



# Integrating cattle raising and deforestation policies in Peru





# **Executive Summary**

Global demand for livestock farming products, particularly in developing countries, is forecast to increase by 70% by 2050 to feed an estimated worldwide population of 9.6 billion people<sup>1</sup>. To satisfy this demand, the agri-food industry will have to change its current practices to less-polluting production methods which reduce deforestation.

Launched by the government in 2017, Peru's National Livestock Farming Development Plan seeks to develop a prosperous livestock farming industry that can operate within national and international markets up until 2027, providing quality products and high productivity rates.

While these are admirable goals, rolling out this ambitious plan could lead to a serious environmental impacts and increased deforestation across the country. To counter this threat of deforestation in Peru, the plan needs to be implemented as part of an integrated agenda that incorporates forest and other environmental policies in order to control deforestation trends in Peru.

By promoting policies that take deforestation into account from the very early stages of developing the livestock farming industry, Peru can position itself as a leader in the sector, incorporating sustainable practices for both the internal and external markets.

Therefore, CDP and SPDE recommend that policymakers in Peru:

- Create the mechanisms and methodologies needed for a measurement, review and verification system (MRV) looking at the environmental impact of the livestock farming sub-sector.
- Provide access to credit conditioned to deforestation criteria, as well as technical assistance to producers seeking to implement conservation practices and more sustainable production systems.
- Bring together the government's efforts with those of the private sector, and with supply chains, towards more sustainable production, for example, by using tools that can improve transparency amongst businesses, such as the CDP forestry questionnaire.
- Strengthen the role of local governments in promoting and implementing regional policies that support producers.
- Strengthen producer networks so they can work together to guarantee access to credit, technical support and new markets.

#### **About CDP**

CDP is a global environmental impact non-profit working to secure a thriving economy that works for people and planet. High quality, relevant information is the fundamental basis for action and we help investors, companies and cities to measure, understand and address their environmental impact. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action. We aim to make environmental reporting mainstream and provide the detailed insights and analysis to drive the urgent action needed for a climate safe, water secure, deforestation free world.

#### **About SPDE**

La Sociedad Peruana de Ecodesarrollo [The Peruvian Society of Eco-Development] (SPDE), is a private, non-profit organisation founded in 1999. Its ultimate goal is to introduce national and international cooperation initiatives as a way of consolidating the fundamentals of sustainable human development in an inclusive way with local stakeholders across the country.

# The global context of livestock farming and the problems of deforestation

It is estimated that livestock farming is the main source of income for around 200 million families of small-scale producers living in Asia, Africa and Latin America, and the sole source of income for at least 20 million other families. The livestock farming sector is the also biggest global consumer of agricultural land, through grazing and the cultivation of feed crops. Because of this, it plays a significant role in climate change, as well as land, water and biodiversity management<sup>2</sup>.

Global demand for livestock farming products, particularly in developing countries, is forecast to increase by 70% to feed an expected worldwide population of 9.6 billion people by 2050. The agricultural industry in Latin America and the Caribbean (LAC) has enormous potential to contribute to food production and global food security. However, agricultural and livestock farming production in the region will be increasingly influenced by climate issues and the fluctuations of international demand for food, energy and biofuels<sup>3</sup> in the years to come.

The rapid growth of the livestock farming industry in the LAC region - twice the global average- has put significant pressure on the natural resources present, particularly with the loss of forest cover for producing grazing livestock, as well as for producing grains for intensive poultry and swine farming. If this environmental degradation continues, livestock production will face competition for land for agricultural or agro-energy production and could be displaced to marginal areas. Understanding of this dynamic is still limited within the sector, but the ability of companies to analyse and manage risks must be improved, and viable production strategies must be developed from a technical, economic, social and environmental point of view.

Between 1990-2005, 71% of deforestation in South American countries was due to increased demand for pastures. This equates to the loss of one third of forest land in the region<sup>4</sup>. Deforestation caused mainly by converting forested areas into agricultural and livestock farming zones not only threatens the livelihoods of forest workers, forest communities and indigenous people, but also the region's biodiversity. Changes in land use result in a loss of valuable habitats, in land degradation, in soil erosion, in reduced availability of clean water and in the release of carbon into the atmosphere <sup>5</sup>.

