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**Environmental regulation in a decentered
perspective: NGOs' role for ensuring
sustainable oil palm production in Latin
America**

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Environmental regulation in a decentered perspective: NGOs' role for ensuring sustainable oil palm production in Latin America

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DEDICATION AND ACKNOWLEDGEMENTS

Dedication

Para mi mamá, quién acompañándome en cada logro y aprendizaje, ha sido mi faro en este turbulento mar de la vida.

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I. Summery

Most industries and companies have increasingly committed to protect the environment in order to ensure the needs of future generations. But how is this feasible when the industries' main objective is to constantly increase production and profit? As a system of social control, regulation can prevent eventual overharvest of natural resources through standard setting, information gathering and behavior modification (Black 2002, 26). However, many developing countries lack the capacity to regulate domestically, which has led to calls for alternative form of governance (Abbott and Snidal 2008, 2). In this case, civil regulations can compensate for some of the shortcomings of public governance. According to Vogel (2010, 69) "Its growth [civil regulation] reflects the emergence of a more complex global "governance triangle" in which states are no longer the exclusive source of global regulatory authority". John Braithwaite (2006) highlights that non-governmental organizations (NGOs) and local social pressure groups can improve the regulation effectiveness by complementing the state's limited capacity to govern.

In the present paper, we aim to shed light to the role played by NGOs as environmental regulators. To achieve this, we have not focused on the relative power owned by NGOs to influence the process of public decision-making. Instead, we have aimed to understand to which extent, NGOs can represent effective regulatory governance as an alternative to government regulation. With this purpose, the present analysis has been based on the *responsive regulation theory*. According to this theory, no government has the capacity to enforce all laws. Thus, circles of interest, such as state regulators, businesses, and NGOs, regulate one another through responsive governance (Braithwaite, 2011). More specifically, our study investigates if NGOs' activism has an influence in shifting private companies' behavior towards more sustainable production processes. We have chosen to identify the causal relationship between NGOs' activism and the sustainable production practices in the oil palm industry because, without adequate regulation, the expansion of palm oil plantations can result in fatal social and environmental externalities.

The analysis is based on a comparative method among three case studies Colombia, Peru and Ecuador. These three countries are regional leaders in oil palm production and, by belonging to the Andean sub-region, they share many similarities, which is useful for the paper's purpose. Each one of these countries is studied through a sample of cases consisting of their largest national oil palm companies. We have measured the companies' sustainability according to their conformity with the Palm Oil Innovation Group criteria through a documentary research. In the other hand, NGOs' activism has been measured at two levels. First, as single actors using the LexisNexis Academic Database to measure the NGOs' presence in the mass media related to oil palm in each country. Second, NGOs' activism through networking has been measured using the rate of participation to the Roundtable on Sustainable Palm Oil by country. The variations regarding sustainability practices in association with the NGOs' activism is analyzed through a qualitative method based on a cross-case study comparative model. We hope the present research can contribute to the study of regulation in developing countries. Besides, identifying non-state effective regulatory mechanisms opens the possibility to alternative avenues for achieving environmental protection and preventing overharvest of natural resources.

II. Introduction

Since 1960s, the enormous expansion of palm oil planting captures the world's attention. The palm oil is a tropical tree crop, mainly grown for the industrial production of vegetable oil (Verheye 2010, 1). Traditionally, oil palm was produced as part of mixed farming practice in West Africa. Yet, due to gains in rival vegetable oils, in terms of its versatility, productivity and price, demand and supply of oil palm have increased exponentially. As a result, plantations expanded from Africa into other continents. Today, oil palm is the most important supplier of vegetable oil in the world, providing a vast range of uses such as cooking, personal care products or even as feedstock for biodiesel (Global Palm Oil Conference 2015, 3). However, without adequate regulation, the expansion of palm oil plantations can be fatal. "Oil palm was responsible for an average of 270,000 ha of forest conversion annually from 2000 to 2011 in major oil exporting countries" (Vijay et al. 2016, 1). In fact, to optimize the crop's growth and maximize the yield per unit area, palm oil must be planted in large-scale mono-crop plantation situated in tropical areas, with year-round rainfall and stable temperatures (Verheye 2010, 1). Yet, these areas are usually already covered by rainforest, which makes palm oil plantations a direct cause of tropical deforestation resulting in several negative externalities. In one hand, deforestation affects local communities that are dependent on ecosystem products, such as food, medicines or sustainable extraction of raw material, deepening rural poverty in these regions (Hudson 2014, 1708). In the other hand, the conversion of rainforests leads to irreversible environmental impacts such as biodiversity loss and reduction of both, soil and air quality (UNEP 2011). The tropical forest is considered the most diverse terrestrial ecosystem and the presence of industrial scale palm oil plantations has already showed serious ecological impacts. For example, in East Asia palm oil plantations were responsible for an average of 270,000ha of forest conversion annually from 2000-2011 (Vijay et al. 2016, 2).

This scenario has raised a general agreement regarding the need for effective regulation to prevent the rise of another "Tragedy of the Commons". Can the non-governmental organizations' (NGOs) activism be considered as an avenue for implementing effective environmental regulation? Usually, regulation is defined as specific form of governance composed by authoritative rules and often accompanied by some administrative agency for

monitoring and enforcing compliance (Jordana and Levi-Faur 2004, 3). Yet, Julia Black (2002, 13) claims the way regulation is conceptualized often depends on the problem or issue in which the writer is focusing on. The present analysis focuses on developing countries and therefore we have considered that the context appeals for a broader definition of regulation. In fact, most of the developing countries have faced limited government ability to promote policies representing and protecting public interests (Frischtak, 1994, VII). Within the environmental realm, this shortcoming is often due to a lack of both, political will and law enforcement capacity. Even if legislation to protect natural resources exists, law enforcement and policies have been weak. For example, regarding Forest policy in South American countries, governments have been considered to have little role in influencing the current patterns of deforestation (Blundell et Gullison 2003, 402). Environmental public entities have been characterized for been under budget and under staff. For instance, most of the forest departments have had budgets of less than \$1/ha and staffing levels show less than 1 employee per 70000 hectares (Blundell et Gullison 2003, 399). With such poor regulatory capacity and strong incentives for private companies for overharvesting, governments' environmental regulation has been often not effective in preventing deforestation. Hence, we argue that, if we limit our analysis to a state-center perspective, we may fail to find an effective solution for the rampant deforestation related to palm oil plantations. In contrast, we have focused on NGOs as regulatory actors having strong potential to effectively prevent the overharvest of natural resources and in doing so, avoided problems caused by weak institutional capacity at the state level (Dubash and Morgan 2012, 272).

Regulation has been considered to be effective when its mechanisms prove the ability to effect the desired social changes (Sabatier and Mazmanian 1979, 482). For the environmental NGO, the desired social changes have included the awareness of sustainable development and the natural resource conservation (Agarwal 2008, 933). In order to achieve these social changes, NGOs "try to influence the beliefs and actions of people throughout the world concerning their particular issue area" (Wapner 1997, 66). In our analysis, we have considered that the NGOs capacity to exerted social control should not be measured through their capacity of influencing the process of public decision-making because environmental legislation risks to remind only on paper. For this reason, in our study the role of NGO as regulatory actors is measured through their direct influence on producers' behavior. Are

producers' behavior more sustainable when NGO's activism is present? In order to understand if NGOs might be considered as an effective regulatory mechanism for achieving the social optimum and preventing overharvest of natural resources, we have focused our analysis on palm oil plantations in South America, more precisely in the three of the largest oil palm producers of this region: Colombia, Ecuador and Peru.

III. Literature review

As we have claimed in the previous introduction, the concept of regulation has been described as a specific form of governance (Majone 1997; Jordana and Levi-Faur 2004; Levi-Faur 2011). In fact, governance embodies three different functions of the state: income redistribution, macroeconomic stabilization, and market regulation. Governance through regulation aims at correcting various types of "market failure" such as monopoly power, negative externalities and asymmetrical information (Majone 1997, 141). Till the middle of the 20th century, the general belief agreed that government direct market intervention was the optimal strategy for ensuring regulation. Thus, the state was capable to unilaterally effect changes through discretionary direct intervention in the market (Badwin et al. 2010, 66). Yet, in late 1970, the raise of international competition and economic integration forced governments across the world to adopt a new strategy for regulation (Moran 2002, 391; Vogel 1996). The transformation within governments' organization highlighted a new way of thinking about the state. Many states embarked upon a program of privatizing state-own assets and transferring the ownership of key industries to the private sector. Yet, the era of privatization has been also the era of regulation (Gilardi et al. 2006, 4). The creation of independent regulatory agencies has aimed to implement some kind of supervision over the activities followed after the privatizations (Badwin et al. 2010, 66). As a result, the state's interventionist role has been left behind leading to a shift into an alternative mode of control; Public utilities have been left in private hands, but have been subjected to rules developed and enforced by specialize agencies. Literature has referred to this moment as the rise of the "regulatory state"(Deller and Vantaggiato 2014, 144).

Considering that the delegation of power to independent agencies has come from the state, most of the "regulatory state" literature has been centered on the state as the principal actor

of this realm. Nevertheless, there has been an important increase on literature focusing on governance “beyond the state” and contesting the centrality of the governmental law to regulation (Scott 2004, 145). Scholars have stressed the manner in which the public governance functions have been increasingly dispersed across and beyond the state (Jayasuriya 2004, 488) and have argued that the conventional view of regulation, opposing two conditions either freedom of control, has failed to capture the full range of options that lie between these two extremes. According to this approach, “regulatory governance encompasses a much broader array of pressures and policies deployed by a variety of actors, both governmental and non-governmental, to shape the behavior of firms and thereby address market failures and other public problems” (Baldwin et al. 2010, 146). Regulation has thus increasingly been seen as “decentred” from the state. Decentred, in this context, means that governance is located in multiple sites, engages a number of non-state actors in governance, and deploys a range of techniques of governance that move beyond the traditional command and control of the ‘Weberian state’ (Jayasuriya 2004, 489). This regulatory approach has been reflected in the “governance triangle”, according to which states have no longer the exclusive source of global regulatory authority because civil regulations have extended regulatory authority around the state rather than through it (Vogel 2010). In contrast to government’s regulations, these alternative mechanisms have not been coercive but voluntary, and, have been based on “soft law” rather than legal sanctions, providing a higher flexibility able to respond the contemporary challenges generated by the increasing fragmentation of both, power and information (Baldwin 2010, 147).

NGOs have represented one of the most important actors when it comes to implementing “soft law”. “The difference between soft law and hard law is akin to the difference between guiding principles and binding rules” (Malcolm 2008, 116). Defined as nonprofit, voluntary organizations, NGOs are autonomous from the state, work toward social and political change at the global level (Reimann 2009, 4), and its regulatory role has drawn the attention of many scholars (Breitmeier and Rittberger 1998; Baldwin 2010, 421; Vogel 2007; Levi-Faur 2011; Braithwaite 2011). In fact, over the past three decades, NGOs have exploded in number and have become influential players in world politics (Reimann 2009, 1). NGOs’ activities have been considered very significant in the world affairs not only because they have influenced states’ policies but also because they have affected the behavior of larger collectivities

(Wapner 1995, 11). Besides monitoring state regulations, NGOs have directly regulated business themselves, through naming and shaming, restorative justice, consumer boycotts, strikes, and litigation they run themselves (Baldwin 2010). NGOs have also become an important category of standard-setting actors along with the “voluntary self-regulation” (Kerwer 2005, 618; Vogel 2007, 261). Standard setting bodies, such as NGO, have been characterized for operating independently of, and parallel to, government regulation. In fact, governments yield none of its own authority to set and implement NGOs’ standards (Baldwin et al. 2010, 147). Rather than coercing; these standards have sought to influence users by the virtue of the expertise on which they are based (Vogel 2007, 261).

The increasing role of alternative regulatory mechanisms has had a particular echo in developing countries. According to Dubash and Morgan (2012), to understand the regulatory context on the “South”¹ certain particularities must be taken into account. The regulatory state has been first implemented in the western countries as a response to national challenges with the objective to prevent political actors to incline the use of regulation for political temporary ends² (Hochsteler 2012, 362). According to the “credibility hypothesis” the delegation of the government’s powers to independent agencies can ensure policies’ coherence over time (Gilardi 2002, 874). In this perspective, by protecting rules from political control, regulations become more stable and technically appropriate for public ends (Hochsteler 2012, 362). While this normative assumption might have been corroborated in western countries (Gilardi 2002), the South has faced radical differences (Dubash and Morgan 2012). In fact, the regulatory state has arrived in South America through the Washington Consensus liberal reforms. These transplanted policies arrived in a land where States were weak and corruption was an extended practice when privatizing (Riesco 2009, 57). The deficit of the regulatory state in the South has thus increasingly drawn scholars’ attention to re-characterize the conventional assumptions about the regulatory state theory (Dubash and Morgan 2012; Braithwaite 2006; Levi-Faur 2011). Braithwaite (1998) suggests

¹ Rather than a geographic delimited area, the authors use the term “South” to invoke shared histories of many countries, such as colonialism and the struggle to address the widespread poverty.

² Regulation for “political temporary ends” can involve, for example, the political interest of being reelected or to reward friends.

that the theory of responsive regulation can be attractive for explaining the developing countries' regulatory context because it deals with the fact that no government has the capacity to enforce all laws.

According to the responsive regulation theory, governments should be able to offer a dynamic response to peoples' problems, environments and demands over time. To do so, governments need to consider two imperative aspects: one in democratic terms and the other in efficiency terms. First, as a democratic ideal, governments need to show a responsive conduct of those they regulate. "Responsiveness means having respect for the integrity of practices and autonomy of groups". In this regard, Braithwaite (1998, 885) has claimed that a responsive regulation is possible as a result of a "node of network governance". In this perspective, guardians of accountability have been organized in a circle where, in one hand every guardian is holding everyone else in the circle accountable, and in the other hand, each organizational guardian, whether private, public, or hybrid, holds itself internally accountable. The idea is that the interaction between circles, among which interests differ, results into a check and balance system, preventing the abuse of power and allowing a dynamic and responsive regulation over time. According to Braithwaite (1998), even if developing countries have faced governments with limited effective capacity to govern, they have not been disabled from building democracy. In this regard, democracy has been defined in terms of deliberative circles where state regulators, businesses, and NGOs can apply responsiveness to regulate one another (Braithwaite 2011). According to Braithwaite (1998, 886). "[D]emocracy is not something we lobby for as a distant utopia when tyrant is displaced by free elections", but is something we start building as soon as we join the node of governance through, for example, NGOs or self-regulatory responses to demands from environmental groups (Braithwaite 1998, 886),

The second aspect enabling governments to provide dynamic responses to peoples' problems has been the acknowledgement of government's limitation to enforce law. According to the responsive regulation theory, no government has the capacity to enforce all laws. Even the most developed countries have experienced a limited system capacity to deliver punishment (Braithwaite 1998, 888). Therefore, by diversifying regulatory mechanisms, governments have not only ensured law enforcement but have also increased their legitimacy. In fact,

coercive control has been mostly perceived as legitimate only when the less respectful forms of social control have been reduced giving the priority to more dialogic forms of regulation. Therefore, governments should seek the optimal level of interventionism to remain at the same time both legitimate and efficient (Braithwaite 1998, 888). The Pyramid of Enforcement Strategies has attempted to shed light on when governments should punish and when they should persuade. At the bottom of the pyramid, securing compliance is made only with law. As we move up the pyramid, more and more demanding interventions in people's lives are involved, applying punitive approaches only when more modest sanctions fail. The idea of the pyramid is that the regulators' presumption should always be to start at the base of the pyramid and then scale only when dialogue has failed (Braithwaite 1998, 886). "The pyramidal presumption of persuasion gives the cheaper and more respectful option a chance to work first" (Braithwaite 1998, 887). Following this reasoning, the pyramid should ensure the efficiency in terms legitimacy, compliance and costs.

IV. Hypotheses

Both of our hypotheses take into account the assumption that developing countries' limited capacity to govern has led to an increase on the role played by other regulatory actors in the realm of governance. Therefore, we have not based our analysis on a state-catered definition. Instead, we have adopted the responsive regulation theory previously presented. In this perspective, NGOs have been considered as regulatory actors, regulating (and been regulated by) states and business (Braithwaite 2006, 888). As mentioned, our research has focused on NGOs as regulators of private companies. "Through boycotts, protests, and civil suits, activists can force firms to "internalize" negative environmental externalities and motivate firms to comply with their demands absent any intervention by the state. (...) These tactics may damage the general reputation of the firm making it more difficult for the firm to secure suppliers and buyers including attracting talented employees who gain utility from working for socially responsible employers" (Lenox and Eesley 2009, 45). Considering these statements, we have claimed that NGOs as regulatory actors can be an avenue for representing public interests and therefore ensure the sustainability of palm oil production in developing countries.

H1: Countries displaying a high level of NGOs activism will also display a high level of sustainability regarding national private production practices. This is because, according to the responsive governance theory, the complex plurality of many separated interest circles prevents the abuse of power and ensures public interest accountability.

The first hypothesis has been based on the democratic aspect of the responsive regulation theory. This aspect claims that in responsive governance, democracy is no longer an exclusive attribute from the state. The interaction among circles with different interests results into a check and balance system. This plurality of interests has also applied to the world's oil palm production regulation, which is subjected to different interest groups. Whereas firms have aimed to maximize profits regardless of ecological impacts, NGOs have aimed to stop palm oil plantations' expansion. Reducing the negative impacts related to the expansion of this crop (deforestation, biodiversity loss, and conflicts over land rights between oil palm companies and local communities) has been considered a "public interest" because the consequences have applied, more or less, to all members of the society (Douglass B. 1980, 110). We have assumed that NGOs' represent public interest and that "the emergence of NGOs represents an organized response by civil society especially in those areas in which the state has either failed to reach or done so in adequately" (Agarwal 2008, 933). We expected the increasing role of NGOs activism to lead to a check and balance system holding the producers accountable and to prevent them from power abuse and non-sustainable production practices. In order to shape the industries behavior towards a more sustainable way of production, NGOs have mobilized their resources to draw the public's attention to this particular subject in order to make industries responsible for their acts (Vogel 2007, 261). NGOs' environmental activism has involved popular media, research and publications. Through these mechanisms, NGO's have provided factual and reliable information, raising citizens' awareness about oil palm and its negative externalities (Agarwal 2008, 934).

H2: If NGOs' implement efforts in synergy with other national actors and work in collective action trough network governance, then national private production practices will display a higher sustainability level. This is because, according to the responsive governance theory, NGOs can reach more effectively their objectives

through collective action considering that gathering all resources for one shared objective increases both, the cost for non-compliance and the firms' incentives to voluntarily comply with the sustainability criteria.

Figure 1. Responsive regulatory pyramid (Braithwaite 2006)

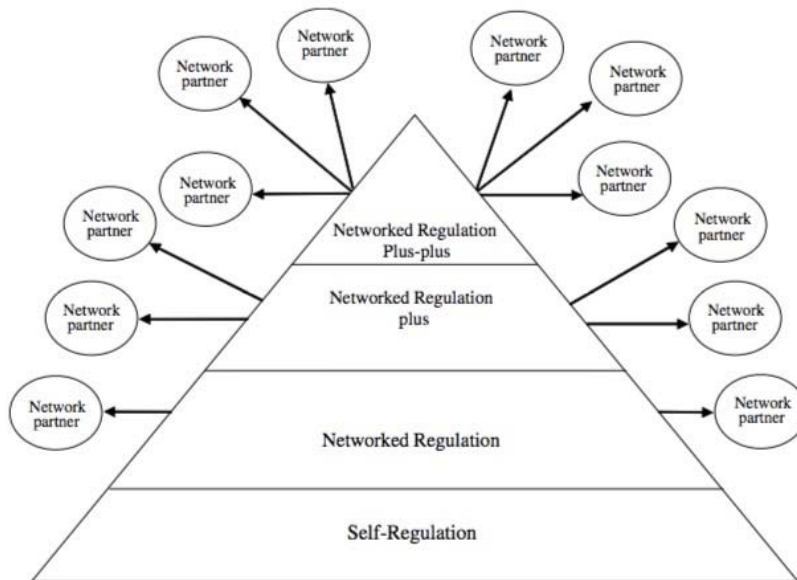


Figure 2. A responsive regulatory pyramid for a developing economy to escalate the networking of regulatory governance.

The second hypothesis has been based on *Figure 1* taken from Braithwaite (2006, 888) study about the benefits provided by the responsive regulation in developing countries. The image illustrates how the presence of non-state regulatory actors can help developing countries to cope with their capacity problem for making responsive regulation work. Inspired on the conventional Pyramid of Enforcement Strategy (Ayres and Braithwaite 1995), *Figure 1* supports the idea according to which states do not necessarily need to escalate in terms of state intervention, but also in terms of networking with non-state regulators (Braithwaite 2006, 890). In this regard, when more actors enroll into the governance network, they bring with them more resources, increasing the costs for non-compliance. From this perspective, whereas NGOs can have an impact by acting as single actors, acting through networking may increase their effectiveness. The logic behind this has been that firms are rational actors and therefore they aim to minimize their costs. Thus, when NGOs have acted through collective

action, more resources have been implemented for naming and shaming, and the costs for non-compliance with ecological and social standards have increased. “In response to global social activism, many firms have adopted voluntary standards to avoid additional regulation and/or to protect their reputation and brands” (Vogel 2007, 261). Within the palm oil industry, NGOs’ collective action has taken the form of an “association created by organizations carrying out their activities in and around the entire supply chain for palm oil to promote the growth and use of sustainable palm oil through co-operation within the supply chain and open dialogue with its stakeholders” (Nikoloyuk et al. 2010, 60). Known as Roundtable on Sustainable Palm Oil (RSPO), this association was created under the World Wide Fund for Nature (WWF) initiative in 2002 (Nikoloyuk et al. 2010, 60).

V. Research design

Methodology

Our study has aimed to identify causal evidence between NGOs’ activism and the sustainability of oil palm companies’ production practices. Thus, the production practices’ sustainability has been considered as our studied population. To analyze the latter, we have focused on three case studies: Colombia, Peru and Ecuador. The studied cases have been chosen through a purposive selection procedure based on the most-similar analysis. Each one of these countries has been studied through a sample of cases consisting of the largest national oil palm producers. Then, the causality between NGOs’ activism and production practices’ sustainability has been analyzed through a qualitative method, combining case study and cross-case study components based on a comparative and hierarchical model. In other words, a more superficial analysis, conducted on a larger scale among the three countries, has been accompanied by a closer study of the selected companies to observe the NGOs’ role in the companies’ sustainability policy definition. Undertaking these two levels of analysis has helped the researcher to formulate useful insights. According to Gerrig (2007), cross-case study and within-case study are complementary. In fact, whereas the former has ensured the population representativeness, the latter has allowed us to study the decisional behavior and the process by which actors reach decisions. Then, causal effect has been observed through spatial comparison. *Ceteris paribus*, when two countries are similar enough to be understood

as examples of the same thing, the differences on the independent variable and the dependent variable shed light to causal interpretation.

Operationalization of concepts

Dependent variable

“With relation to oil palm, “Producer” refers primarily to upstream suppliers such as oil palm growers and millers”³. Therefore, production sustainability had been analyzed within two stages; first, regarding the plantations characteristics and harvesting methods. Second, regarding the processing mills practices. Harvesting methods are particularly delicate in the oil palm sector. The latter has been explained by the rate of expansion of agricultural lands, which despite a decreased since 1960, rapid deforestation still occurs in many tropical countries (Etter et al. 2006). Deforestation has represented a particular risk in the studied countries where the Amazonian rainforest has covered an important percentage of their territory: 74% in Peru, 45% in Ecuador and 36% in Colombia (Dammet 2016, 17). According to the sustainable agriculture concept, harvesting “must conserve the land resource base without degradation and must be economically viable and socially acceptable” (Brown et al. 1987, 717). Sustainable agriculture can be also analyzed as an approach. In this perspective, some practices are seen like been “sustainable” while others are not. “The result is typically a package of ‘good’ practice which once implemented, witness the sustainability of the system (crop rotation, soil conservation, low or reduce use of fertilizer, etc.)” (Morse et al. 2001, 1). In our study, the production practices’ sustainability has been measured according to the Palm Oil Innovation Group (POIG) as the “package of good practices”.

As previously mentioned, “regulation” has been considered to be effective when its mechanisms have proved the ability to effect the desired social changes (Sabatier and Mazmanian 1979, 482). Therefore, measuring sustainability in terms of NGOs’ objectives allowed us to analyze if the production practices reflected the NGOs’ desired results. Besides, the POIG criteria resulted from an agreement among leading NGOs to define “sustainability” within the oil palm sector. Therefore, the POIG criteria legitimacy has not only been based

³ SPOTT. Sustainable Palm Oil Transparency Toolkit. Manufacturers. <http://www.sustainablepalmoil.org/manufacturers/> (consulted the 28.04.2017).

on experts' analytical and technical skills⁴, but also on a consolidated support from NGOs. Whereas each NGO usually prioritizes a main objective such as economic development, conservation and human rights (Gal-Or et al. 2015, 23), the POIG criteria has represented an agreement among these diversity of priorities to define the sustainability concept in the oil palm sector⁵. A similar effort to coordinate priorities to address oil palm production had already been launched by the World Wide Fund for Nature (WWF) in 2002. However, the RSPO initiative has created disagreement among leading NGOs⁶ and therefore its criteria has ceased to be considered as a universally reliable source of sustainability in the sector. Therefore, the POIG's criteria have used the RSPO Principles and Criteria (P&C) as a basis, but it has also added new requirements with the objective of raising the bar on sustainability in the palm oil industry⁷.

The POIG Charter (2013) has provided a total of 19 principles for companies to comply in order to achieve sustainable production practices. These criteria have been divided in 3 thematic areas: "Environmental Responsibility", "Partnership with Communities" and "Corporate and Product Integrity". From the total 19 POIG sustainability criteria we have selected only 14, the other 5 principles were not considered for pertaining reasons. For example, in the environmental category, the Peatland principle was not taken into consideration because it is not relevant for the South American geographical area. In the "Corporate and Product Integrity" category, only the transparency principle has been taken into consideration. We have considered that, whereas the access to the Company's information was necessary to measure our dependent variable, neither certification nor corruption was considered to modify *de facto* plantations' sustainability. In some cases, production practices can be sustainable even without certification. *Figure 2* illustrates the

⁴ NGOs are composed by experts and therefore benefit from scientific and technical knowledge (Gemmill and Bamidele 2002).

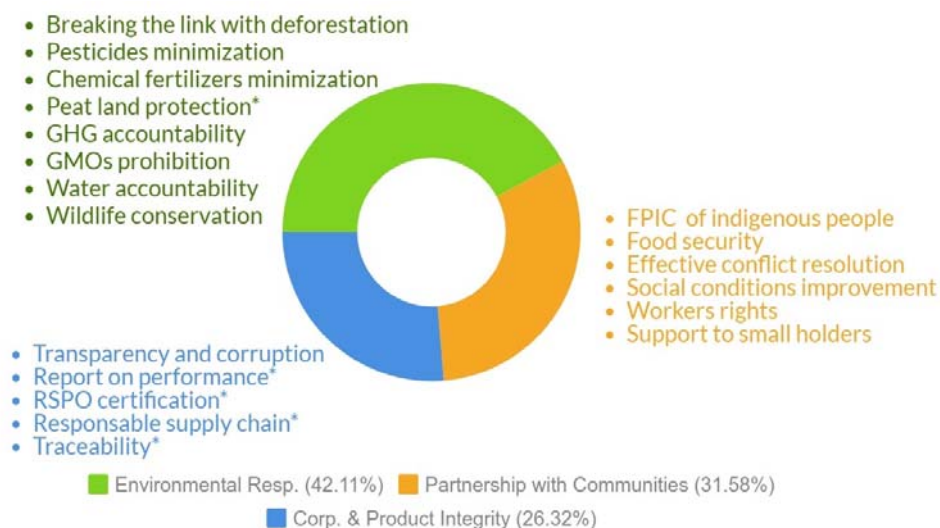
⁵ POIG. About POIG. <http://poig.org>. (Consulted the 28.04.2017)

⁶ Based on the NGOs' conservation strategies and goals, Rusyschaert and Salles (2016) differentiate four NGOs categories regarding the RSPO: collaborative, opponent, skeptics and opportunistic. At least one NGO from each one of these categories has participated in POIG, which shows the existence of an agreement.

⁷ WWF Global. Palm Oil Innovation Group. Going Further for sustainable palm oil. http://wwf.panda.org/what_we_do/footprint/agriculture/palm_oil/solutions/palm_oil_innovation_group/ (consulted the 5.07.17)

POIG criteria. The asterisk (*) distinguishes the principles that are not considered in the present analysis.

Figure 2. POIG Sustainability Principles



Besides excluding five of the total POIG principles, to ease the present analysis, we have regrouped under the same heading the principles with high similarities. For example, the principles regarding *pesticides minimization* and *fertilizers minimization* were analyzed under the same heading because they both referred to decreasing chemicals in the fields. Also, the Free, prior and informed consent (FPIC) principle and the Effective Conflict Resolution principle have been analyzed under the same heading because both principles required inclusive mechanisms to take local communities into consideration. As a result, we had analyzed the production practices' sustainability under the heading of 12 selected and restructured POIG principles. Information about the selected principles has been displayed in Annex-1.

Once the pertinent POIG principles have been selected and the similar ones regrouped under the same heading, we have assigned one or two indicators to each one of the selected principles in order to systematize their analysis. These indicators have been chosen taking into consideration two aspects: the POIG Verification Indicators (2016) and the regional

context. We have based the selection of the indicators on the POIG Verification Indicators, but we have modified the requirements by taking into consideration the regional implemented efforts to achieve sustainability. For example, when measuring social assessment as an indicator, we have also considered companies' surveys implementation or interviews among local communities as an approach to monitor social impact and therefore as an impact assessment program. It appeared convenient to partly adapt the indicators' severity, without losing its essence, to the regional corresponding implemented efforts in order to reflect the regional attempts to comply⁸. Based on these principles and indicators, the companies' production practices have been analyzed through an Internet based research. We have focused on three sources: the companies' websites information, the yearly sustainability reports and the RSPO Annual Communication On Progress (ACOP) in the case of RSPO's members. The companies' conformity to the POIG criteria was measured in a scale from 0 to 1.

Low sustainability: low sustainability, labeled with 0, has referred to the situation where companies have shown no concern about the corresponding criteria. In this case, information regarding the criteria, for example "food security", was not found on the company's documents. Therefore, we have assumed an absence of any concern regarding "food security" and a 0 has been assigned because the subject is neither part of the agenda nor a subject of discussion within the company. Low sustainability has been also considered when the companies' allusion to the principle was so insignificant that it could be considered as inexistent.

Medium sustainability: labeled with 0.5, has referred to the situation where the companies' concern about a certain criteria has been reflected on the company's statements even if no action had been implemented. In other worlds, the companies' intention to comply with the criteria has been reflected on the statements; however there have not been *de facto* improvements because action plans have not been implemented.

⁸ Detailed information about each indicator has been provided in the Analysis section along with the Colombian company analysis' example.

High sustainability: labeled with 1, has referred to the situation where the companies' documents reflected both, concern about the criteria and action plans that corresponded to the criteria requirements. In the present paper we have not measured if these actions were successful or not. As long as the companies' documents have affirmed that efforts had been implemented, we have considered the company as having a high sustainability in the concerned criteria.

Independent variables

NGOs have been defined as “any non-profit, voluntary citizens’ group, which is organized on a local, national or international level. Task-oriented and driven by peoples with a common interest, NGOs perform a variety of services and humanitarian functions (...)” (Guay and al. 2004, 126). According to their functions, NGOs have been distinguished between two categories: “operational” and “advocacy”. Whereas operational NGOs provide social services such as education, health and human relief, advocacy NGOs serve other interested parties through information compilation, analysis, and dissemination (Guay and al. 2004). In the present paper, we have focused on the second category and we have analyzed the advocacy exerted by NGOs through their media visibility. According to Waisbord (2011, 143), “NGOs strive for media publicity to frame public debates, issues, and adversaries, both in order to advance their causes in the public sphere, and to gain validation vis-à-vis various audiences”. In fact, media presence has allowed NGOs to produce and mobilize information in order to achieve their objectives (Waisbord 2011). In the oil palm sector, NGOs’ objectives have aimed to persuade public opinion and companies about the need of adopting sustainable production practices (Hunter et al. 2013). As powerful players, with more than 10.9 million employees and revenues of nearly \$680 billion (Guay and al. 2004, 129), NGOs have devoted massive resources to advancing their interest precisely by imposing patterns on mediated communications, which has allowed them to achieved enormous changes in corporate behavior and governance (Etman 2007).

Considering the previous information, we have measured the NGOs activism by analyzing their presence in mass media related to the oil palm industry. The NGOs’ media presence has allowed us to observe if their requirements have been taken into consideration by the public opinion and therefore by companies. In fact, media tell their publics what matters and how

to think about what matters (Hunter et al. 2013, 26). To examine the NGOs presence on the oil palm media, we have based our research on the LexisNexis database, which has provided a collection of sources for monitoring media. The research was been undertaken under the headline of “Power Search” and “All News, All Languages” from January 2004 until August 2017. To measure the magnitude of NGOs’ activism as single actors, we have included in our algorithm the following elements: (oil palm *or* aceite de palma *or* palma africana) *and* (ong *or* organización no gubernamental *or* ngo *or* non governmental organization) *and* (country’s name) *and not* (rspo *or* mesa redonda de aceite sostenible). In this first research we have excluded any reference to the “RSPO” term. The reason was to analyzed exclusively the media coverage on NGOs individually and not through networking action. Then, we have checked results for accuracy and eliminated false results. Because our analysis focuses on the NGOs’ presence on the oil palm sector media, when one same article was founded twice in the results, it was considered two times only when each article came from a different source, for example, from two different newspapers or from two different medias.

Then, to measure the magnitude of the NGOs’ activisms through networking, we have referred to the RSPO participation rate. According to Nikoloyuk (2010, 59) Schouten and Glasbergen (2011), the RSPO is considered as both, private and “partnered” governance aiming to improve the sustainability of a global commodity chain. Private governance is broadly defined as “forms of socio- political steering in which private actors are directly involved in regulating – in the form of standards or more general normative guidance – the behavior of a distinct group of stakeholders” (Pattberg, 2006, p.591). With more than 2,500 members worldwide, RSPO has allowed NGOs to work in symmetry at the same time with stakeholders and palm oil producers to achieve shared objectives. To measure the magnitude of the NGOs’ activism implemented through the RSPO networking, we have referred to the RSPO’s member list by country, which is provided on the RSPO website⁹. We have measured the participation rate by counting the number of members from each country and by analyzing the variations among countries. We have predicted that in countries with a higher

⁹ RSPO. Members. <https://www.rspo.org/members/all> (Consulted from October 2016-October 2017)

number of RSPO members, stronger is the national networking governance and therefore higher the impact and the higher the sustainability of the companies' production practices.

Case selection

Considering that “systems as similar as possible with respect to as many features as possible constitute the optimal samples for comparative inquiry” (Teune and Przeworski 1970, 32), we have decided to reduced our research scope to focus exclusively in the Andean countries. Located in the western South America, the Andean countries have been often studied separately from the rest of the continent because of their shared geographical and socioeconomic features (Staley 2008, 1). Even if these similarities are not exclusive to the Andean countries, they have been particularity pronounced among them. Therefore, our study was based on the analysis of palm oil plantations within three countries: Colombia, Ecuador and Peru. In total, 12 countries in Latin America grow commercial oil palm, contributing nearly 6% of global production per annum. Colombia, Peru and Ecuador have shared, in one hand, geographic features and rich natural resources, such as the cordillera of the Andes, the Amazon basin and the Pacific coast. Besides of their geographic features, these countries have shared socioeconomic characteristics such as the Spanish tongue as common language and “similar levels of economic development, population, land mass, and other salient characteristics” (Staley 2008, 1). For example, Colombia, Peru and Ecuador have had presidential representative political regime and a similar gross domestic product and score respectively .72, .73 and .74 in the Human Development index¹⁰. Besides their geographical and socioeconomic similarities, these countries were particularly interesting for our study because of their status as “developing countries” and, as previously mentioned, as regional leaders of oil palm production. Since 2012, Colombia has been the fourth world largest oil palm producer and the expansion of this crop amounted 450 thousand hectares in 2012. Placed on the ninth place on this raking, Ecuador's oil palm expansion amounted 280 thousand hectares in 2014. And Peru, where production has been smaller but it has increased faster than its' neighbors states. In fact, Peruvian oil palm production more than doubled

¹⁰ Human Development Reports. Human Development Data (1990-2015). <http://hdr.undp.org/en/data>. (Consulted the 28.07.2017)

between 2006 and 2012¹¹, which placed Peru as the sixteenth world oil palm producers with around 60 thousand hectares of harvested palm oil (Dammet 2014).

In order to analyze the sustainability of the oil palm production practices in these countries, we have chosen three of their most important oil palm companies in terms of production and hectares harvested. Oil palm value chain comprises palm agricultural production (farmers harvesting the palm oil fruit), oil extraction from the palm fruit (through extracting mills) and the refiner stage which results in several oil palm by-products such as biodiesel or the edible oil and fat products (Albán and Cárdenas, 2007). Therefore, different actors, such as growers, millers and refiners, are part of the oil palm production. However, most of the leader companies on the oil palm sector have diversified their activities and they have become at the same time growers, processors and traders. In fact, most of the plantations have taken place around a central oil mill, where the harvested fresh fruit bunches (FFB) are collected and processed immediately; if this procedure is not properly followed the oil quality deteriorates rapidly (Verheye 2010, 8). We have selected three preeminent oil palm harvesting companies in each of the three studied countries based on statements emanated by reliable institutions such as International Organization, scientific articles or governmental institutions referring to these companies' production as being of salient importance regarding the oil palm national sector.

VI. Analysis

Our analysis has been divided into three sections. First, we have studied our dependent variable; this is the sustainability of the companies' production practices. To do so, we began by presenting the oil palm industry of each one of the three selected countries: Colombia, Ecuador and Peru. Then, using a Colombian oil palm company as an example, we have analyzed the production practices sustainability under the POIG principles requirements giving a closer explanation about the indicators' measurement values. The other companies' production practices have been measured through an analogous analysis and the complete

¹¹ SPOTT. Sustainable Palm Oil Transparency Toolkit. Palm Oil in the Americas. <https://www.sustainablepalmoil.org/americas/> (Consulted the 28.07.2017)

information has been provided in Annex.1. The second section of the analysis has focused on the independent variables. Here, we have analyzed the NGOs' activism as both, single and networking actors, to observe in which of the three countries the activism manifested a higher level. The independent variables have been analyzed first through a research of media sources, and second through an analysis of the RSPO members' list. Regarding the media research results, more detail information has been provided in Annex-2. Finally, in the third section of our analysis, we have studied the results to seek for possible correlations among variables in order to achieve a conclusion.

Measuring the production practices' sustainability

Countries' profile and oil palm companies

Colombia

Colombia is the fourth world largest oil palm producer. More than 177 000 hectares¹² of the national land have been used for harvesting this crop, this has represented 9.6% of the total cultivated area within the country¹³. Most of the production has been exerted in an industrial scale and through vertical integration. In fact, out of the 58 palm oil processing mills in the country, 40 have already been integrated either into the food, biodiesel or exportation market (Rueda-Zárate and Pacheco 2015). The African oil palm has been introduced to Colombia in 1932 but it began to be commercialized in early 1950s. The strong development of this sector has been greatly explained by the government's will to expand it. In fact, the Colombian government has focused on oil palm sector as an alternative to challenges such as the balance deficit or governmental lost of control in rural areas¹⁴ (Potter 2015). Thus, financial incentives for producing oil palm have been implemented. For example, in 1957 the "Decreto

¹² The total of oil palm harvested in hectares in Colombia varies largely among authors. For example, Echeverry (2016, 1) states it is 483,784 ha in 2016, Quintero Jaramillo (2015), states it is 450,131 ha in 2014

¹³ According to World Bank official web page, in Colombia the value added in the agricultural sector as percent of GD represents 6.8%, therefore oil palm is a very important sector for the economy. <http://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=CO> (consulted the 15.05.2017)

¹⁴ This strategy aims to regain governmental presence in the rural areas considering the failure of the peace negotiations regarding the armed conflict concerning the Revolutionary Armed Forces of Colombia (FARC) and to decrease the illicit crop plantation such as coca (Borasino 2016).

290” followed by the Law 26/1959 preferential credit rates were established in order to attract investors to the sector. Also in 1962, the National Federation of Oil Palm Oil (Fedepalma) was created in order to represent the interest of the industry and ensure its progress. As a result, oil palm plantations have rapidly expanded under a large and medium plantations model (Rueda-Zárte and Pacheco 2015). Traditionally, oil palm in Colombia was produced to supply the edible oil and fat industry but since 2013 the oil palm utility has expanded to the biodiesel industry, which has replaced the food industry as the first oil palm customer (Rueda-Zárte and Pacheco 2015).

Considering their importance in palm oil hectares harvested, we have selected three Colombian companies to be analyzed. These companies are Industria Agraria La Palma (Indupalma), Aceites Manuelita and Oleoflores. According to the Food and Agricultural Organization (FAO), these three companies have stood out for having the largest harvesting oil palm area in Colombia (Salinas Abdala 2011). Oil palm production in Colombia has been usually analyzed within four zones: Oriental, Central, North and South-occident. Whereas The Manuelita Company has developed its plantations in the Oriental zone, Oleoflores and Indupalma companies have placed theirs on the Central zone.

Indupalma

Created in 1961 by the Grasco Group¹⁵, Indupalma has been one of the most important national oil palm suppliers for the food industry. Even if recently Indupalma has expanded its market into rubber production, the company has largely specialized on oil palm harvesting. With approximately 18.169,59 hectares of this crop, Indupalma has provided more than 3,000 job opportunities (Indupalma Social Balance 2008-2009; Ossa Gómez 2014). Indupalma is an RSPO member since 2012 and the sustainability reports have been provided for the years 2010-2011, 2013, 2014 and 2015 by the Sustainability Disclosure Database¹⁶.

¹⁵ According to Fedepalma (2011) the Grasco Group was established in 1950 to supply the needs of the Colombian market in the areas of edible oils and cleaning products. From its inception, the Group positioned itself as a market leader.

¹⁶ Sustainable Disclosure Database. Organization. Indupalma. <http://database.globalreporting.org/organizations/4378/> (Consulted the 01.11.2017).

Manuelita Oils.

The second analyzed company in Colombia has been Manuelita Oils SA, which has been a producer of Biodiesel and other value-added high quality products derived from palm oil (Maldonado and Torres 2011, 59). Created by the Manuelita Group in 1986, the company established its palm oil plantations in San Carlos de Guaroa in the department of Meta. Then, plantations have expanded towards the Oricué area in the department of Casare to develop a new set of plantations called “Palmar de Altamira” with its own processing plant. In 2015, Manuelita Oils already provided around 6000 jobs and covers more than 20 000 hectares of palm oil (6.400 are owned by the firm and other 14.000 are harvested by small or medium producers) (Rueda-Zárate and Pacheco 2015). The company website and sustainability reports (2012, 2013-2014 and 2015-2016) provided information about the sustainability of their production practices. According to the reports, the palm oil plantations have been developed taking into consideration the “Magic Triangle”, which states that society, environment and economy should be integrated as multi-dimensional balancing of interests.

Oleoflores.

Finally, Oleoflores has been the third analyzed Colombian company. Created in 1967, the company began to harvest palm oil a decade after its creation. The plantations have taken place in the department of César in the region of Codazzi with its own extracting mill established in 1983. At the end of the 1990s, the plantations have expanded through the model of Atrategic Alliances¹⁷ particularly to the regions of Montes de María and the Catatumbo. In 2007, the company inaugurated its first oil palm refining plant for biodiesel¹⁸, and today its’ palm oil plantations have reached 50 000 hectares; more than 25000 hectares are harvested by “supply allies” providing more than 1600 jobs. The Company’s website highlighted Oleoflores social and environmental responsibility. However, there were no sustainability reports available. Only a summery of the Company’s social and managerial policy through which Oleoflores has engaged to provide dialogue spaces with concerned stakeholders in order to resolve disagreements through participative interaction.

¹⁷ These alliances are “a form of contract farming between associations of small landholders (‘supply allies’) and a source of funding, especially large oil palm estates or mills (‘anchor companies’)” (Potter 2015, 41).

¹⁸ Oleoflores. Historia. <http://www.oleoflores.com/about/historia> (Consulted the 01.11.2017)

Ecuador

Geographically between Colombia and Peru, Ecuador has been the second largest oil palm producer in South America with more than 280,000 hectares of palm oil and producing about 500,000 tones per annum (Dammet 2014). Whereas Colombia and Peru have based their oil palm production model mostly on large companies, Ecuador has followed a cultivation model led by small independent farmers (Dammet 2014). In fact, 87% of the total oil palm producers have been small farmers owning less than 50 hectares (Borasino 2016). This production model has been partly the result of the latest Ecuadorian Constitution adopted in 2008. This new Constitution has opposed the neoliberal economic model and states that the “good living” should be ensure through food sovereignty and, to do so, the farmers’ family economy should be in the center of the agrarian policy (Dammet 2014). Almost half of the oil palm produced in Ecuador has been exported and the other 50% has supplied the national edible oil and fat industry (ProEcuador 2014). Biodiesel production has been a minimal share of oil palm production in Ecuador, only one company has engaged in this initiative producing 3% of total production (Albán and Cardenas 2007).

In 2014, Ecuador counted with approximately 7,000 palm oil growers, 40 oil palm extractor mills, and 6 processing oil palm factories for soap and fat or oil production. There has been increasing vertical integration resulting in a situation where all producing stages belong to the same company (ProEcuador 2014). Among the 51 existing oil palm extracting enterprises in Ecuador, the most important companies, in terms of production, have been Palmeras del Ecuador, Palmeras de los Andes (both owned by the Danec Group) and Palmar del Río (Vallejo Chiliquinga 2012, 14). Because the Companies owned by the Danec Group have shared the same sustainability documents, we have decided to focalize on the relatively largest one. Considering that Palmeras de los Andes owned 13,625 palm oil hectares and Palmeras del Ecuador 15,541 hectares, we have selected the latter one for our study (Danec’s Social Report 2015, 9). To choose the third company, we have based our decision on the Vallejo Chiliquinga (2012) and Pro-Ecuador (2014) statements highlighting the fact that Industrias Ales has been also placed on the top Ecuadorian oil palm companies in terms of production and therefore it has also been analyzed.

Palmeras del Ecuador

In 1972 the Danec Group created Palmeras del Ecuador. The Group had first created the Palmeras de los Andes Company in the Esmeraldas region with a first plantation in Quinindé and a second one in San Lorenzo. This plantation has been developed around its own extracting mill and have provided more than 700 jobs with a harvested palm oil area of around 13.625,56 hectares (Danec's Social Report 2015, 9). In 2016, the Group has created Palmeras del Ecuador as second and bigger company specialized in palm oil growing. Palmeras del Ecuador was established in the Shishifindi region and has been composed by a palm oil plantation of 15,541,62 hectares with its own extracting mill (Danec's Social Report 2015, 9). This plantation has provided 1.700 jobs and also has collaborated with independent suppliers through collective contracts (Danec's Social Report 2014). Therefore, the Group, with these two plantations, has achieved a palm oil harvested areas of 29.167,18 hectares. The Danec Group has provided information about its production practices through its website. The Group is a RSPO member since 2010 and yearly sustainability reports were found since 2013.

Palmar del Río.

First under the name of Palmoriente, this enterprise was created in 1979 and its plantations were located in the Ecuadorian Amazon Region, in the Orellana providence. Since 2012 Palmar del Río had become part of the EPACEM group. In the 1990s, Palmar del Río's fields were affected by but rot disease (Mantilla Valdivieso 2015). However, the implementation of a new genetic diversity of seeds has allowed the enterprise to continue as an Ecuadorian leader in oil palm cultivation (PAGO 2011). According to the Company's website, the Company has in average harvested yearly around 10,000 hectares of palm oil. Nowadays, the Company has not yet become a RSPO member and no sustainability reports have been provided. The information was thus mainly gathered from the Company's website.

Industrias Ales

The third Ecuadorian company to be analyzed was Industrias Ales. Created in 1943, this Company has specialized in vegetable oils and fats business and has build its first, out of its three, extracting plant in 1952. Industrias Ales has established its palm oil plantations on the Esmeraldas' region, in San Lorenzo and Las Golondrinas. The Company has harvested approximately 5 thousand hectares of palm oil plantations providing more than 1600 jobs opportunities¹⁹. In addition, the Company has collaborated with smallholders to complement its raw material supply. The Company has not become a RSPO member and no sustainable reports were found. Thus, information about the production practices was mostly gathered from the Company's website where the Ethic Code and other relevant information were found. However, most of the electronic documents required a password to access them.

Peru

Peru's interest in oil palm goes back to 1970 when it had lost its leadership in fishmeal production. The shortage on fish oil highlighted the need to find a substitute to supply the edible oil and fat national market (Silva, 2010). Whereas oil palm sector has been larger in Colombia and Ecuador, it has increased relatively faster in Peru. Peruvian oil palm industry has achieved gains by increasing the cultivated area rather than increasing the production yield. Between 2006 and 2012, Peruvian oil palm production has doubled achieving approximately 50,000 hectares harvested by 2016 (Gromlo, 2015). Currently, 90% of production has been concentrated in the San Martín and Ucayali regions while Loreto and Huánuco account for the remaining 10% (Oxford Business Group 2015). Peru's oil palm production model has been divided in three categories of producers: small, medium and large²⁰. In our study, we have focused our interest in the third category, which is represented by large corporate producers. Grupo Palmas, with more than 22, 000 palm oil hectares harvested by its two companies Palmas del Espino and Palma de Shanisi Complex, has overshadowed its' counterparts. "Located in the Province of Tocache in San Martin Region,

¹⁹ Industrias Ales. Agroindustrial. <http://www.ales.com.ec/negocios-agroindustrial.html> (10.10.2017)

²⁰ First category refers to smallholders' plantations with less than 50 hectares and linked to farmer-owned processing facility. The second category relies on medium independent producers between 50 to 1,000 hectares. Small and medium-sized producers account for 60 percent of the national cultivated area (Hajek 2015).

this complex of plantations, mills, and refineries represents Peru's most economically successful palm oil enterprise" (Hajek 2015, 11). Considering that the Grupo Palmas Companies have shared most of their sustainability documents, we have decided to focus on the relatively largest one. This is Palmas del Espino.

The other company classified on the Peruvian large producers category was Melka Group. However, as a result of environmental irregularities, the Group withdrew its activities from Peru (Forest Peoples Programme, 2017). Therefore, the other two analyzed Peruvian companies have not belonged to the large companies category. However, the Peruvian Minister of Agriculture (PMA 2012) has referred to them for their salient importance regarding the oil palm Peruvian sector. These companies were Oleaginosa del Perú S.A (OLPESA) and Palma Aceitera de Loreto y San Martín S.A. (INDUPALSA) with around 5,000 hectares of palm oil plantations each. These two companies have been the result of the collaboration between, in one hand many smallholders, and in other hand national and international agencies, such as the UNODC, based on the conviction that the cultivation of oil palm is a viable alternative development option (Hajek 2015, 9).

Palmas del Espino

Palmas del Espino and Palmas del Shanusi have belonged to Grupo Palmas, which is a subsidiary of the Grupo Romero, one of Peru's largest domestic corporate entities (Hajek 2015). In fact, Palmas del Espino and Palmas del Shanusi have been considered the country's largest conglomerates (Oxford Business Group 2015). Whereas the firsts plantations related to Palmas del Shanusi, established on 1979, have struggled with terrorists groups that used to dominate the region, Palmas del Espino has been a very profitable firm. In 2016, this company harvested 12 300 palm oil hectares providing about 2,500 jobs besides the collaboration with small farmers (Borasino 2016). Contrary to Palmas del Espino, Palma de Shanusi has not included small farmers into the production chain and its production has been based on the Company's own plantations representing approximately 2,000 hectares and two processing plants, one of them specialized on biodiesel (Hajek 2015). Grupo Palmas has become a RSPO member since 2016 and its website, among other information, provided yearly sustainability reports from 2012 to 2014.

Oleaginosa del Perú

OLEPSA was created in 2006 with the collaboration of an associative of smallholders (Asociación de Palmicultores de la Provincia de Tocache – ACEPAT) and the United Nations Office on Drugs and Crime (UNODC)²¹. The Company's activities have been related to agricultural production, processing and marketing of oil palm and its derivatives products. The Company has constructed its own extracting plant with a capacity of 40 oil palm tones per day, harvesting more than 6.500 hectares of palm oil plantation²². The plantations have been located in the San Martín region. Besides, the Company has collaborated with approximately 1,901 small farmers owning their own plantations (PMA 2012, 28). This Company has become a RSPO member since 2012. However, it has not published any sustainability reports. Information was provided mostly by the Company's website and the RSPO ACOP.

Palma Aceitera de Loreto y San Martín

Indupalsa has been a relatively new company. It was created in 2005 and it was also, like Olpesa, one of the enterprises promoted by UNODC as a strategy to prevent illegal crops farming²³. The majority of the Company's palm oil supply for the processing mill has been gathered from the collaboration with supply from small holders associations, notably from the association "Jardines de Palma", which has harvested more than 5.000 hectares of palm oil (Oikcredi Internacional 2015, 1). The Company has been located in the district of El Pongo de Caynarachi in Lamas, where the most important economic activity in the region is palm oil agriculture. The Company's processing plant production has achieved a capacity of 36,000 tones per year (Oikcredi Internacional 2015). The Company affirmed to be in process to acquire the RSPO certification but it is not yet registered as a member. Information about the production practices was thus provided mainly by the Company's website.

²¹ OLPESA. Nuestra Historia. http://www.olpesa.com/nuestra_historia. (Consulted the 05.10.2017)

²² RSPO. Members. Oleaginosas Del Peru S.A. <http://www.rspo.org/members/1355/Oleaginosas-Del-Peru-S.A-OLPESA>. (Consulted the 05.10.2017)

²³ UNODC. Alternative development. Peru. <https://www.unodc.org/unodc/en/alternative-development/peru---success-stories.html> (consulted the 5.07.2017)

Measuring companies' sustainability under the POIG's criteria

Launched in 2013 by a group of international NGOs and private companies, the POIG has been a multi-stakeholder initiative aiming to “achieve the adoption of responsible palm oil production practices by key players in the supply chain through developing and sharing a credible and verifiable benchmark, and creating and promoting innovations”²⁴. A Company has been considered to be part of the sustainable supply chain²⁵ when its’ production practices corresponded to the POIG’s principles and indicators. In this section, we have analyzed Indupalma Company as an example. We have selected 12 POIG criteria in which we have based our analysis. Each criterion has been measured according to one or two indicators, which have been explained along with the Colombian company’s example. The other companies have been analyzed through an analogous systematic examination of data and the gathered information can be found in Annex-1.

POIG principles and the Indupalma’s example

Environmental Responsibility

Forest protection

The first principle has aimed to break the link between palm oil expansion and deforestation²⁶. However, this principle has not intend to fully ban deforestation. Whereas all natural habitats have some inherent conservation values, the High Carbon Stock (HCS) Approach distinguished some land areas as having “critical importance” for their “outstanding” values²⁷. Thus, according to these criteria, producers may expand their plantation towards forest areas only when these areas of critical importance are not affected. This is, when neither High Conservation Value (HCV) areas nor High Carbon Stock (HCS) areas are concerned. The land stratification related to the HCS areas has been provided in *Figure 3*. According to the figure, there have been only two stratifications, scrubbed or

²⁴ Palm Oil Innovation Group. About POIG. <http://poig.org> (consulted the 5.07.2017)

²⁵ According to the POIG website, a responsible supply chain breaks the link between palm oil production and the destruction of forests, the exploitation of communities and climate change. <http://poig.org> (consulted the 5.07.2017).

²⁶ According to the POIG Charter (2013), deforestation “means direct human induced conversion of forest to non forests, with an exception for small scale low intensity subsistence by indigenous peoples and forest dependent traditional communities”.

²⁷ Sustainable Palm Oil Transparency Toolkit (SPOTT). High conservation values. <https://www.sustainablepalmoil.org/high-conservation-values/> (Conslted the 5.07.17)

cleared land, where plantations could be developed considering that land has already been degraded. However, the value of the land has not only been based on the vegetation characteristics. In fact, the HCV areas have been designated according to the biological, ecological, social and cultural values considered outstandingly significant at the national, regional or global level²⁸.

Based on this information, two indicators have been considered to measure this principle. First the Company should have provided information regarding the definition and the protection of the HCSs areas. We have considered any kind of information about avoiding deforestation as an intention to comply with the HCS approach, even if the term “HCS” has not been quoted. Therefore if a company has implemented non-deforestation programs or policies, we have accorded it a high sustainability level regarding this indicator. The second indicator for this principle has been the preservation of HCV areas. We have observed that the HCV areas’ concept required several aspects to be preserved such as the biological, cultural and ecological regional characteristics. Considering the complexity of the concept, we have considered the companies’ concern about this indicator only when explicit reference to the term “HCV” has been made. Thus, a Company has been considered to have a high sustainability HCV when not only an explicit reference to the importance of this concept was made but also when efforts to protect these areas through actions have been presented.

²⁸ UNEP-WCMC. Biodiversity A-Z. www.biodiversitya-z.org (Consulted the 5.07.17)

Figure 3. HCS Stratification²⁹



HCS Stratification

Based on Idupalma’s sustainability reports, we have classified the Company as having a high level of sustainability regarding the *forest protection* principle. In one hand, according to the Company’s reports, the HCS areas have been respected. Indupalma states plantations have only taken place in lands that were officially assigned for agricultural use, and therefore they were already degraded. The Company states that, since decades ago, these lands were already employed for cattle rising. According to Indupalma, palm oil plantations have not only avoided deforestation, but they also have improved local biodiversity. This is because palm oil plantations, accompanied by environmental programs, have been presented as being better at preserving ecosystems than cattle raising activities. In the other hand, the Company has implemented Environmental Management Systems to address ecosystems preservation and reforestation. These programs have been developed according to the Rainforest Alliance collaboration, the ISO 14.001 and the RSPO certification in order to defined “strategic ecosystems” as HCV. Since 2011, the Company has implemented a non-deforestation policy along with a program to identify and preserve HCS based on the Proforest. Measures have

²⁹ HCS Approach Steering Group Secretariat. The High Carbon Stock Approach. <http://highcarbonstock.org/the-high-carbon-stock-approach/> (consulted the 5.17.2017)

been implemented to preserve these areas and results have been regularly monitored. Indupalma's statements have shown both; concern and actions to prevent deforestation and explicit references and programs regarding HCV. Therefore, a number 1 has been assigned to each one of these indicators. Even if certain independent studies have corroborated the Company's statements (RSPO 2013; IIC 2009) and others have not (Seiboldt, S. & Salinas, Y. 2010; RSPO 2013), our analysis was based on the Company's statements, which manifested both, concern and concrete actions to comply with the principle.

Greenhouse gas (GHG) accountability

The second principle required companies to publicly report on annual GHG from all sources and to show progress towards reaching targeted reductions. GHG emission may have different sources. For example, in the harvesting level of production, clearing practices have represented an important source of emissions. In Southeast Asia, the clearing practices³⁰ have been cited as the major cause of air pollution. By burning forests, either for expanding or renewing the plantations, CO₂ gases are released to the atmosphere contributing to air pollution and to climate change (Jason W. 2004). Emissions could also result from mills operations or transportation activities. Thus, the GHG accountability's principle has required companies to provide informative data about its general GHG emissions.

We have selected two indicators to measure this principle. First, companies should monitor and publicly report data from the emission generated. We have considered as "publicly reported" when the data has been submitted either publicly in the sustainability reports or to the correspondent regional authority for verification. If monitoring actions have been concretized and the data has been submitted, then we have considered a high sustainability level regarding this indicator. Otherwise if monitoring has not been achieved but the company stated its will to comply, the sustainability level was considered as medium. The second selected indicator consists on the efforts implemented by the companies to decrease their emissions' level. Companies presenting concrete efforts such as the implementation of new

³⁰ "The objective of land clearing is to convert the existing vegetative stand into an area, which is suitable for oil palm planting. This requires that the initial vegetative cover be eliminated and the soil be made free of pests, diseases and other hazards, which hamper crop production and access to the land" (Verheye 2010, 9).

infrastructure, technology or practices to capture emissions and prevent air pollution were considered to have a high sustainability level regarding this indicator.

According to Indupalma's reports, efforts have been made to mitigate GHG emissions. In 2013, the Company's reported an objective to reduce 5% of the GHG emitted. Since then, periodic monitoring of air quality has been annually recorded. Based on the monitored results, action plans have been implemented to achieve the reduction objectives. In 2014, the Company presented the results in terms of GHG mitigation. The Company also highlighted its contribution to decrease global warming considering that palm oil plantations have captured more CO₂ than cattle raising activities. Regarding farming practices, we have not found explicitly information in the Company's reports. However, the reports referred to the RSPO certification and according to the Colombian RSPO Main Assessment Report (2013), Indupalma had a strict policy of zero fire. Thus, we have concluded that concerning the *GHG accountability* principle, Indupalma showed for the two indicators a high sustainability level.

Chemicals minimization

The third principle required oil palm producers to have implemented efforts to avoid the use of pesticides and toxic fertilizers, only using them as an absolute last resort. Highly toxic and bioaccumulative³¹ pesticides have been forbidden by the POIG Charter and have been enumerated on a prohibited pesticides list provided by Forests for All Forever (FSC) and the Sustainable Agriculture Network (SAN). According to the WWF³², the application of pesticides can pollute groundwater sources and soil, also killing non-target species. According to the POIG principle, to be considered sustainable, the companies should not use any kind of prohibited pesticides and, in case of emergency the use of pesticides should have been subjected to the POIG's approval. In the emergency cases, chemicals should have aimed to prevent devastating situations. For example, the 2000 hectare plantation's lost due to the

³¹ According to Katagi (2010), bioconcentration is the most popular term for describing the process by which pesticides enter organisms directly from water through the gills or through epithelial tissues. In contrast, bioaccumulation includes the effect of dietary uptake through food consumption or intake of bottom sediments.

³² WWF Global. Palm oil & soil and water pollution.

http://wwf.panda.org/what_we_do/footprint/agriculture/palm_oil/environmental_impacts/oil_water_pollution/ (consulted the 07.07.17)

bud rot disease in Turbo, Colombia, in the early 1970s (Mariau 2001, 29). In case of utilization, the company should have provided full transparency of the used pesticides. Regarding fertilizers, these have been applied to agricultural land to improve crop production. However, like pesticides, chemical fertilizers pollute groundwater and soils. Thus, according to the Charter, the producers most preferentially have used other solutions to maintain high field productivity. For example, organic fertilizers and precision agriculture through multi-year crop growth. Besides, according to the POIG principles the levels of chemicals in watercourses should be monitored and disclosed in public reporting. If the monitoring has indicated an increased on the level of chemicals in the water, the company should adjust fertilizer rates.

All the information provided by the POIG principles regarding chemicals minimization has been measure through two indicators. Whereas the first indicator required companies to avoid the use of toxic fertilizers, the second indicator required companies to avoid toxic pesticides. For each one of these indicators, a medium sustainability level has been assigned to companies when its' concern about toxic fertilizers or pesticides has been presented through statements regarding biological products' advantages or chemicals' disadvantages. In the other hand, to score a high sustainability level in these indicators, the companies should have implemented actions to replace chemical products utilisation. For example, Unilever's Good Agricultural Practice Guidelines (2003, 9) affirmed that a natural practice of weed control is to "not remove the soft epiphytes from palm trunks, which provide a habitat for predators of the main foliage pests."

Indupalma reports manifested the Company's concern to minimize chemicals in the fields. To do so, the Company has prioritized biologic control to prevent plagues. Biological control techniques included fungus stumps to deal with the various organisms that caused the palms' diseases and periodic visits in the plantations to anticipate any plague from spreading. The Company has engaged to minimize pesticides through the MIDAS program, which has forbidden the use of high toxic pesticides and has required the Company to prioritize organic farming production. Regarding fertilizers, reports affirmed that very little chemical fertilization has been used and that waste generated by the production plants has been

intended as fertilizer. This organic fertilization has been made with by-products and has improved the soil's physical-chemical qualities avoiding chemicals utilization. According to the reports, when chemical have been necessary, the Company has only used products approved by The Pesticide Evaluation Report and Safe Action Plan (PERSUAP) which have little environmental impact. Indupalma reports also affirmed to have created awareness about chemical risks among workers through staff training regarding use, management and application of organic products. Because Indupalma's reports have clearly shown concern about chemicals and mechanisms to reduce them have been implemented, we have considered Indupalma to have a high sustainability level in the *pesticides and fertilizers minimization* principle.

Genetically modified organism (GMOs) prohibition

The fifth principle concerned genetically modified organism (GMOs) prohibition. According to the World Health Organization (WHO)³³, GMOs can be defined as plants in which “the genetic material (DNA) has been altered in a way that does not occur naturally by mating and/or natural recombination”. Genetically modified plants have usually aimed to be insect resistant or herbicide tolerant. By been herbicide tolerant, these modified materials have promoted an industrial and chemical intensive model of farming harmful to the environment and have represented a potential threat to other non-target organisms³⁴. Therefore, the POIG Charter has prohibited any kind of GMOs' cultivation. Based on the latter information, in order to achieve a high sustainability level regarding this principle, companies should have prohibited the utilization of GMO from their plantations. A medium sustainability level was considered when GMOs were not prohibited, but the companies' statements have manifested the Company's position against the GMOs utilization.

Indupalma's documents showing information about GMO were not found. According to Colombian Oil Palm Research Center (Cenipalma 2016), Colombian oil palm has not been

³³ WHO. Food safety. http://www.who.int/foodsafety/areas_work/food-technology/faq-genetically-modified-food/en/ (Consulted the 07.07.17).

³⁴ Greenpeace. GMOs and Pesticides: a toxic mix. <http://www.greenpeace.org/international/en/campaigns/agriculture/problem/GMOs-and-Pesticides/> (Consulted the 07.07.17).

produced out of genetically GMO. However, even if palm oil plantations have been GMO-free in Colombia, the Company did not expressed its concern about this subject. Considering that Insupalma's concern about this issue was inexistent within the reports, we categorized the Company as having a low sustainability level regarding the *genetically modified organism (GMOs) prohibition* principle.

Water accountability

The sixth principle concerned water responsible management through minimization and disclosure of water use. Besides the pesticides and fertilizers use, the effluent generated from palm oil processing in mills has represented an important risk related to water quality. Among the waste generated, palm oil mill effluent (POME) has been considered the most harmful waste for the environment if discharged untreated (Rupani et al. 2010, 1190). Besides the millers' practices, the water responsible management can be also taken into consideration in the harvesting practices. In this regard, the plantations' water pollution elimination has been already mentioned on the two previous principles (fertilizers and pesticides). According to the POIG Charter, the companies' water utilization most take into consideration the equity with other users, the impacts of irrigation and the transparency of the information.

Two indicators have been selected to measure the water management principle. First, the company should have implemented a water management program. In order to reflect a high sustainability level on this indicator, companies should have referred to efforts carried out to preserve the water sources quality. For example through the implementation of water management programs' initiatives or the construction of new infrastructure like a treatment plant, to preserve the water's quality. In contrast, a medium sustainability level was assigned when companies manifested their concern about controlling water pollution without referring to the previously mentioned efforts. The second indicator is related to the monitoring of the water sources' quality. In order to have a high sustainability level regarding this indicator, companies needed to provide data resulted from a monitoring water program. A medium sustainability level was assigned when companies highlighted the importance of measuring the waters' sources quality but not monitoring data has been provided.

Indupalma's reports ensured to have implemented environmental management programs aiming to minimize the water and energy use. The irrigation system has been modernized in order to take advantage of the effluents generated during the industrial process. The treated effluent quality was suitable for agricultural irrigation and has been used for irrigating the Company's plantations. According to Indupalma reports, in 2015 38% of the treated water was reused for irrigation. The report states that, by taking advantage of the treated effluents, the company has relied on a fertigation system in which organic nutrients have been applied through irrigation. The Company's reports highlighted that studies made by the *Société Générale de Surveillance* (SGS) have showed that residual water reused as fertigation has prevented direct impacts from been generated on the surface water sources. According to the latter study, it has been proved that palms consumed the organic nutrients presented in the surplus water of the process. Therefore, we have considered Indupalma as having a high sustainability level regarding both of the *water accountability* principle's indicators.

Wildlife protection

Finally, the last principle of the environmental section was based on the protection and conservation of wildlife. This means that companies should not only broke the link between palm oil expansion and deforestation, but also to have make a positively contribution to the threatened species' preservation. According to Anderson (2008), some of these positive contributions to protect the life of wild species have been natural vegetation corridors providing some degree of connection between neighboring patches of forest. This has enabled species to disperse over longer distances greatly improving the ecological integrity of the area.

Regarding this principle, two indicators were fixed. First, the companies should have implemented positive contributions for wildlife preservation. We assigned a high sustainability level to this indicator when companies implemented concrete efforts, such as biological corridors or preservation knowledge sharing with local communities, aiming to preserve local wildlife. If companies have displayed they awareness about local wildlife conditions but did not referred to measures implemented to preserve it, a medium sustainability level was assigned. The second indicator referred to monitoring local wildlife

changes. In this regard, high sustainability level of the indicator was only considered when local wildlife has been monitored and the resulted data has been published through either public documents or submitted to the correspondent authority for evaluation.

According to Indupalma's reports, an inventory of local flora and fauna has already been made in 2006. This inventory, along with the RSPO and Rainforest Alliance criteria, has guided the Company for preserving and protecting local ecosystems. Also, since 2012, important work on biodiversity conservation has been conducted by WWF-Colombia, which has collaborated with Indupalma and The Global Environment Facility of the United Nations (GEF) (Vargas et al. 2015). In 2012, The GEF announced to provide a grant financial help to implement biodiversity-friendly agro-ecological practices in palm cropping in the northern and eastern regions of Colombia³⁵. Indupalma, has implemented preservation programs, for example by maintaining strategic conservation corridors related to crucial watercourses acknowledged to be necessary for ensuring the ecological integrity within the plantations. Indupalma's reports have also enlisted the species in danger of extinction. Based on this list, non-hunting policy has been implemented along with informative workshops for workers. Indupalma's reports have shown the Company's concern about wild species preservation and the concrete actions such as environmental assessment, monitoring programs, hunting prohibition and information campaigns, that have been implemented. Therefore, we considered Indupalma to have a high sustainability level regarding both of the *wildlife protection* principle's indicators³⁶.

Partnership with Communities

Whereas the previous section of principles represented the Environmental Responsibility POIG criteria, this section of principles has focused on the social responsibilities. In fact, “[S]ustainable palm oil requires more than just addressing environmental concerns, although social and environmental impacts are often inter-related. The production of palm oil can result in land grabs, loss of livelihoods and social conflict. The resulting conflicts have had

³⁵ The project is expected to reduce the percentage of new palm-growing areas that encroach on protected land, increase the surface area in palm-production units of protected land, and support small-scale palm producers. Plants 2020. GEF Supports Biodiversity in Colombia. <http://www.plants2020.net/news/0959/> (consulted the 20.07.2017)

significant impacts on the welfare of many people”³⁷. Conversion of forests to plantations has had significant impacts on forest-dependent communities relying on forests for a wide range of goods and services (Sheil et al. 2009). However, the core social problem associated with the development of oil palm plantations is the extremely low level of wages for plantation workers actively producing poverty (Obidzinski et al. 2012). In fact, labor conditions in the industry have been often considered as exploitative and repressive (Pye 2016, 2). To ensure the social sustainability and restraint these negative externalities, the Partnership with Communities category of principles, regrouped in our analysis under six headings, aim to ensure social sustainability in the oil palm sector.

Free, prior and informed consent (FPIC) & Effective Conflict resolution (ECR) principles

The first principle on this section was based on participatory mechanisms allowing local communities to be part of the companies’ decision-making process when they see their interests affected. The right to free, prior and informed consent (FPIC) of indigenous peoples and local communities states plantations should not be established on indigenous peoples’ lands without recognitions of their prior rights. The basis of this principle have referred to the fact that plantations require large areas of land, but often this land has already been designated to the local communities utilization, which have prior rights to these areas (FPP 2008). In order to comply with this principle, the POIG Charter specified that companies most have offered resourced access to independent expert advice at each stage of an FPIC or conflict resolution process. Indigenous and local communities most have been informed and taken into consideration through non-coercive negotiations prior to the plantations development (FPP 2008). The *Effective conflict resolution* principle referred to the situation when negotiation between the indigenous communities and the company have not reach an agreement. In this case, the company is expected to provide a clear procedure and mutually agreed system for dealing with complaints.

In the present study, we have analyzed the *FPIC* and the *Effective conflict resolution* principles under the same heading because we have considered both principles required

³⁷ SPOTT. Sustainability Policy Transparency Toolkit. Social impacts. <http://www.sustainablepalmoil.org/impacts/social/> (Consulted the 19.04.2017)

available and transparent mechanisms ensuring the respect for local communities rights. The indicator assigned to these principles has not involved all the requirement of these principles previously presented. For example, access to independent expert advice and conflict resolution procedures have been excluded and therefore were not considered as necessities for companies in order to acquired a high level of sustainability in this regard. Instead, we have selected as an indicator the availability of information and dialogue spaces through which local communities could express their concerns about oil palm production. We believe the latter indicator has better reflected the companies' concern and efforts to involve local communities in the decision-making procedure. Therefore, we have considered companies' intentions to involve local communities into the decision-making process even when the undertaken measures did not fully corresponded to the previously presented principles. The objective was to observe if the companies provided accessible grievances and complains mechanisms through which communities could express their concerns in order to be taken into consideration by the companies.

According to Indupalma's reports, the Company aimed clear and transparent communication with all stakeholders, including local communities, in order to scope in mutual expectation. To do this, the Company affirmed to have provided appropriate mechanisms for horizontal and equitable intercultural dialogue, which have been implemented through six different Committees³⁸. Besides, the Company affirmed to have regularly provided information about its activities through different ways of communication such as an online journal called "Amanecer Indupalmero" and a newsletter "Correo de la Gente". Also, as a member of *Guías Colombia*³⁹, Indupalma has engaged to provide constructive dialogue and the establishment of grievance mechanisms in order to prevent human rights' violations. According to United

³⁸ Indupalma Sustainability Report (2010-2011, 69), Comités Obrero Patronal, de Vivienda, de Educación, de Calamidad Doméstica, Pensional, Convivencia Laboral.

³⁹ Colombia Guidelines on Human Rights and International Humanitarian Law is a multi-stake holder initiative that brings together business, civil society organizations and the Colombian government. All those who participate in *Guías Colombia* share the purpose of defining, promoting and adopting clear patterns and standards pertaining to Human Rights and International Humanitarian Law for business operations in complex scenarios like contemporary Colombia. (UN Working Group on Human Rights and Transnational Corporations and Other Business Enterprises 2011)

Nations Global Compact⁴⁰, Indupalma has developed grievance mechanisms that are legitimate, accessible, predictable, equitable and transparent⁴¹. The Company's RSPO ACOPs also stated social impact assessments have been conducted in a participative manner. "Communication and consultation as well complaints and grievances procedure are well communicated and adhered to". Finally, in 2015, the Indupalma's report affirmed to have never used coercive measures to acquire land. According to the Company, before land intervention, the property titles and grievances have been studied in detail. The Company affirmed to never have been involved in a project where the plantations development has been related to a social or environmental conflict. The Company affirmed to have received and treated all grievances relatives to plantations and to have implemented efforts to reach solutions through inclusive dialogue. Therefore, Indupalma has presented and applied participatory mechanisms and therefore has been considered to have a high level of sustainability regarding the participatory mechanisms' indicator.

Food security principle

"A household is considered food secure if it has the ability to acquire the food needed by its members to be food secure" (Pinstrup-Andersen 2009,6). This ability can be jeopardized either by food supply shortage or by consumer purchasing power. "At the local and regional levels, monoculture increases the price of the traditional produce that is no longer produced and that therefore has to be bought in from other regions" (Salinas A. 2010, 31). Thus, as a monoculture, palm oil plantations might replace the production of food crops causing a food shortage for local communities facing restraint purchasing power. Regarding the food security principle the selected indicator has referred to any measured undertaken to prevent food shortage. If these measures have been applied, companies would score a high sustainability level. In contrast, if measures have not been implemented but the company's statements referred to food shortage as a risk for local communities, then we have assigned a medium sustainability level for this indicator.

⁴⁰ UN Global Compact. Communication on Progress. Indupalma 2014.
<https://www.unglobalcompact.org/participation/report/cop/create-and-submit/active/221381>
(consulted the 24.07.2017)

⁴¹ These grievance mechanisms are described in Indupalma's sustainability report 2014.

Indupalma's sustainability reports have not manifested concern about this issue. Statements about food security within the Company's reports were not found. We have considered the latter information as a delivered decision because debates about food safety have appeared in the past. For example, Indupalma (2008, 61) has pronounced "we can hardly talk of food security when only 30% of the total land that can be cultivated is harvested". This statement was contested by Seeboldt, S., & Salinas, Y. (2010, 31-32) who, referring to the region where Indupalma's plantations are developed, affirmed that oil palm has replaced practically all other crops and prices of foods such as fruit, cassava, rice and fish have increased. Therefore, because statements about *food security* were inexistent, we considered Indupalma to have a low level of sustainability regarding this indicator.

Social conditions principle

Regarding the social conditions of local communities affected by the plantations, the POIG Charter has required companies to implement social impact assessments to measure the impact of oil palm production within the local communities. Social programs must have been developed in order to prevent human right violations, social conflicts and land grabbing. Besides, companies should have invested in positive contributions for local communities to improve key social issues including housing, healthcare, education and women empowerment. According to the Corporate Social Responsibility (CSR), it has been the company's obligation to be responsive to society's long-run development by implementing efforts to "both minimizing harms (ethical CSR) and promoting benefits for society (altruistic CSR) (...)" (Lantos 2001, 600).

