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## Landmark biodiversity, TK provisions accompany EFTA-Colombia FTA

By David Vivas-Eugui

Since the implementation of the WTO's Agreement on Trade-related Aspects of Intellectual Property (TRIPS) in 1996, several international fora have been working to agree upon the appropriate nature of the relationship between intellectual property provisions and the Convention on Biological Diversity (CBD). The debate expanded to other fora in the early 2000's when other international organisations - such as the World Intellectual Property Organization (WIPO)<sup>1</sup> and the Convention on Biological Diversity's Conference of the Parties (CBD COP)<sup>2</sup> - engaged in the discussion from different perspectives.

At the core of the debate is the fact that the intellectual property (IP) provisions in TRIPS may generate incentives for the incorporation or use of genetic resources, its derivatives, or associated traditional knowledge (TK) in new patentable inventions or breeders' rights. Also, there has been a lot of criticism linked to the fact that the TRIPS Agreement has not incorporated the necessary mechanisms to avoid illegal access and use of genetic resources and TK - so-called 'biopiracy' - and address low patent quality examination in biotechnological patents.

Recently, however, a few small steps addressing trade and biodiversity-related concerns have been seen in bilateral Free Trade Agreements (FTAs). For example, non-binding - yet valuable in terms of coverage - language can be found in the now ratified US-CAFTA, US-Peru FTA, the US-Colombia FTA (which is still in process), and Canada-Peru FTA, and the EU's Economic Partnership Agreement (EPA) with the Caribbean Forum for African, Caribbean, and Pacific States (CARIFORUM). In each of these trade agreements, certain objectives, limited implementing mechanisms, and some level of cooperation to improve patent quality were recognised. Nevertheless, there was reluctance and lack of will on the part of industrialised countries to effectively address biodiversity until the issue was addressed seriously for the first time in the recent FTA between the European Free Trade Association (EFTA)<sup>3</sup> and Colombia.

### Colombia, Peru sail into uncharted waters

One of the main reasons why so few FTAs between developed and developing countries contain provisions on the relationship between intellectual property and biodiversity is that developing countries never broached the subject. This silence on the part of developing countries is likely due to a lack of clarity on how to address the issue in a bilateral context. This suddenly changed during US FTA negotiations with Colombia and Peru, when the two Latin American countries made text proposals aimed at incorporating provisions on biodiversity-related issues into the chapter on IP. These proposals included the following measures:

- The recognition that IP rights should be granted in respect of CBD and national biodiversity and TK legislation;
- The incorporation of a disclosure mechanism for origin/source and evidence of prior informed consent (PIC) and benefit sharing arrangements;
- The inclusion of a mandate to develop at the national level an effective *sui generis* (of its own kind) system to protect TK, and;
- The incorporation of enforcement measures and cooperation arrangements in patent examination and exchange of information.



These four measures were rejected by the US and only two carefully worded 'side letters' (understandings attached to the agreement) were produced. These side letters have been heavily criticised by civil society actors and even former Colombian and Peruvian negotiators because of what they call "exhortatory" language and the lack of specific obligations. Nevertheless, the fact that the issue was put on the table and an outcome - however small - was realised provided an impetus for these and other biodiversity rich countries to make more precise text proposals in subsequent negotiations.

## Biodiversity section appears for first time in FTA

Switzerland<sup>4</sup> has a prominent international reputation in this unexplored field. The country's progressive legislation regarding a requirement to disclose the source of genetic resources and traditional knowledge in patent applications, demonstrates its ability to be open and responsive to these concerns in absence of an international agreement or possible commercial benefit to their own constituencies. As such, the Swiss have submitted several proposals<sup>5</sup> regarding the introduction of declaration of source requirements in WTO and WIPO.

Due to their expertise in the field, Switzerland - along with Norway<sup>6</sup> - was directly involved in Colombia and Peru's FTA negotiations with EFTA. They reviewed the Latin American countries' proposals and proposed specific adjustment to the chapter on IP and have been closely involved throughout the process.

The EFTA-Colombia FTA was ultimately signed in November 2008 and is currently in the ratification process. In a recent interview with the BioRes, the Swiss Federal Institute of Intellectual Property (IPI) and Swiss Secretariat for Economic Affairs (SECO) revealed that the ratification process may be wrapped up by mid-2010. While Colombia and Peru had initially been engaged in joint negotiations with EFTA, they later split the process, thereby allowing the Colombian Agreement to be finalised first.

The EFTA-Colombia agreement contains a section in the IP chapter called "Measures Related to Biodiversity" - it is the first time such a section has been included in an FTA. The inclusion of the heading implies an active stand on the matter, pointing directly at specific "Measures." According to the IPI and SECO, the inclusion of this text was the result of a specific request from Colombia and Peru.

## What's included?

The "Measures Related to Biodiversity" section includes provisions recognising the importance of the objectives and main obligations under the CBD, recognition of basic principles such as sovereign rights over genetic resources, and the respect for access and benefit sharing in light of principles and provisions in national and international law. It also recognises the contributions of indigenous peoples, local communities and their knowledge to economic and social development<sup>7</sup>. The IPI and SECO insist that the chapter emerged as a response to demand for such a clause from Peru and Colombia, rather than it being suggested by Switzerland. The Swiss have also indicated the IPR Chapter of the EFTA-Colombian FTA is very similar to the text in the Peruvian FTA, but will not necessarily be replicable in other negotiations.

One important issue emerging from the incorporation of the new section in the EFTA-Colombia FTA, are the implications of the application of Most Favoured Nation and National Treatment principles. Some observers say that some aspects of the new section on biodiversity related measures should be subject to article 4 of the TRIPS Agreement, which automatically extends any privilege granted to one party to all other WTO members. This would also be the case in regard to national treatment when the same privilege is already incorporated in national legislation. The ultimate answer depends on whether these new measures are considered as part of any of the intellectual property categories stipulated in the TRIPS Agreement<sup>8</sup> or certain WIPO treaties such as the Paris Convention. It would also depend on whether the provisions in question are creating or increasing the protection of intellectual property rights for the citizens of a given WTO member country.

One could argue that some of the measures in this chapter fall into the patent/sui generis rights-related provisions section. The "Measures Related to Biodiversity" section can affect the patentability criteria examination (e.g., novelty and inventive step), the description of the invention, and the evaluation of the claims made in a particular patent. Others might consider these types of requirements as foreign to the patent system and that countries can even exclude some types of life forms from patentability. This line of argumentation can be supported by diverse documentation and statements in the long debate of article 27.3 b) reviewed in the TRIPS Council. Also, TK rights recognition can be considered a "sui generis" (of its own kind) form of intellectual property protection that covers plant genetic resources. Some supporters also argue that the TK protection in the new section implies the new positive "IP rights" to local and indigenous communities. Regardless of the ultimate long-term answer, there are some interesting aspects of this debate due to its systemic implications for future FTAs.

## Conclusions

The new section on "Measures Related to Biodiversity" in the IP chapter of the EFTA-Colombia FTA, shows that it is possible to generate synergies between IP provisions and CBD objectives and principles without affecting the rights of patent holders. It provides certain recognition of the demands made to date by biodiversity-rich countries and the language proposed incorporates many of the proposals made in the TRIPS Council, WIPO, and in previous FTA negotiations. In that sense, it includes - for the first time - precise biodiversity measures backed with some enforcement provisions. This precedent sheds a positive light over future FTAs with EFTA and could be used as reference for future EFTA FTAs as well as EU commercial and cooperation agreements currently being negotiated with Central America and Andean countries. While the honest broker role of Switzerland - and the individual support of Norway - to find balanced outcomes in this particular FTA have brought some limited effect in terms of countries involved, it nonetheless stands as an important example to other negotiations when addressing biodiversity issues in IP negotiations.

