Agrobiodiversity and Intellectual Property Rights: Selected Issues under the FAO International Treaty on Plant Genetic Resources for Food and Agriculture

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1. Introduction

The fundamental role that agriculture continues to play in the economies of developing countries and the livelihoods of the majority of their citizens means that the relationship between intellectual property rights and the sector is one of the most complex and intensely debated aspects of the international intellectual property rights framework. Perceptions of an increasing privatisation and monopolisation of the basic building blocks of crop-based agriculture, plant genetic resources for food and agriculture, through intellectual, and other property, rights have sharpened concerns about asymmetries between commercial and smallholder farmers and threats to public sector agricultural research. The FAO International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR or Treaty) was developed as a response to these concerns and is intended to ensure facilitated access to a selected list of plant genetic resources for food and agriculture on a basis of mutuality and reciprocity.

However, the future interaction of the ITPGR with the established proprietary frameworks, particularly those of plant variety protection and patents, raises a number of questions relating to the effective implementation of the Treaty. This paper considers three of these questions: the ongoing debate regarding concepts of invention versus discovery in intellectual property rights; the nature, and options for the implementation, of Farmers' Rights; and, potential problems with the use of material transfer agreements under the ITPGR.

2. Definitions and scope

- Definitions and scope are complex concepts but often overlooked
- Discovery versus Invention – to what extent are "parts and components" integral to a resource versus independent inventions?
- When is a genetic resource a genetic resource?

Definitions and scope of application have been complex concepts during the development of the ITPGR and in the negotiation and implementation of intellectual property rights regimes. In the context of the ITPGR two particular issues have achieved some prominence. The first relates directly to the question of the claiming of intellectual property rights and is the issue of the proximity of a genetic resource to its "genetic parts or components, in the form received", as referred to in Article 12.3(d) of the Treaty. The direct relationship with IPRs lies in the fact that the controversy over this language is essentially a reflection of the wider debate over invention versus discovery. The second issue is less directly related to intellectual property rights but has the potential to have significant impacts in that field and is the question of what exactly is a genetic resource or, as will be seen, more accurately, *when* is a genetic resource a genetic resource?

2.1 Discovery versus Invention

- Article 12.3(d): *Recipients shall not claim any intellectual property or other rights that limit the facilitated access to the plant genetic resources for food and agriculture, or their genetic parts or components, in the form received from the Multilateral System;*
- "parts and components" – primarily developing country and seen as supporting prohibition of patents on life forms
- "in the form received" – primarily developed country and seen as allowing for intellectual property on derivatives

Article 12.3(d) is one of the most controversial provisions of the ITPGR and, as such, was one of the last to be agreed upon prior to the adoption of the Treaty text. The central point of controversy is one that links concepts of definitions and scope in that it revolves around the question of to what degree does a "genetic resource" include derivatives of that resource? The fact that this question is raised in the context of a prohibition on the claiming of intellectual property rights directly links it to the broader debate on the patenting of life forms and invention versus discovery that has been so heated in forums such as the Council for TRIPs, WIPO and the CBD.

The text of Article 12.3(d) is a compromise or, more accurately, a deliberate ambiguity. The majority of developing countries sought the inclusion of the qualification of "or their genetic parts and components" while a core group of developed countries insisted on the reference to "in the form received",[2] with each group seeing their proposal as an exclusive option. The compromise was to include both, which was essentially an agreement to disagree rather than a genuine compromise. As a consequence, it is not really clear what Article 12.3(d) means and thus whether things such as isolated and purified compounds or gene sequences are patentable or not.

A commonly held view of where the compromise over Article 12.3(d) leaves the situation consists of two parts. First, the debate is not over and will continue in all of the forums where it has been so prominent to date and the ITPGR will probably provide another battleground. Second, Parties to the ITPGR are, for the time being, relatively free to interpret 12.3(d) into their intellectual property laws as they deem fit. As is often the case, much may hinge on implementation at the national level. The more that countries seek to enact intellectual property rights legislation, or regulatory interpretations, clearly iterating their understanding of Article 12.3(d), the stronger their positions in the international debate are likely to be.

[2] The developed country position, and to a large degree the debate, is clearly iterated in the declarations made by the European Community and its member states upon ratification of the Treaty, which all follow roughly the same language: "The European Community and its Member States interpret Article 12.3 d of the International Treaty on Plant Genetic Resources as recognising that plant genetic resources for food and agriculture or their genetic parts or components which have undergone innovation may be the subject of intellectual property rights provided that the criteria relating to such rights are met." See <http://www.fao.org/Legal/TREATIES/033s-e.htm>, website last visited 23/06/04.

2.2 When is a genetic resource a genetic resource: Bolivian potatoes?

- Article 2: *"Plant genetic resources for food and agriculture" means any genetic material of plant origin of actual or potential value for food and agriculture.*
- Utilitarian not physical definition
- Rarely, if ever, clarified and excessively broad if not
- Articles 2 and 12.3(a) do provide some clarity in the case of the ITPGR but may become controversial
- Most other agreements and many national laws do not provide clarity

While the status of derivatives of genetic resources is a major point of ambiguity in the ITPGR, the actual meaning of "plant genetic resources for food and agriculture" is itself ambiguous. The origin of this ambiguity is the ITPGR's use of the CBD definition of "genetic resources" as its model. The CBD definition is utilitarian, in that it depends on the uses of a genetic resource to define the term, rather than physical, i.e. focusing on the natural characteristics of a resource, in nature. Genetic material, or plant genetic material in the case of the ITPGR, becomes a genetic resource on the basis of the application of that material to some purpose and not on the basis of any intrinsic characteristic of the material. Therefore, the definition needs to be supplemented by provisions regarding the types of use of genetic material that will be considered as making that material a genetic resource. In the absence of such supplementary provisions, the default position is that all forms of biological material are genetic resources. Given the almost universal intention of countries to exclude products such as agricultural commodities from any understanding of genetic resources, this is clearly not the intention. However, the CBD definition merely establishes the utilitarian approach and does not provide its details, thus leaving considerable room for interpretation at the national level.

The ITPGR is almost unique in that it does provide some detail, and thereby narrows the scope of application of the definition, through the provisions of articles 2 and 12.3(a). The relevant text in Article 2 is the closing line of the chapeau: [t]*hese definitions are not intended to cover trade in commodities*. This text clearly demonstrates that the definitions provided are not self-sufficient, as the exclusion of commodities had to be added, and equally clearly places the emphasis on the uses, rather than the intrinsic nature, of material. This pattern is expended upon in Article 12.3(a):

12.3 Such access shall be provided in accordance with the conditions below:

(a) Access shall be provided solely for the purpose of utilization and conservation for research, breeding and training for food and agriculture, provided that such purpose does not include chemical, pharmaceutical and/or other non-food/feed industrial uses. In the case of multiple-use crops (food and non-food), their importance for food security should be the determinant for their inclusion in the Multilateral System and availability for facilitated access.

This paragraph provides relatively clear lines for the types of uses that do, and do not, bring a particular use of plant genetic resources within the scope of the ITPGR. Whether this language is considered to impact the definition or the scope of application is largely a question of semantics, the fact that it considerably narrows the uses of plant genetic material that fall within the ambit of the ITPGR remains in either case.

A recent example of why these issues of definitions and scope matter can be found in the case of a deal between Bolivia and a Swiss company regarding several traditional potato varieties.[3] The potato varieties are being provided by Bolivia and they will be multiplied in Switzerland for sale as gourmet varieties in supermarkets in return for the payment of a royalty on sales to Bolivia. Given that potato is one of the key crops covered by the ITPGR, the question was whether the Bolivian-Swiss deal would be covered by the Treaty? If it was, Bolivia would be required[4] to provide facilitated access to potato varieties subject to state ownership and control and, thereby, would forego any right to require the direct payment of royalties. The Swiss did not intend to undertake any breeding, or other form of research or improvement, involving the potato varieties and thus the deal does not appear to fall within the "utilization and conservation for research, breeding and training" scope provided for in Article 12.3(a). Thus the Bolivian-Swiss deal would appear to have been acceptable even had the Treaty been applicable to the countries at the time.

While the Bolivian-Swiss situation is relatively easily resolved it highlights the fact that a variety of uses of crops covered by the ITPGR do not fall within the scope of the Treaty. Future examples may not prove to be as simple and could become controversial if individuals and countries begin to avoid the intellectual property rights and benefit sharing requirements of the ITPGR on the basis of its relatively narrow scope.

3. Farmers' Rights: positive and negative rights

- Farmers' Rights are inextricably linked to intellectual property rights
- Some aspects of Farmers' Rights, "positive rights", are effectively a form of intellectual property rights
- Other aspects, "negative rights", are limitations on intellectual property rights
- Farmers' Rights go considerably beyond their relationship with intellectual property rights
- The future of Farmers' Rights depends very much upon national interpretation and implementation

3.1 The nature of positive and negative rights

From its initial formal iteration, the concept of Farmers' Rights has been the subject of a variety of interpretations depending upon the particular perspectives or interests of the actors involved. An exhaustive analysis of these interpretations is not within the scope of this paper. However, in general terms, these interpretations can be broadly divided into two discrete, but related, groups: positive and negative rights.[5] In simple terms, positive rights are those that allow for the assertion

[3] Information regarding this deal and the surrounding questions was provided in the context of a workshop on access to genetic resources hosted by IPGRI and InBio in San Jose, Costa Rica, in January 2004.
[4] At the time of the deal the ITPGR had not entered into force and Bolivia had not ratified it meaning that the question was in the context of whether it was in Bolivia's interests to accede to the Treaty rather than in that of the Treaty's immediate application.
[5] The nature of, and basis of division between, positive and negative rights is derived from the legal and political theories of imperfect and perfect rights and positive and negative community developed by Grotius and Puffendorf in the Seventeenth Century. See Tuck, R., *The Rights of War and Peace: Political Thought and the International Order from Grotius to Kant* at 152 – 158 (Oxford University Press, 1999).

of rights that affect, or impose on, others. Negative rights are those that allow for freedom of action, or a right not to be interfered with, on the part of those asserting the right.

The most significant international iteration of Farmers' Rights to date is that contained in Article 9 of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR). Article 9 contains concepts that reflect aspects of both positive and negative rights. The following discussion considers each of these in turn in an effort to highlight the fact that Farmers' Rights is not a single, unified, concept but, rather, consists of at least two distinct sets of rights that may be recognized or supported as individual states deem fit. This point is particularly important when one considers that the chapeau to paragraph 9.2 provides that states should implement Farmers' Rights "as appropriate, and subject to…national legislation". As much as states may choose how they implement Farmers Rights',[6] they may also, presumably, choose from among the various elements provided for.

The discussion concludes by examining the assertion that basic elements of the concept of Farmers' Rights are more broadly embedded in the ITPGR than the text of Article 9 suggests. In particular, Article 6 of the Treaty, providing for the "Sustainable Use of Plant Genetic Resources" has considerable potential relevance to Farmers' Rights.

3.2 Farmers' Rights as positive rights

Positive Farmers' Rights are somewhat akin to orthodox intellectual property rights and primarily consist of the right to share in any benefits that might be derived from the use of farmers' varieties and the right to control or influence such use. The basic operative principle is one of equity, where one has a right to benefit from the fruit of one's creativity. To the extent that positive Farmers' Rights are considered at the international level, they are primarily debated in established intellectual property rights forums such as the World Intellectual Property Organization (WIPO) and the World Trade Organization's (WTO) Council for TRIPs, in the latter case primarily within the context of *sui generis* regimes developed pursuant to TRIPs Article 27.3(b).

Article 9 of the ITPGR primarily provides for positive Farmers' Rights in paragraphs 9.1 and 9.2. Paragraph 9.1 is the iteration of the underlying principle of equity, recognizing that Farmers' Rights are based on the historical and ongoing contributions of farmers to global agriculture. Paragraph 9.2 contains the operative elements of positive Farmers' Rights, in particular in sub-paragraphs (a) and (b):

> (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
> (b) the right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture; and

There are several ways in which the division between subparagraphs (a) and (b) may be interpreted. However, given that the two paragraphs are likely to be viewed as a holistic whole,[7] these divisions are not particularly significant. The main points to be noted are that knowledge

[6] The controversial question is whether they are required to implement anything or not. The language of the chapeau suggests that there is no mandatory requirement but it could be interpreted as requiring at least token measures.

[7] The purpose of the division between 9.2(a) and 9.2(b) is more to do with emphasising benefit sharing rather than creating any genuine divisions between the subject matter of the two sub-paragraphs.

and resources[8] are given equal weight and that the right to benefit is accompanied by the right to control or influence use.