The social conditions' principle has been measured through two indicators. First, companies should have implemented measures to improve the local communities' lifestyle. To acquire a high level of sustainability regarding this indicator, companies should have expressed not only their concern about social issues but also measures to positively contribute to improve local communities lifestyle. To mention some examples, these efforts could have been reflected through new infrastructure for the city improvement, cultural activities organization for social integration and economic support to local institutions such as schools. The second indicator referred to social impact assessments. The letter should have been reflected on the

companies' efforts to review the social effects of their production activities. To be considered as having a high sustainability level regarding this effort, companies' efforts did not necessarily need to reply to a formal social impact assessment⁴². It was sufficient to have carried out measures providing information about the companies' social effects, for example through surveys realization or monitoring data.

Indupalma's reports have showed engagement to social conditions. To improve the communities' social conditions, education programs and technical formations have been encouraged and sponsored by the Company. Education has also been encouraged through the establishment of a school named *Colegio Indupalma*. The latter has provided free basic education to employees' children and other local low-income children during the day; in the evening there have been free classes for adults. According to the Company's reports, in 2011 Indupalma won the Santillana award for best educative experience in the private sector. Besides, informative workshops about Human Rights, children rights and gender equality have been provided. In order to foster female worker's autonomy, Indupalma has encouraged Associated Workers Cooperatives (CTA) integrated only by women, such as Mano Amiga, Vellasan and SC&C. Also, women have exerted key jobs opportunities, such as the direction of the extracting plant in San Alberto. To improve the life of local communities, housing projects and communitarian events, such as artistic activities and sport events, have also been encouraged. Regularly, Indupalma's sustainability reports have displayed the results of these efforts, for example through a graphic illustrating the education improvement or by highlighting a close dialogue with communities in order to monitor the social impact of the Company's activities. Thus, because Indupalma has invested considerable resources to implement programs aiming to improve local communities lifestyle and efforts to monitor their impact, we have considered the Company as having a high level of sustainability regarding the both of the *social conditions* principle's indicators.

⁴² Environmental and Social Impact Assessment (ESIA) is defined as "A process for predicting and assessing the potential environmental and social impacts of a proposed project, evaluating alternatives and designing appropriate mitigation, management and monitoring measures. Biodiversity A-Z. UN environment. <http://www.biodiversitya-z.org/content/environmental-and-social-impact-assessment-esia> (Consulted the 18.10.2017)

Workers rights principle

Labor conditions in the oil palm industry have been often considered as exploitative and repressive (Pye 2016). We have gathered the POIG Charter requirements regarding workers' rights within two indicators. First, companies should provide fair contracts ensuring minimal legal wage, workers rights and social security. In fact, while permanent contracts have offered a degree of security and some social benefits such as pensions, they have become increasingly rare, as the industry has introduced more and more precarious work contracts. This has resulted on quota systems where, in order to be paid, workers have to meet certain targets which indirectly encourages child labor (Pye 2016). To prevent this situation, the POIG Charter (2013) has stated “[P]ermanent, full-time employment is used for all core work performed by the company. Casual, temporary and day labor is limited to jobs that are genuinely temporary or seasonal, and account for no more than 20% of the workforce”. Living wages are supposed to be regularly paid for all workers, compensations, such as social security, consistent with applicable law, a working hour week not exceeding 48 hours and access to legally mandated public holidays. To be assigned a high sustainability level for this indicator, companies need to have displayed efforts to comply with the majority of the latter requirement (legal wage, permanent contracts, workers rights and social security). If only half or less of these criteria were mentioned by the companies' statements, then a medium sustainability level for this indicator was assigned.

The second workers rights' indicator referred to safety of the working environment. This indicator has required companies to ensure workplace safety at two levels. First by providing safety infrastructures and second by preventing and actively addressing forced labor, human trafficking and child labor. Similar to the previous indicator, to be assigned a high sustainability level, companies need to have displayed efforts to comply with the most of the following aspects: infrastructure safety, child and forced labor eradication and the prohibition of discriminatory practices. If only half or less of these criteria were mentioned by the companies' statements, then a medium sustainability level for this indicator was assigned.

Indupalma's reports referred to workers rights as a priority for the Company. In 2015, Indupalma stated to have 463 direct workers. Indupalma affirmed to comply with both, international and national working rights regulations. The Company's reports have affirmed that, between 2010-2011, the lowest salary paid by Indupalma was 24% higher than the minimum legal wage in the country. The Company has manifested its concern about local communities and workers' wellbeing and therefore has provided spaces for dialogue and consensus such as the Labor-Management Committee, Workers Corporate Committee and the Pensions Committee. Also, high security standards have been implemented within the working area through the OHSAS 18.001 certification to ensure adequate working conditions in terms of security and health. Indupalma has also aimed to eliminate child labor incentives by encouraging education and making compulsory the use of identity card within workplaces where minors' entrance has been forbidden. Considering that Indupalma has also relied in Strategic and Productive Alliances (APE) for its production activities, the Company has stated that regarding the non-direct workers' conditions a being part of the Company's social responsibility (for medical care and pensions) (Salinas A. 2010, 29). Considering that Indupalma has expressed its concern about the workers' rights and has also implemented measure to ensure them, we have considered the Company to have a high level of sustainability regarding the two indicators that have been assigned to the workers rights' principle.

Support to smallholders

Finally the sixth principle focused on the Companies' support to smallholders. To understand this principle, we have to consider that within the oil palm industrial market both, vertical and horizontal integration has taken place. Whereas the former refers to the situation where all the producing stages belong to the same enterprise, the latter refers to the situation where an enterprise increases production at the same part of the supply chain. In the horizontal integration, the enterprise is no longer directly involved with harvesting the fruits. Instead, agreements with small landowners or farmers are concluded through strategic alliances insure the palm fruit supply to the company (Mingorance et al. 2004). According to the POIG Charter, these strategic alliances should have been based on fair and transparent contracts including measures to increase smallholders' productivity. The Charter specified that

productivity gains should be achieved without threatening local communities' needs. The support for stallholders' plantations should have also included financial management and budgeting.

In our analysis, we have assigned only one indicator to the support to small holders' principle. The indicator related to measures implemented to improve the small holders' productivity level. To be considered as having a high sustainability level regarding this indicator, companies should have supplied support to improve smallholders' productivity, for example through knowledge sharing, economic help or technical support.

Indupalma's reports showed the Company's will to implement measures aiming to increase smallholders' productivity. We have observed that Indupalma's inclusive model is often taken as an example of social achievement in Colombia. The model was considered to have integrated farmers in the palm oil production supply chain (CECODES 2008, OCDE 2015). Indupalma has been considered as an inclusive company because it has encouraged farmers to buy their own land by providing credits to growers for the purchase of land. This has been possible through collaboration with public and financial institutions (Ossa Gomez 2013; Martínez and Santamaría E. 2014). According to Indupalma's reports, 280 CTAs' members have become landowners and have been received financial orientation from Indupalma. Besides, CTAs' members have systematically had access to trainings and financial programs in order to encourage them to become efficient and profitable in their administrative management. Considering Indupalma's statements about smallholders support, we have classified the Company to have a high level of sustainability regarding the support to smallholders' principle's indicator.

Corporate and Product Integrity

Transparency

Originally on the POIG criteria, this principle has involved both transparency and corruption. However, as previously explained, in our study we have only focused in the transparency aspect considering that, whereas the access to the Company's information was necessary to measure our dependent variable, neither certification nor corruption was considered to

modify *de facto* plantations' sustainability. Thus, only one indicator was assigned to this principle: the company's documents availability. This is, to be considered to have a high sustainability level regarding transparency, companies should have displayed accessible yearly sustainability reports informing about their production practices characteristics and improvements. Only when sustainable reports were available, the companies were considered to have high sustainability level in terms of transparency. Medium level of sustainability was assigned when information was available but, because of the absence of sustainability reports, only through other sources (website documents or the RSPO ACOPs).

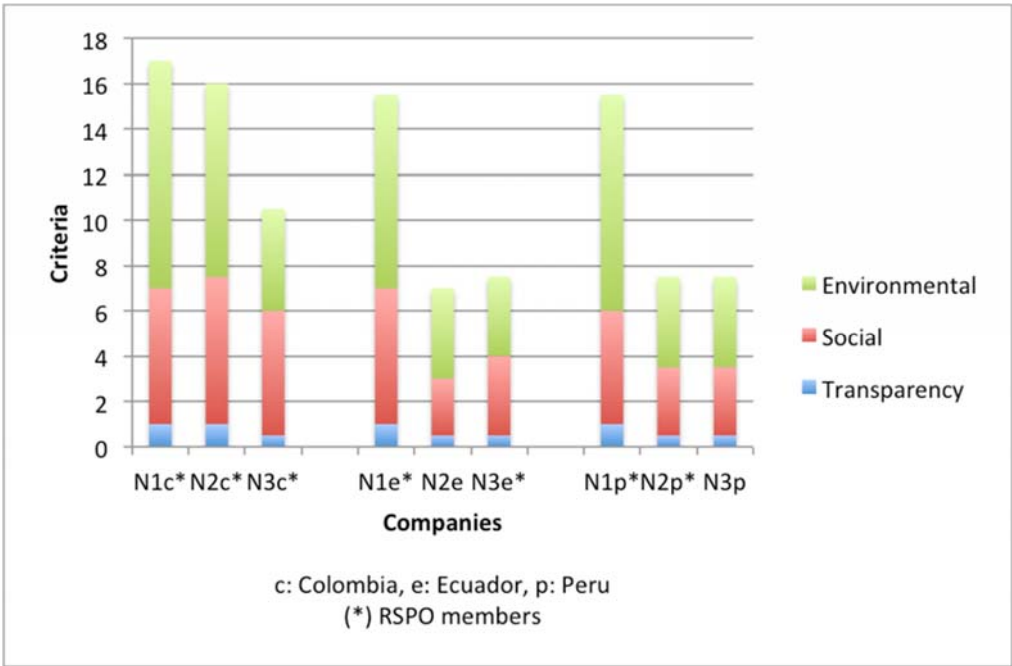
Regarding Indupalma, sustainability reports since 2008 were available. Therefore, a high sustainability level of transparency was assigned. The Company's documents have presented valuable information based on fixe goals, indicators and results. Besides, the Company has been submitted to different international certifications, such as RSPO, ISO 9001, ISO 14.001 and OHSAS 18.001 (Ossa Gomez 2013), providing independent assessments about the Company sustainable actions and shortcomings. According to the Colombian RSPO Main Assessment Report (2013), Indupalma Ltda. has evidenced commitment to transparency, all information and consultation requested have been addressed, and environmental and social has been available.

An overlook on companies production practices

The results of our documentary research about companies' production practices have been illustrated in *Figure 4*. The latter has been build according to the results provided in *Table 1*, which is available with more detailed information in Annex-1. As previously presented, 12 POIG principles have been selected for our research. However, each one of these principles has been analyzed through one or two indicators resulting in a total of 19 indicators, which are illustrated in the y-axis of *Figure 4*. The companies that have become RSPO members have been distinguished with an asterisk (*). According to our analysis, the average sustainability rate has been higher among the Colombian companies, which have complied with 76% of the sustainability indicators, followed by Peruvian companies, which have complied with 52% of the criteria and finally the Ecuadorian companies, which have

complied with 51.5% of the POIG selected sustainability indicators⁴³. We have observed also a slight correlation between the RSPO membership and the sustainability level. Whereas in the Colombian case the three companies are RSPO members, among the Ecuadorian and Peruvian non-RSPO members companies showed the lowest sustainability level. However, we have not considered this information as relevant considering that the discrepancy was negligible and the number of non-member companies was too low to be representative.

Figure 4. Companies' sustainability based on POIG criteria



Whereas some companies have provided yearly reports with clear and broad information about their production practices, some others have provided superficial, insufficient and more general information making it hard to appreciate their veritable efforts towards sustainability. For example, the information about production practices diverged among companies in Colombian. We have observed that the first two Colombian companies, N1c and N2c,

⁴³ Each one of the 19 indicators was assigned the value of 1. If companies had a high sustainability level in each indicator, the total most have been 19. However, in average, companies scored 14.5 in Colombia, 9.8 in Ecuador and 10 in Peru. According to these numbers, percentages were calculated.

displayed a particularly high sustainability level, complying with 17 and 16 indicators respectively. In fact, both of these companies have provided a very complete and detail information about their production practices through yearly sustainability reports containing measures and monitoring programs to achieve fixed environmental and social objectives. The only criteria that were not presented on the companies' documents were related to GMO prohibition, food shortage and the use of pesticides⁴⁴. However, according to our results, these three criteria have almost never been taken into consideration by the Andean oil palm companies' agendas. In contrast, the information provided by the third Colombian company, N3c, has been relatively superficial. In fact, N3c has not provided sustainability reports and the information provided by the website was unspecific. For example, the Company affirmed to have regularly implemented efforts to comply with the RSPO P&C. However, the documents have not specified the implemented measures to do so. Even if N3c production practices' information has been complemented with the Company's RSPO ACOP, awareness about water management monitoring and wildlife monitoring has not been manifested. As a result, N3c's sustainability level has been relatively lower than its counterparts fulfilling only 12.5 of the selected indicators. In fact, the Company's documents have been more focalized on the sustainability social aspects. Considering that N3c is one of the few companies that already acquired the Supply RSPO Chain Certification, we believe the Company could have acquired a higher sustainability level if more yearly reports about its sustainable policies had been provided.

Even if the Colombian companies have showed differences regarding information availability, they all have displayed an interest to collaborate with NGOs to reduce social and environmental negative externalities. Explicit references to this collaboration have been particularly presented in N1c's documents, which have stressed its efforts to comply with the 14001 and RSPO certification, the *Colombia Guidelines*, the Sustainable Agriculture

⁴⁴ Only in the case of N1c the use of pesticides was not mention.

Network (SAN)⁴⁵, the Global Reporting Initiative (GRI)⁴⁶ and the United Nations Global Compact⁴⁷. Also, N1c has developed wildlife protection programs based on the Proforest criteria⁴⁸ and the information provided by the IUCN⁴⁹ has been considered to monitor endangered species. The documents provided by N2c have also highlighted the joint efforts exerted with the GRI, the ISO 14001 and RSPO, and the collaboration with The Nature Conservancy (TNC) to implement programs, such as *Fundación Panthera*, to preserve wildlife or water quality. Finally, N3c's documents have referred only to the RSPO certification as a crucial guideline for its production policies and briefly to the partnership implemented with WWF, the Colombian Government and the Embassy of Netherlands to implement them. Therefore, it has been interesting to point out that, in the Colombian case, more a company had stressed its collaboration with NGOs through different programs, higher had been its sustainability level.

The Ecuadorian companies, similar to the Colombian case, have also displayed divergences among the harvested palm oil area. Whereas N1e has affirmed to harvest around 15,000 palm oil hectares, N2e and N3e have harvested only approximately 10,000 and 5,000 hectares respectively. N1e has witnessed the highest sustainability level with 15.5. This Company has provided sustainability reports since 2013 under a similar format as the Colombian companies N1c and N2c. N1e documents' have only lacked information about the three

⁴⁵ The SAN is a group of NGO working for the conservation of biodiversity and rural development. SAN. Who are we? <http://san.ag/web/about-us/who-are-we-2/> (Consulted the 03.11.2017).

⁴⁶ GRI is an independent organization that has pioneered sustainability reporting since 1997. GRI. About GRI. <https://www.globalreporting.org/Information/about-gri/Pages/default.aspx> (Consulted the 03.11.2017).

⁴⁷ The United Nations Global Compact initiative aim to encourage business worldwide to adopt sustainable and socially responsible policies, and to report their implementation. United Nations Global Compact. Our Mission. <https://www.unglobalcompact.org/what-is-gc/mission> (Consulted the 03.11.2017).

⁴⁸ Proforest is a non-for-profit group that includes both NGO and companies to ensure sustainable use of natural resources. Proforest. Our missions and values. <https://www.proforest.net/en/about-us/our-mission-and-values-1> (Consulted the 03.11.2017).

⁴⁹ The International Union for Conservation of Nature (IUCN) is an NGO dedicated to provide knowledge to enable nature conservation. IUCN. About. <https://www.iucn.org/about> (Consulted the 03.11.2017).

constantly absent criteria (use of chemicals, GMO prohibition, food security) and about wildlife preservation monitoring. The other two Ecuadorian companies, N2e and N3e, have showed a significantly lower sustainability level complying only with 7 of the selected indicators. In fact, these two companies have not provided sustainability reports and information about their production practices' sustainability was predominantly insufficient. Criteria referring to crucial topical issues, such as decreasing GHG emissions, monitoring water quality and inclusive mechanisms, have been absent. Considering that N2e is not an RSPO member and that N3e has not complied with the RSPO P&C requirements to acquire the Supply Chain Certification certification, we have no reason to believe its sustainability practices go beyond the stipulated information.

Ecuadorian companies' documents have also reflected allusion to the cooperation that has been undertaken with NGOs. For example, N1e has explicitly justified its decision to begin with yearly sustainability reports by the company's will to comply with the RSPO criteria. In fact, the Company has based its sustainability strategy on the RSPO P&C environmental and social requirements providing details about each one of the criteria. In the other hand, N2e's documents have not mentioned any explicit interest to comply with the RSPO requirements or with any other NGO's concern. Finally, N3e documents have referred to the collaboration that has been established with both, *Teach for All*⁵⁰ to implement a program aiming to improve the education system in local communities and with the RSPO to define the Company's environment responsibilities. Thus, it is interesting to notice that, among the Ecuadorian companies, N2c has been at the same time the company with lowest sustainability level and the only company not displaying information about its collaboration with NGOs sustainability efforts.

Similar to its counterparts, the Peruvian sample has witnessed discrepancies regarding the companies' harvested area and one company with a sustainability level notably higher than the other two. This company has been N1p, and it has provided extensive information about

⁵⁰ *Teach for All* is a network of over 46 independent partner organizations and a global organization that works to develop collective leadership in classrooms around the world. Teach for All. About us. <http://teachforall.org/about> (Consulted the 04.11.2017).

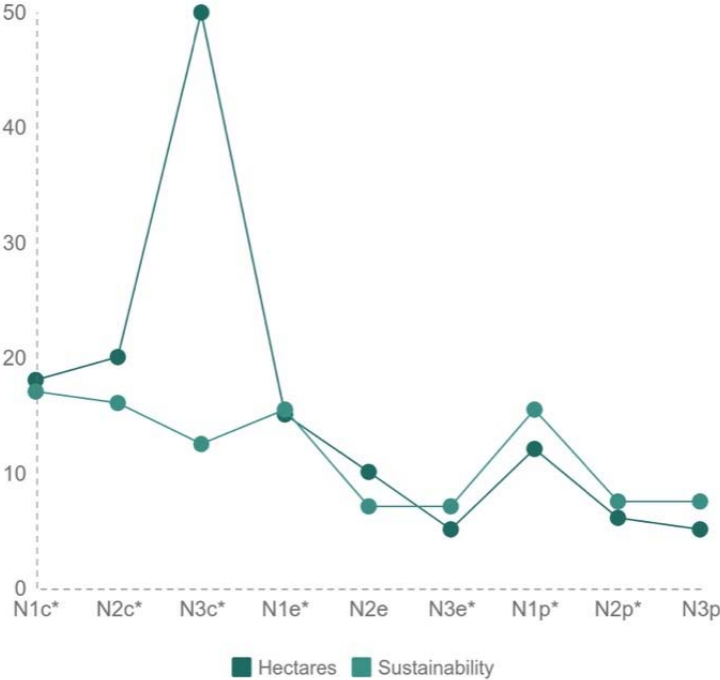
its production practices through yearly sustainability reports, press releases and several documents available in the Company's website. N1p has complied with 15.5 of the selected indicators. The missing indicators were related to the three constantly absent criteria (use of chemicals, GMO prohibition, food security) along with social assessments and workers' contracts conditions. Owned by the largest oil palm economic Peruvian group, N1p has displayed the most important palm oil harvested area in Peru with 12,300 hectares compared with its counterparts N2p and N3p with approximately 6 000 hectares. Differences among the Peruvian companies have also been highlighted regarding the creation date. Whereas N1p was created in 1979, N2p and N3p have been categorized as "young companies". In fact, these two companies were created in 2006 and 2005 respectively, and have resulted from the collaboration among different entities to ensure a sustainable alternative to illegal farming in Peru. Whereas N2p has been a RSPO member, detailed information about programs to improve crucial issues such as GHG emission, wild life preservation, social conditions and workers rights have not been provided.

N2p has explained deficiency regarding sustainability level by the absence of a national interpretation of the RSPO P&C. According to these statements, the biggest challenges to implement sustainability have been related to the absence of trainings to implement the RSPO P&C and to the pecuniary investing needed in plantations that are characterized by small producers with low incomes. Both companies, N2p and N3p have complied with 7.5 of the selected sustainability indicators. Similar to N2p, N3p has provided too general information lacking of fixed objectives or clear measures. Regarding the allusion to collaboration with NGOs, Peruvian companies have only referred to the joint efforts implemented through the RSPO P&C criteria. Whereas N1p has developed its sustainability strategy with a detailed action plan based on the RSPO requirements, N2p and N3p have only referred through general statements about their will to comply with the required sustainability criteria. Thus, in the three Peruvian cases, allusion to collaboration with NGOs has been reduced to their engagement with the RSPO criteria.

It is interesting to highlight the similarities between the Peruvian and the Ecuadorian case. Both cases have displayed one leading company in terms of sustainability and production

and two relatively smaller companies scoring the same sustainability level. Differences regarding the sustainability level have also been present in the Colombian case but with the opposite situation. This is, two companies scoring a high sustainability level and only one with a lower level. We could observe a tendency according to which the larger the company, the higher the sustainability level. *Figure 5* has illustrated the correlation between the companies' size and the sustainability level. The companies' size has been measured according to the companies oil palm harvested area and detailed information can be found in Table 2 provided in Annex-2. For example, the Peruvian company N1p, owned by the Palmas Group, has harvested close to 12,000 oil palm hectares and has provided yearly sustainability reports with clear information in harmony with the POIG criteria terminology. In the other hand, smaller Peruvian companies, such as Olpesa or Indupalsa with approximately 6,000 harvested hectares each, have not provided sustainability reports; instead information has been general without fixe objectives or monitoring programs.

Figure 5. Companies' size and sustainability level



The same contrast has been observed in the Ecuadorian case where the largest company N1e represented by a Danec group's Company has harvested more than 15,000 hectares and has provided sustainability reports with extensive information about its production practices. In contrast, smaller Ecuadorian companies such as N2e and N3e, with 10,000 and 5000 hectares harvested respectively, have witnessed a relatively lower sustainability level and sustainability reports have not been provided. In the case of Colombia, the companies' sizes have also differed as much as in the Peru and Ecuador cases. However, the tendency about higher production and higher sustainability has not been satisfied for N3c. Whereas the three Colombian companies are members of the RSPO, only two, N1c and N2c, have publicly provided yearly sustainability reports enouncing goals, indicators and results with clear and accessible information. In the other hand, N3c has not provided sustainability reports and, even if information about social sustainability has been outstanding, the measures to ensure environmental conservation have been superficially mentioned. Along with the other two Colombian companies, N3c was one of the three companies that have already achieved the RSPO P&C Certification. Therefore, we have estimated that the fact that N3c witnessed a low sustainability level despite its high production level could be explained by a poor communication strategy rather than an absence of implemented efforts by the company.

In our analysis regarding the three studied cases, we have also observed that some criteria are more taken into consideration than others. For example, issues such as food security and GHG have not been present in the producers' sustainability agendas. In fact, regarding GMOs presence, instead of referring to them as an environmental issue, companies often refer to them as an opportunity to increase the yield of production. Also, regarding food security, producers have usually considered that the areas of land, officially reserved for harvesting, have not been yet exploited and therefore oil palm expansion is not perceived as a risk in this regard.

Measuring the NGOs activism

NGOs activism as single actors

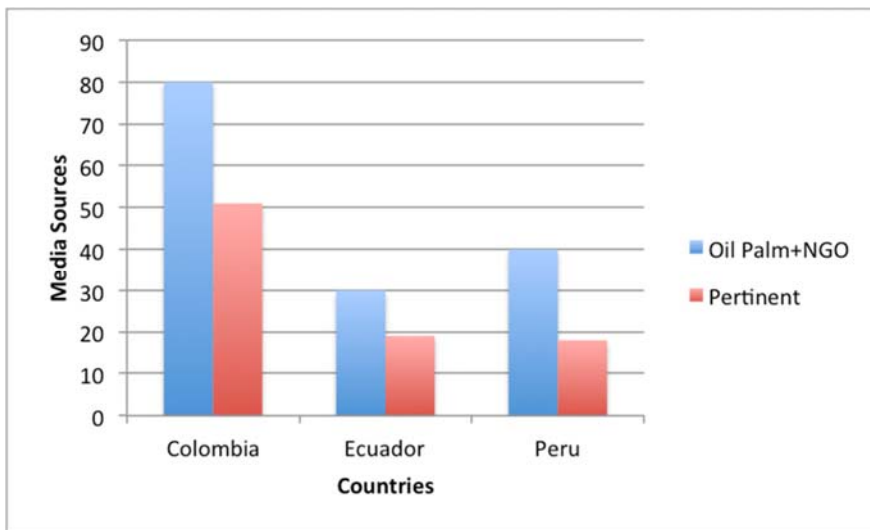
Figure 6 represents the results drawn from three different algorithms introduced in the NexisLexis database. These algorithms were implemented for each one of the countries and detailed information about the research results has been provided in Annex-3. The first results

have been attained by introducing in the LaxisNexis database the following algorithm: (oil palm *or* aceite de palma *or* palma Africana) *and* (country's name). According to the Agenda Setting Theory, the media set the agenda for public opinion by highlighting certain issues more than other. In fact, "generally speaking, the more attention a story is given by the media, the more it appears important to the public" (Hunter et al. 2013, 26). Thus, this first research has allowed us to observe to which level the oil palm subject was relatively salient in each one of the countries. With 1410 sources, the resulted number referring to the Colombian oil palm sector has been higher than Ecuador with 486 and Peru with 605. This can be explained by the fact that Colombian oil palm production started relatively earlier and has become the forth world ranking in terms of production (Dammet, 2014). However, these first results have not been illustrated in *Figure 5* because we have used them only s indicative information.