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## Biodiversity-Related Measures in the EFTA-Colombia FTA

Measures	Commentary
To collaborate in specific cases of non compliance <sup>9</sup>	While this rule is of a 'best endeavour' nature, if implemented in an effective manner it could generate joint efforts towards actual cases of illegal access and use of genetic resources and TK. This would facilitate clarifications and bilateral agreeable solutions.
To require, according to national law, that patent applications contain a declaration of the origin or source of genetic resources to which the inventor has had access <sup>10</sup>	This may be the most 'novel' IP provision in this FTA, being also the main measure proposed by biodiversity rich countries to tackle the lack of TRIPS/CBD synergies. This requirement implies that patent applicants must indicate, when appropriate, the country of origin of any genetic resources (in order to assess geographical provenance, linked ecosystems, and more importantly to some countries, jurisdiction) or the source - meaning who has provided the resources <sup>11</sup> .
To require, as far as provided for in each Party's national legislation, the fulfilment of the PIC and to apply these provisions to TK as applicable <sup>12</sup>	This provision is relevant to the fulfilment of CBD objectives and their implementation. The PIC concept is already a solid principle of international environmental law and common to many multilateral environmental agreements. Prior informed consent implies more than simple agreement, it implies the full release of relevant information and consultations between all stakeholders in order to generate an informed opinion. This principle is especially relevant in the case of weak parties as is the case of indigenous peoples. This point has also been part of proposals already made in the TRIPS Council by several developing countries that also demand the submission of relevant evidence of PIC and of benefit sharing in patent applications. The objective of the measure in this particular case goes beyond the purpose of improving the patent quality and the avoidance of 'biopiracy'. The objective here is directly related to the fulfilment of basic requirements for legal access according the CBD and national biodiversity laws.
To take legislative and administrative measures, as appropriate, with the aim of ensuring fair and equitable sharing of benefits provided they are based on mutually agreed terms <sup>13</sup> .	This provision, which looks more like an access provision than an IP one, seeks to respond to demand by stakeholders on the need to ensure benefit sharing actually happens.
To provide civil, administrative, or criminal sanctions in case the inventor or the patent applicant wilfully or wrongfully misleads the declaration of origin or source <sup>14</sup> .	This is the first time rules for providing an erroneous or false declaration of origin source are incorporated into an FTA. This text is an essential part of an effective set of provisions designed to address biodiversity concerns as it provides teeth for their implementation. Additional strength will be provided by the dispute settlement rules in chapter 12 of the Agreement. The text is consistent with Norwegian and Swiss positions on these issues as the misleading or lack of disclosure will not affect the validity of the patent.
To take policy, legal and administrative measures, with the aim of facilitating the fulfilment of terms and conditions of access established by the Parties for such genetic resources <sup>15</sup> .	This provision implies important obligations on the country providing genetic resources by requesting them to facilitate the fulfilment of terms and conditions of access. Many cases have shown that problems related to burdensome regulations and administrative inefficiency have occurred. This provision could generate some pressure in a providing country to better manage and implement their own internal legislation and to not only seek control but to facilitate the legal flow of genetic resources.
To undertake reasonable efforts to make patent protection available to plant inventions <sup>16</sup>	This is a best endeavour clause that seeks to generate some coherence between the need to insert a disclosure of origin/source requirement and patent law. The argument is that if there are no patents available for plant inventions, what are you going to disclose? A possible answer could be: parts of plants or chemicals derived from them. Nevertheless, it is logical that to achieve benefit sharing from the use of biodiversity both incentives should be put in place.

<sup>1</sup> Intergovernmental Working Group on Genetic Resources, Traditional knowledge and folklore (IGC).

<sup>2</sup> Negotiation of an international regime on access and benefit sharing.

<sup>3</sup> EFTA Members include Liechtenstein, Iceland, Norway, and Switzerland. The first EFTA FTA with a developing country was the Agreement with Morocco in 1997 and the latest the one with Colombia in 2008. Advanced negotiations are currently underway with Peru.

<sup>4</sup> See Article 49a) of the Swiss Federal Act on Patents for Inventions, rev. 2007.

<sup>5</sup> See WTO document IP/C/W/433 of November 2004 and IP/C/W/447 of May 2005.

<sup>6</sup> Norway is another of the few industrialised countries that have already introduced a disclosure requirement at the national level.

<sup>7</sup> Ibid, article 6.5.1 to 3.

<sup>8</sup> See TRIPS Agreement, article 1.2.

<sup>9</sup> See EFTA Colombia FTA, article 6.5.4.

<sup>10</sup> See EFTA Colombia FTA, article 6.5.5.

<sup>11</sup> In the case of Switzerland this would imply who is entity competent to grant the access or to participate in the sharing of benefits. See WTO document IP/C/W/433 of November 2004.

<sup>12</sup> See EFTA Colombia FTA, article 6.5.5.

<sup>13</sup> Ibid, article 6.5.8

<sup>14</sup> Ibid, article 6.5.6 and 7.

<sup>15</sup> Ibid article 6.5.9.

<sup>16</sup> Ibid article 6.9.3(b)

# EU, Canada set to square off on seal ban

By Paige McClanahan

When EU foreign ministers voted in July to ban imports of seal products into the European market, they set ablaze a trade and environment dispute that has been slowly gathering fuel for years.

Emotions run high on both sides of the debate. Animal rights groups - which have campaigned for the ban for more than three years - cheered the vote, but officials in Canada, home to the world's largest seal hunt, say the embargo is unfair and have vowed to take their complaint to the WTO.

The European Parliament passed the embargo in a 550-49 vote in May, and the endorsement by EU foreign ministers on 27 July sealed the deal. The ban applies to all seal products, which includes pelts, meat, and omega-3 diet supplements derived from seal oil. But the regulation includes an exemption for seals taken by Canada's Inuit communities, which consider the seal hunt vital to their cultural heritage.

Animal rights activists were jubilant. "Barbaric annual displays of animal cruelty will no longer be tolerated," said Caroline Lucas, a Green Party Member of the European Parliament and long-time supporter of the EU ban, in a statement after the vote. The embargo "represents the will of European citizens," and is "one of the most effective ways of shutting down demand" for seal products, Lucas stated in an interview.

## Canada defiant

The vote drew a fierce reaction from Canada, where the sealing industry serves as a key source of income for some 6,000 families, mostly in the eastern coastal province of Newfoundland and Labrador, according to the Canadian government. Canada exports roughly 25 to 30 percent of its seal products to the EU, says a spokesman from Canada's Department of Fisheries and Oceans; Norway, Russia and China are also major markets.

"The seal hunt is a major economic venture in many of our eastern and seaboard communities," Canadian Trade Minister Stockwell Day told the BioRes. Day insists that the practice serves as a critical source of income and provides employment in a range of related industries including processing, ship-building and transportation.

Even before the EU ban was passed, many Canadian seal hunters were struggling to make ends meet. Fishing communities along the country's eastern coast were hit hard by the collapse of Canadian cod stocks in the early 1990s and have never fully

recovered. With other fishing options limited, seal hunting has offered many fishermen a critical income supplement, even though the hunting season provides employment for only two months each year.

"The seal hunt is tremendously valuable to those people in our remote Aboriginal, coastal, and northern communities who use it as a source of income at a time of year when economic opportunities are very limited," Canadian Fisheries Minister Gail Shea said in an email message. "In Newfoundland and Labrador, for example, several coastal communities can typically derive between 15 percent and 35 percent of their total earned income from the seal hunt."

But with demand for seal products dwindling - thanks both to the global economic downturn and the threat of the European embargo - seal hunters are now hurting more than ever. This year, the price of seal pelts tumbled to C\$14, down from a high of C\$105 in 2006, and total income generated from the hunt took a nose dive. With the EU ban in force next year, demand for seal products will likely drop further, perhaps driving even more of the fishermen out of the industry.