The interactions between positive Farmers' Rights and orthodox intellectual property rights revolve around a range of relatively well established, and often intensely debated, points. These can roughly be grouped into substantive and procedural issues. On the substantive side, the primary question is formal legal recognition allowing farmers to claim and enforce their rights. This question is not dissimilar from those relating to other aspects of traditional knowledge. One distinction might be that recognition at the national level is perhaps at least important as recognition at the international level given that landraces are often sourced, at least initially, for national purposes. The more challenging questions are those on the procedural side and include, *inter alia*: requirements for declarations of any use of landraces; mechanisms for benefit sharing that adequately balance the interests of individuals, communities and other groups; and, the transaction costs[9] of implementing positive rights as balanced against the economics of plant breeding. This latter point of transaction costs is particularly important when one considers that the most widespread use of landraces is in the development of new varieties for use by smallholder farmers and, thus, any increase in costs may prejudice the situation of those who are already the most vulnerable.

3.3 Farmers' Rights as negative rights

Negative Farmers' Rights have less in common with orthodox intellectual property rights than their positive cousins but still interact with them, in particular with plant breeders' rights and the Convention for the Protection of New Varieties of Plants (UPOV Convention). They focus on freedom of action, rather than the assertion of rights to impose on others witnessed in the case of positive Farmers' Rights. Forums such as the CBD and WIPO have occasionally considered negative Farmers' Rights in the context of their broader mandates, but the only forums to consider them explicitly are UPOV and FAO. UPOV has not considered Farmers' Rights, whether positive or negative, in their own right but has considered them in the context of the evolving nature of plant breeders' rights. In particular, UPOV has traditionally considered some level of need for limitations to, or exclusions from, plant breeders' rights to allow for the essential activities of smallholder farmers. However, as is the case with positive Farmers' Rights, the clearest iteration of negative Farmers' Rights can be found in Article 9 of FAO's ITPGR:

> 9.2…
> (a) protection of traditional knowledge relevant to plant genetic resources for food and agriculture;
> (c) the right to participate in making decisions, at the national level, on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.
>
> 9.3 Nothing in this Article shall be interpreted to limit any rights that farmers have to save, use, exchange and sell farm-saved seed/propagating material, subject to national law and as appropriate.

[8] Which in turn, probably can be taken to imply that no distinction should be made between the use of resources alone and the use of resources in combination with associated knowledge. However, it should be noted that this interpretation is somewhat at odds with the basic intellectual property rights concepts underlying positive Farmers' Rights, where human ingenuity and creativity "adds value" to a resource.
[9] This includes a range of possible costs including tracking, traditional enforcement, assessment of relative contributions of landraces etc.

Just as subparagraph 9.2(a)'s use of the term 'protection' can be interpreted as incorporating various concepts of positive rights, such as rights to control or influence in decision-making, the same term can be interpreted as also incorporating concepts of negative rights, such as the conservation and promotion of knowledge or resources. Subparagraph 9.2(c) reinforces this interpretation of 'protection' by providing that farmers should be included in national level decision-making that may directly affect their resources and practices. While the exact requirements of this subparagraph are, probably intentionally, unclear it could be said that other articles of the Treaty provide, at a minimum, guidelines to this effect, as discussed in 3.4 below.

Subparagraph 9.3 is the most clearly iterated, and widely accepted, element of negative Farmers' Rights. These basic rights to save, use, exchange and sell seed and propagating material reflect the traditional practices of smallholder farmers throughout the world. For many years these rights were taken for granted, but, efforts to curtail or otherwise limit them in regard to commercially developed varieties, and recently essential derivations of such varieties, have significantly increased in the last twenty years with the emergence and spread of UPOV and subsequent expansions of the implementation of patent rights.

It has been increasingly recognized that negative Farmers' Rights require some form of explicit iteration or formal recognition to limit or prevent this erosion. Examples of the explicit implementation of negative Farmers' Rights are almost as rare as examples of the implementation of positive rights. The most notable exception to this trend is Brazil which, while not mentioning the term Farmers' Rights, has constructed its plant variety protection legislation in such a manner so as to exclude smallholder farmers from the ambit of plant breeders' rights. Despite its vocal support for Farmers' Rights during the negotiations for the ITPGR, examples of the implementation of negative Farmers' Rights are few and far between in Africa, with most of the attention having gone to positive rights. However, it should be noted that the formal recognition of negative Farmers' Rights is likely to be a more immediately, if not permanently, profitable undertaking for developing countries than the recognition of positive Farmers' Rights. Implementation costs virtually nothing, as recognition is more recognition of traditional practice than the recognition of new rights. In addition, formal recognition provides more scope for the active promotion and further development of useful traditional practices than is currently the case under legal regimes dominated by the commercial plant variety development paradigm.

