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Regime Tension in the Intellectual Property Rights Arena: Farmers' Rights and Post-TRIPS Counter Regime Trends

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Recognizing the transitions that have occurred in the global intellectual property arena since the TRIPS Agreement, this article identifies and examines key sites of the counter regime trends in intellectual property rights with a focus on farmers' rights. It invokes farmers' rights to highlight the conceptual and juridical hurdles facing the new issue-linkages that propel attempts to redress the shortcomings of the TRIPS' trade-centred approach to intellectual property. The author argues that the existing juridical framework for farmers' rights, especially under the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA), although inchoate, is stymied and not competent to realize the expectations underlying those rights. The notion of farmers' rights would be better promoted under the canopy of the more unifying framework of other post-TRIPS counter-regime trends, especially the protection of the bio-cultural knowledge of indigenous and local communities, pursuant to the framework Convention on Biological Diversity.

Reconnaissant les changements qui se sont produits sur la scène mondiale en matière de propriété intellectuelle depuis la signature de l'Accord sur les aspects des droits de propriété intellectuelle qui touchent au commerce (Accord sur les ADPIC), l'article définit et examine des points clés des tendances contradictoires relativement aux droits de propriété intellectuelle, s'arrêtant particulièrement aux droits des agriculteurs. Il parle des droits des agriculteurs pour illustrer les questions conceptuelles et juridiques qu'il faut résoudre pour combler les lacunes de l'approche de la propriété intellectuelle préconisée par l'Accord sur les ADPIC, soit une approche axée sur le commerce. L'auteur allègue que le cadre juridique actuel des droits des agriculteurs, en particulier sous le régime du Traité international sur les ressources phytogénétiques pour l'alimentation et l'agriculture, même si le cadre est imparfait, est contrecarré et ne permet pas de réaliser les attentes soulevées par ces droits. La notion de droits des agriculteurs serait mieux défendue à l'intérieur du cadre plus unificateur d'autres tendances qui ont émergé à la suite de la conclusion de l'Accord, en particulier la protection des connaissances traditionnelles des collectivités autochtones et locales dans les domaines de la biologie et de la culture, dans le cadre Convention sur la diversité biologique.

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Introduction

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Introduction

In 1986, industrialized countries, led by the United States, incorporated regulation of intellectual property into the international trade negotiations of the World Trade Organization (WTO).² This initiative resulted in the *Agreement on Trade-Related Aspects of Intellectual Property Rights* (TRIPS),³ one of the 28 agreements produced by the Uruguay Round of Multilateral Trade Negotiations of the WTO.⁴ Backed by the WTO dispute settlement and enforcement apparatus, TRIPS today is the most authoritative global regime on intellectual property regulation.⁵

The shift of international intellectual property from the traditional supervised framework of the World Intellectual Property Organization (WIPO)⁶ into the international trade arena of the WTO is catalytic of current debates and tensions surrounding intellectual property. The tensions are exacerbated by a combination of circumstances implicated in the underlying ideology of the TRIPS Agreement⁷ vis-à-vis the original WIPO framework. These include the radical and far-reaching nature of the changes in intellectual property in terms of both ideological and conceptual details, the circumstances under which the TRIPS Agreement

1. "Regime tension" is used loosely in this article in reference to the general character of the international intellectual lawmaking landscape consequent to the phenomenon of the "regime shift" in the intellectual property arena occasioned by the TRIPS Agreement and other counter regime trends post-TRIPS. See *infra* note 9 and accompanying text. For an elaborate treatise on regime shift in intellectual property which is endorsed in this article, see Laurence Helfer, "Regime Shifting: The TRIPs Agreement and New Dynamics of International Lawmaking" (2004) 29 *Yale J. Int'l L.* 1 at 14 [Helfer, "Regime Shifting"]; see also the following: Marney L. Cheek, "The Limits of Informal Regulatory Cooperation in International Affairs: A Review of the Global Intellectual Property Regime" (2001) 33 *Geo. Wash. Int'l L. Rev.* 277; Ruth L. Okediji, "The International Relations of Intellectual Property: Narratives of Developing Country Participation in the Global Intellectual Property System" (2003) 7 *Sing. J.I.C.L.* 315 [Okediji, "Developing Country Participation"]; Peter K. Yu, "Currents and Crosscurrents in the International Intellectual Property Regime" (2004) 38 *Loyola of Los Angeles L. Rev.* 323, Ruth L. Okediji, "Back to Bilateralism? Pendulum Swings in International Intellectual Property Protection" (2004) 1 *University of Ottawa Law and Technology Journal* 125.

2. Deliberations over the TRIPS Agreement as part of the renewed rounds of GATT/WTO negotiations which culminated in the formation of the WTO as a successor to the GATT commenced in Punta del Este in 1986 and were concluded in the Uruguay Rounds in 1994.

3. *WTO Agreement on Trade-Related Aspects of Intellectual Property Rights*, 15 April 1994, 33 I.L.M. 1197, online: WTO <www.wto.org/english/tratop_e/trips_e/t_agmo_e.htm> [TRIPS].

4. See *Marrakesh Agreement Establishing the World Trade Organization*, 15 April 1994, 1867 U.N.T.S. 3.

5. See Peter Drahos & John Braithwaite, *Information Feudalism: Who Owns The Knowledge Economy?* (New York: The New Press, 2002) at 12 [Drahos & Braithwaite, *Information Feudalism*].

6. See *The Convention Establishing the World Intellectual Property Organization*, 14 July 1967, 828 U.N.T.S. 3 (amended 28 September 1979).

7. Underlying ideology is used narrowly here in reference to TRIPS' insensitivity or nonchalant outlook on social and public welfare considerations in intellectual property jurisprudence and, to some extent, in reference to the agreement's negative effects in a number of respects, including enclosure of policy space, undue emphasis on "commodity logic" and the issue of democratic deficit in the WTO process.

was concluded, and the emerging trends of the post-TRIPS era. Others are the pivotal nature of intellectual property in the current transition to a knowledge-based economy spurred by two major technological revolutions of the twentieth century – digital and biotechnologies⁸ – and the complicity of globalization in the timing of the regime shift⁹ in intellectual property.

The combination of the above circumstances and the disenchantment over the perceived democratic deficit in the making of the TRIPS Agreement¹⁰ are implicated in the extant tension and resistance in international intellectual property lawmaking. The resistance is championed mainly by developing countries, non-governmental and civil society organizations and intergovernmental bodies interested in moderating the overarching trade-based ideology of TRIPS and its consequences mainly for those countries. By a strategy of issue linkage, these interest groups press for the diversification of the conceptual framework of intellectual property to accommodate mostly new areas undermined by the TRIPS Agreement, such as biodiversity and indigenous knowledge, public health and human rights, and plant genetic resources for food and agriculture to mention a few.

The transfer of intellectual property to the trade arena is driven by “commodity logic”¹¹ which compromises or stymies the social interest ideology with which the developing countries approached intellectual property issues before TRIPS. In the trade arena, intellectual property is deployed in a manner that relegates social interest considerations, imposes artificial scarcity on information, inflates its price, distorts the balance between public and private claims to knowledge in favor of the latter, supervises the plunder of the commons, and shuns the diffusion of

8. See Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 10.

9. Helfer articulates the concept of regime shift “as an attempt to alter the status quo ante by moving treaty negotiations, lawmaking initiatives, or standard setting activities from one international venue to the other” in a manner that “provides an opportunity [or opportunities] to generate “counterregime norms” – binding treaty rules and nonbinding soft law standards that seek to alter the prevailing legal landscape” (footnotes omitted); see Helfer, “Regime Shifting,” *supra* note 1 at 14; see generally Cheek, *supra* note 1.

10. See Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at c.12; see also Helfer, “Regime Shifting,” *supra* note 1 at 20-1. See generally John Braithwaite & Peter Drahos, *Global Business Regulation* (Cambridge: Cambridge University Press, 2000) [Braithwaite & Drahos, *Global*].

11. Commodity logic perceives knowledge not as a public good but as a private one. It de-emphasizes the notion of knowledge as a common heritage and shrinks the sphere of public domain and social policy. Under that logic, intellectual property is the major incentive for productivity, one that guarantees return to investment in which knowledge can be privatized and commodified for trade under the market economy. See James Thuo Gathii, “Rights, Patents, Markets and the Global AIDS Pandemic” (2002) 14 Fla. J. Int’l L. 261 at 309 [Gathii]. See generally, Drahos & Braithwaite, *Information Feudalism*, *supra* note 5; Keith E. Maskus & Jerome H. Reichman, eds., *International Public Goods And Transfer Of Technology Under Globalized Intellectual Property Regime* (Cambridge: Cambridge University Press, 2005) [Maskus & Reichman, *International Public Goods*].

knowledge in preference to its conditional rationing.¹² These translate into human rights crises, escalating social tensions in developing countries, and the fostering of a continuing culture of suspicion and distrust between developing and developed countries in the global constitutive process.

Recognizing the transitions that have occurred in the intellectual property arena under the aegis of the WTO following the coming into force of the TRIPS Agreement, this article identifies and examines key sites of the counter regime trends in intellectual property rights. It highlights farmers' rights, in admittedly moderate detail, situating them within the framework of the several complex issues jostling under the counter regime umbrella. Even though the phenomenon of farmers' rights does not seem to be directly implicated in the extant tension in the intellectual property regime, I argue that the TRIPS Agreement provides impetus for the farmers' rights movement as part of the counter regime dynamic. Specifically, this paper uses farmers' rights to highlight the conceptual and juridical hurdle facing the new issue linkages that propel attempts to redress the shortcomings of the TRIPS' trade-centred approach to intellectual property.

Faulting the emerging and rather ambiguous conceptualization of farmers' rights jurisprudence, I favour the incorporation of farmers' rights into the broader or perhaps more potentially unifying framework of other counter regime trends, especially the protection of the bio-cultural knowledge of indigenous and local communities under the *Convention on Biological Diversity* (CBD).¹³ I argue that, on its own, the existing juridical framework for farmers' rights, especially under the *International Treaty on Plant Genetic Resources for Food and Agriculture* (ITPGRFA),¹⁴ although inchoate, is stymied and not competent to realize the expectations underlying those rights.

The paper is divided into four parts. Part I elaborates the international economic and legal backdrop of the TRIPS Agreement. Part II explores factors underlying the counter regime pressure in international intellectual property lawmaking, implicating the globalization phenomenon in the process. Part III identifies and discusses a few principal sites or domains of counter regime trends in the post-TRIPS intellectual property arena,

12. See Keith E. Maskus & Jerome H. Reichman, "The Globalization of Private Knowledge and the Privatization of Global Public Goods" in Maskus & Reichman, *International Public Goods*, *ibid.* at 41 [Maskus & Reichman, "Globalization"] (arguing that "aggregate investments in R&D depend on private intellectual property rights, especially patents, which deliberately restrain trade").

13. *United Nations Conference on Environment and Development: Convention on Biological Diversity*, (5 June 1992), 31 I.L.M. 818 (1992) [CBD].

14. *The International Treaty on Plant Genetic Resources for Food and Agriculture*, 3 November 2001, online: Food and Agriculture Organization of the United Nations <<http://www.fao.org/AG/cgrfa/itpgr.htm#text>> [ITPGRFA]. The ITPGRFA opened for signature on November 3, 2001. It came into force on June 29, 2004 following 54 ratifications.

namely biodiversity and indigenous knowledge, public health and human rights.

Part IV draws plant genetic resources (PGRs) for food and agriculture into the counter regime analysis. In an attempt to situate farmers' rights within the matrix of the intellectual property regime, Part IV begins with a cursory overview of the quasi-intellectual property regime of Plant Breeders' Rights (PBRs) under the enabling juridical instrument, the *International Convention for the Protection of New Varieties of Plants* (UPOV).¹⁵ It also notes how, beyond UPOV, TRIPS incorporates and affirms the extension of intellectual property rights to PGRs, universalizing the sphere of application and legitimacy of PBRs and related interests across the WTO membership. Thus, the co-option of *sui generis* options for the protection of PGRs, including PBRs, into TRIPS and their consequent empowerment within the framework of the WTO enforcement apparatus provide the impetus for farmers' rights as a counter regime initiative.

The current highpoint of farmers' rights jurisprudence is found in ITPGRFA provisions. Even though these provisions antedate the TRIPS Agreement, they have a post-TRIPS impact. The last section of Part IV explores closely, even if briefly, the notion of farmers' rights. It highlights the phenomenon's underlying conceptual difficulties as part of the overall challenge inherent in the counter-hegemonic nature of general attempts to re/address the social policy deficit in the trade-based ideology of the intellectual property regime under the TRIPS Agreement. Given the weakness inherent in farmers' rights, especially within the rubric of the qualifications in ITPGRFA, significant doubts exist about the realization of their underlying objectives. Hence there is a need to consider the farmers' rights project as a counter regime initiative within a potentially more unifying and established platform such as the one provided under CBD,¹⁶ especially in regard to the protection of the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles.