A drop in prices resulting from the ban would also impact Canada's Inuit communities, even though the EU regulation includes a specific exemption for the seals they hunt. Most of the products generated from the Inuit seal hunt are consumed locally and never make it onto the international market, says Duane Smith, President of the Canadian branch of the Inuit Circumpolar Conference, but a fall in world pelt prices would mean lower profits for aboriginal seal hunters, even if their products never leave Canada.

*"Economically,  
it doesn't make any sense."*

Sheryl Fink, IFAW

## 'It's just politics,' animal rights groups say

Such arguments fall on deaf ears among animal rights activists, who say that the economic importance of the hunt has been exaggerated and that the hunt itself is simply indefensible. The International Fund for Animal Welfare (IFAW) argues that the seal hunt is characterised by "unacceptable cruelty": seals



are beaten with spiked clubs, impaled with steel hooks, or shot from moving boats - but rarely killed immediately. Such practices have no place in the Canadian economy, they say, and should not be allowed to continue.

"Economically, it doesn't make any sense" to fight the EU ban, says Sheryl Fink, Senior Researcher and Projects Specialist at IFAW. In Newfoundland and Labrador, seal hunting represents less than half of a percent of provincial GDP, and the landed value of seal pelts ranked ninth among all fisheries in the two provinces in 2008. This year's seal hunt, which ran from late March to late May, generated just C\$1.2 million in income, Fink says, thanks in large part to the low pelt prices.

Instead of providing a boost, the hunt may actually be a drain on the Canadian economy, IFAW has argued, given that the government subsidises the industry by sending delegations overseas to promote the seal hunt, providing sealers with icebreaking services, and offering up federal grants for seal product development and marketing. All of this, Fink says, is done despite national surveys indicating that a majority of Canadians oppose the hunt.

"It's just politics," Fink says of Ottawa's fierce opposition to the EU ban. Speaking out against the seal hunt is unthinkable for most Canadian lawmakers, who want to appear to be on the side of the country's struggling blue-collar workers, she speculates. The lawmakers are just "trying to play to the home crowd."

Indeed, opposing the seal hunt is a political non-starter in Canada. In March, Senator Mac Harb of Ontario introduced a bill to ban the country's commercial seal hunt, while allowing the traditional Inuit hunt to continue. The legislation went nowhere; not a single other lawmaker came forward to support it. "This bill was stillborn," a Liberal spokesman told Agence-France Presse at the time.

#### WTO case to come this autumn

Canada is wasting no time with its WTO challenge to the ban; the official request for consultations - the first step in the WTO's dispute settlement process - should be filed at some point this autumn, says Trade Minister Day. Ottawa will be pushing the EU to allow seal imports from countries whose seal hunts meet strict international guidelines, Day says - he and other Canadian officials insist that the country's hunt should easily qualify for such an exemption.

"We take our responsibility to ensure animal welfare very seriously," says Fisheries Minister Shea. "We put in place strict guidelines to ensure that the seal hunt in Canada is carried out humanely and in line with advice from independent veterinarians."

But winning such an exemption seems unlikely at best. Animal rights groups and some European legislators have

called the seal hunt "inherently inhumane" and the EU resolution itself leaves little room for compromise:

"Given the conditions in which seal hunting occurs, consistent verification and control of hunters' compliance with animal welfare requirements is not feasible in practice or, at least, is very difficult to achieve in an effective way," the text of the ban reads.

*"Winning such an exemption seems unlikely at best. Animal rights groups and some European legislators have called the seal hunt 'inherently inhumane' and the EU resolution itself leaves little room for compromise."*

#### 'No bearing' on FTA talks

With a protracted seal dispute on the horizon, some observers have speculated that the trans-Atlantic tensions could derail ongoing EU-Canada free trade talks, but Canadian officials insist otherwise.

The seal dispute will have "virtually no bearing" on EU-Canadian trade talks, Day insists. "At a political level, people understand that it's a stand-alone dispute on a particular product."

A free trade pact would be a big win for Canada. One study predicted that an ambitious free trade pact could bring an additional US\$8.2 billion into the Canadian economy each year and boost the country's exports to the European market by 20 percent. The EU is Canada's second-biggest trading partner, while Canada ranks eleventh on Europe's list.

*"We must not let these disagreements get in the way of building a stronger economic partnership between Canada and the EU."*

*Canadian Fisheries Minister Gail Shea*

"As with any bilateral relationship, there are always some issues on which we don't agree, but we must not let these disagreements get in the way of building a stronger economic partnership between Canada and the EU," Minister Shea said. "During these times of economic difficulty, such relationships are all the more important."

*Paige McClanahan is Editor of Bridges Weekly Trade News Digest at the International Centre for Trade and Sustainable Development.*

# Biopiracy concerns heat up over chilli pepper

By Daniel Robinson

Under the WTO Doha Round of trade talks, there has been increasing pressure, particularly from developing countries, to find mechanisms which will help prevent biopiracy and misappropriations - focused particularly on the patenting of foreign biological resources and traditional knowledge. In July 2008, a coalition of more than 100 developed and developing countries - including the EU, Brazil, India, many African countries and Switzerland - put forward a set of draft modalities to tackle the issue. The proposal calls for the Doha discussions to consider amending TRIPS to include a 'disclosure of origin patent requirement' relating to the use of biological resources and/or traditional knowledge in a patented invention.

Despite the formation of this sizable coalition, informal consultations on the matter have continued under the coordination of WTO Director-General Pascal Lamy without substantive progress. While these negotiations are important for their own aims, there are overlapping concerns that need to be addressed and which may be slipping through the cracks in the emerging international legal framework.

Although biopiracy is often discussed in terms of injustices relating to patent monopolisations, there are other cases where biological materials and traditional knowledge are appropriated and commercialised without sufficient authorisation and/or compensation. Do these cases deserve the title of biopiracy? Certainly other forms of intellectual property protections may offer unfair monopolisation of plants through, for example, plant variety protection that free-rides on the knowledge and innovations of others. These other cases of 'non-patent biopiracy' also need to be considered and addressed.

## American scientists cool off spicy pepper

A new case of interest has been identified in the US Plant Variety Protection (PVP) Office database with PVP number 200400329 for the 'TAM Mild Habanero Pepper'. This certificate was issued on 25 January 2007 to the Texas Agricultural Experiment Station. The main 'biopiracy' concern in this case is that the pepper (*Capsicum chinense*) cultivar was bred from a cross between an orange habanero pepper from the Yucatán Peninsula and a pepper from a US Department of Agriculture (USDA) genebank with Plant Introduction (PI) number 543188 collected from Bolivia.

The Texas A&M University System Agriculture Program put out an 'AgNews' press release on the pepper on 12 August 2004, describing it as a successfully bred mild version of the infamously hot and piquant habanero pepper. From a five-year breeding program the progeny of a cross "between a hot Yucatán habanero and a heatless habanero from Bolivia began to show promise"<sup>1</sup>. Due to the mildness of the normally piquant habaneros, those breeders from the Texas Agricultural Experiment Station have indicated their excitement

at the possibility of selling the habaneros to salsa companies and as a fresh product at between US\$3 and US\$4 per pound; while the comparable jalapenos peppers fetch around 50 cents per pound<sup>2</sup>.

## Mild variety has long history in Latin America

Despite tampering in Texan laboratories, much of the uniqueness of this mild habanero can likely be put down to the variety collected in Bolivia. The US Genetic Resources Information Network (GRIN) database record indicates that the original variety is 'not piquant' and that it is 'said to be grown locally' in Bolivia. The original variety was purchased by a USDA official from a Brazilian vendor in the Cobija market of Nicolas Suarez Province (Pando Department) which borders Brazil, on 13 November 1988. The plant material was then transferred to the USDA Plant Genetic Resources Conservation Unit in Georgia where the Texan breeders appear to have obtained the germplasm (GRIN PI 543188).

