

THIRD INTERNATIONAL CONFERENCE TO TACKLE BIOPIRACY



ALTERNATIVES TO THE APPROPRIATION OF BIODIVERSITY AND TRADITIONAL KNOWLEDGE

Organised by the Fondation Danielle Mitterrand - France Libertés Sponsored by Chantal Berthelot, MP for Guyana 5 march 2015 - Salle Colbert, Assemblée Nationale, Paris

CONTENTS

9
nities11
Vorld13
•

FIRST ROUND-TABLE SESSION:

ARE THE LEGAL ALTERNATIVES FIT FOR PURPOSE?
A Critical Analysis of the Nagoya Protocol
and Access and Benefit Sharing Systems (ABS)21
The French Biodiversity Bill:
An Example of Nagoya Protocol Implementation25
Protecting against Biopiracy Requires the Involvement
and Participation of Indigenous Peoples27

SECOND ROUND-TABLE SESSION:

ACKLING BIOPIRACY ON THE GROUND	29
Economic Alternatives	31
Seed Banks: Selecting, Storing	
and Exchanging Farmers' Seeds	32
Bio-Cultural Community Protocols	.35
Research Organisations' Code of COnduct	
and Good Practice	37
POLITICAL AND ETHICAL VIEW POINTS	39
The Patentability of Living Things	
with regard to the Genomic Revolution	41
GoOvernments' Consideration of Indigenous Peoples'	
Interests	43
CLOSE Conclusion	

Glossary

Introduction

The Fondation Danielle Mitterrand -France Libertés, established in 1986 by Danielle Mitterrand, seeks to defend riahts human and the dlobal commons. The foundation's activities focus on two programmes, the first covers water as a commons and the second works to uphold people's rights. As such, the foundation is activelv involved in supporting indigenous peoples, both to ensure recognised their riahts are and respected, particularly their rights to natural resources, and to highlight their traditional knowledge and ways of life.

For the last ten years, France Libertés has also been working to tackle **biopiracy**. The term biopiracy describes the privatisation of nature and of traditional knowledge of biodiversity, notably through patents. More specifically, biopiracy involves the illegal appropriation of indigenous peoples' knowledge of using genetic resources, without their consent and without giving them any share of the profits made from developing these resources.

The present-day erosion of the world's biodiversitv is creating an unprecedented crisis, one which is being exacerbated by the theft of indigenous knowledge resources. of genetic Biopiracy is becomina increasingly common around the world, posing a threat not only to local farmers' grain and seed stores but also to indigenous peoples' medicine stocks. Traditional indigenous knowledge is highly coveted,



First International Conference to Tackle Biopiracy, held at the Assemblée Nationale (June 2009, Paris - France) © France Liertés

both bv research institutes and commercial companies. Numerous firms have already taken advantage of the legal uncertainty surrounding biopiracy to appropriate indigenous peoples' knowledge of biodiversity. This is despite the fact that international legislation has been introduced to combat biopiracy. However, application of this legislation is primarily dependent on the will of individual countries and governments. Furthermore, this legislation makes no mention of the principle of patenting genetic resources or of the associated marketing of living things. The Nagova Protocol, the international benchmark treaty on tackling biopiracy, came into force in 2014 when it achieved its 51st ratification. Its contracting parties are now required to put domestic legislation in place that incorporates the principles set out in this protocol, such as the biodiversity bill being introduced in France.

Libertés France advocates for ensuring, and seeks to guarantee, that peoples' indigenous traditional knowledge of genetic resources is recognised and respected. The foundation acts as a watchdog against biopiracy. It carries out monitoring identify activities to and report instances of biopiracy through both legal and media channels. In order to raise awareness of biopiracy, France Libertés has previously addressed this essential issue at a number of events. The foundation also organises international conferences to tackle during biopiracy which biopiracy issues and possible alternatives are debated by a wide range of interested parties.

The First International Conference to Tackle Biopiracy was held at the Assemblée Nationale in Paris, France, in June 2009. This was attended by a large number of subject-matter experts, who came together to define the concept of biopiracy, learn more about biopiracy practices and put forward viable alternatives.



Second International Conference to Tackle Biopiracy (June 2012, Rio de Janeiro, Brazil) On the photo (from left to right), **Vandana Shi**va, ecologist and founder of the Navdanya network, and **Benki Ashaninka**, champion of indigenous peoples' rights and biodiversity in the Amazon in Brazil). © France Libertés

In June 2012, the Second International Conference to Tackle Biopiracy was held during the People's Summit in

Brazil (Rio de Janeiro), alongside the Nations Conference United on Development Sustainable (Rio+20). The aim of this second conference was once again to denounce the illegal peoples' plunder of indiaenous knowledge and living things and seek ways to prevent it.

The Fondation Danielle Mitterrand held its Third International Conference to Tackle Biopiracy in March 2015. This conference provided an opportunity, not only to raise awareness and share information on biopiracy. its development and alternatives, but also interest around to generate the biodiversity bill being introduced in France, which, through its Chapter IV on access to genetic resources and fair and equitable sharing of the benefits arising from their use, has the potential to be a useful legal tool for combating biopiracy in France.

In addition to wanting to raise public awareness of this still little known issue, Fondation France Libertés' aim in organising the conference was also to bring together key stakeholders from the voluntary sector, policymaking bodies, research institutes and the private sector to discuss tangible alternatives to biopiracy and establish a network able to take action against this practice. To this end, the Third International Conference to Tackle Biopiracy began by highlighting the legal measures that can be taken against biopiracy. Focus then turned to the various alternatives being implemented at the local level before the ethical and political aspects of tackling biopiracy were reviewed.

Key legislation: the Convention on Biological Diversity and the Nagoya Protocol

The Convention on Biological Diversity (CBD) was one of the main texts to come out of the **Earth Summit** that took place in Rio de Janeiro, Brazil, in 1992. This convention has three main goals:

- Conservation of biological diversity (or biodiversity);
- Sustainable use of the components of biodiversity;
- Fair and equitable sharing of benefits arising from the use of genetic resources.

The CBD entered into force in 1993, under the auspices of the United Nations, and 193 countries have now ratified this treaty, with the notable exception of the United States. These countries' governments meet on a regular basis to plan its implementation. They thus came together in Nagoya, Japan, in 2010 for the CBD's tenth Conference of the Parties (COP10) meeting. The Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of Benefits Arising from their Utilisation to the Convention on Biological Diversity was adopted at this meeting. The aim of this protocol is to provide a legal framework to combat biopiracy. Each country ratifying the protocol must thus now include the principles outlined in the Nagoya Protocol in its domestic legislation

OPENING ADDRESS

« The subject of biopiracy links civilisations: ours and those of indigenous peoples who have an amazing ability to live in a balanced relationship with their environment. Establishing this link is vital for building tomorrow's society, which has to be well-balanced ». It is with these words that Emmanuel Poilâne, head of France Libertés, opened the Third International Conference to Tackle Biopiracy and called on all conference participants to learn from and respect these indigenous peoples..



From left to right: **François Meienberg**, Campaign Coordinator for the Berne Declaration; **Emmanuel Poilâne**, head of France Libertés; **Chantal Berthelot**, MP for Guyana; and **Daniel Joutard**, member of the France Libertés Anti-Biopiracy Scientific Committee and founder of Aïnygauche à droite)

© France Libertés

Biopiracy, an Issue for Indigenous Communities



Chantal Berthelot © Karine Boudart

Chantal Berthelot

She is a member of the French National Assembly and represents Guyana, whose land and people she works to protect. Over 90% of the region within her constituency is rainforest, making this area а biodiversity hotspot for France. Guvana is home to an indigenous population that is still currently not recognised as such by the French authorities. Chantal Berthelot has worked on drafting the biodiversity bill that has been submitted to the National Assembly, helping to ensure it is both more rigorous and properly respects the indigenous peoples of Guyana.

Chantal Berthelot

Δs far as Chantal Berthelot is concerned, the erosion of biodiversity not afforded the is attention it deserves. This erosion is exacerbated by the fact that indigenous peoples' traditional knowledge of nature and their environment is continually being plundered. The French overseas territories, home to 90% of France's biodiversity, are particularly affected by this erosion. This is especially true of Guyana, which alone contains 80% of France's biodiversity and has to contend with issues such as illegal fishing and the mercury contamination of its American Indian population.



© Bernard Dupont

France has a duty to adopt legal instruments that not only protect biodiversity, but also recognise and preserve the rights of the indigenous communities that directly depend on this biodiversity. For centuries now, these communities have been preserving, developing and passing on their land, soils and knowledge to future generations, and these form an important part of both their identity and human history.

11

INDIGENOUS PEOPLES

Defining the concept of indigenous peoples remains a subject of debate. Not even the United Nations Declaration on the Rights of Indigenous Peoples contains a precise definition. Nevertheless, there are a number of commonly agreed features, such as self-identification as an indigenous population, as well as growing political, legal and anthropological consensus around the use of certain defining criteria, including those outlined by Erica-Irène Daes, former chairperson of the UN Working Group on Indigenous Populations, according to which certain peoples are designated as being indigenous:

- "because they are the descendants of groups which were in the territory of the country at the time when other groups of different cultures or ethnic origins arrived;

- because of their isolation from other segments of the country's population, they have preserved almost intact the customs and traditions of their ancestors, which are similar to those characterised as indigenous;

- because they are, even if only formally, placed under a State structure that incorporates national, social and cultural characteristics alien to theirs".¹

There are about 370 million people worldwide that are considered to be indigenous. They belong to around 5,000 groups and can be found in over 70 countries. The diversity of these people is matched only by the wealth of their traditional knowledge, which has been passed down through the generations and is now highly sought after by the westernised world. The vast majority of the planet's genetic resources are to be found on indigenous land. Thus, indigenous peoples play a significant role in preserving the earth's biodiversity. However, as political minorities within the countries in which they live, these people are frequently denied their rights and traditional practices and are often the victims of violent domination.

The International Labor Organization (ILO) **Convention 169** is a legally binding international instrument that specifically covers the rights of indigenous peoples. France has refused to ratify this Convention, citing the principles of "indivisibility of the Republic" and "equality of all citizens before the law". France is thereby denying the existence of French indigenous peoples living in South America, Oceania and the Indian Ocean.

¹ Definition available on the UN Working Group for Indigenous Peoples (UNWGIP) website.

The Development of Biopiracy around the World



Daniel Joutard © Karine Boudart

Daniel Joutard

After having worked on local development projects in indigenous communities in both Ecuador and Peru, Daniel Joutard set up the organic and ethical cosmetics brand, Aïny. Aïny practices fair trade and works in partnership with organisations. indigenous The company uses alternative working methods that develop and respect local knowledge and biodiversity. Daniel Joutard is also a member of the France Libertés Anti-Biopiracy Scientific Committee.

Daniel Joutard

Daniel Joutard supports the comments made by Chantal Berthelot: « biopiracy is no longer an emerging environmental issue: it has become a national problem ». As both a « supplier » and « user » of biodiversity, biopiracy has particular implications for France.

However, this practice has developed over time. About ten years ago, biopiracy essentially involved researching an indigenous community. During this field study period, the research team would first observe and gather information on the community's knowledge of the history of plants and their uses before taking samples away for analysis in a laboratory. A patent would then be filed, most often including the exact same traditional knowledge and information as that passed on by the indigenous peoples to the bioprospector. According to Daniel Joutard, « it was a time of easy biopiracy ». Easy to carry out because there was no legal framework and no concerns raised about the practice, but also easy to fight as the patents were clearly totally morally illegitimate. Then the Nagoya Protocol was introduced, which enabled real progress to be made. This treaty recognises the role of indigenous peoples in managing biodiversity and lays the foundations for establishing guidelines for all those wanting to utilise biodiversity and/or indigenous knowledge. These guidelines include the requirements to provide indigenous peoples with them any benefits arising from the use of this biodiversity.

THE ABS SYSTEM: ACCESS AND BENEFIT-SHARING

The Nagoya Protocol introduced the access to genetic resources and fair and equitable sharing of the benefits arising from their utilisation mechanism – or ABS. The aim of this ABS system is twofold: to tackle biopiracy and to clarify procedures. The ABS mechanism helps regulate the relationship between the provider and user of genetic resources and related traditional knowledge. States have sovereign rights over their genetic resources and, as such, are responsible for their natural resources. Thus, they are also responsible for establishing their domestic ABS legal frameworks. Under the ABS system, the user of a genetic resource needs to obtain the consent of the country providing the resource in order to access it and must also share the benefits arising from the commercialisation of products made from this genetic resource (which can include monetary and non-monetary benefits). Indigenous peoples' consent must systematically be obtained prior to using the traditional knowledge relating to the chosen genetic resource.

However. the Nagoya Protocol proposes a new definition of biopiracy where biopiracy is construed as bioprospecting activities that fail to comply with the provisions set out in the legislation. In other words, this definition of biopiracy only covers acts that violate Nagova Protocol Access Benefit-Sharing and (ABS) agreements. However, neither the Nagoya Protocol nor French legislation makes any provision for regulating biodiversity-related patents. Firms continue to file bio-pirated patents: however, these have become more subtle. Indigenous knowledge-based patents no longer copy this knowledge as blatantly as they did before. Cases of biopiracy are still being detected, but they are becoming harder to tackle through legal channels. Thus, there is a risk that biopiracy may ultimately be regulated by nascent and insufficient **legislation.** Within such a fledgling legal framework, it becomes far more difficult to rule against patents based simply on civil society's moral legitimacy alone.

Daniel Joutard strongly believes we will need to push the boundaries if we are to successfully tackle biopiracy. It is thus vital that we find out more about innovations introduced in other countries. We can learn a lot about alternatives to biopiracy from South America. countries in for instance. By way of example, in 2002, Peru, a country at the forefront of the fight against biopiracy, created a National Anti-Biopiracy Commission. Ecuador, meanwhile, has banned the filing of patents on plants through an amendment to its Constitution



© France Libertés

THE PATENTABILITY OF LIVING THINGS AND BIOPIRACY

Biopiracy is intrinsically linked to the patentability of living things. A highly westernised concept, intellectual property rights are rights given to persons or entities that have used a technical process to create a product, even where this is organic in origin. This therefore means that a common natural resource can be transformed into private property just by making a slight modification or extraction in a laboratory. These property rights are officially recognised through the granting of a patent. This thus turns natural resources into commercialised products to which access is restricted. One of the first people to claim property rights over living things was Louis Pasteur through the patent he filed for using brewer's yeast (as a fermentation method) in France in 1865.

For the patent-holder, a patent provides a means of developing an innovation and serves as a technological monitoring tool and economic weapon. In order for a patent to be granted, a specific set of criteria needs to be met, namely novelty, inventiveness and commercial application. By definition, therefore, a patent based on ancestral traditional knowledge should automatically be ruled inadmissible as it fails to fulfil the criteria of novelty and inventiveness.