I. *International economic and legal backdrop of the TRIPS Agreement*

The transition in international intellectual property governance from the WIPO to the WTO/TRIPS framework is a byproduct of the crisis of

15. See *infra* note 81 and accompanying text.

16. The CBD approach does not, however, present an ultimate solution. Indeed, there is a virtual consensus that the CBD regime is antithetical to the WTO/TRIPS framework. Since the coming into force of the two regimes concerted attempts continue to be made to reconcile their conflicted orientation. Nonetheless, the CBD is an established model which can accommodate, in a uniform framework, diverse issues such as farmers' rights and other open-ended claims for equity in international intellectual property lawmaking, especially those coterminous with protection of indigenous knowledge and innovations.

confidence between developed and developing countries on the subject of intellectual property.¹⁷ It also epitomizes the two geopolitical blocs' conflicted ideological approaches to and expectations for the intellectual property system. Historically, upon becoming a specialized agency of the United Nations, WIPO's mandate focused on "promoting creative intellectual property activity ... for facilitating the transfer of technology related to industrial property to the developing countries in order to accelerate economic, social and cultural development."¹⁸ The linkage of intellectual property to the socio-cultural and economic well-being of developing countries espouses a vision or ideology of intellectual property to which WIPO was originally committed.¹⁹

These social and public welfare approaches to intellectual property rights had little attraction for industrialized countries which were interested in strategically positioning themselves at a time when revolutions in digital/information and biotechnologies were transforming the world into what commentators tagged the knowledge economy.²⁰ Both digital and biotechnologies marked a shift from a traditional economy. Traced from the agricultural to industrial revolution, global economic advance has now entered the information age. Information is the hub of the knowledge economy. Whilst the agricultural revolution was propelled by land and labour, and the industrial revolution by mass-produced physical goods and services, the information revolution of the knowledge economy is driven by intellectual property²¹ as the primary mechanism for the allocation of rights over the products of knowledge. Thus, intellectual property is the currency of the knowledge economy and the information age.²²

Because of the fluidity of knowledge and information, a tighter or strengthened regime of boundary fencing through intellectual property

17. See A. Samuel Oddi, "The International Patent System and Third World Development: Reality or Myth?" (1987) 1987 Duke L.J. 831; Ruth L. Gana, "Has Creativity Died in the Third World? Some Implications of Internationalization of Intellectual Property" (1995) 24 Denv. J. Int'l L. & Pol'y 109. See also Rafik Bawa, "North-South Divide Over the Protection of Intellectual Property" (1997) 6 Dal. J. Leg. Stud. 77.

18. Art. 1, *Agreement between United Nations Organization and the World Intellectual Property Organization*, 17 December 1974, at art. 1, online WIPO <<http://www.wip.int/treaties/en/agreement/>>. This is the agreement that brought the WIPO into the UN system and made it one of the UN's specialized agencies.

19. Since the TRIPS Agreement, the extent of WIPO's commitment is moderated by the provisions of that Agreement which have whittled down the sphere of economic sovereignty of national governments.

20. See generally Drahos & Braithwaite, *Information Feudalism*, *supra* note 5; Braithwaite & Drahos, *Global*, *supra* note 10.

21. George S. Takach, *Computer Law*, 2nd ed. (Toronto: Irwin Law, 2003) at 48-49 [Takach] (arguing that the information age does not displace the two previous eras. Rather, it fosters efficient service delivery in agricultural and industrial activities).

22. *Ibid.* at xxi. See also Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 1-2.

regulation became a critical imperative for key players in the knowledge economy. The dissatisfaction of the developed countries with WIPO's mandate forebode an ideological schism in the elaboration of a competing philosophy of intellectual property. Consequently, by deft manoeuvres, the United States and a few other industrialized countries succeeded in incorporating intellectual property into the Uruguay Round of Multilateral Trade Negotiations.²³ Their effort paid off and was elaborated in the 1994 GATT/WTO-TRIPS Agreement. Even though the agreement's ostensible focus was on trade-centred issues, in truth, TRIPS encapsulated and reified virtually all aspects of intellectual property, extending private ownership and proprietary claims to hitherto excluded fields both of the commons and of diverse human endeavours. The re/location of intellectual property within the then new WTO framework (GATT's successor regime) brought it to the centre of traditional debate over the role of social and economic factors in the international legal constitutive and decision-making process.

In a 2002 article,²⁴ Professor James T. Gathii discussed the ambiguous place of social policy in the international economic and political institutional frameworks of the post-Second World War era. According to him, the classical view of international economic institutions, including the World Bank (the Bank), the International Monetary Fund (IMF), and, by extension, the GATT/WTO in relation to the United Nations, its organs, and specialized agencies, reflects the conceptual bifurcation of private and public international law.²⁵ While international economic institutions narrowly construe their mandate to be mainly economic and financial, and as having limited, if any, social agenda, the United Nations' role was acknowledged to be essentially socio-political.²⁶ This distinction is reflected in the operational modalities of these institutions. According to Gathii:

This post-Second World War settlement between public and private international institutions was not accidental, rather it was the result of conscious design by architects who wanted to safeguard the international economy from the whims of politicians. In the view of these architects, politicians had endangered the international economy in the period

23. The U.S. was spurred on by its powerful transnational pharmaceutical corporations. For the role and influence of these pharmaceutical lobbies on US intellectual property policies, especially as they relate to the TRIPS Agreement, see Drahos & Braithwaite, *Information Feudalism*, *supra* note 5. For history of the formation of the TRIPS Agreement, see Daniel Gervais, *The TRIPS Agreement: Drafting History and Analysis*, 2nd ed. (London: Sweet and Maxwell, 2003).

24. See Gathii, *supra* note 11 at 295-333; See also James Thuo Gathii, "Re-Characterizing the Social in the Constitutionalization of the WTO: A Preliminary Analysis" (2001) 7 *Widener L. Symp.* J. 137.

25. Gathii, *supra* note 11 at 300.

26. *Ibid.* at 296.

following the First World War Hence, it was necessary to impose restrictions on political influence over international economy by placing power into the hands of technocrats.²⁷

Because of the perceived dichotomy in the mandates of the United Nations and those of the Bretton Woods institutions, historically the latter eschewed consideration of social or political exigencies in the implementation of their mandates.²⁸ For instance, the World Bank was barred from interfering in members' political affairs and forbidden from being "influenced in [its] decisions by the political character"²⁹ of member states. Consequently, international economic and financial institutions tended to be narrow in their focus and to maintain positions that isolated them from the underlying broader commitments to the socio-political imperatives of international comity characteristic of public international law.

Inevitably, the conceptual dichotomy between public and private international law as they corresponded to the mandates of international economic institutions and the remaining institutions of public international law was not to endure. For instance, even within public international law, international legal scholarship has chiselled down the dichotomy in the hierarchical elaboration and separation of the International Bill of Rights between civil and political rights on the one hand, and economic, social, and cultural rights on the other.³⁰ Today, because of the principle of interrelatedness of rights, it is not off the mark to argue that what is left of that conceptual dichotomy is rhetorical or at best theoretical.³¹

27. *Ibid.*

28. The agreement between the World Bank and the United Nations recognized the Bank as an independent organization. However, it required the Bank to observe the resolutions of the United Nations Security Council. See *Agreement Between the United Nations and the International Bank for Reconstruction and Development*, Nov. 15, 1947, arts. I § 2, VI § 1, 16 U.N.T.S. 346 (1948); Gathii *supra* note 11 at 297 and nn. 129-131; see also Samuel A. Bleicher, "UN v. IBRD: A Dilemma of Functionalism" (1970) 24 *International Organization* 31, cited in Gathii, *supra* note 11. Yet, in 1969, the Bank ignored both General Assembly and Security Council Resolutions for suspension of lending to Portugal and South Africa for reasons of continued colonial activities in Africa and apartheid policies respectively.

29. *Articles of Agreement of the International Bank for Reconstruction and Development* (establishing the World Bank) Sec. 27, 1945, art. IV §10, U.N.T.S. 134, 158 "Interdisciplinary Approaches to International Economic Law"; see also art. III § 5(b); Gathii, *supra* note 11 at 296-97 and n. 127; Nathaniel Berman, "Economic Consequences, Nationalist Passions: Keynes, Crisis, Culture, and Policy" (1995) 10 *Am. U.J. Int'l L. & Pol'y* 619.

30. See Henry J. Steiner & Philip Alston, *International Human Rights In Context: Law, Politics and Morals*, 2nd ed. (Oxford: Oxford University Press, 2000) at 268 (arguing that principles of indivisibility, interdependence and interrelatedness of all rights drive the approach to resolve this dichotomy despite continuing insistence in some quarters that civil and political rights take priority).

31. *Ibid.*

The faint border between economic, social, and political subject matter has continued to peter out in the post-Second World War era.³² Gradual transformations on the global political landscape from the 1960s to the 1990s emphasize the relationship between economic and financial mandates of international economic institutions and social issues, such as human rights as encapsulated in the United Nations International Bill of Rights.³³ From an historical indifference to social and human rights issues, the Bank and other international economic institutions have turned full circle. Since the 1990s, the Bank has, through its good governance policy “which combines economic and political conditionality,”³⁴ provided an entry point for the incorporation of the elements of the International Bill of Rights into its mandate. For instance, environmental accountability and regard for indigenous ecological vulnerability and other general human rights concerns are now matters that moderate international economic policies within and outside the structure of international economic institutions.³⁵

For Gathii, the reconstruction of the Bank’s mandate is hardly evolution and progress from the classical position, which held that such institutions were impervious to social issues, to a modern one which is conversely inclined.³⁶ Rather, “both the World Bank’s Articles of Agreement and the International Bill of Rights provide a sufficiently open-ended interpretive arena for continued redefinition of the role of the World Bank with respect to human rights.”³⁷ In this open-ended interpretive space which most private international economic institutions share in their enabling instruments, it remains extremely difficult to attack their underlying historical ideology on

32. For instance, the evolution of international environmental law from the 1972 United Nations Conference on the Human Environment (UNCHE) marked the entry of environmental, developmental and social factors into global economic policy making.

33. Comprising the *Universal Declaration of Human Rights*, G.A. Res. 217A (III), 3(1) U.N. GAOR Resolutions 71, U.N. Doc A/810 (1948), the *International Covenant on Civil and Political Rights*, 999 U.N.T.S. 171 (1966), and the *International Covenant on Economic, Social and Cultural Rights*, 993 U.N.T.S. 3.

34. Gathii, *supra* note 11 at 298.

35. Interest in the relationship between environment and development in the early 1970s and its continued evolution help in part to explain this volte face. See Ibrahim Shihata, “Democracy and Development” (1997) 46 I.C.L.Q. 635 (on progressive reinterpretation of the World Bank’s mandate). Article XX of GATT, on general exceptions, is the most notable example of the incorporation of social issue sensitivity into the international economic and trade policy framework. See *infra* note 39 and accompanying text.

36. Gathii, *supra* note 11 at 299.

37. *Ibid.* See also Laurence R. Helfer, “Human Rights and Intellectual Property: Conflict or Coexistence?” (2003) 5 Minn. Intell. Prop. Rev. 47 at 57 [Helfer, “Human Rights”] (noting the elasticity of human rights law); Maskus & Reichman, “Globalization,” *supra* note 12 at 30; Helfer, “Regime Shifting,” *supra* note 1 at 58.

the basis of indifference to human rights and other social considerations.³⁸ In part, this explains the ambiguous treatment of the role of social issues in international economic policy.

The industrialized countries' decision to make intellectual property a trade issue before the WTO underscores the dominant ideological consideration behind that initiative. It is obvious from the 1974 agreement between the WIPO and the United Nations, by which WIPO became the latter's specialized agency, that the WIPO regime of international intellectual property fits within the political and social interest nuances of the public international law of the United Nations. As I have already noted, Article 1 of the agreement, which is pivotal to that framework, links intellectual property to technology transfer and to political, economic, and socio-cultural contingencies in developing countries.³⁹ Perhaps most importantly, it engrafts and co-opts the WIPO into the public international legal framework of the United Nations system in harmony with the mission of the United Nations' other agencies.⁴⁰ In the GATT/WTO arena, intellectual property is incorporated automatically into "the internal logic of international economic governance."⁴¹ A critical aspect of that internal logic is driven by the classical ideology of trading regimes in international

38. Ghatii observes that "[t]his possibility of ambiguity in interpreting and reinterpreting the World Bank's Articles of Agreement and the International Bill of Human Rights simultaneously empowers and disempowers those involved in this interpretive and strategic work as each side constructs its case," *supra* note 11 at 299. See also Doris Estelle Long, "'Democratizing' Globalization: Practicing the Policies of Cultural Inclusion" (2002) 10 *Cardozo J. Int'l & Comp. L.* 217 at 252, 256 and n. 156 [Long] (arguing that "the more open-ended language in TRIPS ... necessarily allows for a range of domestic policy choices" that could address social policy concerns); J.H. Reichman, "From Free Riders to Fair Followers: Global Competition under the TRIPS Agreement" (1997) 29 *N.Y.U.J. Int'l L. & Pol.* 11 (on the flexibilities in the TRIPS Agreement that accommodate developing countries' peculiar needs).

39. See *supra* note 18 and accompanying text.

40. See also *supra* note 18 at Art. 2.

41. Gathii, *supra* note 11 at 295.

law as self-contained frameworks with little or no obligation to socio-political and other public interest claims and considerations.⁴²

A fundamental principle of intellectual property philosophy is the need to strike a balance between private and public claims to knowledge and innovation. Commitment to one extreme of the competing tensions distorts the essence of intellectual property. Because of its root in the internal logic of international economic governance, that is, in the trade arena, current intellectual property policy emphasizes one end of the spectrum of the competing claims, namely, private claims to knowledge as against public claims and their underlying policy considerations. The dominant pull of intellectual property policy in the trade arena is the so-called "commodity logic," which is "based on maximizing profits to producers of IPRs."⁴³ This vision of intellectual property rights is mainly championed by Western countries. It stands in conflict with a core objective of intellectual property in terms of fostering innovation on the one hand. Also, on the other hand and most important for present purposes, it undermines an alternative vision of intellectual property, one that supports the role of intellectual property in promoting public claims to knowledge and other issues bordering on social justice or public interest.