*"There is extensive evidence of the domestication and breeding of habanero peppers for use as a food in the region bordering Brazil and Bolivia, which has continued through to the present day."*

There are a number of documents that indicate the extent of breeding and use of cultivars of the *Capsicum chinense* species, including the habanero pepper in South and Central America. Archaeological excavations have placed sedentary people practicing agriculture east of the Andes, possibly as early as 2000 BC<sup>3</sup>, indicating that it was probably these people who first domesticated cultivars of the *Capsicum chinense* species. Evidence also indicate that the likely place of origin of the domesticated *Capsicum chinense* cultivars are the lowland Amazon basin with a potential range across Central America, South America and the Caribbean<sup>4</sup>.

Thus, there is extensive evidence of the domestication and breeding of habanero peppers for use as a food in the region bordering Brazil and Bolivia, which has continued through to the present day. Despite these documents, due to the limited requirements for grant of a plant breeder's right in the US (and elsewhere) the examiners do not need to consider prior art as a registration criterion in the same way as a patent, and therefore these documents do not invalidate the plant breeder's right bestowed by the PVP certificate.

In the PVP documents there is some evidence of breeding, although the so-called 'new' non-piquant trait of the 'TAM Mild Habanero Pepper' is likely to be a direct result of the breeding by local growers in Northern Bolivia. Because the USDA admits that the original plant was bred locally in Bolivia and found already with this trait, it seems likely that the direct contribution to the 'new' variety made by Bolivian breeders would be substantial. According to the Bonn Guidelines for Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization, the individual Texan breeders should consult with the USDA and local agriculture authorities in Nicolas Suarez Province to establish a process of engagement and benefit-sharing with the original breeders at the very least.

The genebanks of the USDA should also be much more cognizant of these issues and should be establishing material transfer agreements like those required by the international research centres of the Consultative Group on International Agricultural Research (CGIAR), including recognition, consultation and benefit-sharing arrangements with indigenous and local provider groups as well as placing restrictions on IPRs over germplasm collected directly from foreign sources.

### More protection needed

For the most part, international attempts to resolve issues of biopiracy have focused criticisms and proposals on the need for amendment of the patent system. But a 'disclosure of origin' requirement might also need to be extended to PVP systems, particularly through the International Convention for the Protection of New Varieties of Plants (UPOV), to be effective against cases such as the one described above.

*"A 'disclosure of origin' requirement might also need to be extended to PVP systems."*

Regarding the prevention of biopiracy, the other main area of focus has been on closely regulating 'access to genetic resources and benefit sharing' as well as genetic material transfer agreement rules in the Convention on Biological Diversity (CBD) and the International Treaty on Plant Genetic Resources for Food and Agriculture

(ITPGRFA) respectively. However, there is still some way to go before the Parties to the CBD are likely to be able to fully develop an International Regime on Access and Benefit-Sharing.

Additionally, the ITPGRFA only covers certain crops under its Multilateral System on Access and Benefit-Sharing. In this case, the Capsicum genus has not been listed for inclusion in Annex 1 on the ITPGRFA and so is not regulated by the Standard Material Transfer Agreements required of Contracting Parties under the Multilateral System. These international laws also do not apply retrospectively. Consequently, there are still many gaps in the evolving international legal framework which mean that biopiracy is still likely to be an ongoing problem.

That this case is so recent, suggests that researchers are still not aware of the ethical implications with regards to indigenous knowledge and breeding of plant varieties, and are ignoring the current legal developments in international fora. However, because the US has not ratified the CBD or the ITPGRFA the US government is essentially legitimising these sorts of malpractices so long as the so-called 'innovators' comply with the word of the domestic intellectual property laws in question. With the recent accession of Iraq bringing the total number of Parties to the CBD to 191, almost every country in the world is on board - the US being conspicuously absent.

*"However, because the US has not ratified the CBD or the ITPGRFA the US government is essentially legitimising these sorts of malpractices."*

The Permanent Mission of Bolivia to the UN in Geneva has been notified of the case and is investigating.

*Dr. Daniel Robinson is a Lecturer at the University of New South Wales' Institute of Environmental Studies. This article is based on an extract from his forthcoming book 'Confronting Biopiracy: Cases, Challenges and International Debates'.*

- <sup>1</sup> Santa Ana III, R. (2004) 'Texas Plant Breeder Develops Mild Habanero Pepper' AgNews - News and Public Affairs. Texas A&M University System Agriculture Program. 12 August, 2004.
- <sup>2</sup> Kevin Crosby cited by Santa Ana III, R. (2004) 'Texas Plant Breeder Develops Mild Habanero Pepper' AgNews - News and Public Affairs. Texas A&M University System Agriculture Program. 12 August, 2004.
- <sup>3</sup> See Pickersgill, B. (1971) "Relationships Between Weedy and Cultivated Forms in Some Species of Chili Peppers (Genus Capsicum)" Evolution Vol 25, No 4, pp683-691.
- <sup>4</sup> See Bosland, P.W. (1996) 'Capsicums: Innovative Uses of an Ancient Crop' in Janick, J. (ed) Progress in New Crops. ASHS Press, Arlington, VA and McLeod, M.J., Guttman, S.I. and Eshbaugh, W.H. (1982) 'Early Evolution of Chili Peppers (Capsicum)' Economic Botany Vol 36, No 4, pp361-368.

# Engaging business in the conservation and sustainable use of biodiversity

By Rik Kutsch Lojenga and María Julia Oliva

Biodiversity is depleting at a faster rate now more than ever before. And with the world's population dependent on biological resources for food, health, and economic welfare, reversing this worrisome trend is a global challenge. Yet discussions at the Convention on Biological Diversity (CBD) - the most comprehensive international agreement on biodiversity - have not managed to fully engage the range of stakeholders and affected parties in order to find a collective solution.

The role of the private sector in the conservation and sustainable use of biodiversity, in particular, still needs to be further explored and developed. Many economic and industrial sectors rely heavily on biodiversity and their actions can have a major impact on the health of ecosystems and biological resources. As noted by Jean-Christophe Vié, Deputy Head of the Species Programme at the World Conservation Union (IUCN), the economic impact of biodiversity loss is immense: "Think of fisheries without fishes, logging without trees, tourism without coral reefs or other wildlife, crops without pollinators."<sup>1</sup> Similarly, encouraging business and industry to adopt and promote good practices on the conservation and sustainable use of biodiversity could make a significant contribution towards reaching the objectives of the CBD.

The CBD has recognized the importance of engaging the business community in the implementation of its work. At its 2006 meeting in Curitiba, Brazil the Conference of the Parties of the CBD issued the first decision to focus exclusively on business involvement. This decision - formally known as Decision VIII/17—focuses on bringing together national governments and the business community during the development and implementation of biodiversity strategies and action plans; encouraging the participation of businesses in CBD processes; and compiling and developing good biodiversity practices.

Other initiatives likewise attempt to address the need for more business involvement in the conservation and sustainable use of biodiversity. This includes the CBD-led 'Business and the 2010 Biodiversity Challenge' meetings, which explore new ideas for engaging the private sector (the

next meeting is scheduled for December 2009 in Jakarta). Work on 'The Economics of Ecosystems and Biodiversity' - better known as TEEB - also includes a report focusing on business. This study is expected to outline the economic case for biodiversity conservation and identify economic tools to help businesses make the transition toward a 'green' economy.

