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**Americas Sustainability Issues:  
Biodiversity, Indigenous Knowledge and Intellectual Property Rights<sup>1</sup>**

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**Abstract**

The current Americas integration process is embarked on trade, environmental and social issues, as manifested in the declaration of principles of 1994 Miami Summit, where sustainability assumes an important role. However, this attempt has essentially been pushed for a free trade agenda as the focal way to reach hemispheric integration, beyond NAFTA, and other important sustainable elements have been its importance reduced. The latter is causing asymmetrical unification in the region. If hemispheric integration and social cohesion are congruent in building the new agenda, sustainability appears to be an important tool in reorienting perspectives. In that case, interconnections of biodiversity, indigenous knowledge and intellectual property rights, as presented in this paper, appear as an exercise to unite environmental, social and trade related issues. The latter aims to illustrate that a proper hemispheric integration needs to be unified in a sustainable manner.

**Americas Integration Process**

The Americas is moving quickly towards a trade liberalisation regime through the so-called Free Trade Area of the Americas (FTAA)<sup>3</sup> in the context of the Americas Summits, which began in 1994. This progression is based in the Americas integration process, which relates to building strong partnerships in the hemisphere through the following agenda: 1. to preserve and strengthen the community of democracies of the Americas; **2. to promote prosperity through economic integration and free trade**; 3. to eradicate poverty and discrimination in the hemisphere; 4. to guarantee sustainable development and conserve the natural environment for future generations (Declaration of Principles, Miami Summit Agenda Themes, 1994). In this approach there is no doubt that the principles of the integration process are socially wide as declared in the Miami Summit. However, these principles have become rhetorical and they are being used to justify trade liberalisation leaving aside or minimising the social and environmental agendas. Under the basis of "promoting prosperity" through economic integration and free trade, the mentioned **point 2** has a *bona fide* agenda supported by governments of the region through the ongoing

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<sup>3</sup> The negotiations of the FTAA were launched in the Santiago Summit of the Americas in 1998 by 34 heads of state and aim to reach an agreement by the year 2005.

process of FTAA within the setting up of the nine working group agendas<sup>4</sup>. Through this course of action hemispheric trade liberalisation in the Americas is becoming first priority, diminishing the other priority agenda themes within this integration framework. For instance, attempts to guarantee sustainable development (**point 4**) in the region is weak: there is not a real follow-up and no working groups have been installed since the 1996 Bolivia Summit of the Americas on Sustainable Development. More recently the III Americas Summit, the Quebec Summit<sup>5</sup>, referred to the issue of democracy in the Americas. However, the matter of economic integration was much more predominant in the ambiance. Governments are just pushing for rough trade liberalisation. The political will is leading to reinforce the fast track as a way to ignore the Miami Agenda Themes or to leave out some issues for later negotiations. Furthermore, the objective to eradicate poverty and discrimination in the hemisphere has not had any special consideration. Thus, the governments are just speculating on the spirit of hemispheric integration when they ignore or reject to include the environmental and social issues in the FTAA negotiations. Under these circumstances, the Americas integration process seems jeopardised by trade liberalisation, and sustainability –as was agreed in the Bolivia Summit– is still far from reality.

The genuine hemispheric integration not only implies the establishment of a dogmatic trade agreement, but mostly the strengthening of the relationship between trade, environmental and social themes in a sustainable framework, which aims to provide better development opportunities to the peoples of the Americas.

In any case, there is a big need to include environmental and social aspects in the ongoing FTAA negotiations as a chance to renovate the Americas integration process. It is important to bring to the fore and to finance the other agenda themes with their own preeminence, simultaneously with the economic integration and free trade, setting up an inclusive agenda and permanent working groups. The vision that economic integration and free trade serve as the only way to promote prosperity and finance the other integration objective is fragile. The Americas integration should not be controlled by only one agenda theme. The control of trade liberalisation objective over other agenda themes would bring major social problems and lack of social cohesion in the region.

As noted above, there are three major components to take into account for the Americas integration: trade, environmental and social agendas. But the ability to meet sustainability will be key to the success of such important initiative. Here public participation is crucial. As the ambitious integration process seeks for the complete development of the Americas region, negotiators and governmental leaders do not have all the solutions. They need civil society and business involvement to manage hemispheric challenges.

