

Toward Global Food Sovereignty? Fostering Bottom-up Approaches to Participation in the International Biodiversity Regime

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Abstract

The right to food is an internationally-recognized human right. However, an absence of food sovereignty—the right of peoples to define their own agriculture and to access adequate food—is widespread throughout much of the Global South. At present, the global biodiversity regime creates challenges as well as opportunities for indigenous or local peoples to pursue a state of food sovereignty. Moreover, there is an ongoing debate among international lawyers and policy analysts over whether the prevailing institutions and agreements through which international trade is conducted constrain the rights of indigenous peoples’ to preserve their biological resources, knowledge associated with the use of those resources, and their ability to participate or be represented in the international rulemaking system. The Convention on Biological Diversity (CBD) and the World Trade Organization’s Agreement on Trade-Related Aspects of Intellectual Property Rights (WTO-TRIPS), many of whose provisions and rules concerning biological resources conflict with the other’s, are among the most recognized of those institutions and agreements. For example, critics cite WTO laws meant to prevent trade discrimination between states as the basis for compelling indigenous farmers’ to adopt foreign food crops and, subsequently, displace traditionally-bred varieties. Although completely reforming the “top” of the global biodiversity regime lacks pragmatism, *bottom-up* approaches to helping vulnerable populations pursue a state of food sovereignty do exist. This paper evaluates the use of such approaches to fostering food sovereignty by drawing upon examples from Latin America in which indigenous peoples and farmers—collectively with associations representing them—are working to identify and exploit provisions in the CBD or WTO-TRIPS that *do* offer protections for the resources of local peoples and, thus, their capacity to foster a state of food sovereignty. It finds that, although bottom-up approaches to pursuing food sovereignty have taken root among many local or indigenous peoples, the relative youthfulness of the current global biodiversity regime makes it premature to identify *bona fide* examples in which such approaches have led to successful outcomes for those peoples.

¹ The authors extend their thanks to the staff of the Science and Human Rights Program of the American Association for the Advancement of Science. Special thanks must be given to Stephen A. Hansen, Director of the Association’s Project on Science and Intellectual Property in the Public Interest, for his guidance and tutelage on matters of traditional ecological knowledge, intellectual property protections, and the global biodiversity regime.

INTRODUCTION: UNDERSTANDING FOOD SOVEREIGNTY

For over half of a century the basic right to food has been recognized by such international agreements and treaties as the Universal Declaration of Human Rights and the International Covenant on Economic, Social, and Cultural Rights.² In the broadest sense, food sovereignty encompasses the right to *access* adequate food. The term was introduced at the 1996 World Food Summit by La Via Campesina, a global organization representing smaller groups of rural peoples and agricultural producers from three continents. La Via Campesina defines food sovereignty as the right of peoples “to define their agricultural and food policy” and emphasizes the role of local peoples to participate in “agricultural policy choices.”³ People’s Food Sovereignty, an agricultural trade network of peasant-farmer associations and other nongovernmental organizations, further describes food sovereignty as the right of peoples

to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant; to restrict the dumping of products in their markets, and; to provide local fisheries-based communities the priority in managing the use of and the rights to aquatic resources. Food sovereignty does not negate trade, but rather, it promotes the formulation of trade policies and practices that serve the rights of peoples to safe, healthy and ecologically sustainable production.⁴

Since the concept was introduced, it has become widely recognized by the international community—particularly within the United Nations (U.N.) system.

Access to Adequate Food

A lack of access to adequate food is widespread throughout many impoverished nations.⁵

However, attaining food sovereignty is possible when peoples—particularly at the grassroots—are

² Universal Declaration of Human Rights, adopted December 10, GA Res217A (III), 3 UN GAOR. *United Nations Document A/810*, 1948, and the International Covenant on Economic, Social, and Cultural Rights, adopted December 16, 1966, 1999 UNTS 171 (enacted January 3, 1976), GA Res 2200 (XXI), 21 UN GAOR Supp (No. 16) at 49, *United Nations DocA/6316*, 1966.

³ La Via Campesina. 2003. *What is Food Sovereignty?* Available online at www.viacampesina.org/main_en/index.php?option=com_content&task=view&id=47&Itemid=27.

⁴ Peoples Food Sovereignty. Available online at www.peoplesfoodsovereignty.org/index.php?option=com_content&task=view&id=32&Itemid=26.

⁵ World Food Programme. *Are We Reaching the Hungry?* (Rome: Communications Division, World Food Programme, 2006). Pp. 2-3.

empowered to participate in decision-making processes that preserve their agricultural production practices as well as their rights to use native biological resources vital for sustenance. Those rights are affirmed by the most widely-recognized international human rights treaties⁶ that recognize a peoples' right of access to adequate food, to protect their biological resources, and to preserve their indigenous knowledge. No less important in the drive toward food sovereignty is the international human rights norm of self determination—the right of people to pursue their own economic, social, and cultural development.⁷

Food Sovereignty and Traditional Knowledge

As of 2004, the population of indigenous peoples remaining was approximately 300 million worldwide.⁸ Overwhelmingly, an indigenous or local⁹ community's ability to feed itself rests on a foundation of traditional knowledge (TK),¹⁰ which facilitates stewardship of their surrounding environment and maintains the processes that generate and preserve local biodiversity. Increasingly, the survival of traditional crop varieties and the knowledge associated with them—for seed breeding, sowing, cultivation, and food preparation—is being challenged. For example, when local communities face the possible loss of access to biological or genetic resources that have been patented, when their use

⁶ Those include, for example, the Universal Declaration of Human Rights, and the International Covenant on Economic, Social, and Cultural Rights.

⁷ See Article 1 of the International Covenant on Economic, Social, and Cultural Rights.

⁸ Künnemann, R. and S. Epal-Ratjen. *The Right to Food: A Resource Manual for NGOs*. (Washington, DC: American Association for the Advancement of Science, 2004), P. 15.

