Production Methods in the WTO: Considerations for Colombian biotrade.

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The Impact of Bioethics and Consumer Demand on Process and Production Methods in the WTO: Considerations for Colombian biotrade.

**Keywords:**

Process and production methods, consumer protection, WTO, Dispute Settlement, bioethics, environmental protection, public participation, transparency, non-state actors, developing countries, Colombian biotrade, UNCTAD.

**Abstract**

In international trade, products might face different kinds of concerns related to process and production methods. Consumer preferences are often driven by the information about the way in which those goods have been produced (labor standards, fair trade, animal cruelty and the use of GMOs). Such concerns are grounded in moral, environmental, safety and quality attributes that consumers increasingly demand not only from producers but also from their own governments in forms of regulations and trade policy measures (expressed in technical standards, sanitary and phytosanitary measures, labeling information, etc).

In this sense, consumer access to process information, especially in bioethics concerns (animal testing, animal welfare, organic products, environmentally friendly processes, GMOs, biotrade, etc) is expected to lead to regulatory policies and a more inclusive interpretation of the GATT and the WTO covered agreements in which Process and Production Methods (hereinafter PPMs\(^1\)) are restricted to the application of Article XX. The tension between international trade law and environment /bioethics challenges should be also analyzed from the perspective of consumers and not only from the industry or the government as the traditional actors in international trade negotiations.

This paper intends to identify the role of consumers as demandeurs for trade policy actions and regulations when implementing bioethical concerns embedded in PPMs, traditionally considered as Non Trade Barriers and then incompatible with the purpose of WTO member states obligations, specially taking the Colombian biotrade initiatives as an example. Civil

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1. OECD stated this abbreviation in 1994 and 1997.
participation and the vindication of policy space of Member States in order to protect the so-called “consumer’s right to know”\(^2\) (Noah, 1994) should be analyzed as a force that could lead to regulatory changes and consistent interpretations that include consumers as important stakeholders of a sustainable and environmentally compatible trading system.

**Relevance of this paper**

The relevance of the present research paper is based on three specific dimensions:

Firstly, this paper contributes to the existing legal studies on PPMs and their connection to consumer preferences for bioethical and environmentally friendly systems of production identifying the case of Colombian biotrade. The existing literature broadly explores the concept but still it does not address the complexity of bioethics and its relation to consumer preferences and in addition, the possible convergence or divergence with environmental concerns (without considering that inside environmental concerns it is possible to identify different values). This paper will identify different variables when understanding the role of consumer as demandeurs for trade related measures. This approach aims bring the attention of WTO scholars for addressing new challenges in terms of interpretation of the WTO covered agreements (GATT, TBT, SPS) in accordance to consumer awareness and demand for information.

Secondly, this paper exposes the importance of considering the process of trade negotiation for developing countries as a meaningful variable when assessing the stakes embedded in the concept of PPMs, particularly those related to the consumer’s preferences for bioethical and the environmental process of production. In this sense, considering this kind of measures as a protectionist measures per se or unnecessary obstacle to trade imposed against developing countries interest will a matter of a later debate. The novelty of this paper is be based on the consideration of the perspective of both developing and developed countries, but identifying the unexplored benefits for Colombia as an example in the Andean Region, when considering consumers as legitimate demandeurs of policies and legislative responses on bioethical and environmental issues, specifically when addressing the case of biotrade.

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\(^2\) Related to the disclosure of the conditions or method of manufacture.
The approach presented by this paper aims to bring the attention of WTO scholars for the development of new theories and interpretations about the role of consumers in international trade law (traditionally more focused on producers rather than civil society actors). The dialog between International Trade Law, Environmental Law, consumer protection and bioethics will be fundamental for the future of the multilateral trading system and the new challenges that emerge from an information age and the concerns derived from global warming, considering issues and stakes for Colombia and other developing countries sponsoring biotrade initiatives.

**Introduction**

Many trade related issues are inherently linked to social and cultural identity. Recent trade disputes dealing with food and the perception about the use of artificial growth hormones in cattle and the use of biotechnology in the process of production are particularly grounded in the cultural perceptions and social meaning of food (e.g resistance towards artificial growth hormones and GMOs is in this sense not strictly science based but also culture based). In the same way, animal welfare standards or animal-cruelty awareness among consumers is deeply enrooted in culture and socio economical realities (Brom, 2004)

Thus, it is important to determine if such values and concerns existing in any given country in which citizens as voters, consumers and taxpayers, have the legitimacy to request legislative reforms or governmental intervention in order to address or protect their concerns even if third countries expectations related to trade are at stake.

According to Weiss (2006) “even more is expected of the contemporary world trading system for which the WTO provides the common institutional framework and its main negotiating forum increasingly, that system intersects with issues directly affecting peoples’ lives, such as investment and competition policies, environmental and development policies. Human rights, labor standards, health, animal welfare, distribution of resources, ethical issues, and even national security. All these issues are raised with ‘sovereignty of purpose’ by particular interest groups seeking regulatory intervention, unconcerned about possible ‘limits to the growth’ and utility of such activity in the global economy” (Weiss, pp. 157, 2006)
This topic is explored by Kysar (2004) when examining the conceptual distinction between product-related information (e.g., potentially risks associated to the product for human health), and process-related information, commonly embedded in trade-related concerns as fair trade, animal welfare standards, and environmentally friendly production methods. In his analysis, market and consumer are central to public policy responses, also reflected in potentially trade measures. In his study, recent developments in international trade law, environmental, health, constitutional law, and safety regulation are considered when affirming that consumer preferences could be heavily influenced by information regarding the manner in which products are produced (process information).

Kysar (2004) also demonstrates that the process/product distinction is a prominent element of the effort to resolve policy disputes that involve the entanglement of consumer regulation with broader social or environmental questions, and argues in favor of acknowledging and accommodating process preferences within policy analysis. In addition, the author states that product labels may become significant venues for the expression and evaluation of policy issues.

Similar to Nielsen (2005), Kysar (2004) also explores the impact of process/product distinction within the WTO framework, analyzing the Member States’ commitments under GATT and relevant Dispute Settlement Reports (including 1991 GATT reports as Tuna/Dolphin) in which the concept of “products as such” seems to be one of the legal cornerstones when analyzing the compatibility of discriminations based on PPMs with WTO obligations. Such analysis on process-based trade measures under GATT/WTO jurisprudence had been analyzed during the past decade by John H. Jackson (1992), Steve Charnovitz (1994) and has been particularly criticized by Esty (1994) and other trade law scholars (Broom, 2004; Cameron & Campbell, 1999; Morris Groos, 1999; Hudec, 1998; Bhagwati, 2001) since the Tuna/Dolphin report in which the panel condemned process-based trade measures as per se violation of Article XI (in the future just possible to justify under Article XX\(^3\)).

\(^3\) Moral exception is likely to be invoked in these cases. This exception is expressly listed in both agreements GATT and GATTS as follows: “Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where like conditions prevail, or a disguised restriction on trade in services, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures:(a) necessary to protect public morals or to maintain public order

A note has been added to this literal in the WTO website: The public order exception may be invoked only where a genuine and sufficiently serious threat is posed to one of the fundamental interests of society. (See http://www.wto.org/english/docs_e/legal_e/26-gats_01_e.htm#lnt5)
In this scenario and with the existent WTO Dispute Settlement Reports, the process/production distinction still poses a serious obstacle to trade measures (using the labeling schemes). Even if they would be justified under Article XX, labeling initiatives must also be consistent with TBT\(^4\) and SPS\(^5\) Agreements. In both cases, measures should not be more restrictive than necessary and not been considered as a disguised protectionism.

In the view of Alan O Sykes (2002), the SPS agreement “unmistakably elevates the policing of trade restrictive measures above the ability of national governments to address risk in the face of scientific uncertainty”, but Kysar (2004) affirms that if even granting that the rules of the international trading system can improve “democratic rationality” by discouraging regulatory actions premised on “popular prejudice and alarm”, what is to be made of public concern that persists despite a lack of scientific evidence to support it?

In this context, this research project is intended to analyze decision making process embedding consumer’s trade related concerns in three dimensions: national, regional and multilateral, in particular, those related to preferences for processes in which bioethics\(^6\) plays a pivotal role. Therefore, it would be necessary to identify at what extent the consumer’s protection/participation mechanisms could be compatible and consisting with International Trade Law, the new challenges of the WTO and the increasing negotiations of free trade agreements (WTO+).

The problematic examples described above suggest the importance of identifying new variables when understanding the increasing awareness in consumers\(^7\) that may demand

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4 Technical Barriers to Trade.

5 Sanitary and Phytosanitary Measures

6 The traditional concept of Fritz Jahr’s (1927) is related to the use of animals and plants for scientific purposes, nonetheless the concept is extended to a broad field that includes historical, philosophical, theological and sociological approaches to some issues related to process and production methods that implies the use of life for human purposes. Animal rights, biopiracy, cloning, genetically modified food, medical research used for pharmaceutical industry, moral status of animals; among others are issues with potential effect in pattern of consumption and consumer choices. On the other hand, Peter Singer will have an important role in the current discussions about animal welfare and the industrial use of animals. It is important to highlight that those bioethics considerations may influence environmental concerns. Bioethics and environmental aims are interrelated.

7 This research project aims also to analyze the compatibility of consumer concerns related to bioethics (Fritz Jahr’s, 1927; Peter Singer, 2008) with the WTO legal framework, particularly the TBT and SPS agreements and the consequences for legal interpretation for new bioethical based trade disputes in accordance with the existent case law provided in Dispute Settlement Reports.
trade restrictive measures. Such complex phenomena should be matter of consideration by the WTO adjudicating bodies, especially regarding the requested implementation of the so-called necessity test (when defendant is using Article XX as the main basis for its legal defense). Additionally, new insights on the preference for process (PPMs) should be explored for developing countries; since bioethical and environmental concerns are non necessary related to certain geographic locations and therefore, consumers from developing countries could be also demandeurs of such mechanisms.