The link between trade and environment goes beyond economics and environmental protection and there is a strong association with the social element, which implies from

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<sup>4</sup> 1. market access; 2. investment; 3 services; 4. government procurement; 5. dispute settlements; 6. agriculture; 7. intellectual property rights; 8. subsidies, anti-dumping and countervailing duties; and 9. competition policy.

<sup>5</sup> The Quebec Summit, April 2001. This event took place in Quebec City, Quebec, Canada.

basic human rights to human development. In this context, sustainability issues play an important role for the success of any initiative.

As mentioned before, this chapter intends to bond environmental, social and trade elements through the review of, and in close proximity to, connection of biodiversity, indigenous knowledge and intellectual property rights in a sustainable integration framework. In this approach, hemispheric integration is not seen only as a purely economic integration but as a non-discriminatory and complex process that implies to treat the other elements of integration with the same status. Therefore free trade should not suppress sustainability. Too often economic integration is negotiated and discussed purely as an economic phenomenon, in favour of investor's rights, with too little attention given to biodiversity and other social issues, such as the rights of indigenous peoples. This reality has produced a continuous debate between trade and environment issues in connection with social concerns. The agenda pushed by governments for the mere promotion of free trade has led to protecting private rights, which are now provoking a real public problem.

### **Trade and Environment Debate**

The relationship between trade and environment is controversial, dynamic and multidimensional. On the one hand, trade liberalization has severely affected the world's environment. On the other, the commitment to protect the environment and preserve natural resources has led to create trade related environmental measures that are strengthening international laws for that purpose, but which are affecting international trade. For the latter reasons, a polarisation between economic and environmental regimes has become evident, which has generated dispute within international negotiations affecting social stability<sup>6</sup>. Nevertheless, Multilateral Environmental Agreements (MEAs) and Multilateral Free Trade Agreements are united by trade related environmental issues. In this view, there is an optimism for an environmentally worldwide sound trade expansion.

In the situation of this debate, the concept of **Sustainable Development**<sup>7</sup> has acted as a universal value with principles for harmonising trade and environmental preservation in kindness for human life quality. In this sense, sustainability has become increasingly important in international economic relations, for no other reason than the emerging need to compete at another more sustainable scale, due to the growing social demand to protect the environment. At the present, market access chances are increasingly conditioned to complying with local and international environmental laws. This suggests not simply less pollution, nor and end to economic growth, but rather a different kind of growth as stated in *Our Common Future* (WCED 1987) and in the "*Santa Cruz de la Sierra Declaration*" Art. 2.

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<sup>6</sup> There are confronted positions about the interaction between trade liberalization and the environment. Trade activities have caused irreversible damages on the environment. However, there are not only negative connections, but also positive ones. Both of the regimes –trade and environmental– face each other and, in some cases, become complements in spite of the fact that there are still sordid positions that try to dissociate these relations.

<sup>7</sup> In this chapter Sustainable Development is referred as a common conceptual framework that recognizes the objectives of all sides of the debate. Then, sustainability is an integrated and interdisciplinary process based on all three pillars of international economic, ecological and social law policy.

Most of the world democratic nations are constantly reviewing and enhancing their environmental regulatory systems for the amelioration of life quality. Likewise, there has been a considerable increment in the ratification and number of signatory countries to the conventions of the world's environmental regime agreements related to trade – such as Multilateral Environmental Agreements (MEAs)<sup>8</sup> and Regional Environmental Agreements (REAs). -Global environmental problems have motivated the creation of an environmental regime, which in many occasions includes trade restrictions at local, regional and world scales-. As importantly, Multilateral Investment Agreements (MIAs), the World Trade Organisation (WTO), the Organization of Economic Co-operation and Development (OECD) and other trade related organisations, are setting sustainable development measures to reduce transnational trade with negative environmental impacts and most of all, to make compatible links between environmental and trade policies. The recent UNEP-UNCTAD initiative on Capacity Building Task Force (CBTF) is an important combined effort in this direction. This project essentially embraces issues on environment and development. Still, one of the main purposes of this task is that the policies balanced integration related to trade, environment and development represent a substantial contribution to sustainable development objectives accomplishment. The general CBTF purpose is to strengthen nations' capabilities, mainly those developing countries and countries with transition economies, to direct and deal with efficiency questions related to trade, environment and development.<sup>9</sup>

An important number of measures, improvements and initiatives are partly being taken, due to pressure from organised civil society - mainly environmentalists and responsible consumers seeking to prevent or correct the negative environmental consequences that non-sustainable development can generate, or has generated. For the most part, these measures include unilateral and multilateral rules that affect the flow of goods and services, particularly those derived from activities that generate emissions, which are risky to human and environmental health. Increasingly aware environmental consumers are demanding healthy products that produce the least environmental damage, and multinational corporations that have assumed these demands are gaining reputation.

