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Across the North–South Divide**

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**Explaining Compliance with Intellectual Property
Commitments: The Case of Agrobiodiversity¹**

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Abstract

Through the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), all member states are obliged to establish effective systems of intellectual property rights for plant varieties. This paper asks why the developing countries agreed to such a regulation, and why many of them introduce intellectual property legislation which is stricter than the TRIPS minimum requirements for plant varieties.

Developing countries have traditionally opposed intellectual property rights on plants and plant varieties, since most of the plant genetic diversity stems from the South, but the financial and institutional capacity for efficient and commercial use of such systems has remained largely with Northern corporations and institutions. Thus, developing countries have feared a new form of imperialism – not of territory, but of plant genetic material.

Another reason has been the importance of these resources for food security. During the past 40 years, massive genetic erosion has dramatically reduced the genetic diversity in food crops. The intellectual property rights regimes impose new forms of restrictions, in terms of reduced accessibility and use for farmers and other - often local – breeders in the South. The resulting improved varieties may increase food production in areas with conducive, environmental conditions, but the lack of adequate, affordable genetic resources remains a major problem in most developing countries.

In seeking to understand why the developing countries did accept the relevant provisions of the TRIPS Agreement and their compliance with them, Susan Strange's theory of *structural power* is useful. Structural power is defined as the ability to shape and determine the structures of the global political economy within which other states, their political institutions, their economic enterprises and their professional people have to operate. This forms the theoretical point of departure for the analytical framework of this paper. A document review of the TRIPS negotiations provides the basis for the analysis of the negotiation output, whereas an in-depth case study from the Philippines serves as point of departure for analysing compliance. Finally, the general relevance of the findings is discussed.

Structural power is found to represent a core explanatory factor for the formation of the TRIPS regime as it pertains to plant varieties. It is also central in explaining why and how many developing countries have chosen to comply with their obligations towards these provisions by exceeding the minimum standards.

1. Introduction

Biological diversity is usually associated with wild animals and plants. There has generally been less political awareness of the crucial importance of genetic diversity in agriculture. In fact, plant genetic diversity is fundamental to the breeding of food crops and thus one of the central preconditions for food security. Access to diverse genetic resources is vital to modern plant breeding, as it provides the genetic traits required to deal with crop pests and diseases, as well as with changing climate conditions. It is also essential for traditional small-scale farming, on which approximately 1.4 billion people worldwide depend for their livelihoods.³ Traditional small-scale farmers maintain the yield and quality of their crop varieties by exchanging seeds and seedlings over short and long distances, as they have done since the dawn of agriculture. Without genetic renewal, yields decrease and quality deteriorates. Plant genetic diversity is thus an indispensable factor in the fight against poverty.

The diversity of domesticated plant varieties is disappearing at an alarming rate.⁴ At the same time, interest in the commercial use of genetic resources has increased apace with the growing economic stakes of the biotechnologies, followed by demands for intellectual property rights.. This paper focuses on the most consequential type of intellectual property rights to plant genetic resources for food and agriculture (PGRFA)⁵ –*plant breeders' rights*. These rights have been developed to provide incentives to plant breeders for developing improved crop varieties. At the same time they do, however, also restrict access to and the use of these vital resources. The scope and coverage of the rights differ, as do the ways in which they restrict access to, and use of, the protected plant varieties.

Plant breeders' rights do not stop farmers from using their traditional varieties, and have usually not stopped them from using protected varieties in their traditional ways. Protected varieties could be used as an input to strengthen and improve own varieties, allowing parts of the harvest to be used for sowing, exchange and sometimes for sale, without paying royalties to the rights-holders (Andersen 2003). In recent years, however, increasingly stringent plant breeders' rights have been limiting these possibilities, depriving farmers in poor countries of their customary rights to exchange and sell seeds from their own harvests, and in some cases even to store and reuse them on own landholdings. As the number of varieties protected by stricter plant breeder rights increases and the number of traditional varieties falls, the total number of varieties available for traditional use by farmers obviously declines, affecting their ability to maintain yields and the resistance of their own crop varieties.

Another effect of the introduction of plant variety protection in a country is that it encourages the sales of 'improved varieties'. In Brazil, for example, Monsanto increased its share of the maize seed market from zero to 60% between 1997 and 1999, following the introduction of legislation on plant breeders' rights (CIPR, 2002: 65). Whereas these new varieties have

³ Approximately 1.4 billion people live in farm families that are largely self-reliant and self-provisioning when it comes to seeds and other planting materials, according to Cary Fowler et al. (in Brush, 2000). According to the FAO database, the total number of people dependent on agriculture in 2001 was 2.48 billion, including persons depending on hunting, fishing or forestry and their non-working dependants.

⁴ There are few exact figures on the extent and pace of genetic erosion in agriculture. However, nearly all the 154 countries reporting to the FAO for the Leipzig Conference in 1996 (FAO, 1998) maintained that genetic erosion is a serious problem. The report indicates that up to 80% of the varieties of central crops grown hundred years ago are now forever gone.

⁵ Plant genetic resources for food and agriculture encompass the diversity of genetic material in traditional varieties and modern cultivars, as well as crop wild relatives and other wild plant species used as food, according to the current FAO definition (FAO, 1998). This paper focuses on the management of domesticated PGRFA.

increased and improved production in areas with conducive production environments and for farmers who can afford the necessary fertilizers, pesticides and other required inputs, they have also crowded out local varieties, contributing to further genetic erosion.

Most plant genetic resources originate from the South, but plant breeders in many developing countries have limited institutional and financial capacity to make use of plant breeders' rights. Such rights are also seen as making life more difficult for small-scale traditional farmers, who comprise the vast majority of the farming population in developing countries. Therefore – and despite the promise of spurring the development of improved varieties of crops – there has been massive protest against intellectual property rights from the South, along with demands for protecting the rights of farmers and indigenous peoples and ensuring a fair and equitable sharing of the benefits arising from the use of these vital resources.⁶

One point of departure for explaining why developing countries have agreed to introduce plant breeders' rights is the Agreement on Trade-Related Intellectual Property Rights (TRIPS) of the World Trade Organization.⁷ Through the TRIPS Agreement, all WTO member states are obliged to establish effective systems of intellectual property rights for plant varieties.

This paper asks why developing countries agreed to such a regulation – despite their fierce initial resistance – and why many of them have gone on to introduce intellectual property legislation even stricter than the TRIPS minimum requirements for plant varieties. The theory of *structural power* (Strange, 1988) will provide the theoretical point of departure for this exploration. Structural power is defined as the ability to shape and determine the structures of the global political economy within which other states, their political institutions, their economic enterprises and their professional people have to operate. A document review of the TRIPS negotiations forms the basis for analysing negotiation output, whereas an in-depth case study from the Philippines serves as the point of departure for analysing compliance. Its general relevance will be discussed in light of brief assessments of the compliance of other developing countries. Finally, conclusions are offered regarding the explanatory relevance of the theory of structural power and its implications.

2. The theory of structural power and its relevance for the topic

The theory of Structural Power was developed by Susan Strange in the 1980s and took the realist discussion on power as its point of departure. A common way of defining power is to say that it is the ability to get others to do something they would otherwise not do. Morgenthau (1985: 32) is a representative of this view, when he defines power as a relation between those who exercise it and those over whom it is exercised, which gives the former control over certain actions of the latter. According to Morgenthau, this control is the result of the impact that the former has on the minds of the latter, and derives from three sources: the expectation of benefits, the fear of disadvantages, and the respect or love for people or institutions. Keohane and Nye (1977) take this view on power in distinguishing between the control over outcomes and the *potentials* to achieve such control. They thereby focus on the initial *power resources* that provide an actor with the potential ability for action, rather than the actual influence that the actor has over the patterns of outcome.

⁶ For an analysis of the time dimension in the interaction between the Convention on Biological Diversity, the TRIPS Agreement and other international regimes pertaining to PGRFA, see Andersen, 2002.