The expansion of livestock farming experienced by the countries of Latin America represents both an opportunity and a threat to sustainable development in Peru. On one hand, there is an opportunity to generate wealth and mitigate poverty if appropriate political decisions are made and sustainable and environmentally friendly livestock production systems are promoted. But, on the other hand, expanding the industry without considering the environmental costs and potential marginalisation of small-scale producers represents a real threat to Peru's economy, environment and social structures<sup>6</sup>.

<sup>2.</sup> Idem.

<sup>3.</sup> FAO, 2018. Sustainable livestock farming and climate change in Latin America and the Caribbean. Last accessed 4 July 2018. Available at: http://www.fao.org/americas/prioridades/ganaderia-sostenible/es/

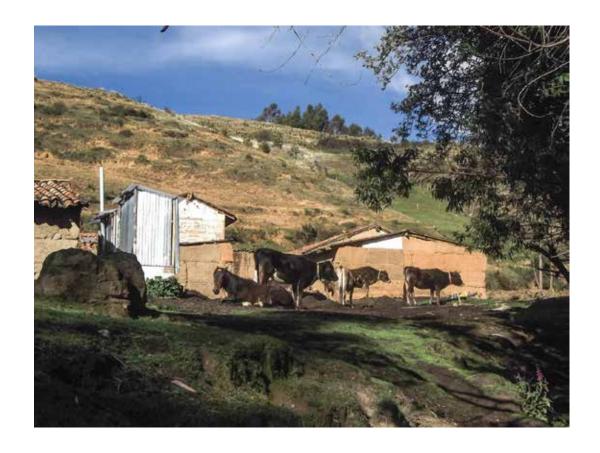
<sup>4.</sup> FAO, 2016. The State of the World's Forests 2016. Forests and agriculture: challenges and opportunities in terms of land usage. Rome.

<sup>5.</sup> FAO, 2018. The State of the World's Forests 2018. Forest pathways to sustainable development. Rome. Licence: CC BY-NC-SA 3.0 IGO

FAO, 2018. The State
FAO, 2018. Op. Cit.

It is important to recognise that global supply chains are increasingly concerned with understanding the origin of forest-derived products, and with its transparency and traceability, due to concerns around deforestation and climate change. Latin American countries recognise the importance of reducing the impact of goods produced in forested areas and are creating action plans to reduce deforestation in the supply chains of these products. Colombia was the first Latin American country to join the Tropical Forest Alliance 2020 (TFA), and is developing national zero-deforestation policies for their meat, milk, palm oil and timber supply chains.

Governments are also starting to add deforestation mitigation strategies to their climate policies. The 25 countries with the greatest forest cover are including forest-related mitigation measures, within their Nationally Appropriate Mitigation Actions (NAMA) and their Nationally Determined Contributions (NDCs). These measures include reducing deforestation and forest degradation, afforestation, improving forest carbon reserves, forestry conservation and agro-silviculture7.



# Livestock farming in Peru and its impact on deforestation<sup>8</sup>

Peru's NDCs reflect the reality of the country, and is in alignment with the two pillars on which the twentieth session of the Conference of Parties (COP20) in Lima was based - a sense of urgency and a high level of ambition. Peru aims to reduce its greenhouse gas (GHG) emissions by 30% by 2030 as part of a business as usual (BaU) scenario, including emissions from the significant land use, land use change and forestry (LULUCF) sector, taking into account the challenge of reducing deforestation and forest degradation<sup>9</sup>.

Although Peru's GHG emissions are low when compared to other countries, the impact of deforestation is high - the average annual deforestation between 2012 and 2016 was 159,688 hectares. While although the 2017 loss of 143,425 hectares was below this average, and represents a drop of 13% on the previous year<sup>10</sup>, the trend since 2001 has shown an overall increase in deforestation. The main causes of deforestation are agriculture and livestock farming, which together contribute to 81%-93% of total deforestation.