Examples of Biopiracy



François Meienberg © France Libertés

François Meienberg

He is Campaign Coordinator for the Berne Declaration. As a biodiversity and intellectual property rights Meienberg has Francois expert. closely monitored and reported of biopiracy. numerous cases including those relating to Basmati rice. Swartzia Madagascariensis. hoodia, pelargonium and rooibos. The Berne Declaration is a Swiss independent and non-governmental organisation that campaigns for fairer and more equitable relations between Switzerland and developing countries. To this end, the Berne Declaration is actively involved in tackling biopiracy.

François Meienberg

Francois Meienberg would like to expand the definition of biopiracy. He pointed that violating out the Convention on Biological Diversity (CBD), the Nagova Protocol or any domestic legislation implementing this protocol equates to an act of biopiracy. All the more so if there has neither consultation been nor agreement reached with the indigenous communities concerned and the benefits are not shared, as this is unlawful appropriation. In addition. it is an act of biopiracy to breach the terms of agreements made with indigenous peoples. For example, a company cannot market a product developed using traditional knowledge if the contract it has signed prohibits this. Furthermore, as Daniel Joutard explained, filing a patent that includes an exact copy of traditional knowledge or that covers an existing plant is also biopiracy. Francois Meienbera illustrated these points by reviewing some well-known biopiracy cases.



In 2014, the Berne Declaration filed a complaint with the European Patent Office (EPO) against a patent granted to Syngenta for insect-resistant pepper plants. The patent was awarded despite the fact that this specific insect-resistant feature of pepper

plants was not created by Syngenta but is a natural property of wild pepper plants found in Jamaica. Syngenta simply crossed the wild pepper plant from Jamaica with commercial pepper plants to make them insect-resistant. Thus, this is not a real invention; however, **under the current patent system, it is possible to copy genes**. **This notably means that patents can be filed for native traits**, which, in this instance, is insect resistance.

NATIVE TRAITS

Over the last few years, and coinciding with the growth in biotechnologies, numerous patents have been filed for native traits of naturally existina aenetic resources. These new patents enable the patent-holder to claim property rights over plants. These plants have similar - or "native" developed features that have naturally or through essentially organic processes. These patents granted for the alleged are inventiveness of identifying the link between a genetic sequence and its function. This could involve a specific trait, such as insect resistance, for example.

Another edifying example of a dubious patent is that of *Swartzia Madagascariensis*, a tree with antifungal properties that is native to Zimbabwe. After having received this tree's genetic resources from the

University of Harare (Zimbabwe), the University of Lausanne (Switzerland) applied for a patent for a fungicide compound. However, the university failed to inform either the University of **Zimbabwean** Harare or the government of its patent application, thus breaching the Convention on Biological Diversity. Consequently, the agreement on access and sharing of the benefits arising from utilisation of Swartzia Madagascariensis had to be renegotiated.

Benefit sharing was also at the centre of the hoodia biopiracy case. Hoodia is a cactus traditionally recognised and used by the San communities in South Africa as an appetite and thirst suppressant. The plant's relevant active ingredient was patented by a South African institute that had signed a benefit sharing contract with the San people. However, a range of hoodiabased products have since been commercialised by Swiss, German and French companies that have signed no agreement or benefit-sharing contract with the San population, the rights holders of the traditional knowledge.



Hoodia is a well-known natural thirst and appetite suppressant. The appetite suppressant properties of hoodia are potentially of great value to the pharmaceutical market. © Wikimedia Commons

The *pelargonium* biopiracy case involves a medicinal plant that has been used by indigenous peoples in South Africa for generations. A number of patents were unlawfully granted to the German company, Schwabe, for the medicinal use of *pelargonium*. In 2010, the company finally withdrew five of its patents following challenges made by the Berne Declaration. Francois Meienberg concluded by saving that: « The Nagoya Protocol is particularly and reauires important effective domestic legislation to be set up in order to put an end to the illegal sale of products. We not only need to look at patents but we should also review the that have already products been commercialised ».



Pelargonium is used in traditional medicine. The roots of the plant are used to treat a range of respiratory infections. © France Libertés

FIRST ROUND-TABLE SESSION : ARE THE LEGAL ALTERNATIVES FIT FOR PURPOSE ?



© France Libertés

The first round-table session, the panel for which included **Victoria Tauli-Corpuz**, UN Special Rapporteur on the Rights of Indigenous Peoples, **Chantal Berthelot**, MP for Guyana and **Lucy Mulenke**i, Director of the NGO Indigenous Information Network, focused on a highly strategic facet of discussions on biopiracy, namely the legal aspect. Chaired by the journalist **Agnès Sinaï**, this round-table session enabled participants to compare levels of governance and examine differing views on the legal options available for combating biopiracy.



Agnès Sinaï

© France Libertés

She is an author, environmentalist, freelance journalist and senior lecturer at the Paris Institute of Political Studies (*Institut d'études politiques de Paris*). She is also the founder of the *Institut Momentum*, a think tank and platform for civil society, journalists and researchers that explores a wide range of transition and development related themes.

A Critical Analysis of the Nagoya Protocol and Access and Benefit Sharing (ABS) Systems



Victoria Tauli-Corpuz © Karine Boudart

Victoria Tauli-Corpuz

She is the UN Special Rapporteur on the Rights of Indigenous Peoples. She is also a human rights expert and an indigenous leader from the Kankanaey Igorot people of the Cordillera region in the Philippines. She is the founder and director of the Tebtebba Foundation, which seeks to promote indigenous peoples' views on key issues to inform policy research and education.

The UN Special Rapporteur on the Rights of Indigenous Peoples, Victoria Tauli-Corpuz, opened this round-table session with a statistic from a World Bank study published in 2008: "Indigenous peoples occupy 22% of the world's land surface and 80% of the planet's biodiversity is found within their land and territories". These figures illustrate the essential role Victoria Tauli-Corpuz

played by indigenous peoples in protecting biodiversity and caring for their ecosystems. Victoria Tauli-Corpuz believes that we need to learn from these people, who live by successfully managing the biodiversity that surrounds them. The Convention Biological Diversitv (CBD) on recognises the interdependent link indigenous between peoples and nature. In addition. Article 31 of the United Nations Declaration on the Rights of Indigenous Peoples explicitly states that: "indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions (...) including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora (...)". Victoria Tauliexplained that indigenous Corpuz peoples were thus accordingly involved in international negotiations CBD. These the negotiations on included discussions on the ABS system, an aspect that is being closely monitored by developing countries. These countries often have a high level of biodiversity; however, they reap very few of its benefits. These resources are predominantly utilised by richer countries, which tend to show more interest in preserving and protecting biodiversity than in effectively sharing the benefits arising from its use.

Victoria Tauli-Corpuz also highlighted some of the shortcomings of the Convention on Biological Diversity and the Nagova Protocol, starting with the requirement for due diligence, which means that users are obliged to obtain prior consent from the providing party thev utilise before can aenetic resources. The Nagova Protocol fully recognises the right of indigenous peoples to give their consent in Article7². However, implementation of this article is based on the domestic legislation of each country that has signed up to the protocol, whereas, according to Victoria Tauli-Corpuz, it is important that this right is consistent with customary law, which is not always the case.

Tauli-Corpuz Victoria stated that differences of opinion on how to manage genetic resources have been highlighted through implementation of both the CBD and the ABS system. Here, the UN Special Rapporteur is referring to differences in the way the various stakeholders and legal instruments have interpreted the texts in а world where numerous international and national institutional bodies have introduced sometimes contradictory regulations. For example, the CBD on people's rights and biodiversity and the Agreement on **Trade-Related Aspects of Intellectual** Property Rights (TRIPs) are intrinsically combined but contain contradictions. Furthermore. for indigenous peoples, it is also important

to clarify the issue of commercialising their knowledge. Some indigenous peoples consider that accepting ABS systems also means accepting the commodification of their traditional knowledge. This can give rise to ethical issues. In contrast, other indigenous peoples see the ABS system as a means of protecting their knowledge and resources from plunder.

