



Instituto de Estudios Forestales & Ambientales

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Letter N° 002-2017-KENÉ

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President of the European Parliament
European Parliament
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Belgium

Mr.
DONALD TUSK
President of the European Council
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B-1048 Bruxelles/Brussel
Belgique/België

Messrs.
MEMBERS OF THE COUNCIL OF THE EUROPEAN UNION

Mr.
JEAN-CLAUDE JUNCKER
President of the European Commission
Rue de la Loi / Wetstraat, 175
B-1048 Bruxelles/Brussel
Belgique / België. -

An Open Letter to the Members and Authorities of the European Parliament:

Receive cordial greetings from KENÉ, Institute of Forestry and Environmental Studies¹, and from several representative organizations of Indigenous Peoples, and associations of small local farmers from the Peruvian Amazon.

¹ Kené is a Peruvian non-profit organization, which aims to contribute making Peru a sustainable, equitable, fair and environmentally responsible country; the conservation of tropical forests, biodiversity and their ecosystem services, from a rights, governance and transparency approach. www.kenamazon.net

On this occasion we turn to you in connection with the Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources, presented by the European Commission at Brussels, on November 30, 2016; In order to express our concern about the possible impacts of the incorporation of palm oil as one of the sources of biofuels, within the framework of the goal of increasing the participation of biofuels in the energy supply for the European Union.

This is due to the fact that, the international demand for biofuels, as well as policies promoting agribusiness monocultures in tropical countries, such as oil palm, has led to deforestation by clearing more than two hundred thousand (200,000) hectares of tropical primary forests with high biodiversity in the Peruvian Amazon, generating serious economic, environmental and social impacts, which we will detail in this communication.

- **Antecedents**

Directive 2009/28/EC established a regulatory framework for the promotion of the use of energy from renewable sources which set binding national targets on the share of renewable energy sources in energy consumption and transport to be met by 2020.

In October 2014, the EU countries, in the context of the European Council, have agreed on 2030 Framework for Climate and Energy targets and policy objectives², which aim to help the EU achieve a more competitive, secure and sustainable energy system, as well as to meet its long-term 2050 greenhouse gas reductions goal. Targets for 2030 are:

- a 40% cut in greenhouse gas emissions compared to 1990 levels
- at least a 27% share of renewable energy consumption
- at least 27% energy savings compared with the business-as-usual scenario³

Promoting renewable forms of energy is one of the goals of the Union energy policy. The increased use of energy from renewable sources, together with energy savings and increased energy efficiency, constitutes an important part of the package of measures needed to reduce greenhouse gas emissions and comply with the 2015 Paris Agreement on Climate Change, and the Union 2030 energy and climate framework, including the binding target to cut emissions in the Union by at least 40% below 1990 levels by 2030⁴.

² European Parliament resolution of 5 February 2014 on a 2030 framework for climate and energy policies. In: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P7-TA-2014-0094+0+DOC+xml+v0//EN>

³ "A policy framework for climate and energy in the period from 2020 to 2030" (COM/2014/015 final).

⁴ EUROPEAN COMMISSION. 2016. Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources. Brussels, 30.11.2016. COM (2016) 767 final 2016/0382 (COD). 115 p

The 27% for the share of renewable energy consumed in the EU in 2030 target is binding at EU level and will be fulfilled through individual Member States' contributions guided by the need to deliver collectively for the EU. In addition, the new framework also enables the collective delivery to be done without preventing Member States from setting their own, including more ambitious, national targets⁵.

- **Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources**

On November 30, 2016, the European Commission presented to the European Parliament a proposal for a Directive on the Promotion of the Use of Energy from Renewable Sources to be implemented until 2030.

This proposal, establishes a EU-level obligation for fuel suppliers to provide a certain share (6.8% in 2030) of low-emission and renewable fuels (including renewable electricity and advanced biofuels), in order to stimulate decarbonization and energy diversification and to ensure a cost-efficient contribution of the sector to the overall target achievement. ILUC⁶ issues are addressed through Article 7 of the proposal, which introduces a decreasing maximum share of biofuels and bioliquids produced from food or feed crops starting from 2021. The switch to advanced biofuels is promoted by a specific sub-mandate, increasing yearly their contribution to reach at least 3.6% by 2030⁷.