Agriculture alone is responsible for approximately 49%-54% of all deforestation, representing a loss of almost 70,000 hectares per year. Livestock farming is the second biggest direct cause, representing approximately 32%-39% of all deforestation and an estimated 40,000 - 48,000 hectares<sup>11</sup> of forests lost annually. Additionally, in recent years, small-scale agriculture of farms of less than 5 hectares has been the biggest single cause of deforestation in Peru (see graphic 1).

<1 1-5 15-50 5-50 50-500 >500

150.000 100.000 50.000

2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

Graphic 1. Forest loss in hectares - Peru

Source: MINAM 2017, GEOBOSQUE - Forests and forest loss. Available at: http://geobosques.minam.gob.pe/geobosque/view/perdida.php

0

For more information on the main Peruvian forests risk commodities, see SPDE-CDP, 2018. Situational analysis of the main Peruvian forest risk commodities. Available at: http://spdecodesarrollo.org/wp-content/uploads/2018/05/Analisis-Peru-Vers%C3%A3o-Simples-FINAL-V4.pdf

<sup>.</sup> MINAM, 2016. Peru's National Contribution - iNDC: a plan for climate-friendly development. Lima, Peru. Available at: http://www.minam.gob.pe/cambioclimatico/wp-content/uploads/sites/11/2015/12/LA-CONTRIBUCI%C3%93N-NACIONAL-DEL-PER%C3%9A1.pdf

<sup>10.</sup> MAAP 2018. MAAP #78: Deforestation hotspots in the Peruvian Amazon. Available at: http://maaproject.org/2018/hotspots-peru-2017/

<sup>11.</sup> GGGI, DIE and SERFOR 2015. Interpreting the dynamics of deforestation in Peru and lessons learned for its reduction. Lima, Peru.

The country's land registries record approximately 824,000 properties with at least one cow, and more than 50% of cattle are reared in agricultural units of less than five hectares. 31% of these producers live in poverty and 13% in extreme poverty.

Peru's total cattle population is 5.2 million, an increase of 35.3% from 1972 and 14.7% in comparison to  $1994^{12}$ .

The majority of producers work alone, and producer networks don't exist in any formal way in Peru, with just 21% of all agricultural producers belonging to some kind of organisation<sup>13</sup>. The existence of strengthened cooperatives can therefore help producers access credit from banks, as well as sharing the costs of technical support and new technologies for recovering degraded pastures and increasing productivity.

#### The role of the private sector in the fight against deforestation

Companies working with livestock products in various countries<sup>14</sup> which responded to CDP's Forests questionnaire, such as Nestlé and Unilever, identified a number of risks related to producing, selling and supplying livestock products, which have the potential to lead to a substantial impact on any company's operations, income and expenditure.

Out of the 48 companies that responded to questions on cattle products, 33 identified reputational risks, whilst 22 identified regulatory risks in relation to their operations. 27 companies had sustainability policies in place for their products, including 18 who had zero-deforestation or zero net deforestation policies in place.

Peru's goal is to be increasingly active in global livestock supply chains, and companies working in this sector are increasingly aware of sourcing their products in a sustainable way.

As such, by promoting policies that incorporate concerns around deforestation from the very early stages of development of a livestock farming industry, companies can leapfrog harmful practices, and can mitigate risks and the costs of adapting to sustainable practices in the longer term. For its part, the government can support Peruvian companies and those operating in the country to position themselves as leaders in sustainable practice within both internal and overseas markets.

<sup>12.</sup> MINAGRI 2018. National Livestock Farming Development Plan in Peru 2017 - 2018. Lima, Peru. Available at: http://minagri.gob.pe/portal/download/pdf/dg-ganaderia/plan-nacional-ganadero-2017-2027.pdf

<sup>13.</sup> Ibidem. p. 27

<sup>14.</sup> The companies that disclose information on their cattle products are originally from Australia, Brazil, Finland, France, Japan, the Netherlands, the Philippines, Portugal, South Africa, Spain, Sweden, Switzerland, Thailand, the United Kingdom and the United States.

# The National Livestock Farming Development Plan and the importance of sustainable production in Peru

Launched by the Peruvian government, Peru's National Livestock Farming Development Plan<sup>15</sup> seeks to develop a prosperous livestock farming industry that can operate within national and international markets up until 2027, providing quality products and high productivity rates.