The UN Special Rapporteur on the Rights of Indigenous Peoples also highlighted the risks associated with property rights, as the CBD advocates for puttina an inter-governmental agreement in place. Through its sovereignty. country's aenetic а resources belong to the State, who can thus claim ownership of these genetic resources and their related traditional knowledge. The ABS system therefore gives users and States a greater say over this knowledge than the ancestral owners who have collectively developed it. Victoria Tauli-Corpuz emphasised the fact that there is a between contradiction types of property rights, particularly between common property rights and individual property riahts. with individual property rights carrying much more weight. This creates an asymmetry between indigenous peoples' rights and intellectual property rights that is still a long way from being resolved. Indiaenous peoples wanting to exercise their collective and ancestral riahts over their resources and traditional knowledge find themselves

² Article 7 of the Nagoya Protocol - Access to traditional knowledge associated with genetic resources: In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that traditional knowledge associated with genetic resources that is held by indigenous and local communities is accessed with the prior and informed consent or approval and involvement of these indigenous and local communities, and that mutually agreed terms have been established.

in a weakened position. It seems somewhat absurd to impose our westernised and highly complex legal frameworks instruments and on indigenous peoples. Victoria Tauli-Corpuz further pointed out that effectively implementing ABS systems is administratively complex and also incurs transaction costsfaiblesse.

According the UN to Special Rapporteur, these legislative texts do nonetheless contain the basic principles for tackling biopiracy, in particular the principles relating to the fair and equitable sharing of benefits arising from the utilisation of genetic related resources and traditional knowledge. Similarly, the prior and informed consent of indigenous peoples is now required and has to be

proven. Victoria Tauli-Corpuz nevertheless wished to make it clear that « benefit sharing with indigenous peoples is defined through domestic legislation, and this is one of the Nagoya Protocol's shortcomings." »

In conclusion, Victoria Tauli-Corpuz reiterated that it is her duty as UN Special Rapporteur on the Rights of Indiaenous Peoples to consider complaints about and ensure compliance with the Nagova Protocol, ABS systems and indigenous peoples' rights and so called upon all those attending the conference to report any threats to or violations of these principles to her.

Location of biodiversity hot spots, as identified by Conservation International, an organisation that works to protect these areas:



Biodiversity hot spots are areas that are biologically rich and contain a high percentage of endemic species. They are also under threat (from pollution, invasive species, deforestation, etc.)

© wikimédia

LIMITATIONS OF THE NAGOYA PROTOCOL: ILLUSTRATED THROUGH EXAMPLES FROM FRANCE

Other speakers at the conference joined Victoria Tauli-Corpuz in exploring some of the Nagoya Protocol's limitations. Despite being a binding treaty, this legislation is often criticised for its lack of clarity and the amount of flexibility it provides to States.

<u>Retroactivity of the Nagoya Protocol</u>

The Nagoya Protocol only takes effect from the date that the domestic legislation implementing this protocol enters into force. Victoria Tauli-Corpuz explained that it is impossible for indigenous peoples to claim Access and Benefit Sharing rights over ex situ genetic resources that were collected prior to the date that the CBD was signed (1992) and listed in seed banks. Emmanuel Poilâne reminded the conference that making the protocol retroactive to 1992, the year the CBD was signed, is one of indigenous peoples' demands.

• No obligation to disclose the origin of the resources used when applying for a patent

The biodiversity bill that is to implement the Nagoya Protocol in France does not currently include the obligation to disclose the origin of the genetic resource being utilised or its associated traditional knowledge. The INPI (*Institut National de la Propriété Intellectuelle*) does not require this information in order to grant a patent. François Meienberg explained that it is necessary to state the origin of the resource under Swiss law, however.

Extraterritoriality

Under the provisions through which the Nagoya Protocol is to be implemented in French law, French companies will only have to comply with access and benefit sharing regulations within French territory. This means that a French firm working abroad in a country that has not ratified the Nagoya Protocol will be able to freely carry out acts of biopiracy with impunity.

The French Biodiversity Bill: An Example of Nagoya Protocol Implementation



THE BIODIVERSITY BILL

After having signed the Nagoya Protocol in 2011, France is currently putting a legal framework in place to combat biopiracy through its bill on regenerating biodiversity, nature and landscapes. Chapter IV of this bill focuses on access to genetic resources and fair and equitable sharing of the benefits arising from the use of these resources and related traditional knowledge (ABS).

Following on from Victoria Tauli-Corpuz's review of international legislation, the MP Chantal Berthelot revisited domestic implementation of the Nagoya Protocol, which is being incorporated into French law through the biodiversity bill. France signed the Nagoya Protocol in 2011 and thus undertook to adopt legislation on access to genetic resources and the fair and equitable sharing of the benefits arising from their use. To this end, the biodiversity bill includes a

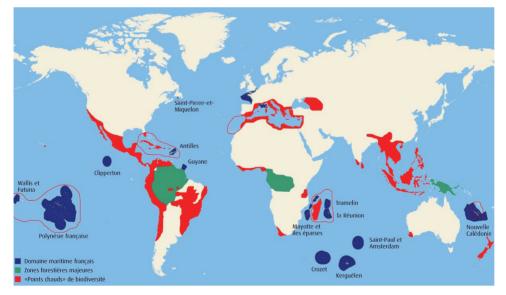
Chantal Berthelot

declaration system for instances where genetic resources are accessed for non-commercial use, as well as regulated and mutually agreed authorisation for commercial use..

Any user wanting to utilise traditional knowledae must complete the utilisation procedure, meaning that they must communicate with and obtain feedback from the indigenous communities ensure to these communities are in a position to give their informed consent (or refusal). This therefore involves informing and consulting with groups of local inhabitants. Following this. the administrative authority will grant or denv the authorisation requested. If authorisation is granted, the benefit sharing contract needs to be agreed and signed by a legal entity.

Accordina to Chantal Berthelot. implementing the Nagoya Protocol poses two challenges for France. Firstly, France is in the unusual position of being both a user of genetic resources and a biodiversity provider country. Highly protective legislation is therefore domestic required to safequard this French heritage. Secondly, Chantal Berthelot reminded the conference that Guvana. along with other countries, is home to indigenous peoples that are not

under recognised the French Constitution. In accordance with the principle of indivisibility of the Republic and equality of all citizens before the law. France does not recognise the indigenous populations living in its Consequently, territories. Chantal Berthelot considers that « the aim is to ensure the diversity of the French population is recognised, including indigenous peoples, local communities and communities of inhabitants ». She also believes that « France still needs to take ownership of its territory and its history. »



France's overseas territories support a rich biodiversity that is vulnerable to acts of biopiracy. © UICN, 2013- Site internet du ministère de l'écologie, du développement durable et de l'énergie

Protecting against Biopiracy Requires the Involvement and Participation of Indigenous Peoples



Lucy Mulenkei ©Karine Boudart

Lucy Mulenkei

She is Director of the Indigenous Information Network (IIN), an NGO that works to defend indigenous peoples and protect the environment in Kenya. Lucy Mulenkei is also an active member of the International Alliance of Indigenous and Tribal Peoples of the Tropical Forests (IAITPTF).