1. Literature Review

Most of reviewed literature analyzes the topic from the labelling perspective (TBT and SPS) and its impact for trade liberalization. This very legalistic approach doesn't consider the consumer's influence as a constraint for the Member State when adopting the measure. Besides of some actions taken by other non-state actors (e.g NGOs) when canalizing public opinion about certain methods of productions in which the consumer may have an ethical concern worthy of protection by the government. For Kysar (2004) “the future significance of process preferences to civil society in the light of both the seemingly inexorable social and economical trends of globalization and the growing theoretical importance of private market behaviour to understand civil participation and government regulation”, and this reality should not be outside the core of International Trade Law and some environmental treaties that may have an impact on trade (e.g CITES convention)

Nonetheless as will be discussed later, the question to be addressed is polemical for many scholars that consider that governments are often forced to defend consumers and other economic agents by means of non trade barriers. In words of Kerr (2010) “the economic model that underpins multilateral trade policy-as manifest in WTO agreements-only predicts that firms will lobby for protection, with no provisions for how governments faced with requests for protection from other groups can respond. Consequently, governments have been forced to defend the imposition of trade barriers using spurious justifications; the WTO dispute mechanism has largely dismissed these justifications, and consumers feel disenfranchised”

8 As a matter of policy space or the right to regulate for the WTO Member State.
2. Setting standards and labels: a room for protecting consumer’s bioethical concerns?

According to Matsushita, Shoenbaum & Mavroidis (2006), there are four schemes in which trade and market access barriers can be grouped. The first scheme is related to governmental border measures (tariffs, quotas, customs regulations, import licensing, testing and certifications). The second scheme includes internal regulations and practices that have potential protective effects. Those regulations usually include certain conditions related to product and services, distribution channels, technical standards, subsidies, state-trading monopolies, and bio-security measures. The third scheme relates to private business practices and customs affecting business behavior and consumer preferences; whereas the fourth scheme includes economic and structural characteristics of the importing country (government credit, macroeconomic, investment and industrial policies).

It is, however not clear if it is upon the WTO to consider all those categories since “the WTO has tended to concentrate on explicit and obvious governmentally imposed trade obstacles, such tariffs, quotas and customs regulations and practices. In the later rounds on trade negotiations, however, notably the Tokyo and Uruguay Rounds, the WTO addressed less obvious governmental measures, such as import licensing, subsidies and technical barriers to trade. Nevertheless, many trade barriers remain outside the purview of the WTO agreements” (Matsushita et al, 2006)

The TBT Agreement seeks to strike a balance between the policy space of Member States and the discipline that such measures must observe in order to minimize their impact on trade liberalization. According to the TBT Agreement (Annex 1, para.1), “technical regulations” are “mandatory laws or provisions specifying the characteristics of products, the processes or production methods for creating products or the terminology, symbols, packaging, marking, or labeling requirements for products”. Additionally, “the TBT Agreement requires the WTO members to apply national treatment and MFN standards with respect to technical regulations. It also requires WTO members to use international standards when such standards are available, except when such standards would be an ineffective or inappropriate means for the fulfillment of the legitimate objectives pursued” (Matsushita et al, 2006).
Furthermore, technical regulations must fulfill certain requisites in terms of: transparency, prompt publication (to make them generally available), and shall not create “unnecessary obstacles to international trade” or been “more trade-restrictive than necessary to fulfill a legitimate objective⁹”. It is still problematic if the above-mentioned definition will include the polemical non-production-related standards and most generally PPMs, in which environmental and bioethical concerns have a prominent expression.

Droge (2011) notes that it is not that clear “whether non-product-related standards, which are applied in life cycle labeling schemes, are subject to TBT-rules. The definition in Annex 1.2 TBT names ‘products or related processes and production methods’, and thus, further interpretations have to consider the negotiation history of the agreement (travaux preparatories). On the other hand, Chang (1997) considers that non-product-related PPMs were explicitly excluded, already during the negotiation of the amendment to the TBT-Agreement, and thus cannot be considered when interpreting the text. During negotiations of the Uruguay-Round, negotiators used the expression ‘or related’ in order to exclude ‘non-related’ processes and production methods.

In relation to the adoption, preparation and application of standards, the TBT also contains a Code of Good Practices. In this Code, the term `standard´ is defined as a voluntary guideline for products characteristics (Annex 1, para.2) and requires Member States to participate and comply with standards from international bodies like the International Organization for Standardization (ISO). Nevertheless, this organization is not intrinsically related with green issues or other bioethical concerns from consumers.

Labeling is becoming popular as a market driven mechanism to pursue ethical values related to environmental protection or moral concerns. In this sense it is possible to say that ecol labels are often a market-based environmental policy instrument informing consumers about environmental characteristics of goods. Labels are granted by different private or governmental organizations to producers for different product categories.

⁹ According to the TBT Agreement, those objectives include concerns to: National security requirements, prevention of deceptive practices, protection of human health or safety, animal or plant life or health and environment. Those objectives not necessarily include the consumer’s mere concern about certain trade related values as bioethics, species protection, child labor, labor standards, etc.
Many so-called eco-labels not only provide information about product quality itself, but also the whole life cycle, including generation of inputs, production processes consumption and waste disposal. The number of countries applying eco-labels has been growing constantly. However, with the increasing international integration, especially growth in trade in goods and services, consumers as well as producers demand compatibility and transparency of labels at the international level. Also, eco-labels from industrialized countries are subject to increasing criticism from developing countries, which regard labels as a new non-tariff trade barrier.’ (Droge, 2001)

On the other hand the WTO is eager to be considered more democratic and transparent in all its decision making processes -including public participation- but so far it is not clear in the literature review or the WTO covered agreements, the mechanisms in which consumers will facilitate this kind of multilateral standards as they don’t have direct participation in the negotiation process, the dispute settlement system (besides the polemic amicus curiae briefs) and standardizing bodies, that not necessarily create standards in accordance with consumer expectations or concerns.

The case of GMOs would be eloquent in this regard, since there is a divergence about the mandatory labeling that shall be imposed by law (EU approach) whereas the United States considers this as an impermissible trade restriction. For the EU the GMOs labeling regulation is a matter of consumer awareness rather than a safety promotion, and thus the stringent application of both TBT and SPS may be not entirely compatible with new consumers concerns beyond health risks.

Hence, under TBT provisions, the regulation enacted by Member States when pursuing trade related aims should not be more restrictive than necessary (Article 2.2) and additionally, those regulations must be based on international standards unless the Member State can demonstrate that such standards are not effective or appropriate (Article 2.4). Nonetheless, is it possible to talk about international standards for bioethics? Is the Member State allowed by current interpretation of WTO law to dismiss international standards for not satisfying domestic consumers on their preferences for processes?
3. Science, risk aversion and ethical perceptions

Consumer concerns even if not based on scientific evidence could be considered propelled by culture (e.g. uncertainty avoidance) or moral perceptions through the use of living beings for trade purposes. It depends on how such group is organized (league of consumers, lobbies, NGO’s) that this private set of concerns could be considered as an important force behind the policy\(^\text{10}\) and law-making process that may interfere with trade obligations for the Member State under the WTO framework. The emerging dispute European Communities –Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS400 and WT/DS401 is an example of consumer’s demands based on bioethical perceptions rather than scientific assessment or even environmental protection and nonetheless considered by the EU when enacting the challenged measure.

This case will continue the trade and environment saga that started with US-tuna cases\(^\text{11}\) and US-Shrimp\(^\text{12}\), but it is likely that this case will be grounded on moral considerations of consumers (animal welfare) rather than the umbrella policies of sustainable development (Nielsen, 2007).

¿Could those considerations increasingly framed as social values or “public morals” validly be defended by a Member State (as a policy choice embedded in national legislation) under the language of the general exceptions provided in Article XX of GATT without second guessing of a DS panel or the Appellate Body\(^\text{13}\)? The question about “moral coherency” may

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\(^\text{10}\) They could be highly involved in this process by lobbing and sharing information accessible through social networks and organized boycotts.


\(^\text{13}\) After the Gambling precedent under GATS and the recent panel report on China-Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertaining Products we will probably see how trade-morality conflicts are alike to increase, and even if trade measures related to animal welfare would
be at stake when selecting the concerns worthy of being protected by the government, especially if a clash of ethical values and different perceptions about processes for production could be also always present at the national level.

Nonetheless, a complex set of elements/conditions provided in Article XX of GATT (least restrictive means and Nondiscrimination) are demanded from a Member State to be fulfilled when designing/implementing trade measures to be defended as a legitimate exception. How would these conditions be fulfilled when the consumer functioning as the demandeur?

Nielsen (2007) argues it would be more problematic to tackle cases involving process and production methods (PPMs) under WTO law, than the banning of the product as it happened in the EC-Asbestos case. Since bans on products do not involve issues of certification of “acceptable” process or production practices in other countries (asbestos is for example unacceptable no matter how it was produced.

As presented in the introduction, PPMs deal not only with trade measures that are environmentally or socially motivated but with the idea of consumer sovereignty (Kysar, 2004) within the international economic system. This topic has been increasingly explored by scholars in the field of International Trade Law since production methods as a criteria for product differentiation is posing multiple challenges not only for the adjudicatory body of the WTO regarding the interpretation of GATT and WTO covered agreements (especially TBT, SPS) but also for the idea of considering the WTO as a democratic system in which consumers should play an important role.