While these are admirable aims, rolling out this ambitious plan could create serious environmental impacts, including increasing deforestation. To avoid this, the plan must move forward alongside complementary policies that support sustainable livestock farming production and monitor deforestation trends in Peru. This process should involve all stakeholders in the livestock farming supply chain, including producers, local governments in livestock farming regions, and the private sector.

Sustainable livestock farming production can lead to greater productivity rates per hectare, environmental best practice strategies and pasture recovery. If Peru implements policies that support these practices, the country could become a leader in sustainable livestock farming, among the pioneering countries of this new economic model that seeks out a more balanced approach to economic, social and environmental aims.

The National Livestock Farming Development Plan chiefly proposes improvements to the quality of livestock farming products. It focuses on five key issues including: adequately managing natural resources; increasing competition; increasing the added value gained from products; improving coverage of services for accessing markets; and strengthening associations. According to the plan, the following goals are to be achieved by 2027<sup>16</sup>:

- 360,000 hectares of natural pastures should improve from poor condition to normal.
- Natural pasture capacity should increase by 0.30 animal units/hectare.
- There should be a total of 1,000,000 hectares of farming pastures across the country.
- 500,000 livestock farming producers should be using high-quality breeding animals alongside productive infrastructure.
- 650,000 livestock farming producers should adhere to Livestock Farming Best Practices (BPG).
- 250,000 producers should be affiliated with associations.

Achieving these proposed goals will involve going far beyond operational barriers, such as issues around the increasing degradation of pastures and consequent loss of productivity, deforestation, dependency on external forces, genetic technology and materials, high disease rates, financing, associativity, formalisation and selling products. Effective policies need to also take into account other associated issues, such as poverty, food security, land usage and rural development. Governments must integrate policies to guarantee land tenancy rights with those of forest conservation and of increasing productivity of the land use sector.

The National Livestock Farming Development Plan presents aspects of concern around environmental and social impacts. Strategic action 7.1.2, for example, seeks to promote the management and conservation of natural pastures, soil and water. Nevertheless, the impact of deforestation is still not clarified, and the Plan does not include any ideas for mitigating the effects of this deforestation.

Therefore, CDP and SPDE propose that, when executing Peru's Livestock Farming Development Plan, the environmental impact of livestock farming operations on forests should be taken into consideration. Low-emission livestock farming projects and initiatives that already exist in Latin America, including silvopastoral systems, should be supported and replicated.

16. Loc. Cit. pp. 41-53.

<sup>15.</sup> The National Livestock Farming Development Plan states that the livestock activity is of fundamental importance for rural areas and the country's food security, since this sector creates employment and income for some 7.6 million people, and represents 40.2% of the agricultural sector's Gross Value Added (GVA). Peru's agricultural development is unequal between regions, with La Costa representing a relatively large share (44%) of the country's total agricultural Gross Domestic Product (GDP), despite being home to just 23% of the country's agricultural land. La Siera contributes 42% of total agricultural agricultural GDP, even though it has 30% of the country's available agricultural land. MINAGRI, 2016. National Livestock Farming Development Plan in Peru 2017 - 2027. Lima, Peru.

# **Sustainable Livestock Farming Initiatives in Latin America**

#### The LivestockPlus Project

The International Center for Tropical Agriculture (CIAT) project in Colombia, Costa Rica and Peru (pilot phase) facilitates the development and implementation of nationally appropriate mitigation actions (NAMA) for the livestock farming sector, providing technical support and managing key information, along with the necessary guidelines, for identifying options and supporting plans and policies for scaling up those NAMA initiatives.

The project aims to achieve lower livestock farming emissions within 1.1 million hectares by promoting producers' associations, identifying and assessing mitigation options that are best suited to individual circumstances, as well as developing measurement, review and verification (MRV) systems for the livestock farming sectors in those countries. In Peru, the project works alongside 19 producer units in partnership with the Peruvian Amazon Research Institute.

So far, data has been collected on livestock farming production systems (type, status, management and distribution) in terms of GHG balances and soil carbon reserves within conventional and improved livestock farming production systems, among others<sup>17</sup>.