The private sector is also focusing increasingly on the issue of conservation and sustainable use of biodiversity in their strategic decision-making process. In the cosmetics sector, for instance, the loss of biodiversity is a grave concern. Colipa, the European Cosmetics Association, has highlighted key issues linked to natural resources and biodiversity as among the primary challenges the sector faces.<sup>2</sup> Nine of the top twenty cosmetics companies mentioned biodiversity considerations in their corporate communications in 2008.<sup>3</sup> A specific example is that of companies developing fragrances and flavours, which are increasingly worried about competing land uses and growing pressure on ecosystems: the shrinking resource base is expected to impact the quantity and quality of available fragrances.

*"The private sector is also focusing increasingly on the issue of conservation and sustainable use of biodiversity in their strategic decision-making process."*

Despite the rising awareness of the importance of the engagement of the private sector in the conservation and sustainable use of biodiversity, there is still a long way to go. Biodiversity



considerations need to be not only recognised but also incorporated in business practices and integrated along the supply chain. To contribute to the protection of biodiversity, business must adopt practices that, among others, promote the preservation of local ecologies and support local development in source countries.

Budding yet significant efforts to address biodiversity in business practices do exist. In the food and cosmetics sectors, for example, ethical sourcing practices are increasingly recognised as an effective means to addressing biodiversity concerns. Leading companies like L'Oréal acknowledge that "plant-based ingredients are a huge source of innovation" and have developed approaches aimed at ensuring sustainable sourcing practices for these ingredients.<sup>4</sup>

*"In the food and cosmetics sectors, for example, ethical sourcing practices are increasingly recognised as an effective means to addressing biodiversity concerns."*

Companies are also collaborating amongst themselves and with other stakeholders to develop and adopt sustainable biodiversity sourcing practices. For example, the Novella Africa Partnership was formed by Unilever, IUCN and other organisations with the aim of advancing the equitable and sustainable production of oil from the Allanblackia tree - a natural ingredient with great potential in the food and cosmetics sectors.

All of these private sector-related efforts will be considerably influenced by consumer demand for biodiversity-friendly products. And while advertising increasingly refers to the environment and to 'green' products, it is still unclear to what extent consumer interest in such products relates to biodiversity. A recent international measurement of consumer awareness of biodiversity - The Ethical BioTrade Barometer - found that more than 1 out of 2 people say they have heard of biodiversity.<sup>5</sup> Yet, people are less knowledgeable about concepts such as biodiversity conservation and ethical sourcing of the biodiversity, than about other more mainstream terms like fair trade and sustainable development. Nevertheless, research by the Union for Ethical BioTrade shows that consumers would like to know more about how the

cosmetics sector, for instance, sources its natural ingredients. Moreover, a large majority would be willing to stop buying products from cosmetics companies that are not materially committed to ethical sourcing for their products.

*"As these terms and their relevance have become widely recognised, industry trend watchers predict that the concept of biodiversity will gain traction in coming years."*

While public awareness of biodiversity issues is only now beginning to grow, the example of sustainable development and climate change - once unknown concepts among the general public - demonstrates that communication efforts can bear fruit over time. As these terms and their relevance have become widely recognised, industry trend watchers predict that the concept of biodiversity will gain traction in coming years. As the International Year of Biodiversity, 2010 presents an important opportunity to bring greater attention to bear on the continued loss of biodiversity and the relevance of promoting actions to support its conservation and sustainable use at all levels and among all stakeholders.

*Rik Kutsch Lojenga is the Executive Director of the Union for Ethical BioTrade. Maria Julia Oliva is the Senior Adviser on Access and Benefit Sharing at the Union for Ethical BioTrade.*

<sup>1</sup> IUCN, Wildlife crisis worse than economic crisis - IUCN, 02 July 2009 Press Release, available at [http://cms.iucn.org/news\\_eventsold/?uNewsID=3460](http://cms.iucn.org/news_eventsold/?uNewsID=3460).

<sup>2</sup> Colipa, Activity Report 2008, available at <http://www.colipa.eu/news.html?id=17>.

<sup>3</sup> Union for Ethical BioTrade, "Ethical BioTrade Barometer 2009," April 2009. The survey involved a sample population of 4000 individuals in four countries: France, Germany, the UK and the USA. A press release issued for the launch of the Ethical BioTrade Barometer 2009 is available at <http://www.ethicalbiotrade.org/dl/ENG-UEBT-IPSOS-COMMUNIQUE-PRESSE-30avril2009fr.pdf>.

<sup>4</sup> Union for Ethical BioTrade, "The Beauty of Sourcing with Respect," Press Release, 13 May 2009, available at [http://www.ethicalbiotrade.org/dl/press/UEBT\\_Beauty\\_of\\_Sourcing-Web\\_19May.pdf](http://www.ethicalbiotrade.org/dl/press/UEBT_Beauty_of_Sourcing-Web_19May.pdf).

<sup>5</sup> Union for Ethical BioTrade, "Ethical BioTrade Barometer 2009," April 2009. The survey involved a sample population of 4000 individuals in four countries: France, Germany, the UK and the USA. A press release issued for the launch of the Ethical BioTrade Barometer 2009 is available at <http://www.ethicalbiotrade.org/dl/ENG-UEBT-IPSOS-COMMUNIQUE-PRESSE-30avril2009fr.pdf>.

# In climate politics, follow the money

By James K. Boyce

Any policy that limits supply of fossil fuels must raise their price. The economic logic binding price to scarcity holds true, regardless of the cause of scarcity. When OPEC wants to increase the price of oil, it cuts production. If, as part of the international climate agreement that emerges from the Copenhagen conference in December, national policymakers place a cap on carbon emissions from burning fossil fuels, this too will increase the price.

The key question is: *who gets the money?* As the United States Congress takes up climate legislation that would cap carbon emissions, and issue permits for emissions up to that cap, this question looms large. There are three possible answers:

*Windfall profits to corporations:* If the permits are given free-of-charge to fossil fuel companies, they reap profits: consumers pay higher prices and shareholders get the money. This is a 'cap-and-giveaway' policy.

*Revenues to government:* If the permits instead are auctioned to the firms, their value (which is the counterpart to the higher prices paid by the consumer) is captured by the government. If the money is used to fund public expenditures or cut taxes, the benefits to the populace will depend on these uses. This is a 'cap-and-spend' policy.

*Dividends to the people:* If the revenue from permit auctions is returned to the public as equal per-person dividends, people with smaller-than-average carbon footprints come out ahead, receiving more than they pay in higher prices. This is a 'cap-and-dividend' policy.

The stakes are enormous. A carbon cap in the United States will involve the greatest allocation of new property rights since the Homestead Act of 1862. A cap that cuts US emissions 80 percent by 2050 - the goal endorsed by climate scientists and embodied in legislation now before Congress - could generate as much as US\$10 trillion over the next four decades.

*"A carbon cap will be most efficiently administered 'upstream', requiring permits to be purchased by the first sellers of fossil fuels into the economy."*

## Why Cap Carbon?

A cap on carbon emissions is a crucial element of any serious policy to curb global warming and promote energy efficiency and the transition to renewable energy. A carbon cap will be most efficiently administered 'upstream', requiring permits to be purchased by the first sellers of fossil fuels into the economy. Because the cap will reduce supply, it will raise fuel prices. The resulting market signals will spur investments by firms and households in

energy efficiency and clean energy.

## Costs versus Transfers

While higher prices for gasoline, heating oil, natural gas, electricity are a cost to consumers, these are not a 'cost' from the standpoint of the economy as a whole. Instead, they are a transfer. Every dollar paid in higher fuel prices will be redistributed to the holders of the carbon permits. Unlike the case when oil prices rise due to market forces or supply restrictions by OPEC, a carbon cap in the United States will recycle dollars within the country. From the standpoints of both economic fairness and political durability, the key policy question is where these dollars will go.