Including the term "NGO" to the first algorithm we have attained the second series of results. Once the NGO term was introduced, the number of results decreased for the three countries. In the case of Colombia, we went from 1410 results to only 80, in the Ecuadorian case the 486 results became 30 and for the Peruvian case from 605 results we only obtained 40. However, not all of these sources were pertinent for our study. Therefore, the third results were attained after checking results for accuracy and eliminated the non-pertinent ones. In the process of selecting for pertinence, our objective has been to find those sources quoting at the same time information about the oil palm situation in the selected country and information about the NGOs' perspective about the oil palm externalities. We have considered that, by taking part in the countries' oil palm information, NGOs have indirectly framed the content of the subject by participating on the problem definition. Once we have checked the results for accuracy, we had 51 pertinent sources for Colombia, 19 for Ecuador and 18 for Peru. The false results have been caused almost by the same bias in the three countries⁵¹.

⁵¹ These bias have been associated for example with sources gathering different articles without any relation among them, articles focusing in other continents and quoting our cases studies only briefly without relevant information, articles focusing in other sectors and issues such as the sugar sector or the increase in violence without stressing their link with the oil palm sector, and finally terminologies meaning's deviation such as sources referring to Ecuador the imaginary line dividing the Earth into two Hemispheres and not the country.

Figure 6. NGOs activism as single actors



Most of the sources concerning the Colombian oil palm sector have referred to the violence exerted by the paramilitaries strategy to clear the lands in order to develop oil palm plantations. Terms such as violence, communities' displacements, human rights violations and deaths have been often founded on the Colombian sources headlines. Since 2006, NGOs have denounced the humanitarian situation and have required the Colombian government to stop the plantations expansion until social and environment rights have been respected. Certain years have reflected a higher number of results than others. In 2008, the debate about the agrofuels as an alternative to produce energy gained visibility in Colombia. Therefore, besides referring to the general critics about the oil palm externalities, the sources referred also to the NGOs' concerns about the production of biodiesel. Considering that Colombia has been a leading country on biodiesel production, NGOs have highlighted the social and environmental risks related to that monoculture crops expansion. The critics about the new biodiesel agenda have affirmed that it had not been drafted by policymakers but by private economic interests, which have ignored the risk of global warming and environmental destruction. NGOs have also denounced European investments aiming to develop oil palm sector in Latin America, particularly in Colombia, to have contributed to local violation of human rights and deforestation. In 2010, the World Bank investment agenda has been also criticized for its support to oil palm expansion in developing countries.

The sources regarding Colombian oil palm industry have also observed a relatively higher activism in 2011. The NGOs have complained about corruption, unequal access to land, forced displacements and other issues related to Colombian oil palm sector. The US-Colombia Trade Promotion Agreement that took effect on May 2012 could have been an explanatory factor for the increase on the activism. This agreement has been a crucial moment to ensure sustainability and therefore to increase advocacy efforts. Finally, in 2016 we have also observed an increase on the activism. The sources have referred to studies made by NGOs such the Global Witness campaign about violence suffered by environmentalists or reports about water pollution generated by a extracting plant in the Santander's region. Also, during this year sources have referred to the advocacy exerted towards the European Parliament to reinforce the oil palm regulation in developing countries. In fact, European countries are characterized by a high oil palm importing level and, according to the Paris Climate Agreement, adopted by consensus in 2015 and ratified by the European Union in 2016, countries are expected to implement efforts to reinforce sustainability measures.

The sources resulted from the Ecuador's oil palm sector research have not been perceived as severe as the Colombian ones. Whereas most of the Colombian sources highlighted the human rights' violations caused by the oil palm forced expansion, the headlines of the Ecuadorian sources gave a more positive image about the country's oil palm sector. Whereas the Ecuadorian government has been accused for authorized the conversion of tropical forest into oil palm plantations, the critics have been mostly focused on the environmental aspect, particularly deforestation, and achieved improvements have been presented. For example, the contemporary forms of slavery and the vulnerability of indigenous communities facing mono-crop agriculture in Ecuador have been denounced. However, exemplary initiatives implemented by the Ecuadorian government and NGOs participation on international forums to decrease groups' vulnerability have also been enunciated. Similar, whereas massive deforestation suffered by the Ecuadorian Amazonian has been also denounced, also efforts implemented by the government to prevent deforestation by making small producers landowners has been also mentioned.

According to the Ecuadorian sources, NGOs have provided new technologies to monitor the exploitation of national resources worldwide, enabling people to purchase Ecuadorian palm oil coming from veritable responsible producers. Also, NGOs have provided satellite imagery allowing to analyze crucial sustainability issues such as the deforestation rates and along the Colombian-Ecuadorian border. NGOs have also invested on resources to be present on international forums, such as the Global Forest Coalition gathering, to highlight the vulnerability of the indigenous communities in Ecuador and risk of forests deforestation. Unlike the Colombian results, the number of Ecuadorian sources was only particularly high during one year; 2016 and this was because of the earthquake's social repercussions.

Similar to the Ecuadorian case, Peru's media research has displayed the first sources in the year 2007. Until 2015, these media sources have referred to the Peruvian oil palm production as a secondary subject. In fact, oil palm negative externalities have been mentioned only within other broader topics such as indigenous communities rights and commercial agreements. For example, in 2014 the Peruvian oil palm sector was referred as a solution for another primary problem: the illegal cultivation of opium. Oil palm has been promoted as an alternative to eradicate illegal crops cultivation and Peru's experience has been presented by NGOs as a successful example. Barely in 2015 the analyzed sources have started to refer to the Peruvian oil palm sector as an independent topic to highlight the terrible impact that it was causing. NGOs declarations have then denounced publicly the Peruvian companies behind environmental destruction.

The media sources have explicitly denounced two Peruvian companies, Palmas del Espino and Melka Group for their environmental and social violations. These companies have been accused for destroying biodiversity and for deforesting primary forest, mainly on the Amazonian rainforest. NGOs have affirmed these companies without fulfilling legal requirements to deforest, have continued destruction without any kind of authorization. Both, NGOs and civil society have required the Peruvian government to reinforce oil palm regulation. In 2016, Peru was cited along with Colombia on the Global Witness study for standing out for its high number of death concerning activists caused by violence. Besides knowledge sharing, NGOs in Peru have provided reports about the Amazonian deforestation

and endangered species, which have allowed to directly naming and shaming the responsible corporations.

Within the three countries, NGOs have addressed not only governments and companies, but also individuals' responsibility to ensure sustainability within this sector. NGOs activities for knowledge creation and sharing have been also present. For example, an International workshop has been organized to raised awareness about the murders committed against environmental activists, notably is Colombia. Informative campaigns such as the Global Witness campaign about environmentalist deaths caused by violence, scientific reports and satellite imagery have allowed NGOs to name and shame both, companies and governments not complying with sustainability standards. NGOs have also invested resources to be present in crucial dialogue arenas related to the oil palm industry. For example, NGOs have exposed their concerns in dialogue arenas at the national level, such as the Colombian National Congress of the Oil Palm Growers Federation, and at the international level, such as the European Commission discussions about the implementation of the trade agreements and the Global Forest Coalition.

NGOs activism through networking

To study the NGOs activism through networking, we have focused on the RSPO because its mission to advance sustainability is specifically addressed to the palm oil market. On the RSPO official website, we have searched for the members from each one of the studied countries. When companies become RSPO members, they have engaged to implement efforts to comply with the P&C. However, countries differ in their national laws and cultural particularities, which has raised a problem for some criteria such as minimum wages for workers. Therefore, the RSPO P&C have been further adapted to be used by each country through National Interpretations⁵². Considering that interpretations may differ, the RSPO has specified to which country belongs each member. Whereas all members have been required to actively support the implementation of the RSPO P&C, there have been three different membership categories and, according to the country, different interpretations of

⁵² RSPO. National Interpretations. <http://www.rspo.org/certification/national-interpretations>. (Consulted the 21.10.2017).

the criteria have been undertaken. According to the RSPO webpage⁵³, there are three membership categories; *Ordinary* for organizations directly involved with the palm oil supply or associated NGO; *Affiliate* for organizations or individuals that are not directly involved in the palm oil supply chain; *Supply chain associate* for organizations that have business activities along the palm oil supply chain but limited to using not more than 500 metric tones of palm oil annually.

The RSPO has a total of 3,583 members, among which 39 environmental NGOs and 12 social NGOs. In the case of Colombia, 35 members have been registered⁵⁴. We could observe that, the number of new Colombian RSPO per year increased from 2009 with 5 members joining the RSPO⁵⁵, to 14 in 2012⁵⁶, to 24 in 2014⁵⁷, to 26 in 2015⁵⁸, to 33 in 2016⁵⁹ and finally to 35 in 2017⁶⁰. The highest number of new members was registered in 2014 and in 2016 when 10 and 7 Colombian new members respectively have joined the RSPO. Among the Colombian RSPO members we have found mostly *ordinary* members, represented by companies on the growing, processing and trading sectors of oil palm. The Colombian companies that we have analyzed on the present paper have joined the RSPO with a small time difference; Whereas Indupalma has become a member in 2012, Aceites Manuelita and Oleflores has joined the RSPO in 2014. It is interesting to notice that, other important oil

⁵³ RSPO. Membership categories. <http://www.rspo.org/members/categories>. (Consulted the 23.10.2017).

⁵⁴ RSPO. Impacts. Certification in Numbers. <http://www.rspo.org/about/impacts> (Consulted the 25.10.2017).

⁵⁵ In 2009, the new Colombian RSPO members were Hada, Poligrow Colombia, Teamfoods Colombia and Fedepalma

⁵⁶ In 2012, the new Colombian RSPO members were Aceites, Biocombustibles Sostenibles del Caribe, Daabon Group, Fanagra, Grupo Biz Colombia, Indupalma Palm, Naturaleza Energía Sociedad (affiliate member), Palmaceite and Hacienda la Cabaña

⁵⁷ In 2014, the new Colombian members were Aceites Manuelita, C.I. Biocosta, Extractora El Roble, Extractora Frupalma, Extractora la Gloria, Fábrica de Grasas y Productos Químicos Limitada Grasco Limitada, Fundación Proyección Eco-Social (affiliate member), Oleoflores, Palmas del Cesar, Palmeras de la Costa

⁵⁸ In 2015, the new Colombian members were Extractora Palmariguaní and Indutrade Colombia

⁵⁹ In 2016, the new Colombian members were BioAp Biología Aplicada (affiliate member), Extractora del Sur de Casanare, extractora sicarare, Goldchips (affiliate member), Gracetales limitada, Indutrade Sociedad de Comercialización Internacional, Protecnic Ingenieria.

⁶⁰ BCS Öko Garantie Colombia (affiliate member) and Bio D.

palm production countries such as Malaysia⁶¹, count with some national NGOs as members of the RSPO. However, Colombia has none neither environmental nor social NGO registered as a RSPO member.

In the case of Ecuador, 11 entities have been registered as RSPO members. According to the RSPO website, the firsts two Ecuadorian companies to have joined the RSPO were Ancupa and Industrias Ales in the 1970s. However, we have assumed this date to be wrong, considering that the inaugural RSPO meeting had taken place in 2003 and the first companies declaring their intention to participate have done it in 2004⁶². A third Company, La Fabril, has joined the Ecuadorian RSPO group in 2009, followed in 2010 by Industrias Danec. Between 2013 and 2016, only one new member per year has joined the RSPO; Comercializadora Internacional Ciecopalma in 2013, Inalproces in 2014 and the Asociacion De Productores Y Comercializadores De oleaginosas Y Frutas Organicas in 2016. Finally, the higher number of new members has been registered in 2017 when four companies, Olijoya Industria Aceitera, Organiz Supply, Sistema de Extraccion de Palmiste Siexpal and Oleodavila, joined the Ecuadorian RSPO group. Alike the Colombian case, Ecuador has not registered any neither environmental nor social NGOs as a RSPO member. There has been almost one new member par year, the only year that has witnessed a higher number of new members was 2017 during which 4 companies became RSPO members.

Compared to the two previous countries, Peru has witnesses the lowest number in terms of RSPO members. The first Peruvian company to join the RSPO has been Olpesa in 2012, followed by Industrial Alpamayo and Palmas del Espino in 2016 and finally by two more companies, Alicorp and Inka Crops, and one association, Junta Nacional de Palma Aceitera del Peru, in 2017. In total, Peru has 6 RSPO members. It has been interesting to notice that the Peruvian RSPO participation has been relatively recent considering that the first Peruvian member to join the RSPO did it in 2012. Like Colombia and Ecuador, Peru has not registered

⁶¹ According to the RSPO webpage, 6 Malaysi environmental NGOs have refistered on the RSPO; WWF Malaysia, Malaysian Nature Society, Leap Spiral, Oragutan Conservation Programme, Global environmental Centre, Borneo Rhino Alliance, Borneo Conservation Trust.

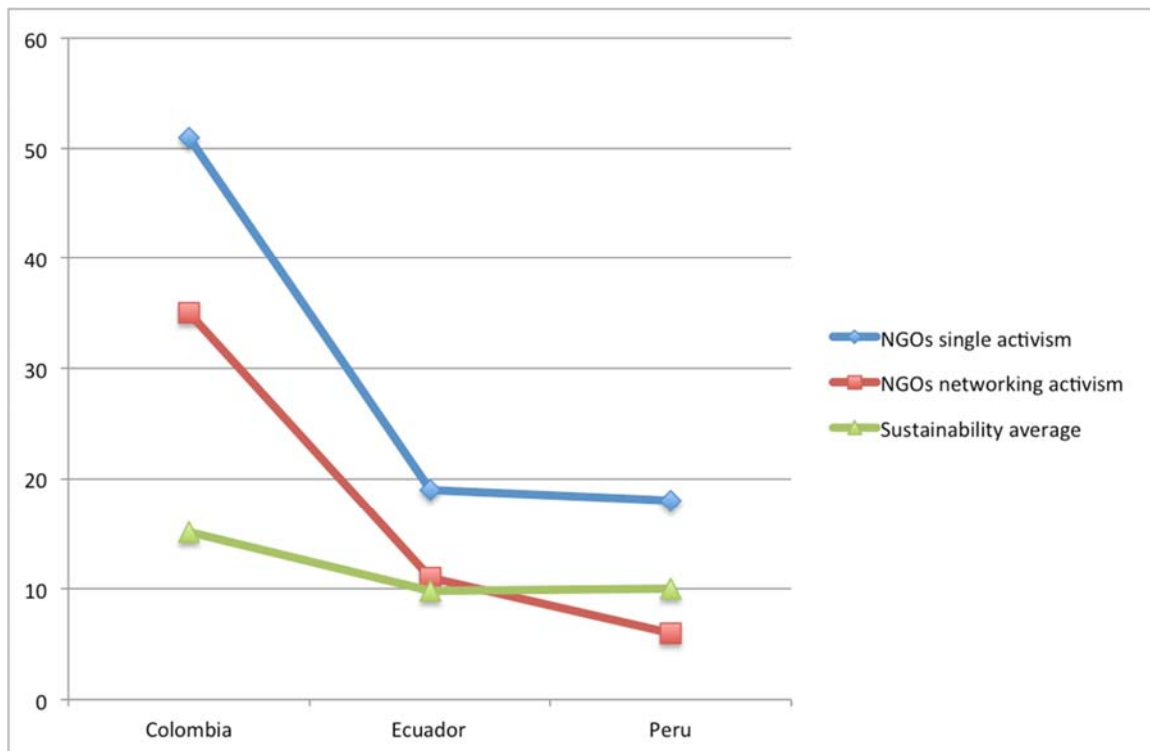
⁶² RSPO. About us. <http://www.rspo.org/about> (Consulted the 25.10.2017).

any environmental or social NGO as a RSPO member. It is important to know that, even when a company becomes a RSPO member, it does not receive *de facto* the sustainability certification. Companies most have presented efforts and have followed a particular procedure in order to acquire the certification. However, the act of becoming a member has shown the companies' willingness to comply with the RSPO P&C criteria and to improve the sustainability of their production practices.

Correlation of variables and results

Figure 7 has been build with the results gathered from our dependent and independents variables. Thus, the illustrated data has referred to three different variables. First the NGOs' activism level as single actors. This variable has been measured through a media publications' research by country. The second variable has been represented by the NGOs' activism through networking. This variable has been measured according to number of RSPO's members by country. Finally, the third variable has represented the average of the companies' sustainability level in each country. As *Figure 7* has presented, our results have displayed a clear correlation among these variables. The observed correlation between the NGOs activism as single actors and the sustainability level of the companies' production practices, has allowed us to verified H1, which has stated that *countries displaying a high level of NGOs activism will also display a high level of sustainability regarding national private production practices*. Colombian case study has displayed both, the companies with the highest sustainability level of the POIG selected indicators satisfied, with an average of 79.4%, and the highest NGOs' activism as single actors, with 51 media sources presented. In the other hand, Ecuador and Peru have shared similarities regarding both, the sustainability level which scored 51.1% and 52% for each country, and the NGOs' activism level with 19 and 18 media sources respectively presented. Explanatory factors for this correlation have been found in a cross-case level between countries, but also in a case study level within each one of the countries.

Figure 7: correlation among variables



Regarding the cross-case study, as it has been previously stated, we have observed a correlation between the NGOs' activism measured through media sources available by country and the average sustainability level by country. Based on to the agenda setting theory, we have observed that with 1410 media sources referring to the oil palm Colombian industry, this sector has been relatively perceived by public opinion as having more salient importance than in Ecuador and Peru with 486 and 605 media sources respectively. This is probably because the Colombian oil palm production has started relatively earlier and has become the fourth world ranking in terms of production. We have estimated that the earlier development of the industry, the relatively higher production level and the internal armed conflict in Colombia have incentivized NGOs to invest more resources in the Colombian oil palm industry than in the other two countries. In fact, NGOs activism have started relatively earlier in Colombia than in Peru and Ecuador (whereas the first Colombian media sources dated from 2004, both Peru and Ecuadorian first sources dated from 2007) and it has been particularly straightforward with the implemented terminology. In contrast with tis

counterparts, Colombian media sources' headlines contained particularly often terms such as "blood", "death", "violence", "war" and "human displacements". By stressing the relation between violence and the Colombian palm oil industry, NGOs have succeeded in framing the national public perception towards the believe that sustainable corrective measures are fundamental for the sector's development.

The Peruvian and the Ecuadorian results regarding companies' sustainability and NGOs activism have been very similar. However, Peru has witnessed a slightly lower NGOs' activism level and a slightly higher sustainability level. To understand the slight discrepancy regarding the sustainability level, we have taken into consideration the origins of the studied companies. In fact, palm oil cultivation has been introduced in Colombia and Peru as a development strategy alternative from illegal cropping. Therefore, two of the Peruvian companies have resulted from the collaboration between public instances and international organizations such as the UNODC collaboration to provide as alterative for sustainable development. Thus, we have assume as an explanatory factor that these companies, resulting from social projects, have tended to the respect sustainability criteria slightly more than its' Ecuadorian counterparts. Besides, civil society denounces about environmental and social violation have obtained through activism that the Melka group withdraws from the RSPO and suspends its plantations in Peru, which has probably raised awareness among the other Peruvian oil palm companies. In fact, we have observed that Peruvian media sources were the only ones denouncing explicitly a particular company name. In the other hand, to understand the slight discrepancy regarding the NGOs' activism level, we have taken into consideration the late development of Peruvian oil palm industry. Whereas Colombian and Ecuadorian have started their industrial production since the 1980s, the Peruvian oil palm production has increase since the year 2006 (Potter 2015). Considering that the negative externalities of the oil palm Peruvian expansion have as a result manifested recently, we have speculated that NGOs efforts at these regard have not been yet completely reflected by the media.

The case study analysis has allowed us to observe an interesting correlation between the companies' size and their sustainability level. Whereas larger companies have displayed a

relatively higher sustainability level, smaller companies have displayed a relatively lower sustainability level. This tendency could be explained by the high costs that required the adoption of sustainability measures. In fact, the Peruvian company N2p has highlighted that the main obstacles for a company to comply with sustainability criteria have been related to the absence of resources. First, an absence of economical resources considering large investments needed in plantations in order to implement the required measures. Second the absence of information and training within the country. For example, in the Peruvian case the RSPO P&C national interpretation has not yet been provided. Therefore, larger companies, with larger economic power, have the resources to circumvent these obstacles with relatively lower opportunity costs to collaborate with experts from other countries or by investing important quantities in new and cleaner technologies. We have also observed that the companies have shown more concerned about some criteria than others. In fact, we have observed that issues such as food security and GMOs have not been perceived or presented as a public problem by the companies.

Figure 7 has also illustrated the results related to the NGOs activism through networking. This information has allowed us to verify H2 according to which *if NGOs' implement efforts in synergy with other national actors and work in collective action through network governance, then national private production practices will display a higher sustainability level*. After our results, we have observed a direct stark correlation between our two independent variables. In fact, where NGOs activism has been higher, NGOs activism through networking has also been higher. This correlation has been also respected between these two variables and the sustainability level in the case of Colombia. The latter has displayed the highest RSPO participation level with 35 Colombian members, the highest NGOs' activism level, and the highest sustainability level. In fact, it is interesting to notice that, in our study, the only three companies that have all ready acquired the RSPO certification, belong to the country with the highest NGOs activism and RSPO participation level. Besides, these three companies, mainly N1c and N2c, which have scored the highest sustainability level, have shown particular attention in their documents to bilaterally collaboration with NGOs such as TNC, Proforest and the IUCN. As previously explained, the correlation among these three variables has been also verified in Peru and Ecuador but

with a slight deviation. The latter has been reflected on the fact that whereas the Peruvian suitability level has been the second highest in our study, Peru has witnesses the lowest and latest RSPO participation, considering that the Peruvian first member to participated in the RSPO dated from 2012, in contrast with Colombian and Ecuador which first member dated from 2009. However, the differences among the Peruvian and Ecuadorian have been minor. This slightly deviation has been explained by the particularities characterizing the Peruvian companies context.

VII. Conclusion

The results of this study have served to support the responsive governance theory and to prove our hypotheses. We have confirmed through our cross-case analysis the correlation between the countries production practices' sustainability, the level NGOs activism as single actors, and the level of NGOs' activism through networking. Besides, the study-case analysis has allowed us to obtained comprehensive results about the specificities of each country's oil palm industry. In fact, the NGOs activism has played a crucial role on the adoption of sustainability practices by the companies. We have observed this influence though the companies' documents, which have tendency to highlight the efforts to achieve the sustainability requirements dictated by NGOs. The media sources analyzed from each country have also given insights about the activities implemented by NGOs to exerted activism. NGOs regularly presence in international gathering, media statements, denouncing studies and collaboration with companies has suggested that their participation as a group of interest on the complex plurality of governance has contributed to frame companies towards the need of implementing sustainable measures in order to be accepted by the public opinion.

Besides, several companies have referred to their RSPO participation as an opportunity for economic concurrence. As Opesa has affirmed on its ACOP RSPO (2016), "It has been shown that the RSPO certification allow us to open the doors to more demanding international markets seeking commitments to economic, social and environmental sustainability." Therefore, along with the cross-case study analysis, the case-study information has suggested that collective action among groups of different interest has increased both, the cost for non-compliance and the benefits to comply. We have also

observed that the concept of sustainability has matured from the concept conservation in the 1990s to a new concept that involves applying systems thinking to anticipate unintended consequences (Laszlo and Zhexembayeva 2017, 2). In the other hand, we have also observed that there has been a strong correlation between the companies' size matter when complying with sustainability criteria. Larger companies have shown a tendency to higher compliance. In fact, the OECD (2007, 3) has declared that “[E]nsuring compliance of small and medium-sized enterprises (SMEs) with environmental regulations is a substantial policy challenge for environmental authorities worldwide. In particular, their size and number limit the effectiveness of conventional regulatory and compliance assurance approaches developed for large enterprises.”

Our study has also shade light on the importance of the constructivist approach for the public problems agenda setting. “Generally speaking, the more attention a story is given by the media, the more it appears important to the public. On a second, often less explicit level, media tell their publics how to think about what matters – is it good revolting?” (Hunter et al. 2013, 26). It fact, the oil palm industry has been presented after two different images. In Colombia and Peru, it has been first presented as a sustainable alternative for illegal cropping. However, the negative externalities generated by this industry have drawn the civil society awareness which, through advocacy, has framed the public opinion. Thus, a new image of this industry has been related to the emerged of a social problem perceived as undesirable and the need to implement sustainable measures to ensure social and environmental wellbeing. The evidence from this study indicates that where NGOs advocacy has been higher and collaboration with other entities has been stronger, the sustainability agenda setting has achieve more success among private companies.

Considering the effectiveness of these two agenda-setting strategies, NGOs have aimed to reinforce them. In one hand, in order to achieve desired outcomes, NGOs have increased their advocacy strategies by developing its own media. Implementing new media communication tools has allowed NGOs to influence straightforward the public opinion without depending on the traditional mainstream media often controlled by a limited number of stakeholders with high economic power (Hunter et al. 2013; Bennett 2003). In the other

hand, NGOs activism through networking has been also reinforced. For example, we have observed that the RSPO has not achieved unanimity among leading NGOs. However, another effort has taken place with the POIG. This has reflected the importance that NGOs give to collaborate with other entities to join efforts to achieve one shared objective.

Finally, the two most important limitations about our study lie on the dependent variable. First, based on a documentary analysis, our study results have been analyzed through a subjective regard, considering that the information provided by the companies has been necessarily analyzed through a partly subjective interpretation in order to assign if the company has complied or not with the criteria. The second limitation has been related to the availability of the companies' information. As we have seen with one of the Colombian companies, N3c, sometimes the sustainability measures that have been implemented *the facto* by the company without being reflected on the consulted sources (websites, sustainability reports, RSPO ACOPSs). Nevertheless, we have believed the most important efforts should have been reflected on the companies' communication strategy considering the importance of sustainability for the companies' public image.

VIII. Annex-1

This annex gathers the information used to complete Table 1. Each one of the companies was analyzed under the selected POIG criteria through an Internet based research. In each company segment, the first paragraph refers to the consulted documents where the information was found. Then, the sustainability level accorded is written in parentheses next to each criterion.