Consumers concerns would be multiple and not only focused on their own welfare but philanthropic or altruistic purposes (Dayly, 1996; Baudrillard, 2001; Woods & Blewett, 2001). Those concerns are often considered as central in public policy and therefore worthy of being expressed in domestic regulations (requesting e.g. mandatory labeling, trade bans or even imposing unilateral standards for foreigner suppliers of goods and services) and also in corporate strategies with possible effects in the world trading system (voluntary standards, fit on the public morals domain, the emerging of a “public doctrine” in the DSB would certainly restricts the sovereignty of Member States when invoking moral issues as proper trade obstacles, especially on the scrutiny most closely on the “Necessity Test” and the Chapeau of Article XX. Thus a broader interpretation of public morals can be adequately cabined by applying close scrutiny under two existing mechanism: the trade-restrictive measures must be the least trade-restrictive means of achieving their stated end, and they must be designed and applied in a nondiscriminatory fashion. (Marwell, 2006:806)
voluntary labeling, CSR strategies and self declarations). Such concerns are frequently related to bioethics and environmental protection, and are therefore not totally extrapolated from the WTO mandates, since, under paragraph 32 of the Doha’s Declaration, WTO Members explicitly mandate the Committee on Trade and Environment (CTE) to identify areas of the WTO which need clarification with respect, inter alia, labeling requirements and environmental measures (Potts, 2008).

Nonetheless, the concept and aims of PMM’s have received criticism from the critics of different scholars (Hudec, 1996; Beales, 2002; Howse & Trebilcock, 1996) all of which consider that accepting the legitimacy of PPMs within international trade law could allow product regulation to be overcome by an “excess of zeal” (Hudec, 1996) from moral claims of consumers and such claims could be also irrational and merely sentimental. In addition, different concerns about the impact of production methods for developing countries have been expressed in different scenarios when considering that those preferences are commonly embedded in unilateral standards imposed by a developed country imposing ethical preferences (Bhagwati, 2004).

Responses to those critics have increasingly introduced by other scholars (Snape & Lefkovitz, 1998; Reagan, 2003) that insert the traditional liberal view for international trade law analysis, according to what the “aims and effects” rationally tests should not consider consumer’s based measures as a proxy for disguised protectionism, and therefore, DSS panels should look for a flexible and democratic interpretation that combat the problem of protectionism without simultaneously eviscerating a nation’s ability to respond to the firmly held convictions of its consumer citizens (Reagan, 2003).

Additionally, alternative voices within the existing literature recall the importance of this topic since the presumption that emerge from the above recalled critics in which “mere consumer concern” about PPMs is an insufficient basis for state action, should be rejected (Kysar, 2004; Adler, 2003; Nussbaum, 1998; Potts, 2007). Nevertheless, the literature is still insufficient regarding bioethical concerns as a basis for intervention of Member States, this is particularly important since PPMs are often an expression of diversity and thus standardization or harmonization is not always a necessary or logical response, as stated by Jasson Pots in his report on the legality of PPMs under GATT (iisd, 2007).
4. The complex dynamics of PPMs: issues, stakeholders and trade related concerns

When analyzing the legal consequences of PPMs from the perspective of non trade barriers there is a complex universe of variables that is missed. Public policy, consumer rights, civil society movements and different channels for participation in domestic policy making should be considered when evaluating environmental or bioethical concerns as a trade restrictive scheme. That is to say, the connection and dynamics between the adoption of national regulations protecting the consumer right to know in the preference for bioethical and environmentally friendly processes and its effects on international trade obligations (e.g. by means of labeling or even trade bans). In order to analyze the legal framework of such dynamics it is important to identify the existing challenges for PPMs aimed to protect the bioethical/environmental process preferences of consumers.

In this context, a complete multifactor analysis should consider the complexities related to legislative processes of WTO Member States when considering consumers in their role of citizens, voters and taxpayers, the intervention of the government when correcting market failures (as information asymmetries) and the existent tensions on the WTO regarding the transparency of its procedures when considering civil society demands (amicus curiae participations) and the desirable new approaches regarding the interpretation of GATT (Article I:1, III:4, and XI:1 and XX) and other covered agreements in accordance with consumer interests.

This multifactor analysis would lead to a more flexible interpretation of WTO covered agreements that is usually focused only on the government action when adopting a restrictive measure (e.g. environmentally or bioethical motivated), specially due to the negative trade impact for other Member States’ expectations rather than assessing the consequences for domestic stakeholders or the decision making process (including political costs, accountability, legal actions enacted by social groups demanding governmental actions, etc). In this sense, we should include the following variables as important political and legal drivers when understanding the architecture of the restrictive measure that may be challenged at the Dispute Settlement System of the WTO:
a) Consumer issues are also central for public and trade policy. The preference for processes (bioethical and environmental considerations) is a legitimate aim that governments may pursue by means of trade related policy measures.

b) The environmentally or socially motivated trade measures intended to protect the consumer right to know for processes should not be considered as a proxy for protectionism under WTO. New interpretations for the criteria of like products and the necessity test (GATT Article XX) should be explored in order to consider the WTO as a democratic organization.

c) Developing countries are not necessarily affected in a negative way by PPMs related to bioethical and environmental concerns. In fact, initiatives as biotrade (promoted by UNCTAD), fair trade, organic and other forms of sustainable production or harvesting (e.g. to replace illegal crops) could give them a competitive advantage and new trade opportunities by means of FTA´s. Especially considering that the economy of many developing countries is composed by large numbers of Small and Medium Enterprises, and they may find business opportunities when addressing trade related concerns as an alternative for exploring new markets rather than have the expectation of exporting large quantities of a product (without the expected ethical or environmental credentials). That would be the case of Colombia and other countries of the Andean Region.

This analysis would lead us to some relevant questions within different levels when addressing the impact of trade restrictive measures grounded on Product and Production Methods:

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<th>4.1 Domestic level:</th>
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<td>Pressure to change in domestic legislation, mandatory labeling, disclosure of information (correction of market failures)</td>
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<td>Tensions and mandates for the Government (attend consumer demands vs. provide market access) consumers as citizens, taxpayers and voters.</td>
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<td>The process of designing policy measures and possible impacts to trade: implementation of DSS criteria in relation to the necessity test, risk assessment and</td>
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the Article XX chapeau (less restrictive means and non discriminatory effects) and the concept of like products provided in GATT and DSS reports after Tuna/Dolphin, Korea/Beef and China/Censorship. It is there a room for interpretation of what is necessary in accordance to consumer sovereignty and the obligation for the government of providing public goods?

The role of the consumers in domestic legislation/trade policy: mechanisms for participation, competition laws, the consumers right to know as a legal principle to be protected by legislation (constitutional law, case law), consumer groups and lobbies, NGO’s and their role in the emergence of new consumer concerns different from risks for human health (can they contribute to the reduction of information asymmetries in bioethics and environmental issues?). Relation between activism and opinion groups in politics.

The possibility of a clash of values when considering green and bioethical concerns (not all the green consumers are bioethical consumers per se).

Legal and policy tensions for WTO Member States: to satisfy consumer concerns or private industry demands regarding labeling and trade bans motivated in trade related issues.

“Trademark effect” in processes related information (seals and certifications could be associated with the quality, origin and credentials of the products)

| 4.2 Regional/bilateral level |

Consequences for trade liberalization in WTO+ agreements and other preferences framed in GATT paragraph 2 (c) the Enabling Clause for Developing Countries: presence of clauses possible embedding PPMs in FTAS or General System of Preferences provided by developing countries to Andean Countries with a possible impact for new business opportunities (illegal crops replacement like in the case of Colombia)
Direct or indirect participation of consumers or other non-state actors as NGOs in regional or bilateral negotiations when process preferences related to bioethical issues are at stake.

The role of consumers when implementing FTA’s obligations and the possible clash of values: trade & development/ sustainability & bioethics. The case of biotrade in the Andean Region (initiative grounded on the Convention on Biological Diversity). Can environmental and bioethical concerns necessarily follow the same rationale? e.g an European league of consumer wants to boycott the import of lizard skin due to the lack of animal welfare standards nonetheless its green credentials (biotrade certificate)

4.3 Multilateral Level

Analytical drivers for a new interpretation of GATT and TBT and the policy space of Member states when addressing consumers concerns should include: culture, science, bioethics and environmental protection aims easily identified in Multilateral Environmental Treaties.

The role of International Standardizing Bodies as ISO when addressing consumer concerns related to bioethics and environmental concerns: coincidence or divergence of criteria. (e.g the case of ISO26000 requirements on social responsibility and animal welfare standards)

Consequences of WTO case law addressing the concept of like products, PPM’s and GATT Article XX for the interpretation of consumer concerns as sufficient basis for State action and restrictions for market access (Non Tariff Barriers and policy space of Member States). Systemic consequences for the WTO and DSS.

Are bioethical PPMs embedded in the restrictive measure a proxy for protectionism and disguised discrimination against developing countries?
Could the specific PPMs embedded in the restrictive measure be considered as an ally for development and welfare? What kind of opportunities for Developing Countries may be identified?

5. Colombian Biotrade and Product Production Methods (PPMs): the tension between trade related concerns and trade liberalization

The biotrade is a meaningful example of the products characterized for incorporating different trade related concerns in their production methods, particularly the sustainable use of natural resources and the benefits for vulnerable rural communities participating during the production process. Biotrade initiatives usually rely on an institutional framework within the Andean Region and in the Colombian case they involve not only the government but different stakeholders: epistemic communities, private companies (mainly small and medium enterprises), NGOs and specially, the initiative of UNCTAD on biotrade (focused on developing countries).

The following case study will illustrate the relevance of those referenced questions and issues when addressing the Colombian case for biotrade in the context of PPMs legal debate.