#### Silvopastoral Systems

Silvopastoral systems are a viable option for livestock production in Peru, promoting soil and water conservation, reducing GHG emissions and increasing farming production. In addition, they provide an alternative way to combat climate change, as they are a system of adaptation, mitigation, and also make livestock farming production systems more resilient.

Silvopastoral systems combine fodder crops, such as grass and legumes, in the same space as shrubs and trees used for animal feed and other related uses. This closer relationship between land, plants and animals allows for more sustainable management and increases in productivity, as well as net benefits for systems in the short and medium term.

This model has been generating good results in the Palcazú Valley in the Oxapampa region of Pasco, Peru.

By recognising the importance of this method, Peru has introduced mitigation measures to recover degraded land via silvopastoral systems in the Amazon region as part of its NDCs, in a bid to mitigate against 1,344Mt of CO<sub>2</sub> equivalent by the year 2030.

#### **Recommendations**

## To reduce the potential impacts of the National Livestock Farming Development Plan, CDP and SPDE are issuing the following recommendations as part of five key areas for action:

### Regulations and monitoring

Within the national initiatives for achieving Peru's NDC commitments, the mechanisms and methodologies needed to establish a measurement, review and verification system should be created for the livestock farming sub-sector. Policymakers working on livestock farming, deforestation and climate change issues should work together in order to:

- Promote the development of a livestock farming NAMA as a tool for developing sustainable livestock farming in Peru.
- Establish the methodology and norms needed for setting benchmark standards to calculate GHG emissions from livestock farming operations.
- Urgently establish clear rules within policies and standards for granting access to territories with forest cover, in order to mitigate against problems and conflict in relation to land holdings and territorial claims amongst different interest groups.
- Guarantee the integration of all agendas from different governmental policies such as the National Livestock Farming Development Plan and the Forestry and Wildlife Regulations via ongoing working groups between the Ministry of Agriculture (MINAGRI), the Ministry of the Environment (MINAM), the National Forestry and Wildlife Service (SERFOR) and representatives from regional government.
- Incorporate relevant information and available data from the sectors and sub-sectors related to livestock farming and the use of territories into one single national platform, which is binding and available to the general public.

# Access to credit and technical support

The sustainability of the country's livestock farming industry is based on harnessing natural resources. Producers must be able to access the technical support they need to develop and implement best practice strategies while these resources. Therefore, we recommend that policymakers:

- Include environmental and/or anti-deforestation criteria and mechanisms in the provision of financing or credit in the agricultural sector <sup>18</sup>. These should engage public, private or publicprivate credit institutions, the latter two options on a voluntary basis, whilst providing incentives to adopt such measures.
- Urgently restructure the Agricultural Bank of Peru (Agrobanco) to better focus on providing financing and credit for the agricultural sector, through the entire agricultural production chain, which benefits both small- and large-scale producers.
- Promote the creation of technical support services for producers who are looking to increase their productivity by incorporating silvopastoral systems, pasture management and rotation strategies, as well as recovering degraded pastures, in a way that means land can be recovered and the for further deforestation is reduced.
- ▼ Promote technology within the agricultural industry through the National Institute for Agricultural Innovation (INIA) to make the sector more competitive, providing farmers with more information and scientific evidence on the different silvopastoral management practices that can contribute to carbon sequestration and lead to low-emission livestock farming.

# 

The National Livestock Farming Development Plan recognises the importance of working with the private sector and seeks to "develop investment projects that can be promoted at national, regional and/or local level to develop livestock farming in coordination with the private sector<sup>19</sup>". Implementing livestock farming practices with low environmental impacts brings additional costs, but if the government and private sector work together as allies, this can lead to some of these costs being shared.

The Peruvian government should work together with private companies from the livestock farming sector to:

Promote the voluntary disclosure of environmental impacts within the supply chain. Actions such as disclosing information to CDP's Forests programme show concern for reducing deforestation throughout the supply chain, as well as an increasing commitment amongst suppliers for greater traceability and monitoring.