Lucy Mulenkei

Lucy Mulenkei also considers it vitally important that the place of indigenous peoples is properly recognised and further believes that they need to fight to ensure their voices are heard. For a long time, the biopiracy inflicted against these peoples was not taken seriously. Through its Article 8i3, the CBD states for the first time that indigenous peoples should be involved in negotiations on access to resources as a party in their own right. This Article 8i paved the way for indigenous peoples' involvement in negotiations from the Bonn⁴ Guidelines through to the Nagova Protocol. For example, before the Protocol was adopted. indigenous peoples had to work to ensure that they were able to effectively contribute and that their rights were aligned to those set out in the United Nations Declaration on the Rights of Indigenous Peoples.

It is for this reason that Lucy Mulenkei also emphasised that, prior to implementing the Nagoya Protocol, it is important to fully understand both

⁴ A governmental meeting was held in Bonn in 2001 to give legal substance to the CBD principles. This culminated in publication of the Bonn Guidelines. These guidelines are to be used to assist Parties, Governments and other stakeholders in developing and identifying the steps involved in the process of obtaining access to genetic resources and benefit sharing (ABS). They notably emphasise the obligation for users to seek the prior informed consent of providers.

³ Article 8 In situ Conservation - j) (Each Contracting Party shall, as far as possible and as appropriate) Subject to its national legislation, respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices.

indigenous peoples' situation and all the other issues the legislation is set to address. To illustrate this point, she returned to the hoodia biopiracy case highlighted by **François Meienberg**. In this case, a proper understanding of the *San* people was required. The San live not only in South Africa, but also in Namibia, Botswana and parts of Zimbabwe. Governments thus need to take all indigenous peoples into account, even those that are scattered across regions or live in remote areas.

According to Lucy Mulenkei, « it is clear that the ABS system framework is important for economic development and helps promote the of development ecosystems, conservation and the sustainable use of biodiversity ». However, we need to governments ensure that involve indigenous peoples in national Nagova Protocol implementation processes, in the same wav as indigenous communities have contributed at the international level.

Furthermore, in addition to being involved in negotiations, indigenous peoples also need to consolidate their own traditional institutions and join forces to reinforce their involvement in implementing the Nagova Protocol. Lucy Mulenkei explained that it is crucial that these indigenous peoples work with aovernments and the business world to make their voices heard, hence the importance of the action taken by indigenous peoples' organisations and by civil society as a whole

SECOND ROUND-TABLE SESSION : TACKLING BIOPIRACY ON THE GROUND



© France Libertés

This second round-table session, chaired by Marie Monique Robin, examined what biopiracy represents for each of the panel experts and explored the various types of activity that can be carried out to combat this practice. Claudie Ravel has opted to set up Guayapi, an ethical and socially responsible firm that works directly with indigenous peoples in Latin America and Asia. Biopiracy also affects French farmers, as outlined by Guy Kastler, a member of the French farmers' seed network, Réseau Semences Paysannes. Nonetheless, alternatives to biopiracy are gaining traction. This was demonstrated by Krystyna Swiderska, researcher at the International Institute for Environment and Development, who reviewed the development of bio-cultural community protocols. However, legislation to tackle biopiracy can also sometimes have an impact on the work of researchers, as highlighted by Jean-Patrick Le Duc, head of European and International relations at the French natural history museum, Museum National d'Histoire Naturelle.



Marie Monique Robin

A journalist, writer and filmmaker, Marie-Monique Robin has made a number of documentaries, including one on biopiracy, entitled Les pirates du vivant (2005), for which she was awarded the grand prix at the International Current Affairs and Social Documentary Film Festival (FIGRA). Marie Monique Robin also helped facilitate the First International Conference to Tackle Biopiracy in 2009.

Economic Alternatives



© Karine Boudart

Claudie Ravel

She is founder of Guayapi, a company that manufactures plantbased food products and cosmetics based on traditional knowledge of natural resources.

In establishing Guayapi, Claudie Ravel has started developing and distributing tropical plants by combining business and ethics. Guayapi product development is based on three essential criteria: products must be organic; they must respect ecosystems and they must comply with fair trade principles and with the manifesto of the slow-food⁵ movement. The aim of Guavapi's founder is to « meet the needs of indigenous peoples, which offerina their include emblematic products developed throuah their traditional culture; the noble products from their local lands that they would like to share with the rest of the world in an honourable manner ».

The economic model that Claudie Ravel wanted to create through Guayapi is based on the model introduced by the Sateré-Mawé people (Brazil), who had seen their land invaded and plundered. These

Claudie Ravel

indigenous peoples thus decided to initiate trade arrangements that respected their organisational set-up and their community. The Sateré-Mawé people consider themselves the « *custodians of in situ warana genetic resources* ». This emblematic plant is a powerful physical and mental stimulant. Guayapi has been commercialising warana for over twenty years through shops selling natural organic and fair trade products both in France and abroad. .



The Warana plant. "Warana" is the Sateré-Mawé word for guarana © Guayapi, Claudie Ravel

The Sateré-Mawé Indians have set up a Sateré-Mawé Producers Consortium for all warana producer organisations and Guayapi has entered into a partnership with them to work towards pooling their knowledge. Guayapi publishes the breakdown of the buying price, which includes funds for development projects. «Over time, we have built a relationship of mutual trust with the Sateré-Mawé people».

Guayapi has thus committed to developing an alternative economic and business model that effectively includes and respects indigenous peoples' traditional knowledge. These sustainable trade networks help promote both indigenous peoples' knowledge and their emblematic products.

⁵ Slow Food is an international movement that strives to create a world in which everyone has access to food that is good for them, good for those that produce it and good for the planet.

Seed Banks: Selecting, Storing and Exchanging Farmers' Seeds

Guy Kastler



Guy Kastler ©Karine Boudart

Guy Kastler

He is coordinator of the French farmers' seed network. Réseau Semences Pavsannes. which advocates for the adoption of new farming practices, and а of founding member Confédération Pavsanne. а French farmers' union. Guv Kastler also the represents international Via Campesina network. He is an expert on the biopiracy of farmers' seeds.

Guy Kastler explained that it is not only indigenous peoples that are affected by biopiracy and the patenting of living things; these issues have an impact on French farmers too. Guy Kastler focused on the biopiracy of domestic biodiversity, which he sees as being discredited in France and rarely included in general discussions on biodiversity.

Guy Kastler highlighted the fact that biopiracy also exists in France. It began when seeds were taken directly from the farmers' fields to be stored in seed banks common heritage. as Researchers from various institutes then catalogued these farmers' seeds. either to identify genetic materials for research purposes or to conserve biodiversity. However, the private sector has forged partnerships with these public research institutes and biodiversity has become privatised as a result. French farmers thus risk losing the right to grow their own plants. Guy Kastler criticised this practice, calling it « cultural biopiracy ».

The only varieties available on the market are the industrial, uniform and stable seeds listed in the catalogues. However, these catalogued and marketable varieties originally came from the farmers' seeds that were taken directly from their fields. Over time, the heritage built up by the farmers and then stored in the seed banks has become a resource for the seed industry.