Similar to the position under international economic institutions and, by extension, under private international law, the extent to which the WTO-TRIPS Agreement accommodates social policy for a balanced vision of intellectual property is at best ambiguous. However, again, as with the articles of the IMF and other Bretton Woods institutions and their continuing reconstruction in response to human rights and social policy issues, TRIPS contains far more open-ended interpretive space in its text. For instance, its graded transitional provisions, and the provisions

42. Gathii, *supra* note 11 at 303-304 defines this view as a constitutionalist approach which is supported by some fairly recent jurisprudence emanating from the GATT, especially in the *Thai Cigarette* [Thailand – Restrictions on Importation of and External Taxes on Cigarettes, GATT B.I.S.D. (37th Supp) at 2000 (1991)] and *Tuna Dolphin* [United States – Restrictions on Imports of Tuna, GATT B.I.S.D. (39 Supp) at 155 (1993)] decisions. In both cases the GATT panel took a strictly limited interpretation of exemptions under Article XX of GATT and failed to realize the objective of moderating free trade by considerations of public policy. However, in the *Shrimp Turtle* case (United States – Import Prohibition of Certain Shrimp and Shrimp Products, 38 I.L.M. (1999)), the WTO Appellate Body looked beyond the self-contained character of the international trading system. Here, the WTO incorporated the principles of international environmental law and its nuanced public policy undercurrents to arrive at a decision that was not constructionist. According to Gathii, *supra* note 11 at 305, the outcome of *Shrimp Turtle* clearly points to "a different approach that questions the isolation of the trading regimes from public international law norms such as human rights and environmental protection." See also Maskus & Reichman, "Globalization," *supra* note 12 at 32 (alluding to an analogy between the provisions of Article XX of the GATT and Article 8 of TRIPS).

43. Gathii, *supra* note 11 at 312. See also Philip McCalman, "Reaping What You Sow: An Empirical Analysis of International Patent Harmonization" (2001) 55 *Journal of International Economics* 161; Maskus & Reichman, "Globalization," *supra* note 12 at 11; *supra* note 11 and accompanying text.

on compulsory licence, *sui generis* form of protection, and *ordre public* exemptions⁴⁴ may disempower sustained attack premised on disregard of human rights and other social policy considerations at the other end of the intellectual property policy spectrum.

One of the most debated issues is whether the TRIPS Agreement struck a satisfactory balance between the commodity logic of intellectual property and social policy claims. The symbolic import of the transfer of intellectual property policy-making to the international economic and trade arena is that it signals the triumph of the commodity logic of intellectual property. In the trade arena, the social policy considerations inherent in intellectual property are, at best, subservient to the commodity logic.⁴⁵ In the next section, I highlight a few aspects of the trade-driven revolution in intellectual property jurisprudence under the TRIPS Agreement that underscore the bias of the TRIPS regime in favour of the commodity logic.

1. *Commodity logic and the TRIPS revolution*

Literature on the changes introduced into the international intellectual property regime under the TRIPS Agreement vis-à-vis the pre-TRIPS WIPO framework is not lacking.⁴⁶ A detailed discussion of those changes would be diversionary at this point. A more useful pursuit is to sketch, in an admittedly simplified way, key aspects of those changes that undermine the ability of developing countries to use intellectual property to address social policy imperatives in the exercise of their economic sovereignty guaranteed under the pre-TRIPS era.

The first most significant change is that the TRIPS Agreement created an international intellectual property regime with binding, albeit minimum, substantive content. Under TRIPS, no longer are states' obligations to protect intellectual property optional; no longer is there ambivalence regarding the substantive content of the international intellectual property regime, or the extent of states' commitment to them. Second, accession to the TRIPS Agreement is automatic and compulsory for all members

44. See TRIPS, *supra* note 3 at Arts. 8, 27, 31; see also preamble to TRIPS ("Recognizing the underlying public policy objectives of national systems for the protection of intellectual property, including developmental and technological objectives"). See Maskus & Reichman, "Globalization," *supra* note 12 at 32.

45. According to Long, *supra* note 38 at 252, "because harmonization of intellectual property rights [under TRIPS] is focused on enhancing the trade nature of intellectual property rights, social justice and public welfare issues, including right of access by marginalized sectors of society (at both a national and international level) are minimized, if not completely ignored." Consider, for example, the TRIPS preamble which refers to intellectual property rights as private rights, see *supra* note 3. See also Helfer, "Human Rights," *supra* note 37 at 58.

46. See e.g. J.H. Reichman, "Universal Minimum Standards of Intellectual Property Protection under the TRIPS Component of the WTO Agreement" (1995) 29 *International Lawyer* 345.

of the WTO. Third, quite unlike the immediately preceding arrangement, TRIPS incorporates WTO's "hard-edged" binding dispute settlement and enforcement system.⁴⁷ This system permits retaliatory trade sanctions against erring states. Fourth – perhaps the farthest reaching – is the expansion of the scope of intellectual property to a number of areas,⁴⁸ notably genetic resources, pharmaceuticals and plant varieties. In the previous regime, deference to cultural and moral considerations accounted for the exclusion of these areas from private ownership.⁴⁹

TRIPS' expansion of the scope of patentable subject matter to these key areas implicates the influence on the agreement of American patent jurisprudence.⁵⁰ Through a 1980 decision, the U.S. Supreme Court endorsed an extremely expansive interpretation of section 101 of the U.S. *Patent Act* on patentable subject matter.⁵¹ The Court held that under U.S. patent jurisprudence "anything under the sun that is made by man" was subject to patent protection.⁵² Consistent with this thinking, the TRIPS Agreement sanctions patent protection in almost all areas of commerce, notably pharmaceuticals, genetic resources and plant varieties.

On social policy grounds, especially in regard to public health, developing countries were less inclined to grant patents on pharmaceuticals. Similarly, for cultural and economic reasons, developing countries did not encourage private ownership of genetic resources, including agricultural and plant varieties. To further entrench its underlying commodity logic, TRIPS places stricter restrictions on the ability of states to take advantage of compulsory licence schemes over patented inventions.⁵³ Compulsory licences were previously employed by developing countries to address price distortions and to tackle local supply gaps for essential products, especially pharmaceuticals and agro/industrial chemicals.

47. Helfer, "Human Rights," *supra* note 37 at 54. See also J.H. Reichman, "The TRIPS Agreement Comes of Age: Conflict or Cooperation with Developing Countries?" (2000) 32 Case W. Res. J. Int'l L. 441 at 443-47 [Reichman, "Conflict or Cooperation"].

48. Aside from these areas TRIPS extended intellectual property to computer programs as literary works, as opposed to their status as patentable inventions under the Berne Convention. TRIPS mandates the creation of "rental rights" to enable authors of computer programs and producers and performers of sound recordings to control commercial rental of their work to the public, and acts of bootlegging as part of the anti-piracy strategy. See Cheek, *supra* note 1 at 293; see also art. 10 of TRIPS, *supra* note 3; Adrian Otten and Hannu Wager, "Compliance with TRIPS: The Emerging World View" (1996) 29 Vand. J. Transnat'l L. 391 at 396.

49. See Helfer, "Regime Shifting," *supra* note 1 at 27.

50. As "the world's biggest net intellectual property exporter" the TRIPS Agreement benefited the United States more than the European Community: see Maskus & Reichman, "Globalization," *supra* note 12 at 11.

51. See *Diamond, Commissioner of Patents and Trademarks v. Chakrabarty*, 447 U.S. 303 (1980).

52. *Ibid.* at 309 (alluding to a Senate Committee report).

53. TRIPS, *supra* note 3 at Art. 31 (permitting compulsory licences in cases of national health emergency subject to stringent conditions that privilege foreign patent holders).

The creation of a binding, albeit minimum, substantive and enforceable international intellectual property regime, as well as the extension of intellectual property, especially patent protection, to genetic resources, pharmaceutical and plant varieties are key highlights of the TRIPS regime. In their detailed enunciation, these changes represent “a marked strengthening of substantive intellectual property standards” in a direction opposed to the social interest sensitivities of developing countries and their economic sovereignty guaranteed under the pre-TRIPS framework.⁵⁴ Consequently, the entrance of the TRIPS Agreement into the global intellectual property equation has yielded a culture of disaffection against the Agreement by developing countries akin to the one that prevailed against the WIPO framework by their developed counterparts.⁵⁵

More than any of the changes introduced by the TRIPS Agreement, patent protection for pharmaceuticals, gene patents or patentability of life forms, including plant varieties, represent the sparkplugs that have fired the opposition and resistance. The reason for this is not far-fetched. These subjects are pivots around which “issue densities” of and “issue linkages” to intellectual property are elaborated in the post-TRIPS era.⁵⁶ Mildly stated, these linkages underscore the outright weakness or oversight of the TRIPS Agreement. They provide the platform for exploiting TRIPS’ social policy deficit and its underlying inequities. Also, they constitute the catalysts for countertrends or dedicated opposition to the TRIPS Agreement and its commodity logic. Before broaching the counter regime trends in Part III, the next part identifies other factors complicit in sustained resistance to the TRIPS Agreement which, invariably, fuel the counter regime movement in intellectual property regulation post-TRIPS.

II. *Build-up to counter regime trends*

1. *TRIPS under pressure*

A combination of circumstances, both in the formation of the TRIPS Agreement and after it came into force, conspires to put the agreement under pressure, even as those circumstances foster counter-trends in international intellectual property lawmaking. For instance, according to

54. See Helfer, “Regime Shifting,” *supra* note 1 at 18.

55. See Paul Salmon, “Cooperation Between the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO)” (2003) 17 St. John’s J. Legal Comment. 429 at 433 [Salmon]; Helfer, “Regime Shifting,” *supra* note 1 at 20; Cheek, *supra* note 1 at 287. See generally Monique L. Corday, “GATT v. WIPO” (1994) 16 Journal of Patent and Trademark Office Society 121.

56. See Helfer, “Regime Shifting,” *supra* note 1 at 8 citing Robert O. Keohane, “The Demand for International Regimes” in Stephen D. Krasner, ed., *International Regimes* (Ithaca: Cornell University Press, 1983) 141 at 155. According to Helfer, Keohane defines “issue density” as “the number of issues within a given policy space”.

Drahos and Braithwaite, the TRIPS Agreement was secured by the United States and the rest of the industrialized countries through a strategy of coercion.⁵⁷ By means of “special 301,” threats of sanction and other arm-twisting strategies, the United States secured specific bilateral intellectual property agreements with a number of developing countries prior to entering TRIPS negotiations.⁵⁸ Armed with those bilateral agreements, the United States used the TRIPS negotiations as a multilateral platform to rein in the remaining countries.⁵⁹ The putative consensus that later became the TRIPS Agreement was secured, for the most part, by coercion. Thus, the liability arising from TRIPS’ democratic deficit continues to haunt the agreement.

The negotiation of the TRIPS Agreement was characterized by what has been termed “bargain linkage diplomacy.”⁶⁰ By this technique, developing countries were lured into committing to a stronger and more burdensome intellectual property regime in exchange for greater access to agricultural, textile and other export opportunities in foreign markets, including reductions in agricultural subsidies and concessions on imports of tropical products.⁶¹ According to Helfer, “[a]s the region and the nation with the largest domestic markets, the EC and the United States have the most power to shape trade bargains according to their interests by promising to open (or threatening to close) their markets to foreign goods.”⁶² A rather subtle and often unmentioned aspect of bargain diplomacy relates to the irritating use of unilateral trade sanctions and other bilateral pressures by the United States. Many countries, developing and developed,⁶³ acquiesced in making intellectual property a trade issue

57. See Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 12 (noting that “the intellectual property rights regime we have today largely represents the failure of democratic processes, both nationally and internationally. A small number of U.S. companies, which were established players in the knowledge game, captured the U.S. trade-agenda setting process and then, in partnership with the European and Japanese multinationals drafted the intellectual property principles that became the blue print for TRIPS”). See also *ibid.* at 85-99, 191; Cheek, *supra* note 1 at 283.

58. “Special 301” is one of the statutory vehicles for U.S. unilateral trade sanction under the *Trade Act of 1974* as amended by 1988 and 1994 Acts. The others are section 301, and ‘super 301’. See Helfer, “Regime Shifting,” *supra* note 1 at 22, n. 91; Cheek, *supra* note 1 at 301. See also Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 191.

59. See Drahos & Braithwaite, *Information Feudalism*, *ibid.* (arguing that the U.S. went into the TRIPS negotiation “with a sequence of strategic bilaterals already having made certain terms of the favored multilateral deal a *fait accompli*”). See also Helfer, “Regime Shifting,” *supra* note 1 at 20-21. See generally Braithwaite & Drahos, *Global*, *supra* note 10.

60. See Long, *supra* note 38 at 242.

61. For detailed discussion of other concessions, see Frederick Abbott, “Protecting First World Assets in the Third World: Intellectual Property Negotiations in the GATT Multilateral Framework” (1989) 22 *Vand. J. Transnat’l L.* 689.

62. See Helfer, “Regime Shifting,” *supra* note 1 at 21.

63. Industrialized countries and other U.S. allies are not exempt from the special 301 process and threats of sanction; Japan is a notable example, see Cheek, *supra* note 1 at 303.

in exchange for the United State's scaling down of its excessive use of unilateral trade sanctions and other acts of coerced bilateralism.⁶⁴

More than a decade after the TRIPS Agreement, the prevailing impression is that, in relation to developing countries, it has left in its wake "a sobering list of negative factors."⁶⁵ Key promoters of TRIPS, especially the United States and the European Union, have neither delivered nor shown a commitment to deliver on the promise of bargain diplomacy on the two major fronts: trade concessions and market access, and scaling down the use of unilateral/bilateral mechanisms.⁶⁶ Long notes that "[n]umerous scholars have criticized TRIPS for being a bad bargain obtained, as a result of coercive power, for which the agreed-upon concessions have not been achieved."⁶⁷ Similarly, Reichman decries the cold treatment of the issue of new trade concessions for developing countries. He hints at the possibility of introducing trade concessions into debt forgiveness deals "as a trump card in any future round of multilateral trade negotiations."⁶⁸ It remains to be seen whether the 2005 debt forgiveness package for the world's eighteen poorest countries by the Paris Club of creditor nations (the G8) will result in the latter adopting a hardened stance on future trade negotiations at the WTO.⁶⁹

Contrary to the so-called promise of TRIPS' bargain diplomacy, the United States and the European Union continue to step up domestic farming subsidies.⁷⁰ This practice has resulted in developing countries becoming dumping grounds for foreign agricultural products. Another noted result

64. See G. Richard Shell, "Trade Legalism and International Relations Theory: An Analysis of the World Trade Organization" (1995) 44 Duke L. J. 829 at 843-44; see also Helfer, "Regime Shifting," *supra* note 1 at 22.