- Work directly with producer associations and regional agricultural management committees to ensure that livestock products meet with certain production criteria, including zero-deforestation targets.
- Evaluate the creation of public-private partnerships to improve access for small-scale producers to the most up-to-date livestock farming best practices. The private sector has access to the latest technology and production techniques and, through public-private partnerships, it can support producers in reducing their environmental impact, including reducing deforestation.
- Implement policies to reduce deforestation that are directly linked to the livestock farming industry, and facilitate the supply of products from the private sector that aren't involved in deforestation.

# Strengthening regional policies and local government initiatives

Given the importance of Peru's subnational governments, local government must play a central role in promoting an integrated agenda among livestock farming and forests by:

- Prioritising the implementation of territorial structuring plans, economic and ecological zoning, alongside forestry zoning, to make better use of the tools available for managing land usage, particularly in the Amazonian region. This will also help counteract the issues of changing forest-grade land not only for livestock production, but also for other uses such as coffee, palm oil and cocoa production.
- Seeing the livestock farming industry as a priority and an integral part of the Regional Development Plans for local governments, making it part of the political agenda of policymakers.

- Strengthening the institutional nature of the Regional Agricultural Departments in terms of improving civil servants' technical skills, and making the necessary logistics and budgets available to fulfil their duties, such as providing better guidance and supporting producers.
- Central and regional governments must work together to strengthen the Regional Agricultural Management Committees (CGRA) so they can carry out their duties properly, contributing to the implementation of the Livestock Farming Plan, and articulating the demands of all the sector's stakeholders as one.

### Strengthening producers' associations

States and other stakeholders involved in the livestock farming sub-sector should support the strengthening and formalisation of cooperatives and other associations to create a consolidated union of combined power. This will help to put the sub-sector's needs firmly on the national agenda and develop initiatives together. Strengthened associations will be able to:

- Seek access to credit in banks to make the necessary reforms for intensifying production and increasing productivity.
- Jointly seek out new technologies, technical support for recovering degraded pastures, ways to improve productivity and ways to implement silvopastoral systems alongside the government and private companies. Associations may also share the costs of technical support and new technologies.
- Exert greater influence when trading with private companies in terms of product and sub-product sale prices on the markets, and work directly with the private sector to help them purchase livestock products that follow farming and commercial best practices.



#### For more information, please contact:

#### **CDP - Policy and Public Affairs Team**

#### Kate Levick

Global Director, Policy Engagement kate.levick@cdp.net

#### Laura Jungman

Forests Policy Manager laura.jungman@cdp.net

#### **CDP Latin America**

#### **Lauro Marins**

Regional Director, CDP Latin America lauro.marins@cdp.net

#### Rebeca Lima

CSC Senior Manager, CDP Latin America rebeca.lima@cdp.net

#### Camila Yepes

CSC Analyst, CDP Latin America camila.yepes@cdp.net

#### Hugo de Carvalho Ricardo

CSC Analyst, Forests, Latin America hugo.carvalho@cdp.net

#### **CDP Forests**

#### Sultana Bashir

Director, Forests sultana.bashir@cdp.net

#### Sareh Forouzesh

Project Manager sareh.forouzesh@cdp.net

#### Sociedad Peruana de Ecodesarrollo (SPDE)

#### Miguel De La Cruz

CEC

mdelacruz@spdecodesarrollo.org

#### **Andres De La Cruz**

Executive Director adelacruz@spdecodesarrollo.org

#### **Catty Samaniego**

Conservation and Policy Director csamaniego@spdecodesarrollo.org

#### **Edwin Durand**

Regional Coordinator – Ucayali edurand@spdecodesarrollo.org

#### **Tania Gutierrez**

Forestry Specialist tgutierrez@spdecodesarrollo.org

#### **CDP Worldwide**

www.cdp.net

Level 3 71 Queen Victoria Street London EC4V 4AY United Kingdom Tel.: +44 (0) 20 3818 3900

#### **SPDE Central**

Call. Andreas Vesalio N° 213 San Borja – Lima Tel.: +51 1 6599291 www.spdecodesarrollo.org

This policy brief was put together by CDP and SPDE:





This project was supported by:

