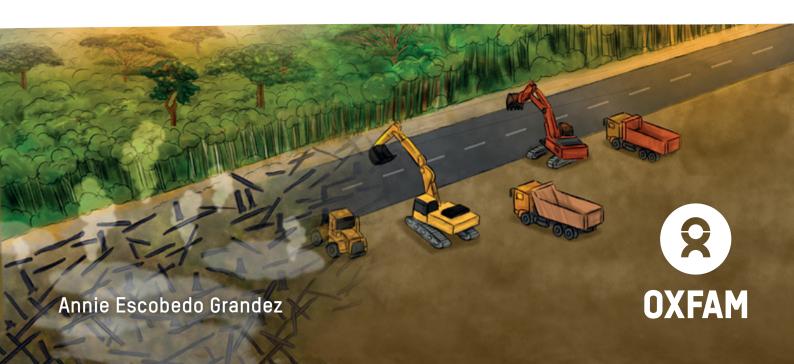


# AGRIBUSINESS FUELING THE CLIMATE CRISIS IN PERU

MONOCULTURE, DEFORESTATION AND CARBON EMISSIONS IN THE PERUVIAN AMAZON



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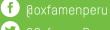
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# STUDY'S **PRESENTATION**

Monocultures, especially those of oil palm, have grown at an increased pace in the Peruvian Amazon over the last 20 years, from 15,000 hectares in 2000 to around 110,000 hectares in 2019, according to Peru's Ministry of Agriculture and Irrigation. One of the main reasons driving this trend is the fact that oil palm is considered one of the world's most efficient crops, given industry's expectations and the high profitability in both domestic and global markets. In this context, we believe it is important to assess the diverse effects generated by the large-scale expansion of plantations in the Amazon.

Since 2017, Oxfam, along with allied organisations, has been working to promote public debate on social and environmental impacts of monoculture development in the Amazon region. Under the Protecting the Amazon project, we have undertaken several studies that have illustrated both the negative effects of these plantations on human and land rights of rural and native communities in Loreto, San Martín and Ucayali, as well as the violation of environmental and social regulations. In addition, these studies have provided an analysis of the resulting deforestation, revealed the stakeholders linked to the supply chain, and assessed the Peruvian state's oversight of these megaprojects.

This study aims to find new evidence on the relationship between the expansion of large-scale monocultures, the deforestation in the Peruvian Amazon and its consequences in terms of greenhouse gas emissions (GHG).

The 2019 Special Report on Climate Change and Land by the Intergovernmental Panel on Climate Change (IPCC) shows that, between 2007 and 2016, 23% of all the anthropogenic GHG emissions came from Agriculture, Forestry and Other Land Use (AFOLU) activities, with deforestation being the main cause of CO2 emissions. According to the Ministry of Environment, 45% of GHG emissions in Peru come from AFOLU activities, with transformation of forest lands into agricultural lands being the biggest contributor. Therefore, if the Peruvian government is determined to meet its commitment of 40% reduction in GHG emissions by 2030, it needs to strengthen efforts to tackle deforestation. It is therefore critical to restrict the expansion of a key driver of deforestation: large-scale agribusiness.

The figures in this study allow us to understand the size of the problem and its consequences in terms of GHG emissions:

- A net loss of 2,859,535 metric tonnes of carbon storage due to the development of oil palm plantations in the Peruvian Amazon, a quantity greater than the carbon stored in the 36,348 hectares of the Peruvian nature reserve "Zona Reservada Río Nieva".
- 45% of the carbon emitted by oil palm crops across the Peruvian Amazon comes from four plantations: Ocho Sur U. SAC, Ocho Sur P. SAC, Palmas del Oriente S.A and Palmas del Shanusi S.A.
- More than 83,000 hectares of Amazonian forest may be lost if suspended or inactive projects of large-scale plantations are developed. This is equivalent to the CO2 emitted by the energy use of more than 4 million households per year.

4 AGRIBUSINESS FUELING THE CLIMATE CRISIS IN PERU: MONOCULTURE, DEFORESTATION AND CARBON EMISSIONS IN THE PERUVIAN AMAZON EXECUTIVE SUMMARY

To restrain this driver of deforestation and contribute to the protection of one of the world's most important carbon sinks, Oxfam recommends limiting oil palm cultivation in primary forests. Fields cultivated by small- and medium-scale agribusinesses should be restricted to deforested or degraded areas, taking into account land use regulations.