The document also reinforces the existing EU sustainability criteria for bioenergy, including by extending their scope to cover biomass and biogas⁸. A new risk-based sustainability criterion for forest biomass is introduced, as well as LULUCF⁹ requirement for ensuring proper carbon accounting of carbon impacts of forest biomass used in energy generation. In addition, the GHG saving performance requirement applying to biofuels is increased to 70% for new plants and an 80% saving requirement is applied to biomass-based heating/cooling and electricity¹⁰.

⁵ Ídem, p: 2.

⁶ Indirect Land Use Change

⁷ EUROPEAN COMMISSION. 2016. Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources. Brussels, 30.11.2016. COM (2016) 767 final 2016/0382 (COD). Art. 25°.

⁸ The sustainability criterion applying to agricultural biomass is streamlined in order to reduce the administrative burden. The text also makes the criterion for peatland protection stricter, but easier to verify.

⁹ UNCCC. Glossary of climate change acronyms and terms.

Land use, land-use change, and forestry (LULUCF): A greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities. http://unfccc.int/essential_background/glossary/items/3666.php#L

¹⁰ EUROPEAN COMMISSION. 2016. Op. Cit. Art. 26°, p: 20.

“Article 26.- Sustainability and greenhouse gas emissions saving criteria for biofuels, bioliquids and biomass fuels

(32) Biofuels, and bioliquids and biomass fuels produced from agricultural biomass taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall not be made from raw material obtained from land with high biodiversity value, namely land that had one of the following statuses in or after January 2008, whether or not the land continues to have that status:

(a) primary forest and other wooded land, namely forest and other wooded land of native species, where there is no clearly visible indication of human activity and the ecological processes are not significantly disturbed;

(b) areas designated:

(i) by law or by the relevant competent authority for nature protection purposes; or

(ii) for the protection of rare, threatened or endangered ecosystems or species recognized by international agreements or included in lists drawn up by intergovernmental organizations or the International Union for the Conservation of Nature, subject to their recognition in accordance with the first second subparagraph of Article 1827(4); unless evidence is provided that the production of that raw material did not interfere with those nature protection purposes;

(c) highly biodiverse grassland spanning more than one hectare that is:

(i) natural, namely grassland that would remain grassland in the absence of human intervention and which maintains the natural species composition and ecological characteristics and processes; or

(ii) non-natural, namely grassland that would cease to be grassland in the absence of human intervention and which is species-rich and not degraded and has been identified as being highly biodiverse by the relevant competent authority, unless evidence is provided that the harvesting of the raw material is necessary to preserve its grassland status as highly biodiverse grassland¹¹”.

In this sense, the petition for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources, emphasizes in the accomplishment of requirements to minimize the risk of using unsustainable forest biomass for biofuel production, especially when it occurs in forest ecosystems of high conservation value. In this cases, the impacts of forest harvesting on soil quality and

¹¹ *Ídem*, p: 93

biodiversity should be minimized; and not exceed the long-term production capacity of the forest¹².

In addition, the proposal of EU Energy Security Policy contains safeguards respect to the international commitments to reduce greenhouse gas emissions, within the framework of the Paris Agreement (2015), as can be seen in the following provision:

“(6). Biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 if the country or regional economic integration organization of origin of the forest biomass meets the following LULUCF requirements:

(i) is a Party to, and has ratified, the Paris agreement;

(ii) has submitted a Nationally Determined Contribution (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC), covering emissions and removals from agriculture, forestry and land use which ensures that either changes in carbon stock associated with biomass harvest are accounted towards the country's commitment to reduce or limit greenhouse gas emissions as specified in the NDC, or there are national or sub-national laws in place, in accordance with Article 5 of the Paris Agreement, applicable in the area of harvest, to conserve and enhance carbon stocks and sinks;

(iii) has a national system in place for reporting greenhouse gas emissions and removals from land use including forestry and agriculture, which is in accordance with the requirements set out in decisions adopted under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris agreement”.

