, where farmers have been selecting, nurturing and conserving agricultural diversity for thousands of years. Their work has proved to be one of the single most important contributions to the planet's agrobiodiversity. The history of the plant varieties we grow and eat today, could be described as the longest running and most innovative human research project to date. This has been recognised by the legally-binding Convention on Biological Diversity (CBD), which has more members than the WTO. TRIPs blatantly contradicts the CBD's moves toward recognising the rights of farmers and local communities of the South, thereby undermining the objectives of the Convention⁴.

While TRIPs does not mention UPOV or PVP, many interpret the *sui generis* option to imply something like the UPOV system, since a few dozen countries already practice it. However, most experts agree that there is ample scope for countries to choose other systems to conform with TRIPs⁵. But the coming into force of UPOV's 1991 Act last month means that in one more year, the older version of 1978 will be replaced by the 1991 version. If forced to choose, most countries would prefer the 1978 system, because it is more lenient on farmers and breeders in terms of planting and research.

Countries are not forced to choose, and countries do not have to join UPOV or enact PVP in fear of WTO-sanctioned trade retaliation. But developing states are facing intense lobbying from vested corporate interests to make them think otherwise.

How TRIPs may be implemented is complicated further still by the fact that in 1999, its Article 27.3(b) calling for patents or *sui generis* rights on plant varieties is scheduled to be reviewed by the WTO member states. This could range from a polite intergovernmental discussion to a fundamental questioning of the WTO's newly acquired authority over biological resources, as opposed to other

agricultural, environmental, or even human rights agreements. Fundamental questioning is clearly needed, as shown by frequent reports in the press of people protesting about corporations in the North claiming ownership of the South's biodiversity. This is the future that TRIPs promises, and what UPOV facilitates.

No country has to join UPOV. From a sustainable agriculture perspective, there is every reason not to join UPOV and to avoid PVP altogether.

4. What's wrong with UPOV

Either joining UPOV or adopting a similar standard of *sui generis* protection to implement TRIPs is about as dangerous a thing any country committed to CBD or sustainable agriculture could contemplate. The reason for the very strong negative views people have about UPOV, and the reason why the Union has been so slow to attract membership since 1961, can be explained from the consequences experienced first-hand by the industrialised countries.

4.1 Its criteria lead to genetic erosion

The loss of genetic diversity in agriculture is destroying farmers' capacities to adapt production to new pressures, such as population growth and climate change. The causes of genetic erosion are numerous, but the most widespread one is the replacement of genetically-diverse traditional varieties by genetically uniform modern seeds⁶. The UPOV system encourages this process by providing powerful commercial breeders the right to IPR sanctioned monopolies. This right is only given if the variety is genetically uniform. UPOV, therefore, automatically limits who can operate on the seed market and it limits the kind of seeds that will be marketed.

The uniformity and stability requirements of PVP stimulate breeders to work only with 'elite' germplasm. This means they recycle familiar breeding materials and churn out variations on a theme. According to one of the biggest breeding industry associations, less than 7% of the germplasm used by professional breeders is 'exotic'. Two-thirds of it is tapped from genebanks, and one-third is collected directly from farmers' fields. American maize breeders use even less exotic material⁷. This shows that there is no pressure upon breeders to develop genetically broader varieties. The push is instead to focus on single genes making the difference between one variety and the other. This is very dangerous for farmers. Under the guise of different labels and names, they are being offered extremely similar seeds. Developing countries can least afford the kind of crop losses this eroding genetic base guarantees.

As one impact study in the United States put it, *'Despite the claim by the seed industry that research and development [R&D] investments has increased due to the PVP, the prima facie evidence suggests that the PVP has had a positive effect on private plant breeding R&D for a few specific crops,'* namely wheat and soybean⁸. There was no remarkable increase in research for other crops. There was also no net positive effect for the public sector, which has a broader agenda than industry's. In fact, the public sector has been pushed out of applied research toward a basic research agenda for the benefit of corporations.