Furthermore, the Peruvian State needs to make clear progress in the enforcement of mitigation targets included in its Nationally Determined Contributions, particularly the ones related to land-use change. As for regional governments, they should prioritise the granting of land titles to rural and native communities and establish rights of use.

Finally, agro-industrial businesses must promote transparency within their supply chains and seriously commit to not buying or using palm oil coming from illegally deforested areas. Consumers have the right to know if products were made at the expense of deforesting the Amazon.

We hope this study will contribute to raising awareness about the relationship between monoculture, deforestation and climate change, and evidence the need to promote more inclusive and sustainable development models that protect the Amazonian forest and offer a dignified and healthy life to surrounding communities.

This document provides a summarised version in English of the study and will explain its main findings, conclusions and recommendations.



# 1

# THE STUDY IN A NUTSHELL

This study quantifies the carbon loss caused by the cultivation of oil palm and cacao in four Amazonian departments in Peru: Loreto, Ucayali, San Martín and Huánuco. Oil palm crops were analysed in all four departments, while cacao crops were only analysed in Loreto. In addition, in each of the departments (with the exception of Huánuco), carbon loss generated exclusively by companies owning oil palm monocultures—such as Palmas de Shanusi S. A. and Palmas del Oriente S. A. in Loreto, Ocho Sur U and Ocho Sur P in Ucayali, and Palmas del Huallaga S. A. C. in San Martín— and cacao monocultures—such as Tamshi S. A. C. in Loreto—was also analysed.

The analysis used spatially explicit information (GIS) combined with available descriptive secondary data. Such information was mainly obtained from official sources such as the Ministry of Agriculture and Irrigitation (Minagri), the Ministry of Environment (Minam) and the National Forest Conservation Programme for Climate Change Mitigation (PNCB). Additionally, data generated by non-governmental organisations (NGOs) that monitor agribusinesses in the Peruvian Amazonia —e.g., Wildlife Conservation Society (Dammert, 2017), Monitoring of the Andean Amazon Project (MAAP) (2018), Paz y Esperanza (2019) and EIA (Environmental Investigation Agency)— was utilised.

The methodological process consisted of four phases. In the first phase, oil palm or cacao areas (plots) were identified or quantified. The second phase focused on the analysis of land-use changes in the plots identified in phase 1 for a 16-year period (2000, 2005, 2011, 2013, 2016); for instance, hectares of forest transformed into oil palm plantations or areas for other land use. In the third phase, carbon loss and carbon gain generated by land-use changes in the area analysed were calculated; for example, when carbon is lost due to the transformation of forests into oil palm and cacao crops, these crops capture carbon when full-grown, producing carbon gain. Finally, the fourth phase consisted in calculating the net loss of carbon, which is the difference between the carbon lost and carbon gained when transforming a forest into areas for other land use. If we take the example of phase 3, forest loss resulted in a carbon loss of 100 metric tonnes (MT), but the cultivation of oil palm led to the recovery of 40 MT of carbon; as a result, the remaining 60 MT of non-recovered carbon is the net loss.

The results of oil palm crop analysis per department were classified based on their production scale: small scale is up to 5 hectares (ha); medium scale is from 5 ha to 50 ha; and large scale, is more than 50 ha.

→ In Loreto, 19,009 ha of active oil palm crops were identified, and more than 85,905 ha more have been proposed by private companies for large-scale oil palm production but were suspended and inactive as of the preparation of this report.

The analysis of small and medium-scale crop production in the 16-year period revealed a forest loss of 8,263 ha: 4,989 ha used for oil palm and 3,274 ha for other land use (e.g., secondary vegetation, fallow lands and water bodies). The land-use transformation of forests to plantations caused a

carbon loss of 941,270 MT, and the new land use led to a carbon stock increase of 320, 962 MT, which means that, in this case, the net carbon loss was 620,308 MT.

In Loreto, the analysis of the impact of large-scale production —by Palmas del Shanusi S. A. and Palmas del Oriente S. A.— revealed a forest loss of 6,307 ha, of which 5,856 ha were mainly transformed into oil palm plantations, while 446 ha became secondary vegetation. This accounted for a loss of 718,686 MT of carbon that was released as a result of the forest loss; after the land-use transformation, 203,765 MT of carbon were gained, which results in a net carbon loss of 514,921 MT.

In Ucayali, an area of 39,211 ha was analysed. During the 16-year period, small-scale production caused the loss of 287 ha of forest and 12.6 ha of secondary vegetation, which were transformed into 114.9 ha of oil palm and other land use such as pastures/grasslands and man-made areas. This led to a carbon loss of 29,986 MT and a carbon gain of 9,782 MT, which resulted in a net carbon loss of 20,204 MT. With regard to medium-scale production, 2,174.2 ha of forest and 215.2 ha of secondary vegetation were lost and transformed into 948.4 ha of oil palm 1,435.2 ha of pastures/grasslands, and 0.1 ha of manmade areas. The land-use transformation of forests and secondary vegetation resulted in a carbon loss of 233, 821 MT and a total carbon gain of 78,234 MT, which meant a net carbon loss of 155,587 MT. With regard to large-scale production, 6,427 ha of forest and 357.4 of secondary vegetation were lost and transformed into 4,453 ha of oil palm, 2,324 ha into pasture/grasslands, and 0.4 ha into man-made areas. Likewise, this transformation accounted for a carbon loss of 675,569 MT and a carbon capture of 217,084 MT, resulting in a net carbon loss of 458,485 MT.

In Ucayali, the analysis of the changes generated by Ocho Sur P and Ocho Sur U revealed, on the one hand, that Ocho Sur P caused the loss of 5,921 ha of forest and 474 ha of secondary vegetation, 6,373 of which were transformed into oil palm plantations, 18 ha into pastures/ grasslands, and 4 ha into man-made areas. This transformation led to a carbon loss of 630,468 MT and a carbon capture of 198,262 MT, which meant a net carbon loss of 432,206 MT. On the other hand, Ocho Sur U generated the loss of 4,836 ha of forest, 227 ha of secondary vegetation and 26 ha of pasture/grasslands; all 5,089 ha were transformed into oil palm plantations. This transformation led to a carbon loss of 506,909 MT and a carbon capture of 157,770 MT, which meant a net carbon loss of 349,139 MT.

In San Martín, a total area of 29,471 ha was analysed. During the 16-year period, small-scale production caused the loss of 89 ha of forest and 1 ha of pasture/grasslands, which were replaced by 86.1 ha of agricultural areas, 2.1 ha of water bodies, 1.4 ha of secondary vegetation and 0.5 ha of man-made areas. The land-use transformation of forests and pasture/grasslands led to a carbon loss of 7,723 MT, while new uses resulted in a carbon capture of 2,759 MT, with a net carbon loss of 4,964 MT. For its part, medium-scale production generated a forest loss of 448.6 ha, which were transformed into



#### **LORETO**

**FOREST LOSS** 14,570 ha

**CARBON LOSS** 1,135,229 MT

#### UCAYALI

FOREST LOSS 19,645.2 ha

**CARBON LOSS** 1,415,621 MT

#### **SAN MARTIN**

**FOREST LOSS** 4,405.2 ha

**CARBON LOSS** 271,070 MT

#### HUANUCO

FOREST LOSS 1,244.3 ha

CARBON LOSS 38,839 MT 342.3 ha of oil palm, 81.9 ha of secondary vegetation, 17.1 ha of water bodies, 4.8 ha of pasture/ grasslands and 2.6 ha of man-made areas. The land-use transformation of forests led to a carbon loss of 38,694 MT, while the new land uses resulted in a carbon capture of 14,554 MT, with a net carbon loss of 24,140 MT. Regarding large-scale production, the loss of 3,430.2 ha of forest and 2,322.8 ha of secondary vegetation was identified, of which 5,610.8 ha were used for oil palm cultivation, 93.2 ha for pasture/grasslands, 27.8 ha for water bodies and 21.1 ha for man-made areas. The land-use transformation led to the loss of 395,460 MT of released carbon and a carbon capture of 177,424 MT, which meant a net carbon loss of 218, 036 MT.

In San Martín, the analysis of the changes generated by Palmas del Huallaga S. A. C revealed a forest loss of 437.4 ha, 426.7 ha of which were turned into agricultural areas and 10.7 ha into secondary vegetation. This transformation caused 37, 619 MT of carbon to be released, but other land uses led to the recovery of 13, 689 MT of carbon, which led to a net carbon loss of 23,930 MT.

▶ In Huánuco, a total area of 2034 ha was analysed. Unlike the other three departments, the analysis was conducted by district: Cholón, Honoria and Tournavista. In Cholón, during the 16-year period, 729 ha of forest were lost, 456 of which were transformed into oil palm and 272 ha into secondary vegetation, among others. The land-use transformation caused the loss of 46,995 MT of released carbon, while new land uses generated a carbon gain of 24,079 MT, which resulted in a net carbon loss of 22,916 MT. In the district of Honoraria, 408.3 ha of forest were lost and transformed into secondary vegetation and oil palm; as a result, 26,338 MT of forest carbon stock were lost, while 14,016 MT were gained, which resulted in a net carbon loss of 12,322 MT. In Tournavista, 107 ha of forest and 1 ha of secondary vegetation were turned into 108 ha of oil palm, which led to a carbon stock loss of 6,943 MT, more than twice the 3,342 MT recovered by oil palm cultivation; this led to a net carbon loss of 3,601 MT.

The global analysis of oil palm plantations shows that 77% of the production takes place in Ucayali and San Martín, with 39,211 ha and 29,471 ha, respectively, followed by Loreto, with 19,009 ha, and Huánuco, with barely 2,304 ha. As for net carbon loss, all four departments accumulated a total of 2,859,535 MT of carbon or 2.8 petagrams of carbon (TgC), which is almost equivalent to the carbon stock in Zona Reservada Río Nieva (2.28 TgC). This net loss, when converted to carbon dioxide equivalent¹ (C02e) is equal to 10,494,493 MT, which is equivalent to the carbon dioxide (C02) emissions released by the energy consumption of 1,210,996 US households in one year. Furthermore, if the inactive or suspended projects in Loreto were developed, there would be a net carbon loss of 9,793,170 MT (9.79 TgC) following the transformation of 85,905 ha of forest, which is equivalent to the 9.26 TgC of carbon stock in the Reserva Comunal Tuntanaín. However, if carbon was turned into C02e, it would result in 35,940,933 MT, which is equal to the energy consumption of 4,147,350 US households in one year.

With regard to cacao plantations in Loreto, the analysis revealed that they were mainly located in the district of Fernando Lores. Large-scale production is carried out by Tamshi S. A. C., which covered a total area of 2,701 ha. Land-use changes became visible beginning in 2013 due to land grabs by Grupo Melka. During the 16-year period, 2,228 ha of forest were transformed, mainly into secondary vegetation and cacao plantations, which caused a carbon loss of 87,040 MT. The conversion of carbon loss to CO2e release represented 319,436.8 MT, which is equivalent to the energy consumption of 36,862 US households in one year.

Finally, although the analysis used secondary data, results provide conservative estimates of the impact that large-scale agribusinesses can have on the four Amazonian departments mentioned, and also raise awareness among decision-makers about potential impact in terms of forest loss and resulting greenhouse gas (GHG) emissions, such as the release of CO2e into the atmosphere.

<sup>1</sup> The carbon loss due to land-use change (C) was multiplied by 3.67—based on the suggestions of the Intergovernmental Panel on Climate Change—for its conversion into carbon dioxide equivalent (CO2e) (Yepes et al. 2011).



#### **REGARDING OIL PALM**

#### → 89725 ha OF OIL PALM CROPS

89,725 ha of oil palm were analysed. Of all four departments, Ucayali has the largest production area (44% or 39,211 ha), followed by San Martín (33% or 29,471 ha), Loreto (21% or 19,009 ha) and Huánuco (barely 2% or 2,034 ha).

#### → 85 905 ha SUSPENDED AND INACTIVE

In Loreto, there are suspended and inactive large-scale oil palm projects. These projects altogether add up to 85,905 ha, a number similar to the active production areas for oil palm.

#### → 17 488 ha OF FOREST LOST

The analysis of the five companies engaged in large-scale oil palm production —Palmas del Shanusi S. A. and Palmas del Oriente S. A. in Loreto, Palmas del Huallaga S. A. C. in San Martín, and Ocho Sur P and Ocho Sur U in Ucayali, all of which covered an extension of 22,841 ha—revealed that the accumulated impact of these companies' presence generated the forest loss of 17,488 ha (90% of the total production area) during the period analysed (2000-2016).

#### → LAND GRABBING

Land-use changes and the resulting forest loss due to oil palm cultivation are visible since 2013. Companies such as Ocho Sur P and Ocho Sur U are key land grabbing cases, which not only led to forest loss but also to social conflicts.

#### → FOREST LOSS CAUSED BY PALMAS DEL HUALLAGA S. A. C.

Even though forest loss caused by Palmas del Huallaga S. A. C during the period analysed (2000–2016) was not visible, the National Forest Conservation Program reports revealed that 819 ha of forest were lost between 2017 and 2018.

#### → 50 % OF TOTAL NET CARBON LOSS OCCURRED IN UCAYALI

As for net carbon loss due to the creation of oil palm plantations, 50% of net carbon loss took place in the department of Ucayali (1,415,621 MT of carbon), followed by Loreto with a net loss accounting for 40% (1,135,229 MT); the remaining 10% occurred in San Martín (9 % or 269, 846 MT of carbon) and Huánuco (1% or 38, 839 MT of carbon).

#### **NET CARBON LOSS CAUSED** BY COMPANIES

In Loreto, net carbon loss generated by Palmas del Shanusi S. A. and Palmas del Oriente S. A. was 514,921 MT; in Ucayali, the carbon loss caused by Ocho Sur P and Ocho Sur U was 781,345 MT; in San Martín, the carbon loss generated by Palmas del Huallaga S. A. C. was 23, 930 MT.

#### 2,859,535 MT OF CARBON LOSS

Finally, carbon loss in all four departments analysed totalled 2,859,535 MT of carbon (or 2.8 TgC), which is nearly equivalent to the carbon stock of the Zona Reservada Rio Nieva (2.28 TgC). If converted to CO2, the loss is equal to 10,494,493 MT, which is equivalent to the amount of CO2 emissions released by the energy consumption of 1,210,996 households in one year.

#### **REGARDING CACAO**

- → LARGE-SCALE PRODUCTION BY TAMSHIS. A. C.
  - Loreto's cacao plantations are located primarily in the district of Fernando Lores. Large-scale production by Tamshi S. A. C. occupied 2,701 ha.
- CONVERSION OF 2,228 HA OF FOREST TO CACAO CROPS

Land-use changes are visible since 2013 and are related to Grupo Melka's land grabbing. The development of one cacao plantation was responsible for the conversion of 2,228 ha of forest during the 16-year period analysed.

→ CARBON LOSS OF 87,040 MT

The net loss of carbon stock, mainly caused by the transformation of forest into one cacao plantation and secondary vegetation, was 87,040 MT. This carbon loss is equivalent to the CO2 emissions released by the energy consumption of 36,862 households in one year.



# **CONCLUSIONS AND** RECOMMENDATIONS

#### 3.1 SPOTLIGHT AND NEW PERSPECTIVES

In 2010, the Grupo Melka turned the spotlight on the development of oil palm in Peru. This new company introduced Peru as "the goose that lays golden eggs", the perfect place to promote oil palm production and expand agribusiness (Convoca, 2016). By 2014, Melka companies had acquired 15,000 hectares in Loreto and Ucayali (Convoca, 2016).

Until then, agribusinesses and oil palm had been presented as a local development alternative in Peru and as a replacement for coca crops (e.g., in Huánuco) that would allow to recover the use of degraded lands and contribute to the reduction of CO2 emissions. Among the main producers of Peru since the 70s is Grupo Romero, which owns most of the industry through ongoing growing and production; other oil palm sowers with small and medium-scale production also entered the scene (Bracamonte & Castro, 2020).

With foreign capital injection, the spotlight was placed on the benefits of oil palm production at a larger scale. Among the reasons for sowing were its high profitability in comparison to other crops, the wide variety of healthy products that could be made with its fruits, and its use for the production of new energy sources such as biodiesel (Lu de Lama, 2015). According to its promoters, considering all these advantages, oil palm crops could contribute to mitigating climate change effects.

However, it was not long until the potential environmental and social consequences of intensive oil palm cultivation sounded the alarms (La Rosa Salazar, 2018). Previous experience and evidence in countries such as Indonesia or Malaysia —referred to later in this study— associate the expansion of oil palm crops to increased deforestation levels, pollution of water bodies and biodiversity loss (Dammert, 2015), in addition to conflicts generated by land use and property, and damages to the social and cultural fabric due to the appropriation of lands owned by native, rural and local communities (e.g., Ocho Sur in Ucayali).

In recent years, the media, civil society organisations and other organisations such as Oxfam and GIZ have "set their eyes" on this activity and advocated a public debate about the environmental and social effects of the expansion of oil palm cultivation. A GIZ report (2016) stated that, since 2007, "there is evidence about the expansion of deforestation units to more than 500 hectares, linked to industrial oil palm crops", and emphasised that Barranquita and Alto Amazonas (in San Martín and Loreto, respectively) were the most affected areas, while Tamshiyacu (in Loreto) was also affected by cacao crops (GIZ, 2016). This document suggested updating the plan for the promotion of oil palm cultivation in order to identify adequate areas for its development and define more detailed technical criteria.

# 3.2 SUSTAINABLE DEVELOPMENT PLAN FOR OIL PALM IN PERU 2016-2025

In 2016, the Ministry of Agriculture and Irrigation (Minagri, for its acronym in Spanish) published the National Sustainable Development Plan for Oil Palm in Peru 2016-2025, which was based on the Development Plan for Oil Palm 2000-2010 and was promoted by the Peruvian National Board for Oil Palm (Junpalma, for its acronym in Spanish), a non-profit private organisation that "promotes the expansion of the oil palm agro-industry under economic, social and environmental sustainability principles" (Junpalma, n. d.).

In this plan, Minagri identified the limited competitiveness of production chains as an obstacle to the sustainable development of oil palm agribusiness, and proposed to solve it through lines of action focused on 1) the increase of productivity with practices meeting high environmental standards, 2) the opening of new markets focused on biodiesel production, and 3) the strengthening of State institutions' capacity to guarantee the compliance with the laws for the definition of adequate or non-adequate areas for agriculture, among others.

## 3.3 EXPANSION AFFECTS FOREST CONSERVATION AND CONTRIBUTES TO GHG EMISSIONS

Peru, together with other 194 countries, committed —through the Paris Agreement signed during the Conference on Climate Change (COP21) in 2015— to contribute to the fight against climate change and promote measures and investments to secure a resilient and sustainable future with low CO2 emissions. The global commitment to maintain a sustained increase of Earth's average temperature below 2 °C, with efforts to keep it below 1.5 °C, according to many experts, is not possible without forest conservation. Thus, reducing slash and burn is essential to revert climate change (Minam, 2016a). In this context, the role of forest in the mitigation of climate change is critical and widely recognised. However, preserving forests is not only about mitigating GHG emissions: forests provide ecosystem services such as water, and are home to an impressive biodiversity that benefits humanity, particularly people living in forests (Minam, 2016b).

According to the Economic Commission for Latin America and the Caribbean (CEPAL) and the Organisation for the Economic Cooperation and Development (OECD) (2017), Peru's participation in GHG emissions—per capita and total— is low. Peru's emissions represent 0.3% of the global total, and around half of this comes from activities related to land use, land-use change and forestry (LULUCF). According to Infocarbono (2020), GHG emissions by 2014 were mainly released by three sectors: LULUCF (45%), followed by the energy sector (30%) and the agriculture sector (16%).

Based on its commitment under the Paris Agreement, Peru's goal is to reduce 30% of its emissions projected for 2030, which implies reducing emissions from the LULUCF sector by 43.1 %, from the energy sector by 16.9% and from the agriculture sector by 6.5% (Ministry of Environment, 2018).

To meet this goal, it is essential to solve the problem of deforestation (mainly caused by the LULUCF sector). The growing demand for agro-industrial crops —such as oil palm— and high value crops —such as cacao and coffee— bring about land-use changes that compete with natural forests (SPDE and CDP, 2019). These crops are therefore recognised as the main drivers of deforestation nationwide. The MINAM (2015)

reported that deforestation across the Peruvian Amazonia in 2001-2013 was directly correlated to the increase in population and the gross domestic product (GDP). The 1% increase in population meant a 0.54% increase in deforestation, and the 1% increase in GDP accounted for a 0.22% increase in deforestation. In areas with several deforestation drivers this was related to the price of the product, such as in areas with alluvial gold mining or agricultural cash crops (coffee, cacao and oil palm).

A process to revise the Nationally Planned and Determined Contributions (INDC) was expected to be conducted in 2020, as it is necessary to make adjustments to significantly reduce the deforestation generated by the aforementioned sectors and to consolidate the Public-Private Coalition, promoted by MINAGRI to boost and develop value chains free from deforestation and low in emissions in the Peruvian Amazon (SPDE and CDP, 2019).

#### 3.4 LARGE-SCALE AGRIBUSINESS: WHERE IS SOCIAL AND ENVIRONMENTAL JUSTICE?

In Peru, the vision and development of large-scale agribusiness have been strongly influenced by environmental concerns and the model of global production. Private interests and the focus on production and competitiveness have taken preference over collective interests and the protection of the Amazon. In addition, environmental opponents have ended up as allies with the expansion of oil palm cultivation and a narrow vision of sustainability, which does not consider the complexity of the process or the different approaches that agriculture can adopt to contribute to socially and environmentally fair practices (Dammert, 2015).

Oil palm cultivation in Peru has increased substantially as a result of strategies to promote private investment in the agro-industrial sector (Lu de Palma, 2015). Private sector views clearly permeate oil palm development policies and respond to a global production outlook led by multinational corporations driven by the demand for edible oils, cosmetics and biofuel (Dammert, 2015).

For example, policies constantly refer to the need to adopt standards of the Roundtable on Sustainable Palm Oil (RSPO), whose creation is funded by global companies such as Nestlé, PepsiCo, Kellogg or Procter & Gamble, whose products depend on oil palm cultivation (Bracamonte and Castro, 2020). Through these standards, oil palm cultivation is presented as an alternative to contribute to the reduction of CO2 emissions —since it enables the manufacture of biodiesel— and as a healthier option in comparison to other vegetable oils.

Yet the adoption of such standards becomes controversial as the private sector justifies intensive oil palm production and consumption saying it has environmental certification 47, without tackling the main structural problems, such as land grabbing, inequity, and institutional weakness. La Rosa Salazar (2018) analyses the changes in policies related to oil palm in the Peruvian Amazon in 2000 and in 2015 and ratifies that even though the government's new vision has been influenced by this environment-related criticism, the National Sustainable Development Plan for Oil Palm in Peru 2016-2025 is adjusted to the global production outlook and turns this criticism into a competitive advantage in the market.

Another contradiction is that, although the standards promote the use of oil palm that does not cause deforestation in Peru, the lack of clarity in legal systems favours the acquisition of land and licenses by corporate groups and monopolies. In practice private companies are still using illegal methods —supported by the State—that enable them to expand their monopoly practices and resulting environmental damages. This is shown by a recent court decision from December 2019 on a case of

illicit environmental certifications for agro-industrial oil palm projects of Grupo Romero companies (Bracamonte and Castro, 2020).

The vision of oil palm development that has been imposed is still based on a conventional and capitalist-style sustainable development concept that promotes competition and economic growth while pushing forest conservation and the ecosystem services it provides into the background. According to Dammert (2015), the progress of plantations is geometrical: much faster than the production of data and its analysis.

The National Sustainable Development Plan for Oil Palm in Peru 2016-2025, in focusing on the compliance with environmental certifications, frames sustainability within a global production model of traditional agriculture that provides value added to the oil palm production chain but fails to incorporate social and environmental justice. Terms such as 'sustainability' and 'sustainable development' in the Plan are constantly linked to concepts such as granting criteria, deforestation, worldwide commitments, international standards, and production, but are rarely associated with native communities, traditional knowledge, agro-ecological practices and restoration of rights.