⁷ Following from the provisions in the TRIPS Agreement on intellectual property rights to plant varieties, also the International Union for the Protection of Varieties of Plants, UPOV, has become relevant in this context, as will be further explained below.

There is a basic difference between the approach of Keohane and Nye and that of earlier political scientists. Whereas earlier political scientists, among them Morgenthau, based their concept of power on the understanding of states as unitary rational actors (URA model), Keohane and Nye ground their analysis on the basic assumption that the world is increasingly one of interdependence between states. This interdependence is the result of international transactions in terms of flows of money, goods, people and information across international boundaries. Whereas interdependence will always involve costs – since interdependence restricts autonomy – that does not mean that interdependence necessarily produces mutual benefit. To identify the sources of power in such complex interdependencies, what matters is to identify the patterns of asymmetries. From several case studies, Keohane and Nye concluded that international regimes can be successful in governing situations of complex interdependencies only if they are congruent with the interests of powerfully placed domestic groups within major states, as well as with the structure of power among states (1977: 226).

Whereas Susan Strange (1988) obviously took some aspects of the Keohane/Nye approach as points of departure for her own theory development, she criticized it for being limited to what she labelled *relational power*, i.e. the power between two actors (often states). She stressed that relational power could not provide a sufficient basis for understanding power in the world, due to the competitive games played in the world systems between states and between economic enterprises. In order to understand power in this emerging context, she introduced the concept of *structural power*, defined as the ability to shape and determine the structures of the global political economy within which other states, their political institutions, their economic enterprises and their professionals have to operate.

Referring to earlier debates on the difference between political and economic power, Strange emphasized (1988: 24) that the distinction between structural and relational power would be far more useful for the understanding and analysis of power in political economy than the distinction between e.g. economic power and political power. She maintained that it would be impossible to have political power without the power to purchase, to command production, and to mobilize capital. Likewise it would be impossible to have economic power without the sanction of political authority, without the legal and physical security that can be supplied only by political authority.

Like most scholars who have dealt with the issue of power, Strange searched for its sources. She asked if power was based on command or coercive force, the possession of great wealth, or on moral authority derived from the proclamation of powerful ideas that have wide appeal (1988: 23). Her answer was that those who exercise authority derive power from all three sources – from force, from wealth and from ideas – but that the extent to what different groups utilize each of these sources will vary according to four fundamental structures of structural power:

- the structure of the security system, defined as a framework of power created by the provision of security by some individuals for others, which allows these individuals to determine and limit the range of choices and options available to the others (p.45);
- the structure of the production system, defined as the sum of all arrangements determining what is produced, by whom and for whom, by what method and on what terms, thereby creating wealth (p. 64);

- the structure of the finance system, defined as the sum of all arrangements governing the availability of credit, and all the factors determining the terms for exchange of currencies (p. 91);
- the structure of the knowledge system, defined as the structure determining what knowledge is discovered, how it is stored, and who communicates it to whom and on what terms (p.121).

As with everything in the world, all these structures are interrelated, and in certain ways determine each other. An important difference to other approaches that seek to explain power is that the analysis is not restricted to the distribution of power between states. Strange (1996) highlights the distribution of power between actors within these four power structures, based on the hypothesis of the declining power of the state and thereby the increase in globalization.

According to Strange all other elements of the international political economy – be they transport, trade, aid, energy or welfare – would be secondary structures that are moulded by the fundamental structures pointed out above (1988: 28). These primary and secondary structures would in turn be decisive for positions and processes at the multilateral level (1988: 204), i.e. the negotiation and implementation of international agreements. True realism, she argues (1996: 25), must recognize the power of non-state authorities over the structures and therefore over some outcomes of the system.

In an effort at further developing the theory of structural power, Mytelka (2000: 39–56) criticizes Strange for not defining the knowledge system as a power structure in its own right. Rather, Strange would have understood it in terms of ‘dominant’ ideas and belief structures that legitimized the authority of key actors in a political system. Whereas Strange would embed transnational corporations within the ‘production structure’, Mytelka suggests locating them within the ‘knowledge structure’, because they are key actors in the system of knowledge production so decisive for today’s economic and political developments.

When one includes in the analysis all the institutions that contribute to technological innovation through knowledge production, the understanding of the knowledge structure changes significantly. Mytelka states that one of the most marked current trends within this structure is the privatization of knowledge, notably through the development of international frameworks and domestic legislation on intellectual property rights. As a result, patenting activities have risen dramatically since the 1980s (2000: 43). Characteristic of this situation is that most patents are held by transnational corporations, not by individual inventors. For example, in the fastest developing sector – that of biotechnology – five transnational corporations based in the US and in Europe control more than 95% of the gene-related patents (UNDP, 1999: 68 in Mytelka, 2000: 43). This represents a sharp contrast to the knowledge structure only few decades ago, where public researchers were main producers of biotechnology-related knowledge. As Strange emphasizes, the global shift from state authority to market authority was largely the result of state policies. Transnational corporations did not steal power from the state governments. Power was handed to them on a plate (1996: 44).

Mytelka concludes (2000: 51) by stressing the importance of understanding how the privatization of knowledge has contributed to the growing dependence of states upon firms for the generation and application of knowledge. It helps us to explain the emergence of a consensual relationship between states and transnational corporations, based on their contribution to the competitiveness of the nation. The close ties that states and transnational

corporations maintained throughout the various international negotiating processes leading up to international agreements on intellectual property rights have shaped the rules governing access to and control over knowledge. In other words, the transnational corporations developed a structuring potential that increasingly shaped international rulemaking within the knowledge structure by the close of the 20th century.⁸

Strange is focused on a system perspective, and is not so precise with regard to the actors and their roles in the development of structural power. By focusing on structures describing the past or the current, it is possible to discuss consequences for the future. However, such an approach does not really grasp the dynamic processes that characterize developments within a range of important issue areas. In teaching us to identify the changes that have taken place within each of the fundamental power structures, Strange touches upon the dynamics. However, the aim is to make an account of checks and balances with regard to power. On this background, the effects within particular issue areas can be studied. Analysing structures or dynamics is a question of choice, and so far most scholars within the realist tradition of regime theory have chosen to analyse structures, Strange included. Grasping dynamics is a difficult challenge, and the theoretical basis for that within realist theory is limited.⁹ It is important to highlight this limitation when using the theory of Susan Strange.

The basic assumption of this paper is that there are patterns of structural power between the economically strongest industrial countries and the developing countries with regard to intellectual property rights over plant varieties, and that these patterns can be studied in the formation and implementation of the TRIPS Agreement. If this assumption is correct, structural power is central in explaining developing countries' compliance with this international regime.

3. The TRIPS Agreement: Negotiations and developing countries

The agenda-setting phase which was to result in the TRIPS Agreement many years later was introduced in the 1973–1979 Tokyo Round of GATT¹⁰, when a group of trademark-holding firms organized the Anti-Counterfeiting Coalition. The Coalition lobbied for the inclusion of an anti-counterfeiting code in the Tokyo Round (Doremus: 1996). The initiative attracted the interest of the United States and the then European Economic Community to draft such a code. So they did, and the draft, which became known as the 'counterfeit code' and was

⁸ Susan Strange did not live long enough to learn about the debate on the new empire, which arose after Michael Hardt and Antonio Negri published their book of the same title (2000), a concept with clear parallels to her own theory. Building on a Marxist tradition, a central statement was that, due to the declining sovereignty of states, imperialism is gone, and a new power structure is emerging, that of Empire, which does not revolve about a territorial centre of power, nor rely on fixed boundaries or barriers. The basic hypothesis is that 'sovereignty has taken a new form, composed of a series of national and supranational organisms united under a single logic of rule'. This radical stand has been heavily criticized by scholars of international relations, who cite the lack of evidence (e.g. Barkawi and Laffey, 2002; Callinicos, 2002; Shaw, 2002; Walker, 2002; Stokes, 2005). It seems odd that Strange has not been brought into this debate, as her analysis of structural power is obviously highly relevant. Hardt and Negri do not even refer to her: neither do any of the other men participating in this debate. Her contribution was, however, a much more advanced as an analytical approach to the phenomena that Hardt and Negri describe, and moreover it meets the arguments of their critics.