In the same sense, and in adherence and compliance with the guidelines and commitments of the Declaration of Principles on Forests (1992), Convention on Biological Diversity (1992), United Nations Convention to Combat Desertification (1994);

¹² *“(5). Biofuels, bioliquids and biomass fuels produced from forest biomass taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 shall meet the following requirements to minimize the risk of using unsustainable forest biomass production:*

(a) the country in which forest biomass was harvested has national and/or sub-national laws applicable in the area of harvest as well as monitoring and enforcement systems in place ensuring that:

i) harvesting is carried out in accordance to the conditions of the harvesting permit within legally gazetted boundaries;

ii) forest regeneration of harvested areas takes place;

iii) areas of high conservation value, including wetlands and peatlands, are protected;

iv) the impacts of forest harvesting on soil quality and biodiversity are minimized; and

v) harvesting does not exceed the long-term production capacity of the forest;

(b) when evidence referred to in the first subparagraph is not available, the biofuels, bioliquids and biomass fuels produced from forest biomass shall be taken into account for the purposes referred to in points (a), (b) and (c) of paragraph 1 if management systems are in place at forest holding level to ensure that:

i) the forest biomass has been harvested according to a legal permit;

ii) forest regeneration of harvested areas takes place;

iii) areas of high conservation value, including peatlands and wetlands, are identified and protected;

(iv) impacts of forest harvesting on soil quality and biodiversity are minimized;

(v) harvesting does not exceed the long-term production capacity of the forest”. Ídem, p: 96.

United Nations Assembly Resolution A / RES / 66/288: The Future We Want (2012); The New York Declaration on Forests (2014) to cut natural forest loss in half by 2020, and strive to end it by 2030; among other international instruments, this proposal also states:

“(71) The production of agricultural raw material for biofuels, bioliquids and biomass fuels, and the incentives for their use provided for in this Directive, should not have the effect of encouraging the destruction of biodiverse lands. Such finite resources, recognized in various international instruments to be of value to all mankind, should be preserved. It is therefore necessary to provide sustainability and greenhouse gas emissions savings criteria ensuring that biofuels, bioliquids and biomass fuels qualify for the incentives only when it is guaranteed that the agricultural raw material does not originate in biodiverse areas or, in the case of areas designated for nature protection purposes it is demonstrated that the production of the agricultural raw material does not interfere with such purposes.

*Forests should be considered as biodiverse according to the sustainability criteria, where they are primary forest in accordance with the definition used by the Food and Agriculture Organization of the United Nations (FAO) in its Global Forest Resource Assessment, which countries use worldwide to report on the extent of primary forest or where it is they are protected by national nature protection law. Areas where the collection of non-wood forest products occurs should be considered to be biodiverse forests, provided the human impact is small. Having regard, furthermore, to the highly biodiverse nature of certain grasslands, both temperate and tropical, including highly biodiverse savannahs, steppes, scrublands and prairies, biofuels, bioliquids and biomass fuels made from agricultural raw materials originating in such lands should not qualify for the incentives provided for by this Directive [...].*¹³

Consequently:

*“(72) Land should not be converted for the production of agricultural raw material for biofuels, bioliquids and biomass fuels if its carbon stock loss upon conversion could not, within a reasonable period, taking into account the urgency of tackling climate change, be compensated by the greenhouse gas emission saving resulting from the production and use of biofuels, bioliquids and biomass fuels. This would prevent unnecessary [...] conversion of high-carbon-stock land that would prove to be ineligible for producing agricultural raw materials for biofuels, bioliquids and biomass fuels. Inventories of worldwide carbon stocks indicate that wetlands and continuously forested areas with a canopy cover of more than 30 % should be included in that category”.*¹⁴

¹³ Ídem, p: 48.

¹⁴ Ídem, p: 49.

*(76) “To ensure that, despite the growing demand for forest biomass, harvesting is carried out in a sustainable manner in forests where regeneration is ensured, that special attention is given to areas explicitly designated for the protection of biodiversity, landscapes and specific natural elements, that biodiversity resources are preserved and that carbon stocks are tracked, woody raw material should come only from forests that are harvested in accordance with the principles of sustainable forest management developed under international forest processes such as Forest Europe and are implemented through national laws or the best management practices at the forest holding level. Operators should take the appropriate steps in order to minimize the risk of using unsustainable forest biomass for the production of bioenergy. To that end, operators should put in place a risk-based approach. In this context, it is appropriate for the Commission to develop operational guidance on the verification of compliance with the risk based approach, following the consultation of the Energy Union Governance Committee, and the Standing Forestry Committee established by Council Decision 89/367/EEC¹⁵”.*¹⁶

Renewable Energy Sources contribute to climate change mitigation through the reduction of greenhouse gas emissions, achieve sustainable development, protect the environment and improve citizens' health¹⁷. In this sense, the EU-level 2030 target setting offers an opportunity to implement a holistic approach to deployment of renewable energy. This entails a single overarching renewable energy target of at least 27% for the Union by 2030¹⁸.