## How Does a Cap-and-Dividend Policy Work?

In a 'cap-and-dividend' policy, 100 percent of the permits will be auctioned by the government, and all or most the auction revenue will be returned to the public as equal payments per person. This is what economists call a 'feebate' arrangement: individuals pay fees based on their use of a scarce resource that they own in common, and the total fees collected are rebated in equal measure to all co-owners. In this case, the scarce resource is the US share of the carbon storage capacity of the atmosphere; the fee is set by the carbon footprint of the individual household; and the co-owners are the American people.

Under a cap-and-dividend policy the real incomes of low-income and middle-income families will be not only be protected but will rise.<sup>1</sup> Overall, about six in ten American families come out ahead in purely monetary terms - not counting the environmental benefits that are the main rationale for any carbon policy.

A transparent and efficient way to disburse dividend payments to the public is via an ATM card, similar to the cards now used by many Americans to access Social Security payments. At the ATM, people can view the auction revenue deposits into their accounts and withdraw available funds at their own convenience.

## Free permits to firms would not protect consumers

It is sometimes claimed that free permit allocations to firms would eliminate or mitigate the impact of a carbon cap on consumer prices. This is not true. Elementary economics dictates that when goods become more scarce, their price goes up. A carbon cap makes fossil fuels more scarce.

In housing markets, the price of a dwelling and the rent charged by its owner do not vary depending on whether the owner purchased it or inherited it for free. In the same way, the price of gasoline will not differ if permits are auctioned to companies or handed out free-of-charge. A cap-and-giveaway policy that provides free permits to firms would simply transfer the money paid by consumers in higher fossil fuel prices to the shareholders of the firms as windfall profits.

During last year's election campaign and in his budget proposal submitted to Congress in February, President Obama endorsed the principle that 100 percent of carbon permits should be auctioned.

### With 100 percent auction there is no need for permit trading

Most permits are not tradable. Driving permits, gun permits, parking permits, landfill disposal permits, and building permits cannot be traded in markets. Why should carbon permits be different?

The need for tradable permits is premised on the assumption that some or all of the permits will be given away for free rather than sold by auction. With giveaways based on some formula (like historic emissions), some firms will get more permits than they need, while others will get fewer; trading is required to redistribute them. If instead 100 percent of the permits are auctioned, say monthly or quarterly, firms can make their own real-time decisions as to how many permits they acquire. The need for permit trading disappears.

With non-tradable permits, none of the carbon revenue will be siphoned off by trading firms who need to earn a profit. In addition, non-tradable permits will safeguard the policy from the perception or reality of market manipulation by speculators or other players seeking to game the system.

### Mitigating regional differences in employment impacts

Any policy to cut carbon emissions will have impacts on employment, apart from the impacts on consumers described above. In some sectors (for example, coal mining), jobs will be lost; in others (such as retrofitting of buildings and manufacturing renewable energy technologies) jobs will be created.

Insofar as investment in renewables and energy efficiency is more labour-intensive than investment in the fossil fuel sector, job gains will exceed job losses. But no automatic mechanism ensures that job creation will occur in the same communities and for the same workers who are adversely impacted by job losses.

To protect these communities and workers, a fraction of the carbon revenues initially could be allocated to the states as block grants dedicated for this purpose. In the first year of the cap-and-dividend policy, for example, 10 percent of permit auction revenues could be directed to block grants and the remaining 90 percent distributed to households as dividends, with the block-grant share phasing out over a 10-year horizon. As long as the proportion of revenues dedicated to this purpose

is modest, the majority of families will continue to be 'made whole' by the cap-and-dividend policy.

Block grants would allow the states to tailor transitional adjustment assistance policies to their own needs. In coal-mining states, for example, funds could be invested in the ecological restoration of landscapes degraded by mountaintop removal, strip mining, and disposal of mine tailings and coal ash. In manufacturing-intensive states, funds could be invested in job training and support to 'green' industries such as the production of wind-energy and solar-energy equipment.

*“Block grants would allow the states to tailor transitional adjustment assistance policies to their own needs.”*

### Conclusion

The principal political challenge confronting any policy to curb carbon emissions is how to protect families from the impacts of higher fossil fuel prices - and how to protect the policy itself from the political fallout that otherwise will result.

What is needed is a policy in which the public not only be willing to pay higher prices at the gasoline pump and in their home heating and electricity bills, but will be positively enthusiastic about doing so, secure in the knowledge that they themselves are on the receiving end of the resulting transfers of money.

Neither a cap-and-giveaway policy in which permits are given free to firms, nor a cap-and-spend policy in which permits are auctioned and the revenues flow into the government budget, will yield this desirable result.

In short, a cap-and-dividend policy will not only address squarely the pressing problems of global warming and energy independence, but also strengthen the economic well-being of average families. By achieving these goals in a way that is fair and transparent, it will maximize the prospects for securing durable public support for a policy that weans the economy from dependence on fossil fuels.<sup>2</sup>

The energy transition that is needed to avert the worst of climate change is certainly feasible. But it cannot happen overnight. This historic change will take decades, and for this reason it will require durable support. The time to launch the transition is now, but the policies that undergird it must be built to last.

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<sup>1</sup> See James K. Boyce and Matthew Riddle, "Cap-and-Dividend: How to Curb Global Warming While Protecting the Incomes of American Families," Amherst, MA: Political Economy Research Institute, Working Paper No. 150, November 2007. Available at [http://www.peri.umass.edu/fileadmin/pdf/working\\_papers/working\\_papers\\_101-150/WP150.pdf](http://www.peri.umass.edu/fileadmin/pdf/working_papers/working_papers_101-150/WP150.pdf).

<sup>2</sup> For further information, please go to [www.capanddividend.org](http://www.capanddividend.org).

# China's promotion of its wind industry: implications for the world market

By Gordon Y. Liao

With 70 per cent of its electricity sourced from coal-fired power plants, China has now recognised its urgent need to diversify its current energy portfolio with renewable alternatives. In the past five years, China has doubled its wind power capacity annually, creating substantial business opportunities for international wind turbine manufacturers. Such a windfall for foreign firms, however, looks as though it may be coming to an end.

Foreign turbine producers, while still expanding in absolute sales, have been rapidly losing market share to Chinese competitors—a trend fuelled by both the price gap between foreign and domestic producers and the state's preference for domestically manufactured goods. But China's promotion of its domestic wind industry is not unique as many countries have pursued similar planning strategies in the adoption of wind energy.

## China's aggressive plan

China's wind energy capacity is currently the fastest growing in the world, fuelled by a number of domestic policies. Most prominently, China's 2006 Renewable Energy Law stipulated a binding requirement for large power conglomerates to generate 3 percent of electricity from non-hydro renewable sources by 2010 and 8 per cent by 2020. And, in addition to devoting US\$67 billion of its current economic stimulus package to sustainable energy developments, China is also planning to inject a US\$440 billion green stimulus package to catalyse its renewable energy sector over the next two decades.

Chinese turbine producers are expected to seize nearly three-quarters of their domestic market by the end of this year, compared to one-quarter only four years ago. And the scale of the new projects is precedent setting.

"With this Wind Base scenario, we are talking about 10 to 30 gigawatt wind projects," says Sebastian Meyer, head of research at Azure International, a company specialising in sustainable energy projects in China. "One project is equivalent to the entire installed capacity of Germany."

## A history of domestic preference in wind

While many of China's industrial development strategies, such as local content requirements, financial and tax incentives, and favourable customs duties have been condemned by critics, such tactics are not unusual.

"The Chinese government has, like every other government, two agendas in this area," says Steve Sawyer, Secretary General of Global Wind Energy Council. "One is to improve the content of their energy mix, but the other is to build up their own national industry. And like every other government, they play favourites with the local industries."

A stimulus package with a 'buy national' restriction is also unsurprising. Just as the American stimulus package has a 'Buy America' clause, the US\$486 billion Chinese stimulus, announced last November, also has a strong emphasis on supporting domestic industries. Because China has been delaying the signing of the Government Procurement Agreement that it agreed to as a part of its accession process to the WTO, it currently has no formal obligation to open up its government procurement market to foreign firms.