3.4 Additional aspects of Farmers' Rights

Despite the explicit relevance of Article 9 of the ITPGR to Farmers' Rights, the provisions of Article 6 should not be underestimated in their potential to impact upon the issue. Article 6 was generally accepted as a non-controversial technical issue during the negotiation of the ITPGR. This is largely the case and it should also be borne in mind that the entire text of the Article is one that provides guidelines or a suggested framework rather than any mandatory measures. However, the interaction of the provisions of Article 6 with those of Article 9 contributes to the establishment of a pattern whereby the ITPGR requires, or at the very least recommends, a thorough consideration of national law and policy in the context of Farmers' Rights. Virtually the entire text of Article 6, and in particular 6.2, is of potential relevance to Farmers' Rights and three provisions are selected here as illustrations.

> Article 6, Sustainable Use of Plant Genetic Resources
> 6.2 The sustainable use of plant genetic resources for food and agriculture may include such measures as:
> (a) pursuing fair agricultural policies that promote, as appropriate, the development and maintenance of diverse farming systems that enhance the sustainable use of agricultural biological diversity and other natural resources;

As with Article 9.2(a), discussed above, Article 6.2(a) is potentially applicable to both positive and negative aspects of Farmers' Rights. The subparagraph is potentially subject to a broad range of interpretations relating to agricultural research, development and trade but, in the context of intellectual property rights, the most important of these is probably the proposal that policies should promote diverse farming systems. It is widely acknowledged that plant variety protection following the UPOV model, and perhaps even in terms of its general concepts, has been developed in the context of commercial scale agriculture. It could be argued that the fact that, in most countries, there is no corresponding system for smallholder farmers means that such systems are free to develop as their needs determine. However, the encroachment of plant variety protection into smallholder farming systems suggests that a parallel system of rights for smallholder farmers is necessary to prevent asymmetries developing. The features of this system are not predetermined by Article 6.2(a) but, given the focus on a diversity of systems and sustainable use of resources, the emphasis would appear to be on what have been discussed as negative Farmers' Rights, rather than the more equity oriented positive rights.

> (c) promoting, as appropriate, plant breeding efforts which, with the participation of farmers, particularly in developing countries, strengthen the capacity to develop varieties particularly adapted to social, economic and ecological conditions, including in marginal areas**;**

Article 6.2(c) has two potential implications as regards intellectual property rights. The first relates to orthodox intellectual property rights and is, again, a question that relates more to negative than positive concepts of Farmers' Rights. This is that if government policy should promote participatory breeding efforts at the local level the same policy should seek to avoid a situation were orthodox intellectual property rights might interfere with such efforts. The breeders' privilege, where plant breeders may make use of protected varieties in their research and development activities, under UPOV could be seen as one means of implementing this aspect of Article 6.2(c). The second implication of Article 6.2(c) relates more to positive Farmers' Rights and the underlying concepts of intellectual property rights. This is that 6.2(c) could be interpreted as proposing the establishment of new forms of intellectual property right to provide incentives for smallholder farmers to develop locally appropriate varieties. Efforts at the development of such systems to date have focused on the two central elements of capturing benefits and controlling or influencing subsequent use, as discussed earlier under positive rights.

> (g) reviewing, and, as appropriate, adjusting breeding strategies and regulations concerning variety release and seed distribution.

Article 6.2(g) primarily relates to national seed laws but may also be interpreted as having implications for plant variety protection legislation. Seed laws are not generally considered, or intended, to be intellectual property rights. However, in their requirements for the

registration of seed, and prohibitions on the sale of any non-registered seed, they can sometimes have similar effects. Seed laws are increasingly being harmonised in a number of regions but, as with plant variety protection, are generally being harmonised on the basis of a model that focuses on the needs and interests of the commercial sector rather than smallholder farmers. Also as with plant variety protection laws, seed laws do not prejudice Farmers' Rights per se but, rather, tend to risk such prejudice by not recognising the existence of parallel seed systems. The potential application of Article 6.2(g) to plant variety protection laws lies in the reference to "adjusting breeding strategies". PVP laws are one component, along with seed laws, of regulatory efforts to encourage plant breeding.

4. Material transfer agreements

- Invention versus discovery – which jurisdiction will determine the precise interpretation of Article 12.3(d)?
- Enforcement – private versus public enforcement
- Transaction costs – excessive transaction costs could defeat the purpose of the Treaty

The use of material transfer agreements (MTAs) as a central mechanism of the ITPGR has been a hotly debated issue, particularly during the later stages of the negotiations on the Treaty's text. Discussion here does not consider the full range of issues arising from the use and nature of MTAs but, rather, focuses on three questions that are likely to prove central as the implementation of the Treaty evolves. The first is essentially the same as that raised in section 2.1 of this paper relating to the debate over invention versus discovery. The current draft of the MTA, which is an interim document pending the adoption of a new text by the Governing Body of the ITPGR, adopts the language of Article 12.3(d) verbatim and, thus, incorporates the same ambiguities. This effectively means that the terms and conditions of the MTA will vary depending on the jurisdiction in which particular parties to an MTA are found. As a consequence, countries seeking interpretations of Article 12.3(d) that restrict the patenting of derivatives as much as possible will likely be frustrated by the policies and practices of countries with more expansive interpretations. Ultimately, this will simply mean that the current controversies regarding the patent practices of certain countries will be extended into a new forum.

The second issue considered here is that of the enforcement of MTAs. There is something of a diversity of opinion regarding the role of the Governing Body in the enforcement of MTAs. A number of countries take the view that the effective enforcement of MTAs will be a key measure of the relative success or failure of the ITPGR and that, as a central pillar of the Treaty, the Governing Body should have the primary role in monitoring, and in some cases even implementing, enforcement measures. However, several other countries insist that the enforcement of MTAs must be a matter of private law between the particular parties to them. This, of course, raises the question of who exactly are the parties to an agreement whose terms and conditions are to be established by the Governing Body of the Treaty and how can the Governing Body not have responsibility for the enforcement of the Treaty that it governs? This situation poses a potential threat to the future of the Treaty in that an exclusively private law approach to the question of enforcement will largely be a reflection of the current situation with patent regimes. The relative cost and complexity of seeking redress for alleged cases of biopiracy through the judicial systems of developed countries has led many developing countries to protest that outcomes are determined according to economic strength and not according to the validity of claims.

As is suggested by the previous discussion of problems relating to the diversity of interpretations of an MTA's intellectual property rights provisions and the likely complexities of enforcement, particularly if a private law approach is adopted to the exclusion of state action, the use of MTA's is unlikely to be a straightforward process. This is likely to mean that individuals and institutions seeking to make use of the Multilateral System for the exchange of plant genetic resources established by the ITPGR will need specific capacity to be able to fulfil their obligations under the Treaty. If the enforcement of MTAs is to be a private matter, the providers of genetic resources subject to the Treaty will need to be able to monitor the use of the material they provide to ensure that the terms and conditions of the MTA are being fulfilled. The burden of this responsibility is likely to be minimal for actors that are not publicly accountable or who are already accustomed to monitoring and enforcing rights in such a manner. However, it will fall more heavily on public institutions that are more directly accountable to governments and civil society and who are not generally accustomed to the aggressive assertion and enforcement of rights. If the burden of using material transfer agreements in the implementation of the ITPGR is more than minimal, this burden is likely to defeat the original purpose of the Treaty: to ensure facilitated, i.e. cheap and flexible, access to plant genetic resources for food and agriculture.

5. Conclusion

The intellectual property rights, and other related, issues presented by the implementation of the ITPGR are all, in large part, reflections of controversies in the broader international context. This leads to two basic conclusions. First, that national law and practice has the potential to exert significant influence on the evolution of the implementation of the Treaty in the absence of clarity and consensus at the international level. Countries that postpone detailed implementation are likely to be surrendering valuable political capital at the international level. Second, much of the success or failure of the ITPGR may depend upon whether Parties to the Treaty continue, pending any resolution of fundamental intellectual property rights controversies at the international level, with the "agreement to disagree" demonstrated by the adoption of Article 12.3(d) or whether the Governing Body becomes a new battleground for these controversies and is paralysed in the same manner that the review of Article 27.3(b) in the WTO's Council for TRIPs has effectively ground to a halt.