However, alternative sources of renewable energy include biofuels from agro-industrial monocultures, such as palm oil, soybeans, canola, sugarcane, among others. Several studies show that at least 34% growth in EU biodiesel since 2010 comes from imported palm oil ^{19,20,21}. In 2010, just 8% of palm oil used in Europe was for biodiesel, a share which grew to 45% in 2014. A further 15% of palm oil was burned for heat and power²².

“[...] The Commission should establish appropriate criteria to define such highly biodiverse grasslands in accordance with the best available scientific evidence and relevant international standards”.

¹⁵ Council Decision 89/367/EEC of 29 May 1989 setting up a Standing Forestry Committee (OJ L 165, 15.6.1989, p. 14).

¹⁶ *Idem*, p: 50.

¹⁷ EUROPEAN COMMISSION. 2016. Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources. Brussels, 30.11.2016. COM (2016) 767 final 2016/0382 (COD). 115 p.

¹⁸ *Idem*, p: 23.

¹⁹ DINGS, JOS. 2016. Cars and trucks burn almost half of palm oil used in Europe. In: Transport & Environment. 4 p.

²⁰ <https://www.transportenvironment.org/press/eu-transport-will-spew-out-extra-co2-size-netherlands-emissions-thanks-draft-biofuel-plan>

²¹ https://ec.europa.eu/energy/sites/ener/files/documents/Final%20Report_GLOBIOM_publication.pdf

²² VALIN, H.; DAAN Peters; Maarten van den Berg; Stefan Frank, Petr Havlik, Nicklas Forsell & Carlo Hamelinck. 2015. The land use change impact of biofuels consumed in the EU Quantification of area and greenhouse gas impacts. IIASA, Ecofys, & E4tech.

- **Impacts of Agribusiness Monocultures of Palm Oil in the Peruvian Tropical Forests**

Peru is one of the 8 megadiverse countries worldwide, and ninth in terms of forest area. At the national level, forests occupy 73'633,228 hectares, representing 57.3% of the national territory, with tropical primary forest of the Amazon being the region with the highest forest area with 69'314,485 ha. The Forest and Wildlife Heritage of Peru has constitutional protection, and is one of the most important and strategic resources for food sovereignty, and the country's development in a climate change scenario^{23, 24}.

On July 21, 2016, through Supreme Decree N° 058-2016-RE, the Peruvian State ratified its adherence to the Paris Agreement of the UNFCCC, committing itself to reduce 30% of GHG emissions produced in the country by 2030.

However, it was determined that the accumulated deforested area to the year 2000, was 7'172,553.97 hectares²⁵. In 2005, the rate of deforestation in the Peruvian Amazon was estimated at 150,000 hectares / year, contributing 47.5% of the national CO₂ emissions, also affecting the increase of poverty in the most vulnerable populations²⁶. In concordance with the latest reports from the Ministry of the Environment and the Ministry of Agriculture, between 2001 and 2013, Peru lost 1'469,723 hectares of Amazon forest at an average rate of 113,056 ha / year²⁷.

Likewise, according to the National GHG Inventory 2009 (MINAM, 2015), 39% of the GHG emissions in Peru (52,482 Gg CO₂eq) come from the burning and change of use of forest lands, to other land uses. Among the main causes of deforestation in Peru, are the expansion of illicit coca leaf crops, and the expansion of agribusiness monocultures, mainly oil palm.

²³ Peruvian forests host an extraordinary diversity of species of flora and fauna, while providing goods and services that are fundamental for the country's development and the well-being of its inhabitants, especially indigenous peoples who inhabit the Amazonian. In general, the forests of Peru are classified into three broad categories: (i) Amazonian humid tropical forests; (ii) dry coastal forests; and (iii) Andean tropical and subtropical forests. MINAM & MINAGRI. 2015. Hacia una Estrategia Nacional de Bosques y Cambio Climático. Lima, Perú. 112 p.

²⁴ According to Ministry of Environment - MINAM & Ministry of Agriculture - MINAGRI (2015): *"Peruvian forests contribute to the quality of life of people, fulfilling important ecosystem functions such as: carbon capture and storage, regulate the climate, as well as regulate the flow and supply of water, conserve soil avoiding erosion, provide for timber and non-timber forest products, provide habitat for species that contribute to pollination and natural pest control, provide scenic beauty and landscapes of recreational value, among other goods and services for the society. This is particularly important in the case of indigenous people in voluntary isolation and initial contact, who suffer the most dramatic impacts of degradation and deforestation."* Ídem, p: 18

²⁵ 9,25% of the tropical rainforest of the Peruvian Amazon.