5.1 Measuring Colombian biodiversity

Colombia has a privileged position in terms of wildlife considering that Central and South America would be most biologically diverse continent of the world. Colombia has 4th place in the world’s biodiversity and in terms of taxonomic groups, it is considered the second richest country in plant biodiversity, the first in amphibians and birds and the fifth in terms of mammals. Located in one of the most important biodiversity hotspots -the Andean Region -Colombia is also considered the second richest country in biodiversity after Brazil and it is possible to say that one out of 10th species of world’s total flora and fauna is located in its territory. Having approximately 45,000 and 55,000 plant species (1/3 are considered as endemic species) Colombia also has the third position in the world in terms of vertebrate animals (2,890), from which 1,721 are birds ( 20% of the total world’s birds) and 358 mammals (7% of the world’s entire collection).
Additionally, Colombian geography is vast and diverse: costliness on the Pacific, Caribbean and Atlantic Oceans, the Andean mountains, the Amazon and Orinoquian lowland are epicenter of heterogeneous and very vulnerable ecosystems (e.g. mangroves, snow-capped peaks, grasslands, deserts, wetlands, dry forests, cloud forest among others). According to the Wildlife Conservation Society\textsuperscript{14} the following facts describe the vulnerability of Colombian biodiversity. Those facts should be considered when assessing biotrade projects that may be stimulated by initiatives on trade liberalization and foreign direct investment.

- The country’s most diverse region is also its most highly populated, with about 70 percent of Colombians living in the Andean Mountains.
- More than half of the amphibian species found in the Colombian Andes (6 percent of the world’s diversity) are endangered.
- With globally significant biodiversity levels, the Central and Western cordilleras of the Colombian Andes support several species that exist nowhere else.
- A dense human population has fragmented cloud forest habitats, with less than 5 percent of original dry forest cover or wetlands remaining in some areas.
- Framed by the towering, snow-capped mountains of three Andean cordilleras, Colombia has two fertile and highly transformed valleys found at altitudes of about 3,000 feet.
- Most of Colombia’s agricultural products (coffee, rice, sugar cane, soy) usually grow at elevations under 6,500 feet but rely on water from higher elevations, areas already under increasing pressure from an expanding population.
- The dry, montane, and cloud forests of the Colombian Andes support an array of wildlife, including the pacarama, Andean condor, puma, golden-plumed parakeet, red howler monkey, Andean bear, mountain tapir, and neo-tropical otter. Unfortunately, habitat loss, mining, oil exploration, ecosystem fragmentation, palm oil and coca plantations, poaching, and wildlife trade are threatening Colombia’s natural heritage.

\textsuperscript{14}See http://www.wcs.org/where-we-work/latin-america/colombia.aspx.
In this context, Colombian biodiversity is facing a different threats in which trade and investment could be important causes of depletion and extinction but also global warming, illegal trade on endangered species, introduction of alien species, transformation of habitats and social internal conflicts related to social inequalities and security issues inside and outside national borders\(^{15}\) (mostly drugs and terrorism). Therefore, it is possible to predict that “biodiversity loss often destabilizes and reduces the productivity of ecosystems, weakening their ability to generate products and services, as well as their capacity to deal with natural disasters and human-caused stress, such as environmental pollution and degradation and climate change”\(^{16}\) (UNCTAD, 2005)

Paying attention to patterns of trade in biodiversity is crucial since industrialized countries legally imported thousands of wild animals (mostly live primates) that are largely used in scientific research - in addition to the natural ingredients exported as raw material for pharmaceutical products-; half of those animals were sent to the United States, that counts as Colombia’s principal trading partner. Animals are also traded for human consumption and amusement-pet trade-, in particular parrots and reptiles in which Colombia has an important comparative advantage. There is also a large amount of trade in Colombian reptile skins, imported by fashion industries- clothes and accessories- being particularly explored as products for the biotrade initiatives like in the case of Bolivia.

Nonetheless, the importance of biodiversity has been emphasized in every trade negotiation in which Colombia has been involved. Bilateral trade negotiations (USA, EU and Canada) have a very detailed environmental chapter in which biodiversity has a pivotal role, specially taking into consideration that Andean countries should have a similar position when negotiating trade and biodiversity due to possible impacts of trade negotiations in intellectual property rights and traditional knowledge of aboriginal communities (this specific topic is ruled by Andean community law)

Henceforth, environmental domestic policy has a pivotal role when ensuring coherence between trade agendas and international commitments on trade and trade related matters.

\(^{15}\) Attempts to protect the biologically rich mountainous Cordillera del Condor region in South America, for example, have been hampered by a border dispute between Ecuador and Peru. See: Mackay, Richard. (2009). *The Atlas of endangered species 3rd Edition.* (pg. 42). United Kingdom: Earthscan

Competitiveness and development goals are ideally aligned with biodiversity matters and thus, the idea of sustainable use of natural resources has been one important concern for Colombia when identifying potential markets for its exports in goods and services (e.g eco tourism).

Nonetheless, trade liberalization in goods derived from local biodiversity, especially in the case of Colombian fauna; emerge as a complex bundle of issues that demand particular attention of epistemic communities and policymakers in Colombia. That is to say that International Trade Law -GATT, TBT and SPS Agreements-, negotiations on environmental goods and services in Agricultural and NAMA negotiations (including green box subsides), competition and Intellectual Property Rights, international business and international environmental law have a paramount importance when implementing coherent and sustainable trade and investment agreements ( also biotrade initiatives involving Colombian animal wildlife)

5.2 About the UNCTAD’s biotrade initiative in Colombia

The UNCTAD’s biotrade program\(^{17}\) is intended to support sustainable development through trade and investment in biological resources having the convention on Biological Diversity as its most important legal framework. In this sense, biotrade aims to promote the sustainable use of native biodiversity and reconciling its own conservation with development aspirations of local communities in biodiversity-rich areas in developing countries.

This initiative recognizes that biodiversity\(^{18}\) is the source of many products and services used in the society. Local communities –especially rural communities in developing countries as Colombia- depend on biodiversity when satisfying basic (e.g food, medicines, income,

\(^{17}\) The Bio Trade Initiative is under UNCTAD’s Section on Biodiversity and Climate Change in the Trade, Environment and development Branch/Division on Trade in Goods and Services and Commodities. The notion of BioTrade is thus at the centre of a conceptual framework that guides the action of the BTI, BioTrade regional and national programmes, and of organizations that produce and commercialize products and services derived from biodiversity (fig. 1). Within this framework the term BioTrade is understood to include activities related to the collection or production, transformation, and commercialization of goods and services derived from native biodiversity (genetic resources, species and ecosystems) according to criteria of environmental, social and economic sustainability. To complement the definition of BioTrade, the BTI, the BioTrade national programmes and other national and international partners have defined the BioTrade Principles and Criteria.UNCTAD BioTrade initiative. Implementation Strategy. UNCTAD/DITC/TED/2005/05 .Geneva. March 2005. Pág 1.

\(^{18}\) Biological diversity, or biodiversity, refers to the variety of life on Earth, including the variety of plant and animal species, the genetic variability within each species, and the variety of different ecosystems. (www.biodiv.org)
ecosystem services and cultural and spiritual needs). In Colombia, those rural communities have a very limited governmental assistance (public services, education and security) especially because some of them are located in conflict regions that are commonly characterized for having illegal crops, paramilitary presence and guerrillas that generate forced displacements. Thus, it is important to emphasize that Colombian rural communities are not the only vulnerable actors in this domestic conflict since environment and biodiversity are also depleted and deterred by illegal drugs crops and eco-terrorism acts that are mostly performed in the forests.

Biodiversity is an important source for essential inputs used in different industries of big relevance in Colombia: agricultural products, natural ingredients for cosmetics and pharmaceuticals, pulp and paper. Those products have been the main source for biotrade initiatives in Colombia.

According to the UNCTAD’s biotrade initiative: “the sustainable use of biodiversity is thus fundamental for long-term sustainable development. Development countries, which are often endowed with rich biodiversity, face the great challenge of combining poverty alleviation and economic growth with sustainable use and conservation of biodiversity” (UNCTAD, 2005)

In this context, developing countries need to “find ways for the long-term financing if biodiversity conservation which is currently financed mostly through external funding. Trade of products and services derived from biodiversity could be partly the solution to this problem. Research shows that market interest and demand for biodiversity products and services is growing, giving countries rich in biodiversity a comparative advantage.”(UNCTAD, 2005)19 Colombia is not an exception to this trend since policy responses involving different ministries, export promotion agencies, business communities, epistemic communities and private entities have been slowly incorporated within the biotrade program sponsored by UNCTAD.

Colombia makes of biotrade one alternative for competitiveness and sustainable development. This competiveness has not only a domestic dimension in terms of domestic market but also an international dimension. In other words, Colombia included different provisions related to market access for goods and services in bilateral negotiations (WTO+

Agreements) that may facilitate biotrade initiatives. This strategy would be not only coherent with competitiveness policies but also with the Andean region environmental agenda and the regional strategy for biodiversity (that includes the Biotrade Andean Program).

Biotrade initiatives in Colombia are therefore intended to be an important source for entrepreneurship in the local business community, scientific research when evaluating potential impacts on species protection of Colombian biodiversity, and an opportunity for rural communities to alleviate poverty while enhancing traditional knowledge and ancient sustainable practices. In this sense, Colombia as other developing countries would make of biotrade a real competitive advantage in its international trade agenda and thus, creating incentives to protect its own biodiversity.

In doing so, important efforts must be conducted at national and international levels. According to UNCTAD, the first step is to create and enable a predictable and stable policy environment at the national, regional and international levels to promote sustainable trade in biodiversity products and services. Second step will be increasing the supply capacity of developing countries of goods and services derived (importance of value chains-biotrade facilitation program).

In the following chapter we will analyze the two above-mentioned steps within the Colombian experience. We will address the main challenges and stakes for the long-term implementation of biotrade program in Colombia, especially when assessing the room for animal wildlife protection in trade liberalization and the possible impacts on emerging PPMs based on different perceptions of environmental protection or even bioethics.