©U.S. Department of Agriculture

Other varieties of farmers' seeds have not been catalogued and so cannot be marketed as they are not considered uniform or stable, having adapted to changes in the climate and soils over the course of time. Guy Kastler objects to the use of the term « variety ». As far as he is concerned, the French seed industry has entirely invented the concept of a uniform and stable variety as no such thing actually exists in nature. By definition, a plant evolves; it never identically replicates itself. He « How are farmers thus asked: supposed to exchange and sell their seeds if they have no access to the market? ? »

When it comes to seeds, the Nagoya Protocol refers to the International Treaty on Plant Genetic Resources for Food and Agriculture. There are two articles within this treaty that recognise the farmers' right to store, replant, exchange and sell their seeds. However, the French seed catalogue prevents them from exercising this right. For this reason, Guy Kastler maintained that the biodiversity act « *must thus include the tangible implementation of access and benefit sharing for farmers, as storing and exchanging seeds are farmers' rights* ». Previously, seed banks were used by farmers to share knowledge, but now . « are they not in the process of evolving into a powerful biopiracy organisational tool ? ». The public and collective seed bank has been steadily undergoing privatisation for a number of years now due to a lack of public investment. The seed industry has been using this public seed stock to create its own seed banks. Farmers are private it increasingly difficult to findina access seeds. All industrial seeds. which have now been standardised and modified by the seed industry. originally came from a core stock of farmers' seeds that had been selected by farmers over the course of generations. Guy Kastler deplores the fact that there is no public policy in place to keep seeds on farms or that properly values the many years of seed selection carried out by farmers in France

Now, firms are able to sequence the wild relatives of plants, the progenitors of crops. They then patent the gene sequences, in the same way as outlined by Francois Meienberg for native traits. This can be a sequence relating to a plant's flowering date or its ability to adapt to climate change, for example. As a result, all varieties with a patented gene sequence become the property of the firm holding the patent. « The protection conferred by a patent on a gene sequence extends to all organisms that contain and manifest the features of that gene sequence ». Thus, were researchers to take seeds from a farmer and patent a gene sequence from those seeds, the farmer would no longer be able to use them.

As Guy Kastler pointed out, the farmer « doesn't work with genes ». Yet. European patent law considers that establishing a link between a gene sequence and a plant trait equates to an invention and so can be patented. In order to highlight the ridiculous nature of some of the patents filed, Guy Kastler gave the example of Limagrain, a firm that has recently patented a watermelon plant, which it developed by crossbreeding existing varieties. Under the terms of these patents, any watermelon plant with « at least 19 branches of more than 90cm in length on which there is a lot of fruit that each weighs less than 1.5kg » would be owned by Limagrain.

Guy Kastler believes that the only solution is to abolish patents on living things. He explained that a company

like Monsanto, for instance, has around 80 search enaines that investigate all possible aene associations with a view to applying for patents without going anywhere near a seed. Monsanto just needs access to the farmers' knowledge and the gene sequence, which is published by the International Treaty on Plant Genetic Resources for Food and Agriculture. Guy Kastler concluded by stating that he is against benefit sharing as this would help validate the patenting of living things, a practice that Réseau Semences Paysannes is campaigning to end. He maintained that « We don't want benefit sharing because, simply put, we don't want patents. »

THE COMMON CATALOGUE

In order to market or simply exchange a type of seed, the variety in question needs to be officially recognised by the state. This means that the seed variety must be listed in a common catalogue. If this is not the case, any farmer wanting to sell or exchange his plant or seed is unable to do so as he would be breaking the law. Farmers are often unable to afford the cost of registering a seed variety in the common catalogue. In addition, for registration to be accepted, the seed variety must be uniform and stable. However, many farmers' seed varieties change as they adapt to the climate, soil and local area... They naturally evolve to suit their environment. Biodiversity is, by definition, both changeable and dynamic. Yet, the French seed catalogue today contains 6,500 varieties whereas, in the 1960s, farmers were growing over 50,000 different varieties of seed.

In 2010, the FAO published an alarming report on biodiversity and inherent risks for the world's food security. The FAO estimates that 75% of crop diversity was lost between 1900 and 2000.

Bio-Cultural Community Protocols



Krystyna Swiderska ©Karine Boudart

Krystyna Swiderska

She is a researcher at the International Institute for Environment and Development, a development and environment policy research organisation.

Krystyna Swiderska's areas of expertise include traditional resource rights and biodiversity governance.

In a similar way to Guy Kastler, Krystyna Swiderska works to find tangible solutions to biopiracy. Krystyna Swiderska has studied the implementation of bio-cultural community protocols. These protocols help communities assert their rights and develop legislation on accessing their traditional knowledge and genetic resources and on sharing the benefits arising from their use.

The Nagoya Protocol indicates that indigenous peoples' customary laws should be taken into account during the consultation process and when working to obtain free and informed consent. These customary laws are

Krystyna Swiderska

charters of rules and responsibilities through which communities notably define their customary rights to natural resources and the surrounding land. Bio-cultural community protocols are based on these customary laws, which communities use for their internal governance.

Whilst some traditional knowledge is shared and made available to all, other knowledge is considered sacred and private. Although indigenous communities consider these laws to be paramount, they can be easily bypassed by external parties. In most cases, these laws have never been recorded or written down. Setting up bio-cultural community protocols enables communities to keep а written record and to translate their customary laws into legal language. These protocols thus help indigenous peoples assert their customary rights and create a process of mutual exchange.

With the help of NGOs, such as Natural Justice, work on establishing biocultural community protocols began before the Nagoya Protocol was even implemented. Broadly speaking, their aim is to protect indigenous peoples from potential external threats, such as the creation of protected areas or mining operations, which would have a severe impact on indigenous land. Biopiracy is a new type of threat for which benefit sharing rules are required.

Bio-cultural community protocols provide a tool for sharing knowledge. only within the indiaenous not community itself. but also with other communities affected These protocols provide a link between all legislation. from local through to international laws. In addition. Krystyna Swiderska explained that the term "bio-cultural" has been used for a reason. It essentially emphasises the fact that there is an interdependent traditional relationship between knowledge and genetic resources; an interdependence that the Nagova Protocol fails to fully recognise. Biocultural community protocols thus make it possible to both safeguard strengthen and indiaenous communities' rights and their direct link with biodiversity.



Examples of the different varieties of potato grown in the Potato Park, Pisaq Cusco, Peru © The International Institute for Environment and Development

This system has been successfully used in South Africa. The bio-cultural community protocol developed by the Bushbuckbridge traditional healers has brought together 300 of the area's healers and helped them initiate negotiations with a cosmetics company that was collecting plants from the healers' land. .

The bio-cultural community protocol set up by communities in the Potato Park in Pisag Cusco. Peru provides a example of further successful implementation of this system. This protocol has made it possible to reestablish the planting of 400 varieties of potato within the park. Over the vears, a number of potato varieties had disappeared from the area due to the erosion of biodiversity. Thus, the Potato Park contacted the International Potato Centre in the hope that it would help them address this worrying situation. The International Potato Centre's researchers had visited the area in the 1960s (when it was far more diversity-rich) to collect samples of the various varieties. In 2004, an agreement was sianed between the International Potato Centre and the Potato Park, which involved repatriating several hundred of the lost varieties to the Potato Park in return for making 200 varieties available to the International Potato Centre. Today. the five Peruvian communities within the park are able to take advantage of over 650 varieties of potato. Meanwhile, the International Potato Centre has undertaken to reject any patent applications that relate to these potato varieties. Furthermore, 10% of the profit raised is paid into a joint fund. Each year, the Association of Communities of the Potato Park determine how best to redistribute this profit to the communities.

Research Organisations' Code of Conduct and Good Practice



©Karine Boudart

Jean-Patrick Le Duc

He is the head of European and International Relations at the French National Museum of Natural History. An environmental expert, Jean-Patrick Le Duc was also head of the anti-fraud office for the United Nations Environment Programme's (UNEP) Secretariat of the Convention on International Trade in Endangered Species of Wild Flora and Fauna.