²⁶ MINAM & National Program of Forest Conservation & Climate Change - PNCBMCC, 2014. Manual de Operaciones del Programa Nacional de Conservación de Bosques para la Mitigación del Cambio Climático, aprobado mediante Resolución Ministerial N° 015-2014-MINAM, del 15 de enero del 2014.

²⁷ MINAM & MINAGRI, 2015. Hacia una Estrategia Nacional sobre Bosques y Cambio Climático. Lima, Perú. 112 p.

Until 2017, the expansion of oil palm crops in the Peruvian Amazon has generated:

- Clearcutting and deforestation of more than two hundred thousand (200,000) hectares of primary tropical forests of high biodiversity during the last 20 years, generating serious environmental impacts in Loreto, San Martín, Amazonas, Ucayali and Huánuco regions, in Peru²⁸.
- Loss of fragile ecosystems, as Mountain Forest and Primary tropical forest in the Peruvian amazon basin
- Loss of water resources for human consumption; as well as soil and water pollution by agrochemicals used by monocultures plantations
- Invasions, encroachment and land trafficking, promoted by the agribusiness sectors, affecting protected areas and national forest lands, as well as private properties of local small farmers, in towns like Tamshiyacu (Loreto), Barranquita (San Martín), Nueva Requena and Bajo Rayal (Ucayali), Yurimaguas (Amazonas), among others.
- Invasions and direct damages to the lands and territories of Indigenous Peoples, violating their fundamental rights and collective rights, as well as drastically affecting their living conditions, health and food security in Loreto, Amazonas, San Martín, Ucayali and Huánuco regions in Peru.
- Increased poverty, tropical illness and malnutrition in rural areas, affecting small farmers and indigenous peoples, due to environmental degradation, climate change and loss of productivity of lands to produce food.
- Increased of social conflicts and armed confrontations, among local communities defending their homes, versus armed security forces of the agribusiness companies.
- High levels of corruption at the national and regional authorities, promoted by agribusiness companies, in order to facilitate land sales, and irregular permissions.
- Linkages between oil palm monocultures and illicit coca leaf crops, both growing in associations.
- In some cases, money laundering, and associations with cocaine drug trafficking, using agribusiness as a cover for illicit activities.

Faced with these facts, there are more than 30 criminal investigation and judicial processes in progress at the national level, for environmental crimes against forests, illegal logging and illegal trade of timber, usurpation and invasion of indigenous lands and territories, encroachment on private property, fraud to small farmers, illicit association for crime, corruption of officials, organized crime, money laundering, among others, committed by agribusiness companies against the citizens and the Peruvian State. These cases are still followed by the Public Prosecutor General's Office

²⁸ For more detailed Information, see:

<http://www.keneamazon.net/alerta.html>

<http://www.biofuelobservatory.org/fotografias-y-videos.html>

<http://www.biofuelobservatory.org/amenazas-desde-la-perspectiva-indigena.html>

<http://maaproject.org/category/sectores/palma-aceitera/>

<http://maaproject.org/category/imagenes/>

at the national level, and its Specialized Offices, as well as the Specialized Environmental Matters Attorney, of the Ministry of Environment.

In this regard, we ask the European Parliament, the European Council, the European Commission, and the Governments and Authorities of the 28 member States:

- **To eliminate palm oil as one of the sources of biofuels** within the framework of the Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources
- **To eliminate forest biomass as one of the sources of biofuels** within the framework of the Proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources
- **To incorporate the provisions of article 26 and paragraphs (5), (6), (71), (72) and (76), of the proposal for a Directive of the European Parliament and of the Council on the Promotion of the Use of Energy from Renewable Sources, to the production of biofuels**, in all the producers' countries, where agribusiness generates deforestation, increased of greenhouse gas emissions, as well as the environmental and social impacts described above.

Thanking you in advance for your kind attention. We look forward to be attended in our request.