5.3 Enabling a predictable and stable policy environment in Colombia to promote sustainable trade in biodiversity products and services

The BioTrade National Program in Colombia (Biocomercio Sostenible) was launched on 1996, being the pioneer in the Andean region. Colombia settled an institutional framework that sponsored a set of policies and programs related with biotrade. Having the objective of “create and foster a mechanism that enhance the investment and trade of biodiversity-based products and services that use sustainable criteria, and complements and supports local and regional development efforts for the progress of the country”. The program initially was

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See Biotrade initiative-Regional Programs-UNCTAD. http://www.unctad.org/biotrade/National/Colombia/colombia.htm
launched being focused on the following sectors: natural ingredients (often used for pharmaceuticals and cosmetics), Helicons and Foliage, Amazonian fruits, honey and derivates, sustainable agriculture, Guadua, seeds, handicrafts and ecotourism. Nonetheless, the fauna (animal wildlife) doesn’t have the relevance of local flora for Colombian biotrade.

As said before, Colombia is aware of its incredible potential in terms of biodiversity and therefore included this topic in many of its own policies related to trade, investment, intellectual property rights and environment protection. An additional fact for straightening the role of this country as an example of biotrade is that Colombia occupies nearly the 0.7% of our earth surface but has the 10% of the entire world’s biodiversity-.

In this sense would be considered as the richest country in the world in terms of biodiversity by square kilometer. And as stated in previous paragraphs, this is an important reason for having environmental and biodiversity policies deeply enrooted on the umbrella of the Andean Community from which Colombia is an active member when developing regional policies and supranational regulations. This regional policy coherence could be considered as necessary in order to rationalize the depletion of natural resources and native ecosystem degradation since the Andean region has the 25% of world’s biodiversity and the higher number of endemic species21.

Since Colombia has been considering biodiversity as a strategic sector for its competitiveness agenda, the country launched the biotrade project by facilitating the networking among the government, civil society, academic networks through the implementation of competitiveness policies that encourage trade initiatives and biodiversity protection. Being included in the “Competitiveness National System22” (Sistema Nacional de Competitividad-SNC-) sponsored by the Colombian presidency of Álvaro Uribe Velez, the biotrade project is part of a system that includes a technical committee for biodiversity and competitiveness in which different actors are supposed to have a voice: the academia, the

21 Andean countries are deeply committed with the sustainable use of their biodiversity and in this sense have implemented since 2002 the Biodiversity Regional Strategy (Decision 523/2002) under the umbrella of the Convention on Biological Diversity. This strategy covers the following issues: access to Genetic Resources and Benefit-sharing, equitable sharing of benefits from the utilization of genetic resources, traditional knowledge, innovations and practices, intellectual Property Rights related to Genetic Resources and/or protection of traditional knowledge, innovations and practices related to genetic resources.

22 See Decreto 2828/2006
biotrade fund\textsuperscript{23}, the Ministry of International Trade and Environment, other governmental dependencies related with planning, development, education and science, besides the private sector and the Colombian Congress (fifth Commission)\textsuperscript{24}.

This multi-actor scenario is intended to entails a participative forum in which the inter-institutional coordination is required especially when facilitating alliances and networking between the private sector and the Colombian sub-regions\textsuperscript{25}. Under this policy framework, Civil Society is also encouraged to participate when deciding matters related with biodiversity, economic development and improvement of living conditions of rural communities in Colombia. This platform for biodiversity and competitiveness include a number of core issues that must be addressed to strength Colombia’s biotrade position in international markets: predictable and stable legal framework, capacity building and value chains economic and financial incentives, monitoring and evaluation, science, technology and innovation.

The implementation of this initiative also demands a high degree of international cooperation and capacity building for enhancing value chain’s aspects\textsuperscript{26}, intra-sectorial organization-multifactor effective participation- and specially, a consistent negotiation position in international fora related to trade liberalization for colombian biotrade products and services.

In this sense, business communities (industrial guilds, entrepreneurs and small and medium enterprises) and the Colombian government must address the necessary consistency when shaping its international trade agenda (that includes regional, bilateral and multilateral commitments).

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\textsuperscript{23} Fondo Biocomercio. See: http://www.fondobiocomercio.com/contenido/int.php?dir=quienes/&pag=historia

\textsuperscript{24} This Technical Committee on Biodiversity and Competitiveness has also a Technical Secretary in which the following actors are members: Fondo de Biocomercio, COLCIENCIAS, Alta Consejería para la Competitividad de la Presidencia de la Republica, Ministerio de Medio Ambiente, Vivienda y Desarrollo Territorial, Ministerio de Comercio, Industria y Turismo, Departamento Nacional de Planeacion, Instituto de Investigación de Recursos Biológicos Alexander Von Humbolt. Further alliances with the private sector (Asociacion Nacional de Empresarios de Colombia –ANDI–)

\textsuperscript{25} Decentralization is one of the most important characteristics of this program. “The so called Regional Committees for Biodiversity and Competitiveness” are also encouraged by the Colombian Government.

\textsuperscript{26} Risks, incomes and benefits equitable distribution, biotrade principles incorporation, reduction of transaction costs and market failures, information systems (traceability), development and implementation of quality and good service standards, high value added in colombian biotrade products and services.
Nonetheless, important challenges arise for Colombian enterprises (that are mostly SME’s) in relation with asymmetric information when accessing to international markets, specially “green niches” and “caring/conspicuous” consumers with different concerns in terms of environmental protection and bioethics when buying local and imported goods, like in the case of those related to protection, conservation and sustainable use of natural resources, trade in biodiversity, biotrade, fair trade, organic products and incorporation of animal welfare standards in goods (most of them could be classified as PPMs concerns). Hence, it is possible to say that every single concern in form of environmental PPMs entails a different approach to nature and biodiversity and has a different impact in terms of trade and investment (not to mention marketing strategies for international business).

It is important to recall that Colombia is a megadiverse country in terms of animal biodiversity but nonetheless this advantage has been barely explored when prioritizing products and sectors for biotrade\(^{27}\). However, it is relevant to mention that biotrade initiatives are intended to promote the sustainable use of biodiversity as a strategy to preserve living and genetic resources. Whereas protection of biodiversity implies a restricted or event forbidden use of biodiversity, like in the case of the CITES Convention\(^{28}\) in which species would be listed to be protected by the means of restricting or forbidding either domestic or international trade.

As stated before, biotrade initiatives in Colombia have been mostly related to flora rather than animal wildlife (fauna). Animal biodiversity is commonly used as a source for food, clothing (fashion industry use them for coats and other accessories in which fur, pelts and leather are essential material), pets, ecotourism (birding) and scientific testing for products for human use (cosmetics, pharmaceutics and cleaning). Nevertheless, the impact of biotrade initiatives on native animal biodiversity would be assessed also by evaluating

\(^{27}\) Colombia has considered as its most competitive sectors for biotrade many flora resources: aromatic, condiment and medicinal plants, essential oils and extracts, fresh plants, exotic fruits, organic crops, wood resources. Nonetheless, in its *Program for Competitiveness and Biotrade*, Colombia also includes its native animal biodiversity as a sector for potential use in productive activities related to biotrade initiatives.

\(^{28}\) This convention protects endangered species by restricting and regulating their international trade through export permit system. For species threatened with extinction, which are or may be affected by trade (listed in Appendix I to the Convention), export permits may be granted only in exceptional circumstances and subject to strict requirements; the importation of these species also requires a permit, while trade for primal commercial purposes is not allowed. For species which may become endangered if their trade is not subject to strict regulation (listed in Appendix II), export permits (including for commercial trade) can only be granted if export is not detrimental to the survival of that species and if other requirements are met. For species subject to national regulation and needing international cooperation for trade control (listed in Appendix III), export permits may be granted for specimens not obtained illegally (Cirelli, Pag 7, 2002)
environmental impacts of biotrade projects in terms of ecosystem preservation (e.g. sustainable practices). This is would be relevant for the strategy of promoting positive impacts on biodiversity in the case of industrial activities when incentivizing payment for ecosystem services and implementing good environmental practices as part of corporate social responsibility.

Colombia have been prioritizing native species for biotrade more in terms of flora than animal wildlife, specially because the consideration of higher opportunities for sustainable development and socio economic perspectives for rural communities. Nonetheless there have been some initiatives related to the use of Colombian fauna as an alternative for exports. This is the case of trade in “Babilla” skins and butterflies.

In such scenario, breeding farms are increasingly considered as an alternative for a sustainable use of Colombian animal biodiversity. This could be perceived as a response to illegal traffic in native animal species and the increasing demand of exotic skin animals in international markets. Regional authorities (Corporaciones Autonomas Regionales) are competent for granting environmental licenses related to use of biodiversity resources. Therefore, breeding farms (also known as zoocriaderos) have to apply for environmental licenses in order to be able to experiment on certain species and this first stage would take two or three years for the companies to be allowed to breed native species. Once the conditions for sustainable breeding are established, the breeding farms must pay to the government a royalty of 5% over the annual production.

Nevertheless, as presented in the introduction it is possible to consider certain trade related issues that would emerge in the course of trade. Those issues are basically bioethical considerations with special sensitiveness for “green consumers” that support species protection as a per se value, and that frame the judgment of the production method or the content of the product in itself. It is vital to stress certain distinctions that could mislead consumers with particular preferences for “environmentally friendly” products or bioethical standards, like in the case of animal welfare. The increasingly relevant animal welfare standards are not necessarily present in biotrade industries and they are certainly not a requisite or a condition to fulfill in order to classify a product as a “biotrade product”.

Additionally, trade in biodiversity is not necessarily biotrade, considering that it must respect certain criteria established by the UNCTAD’s BioTrade initiative. In order words, biotrade
aims to make a sustainable use of biodiversity, promote fair and equitable sharing of benefits derived from the use of biodiversity, increase socio-economic sustainability (productive, financial and market management), ensure the compliance with national and international regulations, promote the respect for the rights of actors involved in biotrade activities and clarity about land tenure, use and access to natural resources and knowledge.