⁹ The terms “indigenous peoples” and “local peoples” are not necessarily synonymous. Indigenous peoples essentially constitute a population of individuals or descendants of those individuals who inhabited a particular geographic region prior to the arrival of non-natives from distant geographic regions, such as those who established colonial settlements across the continents. Thus, they are smaller in number than local peoples. “Local peoples” has a broader connotation in that, although indigenous peoples might constitute a “local” population, local peoples themselves also can consist of multiethnic groups who have interbred with an indigenous population, or ethnic groups that migrated from one geographic region to settle in another. Inasmuch as it is possible, this paper will try to use each term appropriately. However, given that local peoples also can be traditional knowledge holders or stewards of surrounding biologically diverse resources, the term will be used in many instances throughout this paper to reflect its broader meaning. In that respect, indigenous peoples are local peoples as well—and both groups typically share the common characteristic of living in heavily rural communities with distinct cultural practices.

¹⁰ Hansen, S.A. and J.W. VanFleet. 2003. *Traditional Knowledge and Intellectual Property: A Handbook on Issues and Options for Traditional Knowledge Holders in Protecting Their Intellectual Property and Maintaining Biological Diversity*. (Washington, DC: American Association for the Advancement of Science). Available online at <http://shr.aaas.org/tek/handbook/handbook.pdf>.

of those natural resources is supplanted by patented commercial products that offer short-term economic gains but are endorsed or introduced through decisions made by their national governments, or when those resources are (mis)appropriated by such entities as multinational pharmaceutical corporations, agricultural corporations, or even national governments—their incentives to maintain such resources might vanish. In the case of agriculture, the loss of traditional seed varieties essentially is irreversible. For example, once those seed varieties (and the knowledge to breed and cultivate them) have been supplanted by resources such as genetically engineered varieties or other higher-yield varieties, the traditional varieties and accompanying breeding practices permanently are lost. That makes possible a more widespread loss of biodiversity, any TK associated with biological resources, and loss of the practices that preserve and generate biodiversity. Thus, the protection of indigenous peoples' TK and the preservation of biodiversity virtually are inseparable.¹¹

TK is the culmination of a long historical process of experimentation, selection, adaptation, and evolution.¹² It commonly is preserved in its most *detailed* form by women, who in many instances serve as a community's epicenter for its TK. Nevertheless, distinct knowledge and biological resources that slowly have accumulated and burgeoned over generations represent the cultural heritage of a community; they do not belong to a specific "inventor," *per se*, but arise from a community's social and cultural history. Historically, the incentives to develop and maintain TK have not been monetary (or primarily monetary), as TK is essential for indigenous peoples' livelihoods and is not treated as a commodity.¹³ Furthermore, biological resources and their associated TK are not static (i.e., they are subject to evolutionary processes), in contrast to innovations documented by Western constructs such as patents. The more restricted concept of what constitutes knowledge or intellectual property (IP) as

¹¹ Biber-Klemm, S. 2000. Biotechnology and traditional knowledge: In search of equity. *International Journal of Biotechnology* 2(1/2/3):85-102.

¹² Biber-Klemm. 2000. P. 87.

¹³ However, as discussed in subsequent sections of this paper, some scholars argue that economic incentives must exist for local peoples to use and preserve their TK and associated biologically diverse resources. Moreover, the construct of access and benefit sharing (ABS) has introduced a new dimension of potential monetary rewards in exchange for the acquisition of (or the acquisition of rights to) a community's TK or associated biological resources.

reflected by the framework of the global biodiversity regime makes the integration of TK—with all of its unique characteristics—quite difficult. Thus, national laws in countries of the South—by default—often must conform to IP laws of the West.¹⁴ The Western IP regime privileges some forms of knowledge but it does not easily accommodate historically-developed, communally-held, and continuously-evolving forms of knowledge—those most likely to be associated with indigenous or local peoples.

For comparative purposes, TK has been deemed the equivalent of what to the West would be considered IP, where measures such as patenting and the use of copyright are more of a norm. For example, patents are intended to serve two general purposes in the Western IP framework: (1) to encourage innovation by ensuring that inventors will reap the benefits of their work by retaining the rights to use, produce, and market it; and (2) to prevent misappropriation of others' work by establishing a legal framework for transferring new innovations. However, the Western concept of IP makes certain assumptions about the nature of knowledge and the processes by which knowledge and inventions arise. It assumes that inventions are costly to develop in terms of time and financial risks, but easy to replicate once developed. It also assumes that the economic returns from marketing a new product are a principal incentive to invent. Finally, it assumes that inventions primarily are the result of *one* individual's or institution's (e.g., the recipient of a patent) work. However, TK conforms to none of those assumptions and frequently is unrecognized and thereby delegitimized by Western governments, regimes, or institutions.¹⁵

Food Sovereignty and Biodiversity

The biologically diverse resources of which so many indigenous or local peoples are the stewards are fundamental to fostering food sovereignty. At the most basic level, those resources retain

¹⁴ Barwa, S. and S.M. Rai. 2002. The political economy of intellectual property rights: A gender perspective. Pp. 41-56 in *Development and the Challenge of Globalisation*, P. Newell, S.M. Rai, and A. Scott, eds. (Glasgow: ITDG Publishing, 2002).

¹⁵ Barwa and Rai. 2002. Pp. 42-44, 56.

their intrinsic value as the raw materials used for sustenance and medicinal healing, but, in turn, they typically are preserved and maintained by their stewards.

Some scholars assign economic value to biodiversity, of which economists generally identify two types: (1) “actual or direct use” value of biodiversity for the daily survival of indigenous communities and for industrial use; and (2) “long-term or optional value” of biodiversity found in the evolutionary processes that generate new varieties of species of potential use in the future.¹⁶ Although the quantitative or economic characterization of the value of biodiversity is difficult to depict, the economic incentives for preserving biological resources such as seed varieties are particularly noticeable at the level of the indigenous or local community.¹⁷ Although that appears to contradict the inherent purpose of preserving biodiversity as held by those communities, it is more a product of the contemporary global biodiversity regime.