Sincerely,




Lucila Pautrat Oyarzún

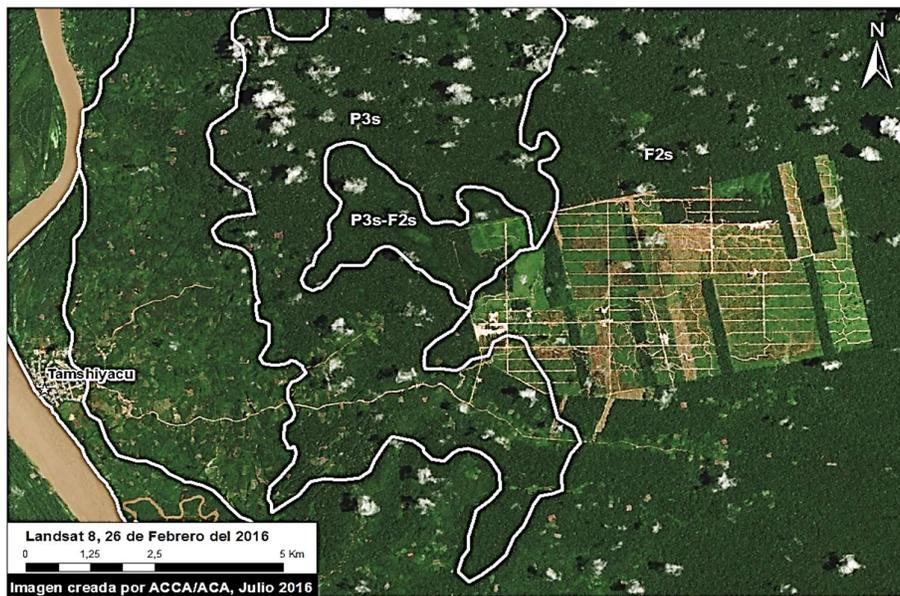
Kené – Institute of Forestry & Environmental Studies
Lima, Peru

Indigenous Organizations, and Local Farmers Organization:

- Federación de Comunidades Nativas del Ucayali y Afluentes - FECONAU
- Asociación Civil El Puente de la Amistad - ACELPA
- Comité de Defensa del Agua de Iquitos – Región Loreto
- Instituto Peruano de Recursos Naturales
- Comité contra incendios de Bajo Rayal Nueva Requena - Ucayali
- Red Nacional de Promoción de la Mujer logrando la equidad, igualdad de género entre hombre y mujer (Filial Ucayali)