The rationale in biotrade initiatives related to the use of Colombian wildlife may be less environmentally focused rather than pragmatic. The case of Caiman’s breeding in Colombia (e.g. Zoocriadero Los Caimanes) is grounded on the necessity of diversifying agribusiness rather than being involved in fauna conservation as a main objective. According to Hector Raigoza (founder of zoocriadero Los Caimanes\textsuperscript{29}) the business associated with caiman’s breeding is rather easy but the competition with Center America is difficult. Nevertheless, trade in lizard’s skins and other exotic animals depend of the European fashion trends and pressures that come from environmental and animal rights NGO’s (reluctant to accept the use of native species in luxury fashion accessories). Hence, the perception about trade in products derived from animal biodiversity is therefore divided. Regardless its origin or purpose (e.g. sustainable use of animal wildlife), production methods could be perceived in a different way in different markets.

The 70\% of breeding farms in Colombia are located in the regions of Atlántico, Bolivar, Antioquia, Huila, Cundinamarca, Cesar, Córdoba, Sucre and Magdalena. The hunt with the purpose of capturing individuals for breeding farms is regulated in Colombia (in terms of quotas and species that could be hunted). Breeding farms have to return certain amount of individuals to their natural habitats as an ecological compensation.

Colombian breeding farms reproduce native species that are sold in international markets as exotic pets and also as raw material for maroquinerie (e.g. fine leather accessories as shoes, bags and belts). Almost 86 of Colombian breeding farms have commercial purposes\textsuperscript{30}. Nevertheless it is still not a big industry since it creates less than a 1000 jobs and therefore,

\textsuperscript{29} This breed farm produce 1000 boas, 22 iguanas and 14.000 caimans per year. “Los Caimanes” also provides touristic services (eco-hotel). Visitors can get some information about caiman’s breeding and even eat caiman’s meat.

\textsuperscript{30} Animals that are commonly exported as products derived from native biodiversity as babilla skins, chiguiro’s meat and leather, and living animals as iguanas, boas and lobos polleros (all of them are reptiles). Some efforts have being developed in order to open markets for babilla’s meat and eggs as an alternative source of protein since the specie is just used for its skin. That would lead to a more efficient and sustainable use of animal resources according with some biotrade entrepreneurs.
its social benefits cant be compared with biotrade initiatives related to the use of native flora (e.g. Natural ingredients for cosmetics and pharmaceuticals)

On the other hand, babilla’s skin is commonly exported to Asian (Singapore, Thailand and Japan) European (France and Italy) and American markets; this last market is characterized for having an important demand on Colombian native and exotic lizards as pets. Additionally, the vast majority of pelts and skins are exported as raw materials and not as finished products.

In this context, the establishment of breeding farms in Colombia has been considered as a sustainable alternative for entrepreneurs to satisfy international demand without having a negative impact on native biodiversity. Illegal trade on animal wildlife is one of the most important causes of extinction in Colombia and unfortunately it is also a very lucrative industry that local environmental authorities have been trying to combat during the last years.

Colombia is interested in opening new markets for its products and services derived from a sustainable use of biodiversity. In 2008 the biotrade exports increased to US $ 7,3 millions. Butterflies, beetles, frogs and ornamental fishes (specially native and exotic fauna that is located at Amazonian region) were the main animal products exported by nearly 1.250 Colombian SMEs to United States, Canada and to Arab Emirates.

Thence, biotrade initiatives are intended to make from trade in animal wildlife a sustainable and equitable alternative for the actors involved in the process. On the other hand, trade in

31 As an average one specimen of iguana (lizard) is sell for US $ 1.50 in the US. Market.

32 119 native species are facing this thread of extinction according to the IUCN Red List of Threatened Species and other Colombian native species 447 are listed in the Convention on International Trade in Endangered Species –CITES–.

33 In 2008, Colombian authorities confiscated near to 54,000 animals (for domestic and international markets)

34 “Tierra Viva” is a Colombian company that export beetles mainly to Japan and United Arab Emirates. Those insects are admired and treated with special devotion in those societies. Another important example of Colombian exports in native biodiversity is the butterflies’ case (mainly butterfly cocoons in transparent urns). Butterflies are commercialized for ceremonies or as a symbolic gift. Nonetheless, they are also sold for butterflies’ collectors and as an artisan element that is used in stationary and bookmarks. The pioneer company on this business has been “Alas de Colombia”

35 According to data from the state-run export Promotion Fund
biodiversity does not necessarily meets the standards in some way established by the Convention on Biological Diversity (enabled by UNCTAD’s BioTrade initiative) and then stakes for Colombia are not negligible. For instance, one possible thread for Colombia is that unique native species are sold in international markets with the mere purpose of animal breeding in more competitive conditions -in terms of prices- but without guarantying the sustainable use of animal biodiversity and then respecting the Convention on Biological Diversity criteria.

In this context it is possible to conclude that Colombia biotrade initiatives related to animal wildlife have been barely explored not only because most strategic sectors have been found in flora but because the environmental policy and regulation that is inherently related to fauna have been more focused in protection of species rather in conservation strategies (not use vs. sustainable use of natural resources). Nonetheless, biotrade initiatives may have a mediate impact on animal wildlife when ecosystems and habitats are maintained when using flora resources for trade.

Nevertheless, from not having fauna as a strategic sector for biotrade initiatives does not follows that Colombia has an stringent policy for to wildlife protection (as a sound environmental policy). As a matter of fact, the possible consequence of this absence is that international trade in animal biodiversity would exist but without following the UNCTAD’s criteria for sustainable use of natural resources, in other words, having trade in biodiversity doesn’t count as biotrade.

In Colombia, trade in wildlife species is mainly the extraction of individual for illegal trade, with negative effects for natural populations and ecosystem’s dynamics. On the other hand, legal trade of animal wildlife is mainly based on a very limited variety of species: Cayman (Cayman crocodilus), Water Pig (Hydrochaeris hydrochaeris), near 200 species of ornamental fishes, Black Tegu (Tupinambis nigropunctatus), Green Iguana (Iguana iguana), Boa Constrictor (Boa Constrictor), Rhinoceros Beetles (Dynastes Hercules) and Butterflies. According to the study of Reyes Garcia and Mancera Rodriguez (2008), in Colombia it is difficult to find the exact information and statistics about the number of individual captured control operatives of illegal traffic on fauna or to certify the accuracy of available information.

Colombia’s has been not only focused in agriculture and mining but specially in Forest Products. 50% of Colombia’s land is basically composed by forest reserves intended to support forestall development activities and wildlife conservation plans for certain species. Colombia has 52, 2 millions of forest hectares- 10% are protected lands- and 1.1 millions of hectares as continental waters.
when assessing the dynamics of illegal trade. Thus, the impact of illegal traffic not only on native species and their ecosystems (domestic an international) in Colombian wildlife remains unknown.

Biotrade initiatives in Colombia could be seen as an important tool to avoid natural resources exhaustion, unsustainable use and breeding of animal species and even unethical practices that may be otherwise difficult to detect when not associated with the CBD objectives. The monitoring and traceability allowed by UNCTAD’s BioTrade principles and criteria for implementation of biotrade strategies (international and national programs and networks, value chains and organizations, natural resources management) would be also useful to provide a more transparent and participative accountability of local and international private companies when profiting from the use of native animal wildlife.

It is important also to mention that in Colombia biotrade initiatives are highly decentralized. Every region has the competence to identify strategic sectors when promoting specific biotrade initiatives (founding and entrepreneurship programs) trough Regional Committees for Biodiversity and Competitiveness.

Nonetheless, promoting biotrade for the use of Colombian wildlife could face additional considerations worthy of being explored in a legal and policy analysis, especially from the perspective of the product and production methods and the non physical characteristic of product, that is to say, the so called PPMs debate presented at the beginning of this paper.

It is important to mention that the empowerment of civil society and the emergence of new environmental NGOs (domestic and international) could be considered as a possible challenge for biotrade initiatives related to fauna, specially because as we said before, there is not a necessary link between animal welfare standards, for instance, considered when labeling in organic products and biotrade in animal wildlife.

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37 Even at the domestic market, trade in animal wildlife has been not measured since it is considered as an “informal sector”. Legal and illegal traffic on fauna don’t seem to be considered in national statistics.

38 The first regional committees that were created as a part of the national strategy for biodiversity and competitiveness are the following: Santander, Antioquia, Quindio, Caquetá and Cundinamarca. Those committees are intended to identify and sponsor biotrade value chains trough mechanism grounded in inter-institutional synergies.

39 IFOAM, the umbrella organization for organic schemes, has recently adopted its four principles for organic agriculture: Health, Ecology, Fairness and Care. A standard on biodiversity is currently under development, but has not been used for this comparison, as it is uncertain if it will be finalized. Obviously, the organic movement is
Consequently, the perception of trade in native species would be considered in its bioethical dimensions and thus brings special attention of NGOs. According to Hobbs (2002) concerns relating to ethical issues in production have increased for some consumers, and therefore has demands for information concerning production methods also increase. Intense lobbying efforts NGOs have been the most visible manifestation of those demands, not only in developed countries but also in developing countries.

In this scenario, different ethical concerns related to the use of nature and animal wildlife may collide regardless the sustainability of the production method as exhibited in the biotrade case. In other words, bioethics issues (sometimes confused with environmentally concerns) would be in conflict with biotrade initiatives related to the use of native fauna as merchandise, for instance when the main concern is not the sustainable use of the specie but the use in itself (animal protection) or animal welfare standards.