The commercial hemispheric block announced by the Free Trade Area of the Americas (FTAA) process, generate concerns about the environment's future of the Americas. This

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<sup>8</sup> The main MEAs related to trade: Convention on Illegal Trade in Endangered Species (CITES - 146 parts), Montreal Protocol (172 parts), Basilea Covenant (131 parts, 3 signatories, not ratified), Convention on Biological Diversity (CBD - 135 parts, 12 signatories, not ratified), Rotterdam Convention on Prior Informed Consent (PIC - 62 signatories), Cartagena Protocol on Biosecurity to the CBD ( It will enter into force when it be ratified by 50 countries).

<sup>9</sup>This initiative will help to the beneficiaries, under their petition: (i) to promote trade expansion and development in a sustainable way and harmless to the environment; (ii) to evaluate consequences on the environment and development of trade policies, likewise environmental policies on trade and development, with the objective to maximize possible benefits. (iii) to conceive and put in practice joint political measures to promote integrated national policies on trade, environment and development; (iv) to study adequate methods to undertake problems from the relation to trade, environment and development; (v) to participate efficiently in the regional and international deliberations on trade, environment and development. ; (vi) to get information of the pertinent organizations which act in the sphere of trade, environment and development and cooperate with them.

region is susceptible to the negative impacts from globalisation<sup>10</sup> because it holds major diversity of ecosystems and cultures, but also presents the most severe economic inequities in the world (Segger, Bastida *et al.* 1999). Also, most of the countries of the hemisphere -in particular Latin America and the Caribbean (LAC) subsist in economic disadvantage if compared to economically rich ones - USA and Canada. LAC region is receiving polluting industries from the latter ones, which want to escape the more restrictive environmental norms decreed in their home country, arguing, among other aspects, competitive disadvantages. In order to face these problems related to such disadvantages, it is becoming an option to impose trade barriers even within the trade integration framework. A particular argument is that this integration induces changes in production and consumption rates, which are opposite to the sustainable development proposal; an issue that makes people become more concerned.

It is necessary to develop a better dialogue and understanding of the relationships between trade, environment and development. Also, it is urgent to evaluate investment liberalisation effects on environments, societies and economies of the hemispheric region, with the aim to adopt a trade strategy, in the context of the FTAA, which values sustainability of the environment for better life quality in the Americas.

### **Biodiversity, indigenous knowledge and intellectual property rights**

The three elements are intertwined components, related to environment, development and trade debate in the hemispheric integration process framework. Their near relationship go from the basic rich megabiodiversity of the region through the complex and ancestral indigenous knowledge based in the long term relationship with the former, to the logic of intellectual property rights (IPRs) in the World Trade Organization (WTO) and World Intellectual Property Organization (WIPO) context. The latter lies in the framework of trade relations, which assign economic values to biodiversity and indigenous knowledge, especially when the resources are to be used for trade purposes.

Historically Indigenous Cultural Diversity has interacted with biodiversity in a sustainable way. It explains why in the indigenous territories there still exist the major biodiversity of the world. At the present time, medicinal plants and traditional knowledge (TK) from indigenous peoples have acquired a high economic value in the world trade system. Most of the pharmaceutical medicine is based in TK and related indigenous peoples knowledge. In the 1990's pharmaceutical revenues were estimated over 32,000 millions USD annually, thanks to traditional remedies incorporated in the conventional medicine. In the USA a recent economic value estimation on the drugs derived from plants reached over 68,000 million annually (Ribeiro 2001).

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<sup>10</sup> The process of globalisation affects almost everything, from economic to environmental aspects. The challenge of economic / ecologic globalisation resides in the harmonisation of policies and decision making, that are directed to correcting the negative aspects that exist today by economic activities, due to the increasing pressures over the environment, and the trade impacts because of environmental measures. The debate has won some -though little- space in the agenda on hemispheric integration, especially during the last decade, due to the international trade liberalisation and thanks to the concerns about the world environment, and in particular where biodiversity is richer, as is the case of the American region.

The problems arise when biodiversity and indigenous knowledge are taken away without permission from their original territories -and from the related nation state for the production of "new" conventional medicine and among other purposes for the establishment and control of gene banks *ex situ*. The genetic multinationals' plan is the subsequent patenting of plants and associated knowledge mainly by the so-called "giant genetics"<sup>11</sup>. These practices are provoking generally genetic erosion, cultural disintegration, and biodiversity degradation, with no reparation, mostly in the indigenous territories. In that case, it is important to know who really needs and benefits from the Intellectual Property Rights system.

### **Biodiversity in the region**

Twelve countries in the world are considered as megabiodiverse, and hold altogether between 60% and 70% of the total biodiversity in the planet. Six of them (50%) are found in the American hemisphere. For that reason the American continent has three times more megabiodiverse countries than Africa, Oceania and Asia, thus holding up to 45% of the biodiversity of the world. In this context, biodiversity implies variability of all biological entities manifested by genes, species, ecosystems and related cultures, and the relationships among and between them (Patrick and Bastida 2001).

In the last decades, for international trade - biotechnological and other multinationals -, the rich biodiversity in the region became extremely important in order to own, control and sell genetic resources through commercial food, farming and health. In this way, biodiversity in the region is threatened, because genetically modified organisms -through the use of modern biotechnology- produce genetic erosion and uncertainty in health when these are consumed. Private companies are dominating Biodiversity, in this sense. For instance, seeds from main food crops -corn, wheat, rice and beans- are becoming controlled by transnational food companies through the use of biotechnology and the patenting system. The production of Genetically Modified Organisms (GMOs) known as transgenics, is their main strategy to control food production and related patents on life. The long-term purpose is to control food supply and gain billions of dollars. The major problem upon biodiversity is the erosion on wild and domestic plant varieties. The loses of indigenous domestic plants are increasingly high.

In the case of pharmaceutical products, related transnational companies want to control bioactive components from those plants, fungi, animals and microorganisms from soils that have potential economic revenues. These organisms often come from megabiodiverse countries where most of indigenous peoples live.

With the intention of caring the world biodiversity the Convention of Biological Diversity (CBD- 1993) was established. This convention deals essentially with the conservation of

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<sup>11</sup> In agro biotechnology, only five enterprises: Syngenta (=Novartis +AstraZeneca), Aventis (=Hoescht + Rhone Poulenc), Monsanto (recently part of Pharmacia), Dupont and Dow, control 98% of the market and those, together with the Mexican multinational Grupo Pulsar, possessed at the end of 1998, 74% of agro biotechnological patents. It is worth to mention that form the transgenics planted area in the world, Monsanto had in the year 2000, 86% of the market.

biological diversity, the sustainable use of its components and the fair and equitable use of genetic resources. However, the fact that in this Multilateral Environmental Agreement (MEA) the importance of the interconnection among genes, populations and ecosystems - including cultures- is not mentioned, put in risk and vulnerability the megabiodiversity of the hemisphere. At present, as is indicated in the CBD, every level of life expression is managed separately. Under this situation, there exists a huge vulnerability, because genes, species and ecosystems are considered components not articulated among themselves and so they can be isolated, manipulated, managed and conserved *in situ* or *ex situ*, which is erratic. For instance, in the case of genes and genomes, the CBD allows that alien genes are inserted in the DNA of a plant so that its descendant is infertile.<sup>12</sup> This produces a violent interference in the natural sequence of evolutionary deeds and in the natural selection of native varieties of such a plant, and thus, goes against basic bioethical principles.

### **Indigenous Peoples**

The United Nations estimate that there exist around 4,000 indigenous peoples –as defined by the International Labour Organisation (ILO)– and over 300 million indigenous people throughout the world.

In the American hemisphere, indigenous peoples are a very important component of the region. In Paraguay, Guatemala, Bolivia and Peru, they are majority. In most of the countries of the hemisphere they still survive, specifically in those megabiodiverse countries<sup>13</sup>. Their traditional knowledge (TK) kept by them throughout their history has a fundamental role in the conservation and sustainable use of biodiversity. Where they live, there still exist harmonised ecosystems, cultural diversity and the associated knowledge. The native strategies for conservation and sustainable management of biodiversity has been recognised worldwide due to their great contributions to the development and knowledge on biodiversity derived from their traditional practices<sup>14</sup>. Today, in face of the progressive crisis owing to the loss of biodiversity and related traditional practice, there is a growing need for biodiversity conservation and native knowledge protection.