Examples of the impact of PVP

With respect to 'free trade' and WTO:

1. PVP works as a non-tariff trade barrier⁹. In 1994, Argentina was denied rights by a US

breeder to export strawberry plants to Europe because they would compete with plants produced in Europe under the US license. PVP, like all intellectual monopolies, is a form of protectionism and hence a market distortion.

2. PVP is employed for anti-competitive practices¹⁰. Sugar cane breeders in Latin American protect their varieties in neighbouring countries to prevent their exploitation there, and thereby protect their own exports.

3. UPOV operates on a closed system of privileges within its membership which contravenes obligations to the WTO's operating principle of national treatment (TRIPs Art. 3) within a different set of countries¹¹.

With respect to biodiversity and CBD:

1. Genetic uniformity as a criterion for plant variety protection results in the deliberate loss of genetic diversity in agriculture¹². Yet agriculture is a major area of economic activity through which CBD's objective of 'sustainable use' is targeted to be achieved.

2. Private intellectual property rights on plant varieties will be enforced despite the principle of national sovereignty over biodiversity (CBD Art. 3) and the collective rights of local communities (CBD Art. 8j). Many countries are party to both TRIPs and CBD but some, such as China and the US, are only party to one, promising legal conflicts beyond the bounds of national control.

3. PVP, especially under the 1991 Act of UPOV, considers diversity only at the level of genes.

With respect to plant breeding

1. In the US, it was found that PVP caused a reduction in the flow of information and germplasm from private seed companies to public plant breeding institutions, while the flow from the public sector to the hands of private sector increased¹³.

2. Contrary to corporate propaganda, there is no positive correlation between the availability of IPR protection and the scope of research and development across countries. The Chinese have been the most advanced breeders in rice without PVP. In the US, only two crops were affected by PVP in terms of increased breeding programmes¹⁴.

3. UPOV contributes nothing to the conservation of plant genetic resources, which is necessary for plant breeding itself.

With respect to farmers' rights

1. UPOV only recognises the 'moral' and 'economic' rights of breeders¹⁵ when they produce varieties satisfying UPOV criteria through UPOV procedures. The moral and economic rights of farmers who provide the original breeding material to scientists is denied.

2. UPOV encourages the suppression of the farmers' age-old practice of saving seed from harvest for replanting.

3. UPOV eliminates choice in the seed market by encouraging breeding for one kind of agriculture – that which caters to international commodity markets, thereby taking food away

from the local markets which feed people.

4.2 Farmers lose their rights and their control of production systems

The type of legal protection enshrined in UPOV only provides rights to a handful of formally trained plant breeders. The UPOV system is based on an excessively narrow view of agricultural research. Formal breeders are entirely aware that farmers generate diversity through the crossing and selection of plants. After all, this is how agriculture has evolved and adapted over centuries. It is also the basis on which the breeding industry has built its billion dollar economic empire -- by riding on the back of farmer-led innovation. Yet when it comes to the 'legal, moral and economic' recognition of the contribution of breeders¹⁶, UPOV only admits those breeders who produce varieties meeting UPOV standards and paying high administrative fees! ¹⁷

UPOV officials always declare that farmers are welcome to submit applications for protection, but in most developing countries farmers do not have the means nor does their innovation fall within the value system embedded in PVP.

The very sense of farmers' rights is negated by UPOV. In the words of the Union's Vice Secretary-General Barry Greengrass,

*The subject of farmers' rights is mainly the business of the FAO and its Undertaking on Plant Genetic Resources. The expression 'farmers' rights' appears also in Agenda 21, but not in the Convention on Biological Diversity. It is up to the institutions that are concerned with farmers' rights to explain what farmers' rights mean and what rights should be given to what farmers. It is not UPOV's business.*¹⁸

Indeed, even if farmers' rights were reduced to the narrow sense of the right to regenerate seed from plants (what UPOV calls the farmers' privilege) or the right to compensation for contributing the building blocks of the breeding industry (how the UN Food and Agriculture Organisation initially framed it), PVP schemes would severely limit the first and completely ignore the second.