65. Reichman, "Conflict or Cooperation," *supra* note 47 at 456 (discussing a litany of hardships TRIPS has wrought on developing countries).

66. See Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 11.

67. See Long, *supra* note 33 at 256.

68. See Reichman, "Conflict or Cooperation," *supra* note 47 at 456.

69. The sweeping debt forgiveness package was announced by the G8 at a meeting in London on June, 11 2005. Under the resulting agreement, eighteen countries – Benin, Bolivia, Burkina Faso, Ethiopia, Ghana, Guyana, Honduras, Madagascar, Mali, Mauritania, Mozambique, Nicaragua, Niger, Rwanda, Senegal, Tanzania, Uganda and Zambia – will receive immediate forgiveness for the more than \$40 billion they owe to the World Bank, African Development Bank and the International Monetary Fund.

70. See *Stop the Dumping: How EU Agricultural Subsidies are Damaging Livelihoods in the Developing World* (Oxfam Briefing Paper No. 31, 2002), online: Oxfam <www.oxfam.org.uk/what_we_do/issues/trade/bp31_dumping.htm>. See also Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 11. See generally "Agricultural Subsidies," online: Global Policy Forum <<http://www.globalpolicy.org/soecon/trade/subsidies>>. The agricultural subsidy question remains one of the knottiest issues that stall progress in international trade negotiations at the WTO. For instance, the failed July 2006 trade negotiations by the Trade Negotiation Committee (TNC) of the so-called G6 (US, the EU, Japan, Australia, India and Brazil) which led to indefinite suspension of all TNC talks at the WTO was as a result of buck passing between the US and EU over their inflexibility on the subject of farm subsidies.

of this practice is the stifling of the competitiveness and export potential of the developing world's agricultural and other sectors. At the same time, the industrialized countries, especially the United States, continue to champion new agricultural biotechnologies that have the potential to inflict negative impacts on developing countries.⁷¹ An example is genetic use restriction or the so-called terminator technologies and other genetic modification practices that further erode the benefit, if any, of the TRIPS' bargain for developing countries.⁷²

Similarly, in a strategic fashion, developed countries have exploited the minimalist nature of TRIPS' provisions to negotiate stronger intellectual property protection under the so-called TRIPS-plus agreements.⁷³ Essentially, these agreements are bilateral in nature.⁷⁴ Thus, for the United States, the expectation that the TRIPS Agreement will result in a restrained wielding of its unilateral and bilateral trade powers through the powerful office of United States Trade Representative (USTR)⁷⁵ has yet to prove true.⁷⁶ Indeed, in 1994, just before TRIPS came into force, the U.S. Congress amended the "special 301" provisions of the *Trade Act* to affirm that a country's compliance with the TRIPS Agreement does not necessarily satisfy the requirement of adequate and effective intellectual

71. Dahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 11.

72. See Chidi Oguamanam, "Genetic Use Restriction (or Terminator) Technologies (GURT) in Agricultural Biotechnologies: The Limits of Technological Alternatives to Intellectual Property" (2005) 4 C.J.L.T. 59 at 64-68 (discussing United States' support for terminator technologies at the expert debate on potential impact of the commercialization of terminator technology under the Convention on Biological Diversity) [Oguamanam, "Terminator"]. Terminator technology is a new biotechnology or genetic engineering device for the suppression of true-to-type second generation seeds or genetic copy propagation. It is designed, *inter alia*, to secure seed monopoly for seed companies so that farmers will depend on them for seed supply. Although the technologies have yet to be approved for commercial exploitation, terminator patents have continued to be granted in industrialized countries.

73. New demands for higher intellectual property protection by the United States, the European Union and Japan are the strategic bases for the Millennium Round of Multilateral Trade Negotiations. See Reichman, "Conflict or Cooperation," *supra* note 47 at 454. See also Helfer, "Human Rights," *supra* note 37 at 59; Maskus & Reichman, "Globalization," *supra* note 12 at 5; Peter Drahos, "Developing Countries and International Intellectual Property Standard Setting" (2002) 5 *Journal of World Intellectual Property* 765. See generally *infra* note 80 and accompanying text.

74. For an outline of U.S. and EC TRIPS-plus treaties, see Peter Drahos, "BITs and BIPs" (2000) 4 *World Intellectual Property Law* 791 at 792-807; "TRIPS-plus' Through the Back Door: How Bilateral Treaties Impose Much Stronger Rules for IPRs on Life than WTO", online: Genetic Resources Action International Law (GRAIN), <<http://www.grain.org/briefings/?id=6>>. See also *Regionalism and the Multilateral Trading System* 11-22 (July 21, 2003), online: Organization for Economic Co-operation and Development (OECD), <<http://www1.oecd.org/publications/e-book/2203031E.pdf>>; Cheek, *supra* note 1 at 4 and n. 10.

75. The U.S.T.R. has statutory power to unilaterally impose sanctions on countries with policies considered hostile to U.S. intellectual property interests.

76. See Reichman, "Conflict or Cooperation," *supra* note 47 at 454, noting that "the United States continues to threaten the rest of the world with Section 301 actions, even though the DSU [Dispute Settlement Understanding of GATT/WTO] in Article 23, appears to outlaw resort to unilateral actions as part of the package deal underlying the Uruguay Round."

property protection.⁷⁷ In 2003-2004 alone, the United States entered into bilateral agreements containing TRIPS-plus provisions with more than fourteen mainly developing countries⁷⁸ who have substantial export dependency on the American market. That list continues to grow.

On the multilateral front, through a series of free trade, investment, trade partnership, and WTO accession agreements, the United States and other industrialized countries have induced many more countries to accept a 'TRIPS-plus' intellectual property protection standard.⁷⁹ According to Morin, post-TRIPS bilateral and multilateral treaties have been exploited by developed countries to achieve their exit from unwanted TRIPS obligations and to secure the entry of developing countries into a TRIPS-plus regime of intellectual property protection.⁸⁰ For example, many of these special agreements require developing countries to ratify the 1991 UPOV Convention, which sets higher standards of protection for plant genetic resources than those countries' obligations under TRIPS.⁸¹

In addition to the apparent failure to realize the promise of bargain diplomacy and the free rein of TRIPS-plus agreements, developed countries have held onto a strict or maximalist interpretation of the TRIPS Agreement in what has been termed a "pound of flesh mentality."⁸² This includes their determination to extend intellectual property protection to

77. See Check, *supra* note 1 at 301.

78. See Jean-Frédéric Morin, "Bilateral IP Treaties," paper presented at the Annual Congress of the Association for Advancement of Teaching and Research in Intellectual Property (ATRIP), Montreal, July 12, 2005 (on file with the author). The countries include Jamaica, Lithuania, Latvia, Trinidad and Tobago, Cambodia, Peru, Nicaragua, Vietnam, Jordan, Singapore, Chile, Australia, Morocco, and Bahrain.

79. Check, *supra* note 1 at 303, reports that by the end of 1999 the U.S. had signed forty-two bilateral investment treaties (containing annexed provisions on intellectual property issues) with developing countries, East European and former Soviet republics.

80. See Morin, *supra* note 78. For instance, the *US-Morocco Free Trade Agreement* requires Morocco to ratify the UPOV Convention of 1991 (see *infra* note 81) and to extend patent protection to plants and animals, and by so doing, undermines Morocco's right not to grant animal patents under TRIPS. By indirect pressure on countries to ratify the UPOV Convention through bilateral and free trade deals, developed countries, especially the U.S., succeed in imposing the TRIPS-plus standards on developing countries. Consequently, despite its historical association with developed countries as front role players in plant breeding, through the subtleties of multilateral and bilateral agreements, since 1991, the number of developing country ratifications of the UPOV Convention has shot up. At last count, over thirty of them are members of the UPOV Convention, as opposed to a little over twenty members from the industrialized world.

81. *International Convention for the Protection of New Varieties of Plants*, 2 December 1961, 815 U.N.T.S. 89, (revised at Geneva on 10 November 1972, on 23 October 1978, and on 19 March 1991) online: <<http://www.upov.int/en/publications/conventions/index.html>>. Popularly known by its abbreviation, UPOV stands (in French) for *Union pour la protection des Obstructions Vegetales*. The original UPOV, signed December 2, 1961, was revised in Geneva on Nov. 10, 1072, on Oct. 23, 1978, and on Mar. 19, 1991. See generally *infra* note 121.

82. See Reichman, "Conflict or Cooperation," *supra* note 47 at 452.

issues over which there was previously no consensus.⁸³ Provocatively, the industrialized countries have attempted to foreclose developing countries' legitimate bid to take advantage of the wiggle room in the TRIPS Agreement to tackle social justice and public interest issues such as access to essential medicines and other public health exigencies. This issue came to a head in the celebrated row between the United States and South Africa over the latter's attempt to use TRIPS' compulsory licence provisions to override patent restrictions in order to procure drugs needed to stem the tide of the AIDS pandemic. Recapitulating this well-discussed subject is not necessary here, save to mention that the episode was symbolic and affirmative of the popular thinking that in the trade arena intellectual property is insensitive to social welfare considerations.⁸⁴

The South African episode was a wake-up call, one that drove home the "growing belief, shared by many developing countries, NGOs, and commentators, that TRIPS was a coerced agreement that should be resisted rather than embraced."⁸⁵ In fact, dedicated resistance to the TRIPS Agreement predates the South Africa-United States AIDS drug imbroglio. That resistance is rooted in the inherent weakness of the TRIPS Agreement, fostered by post-TRIPS trends and aspects of the globalization phenomenon. This set of interrelated factors is elaborated through the issue linkage strategy that extends intellectual property beyond TRIPS' narrow framework. The next section tackles the complicity of globalization in the extant tension in the intellectual property regime.

83. *Ibid.* at 453 and n. 62.

84. For examples of just how well-discussed this subject is see Gathii, *supra* note 11; Winston P. Nagan, "International Intellectual Property, Access to Health Care, and Human Rights: South Africa v. United States" (2002) 14 Fla. J. Int'l L. 155; Oxfam Background Briefing, "South Africa vs. the Drug Giants: A Challenge to Affordable Medicines" online: Oxfam, <http://www.oxfam.org.uk/what_we_do/issues/health/drugcomp_sa.htm>; Susan K. Sell, "Post-TRIPS Developments: The Tension Between Commercial and Social Agendas in the Context of Intellectual Property" (2002) 14 Fla. J. Int'l L. 193 [Sell, "Tension"]; Thomas K. Mirabile, "Aids, Africa, and Access to Medicines" (2002) 11 MSU-DCL J. Int'l L. 175; Christopher K. Eppich, "Patenting Dilemma: Drugs for Profit Versus Drugs for Health" (2002) 43 Santa Clara L. Rev. 289; Dahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 5-10. See generally Simon Portman, "Arrested Development: Patents and Affordability for Poorer Countries" (2003) 154 Patent World 15; Danny Huntington, "Redressing the Wrongs: Patent System not the Venue to Address Indigenous Rights" (2003) 154 Patent World 22.

85. Helfer, "Regime Shifting," *supra* note 1 at 24.

2. *Fuelling regime tension in intellectual property: the complicity of globalization*

Theorists of globalization admit that the phenomenon poses definitional as well as interpretational quandaries.⁸⁶ However, despite its diverse paradigms,⁸⁷ conventional narrative posits that globalization involves at least a triple process of economic, socio-cultural and political transnationalization and regulatory harmonization.⁸⁸ As a trend, globalization dates in time to civilization's earliest attempts to explore the potentials of regulatory harmonization across conventional barriers. Nonetheless, contemporary consciousness about globalization is conveniently located in post-Cold War structural changes in the transnational system within the framework of advancing capitalist and free market ideals.⁸⁹ As aspects of its character, globalization "facilitates [and] is facilitated by a centralized regulatory scheme in a number of spheres, including economic, social, human, natural, and material resources."⁹⁰

Developments since the last half of the twentieth century, including but not limited to exponential advancement in technologies, especially digital and biotechnologies, consolidate and are consolidated by the globalization phenomenon. The multiplier effect of these paradigmatic technologies is evident in electronic commerce, the internet, service delivery, health care, cultural empowerment, education, immigration, agriculture, and research. All of these are sites of intellectual investments that continue to stretch the possibilities that unlock the gate into our knowledge economy. As the currency of the knowledge economy, intellectual property plays a

86. Boaventura De Sousa Santos, *Toward A New Common Sense: Law, Science and Politics In The Paradigmatic Transition* (New York: Routledge, 1995) at 260; Long, *supra* note 38 at 227 and n. 28 [De Sousa Santos] (alluding to the complex and multifaceted nature of the globalization analysis). See also Angela R. Riley, "Indigenous Peoples and the Promise of Globalization: An Essay on Rights and Responsibilities" (2004) 14 Kan. J.L. & Pub. Pol'y 155 at 156 [Riley].

87. See Leslie K. Skair, "Competing Conceptions of Globalization" (1999) *Journal of World Systems-Research* 143. This article is not concerned with and does not engage in an elaborate detour on globalization save to exploit aspects of the globalization discourse that assist the paper's conceptual logic and overall thesis, especially in regard to how globalization is implicated in regime shift and in the counter regime trends that sustain the extant tension in international intellectual property jurisprudence.

88. See Chidi Oguamanam, "Localizing Intellectual Property in the Globalization Epoch: The Integration of Indigenous Knowledge" (2004) 11 *Ind. J. Global Legal Stud.* 135 at 164 [Oguamanam, "Localizing"]; see also Riley, *supra* note 86 at 156; Long, *supra* note 38 at 226-27.