The strategies of conservation and sustainable management of biodiversity by native peoples are beneficial to humankind. For instance, the production and trade of organic products is becoming more demanded among aware consumers. In this sense, sustainable development implies the acknowledgement of traditional practices wherein biodiversity, traditional economy and cultural diversity are strengthened, all of which provide better conditions to achieve global human life quality.

Nowadays, traditional knowledge over ecosystems, and specifically over medicinal plants and animals, represent important economic revenues for international trade. Also,

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<sup>12</sup> See Hope Shand. "Terminator Seeds: Monsanto Moves to Tighten Its Grip on Global Agriculture" in *Multinational Monitor magazine*, November 1998.

<sup>13</sup> Megabiodiversity countries in the American Hemisphere: Brazil, Colombia, Ecuador, Mexico, Peru, and USA.

<sup>14</sup> *Biodiversity Prospecting: Using Genetic Resources for Sustainable Development*. World Resources Institute Book. A Contribution to the WRI/IUCN/UNEP Global Biodiversity Strategy. 1993.

traditional knowledge can generate organic food and health attention for a worldwide population and thus alleviate poverty related to problems derived from agrochemicals and pollution at all levels.

As there is TK erosion and dispossession, there is a big risk of deterioration of local ecosystems. Due to globalisation, indigenous communities are being pushed to become part of the general society. Even pharmaceutical companies and others are concerned about it: they would lose the opportunity to have direct information about medicinal plants and animals, as well human genes from those who are resistant to specific diseases. Gene and health multinationals save millions of dollars and many years of research when they have first hand information –which is not only provided through words, but in genetic language as well.

Trade liberalisation has become a strong official development paradigm where indigenous peoples face huge pressure to trade and protect their resources and traditional collective knowledge. Now that intellectual property rights promote the patenting system, indigenous communities are being pushed to deliver their resources and related knowledge under unfair circumstances.

Therefore, indigenous peoples' rights should produce a juridical mechanism for their territorial protection and their related intellectual peoples property rights, bringing to the discussion the international indigenous peoples' rights in order to protect their resources and knowledge.

Indigenous peoples' rights are being recognised worldwide. Every indigenous peoples has its own culture and its own political and social way of organising, which lead to the appropriation and control of their territory. The latter is embedded in the rights to their land and territory in the self-determination and autonomy framework. The CBD and other international instruments (ILO 169) are recognising the indigenous peoples' rights to control their own collective rights. In the relationship between indigenous peoples and biodiversity there are at least two collective rights: territorial rights and patrimonial rights. Territorial rights are considered as a potential instrument in order to control and protect natural resources and the related Intellectual Indigenous Peoples Property Rights. The patrimonial rights as another collective right generate a sense of community responsibility in terms of collective relations between and among plants, animals, rocks, air, soils, sacred places, art, collective knowledge on the former, cosmovision and others.

There exists a deep relationship between indigenous peoples and the land where they live in. In this sense, it explains why the land tenure and territory cannot be separated from traditional knowledge and related resources. The real acknowledgement to their autonomy and self-determination would lead to a better sustainability not only in their territories but everywhere. In this case intellectual property rights should be rethought towards the production of a new legal framework for the protection of collective Intellectual Indigenous Peoples Property Rights, with their own participation in international forums where they decide how they want to protect their collective rights. The actual system of IPRs through TRIPS and the system of patenting do not produce any favourable path for the former proposal. In that case a new international juridical framework is needed if we want to respect collective and differentiated rights. The crisis has been risen because the present international system of IPRs –WIPO (World Intellectual Property Organization), TRIPS-



WTO, national legislations– are pushing for an agenda does not take into account the juridical position of indigenous peoples' rights. The international agendas are imposing nation-states the recognition of IPRs in favour of patenting of life in a trade liberalisation framework. This is producing the continued robbery of biodiversity of indigenous territories and related indigenous knowledge even when there exist contracts or the establishment of so-called *sui generis* system because it is embedded in the same kind model of international trade liberalization system.