That the preservation and maintaining of local biodiversity largely rests with local or indigenous communities underscores the importance of economic incentives to the preservation of biodiversity at the local level. If indigenous communities do not benefit from the use of natural resources of which they are the stewards, they might lose the incentive to maintain those resources, resulting in the possible loss or erosion of local biodiversity.

Economic incentives, however, are not sufficient for conserving local biodiversity: communities also must have the *means* to foster conservation. Many local communities have co-evolved with their surrounding environments for centuries, and are best positioned to know how to use, maintain, and preserve their biodiversity. Their collective (i.e., traditional) knowledge encompasses the use of certain natural resources as well as methods for cultivating and maintaining them. As discussed above, the loss of TK concerning the utility of local biodiversity might lead local communities to under-appreciate the value of their environment. In turn, the loss of TK concerning the methods to maintain biologically

¹⁶ Biber-Klemm. 2000. Pp. 87-88.

¹⁷ Benz, B., J. Cevallos, E. Muñoz, and F. Santana. 1996. Ethnobotany serving society: A Case Study from the Sierra de Manantlán Biosphere Reserve. *Sida* 17(1):1-16.

diverse resources interferes with local communities' ability to preserve their surrounding biodiversity. Thus, local communities not only must have economic incentives to value their resources, but also the means to preserve biodiversity and position themselves to attain a state of food sovereignty.

THE GLOBAL BIODIVERSITY REGIME

Although traditional knowledge, food sovereignty, and the preservation of biologically diverse resources maintain a direct relationship with local community practices and customs, the past two decades have seen the steady rise of a *global* biodiversity regime. That regime consists of a multitude of actors, including nation-states; international institutions, agreements, and accords; international nongovernmental organizations (INGOs); and other non-state actors. The regime is complex in terms of the extent to which different actors participate, how they participate, the processes by which decisions are made and enforced, and the means by which disputes or disagreements are resolved (or are expected to be resolved). The global biodiversity regime entails several mechanisms for the international *governance* of matters concerning the common environment and natural resources, but it does not constitute an international or world "government." Nevertheless, it is in the context of the global biodiversity regime that many of the actions and decisions affecting practices in relation to biodiversity at the local level occur or will occur. Two institutions in particular—the Convention on Biological Diversity (CBD) and the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights (WTO-TRIPS)—occupy a central position in the relationship between food sovereignty and the use and preservation of biologically diverse resources at the local or community level. Nevertheless, it is crucial to bear in mind that those institutions—relative to the international rulemaking system—are in their youth. Although many aspects of them have precursors based on earlier international agreements or regimes (e.g., the General Agreement on Tariffs and Trade), their current provisions have yet to be tested or applied to the fullest extent.

Scope and Purpose of the Paper

The following discussion is by no means exhaustive; rather, it situates the concept of food sovereignty in the context of indigenous or local peoples' lifestyles. Several authors and institutions already have provided critiques and examinations of the CBD and WTO-TRIPS in greater depth.¹⁸ Thus, the following discussion concentrates on their relationship with local or indigenous peoples' participation in the global biodiversity regime.

Despite the sheer volume of critics as well as supporters of the institutions and agreements discussed in this paper, the purpose is not to argue in favor of or against the array of entities comprising the global biodiversity regime. This paper acknowledges that those entities indeed have demonstrated inherent flaws and frequently have been dysfunctional as a means by which nations of the Global South can vie for a more equitable representation of their interests before the international community. Nevertheless, the subject of how and whether institutions and agreements within the global biodiversity regime should be restructured, abolished, replaced, or left as they are is served well by other authors. Thus, the purpose of this paper is twofold: (1) to examine existing elements of the global biodiversity regime which, if identified and applied by underrepresented groups such as local peoples, can be used to their advantage for objectives such as pursuing food sovereignty; and (2) to evaluate the efficacy (or lack thereof) of the empirical examples discussed later in this paper. Specifically, the approaches examined later in this paper are founded upon the notion of bottom-up participatory action in decision-making processes, including the role of local or indigenous peoples' associations in fostering such approaches. Although this paper primarily is confined to a discussion of the CBD and WTO-TRIPS, it must be noted that the global biodiversity regime also includes several other relevant institutions and

¹⁸ For examples of scholarship renouncing or supporting institutions and agreements that constitute the global biodiversity regime, see Danaher, K. and R. Burbach. *Globalize This!: The Battle Against the World Trade Organization and Corporate Rule*. (Monroe, ME: Common Courage Press, 2000); and Chen, J. 2005. Biodiversity and biotechnology: A misunderstood relation. *Michigan State Law Review* 51(1):51-102.

agreements, such as the International Convention for the Protection of New Varieties of Plants.¹⁹

However, a comprehensive discussion would have to extend beyond the scope of this paper.

The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) was adopted at the 1992 Earth Summit in Rio de Janeiro and implemented in 1993. At its inception, it was signed by 150 representatives of national governments and, as of late 2006, has been ratified by 168 nations. Three central objectives emerged from the Convention's original text: "the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources."²⁰ The third objective is of particular importance with respect to the relationship between food sovereignty, local or indigenous peoples, and TK. That is because it makes provisions for the sharing of benefits (known formally as access and benefit sharing, or ABS) among and between states parties in exchange for access to resources provided through or by their biodiversity and TK.

Access and Benefit Sharing and the 2002 Bonn Guidelines

ABS agreements include, for example, granting intellectual property rights to for a multinational pharmaceutical corporation over and/or access to samples of a native plant with known or purported medicinal properties in exchange for monetary and/or non-monetary benefits.²¹ Although the CBD bestows upon states sovereign rights to biological or knowledge-based resources that might form the basis of an ABS agreement, those rights are not retained by the *bona fide* knowledge holders and

¹⁹ International Convention for the Protection of New Varieties of Plants. 1991. *International Convention for the Protection of New Varieties of Plants of December 2, 1961, as Revised at Geneva on November 10, 1972, on October 23, 1978, and on March 19, 1991*. www.upov.int/en/publications/conventions/1991/pdf/act1991.pdf.

²⁰ Secretariat of the Convention on Biological Diversity. *Sustaining Life on Earth: How the Convention on Biological Diversity Promotes Nature and Human Well-being*. 2000. (Montreal, Canada: Secretariat of the Convention on Biological Diversity). Available online at www.biodiv.org/doc/publications/cbd-sustain-en.pdf.

²¹ That is not to suggest that multinational corporations are the sole actors involved in the acquisition of locally-based biological resources or knowledge. As discussed in this paper, other entities, such as national or foreign governments, also are among those actors typically involved in the appropriation (or misappropriation) of local biological resources or knowledge. Interestingly, the misappropriation of those resources by national government agencies is more common than by multinational corporations or individuals. For more on the role of national governments in access and benefit sharing, see Correa, M. 2005. Do national access regimes promote the use of genetic resources and benefit sharing? *International Journal of Environment and Sustainable Development* 4(4):444-463.

managers of such resources—namely, local or indigenous communities, their leaders, and small farmers.²² Consequently, access to biological resources and TK in an era of increasing globalization is brokered by the nation-state without authorization from (or in many cases, awareness of) their holders at the local level. That is occurring despite the CBD’s intended role as one of the primary vehicles for stopping acts of “biopiracy,” or the misappropriation of biological resources or TK as one’s property.^{23,24}

In 2002, the *Bonn Guidelines on Access and Benefit Sharing*,²⁵ which grew out of deliberations among parties to the CBD, were established to provide voluntary rules designed to foster a more transparent process in drafting (biodiversity) rules and regulations to comply with Article 15 of the Convention—the article that recognizes the sovereignty of the state in facilitating access to biological or genetic resources (as discussed above). As a condition for access to biological resources or knowledge, mutually agreed terms, benefit sharing, and certification of the geographic origin of genetic material and TK in patents, the *Guidelines* encourage CBD member states to incorporate the “prior informed consent” of those whose resources or TK are being sought. Prior informed consent—the “knowledge of and approval in advance for the use of one’s resources”²⁶—is fundamental to fostering equitable access to the resources held by local or indigenous peoples. However, because facilitating ABS agreements is delegated to national governments vis á vis the CBD, laws and regulations to ensure that prior informed consent is obtained are written and adopted at the highest—not local—level of governance.

Even in many nation-states that have passed laws recognizing and requiring the consent of local peoples before their resources or knowledge is pursued, many communities lack the information,

²² Secretariat of the Convention on Biological Diversity. 1992. *Article 15: Access to Genetic Resources*. Available online at www.biodiv.org/convention/articles.shtml?lg=0&a=cbd-15.

²³ World Intellectual Property Organization. *Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore. Seventh Session, Geneva, November 1 to 5, 2004: Draft Report*. (Geneva: World Intellectual Property Organization, 2004). P. 6.

²⁴ Hansen and VanFleet. 2003. P. 5.

²⁵ Secretariat of the Convention on Biological Diversity. 2002. *Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising Out of Their Utilization*. (Montreal, Canada: Secretariat of the Convention on Biological Diversity). Available online at www.biodiv.org/programmes/socio-eco/benefit/bonn.aspx.

²⁶ Hansen and VanFleet. 2003. P. 25.

experience, and support crucial to negotiating equitable terms for ABS agreements. Although Article 8(j)²⁷ of the CBD calls on member states to respect, preserve, and maintain TK, it does so without providing any means by which to protect it in its natural environment. Nevertheless, the *explicit* provisions of Article 8(j)—in theory—offer a means by which local or indigenous peoples and their representatives could vie for the protection and preservation of their TK and biological resources, *provided that they are familiar enough* with those provisions and how best to act upon them. However, among those local peoples and their representatives who *are* attempting to work with certain provisions in Article 8(j), there remain obstacles to achieving end goals such as the preservation of TK and surrounding biological resources—both of which are fundamental to the pursuit of food sovereignty. One such obstacle is found in the call for strong protections of privately-held IP in the Agreement on Trade-Related Aspects of Intellectual Property Rights of the WTO, where there is an absence of provisions for national and international rulemaking over the implementation of Article 8(j) concerning the protection of TK.

The World Trade Organization-Agreement on Trade-Related Aspects of Intellectual Property Rights

The World Trade Organization's (WTO) inclusion in the global biodiversity regime is revealed through its Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS; implemented in 1995). Broadly speaking, “the kinds of initiatives countries can take to protect and promote human rights,” including the internationally-recognized right to food, has been cited as one that the TRIPS agreement “potentially restricts.”²⁸ Specifically, the Agreement creates a negative limiting condition for the global biodiversity regime in that it lacks sufficient provisions to enable indigenous or local peoples

²⁷ Secretariat of the Convention on Biological Diversity. 1992. *Article 8. In-situ Conservation*. Available online at www.biodiv.org/convention/articles.shtml?lg=0&a=cbd-08.

²⁸ Chapman, A.R. 2002. The human rights implications of intellectual property protection. *Journal of International Economic Law* 5(4):861-882.

to protect or preserve their TK by themselves.²⁹ Thus, the emphasis on trade liberalization and the enforcement of the Western concept of IP rights in the Agreement not only places TK and local biologically diverse resources in a tenuous position, but inherently incorporates the TRIPS agreement into the global biodiversity regime by fostering a system of trade rules among nations which, if enforced, can constrain future prospects for the ability of indigenous or local communities' to maintain the knowledge and biological resources of which they are the primary stewards.