4.3 Restrictions on plant breeding limit diversity

PVP proponents repeatedly claim that their system encourages innovation. However, their definition of innovation is perverse as it relies on an industrial perspective of only professionals innovating for market advantages.

On this basis, innovation ends up being defined along purely legal criteria. There is no appreciation of what is a useful plant variety from the farmer's perspective or its value for sustainability. That is how we get to distorted views of genetic variation as hinging on a few genes when a plant has over ten thousand of them! Most farmers in the South work with complexity on the farm; they cannot rely on single genes. At its very core, the PVP system discriminates and works against the entire context of traditional and local innovation and breeding.

History shows how quickly these traditional systems are being appropriated. It is now enough to claim property rights on the seed; they want it to be extended to all future generation. Under the UPOV approach, a farmer who buys an exclusive variety, grows the plants and saves seed from those plants for further sowing would be breaking the law. However, the 1978 Act defined the scope

of the breeder's right in such a way that the farmer could resow the seed but could not sell it. Under the 1991 Act, the breeder's right extends to all uses of the seed. Under the 1978 system there exists a 'farmer's privilege' but under the 1991 system the enactment of such a privilege is curtailed and left to the discretion of the member country¹⁹. Any further use of the variety by the farmer requires special permission, otherwise breeding, selecting and conserving seed on the farm is illegal. Yet these activities are fundamental to innovation and evolution. Sustainable agriculture, which hinges on a broad and free use of diversity in sophisticated farming systems, is impossible without this liberty.

4.4 Dependency is a disincentive

For professional breeders, UPOV is falling victim to its own trap. The 1991 Convention has established a new principle of 'essential derivation'²⁰. This means that if a new plant variety differs from an older one by very minor characteristic – just one minor gene, for example -- the new variety will be considered 'essentially derived' from the older one.

It might seem that this will encourage wider breeding efforts, to avoid the stigma of plagiarism, but that is not at all certain. For one, the system is deceptive. If you are a breeder and you make a slight change on a PVP variety, your 'new' variety can very well pass as distinct, uniform and stable. You will therefore be granted your own title of PVP for meeting the criteria. After that, the owner of the original variety might judge on his own terms that your variety is essentially derived from his, and they will stop you from enjoying your title without their permission.

It is unlikely that national authorities will play a role here. They expect the corporations to judge themselves whether varieties are essentially derived or not, and this means they will do so behind closed doors. So, through formal procedures you may get a title, but behind closed doors it can be taken away from you. This system is also deceptive because one UPOV regime (1991) is replacing another (1978), and the varieties protected under the old regime will also fall under the new regime. It is possible that a variety that stood its own ground under UPOV 1978 will suddenly be shelved as 'essentially derived' under the 1991 regime.

Second, the industry doesn't even know how the 'essential derivation' system is going to work. The system was designed so that corporations can fight it out among themselves. So far, the points of consensus are that there will be different measures of essential derivation for different species and that molecular markers will be used to judge distances. This set-up is inherently biased against the technological capacities and negotiating space of farmers and breeders in the South.

Third, we can expect breeders to get discouraged and drop out. In that way, UPOV undoes its promise of encouraging research and development -- by actually providing disincentives.

4.5 The South gets unsustainable development

UPOV is a 'one way street' for world agriculture: leading towards corporate control and the genetic uniformity that corporations need for global marketing operations. It was set up by the North and remains controlled by the North. Its membership is still 85% industrialised countries who control the world's commercial seed sector. The presence and weight of corporate associations like ASSINSEL in the development of legal monopolies through UPOV is evident.