5.4 May biotrade initiatives be in conflict with animal welfare standards?

States often seek to protect fauna as local natural resource and even try to protect animal wildlife that is remotely located on the grounds of international environmental obligations related to migratory species (like in the case of the famous trade dispute between Canada and the European Communities related to the seal hunt). On the other hand, States may also want to pursue "moral crusades" by enacting domestic regulations and standards intended to ensure humanitarian treatment to animals -even animals that are not located in their territory- as a legitimate public policy measure –that might affect domestic and international trade for certain animal products-. 40

40 Most human interference with fauna takes place within the jurisdiction of sovereign states; e.g., over 90 percent of all fish caught are caught within 200 miles of the coast (Nielsen, 2007:45). The Convention on the Conservation of Migratory Species of Wild Animals (also known as CMS or the Bonn Convention of 1979) aims to conserve terrestrial, marine and avian migratory species.
Therefore, the aim of an environmental motivated measure may not be grounded on wellbeing concerns on animal biodiversity but to assure its preservation for future generations —sustainable use— (like in biotrade initiatives) and therefore non granting animals (as individuals) a per se value. That is to say that the rationale in biotrade may has instrumental and anthropocentric grounds. As stated by Nielsen: “Flora and fauna protection often goes hand in hand; they are living natural resources, part of ecosystem and they contribute to biodiversity. Flora and fauna are thus a part of what is broadly considered the environment. But even if flora and fauna are part of the environment, they are not per se protected in a manner that gives all flora and fauna a right to live as individual specimens” (Nielsen, 2007:44). This particular distinction emerges as relevant criteria when addressing the differences between environmental protection and animal welfare.

Continuing with to this approach, it is proper to affirm that animals are considered as natural resources and therefore some protection under international law is given based to the idea of “species protection” (survival of the species). Notwithstanding, individual specimens are not protected per se and in that sense animal welfare is generally outside the aegis of International Environmental Law (Nielsen, 2007:44)

According to Nielsen what would be particularly important when analyzing the legality of a trade measure related to animal protection (species or individuals) is that this distinction is, however, not always simple: ‘one example of practical difficulty is that legislation is enacted all over the world under headings of environmental, agriculture, religion, etc., without any concern for establishing a clear dividing line between what is environmental protection of animals and what is animal welfare protection’ (Nielsen, 2007:44)

As stated in paragraphs before, ethical requirements in biotrade does not include animal welfare standards. According to the Union for Ethical Bio Trade, the main criteria for “sourcing with respect” is constituted by: maintaining characteristics of ecosystems and natural habitats, not using directly or indirectly pesticides banned in the Stockholm Convention on Persistent Organic Pollutants (POPs, transparency in benefit sharing, ethical

41 Additionally, species have considered as part of common concerns, as a matter of fact “within the international environmental law, the idea of the protection of Nature for future generations begins in a contemporary setting with the 1946 International Convention for the Regulation of Whaling. This document recognizes the ‘interests’ of the Nations of the world in safeguarding for the future generations the great resources representing by whales” (Gillespie, 1997: 107)
Biotrade aims to ensure that the product was obtained without causing negative impacts on the native species (e.g. depleting, hunting animals in extinction, etc.), in other words, without disturbing the ecological equilibrium and enhancing the purposes of Multilateral Environment Agreements—MEAs—such as the Biodiversity Convention or the CITES. Animal welfare is mainly focused on the wellbeing condition of the specimen (specimen protection) and in that sense could be looked as a bioethical concern over the “humanitarian condition” of the animal regardless of the thread of extinction. Hence, when the consumer buy a biotrade product derived from the use of Colombian wildlife (e.g. lizard wallet) may reject or boycott the product since the sustainability in the production is not a guaranty of the humanitarian treatment of the animal that was used.

Additionally, since PPMs are usually a matter of policy space, governments may easily enact measures (e.g. labeling) that require the disclosure of the animal welfare standards in the biotrade product. Since animal welfare is increasingly considered as a social value if not a condition of sustainable developing, it is possible to think that a government may want to pursue, for instance due to the pressure of citizens, to regulate this kind of trade by enacting different sorts of non-tariff barriers arguably defended if challenged by invoking Article XX (b) in order to protect public morals. Therefore, Colombian companies would be eager to get market access for “environmentally friendly” products by means of biotrade. Nonetheless, different non-trade barriers like SPS or TBT measures would be just the tip of the iceberg. Animal welfare concerns for wildlife products categorized as “green” products could be although “ethically” challenged by equally environmentally conscious consumers.

5.5 The current scenario for biotrade initiatives in Colombia in bilateral liberalization

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42 This is not an abstract hypothesis if we consider cases as the EC-Seals. (European Communities-Measures Prohibiting the Importation and Marketing of Seal Products, WT/DS400 and WT/DS401.)
Biotrade flows are increasingly growing in international markets. Approximately US $ 140 billions counts as biotrade exports coming from different sectors in which Colombia has offensive interests due its comparative advantage in terms of biodiversity: cosmetics, pharmaceutics and timber products. Colombia is looking for increase its biotrade market, nonetheless, its participation has been rather modest regardless its advantages counting only for the 0.05% of world’s biotrade.34

Interested in diversifying its trade patterns, Colombia has been actively negotiating free trade agreements with strategic partners that go beyond the disciplines and commitments under the WTO framework (WTO + Agreements). That is to say that matters relative to competition, investment, intellectual property rights, government procurement and labor and environmental standards have been incorporated. What is interesting to analyze is that biodiversity has been a sensitive topic for Colombia and the Andean region in itself (specially because its relation with intellectual property rights). Nonetheless, the Colombian position in trade negotiations has been consistent and unified, particularly in the negotiations with EE.UU, Canada and the EU.

The Colombian position when negotiating trade and environmental matters often includes the language incorporated in GATT Article XX (g) related to the preserved policy space when adopting necessary measures to the conservation of exhaustible natural resources and the definition of its owns levels of protection. Free Trade Agreements, in which Colombia is involved, generally encourage a high degree of enforceability of domestic regulations and international environmental commitments. Besides, those agreements stress the importance of increasing higher levels of environmental protection and cooperation among the parties-mechanisms to enhance environmental performance-.

The following charts summarize the most relevant provisions in recent FTA’s negotiations involving Colombia related to trade and environment -wildlife matters-. Such provisions may have a potential impact when implementing biotrade initiatives and certainly, PPMs and other non-tariff barriers biotrade related should be also analyzed once those agreements are ratified.

### 5.5.1 Colombia-USA Free Trade Agreement

<table>
<thead>
<tr>
<th>Colombia- USA Free Trade Agreement</th>
<th>Relevant Provisions</th>
<th>With particular Relevance for Biotrade Initiatives between the parties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interim Environmental Review</td>
<td>Article 18.1: Levels of Protection</td>
<td>Article 18.5: Mechanisms to Enhance Environmental Performance</td>
</tr>
<tr>
<td>Preservation of policy space when defining own levels of environmental protection-encouraging high levels-</td>
<td>Article 18.2: Environmental Agreements</td>
<td>(i) partnerships involving businesses, local communities, non-governmental organizations, government agencies, or scientific organizations,</td>
</tr>
<tr>
<td>Enforceability of Multilateral Environmental Agreements-MEAS-</td>
<td>Article 18.3: Enforcement of Environmental Laws</td>
<td>(b) incentives, including market-based incentives where appropriate, to encourage conservation, restoration, sustainable use, and protection of natural resources and the environment, such as public recognition of facilities or enterprises that are superior environmental performers, or programs for exchanging permits or other</td>
</tr>
<tr>
<td>Not allowance of waivers that may encourage trade and investment by weakening or reducing protection afforded in the respective environmental laws of the parties</td>
<td>Article 18.5: Mechanisms to Enhance Environmental Performance</td>
<td></td>
</tr>
<tr>
<td>Mechanism provision to enhance environmental performance (flexible, voluntary and incentive based mechanisms)</td>
<td>Article 18.7: Opportunities for Public Participation</td>
<td></td>
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<tr>
<td>Partnerships involving</td>
<td>Article 18.10: Environmental Cooperation</td>
<td></td>
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<tr>
<td></td>
<td>Article 18.13: Relationship to Environmental Agreements</td>
<td></td>
</tr>
<tr>
<td>Business, Local Communities, NGO’s, Governmental Agencies or Scientific Organizations</td>
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<tr>
<td>Market-based incentives when appropriate to encourage conservation and sustainable use of natural resources.</td>
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<tr>
<td>Environmental cooperation (straightening capacities for environmental performance)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biological Diversity (sustainable use of biological diversity, respect and preservation of traditional knowledge of aboriginal communities). + Understanding regarding biological diversity and traditional knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Importance of MEAS: Enhancement of mutual supportiveness (seek to balance obligations under both agreements).</td>
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</tr>
<tr>
<td>Investment and environmental protection (considered as legitimate instruments to help achieve environmental goals.</td>
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</table>
public welfare objective and not constituting indirect expropriation)

5.5.2 Colombia-EU Free Trade Agreement

<table>
<thead>
<tr>
<th>Colombia- EU Free Trade Agreement</th>
<th>Relevant Provision</th>
<th>With particular Relevance for Biotrade Initiatives between the parties</th>
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</thead>
<tbody>
<tr>
<td>Seeking complementarities between trade and environmental policies</td>
<td>CHAPTER 4 Technical Barriers to Trade Confirmation and Incorporation of the WTO/TBT Agreement TITLE X TRADE AND SUSTAINABLE DEVELOPMENT</td>
<td>Article 18 – Collaboration on animal welfare The Sub-committee established in Article 19 will promote the collaboration on animal welfare matters between the Parties. Article 5 Trade favoring Sustainable Development</td>
</tr>
<tr>
<td>Participation of civil society</td>
<td></td>
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<tr>
<td>Biodiversity and intellectual property rights: protection of geographical indications (misappropriation of genetic resources and</td>
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44 The following text has been provided as preliminary text and won't be listed in the bibliography due to what was analyzed while it is still to be amended by the parties.