### **Intellectual Property Rights**

The intellectual property rights lie on the international law system to protect diverse forms of intellectual production in any field to assure individual economic rights. The Intellectual Property Rights (IPRs) are intrinsically related to Trade Related Intellectual Property Rights (TRIPs) and are a way to own life and local indigenous peoples' knowledge. This strategy is mostly in favour of the benefit of individuals and biotechnological companies. The World Intellectual Property Organisation (WIPO) has been impelling for the rights to be extended specifically to indigenous peoples and local communities to ameliorate all kinds of disadvantages. But, when in 1998, the WIPO and World Trade Organisation (WTO) became unified to “help” southern countries to accomplish the 2000 deadline to enforce the TRIPs, a notorious lack of confidence emerged.

The WIPO has been considered more democratic than the WTO and less manipulated by the north. Unfortunately, the WTO is becoming a world trading institution with broad decision-making powers over those of national states. Since the TRIPs are governed by the WTO system, their implementation in the hemisphere generates controversy and conflicts where there exist indigenous peoples. This structure does not protect the integrity of indigenous cultures. Furthermore, the existing intellectual property laws are promoting trade, ignoring indigenous peoples' own laws in relation with secrecy and the communal cosmovision. It generates a big impact in their identities, integrity and culture when the laws just recognise individual property rights and not community rights, which tend to marginalize and oppress collective rights. Even the Convention on Biological Diversity (CBD) managed by UNEP, gives a weak recognition to their cultural and intellectual properties (on Art. 8j). In practice, TRIPs just acknowledge private rights.

TRIPs established under the WTO and the CBD are being used as pressure mechanisms upon states and indigenous peoples in order to force the establishment of legislations about the theme. In this way, international legislations are favouring and promoting the patenting of living organisms and their derivatives, beneficial -among others- to the "gene giants" and related private rights, but detrimental to collective rights.

Furthermore, the recently proposed *sui generis* system does not protect the indigenous peoples' customary laws. This system only refers to access and benefit sharing, and not to the capacity building of indigenous peoples, nor to the protection of their traditional knowledge and other forms of accessing their natural resources: plants, animals and soil, and derived composites. In this respect some experts are impelling the communities to protect their traditional knowledge - and medicinal plants- quickly, before others do in a way that will erode their capacity forever. Some countries in the hemisphere are taking

legislative measures in order to protect traditional knowledge of indigenous peoples, such as Brazil, Costa Rica and Panama. Peru is working on the protection of TK with participation of the traditional communities. However the protection of TK and biodiversity of indigenous territories under unfavourable circumstances –due to the high cost to patent living organisms and related knowledge– makes it impossible for indigenous peoples to protect their resources and territories under this globalised trade rules scheme.

In the indigenous perspective, the appropriation of collective traditional knowledge and life involves high risks among peoples. The monopoly of patents with lucrative ends in favour of private rights can produce a phenomenon that also overrides sovereign governments. For example, there are serious problems of biosecurity because genes are being manipulated by the so called "gene giants". What indigenous peoples reject is not the advancement of knowledge, but the monopolisation of collective knowledge and its inadequate use.

In any way, it becomes compulsory to protect TK at all levels within a legal legitimate system: not only within a *sui generis* modality, but under a specific protection system which empowers the collective rights of indigenous peoples in the international law regimes acknowledged by WTO and that can be recognised in the ongoing revisions of various articles of the CBD and related covenants. All nation states hemispheric-wide should introduce specific recognition systems for the indigenous communities, such as collective property and original rights and ownership of their territories. Historically indigenous peoples own the genetic resources from their territories and the related knowledge over biodiversity. This knowledge –including genetic resources– is available worldwide, but it is not free of cost: it has economic, social, spiritual and biological values, and the accessibility to the associated resources needs a specific regime.

In the view of indigenous peoples, TRIPS are producing, among other things, 1. Destruction of: communal rights, innovations and traditional ways of life, which are inducing the destruction of biodiversity and the communities that have produced the related knowledge; 2. Usurpation of indigenous traditional knowledge; 3. A new technological protectionism logic; 4. Indigenous knowledge and access to medical knowledge is denied; 5. The introduction of the concept of life property is producing interruption of genetic resources information flow; 6. The bioethical implications of the patenting of life.