World's top 10 seed companies control 40% of the market

Company	1996	seed	sales
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	(estimated in US millions)
1. Pioneer Hi-Bred International (U.S.)	\$1,721
2. Novartis (Switzerland)	\$991
3. Limagrain (France)	\$552
4. Advanta (Netherlands)	\$493
5. Grupo Pulsar (Mexico)	\$400
6. Sakata (Japan)	\$403
7. Takii (Japan)	\$396
8. Dekalb Plant Genetics (U.S.)	\$388
9. KWS (Germany)	\$377
10. Cargill (U.S.)	+\$300

Source: Rural Advancement Foundation International, *RAFI Communiqué*, November/December 1997. As of early 1998, Monsanto is reportedly planning to buy Dekalb for US\$1 billion.

As a club dominated by industrialised countries, it is no surprise that each revision of the UPOV Convention has systematically strengthened the rights of formal breeders and reduced the manoeuvring space for farmers and informal breeders. Even if more developing countries enter UPOV, that is not likely to change – as intergovernmental power politics sharply attest. In fact, UPOV might increasingly follow the path of its headquarters host, WIPO. More and more, intellectual property organisations are becoming administrative arms of the WTO.

Since the WTO is where trade rules are set up, and IPRs are fast becoming a guiding principle in trade agreements, institutions like WIPO and UPOV may readily turn into handmaidens of WTO. Their role in the world is increasingly shifted from shaping policy to ensuring their members implement WTO policy. This scenario may particularly apply if countries interpret the TRIPs clause on *sui generis* rights as requiring UPOV-like rights. UPOV probably wants this to occur, so that the Union broadens its membership. This implies that the UPOV system could increasingly be controlled by WTO and not by its membership, and in turn serve to control developing countries. The South is far better off staying outside of this spiral towards stronger rights for breeders in the North (mostly TNCs) and subservience to WTO's agenda.

Several Latin American nations have been successfully lobbied to join the Union, although Brazil is thinking twice before it crosses the threshold. As the Workers Party has pointed out, if Brazil joins UPOV, 'We should not be surprised if in a near future our small farmers end up in jail for using protected rice varieties²¹.' It is clear that Brazil's opposition party's analysis of UPOV sees the Convention as heralding a transfer of power from farmers and states to corporations.

Loss of sovereignty is a major concern. In Africa, a few countries like Zimbabwe and Kenya have years of experience with PVP which is set up to suit off-season breeding operations by American

companies like Pioneer and Cargill. As one Kenyan legal expert put it, *'The principles and standards sanctioned by the UPOV Convention and the TRIPs Agreement not only grant preferential patent protection to enterprises of developed countries in Kenya, but also condone the uncompensated extraction of plant genetic resources from Kenya to developed countries.'* [22](#)

In the Philippines, the preoccupations are the same. Dr Randy Hautea, until recently Director of the Institute of Plant Breeding, has studied the options and concluded that while the Philippines certainly has to comply with its obligations under TRIPs, it should do so 'without actually joining UPOV' as this would 'sacrifice the national interest'[23](#).' One major issue in the Philippine deliberations has been how to protect indigenous and community rights against the demands of plant breeders, especially against foreign companies who want to appropriate the country's rich biodiversity. UPOV is one of the primary forces undermining community rights and biodiversity.

In Thailand the debate has been fiercer over the past two years, and peasant movements, supported by NGOs and the academe, have taken the government to task in drafting farmers' rights into a plant variety protection bill[24](#). If Thailand followed the logic of UPOV, *'Many transnational companies will be able to claim for their own the plant varieties which we have developed. They can use a lot of money and sophisticated technology, tamper with genes and appropriate the life form. It becomes theirs by law!'* [25](#)

In other words, and contrary to UPOV propaganda, the problem is the other way around. Farming and indigenous communities in the South are the ones who need protection from biopiracy. The problem does not get solved by the South setting up the same laws as the ones in the home countries of the biopirates.