89. See Robert Kaplan, *The Coming Anarchy: Shattering the Dreams of Post Cold War* (New York: Random House, 2000).

90. Oguamanam, "Localizing," *supra* note 88 at 164.

significant role for stakeholders.⁹¹ It secures the boundaries of valuable knowledge and creates artificial scarcity around that knowledge in order to shore up its value and marketability.

Extending globalization through a harmonized intellectual property regime has been inevitable. An effective global intellectual property framework has been an attractive option for taking advantage of the fluidity of knowledge and its rapid diffusion in the new economy as fostered, particularly, by digital and biotechnologies in the emergent information society.⁹² Thus, as I have observed elsewhere, the TRIPS Agreement is an "IP handmaiden [deliberately] groomed for the service of globalization and internationalization of markets" in the knowledge economy.⁹³

One casualty of globalization illustrated by the TRIPS Agreement is the reduction in the sphere of influence of national governments and their ability to exercise economic sovereignty.⁹⁴ The international arena, dominated by stronger states and their allies, has become the preferred site for promoting a rule-based global trading system of which the WTO-TRIPS Agreement is a strategic component.⁹⁵ Expectedly, in the vision of the United States and its European Union and Japanese allies, a globally harmonized regulatory framework for intellectual property has been strategic in securing their high intellectual stakes in digital and biotechnologies. Both technologies are symbiotically tied to the globalization phenomenon as they propel and are propelled by it.⁹⁶

However, the above perspective on globalization, which emphasizes its complicity in advancing a harmonized rule-based global trading system, undermines what has been described as the phenomenon's interpretive dilemma, a point that was equally ignored by the TRIPS Agreement's narrow focus on trade. Beyond the uniformization or harmonization hypothesis,⁹⁷ globalization breeds a counter or antithetical culture of

91. Literature associating globalization with intellectual property does so from more than one perspective. For instance, while Long, *supra* note 38 at 227, describes regulatory harmonization in intellectual property as a counterpart to broader globalization, others see such harmonization as a component or aspect of the globalization phenomenon. See Oguamanan, "Localizing," *supra* note 88. See generally Cheek, *supra* note 1; Susan K. Sell, *Private Power, Public Law: The Globalization of Intellectual Property Rights* (Cambridge: Cambridge University Press, 2003) [Sell, *Private Power*]; Maskus & Reichman, "Globalization," *supra* note 12.

92. See generally Takach, *supra* note 21.

93. Oguamanan, "Localizing," *supra* note 88 at 164.

94. See Long, *supra* note 38 at 231-233.

95. See John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd ed. (Cambridge, Mass: MIT Press, 1997) 1-30 (on the rule-based global trading system), cited in Reichman, "Conflict or Cooperation," *supra* note 47 at 446 and n. 24.

96. According to Long, *supra* note 38 at 259, "[t]he spread and breath of economic globalization seems matched by the speed and breath of current IPR harmonization efforts."

97. See De Sousa Santos, *supra* note 86 at 253.

resistance to the hegemonic nuances inherent in its mission of regulatory harmonization. Thus, globalization's harmonizing mission "contributes to a sense of isolation and alienation which generates its own backlash against [its] integratory demands."⁹⁸

Through TRIPS, diverse non-Western peoples and cultures have been coerced, via the agency of their national governments, into the conventional Western ideology of intellectual property in its narrow trade-based context in the name of regulatory harmonization. However, since the TRIPS Agreement, a counter regime trend has begun to brew, both in an attempt to resist TRIPS and its underlying ideology, as well as to expand its interpretive space in order to accommodate crucial social policy and cultural sensitivities in developing countries. This dual culture of resistance to and pressure for a reinterpretation of TRIPS is essentially pursued through the strategy of issue linkage that ventilates from at least four substantive areas or counter regime domains of the Agreement in a fashion symptomatic of the backlash of the globalization phenomenon. The next part explores those substantive domains.

III. *Domains of resistance and counter regime trends post-TRIPS*

In a seminal article, Professor Laurence Helfer identified what he characterized as four international regimes for new intellectual property lawmaking.⁹⁹ They are biodiversity, plant genetic resources (PGRs) for food and agriculture, public health, and human rights.¹⁰⁰ While intellectual property rights are relevant to the issue density implicated in these areas, Helfer noted that "prior to the negotiation of TRIPS they had received only limited attention in the biodiversity and PGRs regimes and virtually no attention in the public health and human rights regimes."¹⁰¹ TRIPS's

98. See Long, *supra* note 38 at 234 and n. 56.

99. See Helfer, "Regime Shifting," *supra* note 1 at 27. Compare Okediji, "Developing Country Participation," *supra* note 1 at 317-18 identifying what she calls "four major narratives" that "provide countervailing norms" for developing countries to challenge the current international intellectual property protection regime.

100. Other discourses on new arenas for intellectual property lawmaking identify indigenous knowledge protection which is associated with biodiversity conservation under the framework *Convention on Biological Diversity*, *supra* note 13. See, e.g., Calestous Juma, "Intellectual Property Rights and Globalization: Implications for Developing Countries" online: Centre for International Development at Harvard University <<http://www.cid.harvard.edu/cidbrotech/dp>>, (identifying emerging issues that underscore the implication of TRIPS for development in the third world and, by extension, the basis for anti-TRIPS sentiments to include pressures arising from national implementation of the agreement, issues of technological development, plant variety protection, geographical indications and biodiversity and related traditional knowledge). See also Maskus & Reichman, "Globalization," *supra* note 12 at 29. See generally Reichman, "Conflict or Cooperation," *supra* note 47; Charles R. McManis, "Intellectual Property, Genetic Resources and Traditional Knowledge Protection: Thinking Globally, Acting Locally" (2003) 11 *Cardozo J. Int'l & Comp. L.* 547 [McManis, "Thinking Globally"].

101. See Helfer, "Regime Shifting," *supra* note 1 at 27.

audacity in extending intellectual property protection to subject matters of critical interest to developing countries and indigenous and local communities – namely genetic resources, pharmaceuticals and plant varieties – is catalytic to the emergence of a dedicated opposition to the TRIPS regime. Capturing this point, again Helfer wrote:

In the wake of TRIPS ... developing countries, aided by NGOs and (less frequently) by officials of intergovernmental organizations, have adopted a strategy of regime shifting to move intellectual property lawmaking into fora where it was only nascent and to raise intellectual property issues for the first time in other venues. This strategy has resulted in the drafting of new treaties, the reinterpretation of existing agreements, and creation of new nonbinding declarations, guidelines, and recommendations. Many of these developments criticize the TRIPS Agreement (both for what it includes and what it excludes) as well as other intellectual property protection standards.¹⁰²

One of the reasons for increased visibility and activism of various NGOs, intergovernmental bodies and other interest groups is their enhanced ability to forge strategic alliances across borders.¹⁰³ Their access to enabling digital/information technologies and their effective coordination of dynamic coalitions that now “form the core of a new and vibrant political movement organized around growing [and sometimes institutional] opposition to existing intellectual property [law]” is made possible for the most part by globalization.¹⁰⁴ Unprecedented opening in transnational mobilization and solidarity of hitherto uncoordinated interest groups is one of the benefits of globalization.¹⁰⁵

1. *Biodiversity and indigenous knowledge*

As noted above, the association of intellectual property with biodiversity related knowledge received limited attention prior to TRIPS. However, the emergence of TRIPS and its deliberate omission of indigenous knowledge (as a general matter) under controversial Article 27 provided an entry point

102. See Helfer, “Regime Shifting,” *supra* note 1 at 27-8.

103. For a detailed discussion of this phenomenon, see Chidi Oguamanam, “Protecting Indigenous Knowledge in International Law: Solidarity Beyond Nation-States” in Catherine Dauvergne and W. Wesley Pue, eds. *Law Text Culture Vol. 8 “Challenging Nation”* (Wollongong: Southwood Press, 2004) 191-230 [Oguamanam, “Protecting Indigenous Knowledge”]. Cf. Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 17 (lamenting that organizations fighting for preservation of intellectual commons do so in isolation of one another without necessary coordination and alliances).

104. See Rosemary J. Coombe, “The Recognition of Indigenous Peoples’ and Community Traditional Knowledge in International Law” (2001) 14 *St. Thomas L. Rev.* 275 at 278 [Coombe, “Indigenous Peoples”].

105. See Oguamanam, “Localizing,” *supra* note 88 at 152. See also De Sousa Santos, *supra* note 86 at 264; Mike Featherstone, ed., *Global Culture: Nationalism, Globalization and Modernity* (London: Sage, 1990).

for a counter regime trend. Specifically, the introduction of biodiversity and indigenous knowledge as a new arena of intellectual property discourse was made possible partly as result of TRIPS' omission of these subjects. Since coming into force over a decade ago, the *Convention on Biological Diversity* (CBD)¹⁰⁶ has dedicatedly pursued its objective of ensuring biological diversity conservation, sustainable use of biological diversity components and fair and equitable sharing of their benefits.¹⁰⁷ Because of the abundance of bioresources in developing countries and the centrality of an ecology imperative in knowledge generation in indigenous circles,¹⁰⁸ CBD recognizes the role of indigenous knowledge in its mission and the relevance of intellectual property to access and benefit sharing of genetic resources and technology transfer.¹⁰⁹

Although CBD is not a treaty dedicated to indigenous peoples/knowledge, it is today the most authoritative juridical framework and platform for the protection of that knowledge.¹¹⁰ Through the activities of its governing body, the Conference of Parties, CBD is involved in a variety of initiatives in association with WIPO and various other specialized agencies of the United Nations in championing the protection of indigenous knowledge.¹¹¹ Because of its accommodation of NGOs and diverse interest groups in its policy-making deliberations, indigenous and environmental NGOs have capitalized on the goodwill of CBD to elaborate an alternative vision of intellectual property. Pursuant to Article 8(j) of the Convention, the CBD Secretariat has exploited the framework nature of the treaty to encourage and supervise national and regional legislation, intergovernmental instruments and other soft law initiatives that support

106. See *supra* note 13.

107. *Ibid.* at Art 1.

108. See Darrell Addison Posey, ed., *Cultural and Spiritual Values of Biological Diversity* (Nairobi/London: Intermediate Technology Publications/UNEP, 1999). See also Marie Battiste & James Y. Henderson, *Protecting Indigenous Knowledge and Heritage: A Global Challenge* (Saskatoon: Purich, 2000).

109. See *supra* note 13 at Arts. 8(j), 10(c), 16(5). See also Chidi Oguamanam, "The Convention on Biological Diversity and Intellectual Property Rights: The Challenge of Indigenous Knowledge" (2003) 7 Southern Cross University Law Review 89 at 102.

110. See Chidi Oguamanam, *International Law and Indigenous Knowledge: Intellectual Property, Plant Biodiversity and Traditional Medicine* (Toronto: University of Toronto Press, 2006) at 5.

111. See Oguamanam, "Localizing," *supra* note 88 at 158-162 (detailing WIPO/CBD initiatives and collaborations on the protection of indigenous knowledge). See also Coombe, "Indigenous Peoples," *supra* note 104 at 284; McManis, "Thinking Globally," *supra* note 100 at 556-7.

the link between intellectual property and local knowledge protection.¹¹² Because of the perception of conflict between the objectives of CBD and TRIPS' intellectual property framework, the relationship between the two treaties and the need for their reconciliation has not only generated a significant amount of literature, but is now a subject for future trade negotiations, including a review of the TRIPS Agreement.¹¹³ The short point here is that despite the disdain in which the TRIPS Agreement held indigenous (biodiversity-related) knowledge, its omission from TRIPS has been exploited by developing countries, who have made it an important part of an emerging counter regime.

2. *Public health and human rights*

TRIPS' reforms, particularly in regard to empowering patent owners, curtailing the use of compulsory licences and generally in extending mandatory intellectual property protection to pharmaceuticals in developing countries – an issue that was optional under the pre-TRIPS WIPO framework – provided the entry point for linking intellectual property to public health and, to some extent, human rights. Admittedly, the public health crises arising from the TRIPS-inspired rigid pharmaceutical patent regime demonstrate the Agreement's complicity in undermining human rights. At the same time, the anti-human rights ramifications of international economic and trade policies, especially in the context of the GATT/WTO framework of which TRIPS is a component, encompass public health issues.¹¹⁴ In general, indigenous peoples and other vulnerable local

112. Since the mid-1990s, many countries have enacted national laws, and several regional groups have drafted model legislation on biodiversity, access and benefit sharing, indigenous and related knowledge. These laws entrench the role of intellectual property in the context of generation, use and transmission of local knowledge. See "Biodiversity Rights Legislation (BRL)", online: GRAIN <<http://www.grain.org/brl/>>. See also Kerry ten Kate & Sarah A. Laird, *Commercial Use of Biodiversity: Access to Genetic Resources and Benefit-Sharing* (London: Earthscan, 1999) at 4.

113. See, e.g., Helfer, "Human Rights," *supra* note 37 at 60 (stating that the 2001 Doha Ministerial declaration mandated the TRIPS Council to evaluate "the relationship between [TRIPS] and the Convention on Biological Diversity, the protection of traditional knowledge and folklore, and other relevant new developments raised by Members.") See also WTO, Doha Ministerial Conference, *Declaration on the TRIPS Agreements and Public Health*, WTO Doc. WT/MIN(01)DEC/2(2001), 4th Sess.; Charles R. McManis, "The Interface Between Intellectual Property and Environmental Protection: Biodiversity and Biotechnology" (1998) 76 Wash. U.L.Q. 255; David R. Downes, "How Intellectual Property Could be a Tool to Protect Traditional Knowledge" (2000) 25 Colum. J. Envtl. L. 253. See *The Relationship Between the CBD and the Commission on Sustainable Development and Biodiversity-Related Conventions, Other International Agreements and Institutions of Relevance*, Conf. of Parties Decision IV/15, online: CBD <<http://www.biodiv.org/decisions/default.aspx?m=COP-04&id=7138>>. See also CBD, Conf. of Parties Decision IV/9, para. 16 and V/16 para. 14.