## Redefining 'Made in China'

Despite the technological leapfrogging that has occurred in

Chinese firms over the last few years, it is unknown whether Chinese turbines are inferior in quality to foreign ones. Although there are no accurate measurements of installed wind farm performances in China, an analysis by New Energy Finance, based on rough carbon trade credits, shows that the average capacity factors<sup>1</sup> for Chinese projects using domestic turbines is 22.1 percent, compared to 25.3 per cent for foreign firms.

Many agree that the presence of foreign competitors may not directly result in technology transfer, but it is essential in creating a 'learning network' that facilitates the transfer of human capital and knowledge across firms. Some observers have warned that squeezing foreign firms out of the Chinese market may come back to haunt Chinese firms later on.

## Industry perspective

Foreign firms say they are dissatisfied with Beijing's domestic preference, but they have not been left without gains. For one, their market in China is still growing in absolute numbers. For instance, Vestas, the Danish frontrunner in turbine production, unveiled its plan in April to construct a new factory in China, along with increased sales of specialty wind turbines for Inner Mongolia's harsh winters. Siemens also joined the ranks of other foreign firms, initiating the construction of its first plant in China.

"China's experience with local content requirement [...] actually worked out pretty well, not only for China but for the industry as a whole," Sawyer says. "Now there's a huge supply chain in China, which not only can supply the domestic industry, but is also starting to supply more and more internationally."

## Delicate balance

Localisation of turbine production is essential in the adoption of wind energy. The lowering of costs and the additional perks for the local economy can generate greater acceptance for the technology. However, too strong a push for protectionism can prove to be unhealthy.

"It's a very delicate balance," Sawyer says regarding protectionism. "If you do it at an expense of keeping the international firms out of the market, you'll have either no development at all or very low quality."

Sawyer says that, ultimately, the route a country pursues depends on whether the primary aim of adopting alternative energy sources is environmental or economic. "At the end of the day, if you care about climate change, you want as many inexpensive turbines as available globally," he says.

*Gordon Y. Liao is with the Faculty of Arts and Sciences at Harvard University.*

<sup>1</sup> Capacity factor is a percentage measurement calculated by the actual production over time divided by the power that would have been produced if turbine operated at maximum output 100 per cent of the time.



# National bans on GM maize highlight EU fragmentation

By Lindsay Bass

Despite the recent re-approval of Monsanto's genetically modified (GM) maize by the EU's food safety agency, broad civil society support for national state bans is making it difficult for the EU to create a uniform policy on GM cultivation across its bloc of 27 countries. The European Food Safety Authority (EFSA) stands by its assessment that the GM maize (MON810) is as safe as its non-GM counterparts. MON810 is the only genetically modified organism that has been approved for cultivation in the EU.

The EFSA's decision has been widely criticised by international green groups, which accused the agency of flawed assessments that ignore studies highlighting safety concerns. However, some researchers have levied similar charges at anti-GM advocates and politicians. While experts argue over good and bad science, the European Commission (EC) has been unable to build consensus among member state politicians to stop the bans.

Since a 2006 WTO ruling, which stated that the EU's de facto ban on GM products violated world trade law, Brussels has been under pressure to get its member countries to allow farmers to produce MON810. Despite numerous attempts to force states to allow the use of the product, the EC has been repeatedly rebuffed by EU environment ministers.

## EU food safety system unable to lift national bans on approved product

According to EU legislation, a 'safeguard clause' may be invoked by a country if there is reason to believe that an approved genetically modified organism (GMO) presents a risk to human health or the environment. But, the risk must be supported by scientific evidence. However, in every case to date, the EFSA has repeatedly concluded that the evidence does not justify overturning the EU's decision to authorize MON810. Yet, bans on the product remain in six states -- Germany, France, Hungary, Greece, Luxembourg, and Austria.

So far, the EU's food safety system has had difficulty reconciling the political, social, and economic concerns of its member states with its own scientific assessments. In fact, comments by politicians suggest support for the bans is closely tied to concerns regarding national sovereignty. After the March vote to uphold the Austrian and Hungarian bans, Stefania Prestigiacomo - Italy's Environment Minister - commented that the EU Council "did not vote to authorize the cultivation of GMOs but instead has ruled on the possibility of some countries making use of the safeguard clause that is expressly provided by the European Directive. We have deemed it necessary to defend this possibility."

In June, Environment Ministers from eleven member countries went further calling for the right to opt-out of growing genetically modified (GM) crops. Noting the complex nature of EU decision-making and years of stalemate on biotech policy, they suggested amending relevant EU legislation to allow "opt-outs." However, the

suggestion runs counter to the principles of the single EU internal market, and, in practice, changing the EU's strict rules on regulating the internal market would be extremely difficult, experts say.

The path to resolve the issue remains unclear. Given the positive opinion from EFSA, the EC is now required to propose renewal of the existing MON810 approval for cultivation. The proposal will be considered by the Regulatory Committee, comprising representatives of all 27 EU Member States.

## Mixed results seen under current system

The EU's resistance to genetically modified organisms (GMO) continues to strain relations with biotech industry and major exporters of GM products. A lawsuit by Monsanto against the German government over Berlin's decision to ban the cultivation of MON810 is a recent example.

The ban was upheld by the German administrative court, which found that although the evidence presented did not prove that MON810 posed any health or environmental risks, it did indicate a "possible" risk and this was sufficient to uphold the ban. The court also said Berlin was not obligated to provide definitive scientific proof of a risk to human health or the environment to justify outlawing the crop.

In the EU, some member countries are finding ways to address the concerns of their citizens while adhering to the EU regulatory process. For example genetically modified organism (GMO) regulations put forward by Poland conform to EU laws and have been accepted by the EC.

Additionally, a settlement in July between Canada and the EU regarding an ongoing trade dispute over Brussels' restrictions on imports of GM products could be a sign of change. Canada dropped the complaint in exchange for increased discussions with the EU on issues relevant to trade in GMOs.

ICTSD Reporting; "Up in Arms," NATURE BIOTECHNOLOGY, July 2009; "Green groups blast EU agency over biotech maize," REUTERS, 29 JULY 2009; "EU to examine national opt-outs for GM crop growing," REUTERS, 21 June 2009; "EC accepts Polish GMO regulations," POLSKI RADIO, 29 May 2009.

*Lindsay Bass is a graduate student at the University of California, Santa Barbara's Bren School of Environmental Science & Management*

# Swiss IP office establishes unit on sustainable development

By Thomas Henninger

With climate change, influenza, biodiversity and food security dominating world headlines, Swiss intellectual property (IP) authorities are looking more closely at the relationship between IP protection and sustainable development. To that end, earlier this year the Swiss Federal Institute of Intellectual Property (IPI) established a unit on sustainable development.

According to Felix Addor, Deputy Director General of the Institute, this is likely the first time a national intellectual property (IP) office has ever officially introduced the concept of sustainability in its institutional structure. The move sets an interesting precedent for other national IP authorities.

The institute's statutory mandate is to ensure an appropriate and effective level of IP protection. In this context, the traditional tasks of IPI include drafting legislation, advising the Swiss Federal Council, representing Switzerland at the international level in IP deliberations, granting intellectual property rights (IPRs), and offering services in IPR research and information. However, the IP protection provided is also "to take into account in a balanced manner, as far as possible, the interests of the various stakeholders concerned, including not only industrial but also consumer, ethical, developmental and environmental aspects."

According to Addor, the Institute is getting increasingly involved in international discussions on environmental issues and with the new unit in place, it will now "be able to better reflect these and other developments"...