Like Dammert, La Rosa Salazar (2018) concluded that the development perspective proposed by the State in 2016 was based on a vague conventional definition of sustainability whose conceptualisation focuses on practices that improve the competitiveness of oil palm agribusinesses.

In contrast, agroecology is an alternative that involves a collective agronomical practice promoting the endogenous potential of agriculture and explicitly considering not only economic and social aspects (employability and profit) but also environmental and ecological elements (pollution, land conservation, nutrient cycle) (Sevilla and Martinez-Alier, 2006).

Nevertheless, now that climate change is putting additional pressure on governments to find solutions, it would be strategic for Peru move toward developing new concepts regarding sustainability. There is an opportunity to explore theorical frameworks based on the traditional perspectives of the groups living in the Amazon, with the farmers and civil society, who have a close, daily relation with nature in the region.

## 3.5 EXTRACTION AND PRIVATISATION IN THE AMAZON

As a result of this disparity with regard to those interests fostering the development of oil palm agribusiness, the Peruvian Amazon is being privatised and advancing a highly exclusive model of natural resource exploitation that will lead to the devastation of the Amazon and of Peru's development. While oil palm company profits are concentrated among those groups, partnerships and businesses leading the market, the losses in the Amazon have a broad impact on civil society, especially native and local communities.

Although Peru is still a small player in the big game of oil palm production and its by-products, and the devastation of the Amazon does not compare to that of other Amazonian countries, such as Brazil and Colombia, it is important that stakeholders of oil palm cultivation pay attention to, discuss and consider the direct and indirect consequences of the country's oil palm expansion vision.

Peru can look to the example of Southeast Asian countries, where oil palm cultivation brought economic benefits along with irreversible environmental damage. The case of Indonesia and Malaysia, which supply 85% of the global demand (Bracamonte and Castro, 2020), is important as it is estimated that due to their

intensive cultivation, availability of land for oil palm cultivation will be exhausted by 2022 (Bracamonte and Castro, 2020, quoting EIA, 2015), leaving hundreds of areas devastated and farmers without income. This experience suggests that if Peru does not reorient its vision for expanding oil palm cultivation, the benefits of oil palm agribusiness will lead to immeasurable environmental, social and political costs.

In addition to its devastating impact, the strategy of extraction and privatisation of the Peruvian Amazon can limit the country's possibility of playing an important geopolitical role in the fight against climate change.

Peru is privileged for having Amazonian forests that provide invaluable ecosystem services to mitigate and prevent climate change. Therefore, prioritising the protection of these ecosystems over productivity and competition in the National Sustainable Development Plan for Oil Palm in Peru 2016-2025 must be considered as a necessity for the development of Peru and constantly evolving agribusinesses. Additionally, international cooperation is increasingly interested in providing capital to protect and quarantee the provision of such ecosystem services.

#### 3.6 TOWARDS A MORE STRATEGIC VISION OF **AGRIBUSINESS ALIGNED WITH PROTECTION** OF THE AMAZON

Based on the analysis, the vision for development of oil palm agribusiness should be reoriented towards a more strategic approach that takes into account the social and environmental characteristics of the Amazon. To this end, the following actions are recommended:

- Align the vision and strategies of the National Sustainable Development Plan for Oil Palm in Peru 2016-2025 with the needs and local context of the Amazon.
- Stop the promotion of agribusiness in Amazonian primary forests and their unique and endemic ecosystems; in areas where large-scale monoculture production is permitted, consider and mitigate the socioenvironmental impacts of agribusiness as well as its effects on climate change.
- Discourage oil palm cultivation in primary forests and prioritise the protection of Amazonian resources.
- Take into account existing power relations between large private companies and other stakeholders with less negotiation capacity such as native and rural communities.
- Prioritise the protection of the Peruvian Amazon, and advance titling of land and allocation of land use rights to that end.
- Promote agroecological practices that drive food sovereignty and are aligned with the landscape and diversity in the Amazon.
- Gather evidence on the consequences of the expansion of agribusiness, on deforestation and reduction of carbon capture in the case of the Peruvian Amazon. At the same time, develop public awareness campaigns that enable civil society organisations and other stakeholders to make informed decisions about development in the Amazon.