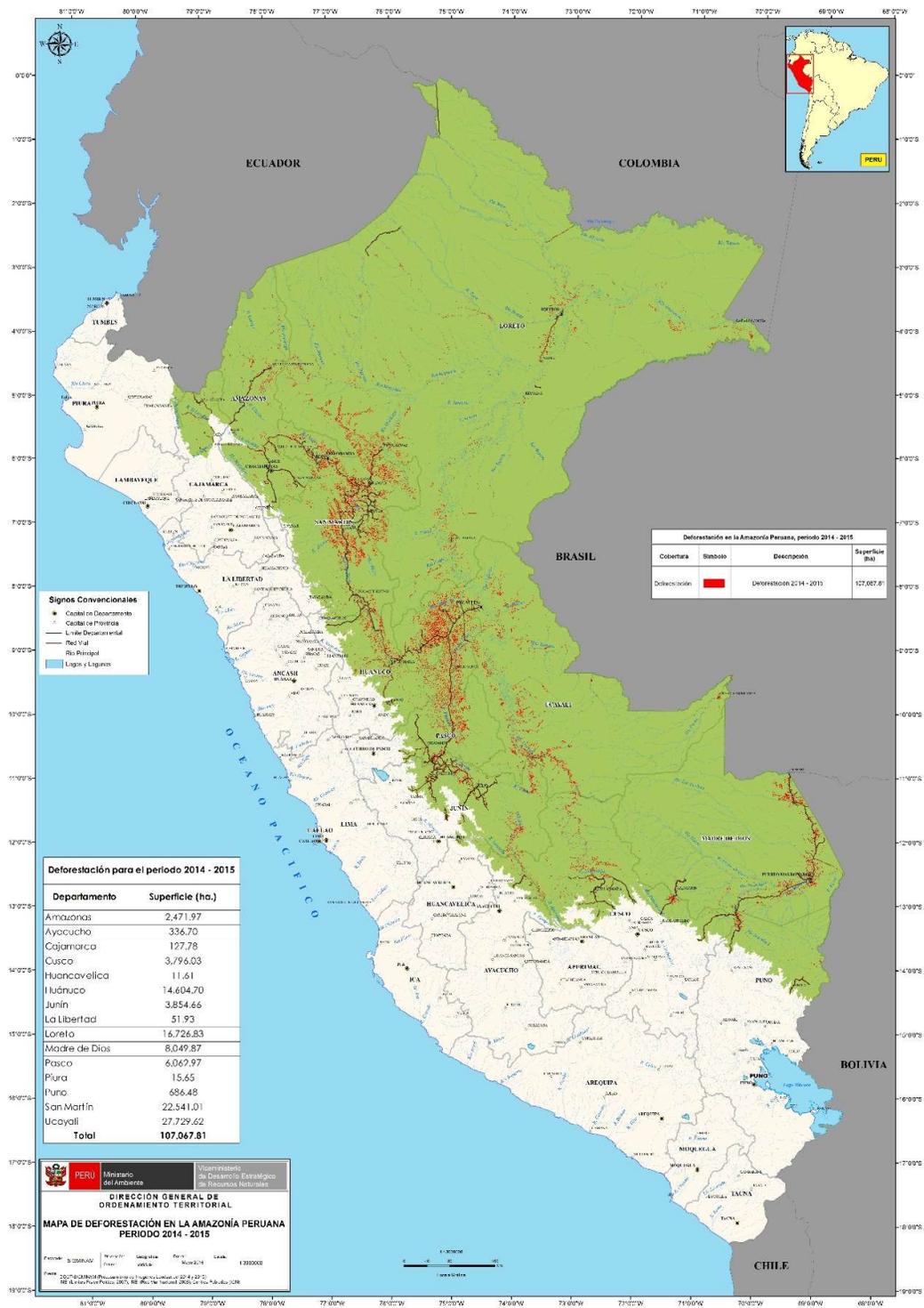
- Centro de Estudios en Solidaridad con América Latina
- Coordinadora Regional de Pueblos Indígenas AIDSESP - Atalaya
- Federación de Comunidades Nativas Yine Yane - Río Urubamba - FECONAYY
- Asociación de Productores Agropecuarios, ecológicos y piscicultores del distrito de Padre Abad - ASHPAZETA
- Asociación Regional en Defensa del Territorio los Bosques, el Agua y la Vida - DAVIDA
- Asociación de Ganaderos de Fernando Lores
- Asociación Agraria Fernando Lores de Loreto
- Asociación de Agricultores de Barranquita – San Martín
- The Chaikuni Institute
- Organización Regional AIDSESP Ucayali - ORAU
- Federación de Comunidades Nativas del Ucayali y Afluentes - FECONAU
- Comunidad Nativa Santa Clara de Uchunya

OIL PALM IMPACT IN THE PERUVIAN AMAZON



Deforestación de 2,375.81 ha de bosques primarios en tierras de aptitud forestal, en la localidad de Tamshiyacu – Loreto

Fuente: MAAP, 2016. En: <http://maaproject.org/2016/forestal/>



Mapa de Deforestación de la Amazonía Peruana

Fuente: Ministerio del Ambiente del Perú, 2015

En: <http://geoservidor.minam.gob.pe/intro/monitoreo/deforestacion-y-degradacion-forestal-6.html>



A serraderos clandestinos de madera ilegal en áreas deforestadas para los monocultivos agroindustriales, en la localidad de Tamshiyacu – Loreto, Perú 2015.



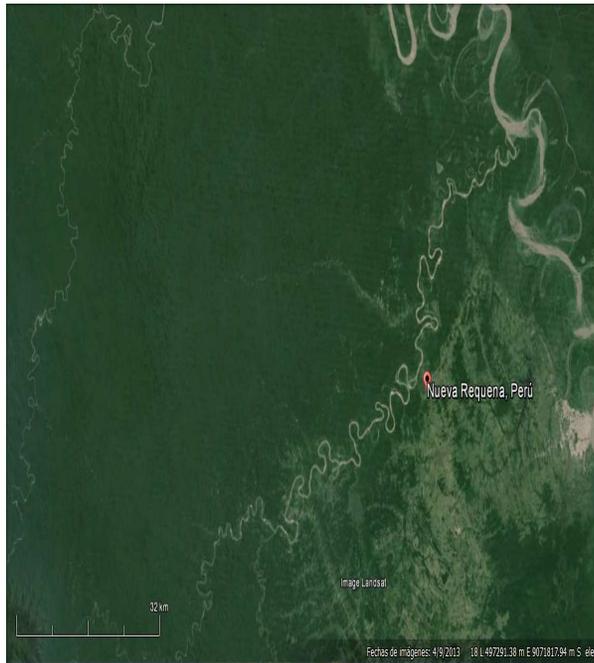
Pequeños agricultores y comuneros despojados de sus tierras por el tráfico de tierras y la usurpación de las empresas de Palma Aceitera en las regiones de San Martín, Loreto y Ucayali, Perú.