A significant concern with the TRIPS agreement's relationship to the global biodiversity regime is that although it "exclude[s] from patentability...plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes," it requires member states to "provide for the protection of *plant varieties* [emphasis added], either by patents or by an effective *sui generis* system."³⁰ Thus, it is incumbent upon *national governments* to ensure that biologically diverse resources such as plant varieties—in many instances developed by indigenous or local peoples—are not subject to unrestricted attempts by outside parties to use and/or acquire those resources as their own IP. Put simply, in the absence of efforts by the nation-state to secure its plant varieties through traditionally Western constructs such as patents or a specially designed (i.e., *sui generis*) legal framework, the possibility remains that diverse biological resources maintained at the local level can be pursued by external entities or individuals—or even by the national governments of the countries in which those resources are located—attempting to acquire formal ownership rights to those resources without their seeking the consent of indigenous or local peoples. However, as discussed above, resources cultivated through practices based on TK—particularly within non-Western states—are not easy to transform into Western IP constructs, including

²⁹ International Federation of Agricultural Producers. *Agricultural Trade and the WTO Negotiations: Concerns and Consensus Among Farmers' Organisations, Consolidated Statement*. (Paris: International Federation of Agricultural Producers, 2003). P. 29.

³⁰ World Trade Organization. 1995. *Agreement on Trade-Related Aspects of Intellectual Property Rights; Article 27(3)(b)*. Available online at www.wto.org/english/docs_e/legal_e/27-trips_04c_e.htm.

patents. Furthermore, it cannot be assumed that indigenous, local, or rural peoples as a whole would value the transformation of living, dynamic resources into protected “property.”

Article 27 also states the following, which, despite its seeming clarity of meaning, requires further scrutiny:

Members may exclude from patentability inventions, the prevention within their territory of the commercial exploitation of which is necessary to protect *ordre public* or morality, including to protect human, animal or plant life or health or to avoid serious prejudice to the environment.³¹

Although Article 27 incorporates the protection of environmental health into its provisions, the exclusion from patentability of living resources is not based on purely objective criteria. First, the TRIPS agreement fails to define the term “invention,” thereby deferring to national legislation for clarity of meaning.³² However, failure to clarify such a term assumes that states already have legal frameworks to provide adequate definitions, which is not necessarily so throughout much of the South. Moreover, Article 27(2) states that exclusion from patentability is permitted “provided that such exclusion is not made merely because the exploitation is prohibited by their law.” Thus, an inherent tension is created between existing national laws and obligations of the TRIPS agreement. As with the ABS provisions made in the CBD, the TRIPS agreement provides little if no formal means of enabling indigenous or local peoples to participate in the processes by which their national governments’ adopt laws that define what is intended by terms such as “invention,” or to be represented formally at the national level with respect to determining what is and is not eligible for exclusion from patentability.

An International Framework in Conflict?

Collectively, the major actors, institutions, and agreements that constitute the global biodiversity regime have created an international process that is not without inherent tensions. Those tensions perhaps are most visible when one contrasts the provisions of the CBD with the WTO-TRIPS

³¹ World Trade Organization. 1995. *Agreement on Trade-Related Aspects of Intellectual Property Rights; Article 27(2)*. Available online at www.wto.org/english/docs_e/legal_e/27-trips_04c_e.htm.

³² Haugen, H.M. 2005. *The Right to Food and the TRIPS Agreement, with a Particular Emphasis on Developing Countries’ Measures for Food Production and Distribution*. (Norway: University of Oslo, Ph.D. Thesis. Submitted to the Faculty of Law of the University of Oslo, September 1, 2005). P. 186.

agreement. Despite its inherent flaws—as discussed above—the CBD includes provisions which, if properly enacted or exploited, could nurture more favorable conditions for local peoples with respect to the preservation of their surrounding biodiversity and associated TK. For example, if national policymakers among more states chose to ensure that the prior informed consent of local peoples were obtained before a national or supranational entity sought a particular resource held by those peoples, access to resources or TK might foster more equitable agreements between the involved parties. However, defects in international constructs such as the CBD compound the problems associated with the global biodiversity regime when one considers many of the rules and provisions of the WTO-TRIPS—several of which differ sharply from those of the CBD.

For over half of a century, international human rights accords have recognized that “intellectual products have an intrinsic value as an expression of human creativity and dignity.”³³ That differs strongly with the treatment of intellectual property as more of an *economic instrument* eligible for legal protection(s).³⁴ The latter is more reflective of the rules and provisions made by the TRIPS Agreement, and it has been the subject of criticism by international human rights commissions that have described the Agreement as a challenge to promoting the right to health. Moreover, delegations at the international level have charged that “there are apparent conflicts between the intellectual property rights regime embedded in the TRIPS Agreement...and international human rights law.”³⁵

The fundamental conflict within the international biodiversity regime arises, therefore, from the *raison d'être* of the CBD and that of the WTO-TRIPS Agreement. Whereas the former was created (in principle) to preserve biodiversity, promote sustainable development, and foster more equitable access and benefit sharing over genetic and biological resources, the latter concentrates on fostering an international system of rules designed to lessen trade barriers and reduce trade discrimination among nations through a system of legal procedures and challenges. Through the interplay of actions taken by

³³ Chapman, 2002. P. 867.

³⁴ Ibid.

³⁵ United Nations High Commissioner for Human Rights. 2000. *Intellectual Property Rights and Human Rights: Sub-commission on Human Rights Resolution 2000/7*. Quoted in Chapman, 2002. P. 871.

way of its juridical system, poorer nation-states can be subject to WTO decisions that will affect their peoples down to the indigenous or local levels. For example, if a particular state from the South refuses to open its markets to the sale of genetically engineered crop seeds by a particular multinational agricultural corporation, legal challenges from the nation in which that corporation is based could result in punitive measures upon the other state or—more pointedly—the requirement of that state to open its markets to such seeds. Should that occur, indigenous or local peoples’ ability to maintain food production might be compromised, because the substitution of foreign or alien foods in place of traditional foods not only leads to a loss of production of traditional and culturally appropriate foods, but in the loss of TK in food production and the ability to maintain that TK for future generations. Indigenous peoples’ organizations have voiced that concern through CBD meetings such as those of its Working Group on Access and Benefit Sharing,³⁶ but progress through those mechanisms has been limited.

