Since 2015, GDP has declined 3% due to the fall of soybean and beef export prices.

Wood prices have increased 2% in the same period, highlighting the business case for combined production systems.

Paraguay has large areas under extensive land use suitable for sustainable intensification with combined systems such as silvopastoral production.

Wood and beef production on the same land brings economic, environmental and social benefits and is a promising FLR business model.

Paraguay’s economy is still heavily dependent on the agriculture sector.

Agricultural prices e.g. soy are constantly declining since its peak in 2012. Diversification into forestry is therefore an attractive value proposition.

There is a steady increase in forest plantations doubling its share from 0.33% to 0.65% in only 6 years (FAO, 2019).
Soy and beef account for about two-thirds of the agriculture sector’s gross product and more than two thirds of the foreign exchange income:

- In the past two decades, the area dedicated to soy has tripled, growing at an average rate of 6% per year.
- Between 1991 and 2008, producers with establishments larger than 1,000 ha have increased from 26 to 482.

Expected climate change related crop yield in Paraguay 2008-2098

- Taking a private local case study, by 2020, 13,500 ha of new forests will be planted, of which 7,700 ha have been already established by the end of 2018.

- The development of a stronger wood industry could alleviate economic losses through diversification of production systems based on beef production and plantations.

- In 2004 forest conversion in Eastern Paraguay was banned by law, marking the cut-off date for illegal deforestation monitoring.

- This will contribute to the global Bonn Challenge to bring 350 million hectares of deforested and degraded land into restoration by 2030 (Paraguay has no national target yet).

- Projections (ERECC, Paraguay. CEPAL, 2014) suggest an important increment of soy production in the first years followed by a considerable reduction of crop yield, due to climate change risk.

- Paraguay is experiencing one of the highest deforestation rates in Latin America, with 1.5% loss of forest area per year since 2000 with cattle ranching as one of the causes.

- Commodities demand paired with large areas of land available at low cost in the country could generate multiple income streams through sustainable resources management and FLR investments.

- Private sector credit to GDP increased from 13% in 2003 to 40% in 2017 and now is higher than the regional average.

Currently, foreign direct investment (mainly in the agrobusiness sector) is the largest source of liabilities of the private sector, at around 15% of GDP.

Source: IMF, 2019
## Opportunities and Challenges for Upscaling Private Sector FLR

### Attractive business environment
- Paraguay is ranked **113/190** in the ease of doing business index for 2019.
- The ease of doing business score is **59.40/100** compared to 58.97 from the regional average.
- The credit growth in Paraguay accelerated to 12% - from 6% in 2017 (constant exchange rate basis).
- USD 40 million afforestation fund was set-up and financing available through commercial banks.

### Diversified production
- The **diversification of production systems** supporting wood supply chains based on plantations and beef production highlights the business case for Paraguay.
- As agricultural commodity exports are a significant driver of the economy, in the long run, the most effective risk mitigation measure against negative prices, is to **diversify exports**, based for instance in wood products.

### Challenges
- The high prices of other commodities in the short term could be a significant disincentive for forest restoration.
- Paraguays NDC* sets ambitious climate targets relying on reforestation.
- Land use policies to encourage Forest Landscape Restoration are currently not in place.

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**NDCs:** 20% emissions reductions by 2030 - 429 MtCO₂eq by 2030 and 83 MtCO₂eq per year afterwards.

The carbon sequestration potential from natural forest is 3,258.3 MtCO₂eq. Carbon sequestration of 26.8 MtCO₂eq from plantations would achieve NDCs goals. These two objectives are aligned with the **Bonn challenge**.

**Three million** tons of CO₂ are already stored in plantations.

**290,000 ha** of forests have to be established annually to achieve NDC.

### The triple bottom line of FLR investment in Paraguay

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Social</th>
<th>Economic</th>
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</thead>
<tbody>
<tr>
<td>The carbon sequestration potential from natural forest is 3,258.3 MtCO₂eq. Carbon sequestration of 26.8 MtCO₂eq from plantations would achieve NDCs goals. These two objectives are aligned with the <strong>Bonn challenge</strong>.</td>
<td>Income and employment opportunities in rural areas, supported by wood and beef supply chains. Increase of local income from environmental services.</td>
<td>Attractive long-term revenues for wood products, access to international growth markets, resilience to commodity price fluctuations.</td>
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</tbody>
</table>

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* NDC: Nationally Determined Contribution