⁹ Some contributions include Stokke (2000 and 2001) and Andersen (2002)

¹⁰ The General Agreement on Tariffs and Trade (GATT) was adopted in 1947 in Geneva and entered into force in 1948. Up to its entry into force, the WTO it had a provisional organization. Its rules and regulations were developed during trade negotiation rounds, of which the Tokyo Round and the Uruguay Round were the last before the adoption of the WTO Agreement. The current Doha Round was introduced in November 2001 as the first trade negotiation round under the WTO.

aimed at discouraging the import of counterfeit goods, was introduced in the Tokyo Round (Yusuf, 1998: 6). However, the initiative did not succeed, and the code was not included in the agenda of the Tokyo Round. Nevertheless, it remained a topic for GATT discussions until the launching of the Uruguay Round in 1986.

Before that, US business corporations from the copyright, patent and semiconductor industries decided to follow up on the initiative of the trademark-holding firms. During the early 1980s they started lobbying for effective protection of intellectual property rights in overseas markets as a trade-related issue. Following these developments a Multilateral Trade Negotiation Coalition was established in the United States, which brought together major financial institutions, manufacturing firms, agribusiness corporations (including seed corporations) and trade organizations (Peng, 1990, p. 209, referred to in Fowler, 1994: 176). One of these trade organizations was the Intellectual Property Committee, a coalition of 13 large companies in the fields of pharmaceuticals, seed production and biotechnology (Weissman, 1991, referred to in Fowler, 1994: 176). With a concerted strategy shared by so many stakeholders from the business sector, pressure on Washington to take action increased dramatically. The driving forces behind what was to become the TRIPS Agreement were formed.

Traditionally, the UN World Intellectual Property Organization (WIPO) was the international institution in charge of co-operation on intellectual property rights. However, US business actors were not satisfied with the performance of WIPO in the enforcement of such rights, and the patent reform in general (Fowler, 1994: 175, Evans and Walsh, 1994: 38). The new GATT, as it emerged during the next round of trade negotiations, was seen to provide better enforcement mechanisms. Therefore, the Chamber of Commerce and other actors in the USA urged Washington to push for patent reform in that next round of negotiations (Fowler, 1994: 175). In 1984 the US delegation initiated an expert group to look into the possibility of including intellectual property rights in the upcoming round of trade negotiations (see *inter alia* Evans and Walsh, 1994: 38–39).

When the negotiators gathered in Punta del Este, Uruguay to launch the Uruguay Round in 1986, the issue of intellectual property rights was brought on the table. However, it was heavily opposed by several developing countries, and made it onto the agenda of the Uruguay Round only at the conclusion of the meeting (Evans and Walsh, 1994: 39). It was framed the following way:

The Punta del Este Declaration (1986), Section D.: Subjects for Negotiations

Trade-related aspects of intellectual property rights, including trade in counterfeit goods

In order to reduce the distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade, the negotiations shall aim to clarify GATT provisions and elaborate as appropriate new rules and disciplines. Negotiations shall aim to develop a multilateral framework of principles, rules and disciplines dealing with international trade in counterfeit goods, taking into account work already underway in GATT.

These negotiations shall be without prejudice to other complementary initiatives that may be taken in the World Intellectual Property Organization and elsewhere to deal with these matters.

The Punta del Este Declaration marked the beginning of the negotiations of the Uruguay Round, and thereby also the negotiation phase that was to result in the TRIPS. The negotiators agreed on some 'General Principles Governing Negotiations', according to which, *inter alia*, industrialized countries would not expect developing countries 'to make contributions which are inconsistent with their individual development, financial and trade needs (Section B, Paragraph v). Therefore, developed contracting parties should not seek, neither should less-developed contracting parties be required to make, concessions that would be inconsistent with the development, financial or trade needs of the latter (Fowler, 1994: 176).

During the first years of negotiations, a TRIPS Agreement was heavily opposed by various developing countries, and the 1988 Montreal mid-term review of the Uruguay Round found TRIPS to be insoluble (Evans and Walsh, 1994: 39). Several developing countries continued to insist that 'social clauses' be inserted in the agreement and were ambivalent as to whether such an agreement should be incorporated into the GATT at all. And then, the opposing developing countries changed their positions during 1989, and dropped their earlier resistance to a TRIPS Agreement. This radical shift must be understood on the background of the international trade situation, and the pressure exerted on them for introducing intellectual property rights (Yusuf, 1998:9):

- The US government started to introduce effective intellectual property protection in developing countries as a precondition for access to its market under the Generalized System of Preferences (GSP) for developing countries.
- On this background, the USA and later the EEC were able to induce significant changes in legislation on intellectual property rights in many developing countries.
- As steadily more developing countries moved towards free market policies, the enactment of effective legislation on intellectual property rights became equated with a certificate of 'good conduct'.
- The developing countries themselves came to perceive a multilateral framework as a lesser evil than bilateral concessions.

In addition, there were the strategic arguments for developing countries to make concessions, since the TRIPS Agreement was a part of the full package of agreements (the so-called 'Single Undertaking') which were to result in the WTO.¹¹ By yielding on TRIPS, gains could be achieved in other important areas of the Uruguay negotiations – such as agriculture, textiles and tropical products. The TRIPS was regarded as one of their few bargaining cards (Yusuf, 1998:9).

Thus, in May 1990 a group of developing countries¹² submitted a detailed proposal on a TRIPS Agreement. Their proposal was divided in two parts, where the first contained draft rules for procedures to discourage international trade in counterfeit and pirated goods, and the second part entailed detailed standards and principles concerning the availability, scope and use of intellectual property rights. This submission was regarded as the breakthrough in TRIPS negotiations and was taken to indicate that the developing countries now accepted a GATT-based standard-setting approach to intellectual property rights (Yusuf, 1998: 9). The proposal also provides insight into the limits for such standards, as seen from the side of developing countries.

¹¹ The democratic deficit of the WTO is further elaborated in Andersen (2006, forthcoming)

¹² Argentina, Brazil, Chile, China, Colombia, Cuba, Egypt, India, Nigeria, Pakistan, Peru, Tanzania, and Uruguay.

The draft must be understood on the background of all the submissions from other negotiating parties, which had already set the agenda for the negotiations. Its proposed provisions on patents are introduced with a range of social objectives, but maintain that patent protection should be available for inventions in all fields of technology which are new, involve an inventive step, and are industrially applicable (proposed Article 4.1). However, several items are excepted from patentability, among them plant or animal varieties or essentially biological processes for the production of plants or animals. The proposal provided substantive content to the final TRIPS Agreement with regard to objectives and principles, and served as a basis for the final negotiations that led to the adoption of the TRIPS agreement.

During most of the negotiation phase, intellectual property rights over plant varieties were no issue. Already in 1987, the European Community emphasized that patents should be available for inventions in all fields of technology, except for plant or animal varieties or essentially biological processes for the production of plants or animals.¹³ Several other states followed up on this stand – as did Canada in 1989. Canada maintained that patents should generally be available in all fields of technology, but that it would not be reasonable to oblige all governments to extend patents to an area such as multi-cellular life forms.¹⁴ Here considerably more technical study would be required, both domestically and internationally, concerning the most appropriate form of protection and the conditions under which it should be accorded. However, when the USA in 1990 submitted its communication to the negotiating group, which was a draft TRIPS Agreement, no exceptions whatsoever were made from patentability.¹⁵ Shortly after, the proposal from the group of developing countries was submitted, where plants and animals were to be exempted from the obligation of patentability – the breakthrough of the negotiations. However, a formulation on intellectual property protection of plant varieties was included, despite fierce protests.