BOTTOM-UP PARTICIPATION IN INTERNATIONAL RULEMAKING

Thus far, this paper has discussed the relationship of the global biodiversity regime to the ability of indigenous or local peoples to pursue a state of food sovereignty. That regime largely consists of institutions and agreements born at the international level, with formal mechanisms for decision making typically left or delegated to national governments. However, calls for the equitable participation and representation of local peoples before the global biodiversity regime have increased the demand for approaches that differ from more traditional ones, where delegations appointed by national governments are charged with partaking in decision- or rulemaking processes before constructs such as the CBD or institutions such as the WTO. Those less-traditional, “bottom-up” approaches form the basis of the ensuing discussion.

³⁶ Secretariat of the Convention on Biological Diversity. *Access to Genetic Resources and Benefit-sharing: Meeting of the Ad Hoc Open-ended Working Group on Access and Benefit-sharing*. (Montreal, Canada: Secretariat of the Convention on Biological Diversity, 2001). Available online at www.biodiv.org/programmes/socio-eco/benefit/ab-wg-01.asp.

Understanding Bottom-up Participation

“Bottom-up” participatory approaches are neither new nor novel to decision-making processes. Absent context, “bottom-up” and “top-down” are heavily *descriptive* terms and are not necessarily restricted to a rigid definition or conceptual framework. Nevertheless, bottom-up approaches typically emerge in response to a real or perceived problem that affects individuals below the regional level—and oftentimes well below that level. Thus, bottom-up practices should not be dismissed as an embellished means of describing democratic participation or representation. Although effective bottom-up participation typically entails democratic practices or at least consensus-building processes among peoples at the local or regional levels, it assumes many different forms, and is not necessarily a construct of the state.³⁷ Thus, bottom-up approaches are not necessarily defined by *where* they originate, but by the notion that those at the local level are incorporated into a process that draws upon their participation to influence decisions or outcomes at higher levels of governance, sometimes—but not always—through existing state institutions. Rather, such approaches tend to arise out of civil society or in conjunction with larger associations within or across borders.³⁸ This paper follows that understanding by discussing *how* bottom-up participation occurs or has occurred in the context of international decision-making within the global biodiversity regime.

Bottom-up participation is cultivated in several ways. It can entail simple, locally-elected councils appearing before higher governmental bodies to present a compilation of requests, concerns, or grievances agreed upon by members of small communities—or more complex approaches, as with associations or nongovernmental organizations (NGOs) that work with communities well below the level of the nation-state or province to assess their needs and concerns. In the latter case, those

³⁷ Nevertheless, bottom-up approaches can and do arise within institutionalized political structures at local or regional levels, as also discussed in this paper. The central theme here is that, conceptually, bottom-up participation is very broad and can occur through existing political structures, actors representing civil society within nations or as part of a “globalized” civil society, or all of the above.

³⁸ For a more in-depth discussion of the role of (international) nongovernmental organizations as supra-state actors or elements of an international civil society, see Brown, L.D. and M.H. Moore. 2001. Accountability, strategy, and international nongovernmental organizations. *Nonprofit and Voluntary Sector Quarterly* 30(3):569-587.

associations or NGOs might act by “lobbying” decision-making bodies at a considerably higher level of organization, or by using an array of techniques to engage themselves more directly with decision-makers or institutions at or above the level of the nation-state. That might include, for example, an association representing multiple indigenous or local communities in a particular geographic region or across multiple regions, or one that has attained “observer status”³⁹ before a particular international entity such as a United Nations committee or subcommittee. The objective in that instance is for the association to serve as a conduit by which indigenous or local communities can articulate their interests and concerns before an entity that otherwise would not acknowledge them formally or, perhaps, in any capacity.

Broadly speaking, the actors engaged in bottom-up participatory approaches in the international rulemaking system—or, for the purpose of this paper, the global biodiversity regime—include *all* individuals, communities, NGOs or representative associations, national governments and their officials, and international delegations and members of international deliberating bodies. However, the actors responsible for initiating bottom-up approaches to participation in the global biodiversity regime typically include NGOs, INGOs, indigenous peoples’ associations, individual local or indigenous persons, or even renown or formidable individuals (e.g., former politicians or heads of state, diplomats, social activists) well-positioned to foster “upward” participatory actions before institutions such as the WTO or meetings of committees mandated by the Secretariat of the CBD.

EFFICACY OF BOTTOM-UP PARTICIPATORY APPROACHES IN THE GLOBAL BIODIVERSITY REGIME: EXAMPLES AND CASES

This section draws upon a limited number of examples of associations and organizations that are engaged in what might qualify as bottom-up approaches to effecting change in the context of the global

³⁹ For a better understanding of the entitlements of observer status within international organizations such as the United Nations, see the Secretariat of the United Nations. *Repertory of Practice of United Nations Organs: Supplement No. 8, Volume IV, Article 70*. (New York: Secretariat of the United Nations, 1975). Available online at http://untreaty.un.org/cod/repertory/art70/english/rep_supp8_vol4-art70_e_advance.pdf.

biodiversity regime. It includes an analysis of each association's efficacy in terms of affecting decision-making processes at the international level, which in some form relate to the empowerment of indigenous or local communities' ability to pursue a state of food sovereignty. Methodologically, the associations selected were chosen through an Internet and traditional literature search of associations within Latin America that are attempting to foster bottom-up approaches, using criteria such as size (large, medium, or small), issue areas of concern to them (e.g., traditional knowledge, ABS agreements, biodiversity), and organizational structure (e.g., complexity and simplicity).⁴⁰

La Via Campesina

La Via Campesina, which is discussed at the beginning of this paper, describes itself as

an international movement which coordinates peasant organizations of small and medium sized producers, agricultural workers, rural women, and indigenous communities from Asia, America, and Europe. It is an autonomous, pluralistic movement, independent from all political, economic, or other denomination... Via Campesina is organized in seven regions as follows: Europe, Northeast and Southeast Asia, South Asia, North America, the Caribbean, Central America, and South America.⁴¹

As discussed earlier, the organization was responsible for introducing the term food sovereignty in 1996 to the world. Via Campesina arose in the early 1990s, when a group of "peasant leaders" from multiple regions of the world convened at a meeting of the National Union of Farmers and Livestock Owners in Nicaragua. By 1993, the Via Campesina officially was chartered.⁴² Thus, its origins can be traced to representatives or leaders of much smaller, grassroots-level rural communities.