114. The protection of indigenous knowledge provides the principal platform on which the intersection of intellectual property and human rights is being explored in the post-TRIPS era. See Helfer, "Human Rights," *supra* note 37 at 52; Erica-Irene Daes, "Intellectual Property and Indigenous Peoples" (2001) 95 Proceedings of the Annual Meeting - American Society of International Law 143. See also *infra* note 172.

communities link their cultural survival, spiritual autonomy and identity (as aspects of their quest for self-determination) with the protection of their knowledge.¹¹⁵ The general perception that TRIPS promotes the Western ideology of intellectual property at the expense of alternative epistemic worldviews raises, in indigenous circles, fundamental human rights issues beyond those inherent in the public health crises. Thus, TRIPS' human rights deficit is obvious from the public health catharsis it has engendered, particularly regarding access to essential drugs. Yet that is only an aspect (admittedly a sensitive one) of a bigger puzzle.

Despite the reluctance of the United States and the rest of the industrialized world to embrace the link between intellectual property and human rights,¹¹⁶ that nexus constitutes, in the post-TRIPS period, a source of fast-growing jurisprudence and scholarship on intellectual property lawmaking.¹¹⁷ Human rights are but one of the several heads of issues jostling under the umbrella of the counter regime trend and the resistance to the narrow commodity logic and trade ideology of the TRIPS Agreement. In vindication of Gathii's theory of an open-ended interpretive space existing in international economic instruments, the entrenchment of public health and human rights issues as part of a compelling vision of intellectual property, even within the TRIPS Agreement itself, was endorsed in the Doha Ministerial Declaration on TRIPS:

We stress the importance we attach to implementation and interpretation of the Agreement on Trade-Related Aspects of Intellectual Property

115. See Rosemary J. Coombe, "Intellectual Property, Human Rights and Sovereignty: New Dilemmas in International Law Posed by the Recognition of Indigenous Knowledge and Conservation of Biodiversity" (1998) 6 *Indiana J. Global Legal Stud.* 59 at 79 [Coombe, "New Dilemmas"]. See also Van Fleet, "Protecting Knowledge" (2003 spring) *Human Rights Dialogue*, online: Carnegie Council <www.cceia.org/resources/publications/dialogue/2_09/articles/942.html>; Oguamanam, "Localizing," *supra* note 88 at 139 and 152.

116. The United States opposes the CBD Secretariat's application for observer status in the TRIPS Council. See Helfer, "Human Rights," *supra* note 37 at 60-1. Such status would put the CBD in a good position to explore areas of cooperation with TRIPS, for example, pursuant to the Doha Declaration and other relevant resolutions of the U.N. Subcommittee on Human Rights. See, e.g., Sub-Commission for the Promotion and Protection of Human Rights, resolutions 2000/7 and 2001/21; Commission on Human Rights, *The Impact of the Agreement on Trade-Related Aspects of Intellectual Property Rights on Human Rights: Report of the High Commissioner*, UN ESCOR, 2001, UN Doc. E/CN.4/Sub.2/2001/13 online: eldis <<http://www.eldis.org/static/DOC5597.htm>>. *Human Rights and Intellectual Property Issues: Statement by the Committee on Economic, Social and Cultural Rights*, E/C.12/2001/15, 26 November 2001.

117. See, e.g., Coombe, "New Dilemmas," *supra* note 115; Helfer, "Human Rights," *supra* note 37; Audrey R. Chapman, "The Human Rights Implications of Intellectual Property Protection" (2002) 5 *J. Int'l Econ. L.* 861; Christopher N. Kendall, "A Human Rights Approach to Intellectual Property Protections?" (2002) 50 *Intellectual Property Forum* 2; Thomas F. Cotter, "Introduction to IP Symposium: Intellectual Property, Development and Human Rights" (2002) 14 *Fla. J. Int'l L.* 147; David Wiessbrodt & Kell Schoff, "A Human Rights Approach to Intellectual Property Protection: The Genesis and Application of Sub-Commission Resolution 2000/7" (2003) 5 *Minn. Intell. Prop. Rev.* 1.

Rights (TRIPS Agreement) in a manner supportive of public health, by promoting both access to existing medicines and research and development into new medicines and, in this connection, are adopting a separate declaration.¹¹⁸

IV. *Plant genetic resources and farmers' rights: constraints on the counter regime project*

1. *Plant genetic resources for food and agriculture*

As with biodiversity/indigenous knowledge, the link between intellectual property and PGRs received only limited attention prior to TRIPS.¹¹⁹ Again, as with biodiversity, research and development in the life sciences and the resulting inventions, especially in the last half of the twentieth century, heightened economic and commercial interest in PGRs. Historically, under traditional intellectual property law, plant and other life forms were outside the sphere of inventiveness and, by extension, private ownership.¹²⁰

In the developed countries, however, especially the United States, that jurisprudence was fast becoming obsolete even by the early twentieth century.¹²¹ Nonetheless, the sacredness of life forms as subject matter outside the reach of patent claims in indigenous communities and developing countries has continued to hold sway.¹²² Whilst developing countries treated PGRs as public goods and part of the common heritage of mankind, seed breeding corporations in industrialized countries exploited

118. WTO, Ministerial Conference (4th Session), *Ministerial Declaration* (adopted on 14 November 1991), WTO Dec.WT/MIN(01)/DEC/1, at para. 17, online: WTO <http://www.wto.org/english/thewto_e/minist_e/min01_e/mindecl_e.htm>.

119. See Helfer, "Regime Shifting," *supra* note 1 at 27.

120. See Fritz Malchup, "An Economic Review of the Patent System" in *United States Senate Committee on the Judiciary's Study of the Subcommittee on Patents, Trademarks, and Copyrights*, 85th Cong., 2nd Sess. (S. Doc. No. 15) (arguing that intellectual property rights, especially patents, from their evolution applied only to inventors of industrial or technical devices).

121. This occurred essentially in the prolonged debate between Europe and America over an appropriate intellectual property regime for plant breeding activities. Several years of restraint in Europe caved in as a result of the attempt to counteract the advantage posed by the U.S.'s lead in this regard via its enactment of the *Plant Patent Act, 1930*. The Act applied only to asexually reproducing plants and was directed mainly to the horticultural industries. It set the juridical framework for the *Plant Variety Protection Act, 1970* which provided for PBR for sexually reproducing plants. These and subsequent similar legislation in European countries were national initiatives. An early attempt to internationalize intellectual property protection in PGRs is conveniently located in the 1961 treaty establishing the Union for Protection of New Plant Varieties, the UPOV, see *supra* note 81.

122. See generally Laurie Anne Whitt, "Indigenous Peoples, Intellectual Property and the New Imperial Science" (1998) 23 Okla. City U.L. Rev. 211; Shubha Ghosh, "Traditional Knowledge, Patents and the New Mercantilism" (2003) 85 Journal of Patent and Trademark Office Society 828. In their various resolutions, declarations and other public representations of their views, the world's indigenous peoples and other local communities in the third world have opposed the patenting of life forms and initiatives that privatize the commons and the public domain; see, e.g., *Indigenous Peoples Seattle 1999 Declaration on the occasion of the Third Ministerial Conference of the WTO*, online: International Public Health Watch <<http://www.idb.org/indi99.htm>>.

PGRs (in *ex situ* seed banks of the International Agricultural Research Centres and other public seed repositories) obtained from centres of biodiversity under the Consultative Group on International Agricultural Research (CGIAR)¹²³ programme. They did this by obtaining plant breeders' rights (PBRs) – a proprietary and private ownership regime over PGRs – and related intellectual property protection and in this way effectively prevented the natural suppliers of PGRs from benefiting from the seed banks.

Extending private ownership claims (essentially by plant breeders) to PGRs, particularly through the instrumentality of the quasi-intellectual property regime of PBRs, was championed by industrialized countries, especially the United States. Changes in that country's statutory and case law as early as the 1930s through the 1980s gradually brought PGRs, as well as other life forms in general, within the ambit of intellectual property protection and jurisprudence. Despite initial reluctance, European resistance to the expansion of intellectual property rights to PGRs and other life forms could not endure. In 1961, by virtue of the treaty establishing UPOV,¹²⁴ PBRs were collectively endorsed by a group of mainly industrialized countries and its scope of application extended from the national sphere to international membership of the treaty. Following progressive reviews and strengthening of UPOV and PBRs as well as increases in the membership of UPOV, the regime of PBRs is now consolidated within UPOV. Although many developed countries have been coerced into UPOV, the treaty and its PBRs regime provide a veritable framework for mostly industrialized countries with a head start in plant breeding and agro-biotechnology in general to appropriate PGRs in *ex situ* seed banks and generally to shortchange their developing country counterparts who are major suppliers of global PGRs, including those in the common pool.

Beyond UPOV, the TRIPS Agreement specifically sanctions the notion of intellectual property protection over plant varieties. Article 27 stipulates in part that “[m]embers shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or by any combination thereof.”¹²⁵ This provision has at least two relevant implications to the present analysis. First, it marks a more expansive and stronger regime of intellectual property protection for PGRs, including

123. CGIAR is the organization that manages *ex situ* collections of plant genetic resources, comprising samples of genetic materials stored in gene banks for agricultural research, including plant breeding. CGIAR was created by private and public sector collaboration.

124. See *supra* note 81.

125. *TRIPS*, *supra* note 3 at Art. 27(3)(b).

patent or other unspecified options which constitute an “effective *sui generis* system.” TRIPS’ scope transcends UPOV and embraces the larger WTO member nations. Also, its provisions are subject to the WTO enforcement and dispute resolution powers. Second, despite suggestions to the contrary, TRIPS’ provision for intellectual property protection over PGRs is not necessarily equivalent to PBRs under UPOV.¹²⁶ However, it marks a formal and most authoritative regime of protection for PGRs in international intellectual property jurisprudence beyond the scope contemplated under UPOV. Thus, TRIPS effectively strengthens, if not escalates, the continued use of intellectual property rights to undermine developing countries’ stake in PGRs – a concern that predates TRIPS. The latter’s provision on PGRs provides impetus to pre-existing pressure for equity in the allocation of benefits of PGRs.

Historically, key developing countries have continued to challenge the unjust consequences of applying intellectual property, especially PBRs in the PGRs arena, at the FAO Commission on Plant Genetic Resources for Food and Agriculture (FAO/CPGRFA).¹²⁷ Their efforts yielded a non-binding *International Undertaking on Plant Genetic Resources for Food and Agriculture* (IUPGRFA)¹²⁸ in 1983. That undertaking reaffirmed the common heritage principle and required that for research, plant breeding, and other useful purposes, parties should have access to all PGRs, whether naturally occurring, cultivated, or in seed banks.¹²⁹ Clearly, the vision of common heritage was in conflict with the underlying approach of appropriation of PGRs under the UPOV regime. The apparent conflict between IUPGRFA and UPOV was resolved in favour of UPOV through an interpretive clarification in 1989, not of UPOV itself, but of IUPGRFA, to the effect that PBRs under UPOV were adjudged compatible with the common heritage principle.¹³⁰ This putative reconciliation “created an imbalance in the [UPOV] regime, permitting unrestricted access only to unimproved PGRs without requiring compensation to states, communities, or institutions that maintained those resources” from which protected and improved varieties were derived.¹³¹ This yawning equity gap, which was

126. See *infra* note 156 and accompanying text.

127. The FAO/CPGRFA is the principal forum for international negotiations on PGRs.

128. See *International Undertaking on Plant Genetic Resources for Food and Agriculture*, Report of the Conference of FAO, FAO Conference, 22d Sess., art. 1, U.N. Doc. C/83/REP (1983) online at: <<http://www.fao.org/ag/cgrfa/iu.htm>> [IUPGRFA]. See also Helfer, “Regime Shifting,” *supra* note 1 at 36 and n. 153.

129. See IUPGRFA, *ibid.* at Art. 1.

130. See FAO, *Agreed Interpretation of the International Undertaking*, Annex I, Res. 4/89, FAO Conference, 25th sess., para. 1 (1989) [FAO Conference]; Helfer, “Regime Shifting,” *supra* note 1 at 36 and n. 157. See also McManis, “Thinking Globally,” *supra* note 100, at 554-55.

131. See Helfer, “Regime Shifting,” *supra* note 1 at 36.

further compounded by Article 27 of the TRIPS Agreement, gave rise to demands for the recognition of farmers' rights in PGRs.

2. *Farmers' rights*

In order to address the inequity created by PBRs as elaborated in the last section, developed countries opted for a revised IUPGRFA that provided for, among others things, "farmers' rights,"¹³² a phrase credited to civil society activist Carey Fowler.¹³³ Farmers' rights are articulated in terms of the "rights arising from past, present and future contributions of farmers in conserving, improving and making available plant genetic resources, particularly those in the centres of origin/diversity."¹³⁴ Although the jurisprudence behind farmers' rights remains inchoate and in need of amplification, essentially, they are proposed as a "counterweight to plant breeders' rights [under the UPOV model], compensating the upstream input providers who make downstream innovations possible."¹³⁵ By extension, farmers' rights are also a possible counterweight to other options for intellectual property protection in the PGRs arena pursuant to Article 27 of TRIPS as those options are antithetical to the equitable allocation of benefits of PGRs.