Oils Manuelita (N2c)

The information was found on the Company's website⁶³ where ample and detail information was found. Besides other information, the Company's yearly sustainability reports for 2012, 2013-2014 and 2015-2016, press releases and informative reports were found. The Company is a RSPO member since 2014. Therefore, Oil Manuelita's RSPO ACOP were also consulted for the years 2015 and 2016⁶⁴

A new Strategic vision for 2020 has been implemented through a new program called MEGA 2020. The strategy aims to encourage social, environmental and economic sustainability. Regarding its environmental engagement, the Company highlighted to have the RSPO certification and affirmed to have respected property rights when developing palm oil plantations. Whereas terms such as "responsible use of resources" and reforestation programs such as "*Siembra una huella, siembra vida*" manifested the Company's concern about the HCS, there was no explicit statement saying that plantations have been developed exclusively in degraded land. Even if respecting property rights do not necessary means to avoid deforestation, we have considered the Company's concern about HCS protection (0.5). In the other hand, the Company affirmed to have collaborated with the Nature Conservancy organization to defined HCV and to implemented environmental and social impact assessments in order to protect them (1).

Programs for both, preventing and reducing pollution have been implemented along with monitoring programs to measure the results⁶⁵. Efforts to decrease GHG emission were reflected on concrete programs. For example, the project implemented in the department of Meta aiming to cut down methane emissions in order to decrease global warming. Also, the Company regularly published data resulting from the emissions and has fixed as an reduction objective of 83% of the total GHG emission in the palm oil biodiesel plans (1).

Regarding the use of chemicals on the fields, the Company affirmed to have progressively changed chemicals fertilizers to organic ones (1). However, neither information nor concern

⁶³ Manuelita. <http://www.manuelita.com> (Consulted from October 2016 to October 2017)

⁶⁴ RSPO. Members. Aceites Manuelita S.A. Profile. <http://www.rspo.org/members/3294/Aceites-Manuelita-S.A> (consulted the 07.08.2017)

⁶⁵ Manuelita. El Grupo. Certificación RSPO. <http://www.manuelita.com/general/certificacion-rspo/> (consulted the 07.08.2017)

about pesticides was found (0). Also, GMO information was not found in the Company's reports (0).

The Company has shown concern about responsible water use, and with this purpose, management initiatives have been implemented (1). Information and data about the Company's water utilization has been also publicly accessible in the consulted reports (1).

Regarding wild species protection, the Company affirmed to have followed the Nature Conservancy guidelines in order to preserve ecosystems. Based on this collaboration, the Company has classified 686 hectares under the status of preservation area in order to protect biodiversity (1). Monitoring programs to measure the impact on biodiversity have been also implemented in order to reduce negative externalities (1).

As a member of the Global Pact, the Company has engaged to respect the standards regarding Human Rights, Labor conditions, Environment and Anticorruption. According to the Company, the participatory mechanisms allowing taking into consideration the stakeholders interests were provided. For example, for local communities, surveys about social conditions, spaces for dialogue and available information about the Company's activities have been provided. Besides, negotiation procedures and mechanisms for grievances and complains were available for local communities (1).

The Manuelitas' Group, to which the Company belongs, expressed its concern about food shortage and affirms to have implemented 27 programs to ensure food security for local communities. Whereas these programs have been implemented in Colombia, they have not been implemented in the palm oil sector but in the sugar cane plantations. Therefore, we assumed it existed the concern about food security, but programs to reduce the food shortage risk have not been implemented in the palm oil sector (0.5).

The Company's has based its social strategy in four axes: education, housing, supplementary income and health. Efforts have been implemented in these three sectors to improve communities' conditions. Basic education has been encouraged through economic support to local institutions, health coverage and housing programs have been supplied and micro-enterprises to provide new job opportunities have been created. Sportive and cultural activities have been also organized to encourage integration within the local communities. To foster pacific interaction among the young people, two programs have been implemented: *Aulas de Paz* and *Fundación Paz y Bien* (1). In order to analyze the impact of social programs, the Company has monitored the results through a fixed indicator called *Línea Social Directa* (1).

Regarding workers' rights, The Company has fixed child and forced labor eradication as an objective. This statement appeared only in the first report (2012) because the Company ensured not having detected any risks regarding forced or discriminated labor within its facilities. Regarding workers' rights, the Company based its strategy on the *Seguridad y Salud en el Trabajo* (SST) requirements and has aimed to provide reliable workplaces, with healthy and safe environment. The reports stated that, during 2012, the salary paid by Manuelita's Oil was higher than the legal salary required by the Colombian government (1). The Company has also recognized and supported the workers' Union and the association

right. Reports have also shown the Company's concern to achieve social security coverage and both, programs and results at this regard. Based on the reports, we considered the Company to have shown concern about the worker's conditions and to have implemented several measures in order to ensure fair contracts and safe infrastructure (1).

Programs to improve smallholders' productivity have also been implemented. Training to improve efficiency has been provided. In fact, the Company affirmed to have improved local communities conditions by prioritizing local suppliers. According to the reports, independent suppliers harvest the other 72%. To ensure suppliers' sustainability, the Company has provided training mostly based on measures to achieve productivity improvement and environment considerations (1).

The information provided by Manuelita Oils corresponds to the GRI indicators with Deloitte's endorsement (sustainability report 2012). Sustainability reports were available on the Company's webpage along with other publications. The Company also shows its transparency by engaging to international programs such as the ISO 14001 certification, the United Nations Global Pact and the Global Reporting Initiative (1).

Oleoflores (N3c)

The Company's information was gather from its website⁶⁶, which provided among other information the Company's both social and the integral management policy. The Company is a RSPO member since 2014. Therefore, information was also available on the Oleflores RSPO ACOP for the years 2015 and 2016⁶⁷. Along with the other two Colombian companies, Oleflores has been one of the three companies that have already achieved the RSPO P&C Certification in our study.

Regarding the environment, the Company affirmed environmental protection to be one of its constitutional principles. Regarding HCS areas, the Company's website referred to the collaboration that has been achieved with the Colombian Government and the Embassy of Netherlands to avoid deforestation. Besides, according to the RSPO ACOPs, the Company's plantations have only been developed where illegal crops used to be established. Therefore, even if the Company did not explicitly referred to the term HCS and that information about forest protection was brief, we considered the presented collaboration efforts as a via of action to prevent the development of plantations in HCS areas (1). Regarding HCV areas, even if information about the biological, ecological and cultural preservation was limited, Oleflores has been one of the only companies in our study that has achieved the RSPO certification for a percentage of its plantations. According to Oleflores RSPO ACOP (2015), the Company has set aside an area for land management including HCV (1).

Regarding GHG assessment, the Company's RSPO ACOPs affirmed measurements through its Industrial Services Department have been carried. Whereas GHG emissions have not been publicly published, the Company affirms to comply with the GHG's local authority, which

⁶⁶ Grupo Empresarial Oleflores. <http://www.oleflores.com> (Consulted the 07.08.2017).

⁶⁷ RSPO. Mmembers. Oleflores SAS. Profile. <http://www.rspo.org/members/3095/OLEOFLORES-S-A-S> (Consulted the 07.08.2017).

verifies the emissions' condition in a yearly audit (1). Regarding efforts to decrease emissions, the Company stated to submit an Environmental Plan to the local government approval before constructing infrastructure and starting operations. Besides, the Oleflores RSPO ACOPs stated the Company has organizational policies that are in line with the RSPO P&C in terms of carbon footprint management. According to the RSPO P&C, carbon footprint policies should aim to decrease GHG emissions (1).

Regarding fertilizers, Oleflores informed about its organic fertilizers production and highlighted the environmental advantages, which displays the Company's concern about organic fertilizers utilization (0.5). However, there were no explicit comments related to fertilizers or pesticides (0) implemented particularly in the oil palm sector. As a member of the RSPO, we assumed the Company's concern for a water management program. This assumption was verified by the Oleflores RSPO ACOPs, according to which the Company has implemented management water programs that are in line with the RSPO P&C such as water management (1). However, no specific program or monitoring results have been published (0).

Regarding GMO, the Company stated to use its own transgenic seed called D x P Dami las Flores, which have a higher yield even in magnesium deficient areas. Therefore, the Company does not forbid GMO from plantations (0). Concerning wildlife protection, Oleflores RSPO ACOPs have displayed the Company has set aside a total of 878 hectares of land management for conservation (1) however, no plans or programs of monitoring have been presented (0).

Information about the Company's social impact was more exhaustive. The Company has published a Social Responsibility Policy based mainly in four objectives. First, to create dialogue spaces allowing local communities and other stakeholders to participate in an integrative way in the Company's palm oil activities. According to the RSPO ACOPs, the Company has implemented a participation policy. Public consultations have been implemented with the local committees in the vicinity of the Company's plantations. These participation tools have guaranteed that any conflict, dispute or any observations coming from the stakeholders to end up in a negotiated solution to everyone (1). According to Oleflores, the Company has procedures to resolve any internal conflict, as for the social or land conflicts, legal directions must treat them and it states not having any conflict (social or land).

Second, the Company affirmed to address its production into social positive externalities in order to improve the quality of life of local communities. Therefore, the Company has created foundations, such as Fundeflores and Fundemaria, aiming to improve education and health within local communities has created foundations (1). Whereas social conditions assessments have been implemented before the programs implementations in order to understand the local context, the Company showed no concern about measuring the post impact of its activities (0.5).

Third, the social policy affirmed to ensure the workers wellbeing by forbidding child labor and any form of discrimination and by promoting respectful, fair and decent contracts and treatment among the associates (1). Since 2013, the Company has also published an Integral

Management Policy, which aims to ensure healthy and safe working facilities to reduce any risk of accidents (1). On this Policy, the Company also confirmed its engagements with different international standards engaged to a quality management system such as the ISO 9001 and the HACCP.

According to the consulted documents, the Company has based its production on Productive and Social Alliances, which have allowed involving smallholders into the production chain with the objective of improving the farmers' life style. The Company affirmed to bring development to smallholders through knowledge sharing, financing and improving productivity, competitiveness and sustainability (1). However, the Company did not explicitly mention examples of workshops' or other measures that have been implemented to achieve this objective.

On the RSPO ACOP about Oleoflores (2015), the Company states not having other public documents such as sustainability reports or policies. Whereas the Company has not sustainability reports, useful but limited information was founded on the webpage documents (0.5).

Palmeras del Ecuador (N1e)

The Company's information was gathered from the Danec Group website⁶⁸, particularly under the "social responsibility" heading where relevant documents were found such as the yearly social responsibility reports between 2013 and 2015, the sustainability policy and the newsletters. The Danec Group is a RSPO member since 2010. Therefore, RSPO ACOPs⁶⁹ were available for the years 2013, 2014, 2015 and 2016.

Regarding its environmental engagement, the Danec Group highlighted its engagement to comply with the RSPO certification. Concerning forest protection, the Group's reports stated that the first plantations (Palmeras de los Andes) were established only on already cultivated land. Besides, when quoting the P&C RSPO criteria, the Group referred to both, HCS and HCV and affirmed to be employing efforts to ensure the respect of these areas in order to preserve nature and protect biodiversity (1).

In 2015, the Group quoted for the first time the RSPO P&C and stated its engagement to quantify GHG emissions. Since then, emissions have been monitored and published (1). The Group stated also to be implementing new practices to decrease the production of GHG emissions (1).

Concerning the use of chemicals on the fields, the Group stated in 2014 to be employing efforts to develop genetic fertilizers. Considering the plague, it could have been interpreted as emergency measure. However, the Group did not mention chemicals implementation as being a last option measure (0). In the other hand, many measures to ensure workers security from pesticides have been mentioned. The latter shows the Group's concern about pesticides (0.5). However, no efforts have been implemented to reduce their utilization.

⁶⁸ Danec. <http://www.danec.com/es/> (Consulted the 07.08.2017).

⁶⁹ RSPO. Members. Industrial Danec SA. Profile. <http://www.rspo.org/members/494/Industrial-Danec-SA> (Consulted the 07.08.2017).

Regarding GMOs, the Group affirmed to be working with modified organism in order to improve production yields. Therefore no efforts have been made in this regard (0). In contrast, water accountability was often quoted as a priority for the Company. The Group affirmed to be engaged with water sources quality preservation and highlighted the construction of a water plant to process the wastewater in order improve the water's quality (1). Data about the water sources' quality was publish and is available on the Group's reports (1).

Finally, to preserve wildlife, the Group has created a photograph concourse about wild local species among the workers. The objective was to encourage a new view about biodiversity incentivizing people to help preserving of local species (1). Besides, in the 2016 sustainability report, the Companies affirmed to implemented efforts to comply with treated species preservation objective of the RSPO P&C. According to the Company's statement, when the high conservation values have been affected, the impact has been notified to the authorities so necessary measure could be implemented. Therefore, wildlife monitoring has taken place and the information has been shared with the pertinent public authorities (1).

In the social aspect, the Group affirmed to base its activities on dialogue and other resolution mechanisms. The Group also provided systems where stakeholders can transmit their complains or suggestions (1). Regarding food security, there were no documents referring to this subject (0). In the other hand, social conditions have been improved by the Group, which affirmed to work in harmony and respect with the local communities with the objective of improving people wellbeing; handicap people have been welcome to participate in productive activities in order to facilitated social integration, social impact assessments have taken place through surveys in order to understand the local communities perspectives about the Company's activities (1), divers events have been also organized in favor of the local communities' integration. For example: sportive and educational gatherings along the year. Trainings are also provided for the workers and their families (1).

Regarding workers rights, the Group affirmed to be engaged with the industrial national norms aiming to ensure the workers' safety and highlights to have kept the same amount of workers even on times on economic crisis. Besides, human rights, including the right of association, were recognized by the Company's manager statement and have been encouraged to be respected. Health programs have also been implemented and illegal activities, such as forced labor, have also been avoided through the international alliance for a safe commerce (BASC) (1). The Group also expressed its concern about temporal contracts and provides several procedures to prevent its abuse (1).

The Group provided support to small holders by collaborating with independent suppliers and transferring them technology, providing training and sharing knowledge in order to improve productivity and to optimize resources (1).

Considering that the Group documents along with the social responsibility reports were clear and publicly available on its webpage, we considered Danec's provided information as transparent, accessible and complete (1)

Palmar del Río (N2e)

Information was gathered from the Palmar Del Rio website⁷⁰, where general information and documents about the Company's production practices were found. However, sustainability reports were not available and the provided documents were superficial and prioritized images. The Company is not a RSPO member.

The Company's documents did not explicitly referred to the preservation or delimitation of HCS and HCV areas. The documents presented the implementation of a program aiming to protect green areas. Based on this information, we have considered the Company's intention to preserve forests or other HCS (0.5). However, no information or concerned about the outstanding biological, ecological, social regional characteristics was presented, and therefore HCV areas were not taken into consideration by the Company (0).

No reference was found regarding the Company concern about the GHG emissions (0) and therefore we could not considered a willing to reduce them (0). The Company has also stated to use chemicals pesticides to prevent plagues on the fields and to use both, chemical and organic fertilizers to ensure a high yield. According to the plan health department, the Company's control of pathogens has been carried out with biological products. Thus, an implicit concern about the need of using biological fertilizers was observed, but there was no explicit information about an objective or action plan to do so (0.5). Regarding pesticides, the Company stated that environmentally friendly products were only used when possible, because sometimes plagues need not be controlled. Thus, no intention or action has been taken regarding pesticides. These statements did not showed willingness to decrease pesticides through alternatives plagues control methods (0).

Regarding GMO prohibition, the Company's documents display that the Company has been experimenting with hybrids and improved genetic mechanisms to improve the yields since 16 years ago (0).

The consulted documents highlighted the Company's license that has been acquired on environmental impact assessment. This license involves biological management corridors, natural reserves and water quality preservation. The Company affirmed to implement water management programs to control, treat and improve the water sources quality (1). The Company stressed the existence of environmental department to monitor the waste management. The Company affirmed that, through its environmental management program, control and treatment of water effluents has been implemented. Therefore, the intention to control the quality of water sources was present, however information about the monitoring programs is absent (0.5).

Regarding wildlife preservation, the Company assured to provide biological corridors and natural reserves in order to conserve local ecosystems (1). The Company also affirmed that the environmental impact assessments have been implemented regarding biological corridors, natural reserves and the compliance of international norms. Whereas this information displayed the Company's concern to monitor local biodiversity through the

⁷⁰ Palmar del Rio. <http://www.palmar-del-rio.com/sitio/> (Consulted the 07.08.2017).

biological corridors impact assessment, information was too broad and not particular programs implemented especially to monitoring local wildlife were presented (0.5).

Considering the social responsibility category, no information about dialogue spaces with communities (0) or about food security was found (0). Regarding the local communities lifestyle improvement, the Company assured to have provided health programs for both, workers and local communities (1). However, there was none impact assessment to verify if the communities' health has improved (0).

The Company affirmed to provide workers with the appropriate clothing to ensure their safety during the working hours. Measures, such as special clothing and pre-working health studies, have been implemented to ensure the workers' health. Also, security plans regarding the infrastructure were briefly presented. However, no further information was presented about crucial issues such as the safety in terms of infrastructure, workers rights or child and force labor eradication (0.5) and there was no information about the contract terms is provided (0).

Integrative programs to collaborate with small producers have been implemented in order to improve productivity. Besides, the Company affirms to share technology and knowledge with smallholders through agricultural events and workshops (1).

Information was poorly available. No monitoring data has been publicly published and the available documents have been mostly based on general statements. Information should provide more details to have a better understanding of the Company's sustainability efforts. Besides, no sustainability reports were available (0.5).

Industrias Ales (N3e)

Information was gathered from the Company's website⁷¹ where documents such as the Company's Ethic Code were found. The Company is an RSPO member and RSPO ACOP⁷² for the years 2013, 2014, 2015 and 2016 were available. However, the Company has not published sustainable reports.

According to the Industrias Ales' Ethic Code, the Company's activities have always been developed considering social and environmental responsibility objectives. The Company has published the implemented policies in line with the RSPO P&C in the RSPO ACOPs. Whereas water, ethical and labor rights policies were provided, the land use rights policy was absent. In fact, the Company's persistence on the compliance and efforts to guarantee sustainability remain too broad and did not referred to any kind of legislation, program or intention regarding forest deforestation or significant biological local value. The general vocabulary such as "sustainable responsible", if not completed with forest or HCV information, did not allowed us to appreciate if the Company considered forest deforestation (0) and local biological value areas destruction (0) as two negative externalities to be addressed. Regarding GHG emissions, the Company's RSPO ACOPs displayed the

⁷¹ Industrias Ales. <http://www.ales.com.ec> (Consulted the 07.08.2017).

⁷² RSPO. Members. Industrias Ales C.A. Profile. <http://www.rspo.org/members/1170/Industrias-Ales-C.A> (Consulted the 07.08.2017).

Company had not implemented an impact assessment regarding its GHG emissions (0) and there was not published information about future projects regarding efforts to monitor or decrease emissions (0).

Information about chemical in the fields was not specified. Whereas we assume that the Company, as a future RSPO member, to have the intention to reduce plantations chemicals information about this issue was not presented (0). On its website, the Company affirmed to have created a new enterprise, Inbioales, in the year 2000 to produce organic fertilizers. However, other than the citation about Inbioales creation, no further information about fertilizers environmental advantages was mentioned (0). The Company information neither mentioned anything about forbidding GMO (0).

In other hand, the Company's RSPO ACOPs reports affirmed that the Company has implemented water management policies in line with the RSPO P&C criteria. This involves water management plans aiming to maintain the quality and quantity of water resources and to measure the results. Thus, water management programs have been implemented (1) and we observed the intention to measure the results (0.5). However, considering that these results have not been published or quoted, we do not consider that they are *de facto* monitored.

Regarding wildlife, positive contributions for preservation have been made through the delimitation of 957.15 ha as natural reserve (1). Whereas the Ethic Code affirmed the Company's will to understand its environmental impact in order to ensure harmony with the nature, the Company did not publish any impact assessment program to monitor local wildlife situation and evolution (0).

Regarding the social realm, the Company affirmed to consider local communities development as an important aspect. However, it did not mentioned any kind of dialogue space for placing complains in order to involve local communities in the decision making process. Even if the Company states many times to seek the implementation of P&C RSPO criteria, which requires that conflicts regarding land and local communities should be mapped out in a participatory way, there was no information regarding the Company's concern about involving local community on decision making neither about possible participatory mechanisms to implement (0).

In order to improve local communities lifestyle, the Company supported the public school "Escuela Fiscal Gabriel Mistral" which is placed near the Company's palm oil plantations. The Company has paid certain professors' salary in order to ensure the children's education. The Company has also financed the books for the workers' sons going to this school. Besides, the Company highlighted the job opportunities that have been provided, benefiting more than 1000 Ecuadorian families. The latter have benefited from health programs and education for the communities (1). However, no social impact assessments have been mentioned (0).

The Company affirmed to respect and promoted human rights and workers dignity. The Ethic Code highlighted that all kinds of discrimination as being dismissed. The Company also explicitly affirmed to comply with all the legislation regarding workers rights, such as fair contracts in terms of salaries, social security and working safety (1). To ensure working

safety, strict labor measures are implemented on the working area, and forced and child labor has been forbidden (1).

According to the Company's RSPO ACOPs, no independent smallholders groups have been supported. However, on the Company's website, information about the collaboration with supply allies. The Company affirmed to promote the productivity growth among the palm oil suppliers in order to improve their lifestyle conditions. With this goal, the Company stated to have provided knowledge helping them to increase income and equipment for harvesting (1).

The information about the production practices was gathered from the Company's website and RSPO ACOPs. Apparently other electronic documents have been published, but they required a password to access them. No sustainability reports were available (0.5). In general, the available information was too general. We could appreciate the Company's will to address sustainability; however there have been very few defined objectives and programs to achieve this goal.

Palmas del Espino (N1p)

Information was gathered from the Grupo Palmas' website⁷³ where, among other documents information, annual reports were found for 2009, 2010, 2012 and 2013-2014. The Company is a RSPO member since 2016. However, RSPO ACOPs⁷⁴ have not been provided.

According to the Group's sustainability policy that has been published on its website, Palmas del Espino has been engaged in producing palm oil free of deforestation. Thus, the Group affirmed that its companies have defined and protected the HCV (1) and the HSC (1) areas. According to the statements, plantations have been developed only under the opportunity of already deforested land left by illegal crops or migratory farming.

Both companies have shown concern about GHG emissions by acquiring new infrastructure in order to reduce them. Besides, the companies have affirmed to have applied a monitoring plan to measure the impact of the efforts made in this regard (1). Reports about GHG emissions were available on the 2011 report from the period 2007-2011 (1)

The companies affirmed to have implemented new alternative techniques, instead of chemical pesticides, to prevent plagues. Whereas companies affirmed to have implemented action plans to reduce the utilization of agrochemicals in general, only actions regarding pesticides organic alternatives were mentioned. Palmas del Espino has already introduced bugs utilization as an alternative to pesticides (1). However, there was no information about undertaken actions aiming the chemicals fertilizers substitution (0.5).

No relevant information about the GMO palm oil crops was found (0).

⁷³ Grupo Palmas. <http://www.palmas.com.pe/palmas/> (Consulted the 07.08.2017).

⁷⁴ RSPO. Members. Palmas del Espino. Profile. <http://www.rspo.org/members/4802/Palmas-del-Espino-S.A> (Consulted the 07.08.2017).

Regarding water management, both Companies affirmed to have applied water management plans. Besides, treatment plants have been build to maintain the water sources quality (1). The results of these measures have been monitored and have been publicly published on their reports (1).

In order to preserve wildlife, the Companies presented the delimitation of a reserve green area where monitoring activities about the local diversity have taken place (1). According to these results, the Companies affirmed to undertake actions to decrease negative externalities. Besides, a forestall reserve area was maintained along with a small zoo where danger species have been harbor (1).

Regarding the social realm, according to the Companies RSPO ACOPs, the Palmas Group has implemented a procedure for internal and external communications and it is developing a systematic program of attention for stakeholders' complaints (1). Also, on the heading "frequent questions" of the Grupo Palmas' website, the Group referred to the "food security" subject. Whereas the information did not presented an action plan, it showed the Company's concern about this issue (0.5).

Both companies highlighted the importance of local communities. Therefore, recreational activities have been organized and local handwork has been prioritized in order to create employment for local communities. The companies have also provided health campaigns and new infrastructure for the schools and the city with the objective of improving local communities lifestyle (1). However, no information about social assessments was found (0)

The Group affirms to have forbidden all kinds of discrimination as well as child labor. To prevent these abuses from happening, the companies have make obligatory the use of identification obligatory. Social security has been also provided, for example life insurance, food subventions, health service and education are provided (1). Workers rights, such as the association one, have been claimed to be recognized and respected. To ensure working security, SST Committees have been established. However, the Company affirmed to increase handwork during certain seasons, meaning that temporal contracts have been used (0.5). According to the Group reports, in order to ensure the optimal palm oil, technical agricultural training for smallholders has been implemented (1).

The Group has provided extensive information about the sustainability of its companies' practices. Even if there are no documents uploaded on the RSPO ACOPs website, the Organisation's Commitments Toward Sustainability questionnaire for members has been fulfill by the Group was available. Beside, on the Group website, sustainability reports were available with substantial information (1).

Oleaginosa del Perú (N2p)

Oleaginosa del Peru (OLPESA)'s information was gathered from its website⁷⁵ and from the RSPO ACOPs⁷⁶ available for the years 2014, 2015 and 2016. Olpesa is a RSPO member since 2012.

The Company affirmed that, in order to respect the preservation of primary forest, plantations have only been developed in certified areas with the status of secondary forest (1). However, even if the Company stressed the importance of the RSPO P&C, information regarding the intention or concern to defined and protect HCV was not presented (0).

Regarding GHG emissions, the Company's RSPO ACOP in 2016 stated the evaluation of GHG has not started. However, according to the same document, training has been carried out on the application of Palm GHG calculator to determine the carbon footprint generated to define the future mitigation plan. Therefore, we used the latter information to considered the Company's concern about both reporting about emissions (0.5) and implementing future efforts to decrease them (0.5).

The Company affirmed to avoid the used of prohibited chemicals and to limit the use of chemicals in general on its fields. Therefore, we observed the Company's concern about minimizing pesticides (0.5) and fertilizers (0.5). Even if the Company's website displayed a biological fertilizer created with the industrial palm oil wastes and highlights its environmental and practical advantages, we could not know if this product has been applied by the Company as an alternative to chemicals or if it is only for external selling.