In addition to the broader, loftier objective of empowering its members to pursue a state of food sovereignty, Via Campesina⁴³ actively works to address most of the elements—discussed in this paper—

⁴⁰ Concerning those criteria, associations were not limited to those that are large and complex. To the contrary, although several of the associations discussed in this section meet those criteria, efforts to include smaller or less-complex organizations or associations—such as those originating exclusively within a local community or village—were made. Virtually all of the larger associations discussed in this section, however, consist of smaller organizations with origins at the grassroots level.

⁴¹ La Via Campesina. 2003. *Organization: What is the Via Campesina?* Available online at www.viacampesina.org/main_en/index.php?option=com_content&task=blogcategory&id=27&Itemid=44.

⁴² Ibid.

⁴³ It should be noted that another association of similar magnitude—the Coordinator of the Indigenous Peoples of the Amazon (COICA)—also merits attention similar to that given to Via Campesina. However, in the interest of brevity, and, due to the size and complexity of COICA, it will be mentioned here that the nature of the analysis of Via Campesina would not

that are intertwined with the attainment of food sovereignty: protection of biodiversity; access to biological and genetic resources; promotion of local women as participants in decision-making processes vital to their communities' survival; and the broader participation of all local peoples in those processes.⁴⁴ On a smaller scale, most of its local peoples' organizations are structured in ways that are designed to foster the objectives discussed above. For example, El Frente Democrático Campesino de Chihuahua (the Peasants' Democratic Front) operates as an organization that represents rural peoples of the Mexican state of Chihuahua, and is independent of government institutions. Among its main instruments for the taking of action, is a set of best-practice guidelines to which it adheres, and, to which rural peoples active within the organization can refer.⁴⁵

Analysis

The size and scope of Via Campesina make it difficult to evaluate directly how efficacious it has been at empowering local or indigenous peoples to pursue a state of food sovereignty through bottom-up participatory approaches within the global biodiversity regime. The organization clearly has fostered greater cohesion within local communities in geographic regions such as Central America—and has provided peoples within those communities with a strong base of knowledge upon which they can draw for the purpose of exercising or representing their interests before higher levels of governance. However, currently it is challenging to find a direct correlation between events such as the brokering of ABS agreements with local peoples and the skill sets that they might be acquiring as a result of the activities of Via Campesina or, more specifically, the smaller organizations to which they belong. Moreover, it is premature to determine the extent to which the organization has made a tangible contribution to decision making at the international level (specifically, the global biodiversity regime). For example, during the CBD's 2006 *Eighth Conference of the Parties*, Via Campesina “shadowed”

differ that dramatically from one of COICA. For further information about COICA, please visit www.coica.org/en/welcome.php.

⁴⁴ La Via Campesina. 2003.

⁴⁵ El Frente Democrático Campesino. *Buenas Prácticas: Sumario*. Available online at www.revistafuturos.info/futuros_3/fdc_eqp1.htm.

deliberations of particular relevance to local or indigenous peoples by reporting on discussions over whether an international moratorium on Genetic Use Restriction Technologies (GURTS) should have been removed. Via Campesina and numerous other rural or indigenous peoples associations vehemently opposed the lifting of such a moratorium, arguing that it would strengthen the ability of multinational agricultural corporations to introduce to rural peoples seed varieties that not only were incapable of being saved between planting seasons, but which could displace locally-breed varieties and any traditional knowledge associated with them. Ultimately, the moratorium was upheld,⁴⁶ but it is difficult to discern the extent to which local or indigenous peoples' associations—acting upon principles developed through bottom-up participatory approaches—influenced the final decision (if at all).

International Federation of Agricultural Producers

The International Federation of Agricultural Producers (IFAP) is perhaps the world's largest association representing small farmers and farming families. As of 2006, IFAP consisted of 115 national farmers' organizations from 80 nations (including those of wealthier states as well). IFAP describes itself as "representing over 600 million farm families" and maintains "General Consultative Status with the Economic and Social Council of the United Nations."⁴⁷ Most importantly is the *process* by which IFAP operates. The Federation attempts to build consensus over issues of concern expressed by its smaller member organizations. Thus far, that has been done through the convening of three "World Farmers' Congresses," where deliberations have resulted in major policy statements and resolutions targeted at decision-making procedures within institutions that are a part of the global food and biodiversity regime, such as the WTO. In turn, those statements and resolutions have been disseminated to key members of the international community (e.g., high officials within the WTO-TRIPS system) with the goal of presenting a policy platform intended to build consensus over the need

⁴⁶ Centre for Research on Globalization. Terminator rejection - A victory for the people. March 24, 2006. Available online at www.globalresearch.ca/index.php?context=viewArticle&code=GRE20060325&articleId=2169.

⁴⁷ International Federation of Agricultural Producers. *What's IFAP?* Available online at www.ifap.org/en/about/aboutifap.html.

to address the concerns that they represent. A prominent example is that of IFAP's 2003 policy statement, *Agricultural Trade and the WTO Negotiations: Concerns and Consensus Among Farmers' Organisations: Consolidated Statement*.⁴⁸ Despite the document's recommendations in support of WTO-TRIPS negotiations to establish a "multilateral legal framework to effectively protect traditional knowledge of rural communities" and its recognition that current WTO-TRIPS provisions for IP rights fail to preserve the actions of small farmers in poor nations who are nurturing "local food and medicinal plant varieties,"⁴⁹ those elements have yet to receive *bona fide* treatment within the WTO, such that particular indigenous or local peoples in specific geographic regions have been able to achieve tangible results in the drive to maintain their TK and foster a state of food sovereignty.