Jean-Patrick Le Duc explained that « tackling biopiracy above all means showing respect for human beings but is also an expression of solidarity between the inhabitants of this planet ». As a scientific research representative, Jean-Patrick Le Duc reminded the conference that genetic resources are part of biological resources . These

Jean-Patrick Le Duc

biological resources constitute both a community's heritage and an exploitable resource for the resource owner⁶. For indigenous peoples,, « biological and resources the knowledae associated with these resources are vital for their survival ». It therefore seems necessary to ensure that these resources are not exploited without the resource-holders receiving a fair return. Meanwhile. investors working in research and development and converting the initial resource into an end product also expect a fair return on their investment.

However, some are only seeking to maximise profit and abuses of the system do occur. As a rule, profit is not usually generated in the country in which the genetic resource is found, which makes taking legal action difficult. According to Jean-Patrick Le Duc, each country's domestic 'access to resource' legislation is different and only around twenty countries have implemented an ABS-type framework to detect illegal activities. Thus, as he pointed out, « you can't break a law that doesn't exist ». Although the Nagova Protocol provides the jurisdiction to establish uniform standards, these still need to be enforced. This oversight can only be provided by trained experts.

⁶ According to Article 2 of the Convention on Biological Diversity, 'biological resources' include : « genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity » and 'genetic resources' means « genetic material of actual or potential value ».

Jean-Patrick Le Duc reiterated the fact that scientific research plays a vital role in developing this expertise. In order to gain a thorough understanding of the issues surrounding biopiracy, it is essential to have expert knowledge of various branches of science. This includes expertise, not only in fields such as anthropology, ethnology and the study of traditional knowledge, but also in the science of taxonomy. Taxonomy involves identifying, naming and classifying species. Jean-Patrick Le Duc maintained that « without taxonomy, we can't study genetic resources or effectively implement the Nagova Protocol. Unfortunately, there are fewer and fewer taxonomists ».

He believes that anti-biopiracy legislation can sometimes hamper scientific research non-commercial that uses genetic resources without aeneratina profit. Overly а cumbersome legal frameworks can have adverse effects. Jean-Patrick Le Duc explained that « access procedures become so complex that they inhibit research ». This was the where scientific case in Brazil. research on biodiversity has declined as a result of the country's complex ABS legislation. He pointed out that, if the process is conducted properly. obtaining the prior and informed consent of indigenous peoples can take between two and three years. The Nagoya Protocol includes simplified procedures for obtaining consent for non-commercial research: however, it does not exempt non-commercial from this requirement research entirely. After detailing how antibiopiracy legislation can slow down

38

research, Jean-Patrick Le Duc stressed non-commercial research that organisations nonetheless need to ethically abide by the law and respect traceability rules However. retroactivelv implementing the principles contained within the CBD and Nagova Protocol will be difficult as this will require organisations to catalogue their collections: a task that will take decades to complete. Furthermore. researchers regularly collect genetic resources that require several years of study to identify before they are able to be exploited and thereby comply with the Nagova Protocol.

In conclusion, Jean-Patrick Le Duc considers it entirely reasonable that scientific research is subject to supervision. However, he also believes it necessary to safeguard this research from the potential adverse effects of anti-biopiracy legislation.

POLITICAL AND ETHICAL VIEW POINTS



The final session of the Third International Conference to Tackle Biopiracy was devoted to discussing different ethical views of biopiracy. **Claudio Chiarolla**, a legal officer at the World Intellectual Property Organisation, explained the background to the genomic revolution, which is highly relevant as biopiracy is evolving in line with biotechnological progress. **Jean-Paul Guevara**, the Bolivian Ambassador to France, spoke about Bolivia's vision for safeguarding indigenous peoples' rights and biodiversity. This is an alternative approach that goes much further than the proposals outlined in the Nagoya Protocol.

The Patentability of Living Things with regard to the Genomic Revolution



Claudio Chiarolla ©Karine Boudart

Claudio Chiarolla

He is a legal officer at the World Intellectual Property Organisation. He is also a Research Fellow on International Governance of Biodiversity at the Institute for Sustainable Development and International Relations (IDDRI -Institut de Développement Durable et de Relations Internationales). Claudio Chiarolla's of areas notably include expertise intellectual property and genetic resource rights and policy.

In line with the presentation given by Guy Kastler, Claudio Chiarolla outlined the impact that the genomic revolution is having on biopiracy. The genomic revolution is well underway and cannot be stopped; it is changing the way life sciences are being carried out (biomedicine, plant breeding, etc.).

Claudio Chiarolla

This revolution involves DNA sequencing, which means reading organisms' DNA, letter by letter, to be able to obtain comparisons. For example, the human genome was seauenced in 2003. Seauencina makes it possible to detect variations in the bases of DNA. Identifying these variations then makes it possible to characteristics. replicate specific Thus, we can determine the likelihood of a person developing cancer or which plants are best able to produce chemical substances.

Work to develop the technology that has led to this genomic revolution began in the 1980s. Over the course of the last thirty years, the cost of sequencing has fallen dramatically. This now very low cost has made it possible to sequence all living things, hence the term "aenomic revolution". Chiarolla Claudio advised the conference that "all living things will be sequenced". However, by making all this data available, there is a risk that not everyone will treat it as a public good or use it for commendable ends.



This technological development has implications for inevitably intellectual property and patenting. The issue of patenting living things through biotechnology first came to the fore in the United States in the 1980s through the Chakrabarty case. The biologist Ananda Chakrabarty, who worked for General Electric, applied to patent a genetically modified microorganism capable of dearadina hydrocarbons. His application was initially rejected as the United States not allow patents on living did organisms. General Electric appealed the decision and the Supreme Court ultimately ruled in favour of the biologist, stating that patentable subject matter includes "anvthing under the sun that is made by man". It was through this case that the patentability of living things was approved.

Claudio Chiarolla expressed concern over the actual effectiveness of the ABS system. Nowadays, the genomic revolution means that access to genetic resources is no longer required as modifications can be made simply by using data provided by a computer. Claudio Chiarolla concluded by saying . « There is no point in setting up an ABS system as there is no longer any need to touch the source material ».

BIOTECHNOLOGIE

Biotechnology is "any technological application that uses biological systems, living organisms or derivatives thereof, to make or modify products or processes for specific use" (UN Convention on Biological Diversity, Art. 2).

Governments' Consideration of Indigenous Peoples' Interests



Jean-Paul Guevara ©Karine Boudart

Jean-Paul Guevara

He has been the Bolivian Ambassador to France since 2012. Bolivia is an extremely biodiversityrich country and is particularly attentive to the interests of its indigenous peoples.

Although this Southern American country was the first to sign the United Nations Declaration on the Rights of Peoples. Jean-Paul Indiaenous Guevara explained that Bolivia has decided not to sign the Nagoya Protocol as it does not properly protect the rights of indigenous peoples. He believes that the Nagoya Protocol legalise the could even historic plundering that is biopiracy. The protocol also does not take the asymmetry that exists in today's world into account; neither the asymmetry peoples' and between indigenous governments' negotiating capacities, nor the asymmetry in the institutional differences that exist between these

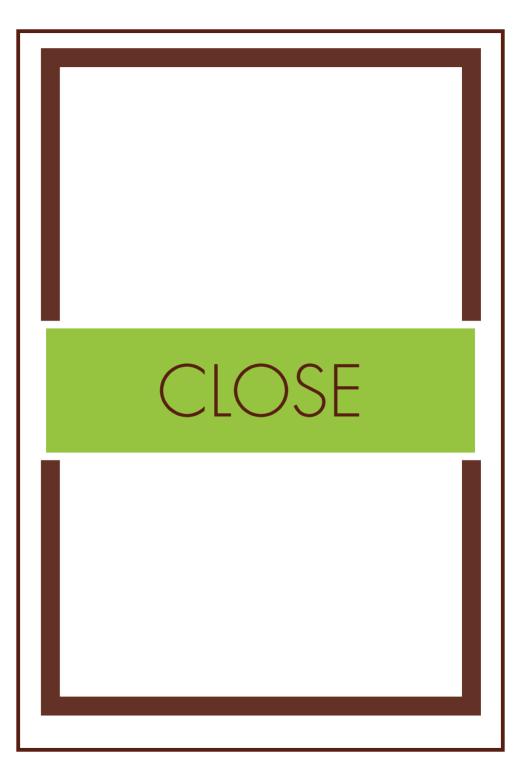
Jean-Paul Guevara

two parties. The Bolivian Ambassador also added that, by fully authorising the commodification of genetic resources, the Nagoya Protocol does not pay sufficient attention to cultural differences.