No information about the utilization of GMO was presented (0). Regarding water management, the Company affirmed the exploitation of natural resources in a responsible way as a priority. With this objective, the Company has built a wastewater treatment plant. We have considered the latter information as a signal of the Company's concern about water management (1). However, there were no clear objectives presented at this regard, neither data about water use monitoring (0). Information about wildlife preservation was also absent. The Company did not present any program to ensure a positive contribution for local species conservation (0) and did not provide data about monitoring the local wildlife context (0).

Regarding the social realm, the Company highlighted the participation and inclusion of the local communities. In this regard, the Company provided a public system for petitions, questions, complains and suggestions. Even though this is not a dialogue space, it has provided a way for Stakeholders to communicate and been taken into consideration (1). However, information about food security was not provided (0).

Regarding social conditions, the Company ensured social wellbeing aspect, along with economic and environmental aspects, as one of the three axis of its production policy. However, there are no positive measures to improve the lifestyle of local communities. In fact, even if support and training is provided to workers, the Company did not presented any

⁷⁵ Olpesa. http://www.olpesa.com/quienes_somos (Consulted the 07.08.2017).

⁷⁶ RSPO. Members. Olpesa. Profile. <http://www.rspo.org/members/1355> (Consulted the 07.08.2017).

positive contribution to improve key social issues among local communities such as housing, healthcare, education and women empowerment (0). The information about a social assessment was also absent (0).

The Company affirmed to comply with labor legislation regarding working rights and to implement effort to ensure workers security by improving the working infrastructures and through training about risks prevention (1). However, the Company did not mention the terms on which are made the contracts with the workers in terms of social security, temporality and salary (0).

The Company mentioned as an achievement the integration of small farmers into the oil palm production chain. According to the RSPO ACOP 2016 report “the company provided training on best social, environmental and agronomic practices to smallholders that provide fresh fruit bunch (FFB) and provided them with tools that were designed to document the best field practices and thus ensure timely information” (1).

The information on the Company’s website remained too broad and superficial. Even if the company quotes the RSPO P&C as the base of its sustainability strategy, there was not detail information about the programs or measures that have been undertaken. However, this absence was partly compensated by the information provided by the RSPO reports about the Company. Three ACOP reports were available and the RSPO Organization’s Commitments Toward Sustainability questionnaire. In the ACOP 2015, the Company affirms that there is no sustainability report yet (0.5).

Palma Aceitera de Loreto y San Martín (N3p)

Information about Palma Aceitera de Loreto y San Martín (Indupalsa)’s production practices has been gathered from only from the Company’s website⁷⁷. The website also provided videos explaining the Indupalsa producing practices. The Company affirms to be in process to become a RSPO member.

The Company’s constitutive objective was to replace illegal crops by palm oil plantations and to stop deforestation. Based on the latter information, we considered the Company intention to only develop palm oil plantations only in already harvested land (0.5). However, the Company documents never refer to deforestation or high value areas preservation (0). Then, concerning GHG emissions, the Company’s website presented as one of its future projects the “Encarpado de la Laguna Anaerobia” aiming to capture GHG to prevent air pollution. Therefore, we observed the Company’s efforts to decrease emissions exist (1), however information about the Company’s concern on monitoring emission was not presented (0).

Regarding the chemicals employed on the field, the Company only highlighted the improvements made on the utilization of organic mud as fertilizer. In fact, the Company produces its own organic fertilizer with the industrial wastes from the palm oil, which

⁷⁷ Indupalsa. <https://www.indupalsa.com.pe> (Consulted the 07.08.2017).

objective is to sell but also to apply in its own fields (1). However, no information about pesticides (0) or GMOs prohibition was mentioned (0).

According to the Company's website, water management actions have been implemented such as new processing wastewater plant has been constructed with the objective of preserving the quality of water sources (1). However, the documents did not provided data about the monitoring or results related to this new infrastructure and actions that accompanied it (0).

According to the video "Industria de Palma Aceitera de San Martín y Loreto" displayed on the Company's website, efforts have been particularly implemented through "environmental and biological monitoring". Based on this information and the photo gallery published on the Company's website, we consider the Company's concern to preserve local species and monitoring their conditions (0.5). However, the Company has not implemented programs aiming a positive contribution for the wildlife preservation (0).

In the social realm, the Company's information was also very deficient. Most of the workers belong to local communities and, at the same time, are actionists on the Company. Therefore, they opinion should be taken into account because decision are taken during assemblies. However, there public participatory mechanisms ensuring the possibility for local communities to express their concerns though an open participatory mechanism were not mention (0).

Food security is not mentioned on the Company's documents nor in other independent studies about the Company probably because the project main objective was to replace coca plantations and this has been achieve (0).

To improve social conditions has been presented as the main objective of the Company. Besides providing alternatives to illegal farming for local communities, other measures have been implemented. For example, infrastructure for recreational activities has been build and collaboration with the smallholder association aims to improve local families lifestyle (1). The documents do not refer formally to social impact assessments. However, on the video provided by the Company's webpage, workers and associates were interviewed about the impact of the Company's activities on their life and dialogue is regularly held with the workers association. Thus, there is an intention of the Company to follow the impact of its production even if no formal assessment has been implemented (0.5)

The Company affirmed to respect the right of association and to collaborate close to the workers unions through dialogue. However, there was no information about the salaries, social security or child and labor force (0.5). No particular rules about safety at work were presented on the Company's documents (0). Whereas this could be explained by the fact that the Company is based on small producers crops and they have to ensure their own security, there was no information neither about security measures within the extraction plant.

Measures to improve small holders productivity have been implemented. According to the testimonies on the video, knowledge sharing have helped small farmers to improve productivity. Also, fertilizers are provided each year to ensure the plantations quality (1).

Regarding transparency, the Company's available documents are very limited. The website information is not extensive and there are no sustainability reports that have been publicly published (0.5).

Table 1. Companies production practices' sustainability based on the POIG criteria

POIG criteria	Indicators	N1C*	N2C*	N3C*	N1E*	N2E	N3E*	N1P*	N2P*	N3
Forest protection	HCS are defined and respected	1	0.5	1	1	0.5	0	1	1	0.5
	HCV are protected from mono-plantations	1	1	1	1	0	0	1	0	0
GHG	Reports about emissions are public	1	1	1	1	0	0	1	0.5	0
	Efforts to decrease emission	1	1	1	1	0	0	1	0.5	1
Chemicals minimization	Avoid toxic fertilizers	1	1	0.5	0	0.5	0	0.5	0.5	1
	Avoid toxic pesticides	1	0	0	0.5	0	0	1	0.5	0
GMO	Ban them from plantations	0	0	0	0	0	0	0	0	0
Water accountability	Water management program	1	1	1	1	1	1	1	1	1
	Monitoring results	1	1	0	1	0.5	0.5	1	0	0
Wildlife	Positive contributions for preservation	1	1	1	1	1	1	1	0	0
	Monitoring wildlife changes	1	1	0	1	0.5	0	1	0	0.5
Participatory mechanisms	Dialogue spaces to involve local communities in decision-making	1	1	1	1	0	0	1	1	0

POIG criteria	Indicators	N1C*	N2C*	N3C*	N1E*	N2E	N3E*	N1P*	N2P*	N3
Food security	Measures to prevent food shortage	0	0.5	0	0	0	0	0.5	0	0
Social conditions	Measures to improve local lifestyle	1	1	1	1	1	1	1	0	1
	Social impact assessment	1	1	0.5	1	0	0	0	0	0.5
Workers rights	Fair contracts (legal wage, avoid temporary, social security, right of association)	1	1	1	1	0	1	0.5	0	0.5
	Safe environment (infrastructure, child and forced labor eradication, non discrimination)	1	1	1	1	0.5	1	1	1	0
Smallholders support	Measures to improve their productivity	1	1	1	1	1	1	1	1	1
Transparency	Documents' availability	1	1	0.5	1	0.5	0.5	1	0.5	0.5
TOTAL		17	16	12.5	15.5	7	7	15.5	7.5	7.5
		15.1			9.8			10		

IX. Annex-2

Table 2. Companies' size measured according to the harvested areas.

Company	Source	Total ha. harvested	Value assigned
Indupalma	Indupalma Social Balance 2008-2009, 12.	18.169,59	18
Manuelita	Rueda-Zárate and Pacheco 2015, 16.	20, 646	20
Oleflores	Oleflores. Quienes somos. http://www.oleflores.com/about/oleflores (10.10.2017)	50.000	50
Palmeras Ecuador	Danec's Social Report 2015, 9.	15,541	15
Palmar del Río	Palmar del Río. Empresa. http://www.palmardelrio.com/sitio/empresa (10.10.2017)	10,000	10
Industrias Ales.	Industrias Ales. Agroindustrial. http://www.ales.com.ec/negocios-agroindustrial.html (10.10.2017) Industrias Ales. RSPO ACOP 2016.	~5,500	5
Palmeras del Espino	Grupo Palmas. Instalaciones. http://www.palmas.com.pe/palmas/el-grupo/instalaciones (10.10.2017)	12,300	12
Olpesa	Olpesa. Quienes somos. http://www.olpesa.com/quienes_somos (10.10.2017)	6,500	6
Indupalsa	Oikcredi Internacional 2015, 1.	5.000	5

X. Annex-3

This annex gathers the information used to complete Figure 2. The research was made through the LexisNexis database under the headline of “Power Search” and “All News, All Languages” from January 2004 until August 2017. The following sources resulted from the algorithm (oil palm *or* aceite de palma *or* palma africana) *and* (ong *or* organización no gubernamental *or* ngo *or* non governmental organization) *and* (country’s name) *and not* (rspo *or* mesa redonda de aceite sostenible). For each country, the results have been checked for accuracy. Beneath each source, short information about the relevance regarding our study we have provided. Only the pertinent sources were marked with a small star (*) to ease the analysis. Because our analysis focuses on the NGOs presence on the oil palm sector media, when one same article was founded twice in the results, it was considered twice for the addition only when each one came from a different source, for example, from two different newspapers or from two different medias.

Colombia:

2004

- Energy, development, and climate change: considerations in Asia and Latin America (Oil & Gas Journal, 2004).

IPIECA (NGO) held two high-level regional workshops in 2002 addressing the issues of energy, development, and climate change. However, the projects presented regarding oil palm were focused on Malaysia. Colombian was considered for a wind farm project. The source is not pertinent because no information about the Colombian oil palm sector was provided.

- *Colombia: Indians and blacks displaced by war in remote northwest (IPS-Inter Press Service, 2004)

Colombian paramilitaries strategy to displaced the rural population to pave the way for the expansion of plantation agriculture such as oil palm. The article refers to the measures undertaken by NGOs in Colombia to denounce the abuses and to assess the humanitarian situation.

- Hot Stock For The Week (The Edge Malaysia, 2004)

The article refers to the ways that Safeguards have been finding to revive business in Malaysia. However, no information about the Colombian oil palm sector was provided.

- *COLOMBIA-D.HUMANOS; Piden paralizar cultivos implantados en medio de violencia (Spanish Newswire Services, 2004)
- COLOMBIA-D.HUMANOS; Piden paralizar cultivos implantados en medio de violencia (Spanish Newswire Services, 2004)

NGO demand the Colombian government to stop palm oil industry from expanding and highlights the negative externalities of this sector. Cited twice but by the same media, so we take it into consideration only one time.

2005

- *ACTUALIZACION PREVIA Colombia: Apartado, un aniversario de paz manchado de sangre Por Silvia Ayuso (dpa) (Deutsche Presse-Agentur, 2005)
- PREVIA Colombia: Apartado, un aniversario de paz manchado de sangre Por Silvia Ayuso (dpa) (Deutsche Presse-Agentur, 2005)

NGOs blamed the Colombian army about the crimes committed in certain regions suspected of developing palm oil plantations in the near future. Quoted twice but by the same source. Cited twice but by the same media, so we take it into consideration only one time.

- *Colombia: Piden suspensión de cultivos de palma africana por irregularidades (UPI LatAm, 2005)

The document refers to the Colombian palm oil plantations irregularities and both, the studies and lobbying implemented made by Suisse NGOs to ban them until human and environmental rights are respected.

2006

- *Latin America: biofuel craze sucks up land and fells forests (IPS - Inter Press Service, 2006)
- *Colombia: biodiésel se mezcla con Guerra (IPS - Inter Press Service – Spanish, 2006)

The article refers to the leading countries on the biodiesel production such as Colombia and Argentina and the possible harm to the environment. NGOs arguments are quoted to express their awareness about the expansion of monoculture crops and, consequently, deforestation. Cited twice but in different sources/languages.

- *Colombia: agribusiness tricked blacks out of land – report (IPS - Inter Press Service, 2006)

The article refers to the fact that Colombian government is stepping up production of biofuels and the risk that this represents for indigenous communities lands. The expansion of oil palm plantations has drawn increasing criticism and divers NGOs have published statements against unsustainable practices within the oil palm industry in Colombia.

2007

- *No to the agrofuels craze! (Appropriate Technology, 2007)

Refers to the agrofuels debate as an alternative to produce energy. The article, written by an NGO, affirms that this new agenda is not being drafted by policymakers concerned to avert global warming and environmental destruction but by private economic interests. The NGO affirms also that destruction related to oil palm (biodiesel) is already happening in Colombia.

- *Feature - History will judge; Ronnie Hall reports from Bali on a flawed market model that's producing big profits for polluters (Morning Star, 2007)

During the climate change negotiations in Bali, NGOs presented memorable images, including a “video showing the body of an 11-year-old child with his mourning family in Colombia. He was shot deliberately during one of many violent disputes over land for export crops, including agrofuels like oil palm.” This information is pertinent because NGOs give an international image about the Colombian oil palm industry.

- *Ziegler denuncia violaciones derechos humanos para producir biocombustibles; Colombia-biocarburantes (EFE Newswire - Relevantes de LatinoAmerica, 2007)

During a conference hold in Geneva, NGOs denounce human rights violations within the Colombian oil palm industry.

2008

- *ONG acusa bancos UE de financiar biocombustibles dañinos para América Latina; UE-Latinoamérica (EFE Newswire - Ciencia y Tecnología (Spain), 2008)
- *Acusa a bancos de la UE de financiar biocombustibles que dañan Latinoamérica; UE-Latinoamérica (EFE Newswire - Cultura (Spain), 2008)

NGOs denounced the European investment to expand oil palm plantations in Latin America, particularly in Brazil, Argentina Paraguay and Colombia, contributing to human rights violation and deforestation.

- *NGO takes Latin American biofuels to task, industry cries foul (Business News Americas – English, 2008)
- *ONG critica producción de biocombustibles en región (Business News Americas – Spanish, 2008)

NGOs state that increased biofuels production in Latin America, especially in Colombia where plans for oil palm expansion are ambitious, could make working conditions worse and increase pollution and deforestation. Cited in two sources, one in Spanish and the other one in English.

- *FMLN rechaza declaración canciller salvadoreña en EEUU y pedirá interpelación; El Salvador-Elecciones (EFE Newswire - Relevantes de LatinoAmerica, 2008)

The article is divided in two parts. The second one concerns Colombian oil palm industry. NGOs, such as CODHES, denounce the human rights violations related to this industry and the human displacements that have resulted from the plantations' expansion.

- FAO y CEPAL destacan ventajas de andinos y caribeños en biocombustibles; Biocombustibles-Conferencia (EFE Newswire - Empresas (Spain), 2008)

Whereas Colombia is presented as one of the countries with the highest potential to produce biodiesel, the NGOs studies and statements refers to the sugar industry and not on the oil palm industry. Therefore this article is not pertinent to our study.

- Temario General AFP de las 21H00 GMT (Agence France Presse – Spanish, 2008)
- Temario General AFP de las 02H00 GMT (Agence France Presse – Spanish, 2008)

The source gathers different articles. The terms Colombia, oil palm and NGO belong to different articles and therefore the information is not pertinent to our study.

- *Tres ONG denuncian el impacto del cultivo de agrocombustibles en Colombia (Agence France Presse – Spanish, 2008)

French NGOs denounce the negative environmental and social impact caused by oil palm industries in Colombia.

- *Humanitarian Zones Resist Violence in Colombia (Christian Newswire, 2008)

The article refers to human displacements by violence in Colombia's rural areas. Statements affirm that economic projects, such as oil palm plantations, use the armed conflict as a pretext to evict peasants and steal their land. NGOs give support to the displaced families to get back their land and to fight for justice and dignity.

2009

- Presidente de Colombia llegará el próximo domingo a Honduras; Honduras-Colombia (EFE Newswire - Relevantes de LatinoAmerica, 2009)

The article is divided into two sections. The first refers to de oil palm plant given by the Colombian government to the Honduras. The second section refers to Ecuadorian NGOs working in the health sector. However, there was no relation between the first and the second article. Thus, this source is not pertinent to our study.

- Especial: Figura Tumaco como la localidad más violenta de Colombia (Xinhua News Agency – Spanish, 2009)

The source is about the galloping increase of violence in Colombia caused by drug trafficking. NGOs affirmed the situation has caused that farmers leave food crops, such as cacao and oil palm, and substitute them by illegal crop such as coca. The source is not

relevant because it refers to NGOs information about drug trafficking in Colombia, but not about the oil palm sector concerns.

- *Felda eyes more overseas estates (HL) (New Straits Times (Malaysia), 2009)

According to the source the Federal Land Development Authority (Felda), whereas the world's largest owner and manager of oil palm and rubber plantation land has received offers from countries like Colombia, Brunei or Brazil, NGOs anti-palm oil campaigns have been implemented.

- NGOs jostle in crowded environment; COPENHAGEN SUMMIT- Local winner (Australian Financial Review, 2009)

The source criticizes the excessive number of participants attending the Copenhagen climate change conference. Organizers wonder to restrict the number of representatives from NGOs and journalists. Whereas the source criticizes the presence of institutions such as the Girl Scouts, it highlights the importance of the presence of relevant actors such as representatives of key countries in the oil palm sector and environmental NGOs. However, no relevant information about the Colombian oil palm sector was provided.

2010

- UN expert on slavery says child labour in Ecuador is an obstacle to development (States News Service, 2010)

This source focuses on child labor but in Ecuador. Colombia is only mention as an example of child labor, not on the oil palm sector but in the asylum-seeking community and therefore it was not pertinent to our study.

- Titulares de los diarios latinoamericanos (Agence France Presse – Spanish, 2010)

This source gives the newspapers' heading for Latin American countries. There were no articles gathering information from both NGOs activism and Colombian oil palm sector. Besides, Colombian sources were absent.

- *Colombia: "death threats have become routine," says priest (IPS - Inter Press Service, 2010)

NGO representatives have been outspoken about the critics of paramilitary abuses in Colombia's armed conflict, which is largely rooted in disputes over land in which the oil palm business is also involved.

- *World Bank's palm oil policy slammed (New Straits Times (Malaysia), 2010)
- *World Bank's strategy for palm oil shouldn't curtail economic freedom (States News Service, 2010)

The source state environment activists have campaigned against the production of palm oil in developing countries, alleging that it damages the environment. Considering these critics, the World Bank has suspended approval in new oil plantations, which would block the economic development in the countries depending on foreign investment to develop their palm oil production. This source is pertinent because Colombia is cited as an example where foreign investment played an important part of the national economy. Therefore, NGOs influence Colombian oil palm production by influencing the world bank strategies.

2011

- *Colombia: food prices rise after record rains (IPS - Inter Press Service, 2011)

The source refers to the rise on food prices in Colombia due to combined effects including divesting rains and souring international prices. NGOs highlight that in Colombia the production of basic food is declining while oil palm plantations are continuously expanding.

- Intergovernmental preparatory meeting for commission on sustainable development considers focal issues of waste management, mining (States News Service, 2011)

The source refers to discussions about waste management within the Commission on Sustainable Development. However, no particular information regarding Colombia's oil palm production practices was mentioned.

- *House Ways and Means Subcommittee on Trade Hearing; "Pending, Job-Creating Trade Agreements."; Testimony by Adam Isaacson, Director, Regional Security Policy Program, Washington Office on Latin America (Congressional Documents and Publications, 2011)

The source refers to an NGO statement addressed to the United States House of Representatives about the Trade Promotion Agreement. Among other subjects, the statement raises awareness about the practice of forcing workers to join involuntary "cooperatives". In the case of Colombia, this problem is especially in the oil palm industry where conditions notoriously abusive.

- *La lucha por la tierra en Latinoamérica sigue manchada de sangre (Agence France Presse – Spanish, 2011)

The source refers to the human displacements caused by extensive agriculture. According to a Colombian NGO deaths of indigenous people linked to land violence is increasing due to the mining projects and, along with the Central America region, palm oil plantations.

- *Colombia desplazados; Fiscalía Colombia revisa denuncia de falsos desplazados en medio de rechazo (Spanish Newswire Services, 2011)
- *Fiscalía Colombia revisa denuncia de falsos desplazados en medio de rechazo; Colombia desplazados (EFE Newswire - Relevantes de LatinoAmerica, 2011)

Whereas Colombian public institutions examine NGOs denounces about communities displacements due to palm oil plantations expansion in Colombia, the NGOs highlight that there has not been an integral investigation about the case.

- *Corruption leading to unequal access, use and distribution of land un report (States News Service, 2011)
- Corruption leading to unequal access, use and distribution of land - UN report (Plus Patent News, 2011)

The source referred to the UN statement according to which corruption caused by weak governance is leading to unequal land distribution and poor resource management. The report highlights corruption is increasing in the biofuel industry and quotes Colombia as an example for its rapid expansion of oil palm cultivation linked to the communities forced displacements. The findings of the report reflect NGOs work about this issue.

- *FAO denuncia problemas de corrupción en acceso a la tierra en 61 países (Agence France Presse – Spanish, 2011)
- La FAO denuncia problemas de corrupción en acceso a la tierra en 61 países (Agence France Presse – Spanish, 2011)
- *Corruption leading to unequal access, use and distribution of land - UN report (Right Vision News, 2011)
- *Corruption leading to unequal access, use and distribution of land - UN report (M2 PressWIRE, 2011)

Refers to a study made by the FAO, which confirms the NGOs denounces about corruption and land access in Colombia. According to the study, rapid palm oil plantations expansion has been related to paramilitary forces that have displaced rural communities by force.

2012

- *Parlamento venezolano aprueba polémica ley contra terrorismo; Venezuela parlamento (EFE Newswire - Relevantes de LatinoAmerica, 2012)

One of the articles gathered by this source refers to the Colombian labor minister, Rafael Pardo, and its visit to Washington aimed to create an action plan to ensure laborers rights in Colombia considering the TLC new clauses. The oil palm sector labor conditions were analyzed and, among other actor, Pardo met with NGOs to exchange information.

- *Diecisiete expertos analizan desde hoy en el IISJ la criminalización de las protestas sociales (Diario Vasco, 2012)

The source refers to an international workshop organized by experts about the criminalization that environmentalists suffer. The oil palm transnational are accuse ignore the local interests in Colombia and Indonesia.

- *La agricultura emigra al Sur (El Pais, 2012)

The source refers to the agro-alimentary Spanish companies that have invested on purchasing land in developing countries to develop palm oil, sugar, yucca or corn plantations. Strong critics against this tendency have been made by NGOs and the source affirms that thousands of hectares of Colombian land has been bought by Spanish companies.

- *UE Colombia; Colombia expone en la UE sus compromisos con los derechos laborales (Spanish Newswire Services, 2012)
- *Colombia expone en la UE sus compromisos con los derechos laborales; UE Colombia (EFE Newswire - Relevantes de LatinoAmerica, 2012)

The Colombian embassy in Brussels published a document regarding the government engagements in term of labor rights giving special attention to critical sectors such as oil palm. However, NGOs and unions have judged as insufficient these engagements. This source is pertinent because NGO are illustrated as important actors within the sector with the legitimacy of saying what is sufficient or not in the Colombian oil palm sector.

2014

- Autoridades hondureñas decomisan tres lanchas por sospechas de narcotráfico; Honduras narcotráfico (EFE Newswire - Relevantes de LatinoAmerica, 2014)

The source is about drug trafficking in Honduras.

- *Colombia palm oil industry asks for help over expensive peso (Energy Monitor Worldwide, 2014)

48th National Congress of the Oil Palm Growers Federation (Fedepalma) highlighted the challenges within the sector such as the rising value of the Peso, environmental concerns and its alleged links to paramilitary groups. NGOs, such as Greenpeace and Human Right Watch, expressed its concern about mass deforestation and forces displacement related to oil palm in Colombia.

2015

- Autoridades de Honduras buscan a joven campesino desaparecido desde el jueves; Honduras tierras (EFE Newswire - Relevantes de LatinoAmerica, 2015)

The source gathers two articles, but neither is pertinent to our study. Whereas the first one refers to a missing farmer in Honduras, the second one refers to the Latin-American and

Caribbean Summit in which the Colombian president highlight the importance of respect within the international relations.

- Palm oil firms in Peru plan to clear 23,000 hectares of primary forest; Four oil palm plantations connected to the same company are proposed for Peru's northern Amazon (The Guardian, 2015)

The source refers to Peru forest deforestation caused by oil palm industry. Colombia is only superficially quoted as a geographical reference to affirms that Peruvian oil palm cultivated area is growing very fast.

- Survival of the cheapest (ABC Transcripts (Australia), 2015)
- Survival of the cheapest (ABC Transcripts (Australia), 2015)

The source is about the level of investment in biodiversity conservation in Australia and the most effective strategies to achieve this objective. The source highlights the impact that environmental groups pushing corporation related to forest destroying to adopt “zero deforestation” policies. However, the source does not refer to oil palm in Colombia and therefore is not pertinent to this section.

- *Residuos contaminan quebrada en Santander (El Tiempo (Colombia), 2015)

The source reports the water pollution that has been caused by an oil palm extracting plant in the Santander region and quotes the studies made by an NGO to measure the impact of the water quality. The source shows the presence of NGOs and their informative role.

- *Colombia puede duplicar ingresos por producción de palma Africana (Notimex (Mexico), 2015)

Refers to the opportunities on the oil palm sector for investments. According to the source, a key explanatory aspect for the Colombian cacao, mango and palm oil culture has been the collaboration among the government, the private sector and the NGOs. Therefore, the source refers to NGOs as important stakeholders in the Colombian oil palm sector.