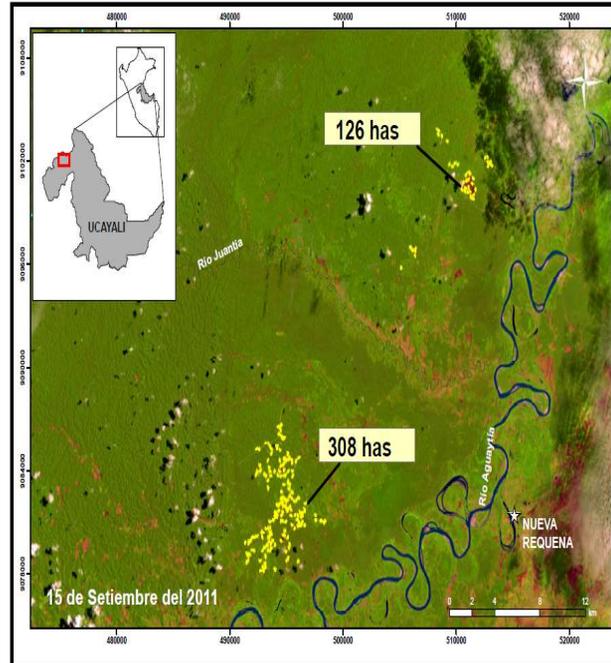
Asociación entre los cultivos ilícitos de coca y las plantaciones de palma aceitera en las regiones de Ucayali y San Martín. Foto: WDR, 2016.



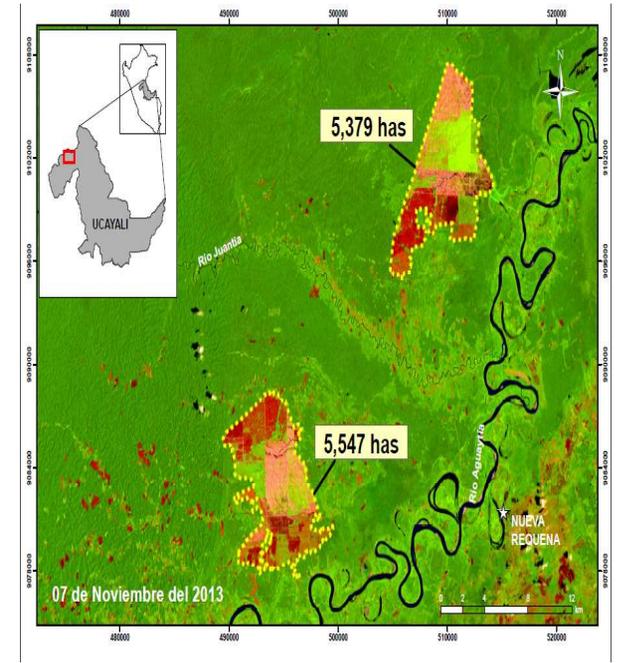
Deforestación de tierras forestales protegidas, y compactación del suelo dentro de las plantaciones para palma aceitera. Localidad de Tamshiyacu, Loreto – Perú 2014.



2010
Primary Forest



2012



2013

DEFORESTACIÓN EN LAS LOCALIDADES DE ZANJA SECA Y BAJO RAYAL, UCAYALI REGION - PERU.



TALA RASA COMPLETA Y DESTRUCCIÓN DE QUEBRADAS Y CAUCES DE AGUA, PRODUCIDA POR EMPRESAS DE PALMA ACEITERA, REGIÓN UCAYALI – PERÚ 2013 - 2014



TALA RASA COMPLETA DE BOSQUES TROPICALES PRIMARIOS Y COMPACTACIÓN DE SUELOS POR MAQUINARIA DE EMPRESAS DE PALMA ACEITERA, REGIÓN UCAYALI – PERÚ 2013 – 2014.