No one is accusing Pakistan, Colombia or Madagascar of conducting biopiracy themselves! In the words of Gul Hossain from the Bangladesh Agricultural Research Council, at a meeting sponsored by UPOV itself, *'The North owes first to the South, and for that matter UPOV owes to the South too.'*[26](#)

Ten reasons why countries should say NO to UPOV

Countries are under strong political pressure to join UPOV because of the TRIPs requirement. However, the baseline facts still remain:

- Countries do not have to join UPOV to implement a *sui generis* system as compliance with TRIPs.
- Art. 27.3(b) of TRIPs is up for review in 1999 and can be amended to remove the obligation to protect plant varieties by IPR.

Developing countries can defend their sovereignty and biodiversity. Ten reasons for not joining UPOV are:

1. UPOV denies farmers' rights both in the narrow and the wide sense. In the narrow sense, the right to freely save seed from the harvest is curtailed. In the wide sense, UPOV does not recognise or support communities' inherent rights to biodiversity and their space to innovate.

2. Northern companies will take over national breeding systems in the South. There is no code of technology transfer implicit in the UPOV regime, other than the net effect that TNCs will be able to market varieties in the South under legal conditions adjusted to their global ambitions. National breeders and local seed companies will be bought out by the foreign companies.

3. Northern companies will get ownership of the South's biodiversity with no obligation to share the benefits. Contrary to the CBD, UPOV does not provide for any sharing of benefits from the North's exploitation of the South's biodiversity. Farmers of the South end up paying royalties for their own germplasm which has been tampered with and repackaged in the North. In this manner, the North gets full commercial control over the germplasm and the communities' knowledge and efforts which contributed to it.

4. UPOV criteria for protection will exacerbate erosion of biodiversity. This is extremely dangerous, especially in poor countries. Chemicals or genetic engineering will be needed to compensate for crop vulnerability, which farmers cannot afford. Uniformity leads to harvest loss and further food insecurity.

5. Privatisation of genetic resources affects research negatively. Impact studies in the United States and elsewhere show a clear correlation between PVP and reduced information and germplasm flows. Also, UPOV rules on 'essential derivation' will act as a disincentive to researchers since TNCs can bully researchers to submit to accusations of plagiarism.

6. Moves to keep biodiversity under negotiated access systems – for example at CBD and FAO – will be undermined. PVP laws give private ownership over resources that fall under national sovereignty and, more truthfully, community sovereignty.

7. Joining UPOV means becoming party to a system that increasingly supports the rights of industrial breeders over those of farmers and communities. Every revision of UPOV broadens the rights of breeders and weakens the rights of farmers and the public interest. Developing countries will be obliged to endorse this trend.

8. UPOV is not in harmony with TRIPs, and conflicts with the CBD. UPOV extends mutual privileges within a membership of 37 countries. TRIPs requires the similar privileges to be mutually shared among nearly 150 countries. Someone has to revise their rules. Further CBD, with a full 170 member states, requires benefit-sharing that UPOV does not provide for. The CBD is currently assessing whether IPR systems like PVP run counter to its objectives.

9. The TRIPs Agreement will be reviewed in 1999. This means that the obligation to provide patent or *sui generis* rights on plant varieties can be removed before developing countries are obliged to implement it. The opportunity to remove this obligation is legitimately on the table.

10. The lion's share of the benefits will flow to the North. UPOV is designed to facilitate monopolies in corporate plant breeding. Most of the breeding is for international markets. Despite 35 years of Green Revolution and UPOV, the South is still food insecure. Joining a biased system like UPOV will ensure that the South's integration into Northern-controlled markets increases, but not for the benefit of those who are hungry today.

Footnotes:

1. Quoted in L.J. (Bees) Butler, 'Plant breeders' rights in the US: Update of a 1983 study' in Joeroen van Wijk and Walter Jaffé (eds), *Intellectual property rights and agriculture in developing countries*, University of Amsterdam, 1996, p. 30. Hess is an honoured American agronomist and currently sits on the Board of ISNAR (International Service for National Agricultural Research), an agency which advises developing countries on administration of agricultural research systems.