This story tells how the reduction of trade in counterfeit goods was the original motivation for an agreement in this area, and how the issue was steadily extended to cover more topics, under pressure from business corporations. Finally, plant varieties were included. Developing countries accepted the deal only under heavy pressure, after realizing that they would be pressured in this direction anyhow, and because they could use the issue in bargaining on other aspects of the WTO Agreement. Thus we see clear patterns of structural power as defined by Strange and by Mytelka.

4. The TRIPS Agreement: Contents and developing countries

The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was adopted 14 April 1994 as one of the three basic agreements, on which the World Trade Organization (WTO) was built.¹⁶ The WTO agreement, which established the new

¹³ Group of Negotiations on Goods (GATT), Negotiating Group on Trade-Related Aspects of Intellectual Property Rights (1987): *Guidelines and Objectives Proposed by the European Community for the Negotiations of Trade-Related Aspects of Substantive Standards of Intellectual Property Rights* (MTN.GNG/NGII/W/26)

¹⁴ Group of Negotiations on Goods (GATT), Negotiating Group on Trade-Related Aspects of Intellectual Property Rights including trade in counterfeit goods (1989): *Standards for Trade-Related Intellectual Property Rights. Submission from Canada* (MTN.GNG/NGII/W/47)

¹⁵ Group of Negotiations on Goods (GATT), Negotiating Group on Trade-Related Aspects of Intellectual Property Rights, including trade in counterfeit goods (1990): *Draft Agreement on the Trade-Related Aspects of Intellectual Property Rights. Communication from the United States* (MTN.GNG/NG11/W/70)

¹⁶ The other two were the General Agreement on Tariffs and Trade (GATT), which pertains to goods; and the General Agreement on Trade in Services (GATS), which pertains to services. In addition there is the agreement

organization, entered into force 1 January 1995, and the TRIPS Agreement came into effect one year later, on 1 January 1996 (Article 65.1). However, developing countries were entitled to extend their implementation of the TRIPS Agreement until 1 January 2000, and least-developed countries were granted a 10-year extension, up to 1 January 2006 (Article 65.2). The latter category of countries may also apply for further extension of the period if they present a properly motivated request to the TRIPS Council (Article 66.1).

The purpose of the TRIPS Agreement is, according to its preamble, to promote effective and adequate protection of intellectual property rights as a means to reduce distortions and impediments to international trade. This is meant to contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users, balancing rights and obligations (objectives in Article 7). It provides minimum standards for the protection of intellectual property rights in its member states, covering such aspects as copyrights, trademarks, geographical indications, industrial design, and patents. Article 27.3 (b) is the focus for this analysis – together with various other provisions of the TRIPS Agreement and of other WTO Agreements establishing the context within which it is to be implemented – and is formulated as follows:

Members may also exclude from patentability plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement

The core norm under the TRIPS Agreement pertaining to Plant Genetic Resources for Food and Agriculture (PGRFA) is that plant varieties have to be protected by a kind of system which is effective. The scope of interpretations is related to the term ‘*sui generis* system’ (which means a system of its own kind) and the word ‘effective’. The limits for a *sui generis* system and the meaning of an effective *sui generis* system are not explicitly defined in the text. The wording thus provides flexibility with regard to forms of protection. Since the TRIPS Agreement provides minimum standards for the protection of intellectual property rights, the crucial question is what the TRIPS Council will accept as a minimum standard for an effective *sui generis* system.

The TRIPS Agreement provides some guidance in other provisions than Article 27.3(b) for the framing of a *sui generis* system for the protection of plant varieties. These provisions must be considered the absolute minimum requirements for an effective *sui generis* system. Leskien and Flitner (1997), supported by Helfer (2002), have summarized these minimum requirements for domestic *sui generis* legislation as follows:

- A *sui generis* system has to be a system of intellectual property rights. The whole Agreement is about intellectual property rights. Furthermore, Article 1(2) of the TRIPS Agreement sets out that the term ‘intellectual property’ for the purpose of this Agreement refers to ‘all categories of intellectual property that are the subject of Section 1 through 7 of Part II). As Article 27.3(b) is one of the components in this part of the TRIPS Agreement, it obviously refers to intellectual property rights. Several further indications are highlighted (Leskien and Flitner, 1997: 28). The conclusion is that governments must ensure that rights-

establishing the WTO, and various additional agreements and annexes dealing with the special requirements of specific sectors and issues.

holders are granted either the right to exclude all third parties from engaging in specified activities pertaining to the protected variety – or – at least the right to receive equitable remuneration for such activities.

- A further specification is that a *sui generis* system must be a system of intellectual property rights additional to those already dealt with in the TRIPS Agreement. Members cannot use the trademark system as a *sui generis* system, since their obligations in this regard are already covered under Article 15. The same goes for geographical indications, since their obligations are already covered under Article 22, and for trade secrets, covered by Article 39. A *sui generis* system must be a system of its own kind.
- National treatment must be granted to all applicants for intellectual property rights under any *sui generis* system, whether they are nationals, or citizens of any other WTO member country. This goes back to Article 3 of the TRIPS Agreement, which provides for national treatment.
- The Most-Favoured-Nation treatment provided for in Article 4 of the TRIPS Agreement is to be taken into account. This implies that national laws must ensure that any privileges or immunity granted to any other country must be accorded immediately and unconditionally to all other member countries of the WTO. However, Leskien and Flitner (1997: 31) maintain that this obligation has only minor practical relevance, since it would be exceptional for a country to grant better conditions to foreigners than to its own nationals.
- Any *sui generis* system must include the regulation of enforcement of rights by private parties. This is provided for in Articles 42–49 of the TRIPS Agreement. Leskien and Flitner (1997: 32) argue that this is probably the meaning of ‘effective’ as it pertains to *sui generis* system, since the term is applied mainly in Articles 42–49, except for in Article 27.3(b). Any *sui generis* law must contain procedures that enable breeders to enforce the rights granted to them. Since intellectual property rights are private rights, this means that it is the rights-holders that are responsible for uncovering infringements of their rights, and for taking appropriate action through the judicial system.

Helfer (2002: 34) maintains that international tribunals have concluded that rights granted in a treaty must be interpreted to make them effective – otherwise they are considered illusory (see also Helfer 1998: 403). On this basis, it is reasonable to believe that that states that have implemented a *sui generis* system following the principles highlighted above are unlikely to have their laws successfully challenged by the TRIPS Council.

From the minimum requirements listed above, there are many options available to developing countries. However, the International Union for the Protection of New Varieties of Plants (UPOV)¹⁷ has held that the most effective way to comply with the provision of an effective *sui generis* system is to follow the model of the UPOV Convention (to be explained in detail below). There are several proponents of this stand (see Helfer, 2002: 31), some of these advocating compliance with the 1978 version of the UPOV Convention, whereas others promote the stricter 1991 version of the same Convention. Those advocating the 1991 Act emphasize that this version provides the most extensive protection for plant breeders, whereas those endorsing the 1978 Act maintain that this was the version of UPOV in force when the TRIPS Agreement was adopted.¹⁸ The International Association of Plant Breeders for the Protection of Plant Varieties (ASSINSEL) in 1999 held an international congress with representatives from more than 1000 seed companies, where it was recommended that

¹⁷ The acronym derives from the French name of the organization, *Union internationale pour la protection des obtentions végétales*.

¹⁸ It was closed for new membership in 1998.

developing countries adopt a *sui generis* system based on the 1991 Act (Crucible II Group, 2000: 92).

Since the UPOV Convention has been held up as the *sui generis* system for the intellectual property rights protection of plant varieties, and since the developing countries are increasingly following this stand, UPOV will be subject to further study below, as it relates to the TRIPS Agreement.

