

A Note on Environmental Issues Related to Farming Activities in the Paraguayan Chaco

Regulatory Overview

To thoroughly understand deforestation and environmental issues would involve a good understanding of the current legislative, social, and political environment in Paraguay, and more specifically the Chaco. Following is an overview with common questions often asked in relation to this topic.

Paraguay has a very strict deforestation law N. 3001/2006 set in place in 1990 and a system that makes it virtually impossible to disrespect it. INFONA is a government agency designed specifically for this purpose. This law ultimately contains two main points:

1. All farms that are to be cleaned of brush have to leave little less than half of the total area untouched. The virgin area has to consist of strips surrounding each parcel of cleaned land, as well as a nature reserve where an entire area is kept. Through this, as well as the creation of drinking water holes (which are also accessible to wildlife), developed areas usually have a higher biodiversity than closed natural brush at the same location.
2. It is also illegal to cut down any big trees, only the brush below may be cleaned, and has to be planted with pastures immediately to leave no soil exposed to weather. This strategy insures that the topsoil does not get burned by the sun or eroded, both of which would degrade it.

How do Paraguayan authorities insure compliance with this law:

The government has a system in place (attached article) in which farms and newly developed areas are carefully controlled via satellite. In order to develop an area the property owner has to apply for a so-called "plan de uso" or usage plan, which is an approved document that specifies exactly which areas are to be cleaned. Now, if a property is found to have disrespected the law, not only does the owner get heavy fines and usually has to reforest or buy virgin land to add to his area, but the contractor who carried out the cleaning gets his license revoked. Therefore contractors take extreme care before submitting to a job to ensure that the project is according to the usage plan mentioned.

Surface Distribution

Current surface distribution is as follows:

- 20% natural pasture
- 20% planted pasture
- 60% Natural brush

A number of natural reserves have also been designated and make up about 10% of the surface area of the Chaco. If the entire Paraguayan Chaco were to be developed, this would be the surface distribution:

- 20% natural pasture
- 35% planted pasture
- 45% Natural brush.

This is still exceptional for any country around the world, and Paraguay could be sold as an example. Keep in mind that Europe has lost approximately 99.7% of its natural forests, which have been partly reforested to less than 30%. In short, the Chaco's peculiarities or biodiversity is not destroyed, but social and economical values are being developed and farmed sustainably.

Farming and its Impact on Biodiversity

It is commonly known that farming and related operations have a negative impact on local wildlife biodiversity. This is not true for the Paraguayan Chaco however, where the addition of watering facilities designed for cattle is also available for wildlife. Because traditionally wildlife is only found in the proximity of a natural waterhole except for in raining season, the total number of wild animals that the area surrounding the water can sustain is limited.

During the last century a growing amount of available drinking water has become available to wildlife through the creation of watering facilities used to feed cattle. This means that wildlife has now access to a huge amount of watering holes all over the surface area of the Chaco, rather than a limited amount of natural springs and dams. This is very noticeable to anyone who visits the Paraguayan Chaco; the presence of especially wild mammals is significant and has increased a lot in recent years. Old farmers tell tales of times when the sighting of a wild boar was a very rare event – nowadays they are seen regularly besides the road or around the farms.

There is no denying that any human intervention in an ecosystem has a significant impact on the biodiversity. Keep in mind however that beef production is done without the use of any added hormones or any natural or artificial fertilizers and in an extensive production manner on pastures, rather than an

intensive manner in feedlots commonly used in the U.S. and Europe. In the Chaco at least the amount of wildlife has gone up due to the added availability of drinkable water.

I would highly recommend the following links/websites for more information on studies done in relation to this topic:

<http://tropicalgrasslands.info/index.php/tgft/article/view/144/92>

<http://www.wfo-oma.com/farmletters.html>

This is the website of the WWF in Paraguay that contains further information on laws and procedures:

http://www.wwf.org.py/que_hacemos/politicas_publicas/ley_de_servicios_ambientales/

Southern Farmlands