Current TRIPs have established a policy of denial to community rights of indigenous peoples. This fact has provoked the stealing and loss of local knowledge. Because the indigenous peoples' local knowledge on biodiversity is abundant, biotechnological industries are interested in the appropriation of both the knowledge and biodiversity to make profit. In this sense the patenting system, in a free trade system, is producing indiscriminate control over such resources. Therefore, there should exist a revision of TRIPs in order to respect and safeguard both indigenous peoples' traditional knowledge and their biodiversity. In that case, the WIPO should advance clear proposals towards the protection of biodiversity and TK, and the WTO should also convene trade rules to stop the erosion of both. Biodiversity and TK have become necessary components for sustainability and they both interrelate to offer new opportunities for sustainable development and scientific contemporary challenges. Obviously, the knowledge of indigenous peoples is

important for life quality and must be protected within its own cultural context and it should be clearly recognised in the economic, environmental and social regimes.

## **Discussion and conclusions**

It has been noticed that the three elements –biodiversity, indigenous knowledge and intellectual property rights– mentioned above in the trade and sustainability discussions have a strong link and that the hemispheric trade negotiations should take into account the interconnections of environmental, social and trade regimes. The latter to really promote prosperity through economic integration by means of free trade –marked as one of the Agenda Themes of the Miami Summit. Furthermore, the other three points of this agenda, which refer to sustainable development, strengthening democracies and eradicating poverty, should have their own process to really achieve the Americas integration process. The hemispheric integration goal should not be expected to result from the exclusive economic integration and free trade process. Thus, there should be a follow-up of the 65 initiatives from the Bolivia Summit of the Americas, which address the sustainable development theme. Also, other summits and the respective follow-up should be carried out on each of the other two points (1. to preserve and strengthen the community of democracies of the Americas; and 3. to eradicate poverty and discrimination in our hemisphere) that were agreed under the mandate of the 1994 Summit of the Americas: “Partnership for Development and Prosperity: Democracy, Free Trade and Sustainable Development in the Americas”.

The recent Quebec Summit, embedded in the series of the Americas Summits, failed in addressing sustainability and socioenvironmental issues; free trade towards the establishment of the FTAA was the major issue in Quebec. Governors left aside other important social issues and the environment during the summit, and are using social clauses such as democracy, as an excuse to consolidate the FTAA. This hemispheric governors strategy can generate social disruption in the Americas, as the real Miami Summit mandate is not being accomplished. The current hemispheric model, which promotes trade liberalization and the economic integration as the only way to deal and finance social and environmental aspects, has been ineffective.

The challenge in the ongoing process of the FTAA is how to achieve sustainability. Also, how trade liberalisation can provide new opportunities for indigenous communities in the conservation of biodiversity and the recognition of traditional knowledge in the Americas. In this sense, TRIPs and other dispositions should support indigenous peoples’ traditional knowledge in a new paradigm. For that, trade, environment and social regimes should be reinforced to achieve sustainability in the Americas, specifically to achieve the acknowledgement of TK as the basis of local sustainability in indigenous territories. In order to advance in a new discussion about biodiversity, traditional knowledge and IPRs, a new legal framework must recognise collective indigenous peoples rights and their inalienable right to their traditional knowledge systems related to biodiversity. The problem is that the indigenous peoples legal aspects related to life have been in other hands, far from their interests. The proposal is that they take control of the management of their genetic resources. It means not just to obtain economic benefits or sharing, but also to produce

collective mechanisms to continue being guardians of their territories. Meanwhile, it is indispensable to put an end to the current genetic and cultural erosion in the indigenous territories. Due to the inequitable appropriation of indigenous peoples TK and their medicinal plants from research centres, individuals, pharmaceutical, agrochemical and other multinationals, a moratoria is needed whereby indigenous peoples can work on fundamental proposals for a win-win-win strategy. Indigenous peoples and communities should have complete rights to be benefited from their TK and their natural resources, which are found in their territories. There is still a lack of numerous legal dispositions which set in order a favourable juridical and normative framework to achieve a truly adequate protection of biodiversity and indigenous knowledge which enables to enter the IPRs system in a favourable way, which means to advance in a Intellectual Indigenous Peoples Property Rights (IIPPR) as a new way to deal with the economic market by protecting collective rights.

To really achieve equitable integration process of the Americas, the above proposal should be empowered by means of including governmental, business people, indigenous peoples and civil society representatives in the decision-making processes. The latter should refer to the interconnections of biodiversity, indigenous knowledge and intellectual property rights as an exercise to link related environmental, social and trade components of the current integration of the Americas. Furthermore, for a real trade, social and environmental Americas integration, there should be not only a FTAA with the particular inclusion of environmental and social regimes, but also social and environmental accords with its own power and the establishment of parallel cooperation frameworks.

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