**DEFORESTATION FRONT**

**PERU Radiation AMERICAN**

The Peruvian Amazon's large areas of primary forest support a rich biodiversity and the livelihoods of numerous indigenous groups and local communities. In the past, large number of smallholders from the highlands have moved to the region and have developed active local economies linked to commercial crops. A large informal economy has also developed in the region involving illegal logging and small-scale illegal gold mining activities.

**Drivers of deforestation**

- **Smallholder farming**: Associated with the growth of small-scale coffee and cacao plantations, along with coca cultivation[2, 4] which are expanding northwards[5]. In Ucayali, some indigenous lands have been encroached on by smallholder colonists from traditional coca production zones[6].
- **Cattle ranching**: The Ucayali/Huanuco region in the central Peruvian Amazon has faced pressure from cattle ranching[7]. Much of this expansion takes place outside areas defined for agricultural use[8].
- **Mining operations**: Small-scale illegal gold mining in rivers and floodplains in Madre de Dios attracts people to forest zones, places pressure on protected areas[9] and leads to deforestation[10, 11]. It also contributes to mercury contamination from terrestrial to aquatic environments[12].
- **Commercial logging**: About eight major market circuits supply timber to the main urban markets in Peru. Around two-thirds of the total comes from informal sources, involving a significant number of smallholders, small-scale chainsaw operators and intermediaries[13].
- **Large-scale agriculture**: In Ucayali and Loreto/San Martin, a handful of projects for expanding large-scale oil palm plantations placed pressure on indigenous communities lacking tenure rights and took advantage of informal land markets. Other projects did not materialize as expected[14].
- **Roads expansion**: The opening and expansion of local and secondary roads, often associated with illegal logging operations, indirectly contributes to livestock activity and smallholders expansion[15]. Project road expansion (e.g., a road in the buffer zones of Maru National Park and Amarakkeri Communal Reserve) is expected to produce uncontrolled colonization and deforestation[16].

**Underlying causes**

Underlying causes are mainly linked to a process of land occupation that has been triggered by the expansion of relatively large informal economies. These are connected to speculative land markets, as well as illegal logging, small-scale gold mining and illicit coca cultivation. Local regional elites have also stimulated extractive and industrial expansion in the Peruvian Amazon[17]. The government, however, has issued legislation to address illegal activities and support forest conservation, and there are several initiatives to support alternative economic activities for local communities[18].

**Responses**

- **Protected areas**: About 20Mha have been designed as protected areas, a significant proportion covering forestlands[19]. A new initiative, “National Parks: Peru’s Natural Legacy”, was signed in 2019 involving the national government and donors to mobilize financial support for managing these protected areas[20].
- **Recognition of IPLCs**: Recognition of indigenous tenure rights has increased over time. By 2016, 12Mha were titled, and 5.8Mha were pending. In addition, 2.8Mha were set aside as reserves to protect semi-nomadic groups and another 2.2Mha as communal reserves comprising various communities[21].
- **Land-use zoning**: Subnational governments hold decision-making power over natural resources through a law on territorial planning[22]. Several regions have finalized their ecological zoning plans including Ucayali and San Martin (the latter has also approved the zoning of forest reserves).
- **Timber legality**: Organismo de Supervisión de los Recursos Forestales y de Fauna Silvestre (OSINFOR) is the state agency in charge of monitoring and controlling timber extraction in the Peruvian Amazon, while Servicio Nacional Forestal y de Fauna Silvestre (SERNFOR) is in charge of granting permits. However, the limited mandate of OSINFOR, and the lack of support of regional governments, makes this a difficult task[23].
- **REDD+ projects**: Peru participated in REDD+ readiness initiatives (CPF, UN-REDD) and received funds from several donors, including US$550M from the Forest Investment Program. Norway pledged US$300M for REDD+ performance-based payments in 2016[24]. About 7.4Mha in the Peruvian Amazon were allocated to forest concessions but a portion of those concessions are inactive[25]. Only 0.7Mha are under FSC certification[26].
- **Voluntary standards**: The Programa Bosques, created in 2010 and implemented by the Ministry of Environment (MINAM), aims to conserve 54Mha by compensating indigenous communities with titles (around US$3.20 per ha/year), and includes capacity building, monitoring and financial reporting[27].
- **Payments for ecosystem services**: The Programa Bosques, created in 2010 and implemented by the Ministry of Environment (MINAM), aims to conserve 54Mha by compensating indigenous communities with titles (around US$3.20 per ha/year), and includes capacity building, monitoring and financial reporting[27].
- **Sustainable landscape finance**: A project on “unlocking forest finance” was implemented to promote sustainable supply in San Martin, supported by the International Climate Initiative (IKI) (2013-18), in agreement with the Regional Environmental Authority, and Agrobanco to develop a green agricultural credit line[28].

**KEY FACTS**

- **Countries, region**: Peru, Amazon
- **Forest type**: Tropical forests
- **Total area**: 11.8Mha
- **Forest area in 2018**: 10.2Mha (86.1% of total deforestation front area)
- **Forest loss 2004-2017**: 0.6Mha (5.9% of forest area in 2000)
- **Location of deforestation**: Localized in Ucayali/Huanuco, San Martin and Madre de Dios[11]
- **Total forest core area in 2018**: 6.5Mha (64.4% of forests in 2018)
- **Fragmented forests 2000-2018**: 1.2Mha (11.4% of forest area in 2000)
- **Accumulated burned area, 2002-2019**: 0.4Mha (3.4% of forest area in 2000)
- **Deforestation trend**: Increasing, with oscillations during the last decade
- **Future trends**: Deforestation to continue expanding

**Deployment at wider scale**

- **Actively used and expanding**
- **Project-specific, experimental**
Measurement, Reporting and Verification (MRV) has been only partially adopted and institutional support has been deployed under REDD+ readiness programmes, in place the mechanisms to enforce their land use plans. Advance recognition of tenure rights in forest areas, and support formalization. 

**Recommended future actions**

- Advance recognition of tenure rights in forest areas, and support formalization of smallholders' tenure rights supporting them to improve their farming systems and develop alternative livelihoods.
- Improve national and sub-national monitoring systems and financial and technical means to improve farmers' compliance with land-use plans.
- Provide the institutional conditions for small-scale and informal chainsaw loggers to undertake sustainable forest management.
- Continue efforts to formalize and regulate illegal gold mining.

**Main outcomes**

Protected areas have proven effective in halting deforestation but there is pressure from illegal logging. Forest concessions also face that pressure, and no significant differences in deforestation rates have been observed between certified and non-certified concessions\(^2\). Regional governments have not always been able to put in place the mechanisms to enforce their land use plans\(^2\). While active financial and institutional support has been deployed under REDD+ readiness programmes, Measurement, Reporting and Verification (MRV) has been only partially adopted and non-certified concessions\(^2\). Regional governments have not always been able to put in place the mechanisms to enforce their land use plans\(^2\).

**References**