Bolivia is campaigning to ensure that nature does not become a commodity. This principle is inherent in Bolivia's Constitution and the country's recognised law of the Rights of Mother Earth, Nature - Mother Earth - is not an object but has a legal personality. Bolivia successfully campaigned for the UN to designate April 22nd as International Mother Earth Day, Jean-Paul Guevara defines Mother Earth as beina « the dynamic living system. formed by the indivisible community of all life systems and living beings, which linked. interdependent are and complementary and share a common fate. Mother Earth is considered sacred. She nourishes this place that contains. comprises and reproduces all living things: ecosystems, biodiversity, organic societies and the individuals within them ». Since 2010. Bolivia has had a law in place that promotes the rights of Mother Earth outlines the and government and society's obligations and duties towards her. Mother Earth is thus recognised as a collective subject of public interest. This is an innovative and important step forward in the fight to safeguard the interests of indigenous peoples and biodiversity.

« Life systems » can neither be marketed nor become private property. Jean-Paul Guevara uses the term « life system » because, as far as he is concerned, we cannot fragment what constitutes life and so we cannot separate ancestral knowledge from the aenetic resources to which this knowledge pertains. Market pressure must not be exerted on aenetic resources as these provide indigenous peoples with both food and medicine. The current market does not take sufficient account of cultural differences However. unless increasingly ethical ideas emerge, the market-driven approach will continue to reign.

Jean Paul Guevara believes that it is vital that diversity be maintained as, whether this is diversity of languages or diversity of ecosystems, such diversity is a prerequisite for life. Part of this diversity has been lost through modernisation and through the standardisation of values and customs. However, Bolivia is fighting this phenomenon. That's whv indigenous peoples are represented and recognised in Bolivia: Bolivia is a plurinational state that has 36 officially recognised languages, so 36 cultures. The Ambassador considers that nation-states too often deny their indigenous peoples.



The conference concluded with a review presented by two young activists, **Valentin Brochard** and **Rozenn Le Berre**, which helped to put the views expressed over the course of the day into perspective.



Valentin Brochard © France Libertés

According to Valentin Brochard, geographer, food security consultant and joint founder of the NGO 7th Generation, **biopiracy is a social injustice**. It runs counter to the concepts of knowledgepooling, benefit sharing and the sustainable use of biodiversity as it appropriates living things and commercialises knowledge. This

social injustice continues to be legally regulated by the French biodiversity bill, despite the notable progress made in relation to indigenous peoples' rights. Biopiracy has social and economic repercussions, particularly as regards the food security of the world's poorest populations. Farming communities are being deprived of their traditional seeds by unlawful patents. After having listened to the day's debates, he wondered whether current legal frameworks are actually up to the task of addressing contemporary developments in biopiracy practices. Valentin Brochard believes that lack of political will is continuing to hamper efforts to combat biopiracy. By way of example, the Committee on World Food Security and Nutrition, which brings together United Nations agencies, governments and representatives from civil society and the private sector working in agriculture, has never once addressed biopiracy in any shape or form. Thus, the world's most inclusive food security and agricultural development body is incapable of dealing with biopiracy.



© France Libertés

Since helping to organise the Second International Conference to Tackle Biopiracy in 2012, **Rozenn Le Berre**, a former France Libertés volunteer, has moved away from tackling biopiracy and is now an instructor working with unaccompanied foreign minors. From her

overall perspective, she is surprised at how little the general public know about biopiracy. Rozenn Le Berre believes that the consumer needs to know whether or not the products they buy meet their own ethical standards. All the shortcomings of the patentability of living things are revealed in the absurdity of the current system, which requires that all knowledge must be written down to exist in law. Ultimately, despite notable progress having been made to ensure indigenous peoples are more involved and respected, Rozenn Le Berre remains concerned about the westernisation of practices and the fact that little is being done to prevent this.

Conclusion

Third International Conference to Tackle This **Biopiracy** highlighted developments in this practice. These latest changes reveal the legal constraints that continue to hamper the fight against biopiracy, despite the implementation of powerful legislation such as the Nagoya Protocol. Nevertheless, alternatives to biopiracy are on the increase and are enabling the voices of indigenous peoples to be heard, as their involvement is vital for combating the plundering of biodiversity and traditional knowledge. Fondation France Libertés will continue to campaign on this issue, both nationally and internationally, working together with all those involved to find ways of preventing the illegal appropriation of living things and related traditional knowledge.

Glossary

Key legislation: the Convention on Biological Diversity and the Nagoya Protocol8	
Indigenous Peoples12	
The ABS System: Access and Benefit-Sharing14	
The Patentability of Living Things and Biopiracy15	
Native traits 17	
Limitations of the Nagoya Protocol: Illustrated through Examples from France	
Biotechnology 42	

Acknowledgements

France Libertés would like to thank Member of Parliament **Chantal Berthelot**, and her parliamentary assistant **Camille Bellia**, for her sponsorship and, particularly, for her work on the biodiversity bill.

The Fondation would also like to express its gratitude to all the panel members for taking part in the conference and helping to make it such a success :

- **Daniel Joutard**, founder of Aïny and member of the France Libertés Anti-Biopiracy Scientific Committee

- **François Meienberg**, Campaign Coordinator for the Berne Declaration

- Victoria Tauli-Corpuz, UN Special Rapporteur on the Rights of Indigenous Peoples

- **Lucy Mulenkei**, Director of the Indigenous Information Network

Claudie Ravel, founder of Guayapi

- **Guy Kastler**, Coordinator of Réseau Semences Paysannes and representative of Via Campesina

- Krystyna Świderska, researcher at the International Institute for Environment and Development

- Jean-Patrick Le Duc, head of European and International Relations at the French Museum of Natural History

- Claudio Chiarolla, legal officer at the World Intellectual Property Office

- Jean-Paul Guevara, Bolivian Ambassador to France Fondation France Libertés is particularly grateful to the session facilitators, Marie-Monique Robin and Agnès Sinaï, and to Valentin Brochard and Rozenn Le Berre for their closing address. Last but not least, France Libertés would also like to thank the interpreters, technicians, Assemblée Nationale staff, the France Libertés Anti-Biopiracy Scientific Committee and the Fondation team, especially Archibald Neyvoz, for helping to organise this conference. Report produced by : Doris Ouensou, Marion Veber, Justine Richer, Nicola Brodrick.



www.france-libertes.org

How to support us ?

- Subscribe to our newsletter (in French)
- Make a donation
- Contact us to become a partnerFollow us on social networks :

F Dailymotion

FRANCE LIBERTÉS - FONDATION DANIELLE MITTERRAND 5, rue Blanche, 75009 Paris, France Tél: (33) 1 53 25 10 40 - Fax : (33) 1 53 25 10 42