Farmers' rights are peculiar in several ways in comparison with other heads of claims to intellectual property protection in that they incorporate practices common to traditional farmers (and persons steeped in traditional farming activities) all over the world, and they are not necessarily limited to isolated individual farmers or groups. Categories of practices that fall within farmers' rights are not closed and they may be region or culture specific. Unlike most claims to intellectual property, farmers' rights are

132. See Annex II, FAO Conference, *supra* note 130, Res. 5/89 at 11-29. Other issues introduced by further revisions included national sovereignty over PGRs (annex III 3/91, 26th sess. of FAO Conference, Rome, Nov 1991) and a ban on claims for intellectual property protection for genetic materials in seed banks. See also Helfer, "Regime Shifting," *supra* note 1 at 37; McManis, "Thinking Globally," *supra* note 100 at 554-55.

133. See Graham Dutfield, "The Role of Traditional Knowledge in International IP Diplomacy" (Paper presented to the 2005 Annual Conference of the Association for the Advancement of Teaching and Research in Intellectual Property, University of Montreal, July 12, 2005) [unpublished]. Dutfield identifies Fowler and Pat Mooney of the then Rural Advancement International (RAFI) as the arrow heads of the global agitation for farmers' rights as a bid to check the appropriation of PGRs in CGIAR seed banks by transnational seed companies and private research agencies. See generally Cary Fowler & Pat Mooney, *Shattering: Food, Politics and the Loss of Genetic Diversity* (Tucson: University of Arizona Press, 1990).

134. *Farmers' Rights*, Res. 5/89, FAO Conference, 25th Sess. (1989), cited in Helfer, "Regime Shifting," *supra* note 1 at 37 and n. 158. These were almost the exact words used to articulate farmers' rights in the 1983 IUPGRFA and the 2001 ITPGRFA (in article 9(1)).

135. Laurence R. Helfer, "Intellectual Property Rights in Plant Varieties: An Overview of Options for National Governments" (FAO Legal Papers Online No. 31, 2002 at 9), online: Food and Agriculture Organization of the United Nations <<http://www.fao.org/Legal/prs-01/years/2002/list02.htm>>, cited in Helfer, "Regime Shifting," *supra* note 1 at 37 and n. 159.

presented as rights not to be restricted, but to be encouraged and open to exploitation so long as those who benefit from them commit to their sustainability and do not shut out the farmers who generate them. Users of such rights do not need the consent of farmers to exploit the skills in question. Finally, in so many ways, farmers' rights are forms of traditional knowledge in form, content and, to some extent, context. For example, they arise incrementally, derive essentially from traditional ecological/biodiversity knowledge and are informal in nature. Indeed, farmers' rights are encapsulated in the CBD's reference to "knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity."¹³⁶

As part of their inherent conceptual indeterminacy, farmers' rights are vested in the international community as a trust for existing and future generations of farmers. This is done through the creation and management of an international fund to promote activities falling under farmers' rights.¹³⁷ Because of the lack of interest by FAO members, especially those of the industrialized stripe, the fund and its objectives were never realized.¹³⁸

The TRIPS Agreement contains no provision on farmers' rights or any correlating privileges. Rather, it provides for a regime that empowers breeders' privatization of PGRs. Protection of PGRs via PBRs was already entrenched in the intellectual property jurisprudence of many developed countries before the advent of TRIPS.¹³⁹ To add insult to injury, TRIPS prescribes the option of patent or effective *sui generis* protection or both for PGRs¹⁴⁰ and by that stroke rolls back the progress, if any, that was made by the IUPGRFA revision of 1989. As if that did not suffice, the revisions of 1991 to UPOV plugged the existing protections of what the Convention characterized as "farmers' privilege" – a concept analogous to farmers' rights – as one of the exceptions to PBRs.¹⁴¹ Before the 1991 revisions, farmers' privilege trumped breeders' rights.¹⁴² By virtue of farmers' privilege, breeders' rights did not extend to genes or principal

136. *CBD*, *supra* note 13 at Art. 8(j).

137. See Res 5/89 on IUPGRFA.

138. Helfer, "Regime Shifting," *supra* note 1 at 37.

139. The earliest notable legislation was the *Plant Patent Act, 1930* in the U.S., see *supra* note 121 and accompanying text. In Europe, related legislation dated to around the 1940s. For example, the Netherlands enacted a Plant Breeding Ordinance in 1941 and Germany's law on the Protection of Varieties and Seeds of Cultivated Plants was enacted in 1953. By the 1960s, most European States had individual versions of the Plant Variety Protection legislation. See also Oguamanam, "Terminator," *supra* note 72 at 61 and n. 32.

140. See *TRIPS*, *supra* note 3 at Art. 27.

141. In addition to farmers' privilege, research and experimentation were second heads of exception to PBR under UPOV.

142. See *supra* note 81.

genetic materials to which farmers had access.¹⁴³ Farmers were allowed to indulge in the age-long practices of using or replanting farm-saved seeds, even if they were of protected varieties under PBRs. The latest revision of UPOV radically rolls back farmers' privilege¹⁴⁴ and replaces it with an extended breeders' rights regime.¹⁴⁵ The same trend is reflected in the national laws of member states of UPOV, which, as previously noted, has had its ranks swollen in recent times by a significant number of developing countries.¹⁴⁶

TRIPS's extension of intellectual property protection, including potentially the PBRs model to PGRs, is insensitive to prevailing agricultural philosophy and traditional farming practices in indigenous communities in developing and developed countries alike. This insensitivity is compounded by a more aggressive PBRs regime under the revised UPOV, which was initiated by developed countries partly as a strategy to maximize the benefits of developments in agricultural biotechnology. Arguably, in retrospect, those revisions may have been aimed pre-emptively to take full advantage of TRIPS. A logical consequence of this state of affairs was that PGRs and their multiplier effect on agricultural biotechnology in general became a new frontier in the counter regime trend to the TRIPS Agreement. Meanwhile, the convergence of commercial agro-biotech research, industrial and allied agrochemical production in a small number of corporate strongholds, and their proprietary claims over PGRs and seeds

143. See C.S. Srinivisan & Collin Thirtle, "Impact of Terminator Technologies in Developing Countries: A Framework for Economic Analysis" in R.E. Evenson, V. Santaniello & D. Zilberman, eds., *Economic and Social Issues in Agricultural Biotechnology* (New York: Cabi, 2003) at 163.

144. However, it allows member countries the option to exempt farmers from the use of protected genetic material for propagation purposes, insofar as the "legitimate interests of the breeder" are not compromised. See *UPOV*, *supra* note 81 at Art. 15(2).

145. Breeders' rights now extend even to harvested material (where a breeder was not able to enforce her right over propagating material) or varieties "essentially derived" from a protected one in order to stem cosmetic breeding. In addition, PBR duration is extended to 20 years; however, trees and vines have a longer duration of not less than 25 years. See Oguamanam, "Terminator," *supra* note 72 at 61-2. See also Srinivisan & Thirtle, *supra* note 143 at 164; *UPOV* *supra* note 81 at art. 14(2).

146. See *supra* note 80 and accompanying text.

have begun to raise questions about food security¹⁴⁷ and the sustainability of traditional farming practices, especially in developing countries.¹⁴⁸

In an attempt to address this threat and other issues relating to appropriation of local agricultural knowledge, developing countries, NGOs, civil society and intergovernmental organizations reached out to FAO/CPGRFA and succeeded in making the latter an important part of the multiple sites of resistance and counter-trend to the TRIPS Agreement. The highpoint of their efforts is evident in the 2001 ITPGRFA.¹⁴⁹ This treaty has been a subject of scholarly scrutiny on many fronts since its inception. Details of the debate surrounding it are outside the scope of this paper.¹⁵⁰ For present purposes, it is important to note that the treaty is a major leap from its precursor, the IUPGRFA, in that it incorporates farmers' rights, in their most authoritative juridical elaboration, into a binding instrument, at least theoretically.¹⁵¹ That seems to be as far as it goes.

3. *Juridical constraint on farmers' rights and prospects for a unified approach*

In Article 9.2 ITPGRFA provides:

The Contracting Parties recognize that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. *In accordance with their needs and priorities*, each Contracting Party should, as appropriate, *and subject to its national legislation*, take measures to protect and promote Farmers' Rights¹⁵²

147. The six biggest global life sciences corporations, namely, Monsanto, Astra-Zeneca, Dow, Novartis, Dupont, AgrEvo, through a spate of mergers, take-overs and acquisitions, have capitalized on the convergence of crop biotechnology with agrochemical and seed production. These corporations and their subsidiaries are based in the industrialized countries of Europe and North America. See Srinivasan & Thirtle, *supra* note 143 at 168.

148. Judicial decisions in Canada and the United States since the 1980s have continued to chisel down the traditional 'right' of farmers to replant farm-saved seed and to indulge in other privileges associated with traditional farming. See, e.g., *Delta and Pine Land Company v. Peoples Gin Company*, 694 F.2d 1012 (5th Cir. 1983) (eroding commercial transaction in farm-saved seeds); *Asgrow v. Winterboer*, 11 S. Ct. 788 (1995) (limiting the amount of farm-saved seed permissible); *Monsanto Canada Inc v. Schmeiser*, [2004] 1 S.C.R. 902 (holding that the use of a seed bearing patented gene to raise an unpatentable product (crop) is a breach of patent, even if no profit resulted from the exercise). See also Oguamanam, "Terminator," *supra* note 72 at 62-3; Peter J. Goss, "Guiding the Hand that Feeds: Toward Socially Optimal Appropriability in Agricultural Biotechnology Innovation" (1996) 84 Cal. L. Rev. 1395 at 1411-1423; Jeremy P. Oczek, "In the Aftermath of the 'Terminator' Technology Controversy: Intellectual Property Protections for Genetically Engineered Seeds and the Right to Save and Replant Seed" (2000) 41 B.C.L. Rev. 627 at 639.

149. See *supra* note 14.

150. See, e.g., Laurence Helfer, "Intellectual Property Rights and the International Treaty on Plant Genetic Resources for Food and Agriculture" (2003) 97 Am. Soc. Int'l L. Proc. 33.

151. Notably, the treaty abandoned the common heritage of mankind approach. However, it identifies its objectives in a manner akin to those of the CBD. See McManis, "Thinking Globally," *supra* note 100 at 555.

152. *Supra* note 14 at Art. 9.2 [emphasis added].

Article 9.3 adds an emphatic rider to the effect that “[n]othing in this Article shall be interpreted to limit any rights farmers have to save, use, exchange, and sell farm-saved seed/propagating material, *subject to national law and as appropriate*.”¹⁵³ The combined effects of these provisions are that states can promote farmers’ rights in accordance with their national priorities. But such efforts must respect pre-existing national law. Given that the underlying motivation for farmers’ rights is to serve as a counterweight to PBRs or other intellectual property options applicable to PGRs, an effective farmers’ rights’ regime would not serve the interests of countries with advanced agro-biotech and plant breeding cultures.¹⁵⁴ In these countries, PBRs of the UPOV standard are part of national law which must trump farmers’ rights, even as the TRIPS Agreement throws open further protection options. The continued co-option¹⁵⁵ of developing countries, through the backdoor of TRIPS-plus bargains, toward the adoption of the UPOV PBRs scheme is not promoting their national priorities, which favour the protection of farmers’ rights. In addition, developed countries have continued to insist that the standard of PBRs required by TRIPS ought to be the UPOV standard.¹⁵⁶

It is certainly arguable that, of the several fronts in the counter regime trend and resistance to the TRIPS Agreement, the farmers’ rights initiative is the one most in need of rigorous scrutiny and interrogation if it is to have any meaningful impact on the needs and priorities of its proponents. Under the prevailing juridical framework, farmers’ rights are stymied. An alternative would be to collapse the claim to farmers’ rights with the broader claim for the protection of local knowledge under the more developed

153. *Ibid.* at Art. 9.3 [emphasis added].

154. For instance, after initial reluctance, the United States signed the ITPGRFA on November 6, 2002 as the 76th State to do so but it is definitely not in a hurry to ratify the treaty. The seeming ease with which other industrialized countries signed and ratified this treaty is not unconnected to the understanding that the treaty made commitment to farmer’s rights subject to national priorities. For virtually all of these countries national priorities privilege PBRs over farmers’ rights.

155. As part of its strategy to make UPOV attractive to developing countries, the UPOV Secretariat represents UPOV’s PBR regime as the lesser of two evils in allusion to the potential introduction of terminator technology as a technological alternative to intellectual property in the plant breeding arena. See Etc Group, “Who Calls the Shot at Upov?” online: <<http://www.mindfully.org/GE/2003/UPOV-Terminator-Technology> 17apr03.htm>.

156. This is a reference to TRIPS’ use of the phrase “effective *sui generis* system” as a third option of protection applicable to plant varieties pursuant to art. 27(3)(b). See Sell, *supra* note 84 at 205, (arguing that TRIPS’ provision for effective *sui generis* protection does not necessarily require a UPOV PBR protection standard). Cf. Dan Leskien & Michael Flitner, “Intellectual Property Rights In Plant Genetic Resources: Options For A *Sui Generis* System” (1997) Issues in Plant Genetic Resources, online: Bioversity International <<http://www.ipgri.cgiar.org/publications/pdf/497.pdf>> (arguing that what is required under TRIPS’ effective *sui generis* option for plant variety protection is practically a patent-like right).

biodiversity initiative.¹⁵⁷ Indeed, Article 1 of ITPGRFA articulates the treaty's objectives as conservation and sustainable use of PGRs and equitable sharing of its benefits in consonance with CBD.¹⁵⁸ Farmers' rights, as outlined under ITPGRFA, fit squarely within contemplation of Article 8(j) of CBD, which is the heart of that regime's provision for protection of local knowledge. Thus, the campaign for entrenchment of farmers' rights is perhaps better explored via multiple fronts, including CBD. Aside from not being fettered by numerous qualifications found in ITPGRFA, under CBD, farmers' rights are a logical part of numerous CBD friendly national laws and other initiatives around Article 8(j). Although not immune from the conflicts in the international legal regime that ITPGRFA sought to avoid, CBD is gradually evolving or influencing more unifying responses to the protection of local knowledge¹⁵⁹ which could be helpful in fashioning a unifying framework for diverse sites of counter regime trends in intellectual property. Besides, since CBD came into effect there has been willingness by stakeholders to recognize the inherent tension between it and the WTO/TRIPS Agreement, even though an acceptable resolution of such tension is far from sight.¹⁶⁰

The criticism of farmers' rights may apply to some degree in regard to the elaboration of intellectual property in other arenas, such as public health and human rights. The conceptual challenges in the elaboration of intellectual property in these counter regime arenas are hardly surprising. The often divergent and conflicting emphases and interests among developing countries,¹⁶¹ various indigenous and local communities, and even NGOs and other intergovernmental organizations associated with these counter regime movements fuel the extant regime tension in the intellectual property arena.¹⁶² The economic power, political clout,

157. The downside of this approach is that the claim to farmers' rights is not limited to indigenous and local communities in the developing countries, but it extends to all smallholder farmers who are steeped in useful traditional farming practices, whatever they may be and wherever such farmers may be. However, in some ways, traditional knowledge depicts universal epistemological phenomena distinct from formal science and is not limited to any geographical domain.