2. 'Sui generis' means unique, or of its own kind, in Latin. Sui generis rights are legal rights tailored for things that, because of their nature, don't fit into classic intellectual property rights schemes. Examples of these are integrated computer circuits, electronic data bases, folklore or plant varieties. In that sense, *sui generis* rights are simply deviations from conventional intellectual property rights. The agreement of the WTO on intellectual property (TRIPs) obliges countries to establish monopoly rights on plant varieties, either by patent or some '*sui generis*' system.
3. Barry Greengrass, UPOV Vice Secretary General, personal communication , 16 April 1998.
4. see '[TRIPs versus the CBD](#)', [Global Trade and Biodiversity in Conflict](#), Gaia Foundation/Grain Briefings, Number 1: April 1988.
5. See Dan Leskien and Michael Flitner (1997), 'Intellectual Property Rights and Plant Genetic Resources: Options for a Sui Generis System', *Issues in Genetic Resources* #6, IPGRI, Rome. GATT-WTO officials have reaffirmed publicly that the lack of reference to UPOV in the TRIPs Agreement gives countries maneuvering space to set up alternative *sui generis* systems.
6. UN Food and Agriculture Organisation (1996), *The State of the World's Plant Genetic Resources for Food and Agriculture*, p. 21.
7. See ASSINSEL *Position on Maintenance of and Access to Plant Genetic Resources for Food and Agriculture*, updated 23 April 1997, at <http://www.worldseed.org>.
8. Butler, *op cit.*, p. 28.
9. See van Wijk and Jaffé, *op cit.*, p.14
10. Idem
11. See Leskien and Flitner, *op cit.*, p. 31.
12. Crucible group, 'People Plants and Patents' IDRC, Ottawa, 1994, pp 24-25
13. See van Wijk and Jaffé, *op cit.*, p. 25.
14. Idem
15. UPOV, 'About UPOV: The Need for Legal Protection for New Plant Varieties', at <http://www.upov.org>
16. 'Moral' and 'economic' rights of breeders are stressed in UPOV literature.
17. In developed countries where the system is in place, the cost of registering and maintaining a PVP certificate of protection figures in the tens of thousands of dollars. In the United States specifically, the same costs for a plant patent rise to a quarter of a million dollars.
18. UPOV (1995), *UPOV National Seminar on the Nature and Rationale for the Protection of New Varieties of Plants under the UPOV Convention (Manila, December 1994)*, UPOV, Geneva, p. 27. We have transposed the verbs from the past tense to the present tense for easier comprehension; the message is the same.
19. UPOV National Seminar on the Nature and Rationale for the Protection of Plant Varieties under the UPOV Convention, Manila, 8 December 1994 - UPOV - Geneva.
20. All countries who recently joined UPOV on the terms of the 1978 Act were coaxed to add on the new principle of essential derivation as well. In other words, their laws are '78-plus'.

21. A Lei de Proteção de Cultivares, em vigor desde 28 de abril deste ano, é analisada pela Assessoria Técnica da Liderança do PT na Câmara dos Deputados. Responsáveis: Gerson Teixeira, Rolf Rackbart. Partido dos Trabalhadores, Brasília, 16 de maio de 1997.
22. James Otieno Odek (1995), *The Relevance of International Patenting and Plant Breeders' Protection Systems to Kenya as a Developing Country: Myth or Reality?*, SJD Thesis, Faculty of Law, University of Toronto.
23. See 'Plant variety protection: what are our options?', *Policy Update*, Vol. 4 No. 3, University of the Philippines Los Baños, March 1996.
24. Plant Varieties Protection Act, B.E. 254, final draft, Bangkok, 1997. See BIOTHAI/GRAIN (eds, 1998), *Signposts to sui generis rights*, available from GRAIN, for a review of legislation in developing countries.
25. See 'Patenting Mother Nature Provokes Outrage' in *The Bangkok Post*, 4 January 1998.
26. M. Gul Hossain, *Towards developing a plant variety protection system in Bangladesh*, Seminar on PVP under the UPOV Convention, organised by Ministry of Agriculture and UPOV, Dhaka, 16 September 1996.