- *Volkswagen, otra multinacional que trastabilla tras toparse con una ONG (El Espectador (Colombia), 2015)

NGOs have become more professionals. Their measures have framed leading corporations' production practices in different sectors. Regarding oil palm, the source affirms multinationals have had to submit to NGOs requirements. We take this article into consideration because it was published in a Colombian national newspaper.

- *Endangered and Threatened Wildlife and Plants: Two Foreign Macaw Species (US Official News, 2015)

- FEDERAL REGISTER: Endangered and Threatened Wildlife and Plants; Two Foreign Macaw Species (US Official News, 2015)

The source refers to the U.S Fish and Wildlife Service intention to list the macaw as an endangered species. Macaw populations have been identified, among other countries, in Colombia. However, these areas have been extensively deforested. The clearing of forests is due to the development of plantations of extensive agriculture of, for example, bananas, oil palms and cacao. Among other NGOs, Colombian-based NGOs are quoted for their action programs to protect this species and its habitats.

- Guatemala alberga un debate sobre la actuación del Estado frente a la palma; GUATEMALA PALMA (EFE Newswire - Relevantes de LatinoAmerica, 2015)

The source refers to the Honduran oil palm industry and Colombia is just mentioned to present the markets to which Honduras exports rubber.

2016

- *Register of Commission documents: The Week Ahead 14 – 20 March 2016 Document date: 2016-03-11 03A-DV-PRESSE_AGD(2016)11-00(00000) Agenda - Press documents (European Union News, 2016)

Refers to the European Commission discussions about the implementation of the trade agreements with Central America, Colombia, Peru and Ecuador. The report stresses the deforestation caused by palm oil plantations and refers to NGOs as key speakers. This source appears on the results of the three countries because the outcome of these discussions has an impact in all the quoted countries.

- *R.UNIDO AGROALIMENTACIÓN; Líderes indígenas piden a la UE que refuerce sus leyes sobre aceite de palma (Spanish Newswire Services, 2016)
- *Líderes indígenas piden a la UE que refuerce sus leyes sobre aceite de palma; R.UNIDO AGROALIMENTACIÓN (EFE Newswire - Ciencia y Tecnología (Spain), 2016)
- *Líderes indígenas de Colombia piden a la UE que refuerce leyes sobre aceite de palma (El Espectador (Colombia), 2016)

The source refers to the requests that have been made by the civil society, from Indonesia, Peru, Colombia and Liberia, to the European parliament to reinforce regulation regarding oil palm supply coming from developing countries. This happened during a gathering in London among European parliamentarian, civil society and NGOs. The latter highlighted the consumers' responsibility to ensure sustainability within this sector. The source highlights the studies made by NGOs about the environmental impact that this industry has caused in Indonesia and their claim about the need of international solidarity to ensure that leading countries in this sector, notably Colombia,

- *MEDIOAMBIENTE VIOLENCIA; Un total de 185 activistas medioambientales murieron asesinados en 2015 (Spanish Newswire Services, 2016)
- *Al menos 185 ecologistas murieron asesinados en 2015 (La Verdad, 2016)
- *Al menos 185 ecologistas murieron asesinados en 2015 (Hoy, 2016)
- *Al menos 185 ecologistas murieron asesinados en 2015 (El Comercio, 2016)
- *En 2015 murieron asesinados al menos 185 ecologistas (Diario Montañas, 2016)

Refer to the Global Witness campaign about environmentalist deaths caused by public or private companies that want to take the land by force. This violence is particularly related to raw material industries such as the oil palm and Colombia is cited for its high number of violence against environmental activists.

- *Colombia debe proteger más a los ambientalistas": Global Witness (El Espectador (Colombia), 2016)
- Colombia debe proteger más a los ambientalistas": Global Witness (El Espectador (Colombia), 2016)

Refers also to the Global Witness campaign that register the number of environmentalists' deaths by country caused by violence, which are particularly frequent on the raw industries such as oil palm and mining. The ONG calls for the consumers' responsibility when deciding what products to buy.

- La muerte verde; El caso de Rigoberto Lima muestra la impunidad con que actúan los sicarios. Este maestro fue tiroteado a las puertas de un juzgado. Había denunciado a una empresa que envenenó un río en Guatemala (La Rioja, 2016)
- La muerte verde; El caso de Rigoberto Lima muestra la impunidad con que actúan los sicarios. Este maestro fue tiroteado a las puertas de un juzgado. Había denunciado a una empresa que envenenó un río en Guatemala (La Verdad, 2016)

The source creates awareness about the murder of a 28 years old teacher right after denouncing an oil palm company of polluting water sources in Guatemala. Similar cases are quoted regarding Colombia but related to the mining industry interests and not to the oil palm sector. Information about the Colombian oil palm sector was absent.

- Juegos Olímpicos, en medio de la peor violencia contra los pueblos indígenas de Brasil (El Espectador (Colombia), 2016)

Whereas the source comes from a Colombian newspaper, the article clearly focuses only on Brazil, which is quoted as the most dangerous country in terms of violence against

environmentalists and the activism implemented by human rights defendants during the Rio de Janeiro Olympic games. However, no information about the Colombian oil palm was found.

2017

- Ingeniería y corrupción (El Espectador (Colombia), 2017)

The source criticizes the corruption in which the Colombian government system is based and the superficial solutions that political parties promote right before the elections. The source also refers to the corruption coming from the private sector, such as oil palm companies, that even if they do not violate the law, they influence its creation without considering the public interest. However, no information about NGOs activities or posture regarding oil palm was mentioned.

- EFE.TV-INTERNACIONAL.PREVISIONES; Actualización coberturas EFE-TV Internacional 8 de agosto de 2017 (15.00) GMT (Spanish Newswire Services, 2017)
- Actualización coberturas EFE-TV Internacional 8 de agosto de 2017 (15.00) GMT; EFE.TV-INTERNACIONAL.PREVISIONES (EFE Newswire - Relevantes del Mundo, 2017)

No information about the Colombian oil palm sector was found.

- Mushroom Cultivation – III (Pakistan Investor Guide, 2017)

No information about the Colombian oil palm sector was found.

Ecuador:

2007

- *Indigenous forum discusses ways global anti-poverty goals can better reflect socio-economic interests of native, tribal peoples (US Fed News, 2007)
- *Indigenous forum discusses ways global anti-poverty goals can better reflect socio-economic interests of native, tribal peoples (States News Service, 2007)

The sources referred to the Permanent Forum on Indigenous Issues efforts to implement the Millennium Development Goals. The Ecuadorian Committee called for bilingual programs, among others, to be expanded in order to reach the most vulnerable populations. Participation of NGOs was registered and oil palm was an important subject during the conference.

- Brand Malaysia under attack (New Straits Times (Malaysia), 2007)

Whereas the source criticizes the hatchet NGOs' job against oil palm, it is not pertinent to our study because it focuses only on Malaysian and Indonesia, and not information about the Ecuadorian oil palm sector was provided.

2008

- *The Global Forest Coalition: Governments Prioritize Forest Exploitation Many Governments Fail to Comply with CBD Mandate (M2 PressWIRE, 2008)

Along with 21 other countries, civil society groups that elaborated the reports monitor Ecuador's environmental policies. The objective is to protect important resources such as the Amazon rainforest from fail solutions to climate change such as relying on agrofuels.

- Scaling up Agroecological Approaches for Food Sovereignty in Latin America (Development , 2008)

The source refers to the expansion of biofuels in Latin America caused by an increasing demand for biofuel crops, such as oil palm, coming from, for example, European countries and the United States. As a response, NGOs, among other actors, are enhancing food security in vulnerable communities. However, no relevant information is given about the Ecuadorian oil palm industry practices or the NGOs statements about this sector.

2009

- ESPECIAL: Figura Tumaco como la localidad más violenta de Colombia (Xinhua News Agency – Spanish, 2009)

The source is about the galloping increase of violence in Colombia caused by drug trafficking. Information about the cocaine presence in Ecuador is provided. However, there is no reference to the Ecuadorian oil palm sector.

2010

- *UN expert on slavery says child labour in ecuador is an obstacle to development (States News Service, 2010)

Refers to a United Nations report about forms of contemporary slavery in different Ecuadorian industries such as oil palm and stresses the exemplary initiatives that have been implemented, among other actors, by NGOs.

- Titulares de los diarios latinoamericanos (Agence France Presse – Spanish, 2010)

The source gathers information about different countries. However, the information about Ecuador are not related neither to oil palm not to NGOs presence in the country.

- *Ecuador sees forest residents as conservation agents; ECUADOR-ENVIRONMENT (Interview) (EFE Newswire - Americas in Focus, 2010)

To prevent deforestation caused by monoculture activities such as oil palm cultivation, the Ecuadorian government along with NGOs have launched a campaign to make landowners partners in the effort to stop deforestation by providing economic incentives.

2012

- Parlamento venezolano aprueba polémica ley contra terrorismo; VENEZUELA PARLAMENTO (EFE Newswire - Relevantes de LatinoAmerica, 2012)

The source gathers many articles, but after reading the ones concerning Ecuador we realized that there was not information related neither to the oil palm sector nor to the NGOs activism.

- *Diecisiete expertos analizan desde hoy en el IISJ la criminalización de las protestas sociales (Diario Vasco, 2012)

The source refers to an international workshop organized by experts about the criminalization that environmentalists suffer. Ecuadorian experts, among other countries, participate in order to denounce the absence of the industries, such as oil palm, for local interests.

- *La invasión de la palma africana; La expansión en Latinoamérica de los cultivos dedicados al biodiésel acaba con las plantaciones tradicionales (La Rioja, 2012)
- *La invasión de la palma africana; La expansión en Latinoamérica de los cultivos dedicados al biodiésel acaba con plantaciones (Hoy, 2012)
- *La invasión de la palma africana; La expansión en Latinoamérica de los cultivos dedicados al biodiésel acaba con las plantaciones tradicionales (La Voz de Cádiz, 2012)

Refer to the Ecuadorian difficulties that many communities face because of oil palm massive expansion in the country and to the integral measures that have been implemented by NGOs in order to support a solidary economic system where local communities get also benefits from this sector.

2013

- *Saving the World's Forests: A Technology Revolution to Curb Illegal Logging (Targeted News Service, 2013)
- *Achim Steiner (The Nation (Thailand), 2013)

The source enlisted many programs regarding new technologies implemented by NGOs. This programs aim to monitor the exploitation of national resources worldwide. For example,

these sources enable people to ensure that the purchasing palm oil from Ecuador comes from responsible suppliers.

2015

- Palm oil firms in Peru plan to clear 23,000 hectares of primary forest; Four oil palm plantations connected to the same company are proposed for Peru's northern Amazon (The Guardian, 2015)

The source refers to Peru forest deforestation caused by oil palm industry. Ecuador, along with Colombia, are just taken as a reference to compare the palm oil area cultivated. However, no farther information about the Ecuadorian oil palm sector is provided.

- *FORESTS: Oil palm expansion threatening Peruvian Amazon, groups warn (ClimateWire, 2015)

NGOs highlight to the massive deforestation that the Amazon rainforest has suffered due to palm oil plantations expansion mainly in Indonesia, Ecuador and Colombia.

- Colombia puede duplicar ingresos por producción de palma Africana (Notimex (Mexico), 2015)

This source is about the Colombian oil palm and cacao industry. Ecuador is only mention as country example from which Colombia could learn to increase benefits from its cacao industry.

- *Endangered and Threatened Wildlife and Plants: Two Foreign Macaw Species (US Official News, 2015)
- FEDERAL REGISTER: Endangered and Threatened Wildlife and Plants; Two Foreign Macaw Species (US Official News, 2017)

The source refers to the U.S Fish and Wildlife Service intention to list the macaw as an endangered species. Macaw populations have been identified, among other countries, in Ecuador. However, these areas have been extensively deforested. The clearing of forests is due to the development of plantations of extensive agriculture. The Ecuadorian government has authorized the conversion of tropical forest into oil palm plantations. Satellite imagery has been used to analyze deforestation rates and patterns along the Colombian-Ecuadorian border.

2016

- *Register of Commission documents: The Week Ahead 14 – 20 March 2016 Document date: 2016-03-11 03A-DV-PRESSE_AGD(2016)11-00(00000) Agenda - Press documents (European Union News, 2016)

Refers to the European Commission discussions about the implementation of the trade agreements with Central America, Colombia, Peru and Ecuador. The report stresses the deforestation caused by palm oil plantations and refers to NGOs as key speakers. This source appears on the results of the three countries because the outcome of these discussions has an impact in all the quoted countries.

- *Tiembra sobre mojado en Ecuador; El terremoto afecta a una región de Ecuador castigada por la pobreza, la discriminación y el cambio climático (Sur, 2016)
- *Tiembra sobre mojado en Ecuador; El terremoto afecta a una región de Ecuador castigada por la pobreza, la discriminación y el cambio climático (La Rioja, 2016)
- *Tiembra sobre mojado en Ecuador; El terremoto afecta a una región de Ecuador castigada por la pobreza, la discriminación y el cambio climático (Hoy, 2016)
- *Tiembra sobre mojado en Ecuador; El terremoto afecta a una región de Ecuador castigada por la pobreza, la discriminación y el cambio climático (El Norte de Castilla, 2016)
- *Tiembra sobre mojado en Ecuador; El terremoto afecta a una región de Ecuador castigada por la pobreza, la discriminación y el cambio climático (Diario Montañas, 2016)

These five sources refer to the work that was implemented by an NGO after the Ecuadorian earthquake in communities where the social fabric and environment have been already destroyed by the oil palm industry.

2017

- Un debate sin solucionar: el aceite de palma (Expansion (Madrid), 2017)

The source refers to the NGOs strategy within the oil palm sector that aims to address consumers. However, the source does not refer to the Ecuadorian state but to the Ecuador as an imaginary line dividing the Earth into two Hemispheres. Thus, no information about the Ecuadorian oil palm sector was provided.

- A Labyrinth Of Deception: Secretary Clinton And The Honduran Coup – Analysis (Eurasia Review, 2017)

No information about the Ecuadorian oil palm sector was found.

- Mushroom Cultivation – III (Pakistan Investor Guide, 2017)

No information about the Ecuadorian oil palm sector was found.

Peru

2007

- *Indigenous forum discusses ways global anti-poverty goals can better reflect socio-economic interests of native, tribal peoples (US Fed News, 2007)
- *Indigenous forum discusses ways global anti-poverty goals can better reflect socio-economic interests of native, tribal peoples (States News Service, 2007)

The sources referred to the Permanent Forum on Indigenous Issues efforts to implement the Millennium Development Goals. The Peruvian Committee called for bilingual programs, among others, to be expanded in order to reach the most vulnerable populations. Participation of NGOs was registered and oil palm was an important subject during the conference.

2008

- Temario General AFP de las 21H00 GMT (Agence France Presse – Spanish, 2008)
- Temario General AFP de las 02H00 GMT (Agence France Presse – Spanish, 2008)

Both sources gather different articles. However, the ones referring to Peru are not related to oil palm production.

- Scaling up Agroecological Approaches for Food Sovereignty in Latin America (Development, 2008)

The source refers to the expansion of biofuels in Latin America due to an increasing demand for biofuel crops, such as oil palm, coming from, for example, European countries or the United States. As a response, NGOs, among other actors, are enhancing food security in vulnerable communities. However, no relevant information is given about the Peruvian oil palm industry practices or the NGOs statements about this sector.

2010

- Titulares de los diarios latinoamericanos (Agence France Presse – Spanish, 2010)

No information about the Peruvian oil palm sector was found.

2011

- House Ways and Means Subcommittee on Trade Hearing; "Pending, Job-Creating Trade Agreements."; Testimony by Adam Isaacson, Director, Regional Security Policy Program, Washington Office on Latin America (Congressional Documents and Publications, 2011)

The source refers to an NGO statement addressed to the United States House of Representatives about the Trade Promotion Agreement. Among other subjects, the statement raises awareness about the practice of forcing workers to join involuntary "cooperatives", which is particularly associated to the oil palm sector. However, the statement focuses on the Colombian working conditions, and no information about the Peruvian oil palm sector was founded.

2012

- Parlamento venezolano aprueba polémica ley contra terrorismo; VENEZUELA PARLAMENTO (EFE Newswire - Relevantes de LatinoAmerica, 2012)

The source gathers divers articles, however there was no information about the Peruvian oil palm industry.

- Diecisiete expertos analizan desde hoy en el IISJ la criminalización de las protestas sociales (Diario Vasco, 2012)

The source refers to an international workshop organized by experts about the criminalization that environmentalists suffer. Whereas the oil palm transnational corporations are accused of ignoring the local interests in Colombia and Indonesia, Peruvian accusations focused only on the mining sector.

- *UE COLOMBIA; Colombia expone en la UE sus compromisos con los derechos laborales (Spanish Newswire Services, 2012)
- *Colombia expone en la UE sus compromisos con los derechos laborales; UE COLOMBIA (EFE Newswire - Relevantes de LatinoAmerica, 2012)

The European Parliament requested Peru and Colombia to hand in a document including their engagements in terms of labor rights and environment responsibilities. Colombia has include its collaboration with NGOs and has focused on important sectors, such as oil palm, where labor rights most be protected. Whereas the Peruvian document is not presented, we believe that, considering the same request was made for both countries, these subjects will be also present on the Peruvian declaration.

2013

- Indigenous peoples' participation in decisions impacting community, land, culture critical to their human rights, speakers tell permanent forum (States News Service, 2013)

During the Permanent Forum on Indigenous Issues, where NGOs participation was present, the UN Economic and Social Council states that rights of indigenous people across must be respected. The effort made by the Peruvian government to develop procedures to consult

with indigenous peoples about decisions affecting them was acknowledged. However, information about the oil palm sector was only provided for the Asian continent.

2014

- Cameroon readies new law to strengthen forest governance (Legal Monitor Worldwide, 2014)

The source is focused on the Cameroonian oil palm industry, the deforestation that has been caused by this sector and the need for alternative approaches for forest governance. The MegaFlorestais network, of which Peru is a member, represents a governance alternative through dialogue, negotiation and exchange of best practices. However, no information about the Peruvian oil palm sector was provided.

- *From opium to espresso (Mizzima Business Weekly, 2014)

The source refers to illegal opium cultivation in Myanmar. The UNodC has launched a project to encourage farmers switching to other crops farming with high demand from Western countries. NGOs work on a report about alternative crop project for poppy farmer and the UNodC Chief Technical Advisor refers to Peru where oil palm has been a successful alternative when it is introduced in a sustainable way.

- Niños que lo dan todo; Padres y ONG abren los ojos a los más pequeños de la casa implicándoles en las calamidades de este mundo. Invierten en valores y en cantera. «Desaprovechamos sus ganas, inteligencia y vitalidad para ayudar», dice Carlota, de 17 años (La Verdad, 2014)
- Niños que lo dan todo; Padres y ONG abren los ojos a los más pequeños de la casa implicándoles en las calamidades de este mundo. Invierten en valores y en cantera. «Desaprovechamos sus ganas, inteligencia y vitalidad para ayudar», dice Carlota, de 17 años (Hoy, 2014)
- Niños que lo dan todo; Padres y ONG abren los ojos a los más pequeños de la casa implicándoles en las calamidades de este mundo. Invierten en valores y en cantera. «Desaprovechamos sus ganas, inteligencia y vitalidad para ayudar», dice Carlota, de 17 años (El Correo, 2014)
- Niños que lo dan todo; Padres y ONG abren los ojos a los más pequeños de la casa implicándoles en las calamidades de este mundo. Invierten en valores y en cantera. «Desaprovechamos sus ganas, inteligencia y vitalidad para ayudar», dice Carlota, de 17 años (Sociedad, 2014)

The sources refer to the increasing importance that NGOs are giving to the collaboration with kinds in order to create awareness since a short age. One of the young witnesses affirms to

have learned about oil palm negative externalities through a Greenpeace campaign. However, this testimony is from a Spanish girl. Peru information is only about “Ayuda en Acción”, a NGO that provides emergency aid and promotes a rights-based approach to poverty reduction. Therefore, these sources do not provide information about the Peruvian oil palm industry.

2015

- *Palm oil firms in Peru plan to clear 23,000 hectares of primary forest; Four oil palm plantations connected to the same company are proposed for Peru's northern Amazon (The Guardian, 2015)

The source refers to the denunciations made by NGOs against Palmas del Espino and the Romero Group. NGOs accuse these companies of causing deforestation and to be planning the expansion of even more plantations on primary forest mainly on the Amazonian. The NGOs request these companies to stop abuses against the forest and biodiversity.

- *FORESTS: Oil palm expansion threatening Peruvian Amazon, groups warn (ClimateWire, 2015)

The source gathers information about the NGOs concern about the Amazonian deforestation caused by palm oil plantations expansion. The risk is present in the Peruvian Amazonian where the expansion has rapidly increased in the last years.

- *Can Peru stop 'ethical chocolate' from destroying the Amazon?; NGOs allege illegal deforestation of primary rainforest to plant cacao and oil palm (The Guardian, 2015)

Refers to the NGOs denunciations about the companies, mainly Grupo Romera and Melka Group that have cause Peruvian forests deforestation and emphasizes the threats posed by the oil palm and cacao plantations to the Amazonian. The companies have not fulfill the requirements to deforest, theSE complains have not been taken into consideration and destruction has continued without any type of authorization.

- Mustapa urges Malaysians to keep open mind on TPPA (Financial Services Monitor Worldwide, 2015)

The source is about the Trans Pacific Partnership Agreement (TPPA) and the terms in which the Malaysian government has accept to submit to this agreement. The agreement provides Malaysia with market access with, among other countries, Peruvian palm oil. Whereas tariffs are eliminated in this sector, no requirements regarding sustainability are present. Thus, not particular advocacy or information was provided regarding the oil palm sector.

- *Endangered and Threatened Wildlife and Plants: Two Foreign Macaw Species (US Official News, 2015)
- FEDERAL REGISTER: Endangered and Threatened Wildlife and Plants; Two Foreign Macaw Species (US Official News, 2015)

The source refers to the U.S Fish and Wildlife Service intention to list the macaw as an endangered species. Macaw populations have been identified, among other countries, in Peru, and their habitat destruction has been related the clearing of forests caused by the development of plantations of extensive agriculture such as oil palms.

- Guatemala alberga un debate sobre la actuación del Estado frente a la palma; GUATEMALA PALMA (EFE Newswire - Relevantes de LatinoAmerica, 2015)

The source refers to the Guatemalan debate about the national oil palm sustainability. Peru is only quoted as an importing rubber country.

2016

- *Peru: German NGO apologizes to Cacao del Peru Norte for allegations (Diario La Region, 2016)

A German NGO rectifies its position regarding cacao plantations to affirm that the destruction of large forest areas in the Peruvian Amazon was caused in order to create oil palm plantations and not cacao.

- *Register of Commission documents: The Week Ahead 14 – 20 March 2016 Document date: 2016-03-11 03A-DV-PRESSE_AGD(2016)11-00(00000) Agenda - Press documents (European Union News, 2017)

Refers to the European Commission discussions about the implementation of the trade agreements with Central America, Colombia, Peru and Ecuador. The report stresses the deforestation caused by palm oil plantations and refers to NGOs as key speakers. This source appears on the results of the three countries because the outcome of these discussions has an impact in all the quoted countries.

- *R.UNIDO AGROALIMENTACIÓN; Líderes indígenas piden a la UE que refuerce sus leyes sobre aceite de palma (Spanish Newswire Services, 2017)
- *Líderes indígenas piden a la UE que refuerce sus leyes sobre aceite de palma; R.UNIDO AGROALIMENTACIÓN (EFE Newswire - Ciencia y Tecnologia (Spain), 2017)
- *United Cacao Breaks AIM Rules; Indigenous, environmental, and rights groups call for removal from London Stock Exchange (Business Wire, 2016)
- *Líderes indígenas de Colombia piden a la UE que refuerce leyes sobre aceite de palma (El Espectador (Colombia), 2016)

The sources refer to the requests that have been made by the civil society, from Indonesia, Peru, Colombia and Liberia, to the European parliament to reinforce regulation regarding oil

palm supply coming from developing countries. This happened during a gathering in London among European parliamentarian, civil society and NGOs. The latter highlighted the consumers' responsibility to ensure sustainability within this sector.

- *MEDIOAMBIENTE VIOLENCIA; Un total de 185 activistas medioambientales murieron asesinados en 2015 (Spanish Newswire Services, 2016)

The source refers to the Global Witness study reporting 185 murders of environmental activists in world in 2015. According to the study, Peru stands out for its high number of death activists due to violence. Among the principal causes of these murders, the increase of oil palm demand is stressed.

- *"Colombia debe proteger más a los ambientalistas": Global Witness (El Espectador (Colombia), 2016)
- "Colombia debe proteger más a los ambientalistas": Global Witness (El Espectador (Colombia), 2016)

The sources refer to the Global Witness study published by the English NGO about the environmentalists murdered, partially explained by the oil palm industry expansion, presents the methodology that has been implemented, and summarizes the recommendations that have been addressed to Colombia and other countries such as Peru.

- *Lessons from multilevel governance: the critical role of political contestation (States News Service, 2016)

The source refers to a study made by the FAO according to which political contestation between divergent sectorial interests determines land use outcomes far more than coordination. In the case of Peru, palm oil companies have managed to coordinate with different entities to expand palm oil plantations. It is thus not cooperation that is missing but environmental laws and regulations. Therefore, political contestation implemented by, for example, NGOs played a great role in shaping environmentally sustainable and socially just outcomes.

2017

- Profile of Rosa Elena Zegarra Spanish translator of World Parrot Trust (Plus Company Updates(PCU), 2017)

This source is not pertinent for our study because it refers the profile of a NGOs member. Thus, the information is only linked to its working experience but do not inform about the NGOs presence in the Peruvian oil palm sector.

- EFE.TV-INTERNACIONAL.PREVISIONES; Actualización coberturas EFE-TV Internacional 8 de agosto de 2017 (15.00) GMT (Spanish Newswire Services, 2017)

- Actualización coberturas EFE-TV Internacional 8 de agosto de 2017 (15.00) GMT; EFE.TV-INTERNACIONAL.PREVISIONES (EFE Newswire - Relevantes del Mundo, 2017)

No information related to the Peruvian oil palm sector was found.

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