5. UPOV as a model for implementation of the TRIPS Agreement

The history of UPOV has similarities to that of the TRIPS Agreement when it comes to driving forces. It dates back to the 1950s, to the initiative of an organization of commercial plant breeders, an organization promoting industrial patents and the International Chamber of Commerce; this led to preparatory meetings in 1957, hosted by France (Fowler, 1994: 104). Six European countries decided to found the UPOV, which took plant variety protection out of the realm of patent law by creating its own distinct system, a *sui generis* system. In doing this, they achieved two things: recognition of plant breeders' rights, and access for plant breeders to all kinds of plant varieties, whether protected by plant breeders' rights or not. In addition the system did not affect traditional farming, since farmers could continue using their harvests for propagation and exchange, also if they originated from protected crops. This was originally a kind of open-source system of intellectual property rights.

The UPOV Convention was adopted in Paris in 1961 to ensure that member states acknowledge the achievements of breeders of new plant varieties, by making available to them exclusive property rights for a given period of time. It provides uniform and clearly defined principles for the protection of the rights of plant breeders to plant varieties. The UPOV Convention entered into force 1968 and was revised in Geneva in 1972, 1978 and 1991. The 1978 Act entered into force in 1981, and the 1991 Act in 1998. Each time, strengthened protection was provided for plant breeders' rights over the new varieties of plants they had developed. The most significant change from past principles was introduced with the 1991 revision, which marks an important step towards a patent-like system. The following table shows the main provisions of the UPOV Act of 1978 and the UPOV Act of 1991, as compared to the requirements for patents under OECD patent laws (to be explained below):

Provisions of the UPOV Act of 1978, the UPOV Act of 1991 and OECD patent laws

Issues	UPOV 1978	UPOV 1991	OECD patent laws
<i>Protection coverage</i>	Plant varieties of nationally defined species or genera	Plant varieties of all genera and species	Inventions
<i>Requirements</i>	Novelty, distinctness, uniformity, stability and variety denomination	Novelty, distinctness, uniformity, stability and variety denomination	Novelty, inventive step, industrial application, enabling disclosure
<i>Protection period</i>	Minimum 15 years	Minimum 20 years	20 years
<i>Protection scope</i>	Producing for purposes of commercial marketing, offering for sale and marketing of propagating material of the variety.	Producing, conditioning, offering for sale, selling or other marketing, exporting, importing, stocking for above purposes of propagating materials of the variety. If harvested materials are obtained through the unauthorized use of propagating material, certain acts are prohibited if the breeder has had no reasonable opportunity to exercise his right in relation to the propagating material.	<i>In respect of a product:</i> Making, importing, offering for sale, selling and using the product; stocking for purposes of offering for sale, etc. <i>In respect of a process:</i> Using the process; doing any of the above-mentioned acts in respect of a product obtained directly by means of the process.
<i>Breeders' exemption</i>	Yes, breeders are free to use a protected variety to develop a new variety. However, repeated use of the protected variety for the commercial production of another variety is not exempted.	Yes. However, in addition to the 1978 provision, essentially derived varieties and varieties, which are not distinguishable from the protected variety are not included in the breeders' exemption.	No.
<i>'Farmers' privilege'</i>	Yes, farmers are implicitly free to use their harvested material for any purpose, also when it stems from a protected variety	National governments are entitled to decide whether farmers shall be allowed – within reasonable limits and safeguarding the legitimate interests of the rights-holder – to reuse the harvest of protected varieties on their own land holdings without the authorization of the rights-holder.	No.
<i>Prohibition of double protection</i>	Yes. Any species eligible for plant breeders rights cannot be patented.	No.	Up to national laws.

Based on: Dutfield (2000:30) (in turn based on van Wijk et al [1993]), Helfer (2000: 30), and the 1978 and 1991 Acts of UPOV.

UPOV 1978 sets out that each member country must provide plant breeders with rights to at least five genera or species at the date of the entry into force of the Convention in its territory, increasing until at least twenty-four within eight years after the entry into force (Article 4). UPOV 1991 includes all genera and species (Article 3). Patent systems are generally aimed at inventions, and the question of whether single plants or new varieties of plants can be regarded as inventions has been heavily debated for years. We will not delve into that debate here, but simply note that inventions pertaining to new plants are recognized as patentable in many OECD countries, whereas plant varieties are normally not patentable as yet.

The requirements for plant variety protection (so-called NDUS criteria)¹⁹ are similar in the two versions of UPOV, but UPOV 1991 is more explicit and somewhat stricter than UPOV 1978. When we compare with OECD patent law, we find certain parallels. The invention has to be new (similar to the novelty criterion), represent an inventive step (similar but not identical to the distinctness criterion) and be capable of industrial application (similar to the uniformity and stability criteria). And disclosure of the invention must be provided for, as in the UPOV system.

The protection period was minimum 15 years in the 1978 Act (Article 8) for most plant varieties (18 years for trees and wines). This is increased to minimum 20 years under the 1991 Act (Article 19) for the same plants (25 years for trees and wines), similar to patent law.

An important difference between UPOV 1978 and UPOV 1991 lies in the scope of protection. For both acts, the effect of the right granted to the breeder is that prior authorization shall be required for producing the protected variety for purposes of commercial marketing, offering for sale and marketing as such. The breeder decides the conditions for authorization. The new elements in the 1991 Act (Article 14) are that any production and reproduction requires the authorization by the right-holder, whether or not the aim is commercialization. Also the 1991 Act requires that export and import, as well as stocking for any of the above-mentioned purposes requires authorization from the right-holder. These provisions also apply to harvested material. Finally, the provisions are extended to cover varieties which are essentially derived from the protected variety, varieties which are not clearly distinguishable from the protected variety, and varieties whose production requires the repeated use of the protected variety. In this, the 1991 provisions represent a substantial step in direction of the patent system.

In our context, the important aspects are the exceptions, since they indicate the scope for accessibility and utilization for breeders as well as farmers. First, there is the breeders' exemption. It allows any breeder to use a protected variety for further breeding and to market the new variety without requiring the permission of the rights-holder. The 1978 version explicitly stated that the authorization is not required for the utilization of the variety as an initial source of variation, for the purpose of creating other varieties or for the marketing of such varieties (Article 5.3). However, when the repeated use of the protected variety is necessary for the production of another variety, authorization would be required. In the 1991 Act (Article 15), the breeders' exemption is still valid, but it is further limited. If a new variety is so close to a protected variety that it is 'essentially derived' from it, authorization from the rights-holder is required. Likewise if a variety is not clearly distinguishable from the protected variety. By contrast, patent law makes no such exemptions at all.

¹⁹ NDUS = novelty, distinctness, uniformity and stability.

The second exemption applies to farmers. Here there is a great difference between the 1978 and the 1991 Acts.²⁰ According to the 1978 Act a farmer was free to use his harvest for planting or exchange with other farmers, also when it was the harvest of a protected variety. Whereas this was absolute in the 1978 Act, the 1991 Act (Article 15) leaves it to national governments to define in their legislation whether farmers shall be entitled to use their harvest without permission from the rights-holder, and if so, the conditions under which they are entitled to do so. This optional exception must be implemented within reasonable limits, and should act to safeguard the interests of the breeders. If farmers are permitted to use the product of the harvest for propagating purposes under national law, this must be limited to their own land holdings. Exchange of seeds from protected varieties is not allowed. This applies also if the variety is essentially derived from a protected variety, or if it is not clearly distinguishable from that variety. Thus UPOV 1991 limits the traditional practices of farmers to exchange seeds, when these seeds stem from protected varieties or varieties essentially derived from a protected variety or similar to them.

What this comparison²¹ shows is that UPOV has moved from a distinct *sui generis* system for intellectual property rights, to one closer to the patent systems. Whether UPOV 1991 can be labelled a 'patent-like system' is subject to discussions. There are some significant differences, of which the most important probably is the breeders' exemption enabling further development of plant varieties for food and agriculture without authorization from the rights-holders as long as the varieties are not very similar to a protected variety. However, the strengthening of breeders' rights under UPOV 1991 has clear parallels to patent law, so it does seem that the UPOV system is getting closer to the patent system – which was precisely what the developing countries worked so hard to avoid during the negotiations prior to the TRIPS Agreement. The crucial question is: why has this come about?

As of August 2004, 17 developing countries were members of UPOV, whereof 15 memberships (mainly Latin American countries) were based on the 1978 Act, and two were based on the 1991 Act, and several developing countries are in the process of applying for membership. Being members mean that they have legislation in place which has been accepted by UPOV as compatible with the respective UPOV Act, and they have functioning institutional structures to implement the legislation. Since the 1978 Act has been closed for signature, new members will have to adhere to the 1991 Act.²²

When the UPOV model seems most prevalent in the implementation of the TRIPS Agreement in developing countries with regard to Article 27.3(b), the most likely reasons are, in my view:

- that such a model appears to offer the best prospects for being accepted by the TRIPS Council, due to statements made by strong actors in the WTO
- that it is advocated by the UPOV and some of its member countries
- that UPOV and WIPO offer technical and administrative assistance for the development of such legislation

²⁰ This is often referred to as the 'farmers' privilege'.

²¹ The final difference of importance between the 1978 and the 1991 Acts pertains to double protection, but will not be further elaborated here due to space limitations.

²² Countries already belonging to UPOV 1978 may apply for membership on the basis of the 1991 Act, when they have adjusted their legislation to that Act. Among the OECD countries the trend is to do this.

- that it is regarded as a shortcut to compliance with the TRIPS Agreement, as compared to the development of a *sui generis* system in countries with scarce legal and administrative resources.

However, it should be noted that the TRIPS Agreement does not even refer to plant breeders' rights as a *sui generis* system. Subsequently, there is no reference to the international convention in force with regard to the intellectual property protection for plant varieties, the UPOV Convention. If member countries develop other systems which are considered effective by the TRIPS Council, these systems would also have to be accepted as *sui generis* systems. Among civil society organizations and many scholars this possibility is regarded an option for developing countries (see e.g. CIPR, 2002; Helfer 2002, Correa, 1998, GRAIN 1998, GRAIN 1997, Leskien and Flitner, 1997), since their farming systems are so different from those of developed countries, and because most of them have no tradition of plant breeders' rights or patents in plant varieties. The core norm of the TRIPS Agreement with regard to intellectual property rights to plant varieties is a standard considerably lower than those currently being implemented with reference to UPOV. The TRIPS Agreement, as it is formulated, opens up for a wide variety of solutions based on the minimum standards given. Whether such other solutions would be accepted by the TRIPS Council remains open, it has not yet been tested.

By 1 January 2000, 69 developing-country WTO members were to have implemented Article 27.3(b) of the TRIPS Agreement, but only 30 % of them had actually done so (GRAIN, 2000: 5). The number of developing countries that comply with or are in the process of implementing the TRIPS Agreement with regard to PGRFA is steadily increasing, as shown in the following table (based on GRAIN, 2004):

Developing countries in process of adapting, or having adapted, intellectual property rights legislation pertaining to PGRFA – largely based on UPOV

Asia	Africa	Latin America	Pacific region
Bangladesh	Algeria	Belize	
Bhutan	Egypt	Bolivia	
China	Kenya	Brazil	
India	Mauritius	Chile	
Iraq	Morocco	Colombia	
Jordan	South Africa	Costa Rica	
Oman	Zimbabwe	Ecuador	
Pakistan		Nicaragua	
Philippines		Panama	
Republic of Korea		Paraguay	
Saudi Arabia		Peru	
Sri Lanka		Trinidad and Tobago	
Taiwan		Venezuela	
Thailand			
Vietnam			

We will now explore the process of compliance in the case of one of these countries, the Philippines.

6. Implementing the TRIPS Agreement: The case of the Philippines

The Plant Variety Protection Act (Republic Act No. 9168)²³ was approved by President Gloria Macapagal Arroyo of the Philippines on 7 June 2002. Its implementing rules and regulations were adopted in February 2003 as Administrative Order 07 of the Department of Agriculture. The overall goal for the Plant Variety Protection Act (PVP Act) is to contribute to food security in the country (Section 2). For this purpose, the Act provides for the protection of exclusive rights over plant varieties to breeders who have bred them, particularly when beneficial to the people (ibid.). In other words, the basic assumption is that the protection of plant breeders' rights will contribute to higher levels of food security. This is a controversial assumption in the Philippines, with good arguments on both sides.

The PVP Act is the Philippine answer to the TRIPS Agreement Article 27.3(b), and it is almost a true copy of the UPOV 1991 Act. Plant breeders' rights are introduced as a means to encourage the participation of private enterprises and provide incentives to necessary investments in the development of new plant varieties, and to secure exclusive rights of scientists and other 'gifted citizens'²⁴ to their intellectual properties and creations. A breeder is defined as the person who has bred or discovered and developed a new plant variety, or his/her employer (Section 3, c).

Any breeder – whatever his/her nationality – may apply for a Certificate of Plant Variety Protection (Section 17). If the country of nationality of the foreign citizen or company affords similar privileges to Filipino citizens, the Act obliges the Philippine authorities to issue a Certificate of Plant Variety Protection, provided that the conditions in the Act are met (Section 23, national treatment). It is generally accepted that this reciprocity benefits foreign parties in the Philippines, as Philippine breeders are normally not in a financial and institutional position to use the system abroad.²⁵ Also in the Philippines, Philippine breeders will normally need to be subcontracted by an international corporation in the country with greater financial and institutional capacity in order to protect a plant variety – and will then subsequently have to share the benefits with that corporation.

The criteria for granting a Certificate of Plant Variety Protection follow the UPOV guidelines: novelty, distinctness, uniformity and stability. It is generally accepted that these criteria are hard to fulfil for farmer breeders in the Philippines, who will therefore not be in a position to use the system for their own breeding efforts.

The holders of Certificates of Plant Variety Protection have the exclusive right to authorize the production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the mentioned purposes (Section 36). This right includes harvested material (Section 38). Following UPOV 1991, the right in addition extends to varieties which are not clearly distinct from the protected variety, and essentially derived varieties (Section 39). These rights imply extensive possibilities for excluding others from the use of the variety in addition to similar varieties, compared to traditional plant breeders' rights as provided for in UPOV 1978 and earlier.

²³ Full title: *An Act to Provide Protection to New Plant Varieties, Establishing a National Plant Variety Protection Board and for Other Purposes*

²⁴ 'Gifted citizens' is the term used in the Philippine act.

²⁵ Based on approximately 80 interviews with stakeholders from all parties in the Philippines in May 2000 and March 2002.

As provided for in UPOV 1991 (optional), there are exemptions to the rights of the plant breeders in the PVP Act (Section 43). These are, however, wider than in UPOV 1991. As in UPOV 1991, acts done for non-commercial and/or experimental purposes are exempted. Also in line with UPOV 1991, acts done for breeding other varieties are exempted in the PVP Act (Section 43), but only if these new varieties are not essentially derived from and are clearly distinguishable from the protected variety. Different from UPOV 1991 is the wording as well as the exemptions pertaining to small-scale farmers. Farmers' traditions of saving, using, exchanging, sharing and selling their farm produce are termed a *right*, and are exempted from the rights of the plant breeders, provided that a sale is not for the purpose of reproduction under a commercial marketing agreement. This exemption also extends to the exchange and sale of seeds among and between farmers, if this is done for reproduction and replanting in their own land. In contrast, UPOV emphasizes that the legitimate right of the breeder must be protected, and makes it optional for governments to permit farmers to reuse their harvest from protected varieties for propagating purposes on their own land holdings, but not to exchange or sell such material.

An important question with regard to legislation on plant breeders' rights is how to establish an overview over *prior art*, i.e. the plant varieties *already existing*, in order to ensure the novelty of a plant variety for which a Certificate of Plant Variety Protection is applied and that farmers' varieties are not illegitimately protected. In short, farmers are made responsible for registering their own varieties, and the burden of proof rests with them and their organizations. They will have the work and costs involved in establishing community inventories, informing the registrar, obtaining and reading the Gazette, and filing opposition when necessary. In such cases, they will have to prove that the variety existed before the issuance of the Certificate. Proving that may be difficult, since one criterion for novelty is that the variety has been discovered and developed, and it is uncertain how much or little a breeder must add in terms of 'novelty' to qualify for a Certificate.

If implemented according to its intention,²⁶ the PVP Act can be expected to be conducive to the introduction of new varieties of plants in the Philippines by seed companies with the financial capacity to apply for Certificates of Plant Variety Protection and to retain these Certificates through annual fees. It may increase accessibility to such varieties for farmers who can afford them. Under favourable environmental conditions, this might increase productivity – a particularly important factor in view of the rapidly growing population in urban areas of the Philippines.

For small-scale breeders, including farmer breeders, the Act will represent a challenge, since they would normally not be able to afford expensive seeds or have the financial capacity to make use of the system, because their access to protected varieties for breeding purposes would be more restricted than before, and because they would have the burden of proof in cases where their own plant varieties were protected by others (who 'discover' and 'develop' them). For farmers, the new legislation represents a limitation of their rights to make use of PGRFA, compared to the earlier situation.

An increased market share of improved plant varieties – following from the Act – could help increase food production under the right conditions, but it would also contribute to the

²⁶ Implementation of the PVP Act is still in a transitional period. So far, the institutional infrastructure is under development, information workshops have been conducted to prepare potential applicants regarding their options and procedures, and provisional Certificates have been issued (Golez, 2004: 20–23). There is therefore not much empirical evidence as to how the Act will affect access to PGRFA in the Philippines.

replacement of traditional or more locally bred varieties, in turn resulting in lack of access to such varieties. Such a situation would particularly affect the large majority of farmers who cannot regularly afford expensive licensed seeds and propagating material, and who depend on access to a wide diversity of PGRFA.

The story of the Plant Variety Protection Act is a story about how an initiative for a genuine *sui generis* system in the Philippines was changed into an attempt to make the Philippines a member of UPOV '91, and how a foreign power had a crucial influence on that process. In short and very broadly, this is the tale:²⁷ From 1995 to 1999, various Philippine Congress representatives worked on a *sui generis* system for plant variety protection which sought to integrate concerns of equity derived from the Convention on Biological Diversity. Specifically, applicants for Certificates of Plant Variety Protection would have to disclose the sources of the parent varieties to the new plant, and document prior informed consent by those who provided them with the material. There were also other suggestions on how to ensure equity.

In 1999, a fully revised draft was proposed, almost an exact copy of UPOV 1991. The bill was proposed by a senator, but had been drafted by a consultant of AGILE.²⁸ AGILE – Accelerating Growth, Investment, and Liberalization with Equity – was a programme under USAID set up in 1997 to provide technical services to Philippine counterparts through training, consultants and production of information materials.²⁹ The overall goal was to revitalize the economy and transform governance to accelerate sustainable growth. Towards this end, various outcomes were defined, including greater competition in agriculture and trade.³⁰ The latter is the outcome towards which AGILE's engagement in the plant variety protection act was directed.

The main implementing institution of AGILE was the US-based consultancy firm, Development Alternatives, Inc. (DAI), which was subcontracted by USAID. DAI established satellite offices in at least 14 government agencies in the Philippines, including the Department of Agriculture.³¹ For these offices, DAI subcontracted Philippine consultants.³² The DAI consultants in the Department of Agriculture worked as employees of the Department and represented it in various external contexts,³³ whereas they were paid by DAI and reported to DAI. One of their main tasks was to ensure the adoption of a PVP Act.³⁴ This is how DAI reported about its experiences in the Philippines:

²⁷ This history is long and nuanced, and documented in detail in Andersen, forthcoming 2006.

²⁸ According to personal communication with that consultant, later confirmed in newspaper articles, see below.

²⁹ Embassy of the United States in Manila (2003): U.S. Embassy Statement on Agile, at: <http://manila.usembassy.gov/www/hagil.html>

³⁰ AGILE (2001): AGILE Concise Work Plan 2001-03 Showing Linkages With The Medium Term Philippine Development Plan For 2001 – 2004 And the July 2001 State of The Nation Address. Internal document obtained at USAID.

³¹ According to the brochure AGILE Accelerating Growth, Investment and Liberalization with Equity, produced by AGILE.

³² According to interview with a DAI consultant at AGILE in March 2002, and confirmed in The Manila Times 28 February 2003: AGILE: The basic facts, by Rene Q. Bas, at: <http://manilatimes.net/others/special/2003/feb/28/20030228spe1.html>

³³ This is self-experienced (documented in Andersen 2006).

³⁴ According to the DAI Statement of Work for November 2001 (p. 50), a 'key expected accomplishment' of its work in the area of intellectual property rights was 'Plant Variety Protection (PVP) legislation enacted by February 2002'. The DAI Statement of Work is an internal publication for AGILE in the Philippines, received at USAID.

In the Philippines, DAI (...) is working with the Department of Agriculture, redrafting PVP legislation to make it compliant with UPOV standards. DAI also is advocating for the PVP law in Congress, where it is pending. The key to DAI's strategy in the Philippines is to separate PVP from controversial issues of GMOs and the rights of indigenous communities. These issues are governed by separate legislation that requires environmental clearances before GMOs can be tested or marketed and that protects the rights of indigenous groups. DAI took key officials and congress persons to Argentina and the United States to learn about PVP programs and legislation. The Filipino Congress is expected to pass the PVP law within the next months. Anticipating the passage of the law, DAI staff have been preparing the ground for its implementation by helping the Department of Agriculture develop rules and regulations, and establish the PVP board, which is responsible for registration and enforcement of breeders' rights. (Kent and Bash, 2000)

The DAI objectives for PVP legislation materialized within few years, despite continued attempts to develop a genuine *sui generis* system for the Philippines.

Short before the signing of the Administrative Order of the new act, Philippine newspapers got hold of the story of AGILE and how it had been influencing Philippine politics. Senator Ralph Recto disclosed in a Senate meeting on 18 February 2003 that AGILE maintained satellite offices in a range of central government agencies and lobbied for the passage of several laws.³⁵ Senator Sergio Osmeña raised concern over AGILE's threat to the country's sovereignty, noting the powerful influence of its agents on the administration of the President of the Philippines. He claimed that AGILE was crafting various legislation that involved foreign interests and questioned whether his country was again becoming a US colony.

In a Senate Hearing on 19 February, Senator Manuel Villar said that it was only now that he realized that all the bills that were given priority in the Legislative-Executive Development Advisory Council had been sponsored by AGILE. Now he understood why so little attention had been paid to bills on health, education and other topics that matter to the people.³⁶ Also Senator Osmeña claimed that he had not been aware of AGILE's strategy, and that he felt duped. He demanded that the subversion and infiltration of the bureaucracy, particularly connected with policy formulation, be investigated.³⁷ The Senate called AGILE officials to the hearing, but these claimed protection through an old law from 1952 that provided diplomatic immunity.

On 26 February, US ambassador Ricciardone went out in the media claiming that AGILE had rendered services to senators, including those attacking the group, by providing technical assistance in their legislative work. He, however, declined to mention any names.³⁸ This was considered a threat and provoked harsh criticism in the media against the US ambassador. Soon after, the topic disappeared from the Senate – and from the newspapers. Nothing was done to address the acts that had been lobbied by AGILE. In the meantime, AGILE has ceased to exist, and all references to the programme have been deleted from the home page of the US Embassy, except for one statement.

³⁵ See *inter alia* *Daily Tribune*, 19 February 2003: 'US funded lobby group rapped for espionage'. Article by Angie M. Rosales (website).

³⁶ *Daily Tribune*, 20 February 2003: 'BAP chief's firm linked to AGILE-USAID-DAI funds'. Article by Angie M. Rosales.