The new 'Intellectual Property and Sustainable Development' unit is destined to be a contact point for the World Intellectual Property Organization's new division on global issues, recently established by WIPO Director-General Francis Gurry. Within the Institute, the new unit will take the lead on IP and sustainable development issues such as biodiversity, traditional knowledge, food security and climate change.

The Swiss institute had already dealt with issues of biodiversity and traditional knowledge and in that regard has collaborated with WIPO's Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGC), the Trade Related Aspects of Intellectual Property Rights (TRIPS) Council, the Convention on Biological Diversity (CBD) and the International Treaty of the UN's Food and Agricultural Organization (FAO). In addition, Addor says "the Institute would like to participate more closely and actively in the activities of those fora studying scenarios for the future of intellectual property."

## Stakeholder involvement and collaboration with other initiatives on sustainable development

For the new unit on sustainable development to have a meaningful impact, it will be crucial for stakeholders to be involved at the national and international levels.

In this respect, Addor states that the Institute has been and will continue to hold formalised public stakeholder consultations on new legislation as well as informal contacts with all stakeholders, including civil society and industry. For instance, such stakeholder consultations took place when Switzerland introduced a requirement for patent applicants to disclose the source of genetic resources and traditional knowledge in revised patent law. Martin Girsberger, the head of the new unit, confirms that the institute "intend[s] to continue and deepen existing contacts with stakeholders, for example those active in the area of biodiversity and traditional knowledge." He added that the institute was particularly interested in establishing additional contacts in newly emerging areas such as climate change.

Girsberger points out that Switzerland made two considerable donations to the WIPO Voluntary Fund, which supports the participation of Indigenous and Local Community representative in WIPO discussions on traditional knowledge. "In the same vein, the Institute, together with the International Centre for Trade and Sustainable Development (ICTSD), organised a workshop with indigenous representatives in February 2008," reports Addor.

Beyond coordinating with other units and facilitating the finding of balanced solutions within the institute through mutual "checks and balances," Addor stresses that the unit will collaborate with other Swiss government agencies that are responsible for sustainable development. He also says the institute is "aware of activities at the international level, such as plans of WIPO to establish a new Global Challenges Division, and the joint project by the European Patent Office (EPO), UN Environmental Programme (UNEP) and ICTSD to examine the role of patents in the development and transfer of environmentally sound technologies."

## Swiss initiatives on biodiversity issues at WTO and WIPO

The establishment of the this new unit on sustainable development comes in the context of series of initiatives and proposals taken by Switzerland in past years to engage more actively in international discussions on IP, trade and biodiversity. To that effect, the Swiss Institute, on behalf of Switzerland, drew up several proposals for the WTO and WIPO that departed from some of the earlier positions that Bern had taken with respect to these issues in earlier discussions.

*“The establishment of the this new unit on sustainable development comes in the context of series of initiatives and proposals taken by Switzerland in past years to engage more actively in international discussions on IP, trade and biodiversity.”*

For instance, Switzerland is a key partner in a huge coalition at the WTO that wants to adopt ‘draft modalities’ on bio-diversity and geographic indications. In July 2008, Switzerland - along with Brazil, the EU, and India - proposed that the TRIPs Agreement be amended so as to require that patent applicants disclose the origin or source of the genetic resources and associated traditional knowledge contained in an application. The proposal, which is now supported by more than 110 WTO members, would improve patent quality and ensure fulfilment of the objectives of the CBD. Beyond TRIPS, Switzerland has proposed a similar disclosure proposal to the Patent Cooperation Treaty (PCT) at WIPO.

Furthermore Switzerland made a proposal to WIPO IGC to establish an international internet portal on traditional knowledge. This portal would electronically link existing local and national databases on traditional knowledge, and could facilitate access by patent authorities to traditional knowledge contained in such databases.

This tendency of Swiss policy to address biodiversity-related concerns is reflected as well in a recent free trade agreement (FTA) concluded between Colombia and the European Free Trade Association (EFTA) - made up of Liechtenstein, Iceland, Norway and Switzerland. This FTA contains for the first time a chapter on biodiversity in its IP provisions, and provides for the disclosure of origin for patent applications and criminal sanctions in case of infringement (see related story, this issue).

Some observers say they hope Swiss authorities will continue to signal further initiatives and measures towards ultimately ensuring that global IP rules and policies are made supportive of public policy objectives in areas such as biodiversity, climate change, and food security.

A presentation of the tasks and mandate of the Institute can be found at: <http://www.ige.ch/en/institute/institute.html>.

*Thomas Henninger is a Junior Programme Officer for ICTSD's Intellectual Property Programme.*

### WTO documents

- IP/C/W/400/Rev.1 (available at [https://www.ige.ch/fileadmin/user\\_upload/Archiv/e/jurinfo/documents/IP-C-W-400.pdf](https://www.ige.ch/fileadmin/user_upload/Archiv/e/jurinfo/documents/IP-C-W-400.pdf))
- IP/C/W/423 (available at <http://docsonline.wto.org/DDFDocuments/t/IP/C/W423.doc>)
- IP/C/W/447 of May 2005.

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### UPCOMING EVENTS

For a more comprehensive list of events for the trade and environment community visit the BioRes online calendar, <http://ictsd.net/news/biores/events/>.

- 28-30 September, Geneva, Switzerland. WTO PUBLIC FORUM 2009.
- 28 September-2 October, Agadir, Morocco. JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON FISH AND FISHERY PRODUCTS.
- 1 October, Geneva, Switzerland. DIALOGUE ON CLIMATE CHANGE AND INTERNATIONAL AGRICULTURAL TRADE RULES. Organised by ICTSD and the International Food & Agricultural Trade Policy Council (IPC).
- 7-9 October, León, Mexico. GLOBAL RENEWABLE ENERGY FORUM 2009: SCALING UP RENEWABLE ENERGY. Co-organised by the Ministry of Energy of Mexico and the UN Industrial Development Organization.
- 8-13 October, Ouagadougou, Burkina Faso. SEVENTH WORLD FORUM ON SUSTAINABLE DEVELOPMENT.
- 15-16 October, London, England. IUU FISHING: FIFTH UPDATE AND STAKEHOLDER CONSULTATION. Hosted by the Chatham House in partnership with the Energy, Environment and Development Programme Project on Sustainable Fisheries, Governance, and Trade.
- 18-23 October, Buenos Aires, Argentina. THIRTEENTH WORLD FORESTRY CONGRESS.
- 22-23 October, New Delhi, India. HIGH-LEVEL CONFERENCE ON CLIMATE CHANGE: TECHNOLOGY DEVELOPMENT AND TRANSFER. Jointly organised by the Government of India and the UN Department of Economic and Social Affairs (UN DESA).
- 26 October-6 November, Bangkok, Thailand. LANDSCAPE FUNCTIONS AND PEOPLE: APPLYING STRATEGIC PLANNING APPROACHES FOR GOOD NATURAL RESOURCE GOVERNANCE. Co-organised by Wageningen International, the Regional Community Forestry Training Center for Asia and the Pacific (RECOFTC).
- 4-5 November, Paris, France. GLOBAL FORUM ON ECO-INNOVATION. Organised by the Organization for Economic Cooperation and Development (OECD).
- 24-25 November, Yogyakarta, Indonesia. INTERNATIONAL SYMPOSIUM ON SUSTAINABLE & ENVIRONMENTAL PROTECTION. Jointly organised by the Indonesian Catalyst Society (MKI) the 6th Sustainable Energy and Environment (SEE) Forum.
- 30 November-2 December, Geneva, Switzerland. SEVENTH WTO MINISTERIAL CONFERENCE.
- 7-18 December, Copenhagen, Denmark. UNFCCC COP 15 AND KYOTO PROTOCOL COP/MOP 5. The fifteenth Conference of the Parties to the UNFCCC and fifth Meeting of the Parties to the Kyoto Protocol.

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