IFAP is an intriguing actor because of its sheer size and complexity. For example, it does not solely represent indigenous peoples but, rather, a significantly larger network of rural and local peoples. The Federation consists of four geographic regions, including Latin America and the Caribbean—but those regions are comprised of several member states, which themselves consist of several farmers' organizations. Thus, although its mechanisms of action follow those of a bottom-up approach—and despite its regional composition—the efficacy of the Federation is relatively low in terms of its ability to "position" the interests and deliberations of its more local (e.g., indigenous community) members before rulemaking bodies such as those within the WTO-TRIPS system. For example, the Federation's Latin America and Caribbean Region includes among its objectives serving "as a [spokesperson] for producers in Latin America and the Caribbean on a regional and international level."⁵⁰

Analysis

Is IFAP an effective instrument through which bottom-up participatory decision making within the global biodiversity regime can take place? Several aspects of its inherent structure and processes

⁴⁸ See, for example, International Federation of Agricultural Producers, 2003.

⁴⁹ *Ibid.*, p. 29.

⁵⁰ International Federation of Agricultural Producers. *Committee for Latin America and the Caribbean: Main Aims*. Available online at www.ifap.org/en/regions/documents/Ficha%20del%20Comite_lac_En.pdf.

suggest a current lack of efficacy on its part. First, the complexity and size of IFAP create a paradox in which the stratification of the Federation obscures the original interests of the very local, indigenous, or other rural peoples who constitute the smaller farmers' organizations that, in turn, form the backbone of the entire organization. Thus, IFAP might better be described as *quasi*-effective at fostering bottom-up participation: it encompasses those at the level of the local indigenous community; it draws upon the informed input of members of those communities; it attempts to assemble that input into forms of action intended to effect change at the level of the international institution (e.g., the WTO); and it operates within and outside of national governmental frameworks. However, the Federation fails to empower local or indigenous communities facing challenges to their survival, such as the preservation of their TK. Thus, its scope is much too broad to enable the Federation to intervene, for example, in a case where an ABS agreement is being drafted or in which it is obvious that the prior informed consent of a local community has not been sought by an external party attempting to procure as its own property a particular biological resource or process of knowledge held by that community.

Campinas Indian Reserve of Brazil

The Campinas Indian Reserve of Brazil represents an interesting case, in that although it draws upon the medicinal aspect of traditional knowledge and biological resources, it exemplifies what might be an instance where effective bottom-up participatory approaches in the context of the global biodiversity regime have been occurring. In June 2006, an indigenous tribal people of the Brazilian Amazon—located within the Campinas Indian Reserve—announced its intention to add to the country's scientific research profile the secretions of a venomous frog (the kambo). Led by Chief Fernando Katukina, the tribe, which for generations has applied the frog's poisonous secretions as a local anesthetic (for suppressing pain), approached the Brazilian government, resulting in *Project Kambo*. The project will permit only the funding of Brazilian scientists to study how the frog's secretions work

on a molecular level, and how they might be transformed into a pharmaceutical product of benefit to global health.⁵¹

Analysis

By establishing *Project Kambo*, the Katukina tribe effectively made provisions that would prevent any possible acts of biopiracy—an important element given that Brazil has a history of instances in which local biological resources were misappropriated by multinational corporations, resulting in no substantive benefits or protections for the local or indigenous peoples who were the stewards of those resources.⁵² Thus, the tribe essentially initiated a process for what eventually could result in a product of benefit to health at the international level, and could facilitate the negotiation of equitable ABS agreements. Although the Katukina tribe and the Brazilian government currently are acting beneath the international level, if a new product should result from research on the kambo's venom, the provisions of *Project Kambo* could ensure that the tribe will not lose access to or stewardship over the current population of frogs from which it obtains the secretions it uses for medicinal healing. Although this example is not the very first of its kind, it is somewhat unusual. However, the approach taken by the Katukina tribe could well be applied to situations in which other local or indigenous peoples with special knowledge of how to use a biological resource (e.g., for food production) could maintain stewardship and use of that resource/knowledge while preventing the misappropriation or misuse of it.

REFLECTIONS AND CONCLUDING REMARKS

Although the examples and cases reviewed in this paper do not clearly demonstrate that effective, bottom-up approaches to decision making in the context of food sovereignty and the global biodiversity regime are flourishing, to conclude that none exist or that fostering them is not possible would be erroneous. This paper has captured a “glimpse” of the landscape concerning food sovereignty

⁵¹ Prada, P. Poisonous tree frog could bring wealth to tribe in Brazilian Amazon. *The New York Times*. May 30, 2006. Available online at www.williams.edu/go/native/kambo%5E.htm.

⁵² Ibid.

and the global biodiversity regime at a moment in time. Moreover, in the interest of brevity, the discussion has been confined to examples from Latin America. As evidenced by the richness of organization within the indigenous and local peoples' associations discussed, the *mechanisms* for bottom-up participation in the global biodiversity regime are—in many instances—set in place. Enacting them will require far greater care, vigilance, and cohesion among those peoples vying to become food sovereign or to preserve the biological resources of which they are the stewards.

A preliminary conclusion that can be made from this analysis, however, is that it is too premature to expect high degrees of efficacy among those actors who are attempting to exploit provisions within institutions such as the CBD and the WTO that will better position them to pursue a state of food sovereignty or preserve their biological resources and associated traditional knowledge. The reason is simple: despite having some precursors—as the WTO does—the foremost institutions that constitute the global biodiversity regime are in their infancy. The CBD has been in effect for about 13 years as of this writing, and the WTO-TRIPS Agreement has been in place since 1995. From a historical perspective, that is insufficient time for members of the international community to apply or use to the fullest extent the provisions and rules generated by those institutions. Similarly, it is too premature for non-state actors, such as those currently engaged working with local or indigenous communities to represent their institutions within the global biodiversity regime. Future research on this topic should concentrate more on highly-specific geographic regions and even single local or indigenous communities, to assess how (if at all) they are being represented or are participating.