45 Colombia has an FTA with EFTA (the European Free Trade Association that include Iceland, Liechtenstein, Norway and Switzerland). Those negotiations were launched in early 2007 and were concluded on June 2008. This FTA is the first concluded between European States and the Andean country. This agreement contains a section denominated “Measures Related to Biodiversity” (deeply related to Intellectual Property Rights)
Parties agree on a reciprocal obligation to adopt protection measures on that regard.

Specific mention of products derived from biodiversity

Legislation to strengthen the role of trade and trade policy in the conservation and sustainable use of biological diversity and of natural resources, as well as the reduction of pollution in accordance with the objective of sustainable development;

Article 2
Right to regulate and levels of protection
Each Party shall strive to ensure that its relevant laws and policies provide for and encourage high levels of environmental and labor protection.

Dialogue and cooperate as appropriate with respect to trade related environmental issues of mutual interest.

The Parties recognize the value of international environmental governance and agreements

The Convention on International Trade in Endangered Species of

2. The Parties shall strive to facilitate and promote trade and foreign direct investment in environmental good and services.

3. The Parties agree to promote best business practices related to corporate social responsibility.

4. The Parties recognize that flexible, voluntary, and incentive-based mechanisms can contribute to coherence between trade practices and the objectives of sustainable development.

Article 6
Biological Diversity

3. The parties will endeavor to jointly promote the development of practices and programs aiming at fostering appropriate economic returns from the conservation and sustainable use of biodiversity.

6. The Parties shall strive to strengthen and to
Wild Fauna and Flora, the Convention on Biological Diversity
Article 5
Trade favoring Sustainable Development
Article 6
Biological Diversity
Recalling article 15 of the Convention on Biological Diversity, the Parties recognize the sovereign rights of States over their natural resources, and that the authority to determine access to genetic resources rests with the national governments and is subject to their national legislation.

enlarge the capacity of national institutions responsible for the conservation and sustainable use of biodiversity, through instruments such as the strengthening of capacities and technical assistance.

<table>
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<tr>
<th>5.5.3 Colombia-Canada Free Trade Agreement</th>
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<tr>
<th>Colombia- Canada Free Trade Agreement</th>
<th>Relevant Provisions</th>
<th>With particular Relevance for Biotrade Initiatives between the parties</th>
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</thead>
<tbody>
<tr>
<td>Comprehensive FTA accompanied by parallel agreement on environment cooperation -FTA are subject to the 2001 framework for conducting</td>
<td>Article 4: Public Information and Participation</td>
<td>Article 1: Definitions</td>
</tr>
<tr>
<td></td>
<td>Article 5: Biological</td>
<td>For purposes of this Agreement:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;environment law&quot; means any statute or regulation of</td>
</tr>
</tbody>
</table>

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environmental assessment of trade negotiations-

Seeking to enhance and enforce environmental laws and regulations

Straightening cooperation on environmental matters (in bilateral, regional and multilateral for a)

To promote sustainable development through:
Sound environmental management, public participation and environmental governance.

For the purpose of this agreement, environmental law includes the conservation of biodiversity (flora and wildlife: endangered species and their habitat)

Express remission to Andean Legislation for the purpose of defining the concept of indigenous and local communities.

Diversity
Importance given to the criteria established by the Convention on Biological Diversity

Article 6: Corporate Social Responsibility

Section II – Environmental Cooperation Article 7:

a Party, or provision thereof, the primary purpose of which is the protection of the environment, or the prevention of a danger to human life or health, through:

(c) the conservation of biological diversity, which includes the protection of wild flora or wildlife, endangered species and their habitat, and specially protected natural areas in the Party's territory. For the Republic of Colombia, conservation of biological diversity also includes its sustainable use;

Article 5: Biological Diversity (6) The Parties shall endeavor to cooperate in order to exchange relevant information regarding:

(a) the conservation and sustainable use of biodiversity;
Preservation of policy space when defining own levels of environmental protection—encouraging high levels—

Parties shall encourage the promotion of trade and investment in environmental goods and services.

The agreement stress the importance of the Convention on Biological Diversity.

Explicit mention to Corporative Social Responsibility for environmental matters.

Calling the general exceptions of GATT Article XX and XIV.

(b) the avoidance of illegal access to genetic resources, traditional knowledge, innovations and practices; and

(c) the equitable sharing of the benefits arising from the utilization of genetic resources and associated knowledge, innovations and practices.

Colombia is therefore opening new scenarios for biotrade also within FTA’s. Issues and chapters related to trade and environment, intellectual property rights and technical barriers to trade are considered like relevant tracks for negotiating biodiversity issues and products (beside market access in agriculture and NAMA negotiations). Every track entails its own issues and sensitiveness for the parties in the negotiation and thus, coordination between the different ministries, regions with and private stakeholders is crucial. And possible level of sensitiveness among the parties should be evaluated in terms of possible non-trade barriers.
(as PPMs) for biotrade products. This type of cooperation would be useful for dealing with the PPM debate at the multilateral level in which it is still to be resolved.

Colombia has been the leader and pioneer of biotrade initiatives in the Andean region, having a primary domestic structure (as a network) and international cooperation alliances – centralized and decentralized- to promote biotrade, especially in flora biodiversity. Nonetheless it is not clear if not including fauna species within its strategic biodiversity sectors may be a sound policy for protection rather than conservation of wild animal species or a mere loophole that may potentially favor trade in native species without fulfilling the “sustainability test” that is included in the CBD and therefore promoted by the BioTrade UNCTAD’s initiative.

### 6. Conclusions

As we suggested in previous chapters, the multilateral scenario poses different challenges to Colombia –as well to other developing countries interested in promoting biotrade-. The WTO negotiations on environmental goods and services is waiting for its floor when reviving Doha’s negotiation for agriculture and NAMA, not only in terms of market access but also when dealing with Non Tariff Barriers. This particular issue will have the most prominent relevance for biotrade interest since different trade measures grounded on the TBT/SPS concerns may arise. Questions as PPM’s and product specific NTB for biotrade products may be therefore, the real challenge for developing countries when negotiating environmental goods and services.

In this context, the negotiation of specific NTBs for biotrade products –especially animal wildlife products-may be complex. Not only because technical and Scientifics considerations (specially zoonotic risks under SPS) but the sensitivity that the issue may arise in terms of trade in wild animals (even if they are not threatened species and listed in Annex I of the CITES ) and also animal welfare considerations that different Member States may pose as

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46 Since biotrade products are not exported in massive quantities, Colombia may not have offensive interest in market access. Besides, there is not yet a special category for biotrade products in the harmonized tariff system.
objections for that kind of products and therefore making even more complex the debate about PPMs.\footnote{Considering that the biotrade concept entails a PPM (process or production methods) per se and also animal welfare considerations in products with animal origin. The whole idea of PPM’s is still a legal debate within the GATT and the WTO covered agreements.}

Nonetheless, it is possible to consider that the PPMs issue may be also seen as an opportunity for a country that is mainly composed by SMEs. Traditional methods of rural and aboriginal communities in Colombia and their ancestral knowledge applied to different methods of production that are increasingly as important as the product in itself, should be explored as alternative ways to fulfill stringent standards imposed by developed countries when addressing non trade related issues.

Those standards are commonly challenged by developing countries due to their impacts in the costs of trade. Nevertheless, developing countries should understand that by analyzing the rationale inside the measure (assuming that it doesn’t come from a not mere protectionism) there could be additional possibilities precisely to address PPMs as a business opportunity that may improve welfare (e.g by creating non exiting jobs) of rural communities and society as whole.

According to Conrade (2011), by the turn of the twenty-first century, arguably most legal scholars writing on the topic of PPMs had repudiated the idea of considering them as illegal per se under WTO law. In addition it has been said that “with the increasing importance of non-tariff barriers to trade, and the conclusion of several other multilateral agreements on trade in goods in the Uruguay Round, the importance of the GATT declined. Questions relating to traceability of products, potentially falling into the scope of other WTO Agreements, attracted considerable attention” (Conrade, 2011)

PPMs debate is complex not only because it relies in a bundle of legitimate concerns or moral values present in any given society (e.g biodiversity protection, sustainable use of natural resources, animal welfare standards) but because issues as consumer information are intrinsically related with this debate, and thus, prima facie WTO consistent.

Nonetheless, the principle of Special and Differential Treatment requires cooperation and assistance for developing countries, and thus is not contradictory or unfeasible to think that a
developed Member State could analyze the architecture of the regulatory measure (e.g. intended to protect species or specimens) and the aims and effects on the developing country in order to identify with the support of multiple stakeholders what would be the opportunities or alternatives given present conditions for the developing country affected by the measure and then be able to achieve the same legitimate goals by incorporating –if possible- alternative practices that may lead to the same outcome.

Biotrade products incorporate environmentally driven PPMs but that could be insufficient to guaranty market access on the basis of WTO framework. Non-tariff barriers related to food safety (SPS), existing prohibitions on importing certain animal (regardless their inclusion in CITES) like in the case of the seal products, moral concerns related with the inclusion of animal welfare standards, etc are mere examples of the policy space of WTO Member States that has to be analyzed by including the position of different stakeholders on the issue (particularly civil society and consumers).

Developing countries could be benefited by PPMs when the private sector is aware of their existence and then, be explored as an opportunity rather than a threat in terms of transaction costs. New production methods aimed to fulfill bioethical expectations of consumers, incorporation of the local “know how” when addressing similar issues (e.g by means of incorporating aboriginal ancestral knowledge when hunting or breeding) could have a different perception when considering them as a trade barriers per se. Exploring this new insights when facing the new challenges of international trade law would be useful to avoid trade disputes that the WTO and the Dispute Settlement Body is perhaps not ready yet to solve.
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