³⁷ *Manila Times* Internet Edition, 21 February 2003: 'Senators ignore USAID exec's defense of AGILE'.

³⁸ *Daily Tribune*, 27 February: 'Senators rap Ricciardone as AGILE protector'. Article by Angie M. Rosales.

Whereas the US embassy holds that AGILE is a joint project between the governments of the USA and the Philippines,³⁹ and that the assistance is demand-driven,⁴⁰ the above documents a different situation – one of intervening in internal processes in the Congress of the Philippines. From June 1998 until June 2003, the US Congress earmarked a total of USD 41,212,527 for AGILE – covering all its work in the fields of politics in the Philippines.⁴¹

As this story shows, there were strong and powerful foreign interests involved in the process that led to the adoption of the PVP Act and its initial implementation. As documented in detail in Andersen (forthcoming 2006), these interests effectively weeded out all references to prior informed consent, benefit sharing, and other provisions that had been proposed to ensure an equity dimension in the new Act (referring particularly the Convention on Biological Diversity). Thereby they used the TRIPS Agreement as leverage, and argued that UPOV-compatible legislation would be the only safe way to ensure that the TRIPS Council would accept the Act as Philippine compliance with Article 27.3(b).

7. Structural power as a mechanism of influence

As we have seen, the political economic structures of plant breeding and trading were decisively changed with the introduction of the PVP Act in the Philippines, altering the conditions under which political institutions, economic enterprises and their professional people operate in the country. In this section, we ask whether and how the developments in the Philippines can be explained in a Structural Power perspective.

An important question to clarify is whether the power exercised in the Philippines was relational or structural – or a combination of both. It could be argued that the strong role of USAID would suggest that this is more about relational than structural power, i.e. that it is a case of the United States influencing the Philippines. The USA is certainly central in this regard, but there were also other actors involved. These include transnational corporation like Pioneer Hi-Bred and Monsanto, as well as UPOV and the WTO Secretariats (Andersen, 2006, forthcoming). It is difficult to gauge their roles and relative influence. We know only that they all pushed in the same direction. Nevertheless, it could be argued that the United States has worked through UPOV as well as the WTO for the same purpose as it pursued in the Philippines, and that the aim has basically been to secure US business interests in the Philippines (and elsewhere). In a power perspective, the interdependency between the two countries shows clear patterns of asymmetries (see Keohane and Nye, 1977), with USA far more powerful than the Philippines. Thus, power relation between the two can be described as relational.

On the other hand, one needs to study very carefully from where this relational power comes, and how it works. In spearheading US business interests in the Philippines, transnational corporations are actually the main beneficiaries, since the seed companies that control most of the seed market are all transnational corporations – whether US-based or not. Also key

³⁹ Embassy of the United States in Manila: U.S. Embassy Statement on AGILE, at: <http://usembassy.state.gov/posts/rp1/wwwhagil.html>

⁴⁰ In the AGILE brochure *AGILE Accelerating Growth, Investment and Liberalization with Equity*, published by USAID and the Republic of the Philippines.

⁴¹ Information previously available from the DAI website at http://www.dai.com/projects/text_only/asia_text_only/agile_text_only.htm printed out on 20 February 2003 (no longer more available on the Internet).

arguments that the Philippines had to comply with its WTO commitments – and that this had to be done through UPOV’91-compatible legislation – indicate an international dimension. The initiative for provisions on intellectual property rights on plants in the TRIPS Agreement came from US business people, which shows that these multilateral instruments were used as leverage to push for changes in global political economic to pursue own interests. The initiative was soon supported by stakeholders in other Western countries, and eventually resulted in the inclusion of such provisions in the TRIPS Agreement. There are obviously larger structures through which key actors operate, and through which structural power is exercised.

In other words, and in line with our discussion of the theory of Structural Power, it makes sense to see relational and structural power as two sides of the same issue, in order to obtain the fullest possible understanding of the situation. I use the term ‘Structural Power’ to cover both approaches, since I regard relational power as a component of structural power – which can be more or less dominant, but which nevertheless must be understood in the broader context.⁴²

The theory of Structural Power provides a fruitful perspective for analysing the legislation process that led up to the PVP Act and its initial implementation. Structural power can be seen as a central mechanism of influence, i.e. a mechanism through which influence takes place, in this regard – and as such as a central factor in explaining Philippine compliance with the Article 27.3 (b) of the TRIPS Agreement.

8. Relevance for other developing countries

The experiences from the Philippines are unique in certain ways, but also have features that are comparable across countries. The central element of these features is pressure. Considerable work remains to investigate how pressure is exercised in different countries, but a common denominator in many countries is that of the so-called TRIPS-plus agreements:

Developed countries and groups of such countries negotiate bilateral and regional trade and investment agreements with individual or groups of developing countries. Under such constellations, the developing countries have a considerable weaker bargaining position. Increasingly, bilateral and regional agreements between developed and developing countries have come to include provisions on intellectual property rights. In general, developing countries have to introduce intellectual property rights at higher standards than those provided for under the TRIPS Agreement, and they are often obliged to join UPOV 1991 within a certain deadline – thus, these agreements are often called ‘TRIPS-plus’ agreements (Vivas-Eugui, 2003). The USA, the European Free Trade Association and the European Union are among the active proponents and initiators of bilateral and regional agreements, and have established such agreements with many developing countries:

⁴² A detailed analysis of structural power in the case of the Philippines, including actor analysis, sources of power, related institutional factors and a discussion of other possible explanatory factors is provided in Andersen, 2006, forthcoming.

Developing countries⁴³ in process of entering into, or having entered into, bilateral agreements imposing TRIPS-plus Intellectual Property Rights on biodiversity⁴⁴ in their countries (counterparts in brackets)

Status	Asia/Pacific	Africa	Latin America⁴⁵
Agreement signed and/or entered into force	Bahrain (US) Bangladesh (EU) Cambodia (US) Jordan (EFTA; EU; US) Korea (EFTA; EU; US) Laos (US) Lebanon (EFTA; EU) Mongolia (US) Oman (US) Palestinian Auth. (EFTA; EU) Singapore (US) Sri Lanka (EU; US) Syria (EU) Vietnam (US; Switzerland)	Algeria (EU) Egypt (EU) Morocco (EFTA; EU; US) South Africa (EU) Tunisia (EFTA; EU)	Bolivia (US) Chile (EFTA; US) Colombia (US) Dominican Republic (US) Ecuador (US) Mexico (EFTA; EU) Nicaragua (US) Peru (US) Trinidad & Tobago (US) Venezuela (US)
Ongoing negotiations as of September 2005	Bahrain (EFTA) China (EFTA) Iran (EU) Kuwait (EFTA) Oman (EFTA) Qatar (EFTA) Saudi Arabia (EFTA) Thailand (EFTA; US) Unit. Arab Emir. (EFTA; US)	Algeria (EFTA) Botswana (EFTA) Egypt (EFTA) Lesotho (EFTA) Namibia (EFTA) South Africa (EFTA) Swaziland (EFTA)	Argentina (EU) Bolivia (EU) Brazil (EU) Caribbean Basin (US) Colombia (EU) Ecuador (EU) Panama (US) Paraguay (EU) Peru (EU*) Uruguay (EU) Venezuela (EU)

Based on GRAIN, 2005

In these cases, there is reason to assume that structural power may represent a central mechanism of influence, contributing to the explanation of why and how these countries comply with their obligations towards Article 27.3 (b) of the TRIPS Agreement.⁴⁶

⁴³ Some of these countries have entered into the agreement as groups, see GRAIN (2005).

⁴⁴ Contents and documentation of the agreements are provided in GRAIN (2005).

⁴⁵ The Free Trade Area of the Americas currently under negotiation is not covered in this overview. The draft contains strict provisions on intellectual property rights on plant genetic resources.

⁴⁶ Domestic institutional factors – and their interaction with structural power – are also important in this context, as further elaborated in Andersen (forthcoming 2006).

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