158. See *CBD*, *supra* note 13 at Art. 1.

159. See *supra* note 112 and accompanying text.

160. See *supra* note 113 and accompanying text.

161. See Maskus & Reichman, "Globalization," *supra* note 12 at 27 (decrying the disorganized institutional apparatus in the developing countries and their inability to effectively participate in norm formation).

162. Because of historical and political differences, various claimants to indigenous knowledge, for instance, approach the subject with different emphasis. See Coombe, "Indigenous People," *supra* note 104 at 277; see also Oguamanam, "Protecting Indigenous Knowledge," *supra* note 103 at 213; Dutfield, *supra* note 133. Because developing countries are at different stages of technological development, they do not approach intellectual property issues from a uniform front, even though they share common interests in many of the issues. Similarly, because of their underlying ideologies and interests, NGOs also differ in the emphases they bring to the intellectual property discourse.

organizational efficiency, and general cohesiveness¹⁶³ of transnational corporate lobbies and their developed country state agents that have influenced the regime shift in international intellectual property from the pre-TRIPS WIPO framework¹⁶⁴ are hardly matched by the inherent divergences in the constituencies that promote counter regime trends.

In addition, sponsors of conventional intellectual property, even in the trade arena, operate from a position of advantage. They have the benefit of established conventions and supporting institutional and normative structures. Those that link intellectual property rights to hitherto unrecognized arenas confront established, albeit parochial, orthodoxy on highly contested grounds. However, in “challenging established legal prescriptions” toward the generation of new norms and principles of intellectual property, they have not been without results.¹⁶⁵ Evidence of this includes the failed attempts to implement gradated transition to TRIPS in accordance with its original timetable for developing and least developed countries. Others are the repeatedly botched attempts to review the TRIPS Agreement, a process that began with the 1999 WTO third ministerial meeting in Seattle, the 2001 Doha Declarations, and the 2003 collapsed Cancún summit as well as subsequent stalled proceedings in the trade negotiation committees of the WTO. Indications are that even though developed countries have had their way in relocating intellectual property to the trade arena, developing countries are having their say on the way forward, as they elaborate an alternative vision of intellectual property that would address social welfare concerns.

The linking of intellectual property to biodiversity and indigenous knowledge, PGRs, public health, and human rights has received more than passing mention in many important fora, including but not limited to CBD, FAO, UNCTAD, WHO, UNESCO and WIPO, and in the continued

163. It is not claimed that developed countries have always formed a common front in intellectual property negotiations. Even as between the U.S., the EU and Japan, there are areas of disagreement on intellectual property. Indeed, Japan and the EU were not original enthusiasts or converts to the TRIPS Agreement and its underlying philosophy. See Drahos & Braithwaite, *Information Feudalism*, *supra* note 5 at 196. However, developed countries' common interests in a stronger intellectual property regime in a trade arena have remained the trump card that propels compromise and a united front on many issues.

164. The push to bring intellectual property under the WTO Agenda and the resulting TRIPS Agreement is credited, for the most part, to powerful private sector CEOs, especially those of U.S. transnational pharmaceutical corporations. See generally Drahos & Braithwaite, *Information Feudalism*, *supra* note 5. See also Sell, *Private Power*, *supra* note 91. See generally Gervais, *supra* note 23.

165. See Helfer, “Regime Shifting,” *supra* note 1 at 6.

elaboration of the International Bill of Rights at the United Nations.¹⁶⁶ The following observation succinctly underlines this trend:

The few short years since TRIPS entered into force have seen nothing less than an explosion of interest in intellectual property issues in a broad array of international fora. Intellectual property issues are now at or near the top of the agenda in intergovernmental organizations such as the World Health Organization and the Food and Agricultural Organization, in international negotiating fora such as the Convention on Biodiversity's Conference of the Parties and the Commission on Genetic Resources for Food and Agriculture, and in expert and political bodies such as the United Nations Commission on Human Rights and its Sub-Commission on the Protection and Promotion of Human Rights.¹⁶⁷

These agencies have continued to collaborate in the exposition and critical exploration of the role of intellectual property in relation to the four major fronts of the counter regime movement which were discussed in Parts III and IV.

With regard to WIPO, in the wake of TRIPS that organization has tactfully collaborated with the WTO to facilitate the negotiation of new TRIPS-friendly treaties in response both to the demands of the trade-based ideology of global intellectual property governance, as well as to the demands of digital technology.¹⁶⁸ It also promotes intellectual property manpower training and legislative and policy support in developing countries, assisting them to establish structures to meet their TRIPS commitment.¹⁶⁹ Nonetheless, even though there is no consensus among

166. See Commission on Human Rights, *Access to medication in the context of pandemics such as HIV/AIDS*, Res 2001/33, UN ESCOR, U.N. Doc. E/CN.4/RES/2001/33 para. 3(b)(2001) (sponsored by Brazil, safeguarding access to medications against third party imposed limitations). See also *Access to Medication in the Context of Pandemics such as HIV/AIDS*, Res. 2002/2000 (2000); *Access to Medication in the Context of Pandemics such as HIV/AIDS*, Res. 2003/29, U.N. Comm'n. on Human Rights, U.N. Doc. E/CN.4/2003/L.11/Add.3 (2003).

167. See Helfer, "Regime Shifting," *supra* note 1 at 6.

168. Since TRIPS, WIPO has supervised the negotiation of a number of treaties that reflect the new trade-based orientation of intellectual property: see, e.g., *WIPO Copyright Treaty* (1997) 36 I.L.M. 65; *WIPO Performances and Phonograms Treaty*, (1997) 36 I.L.M. 76; *Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs* (2 July 1999), online: WIPO <http://www.wipo.int/hague/en/legal_texts/wo_haa_t.htm>. WIPO's Internet Corporation for Assigned Names or Numbers (ICANN) is one of four global initiatives against cyber-squatting. In 2002, WIPO completed a procedural *Patent Law Treaty* and a *Draft Substantive Patent Law Treaty*, online: WIPO. See Salmon, *supra* note 56 at 435-36.

169. WIPO has an elaborate training program that targets developing countries, conducted within and outside those countries. WIPO's virtual Intellectual Property Worldwide Academy is an example of the organization's commitment to use available technologies to reach its entire global constituency, online: WIPO <<http://www.wipo.int/academy/en>>. Insight on WIPO professional training program is available online at: <http://www.wipo.int/academy/en/courses/professional_training/>. See also Salmon, *supra* note 55 for overview of WIPO training and legislative assistance to developing countries.

commentators,¹⁷⁰ WIPO has not undermined its historic and dedicated support for strategic positioning of developing countries to enable them to exploit intellectual property in advancing their national interests pursuant to the 1974 agreement.

For instance, WIPO has not relented in the review of the WIPO-UNESCO Model Provisions on National Laws on Expression of Folklore against Illicit Exploitation and Other Prejudicial Actions.¹⁷¹ This is an initiative that predates the counter regime movement. It is now a key subject of the mandate of WIPO's Intergovernmental Committee on Genetic Resources Traditional Knowledge and Folklore (IGC-GRTKFL),¹⁷² a forum for the exploration of indigenous knowledge and related issues at WIPO.¹⁷³ In addition, the report of WIPO's 1998-99 celebrated Fact Finding Missions¹⁷⁴ under its Global Intellectual Property Issues Program has provided the framework in which WIPO continues to elaborate policy agendas on indigenous or local knowledge, a matter that is critical for developing countries in the context of the debate for the evolution of a globally acceptable intellectual property regime. It is to the credit of that organization that it has not only survived the regime coup in intellectual property regulation pulled by TRIPS,¹⁷⁵ but that it has also not lost its relevance in mediating tense and conflicting intellectual property

170. See Helfer, "Regime Shifting," *supra* note 1 at 26 (arguing that developing countries still retain their influence in post-TRIPS WIPO). See also Pamela Samuelson, "The U.S. Digital Agenda at WIPO" (1997) 37 *Va. J. Int'l L.* 369 at 388-90 (on Africa's influence over the 1996 WIPO Copyright Treaty); Cheek, *supra* note 1 at 314-315 (arguing that WIPO's sponsorship of regional caucus meetings strengthens developing countries to counterbalance the influence of industrialized countries under the aegis of the Stockholm Group in post-TRIPS WIPO processes). *Cf.* Drahos and Braithwaite, *Information Feudalism*, *supra* note 5 at 195 (charging that WIPO drafted TRIP-plus laws for developing countries).

171. Reprinted in 16 Copyright Bulletin 62 (1982). For insight on the Model Law, see Folarin Shyllon, "Conservation, Preservation and Legal Protection of Folklore in Africa: A General Survey" (1998) 4 Copyright Bulletin 37. See also Oguamanam, "Localizing," *supra* note 88 at 160-162 and n. 106.

172. WIPO'S IGC-GRTKFL was established at the 26th Session of WIPO General Assembly in 2000 as a forum for member states to hold discussions on a number of agenda items, including access and benefit sharing, protection of traditional knowledge and expressions of folklore. See also McManis, "Thinking Globally," *supra* note 100 at 557.

173. See WIPO IGC-GRTKFL, *Final Report on National Experiences With the Legal Protection of Expressions of Folklore*, online: WIPO <http://www.wipo.int/documents/en/meetings/2002/igc/pdf/grtkfic3_10.pdf>.

174. See World Intellectual Property Organizations (WIPO), *Report on Fact-Finding Missions on Intellectual and Traditional Knowledge (1998-1999)* (Geneva, April 2001), online: WIPO <<http://wipoint/tk/en/tk/ffm/report/index.html>>. This report explored and made recommendations on the intellectual property needs and expectations of traditional knowledge holders.

175. According to Cheek, WIPO's willingness both to partly cede its secretariat's (the International Bureau) policy making control powers and to moderate the structure of draft treaty negotiations to accommodate post-TRIPS pressures from industrialized countries prevented the latter from exploring an alternative institutional structure to WIPO. See Cheek, *supra* note 1 at 318. See also *supra* note 170 and accompanying text.

expectations as between developed and developing countries within the room left for it by the TRIPS Agreement.¹⁷⁶

Conclusion

Apart from re-igniting the debate over the place of social issues in international economic policy more than a decade after intellectual property became a subject of international trade law, it is unclear to what extent the expectations of the architects of that initiative have been satisfied. Admittedly, most of the ten year-plus period falls within the transition phase of the TRIPS Agreement and does not afford adequate time for appraisal. Nonetheless, the surprises occasioned by the TRIPS Agreement so far are the unsuspected emancipations that have trailed it. An agreement that, in its provisions, deliberately undermines the social and public welfare concerns that must legitimately be incorporated in an intellectual property regime has ironically served as a catalyst not only for generating intense debate about the accommodation of those concerns, but also for raising awareness about the need to extend intellectual property policy discourse into arenas not envisaged by TRIPS.

However, attempts to foist a counter-TRIPS agenda on the WTO's international intellectual property outlook have been faced with those difficulties that normally arise in counter-hegemonic contexts. This is evident in the example of farmers' rights and PGRs, especially under ITPGRFA and to some extent UPOV. Challenging established orthodoxy from understandably less empowered and inherently less cohesive constituencies takes the appearance of a rebellion motivated by the god of defeat. But surprises could be sweet, especially in less expected scenarios, even if they are unaccompanied by any clear victory. TRIPS aims at a maximal exploitation of the trade potential of intellectual property and, consequently, at a permanent shift of its jurisprudence to the trade arena. But this aim has unwittingly moved intellectual property jurisprudence in a direction not contemplated by its proponents, forcing it to reconsider the erosion of social interest aspects of that jurisprudence and the shrinking of public policy space that has trailed the TRIPS Agreement.

For instance, even though the agitations for farmers' rights preceded the TRIPS Agreement, they are bolstered by it. Despite the constraining juridical framework for elaboration of those rights, especially under

176. WIPO and WTO have a cooperation agreement that enables WIPO to provide manpower and lawmaking assistance on intellectual property to both WTO and WIPO Member States. The agreement capitalizes on WIPO's pre-existing expertise in an attempt to avoid duplicating its role within the WTO. This enables WIPO to remain effective in its original role, as tempered by the changed dynamics in international intellectual property law. See Debra P. Steger, "Afterword The "Trade and..." Conundrum – A Commentary" (2002) 96 Am. J. Int'l L. 135.

ITPGRFA and UPOV, it is possible to further the push for farmers' rights through multiple avenues, incorporating the more established CBD framework's policy space in regard to the protection or "preservation of knowledge, innovations and practices of indigenous and local communities embodying traditional life styles." That avenue itself is a warrant for the prominence traditional knowledge and biodiversity-related issues have attained as a firm site of the counter regime trend in international intellectual property post-TRIPS. Clearly, farmers' rights encapsulate traditional agricultural practices as aspects of the knowledge of indigenous and local communities.

