

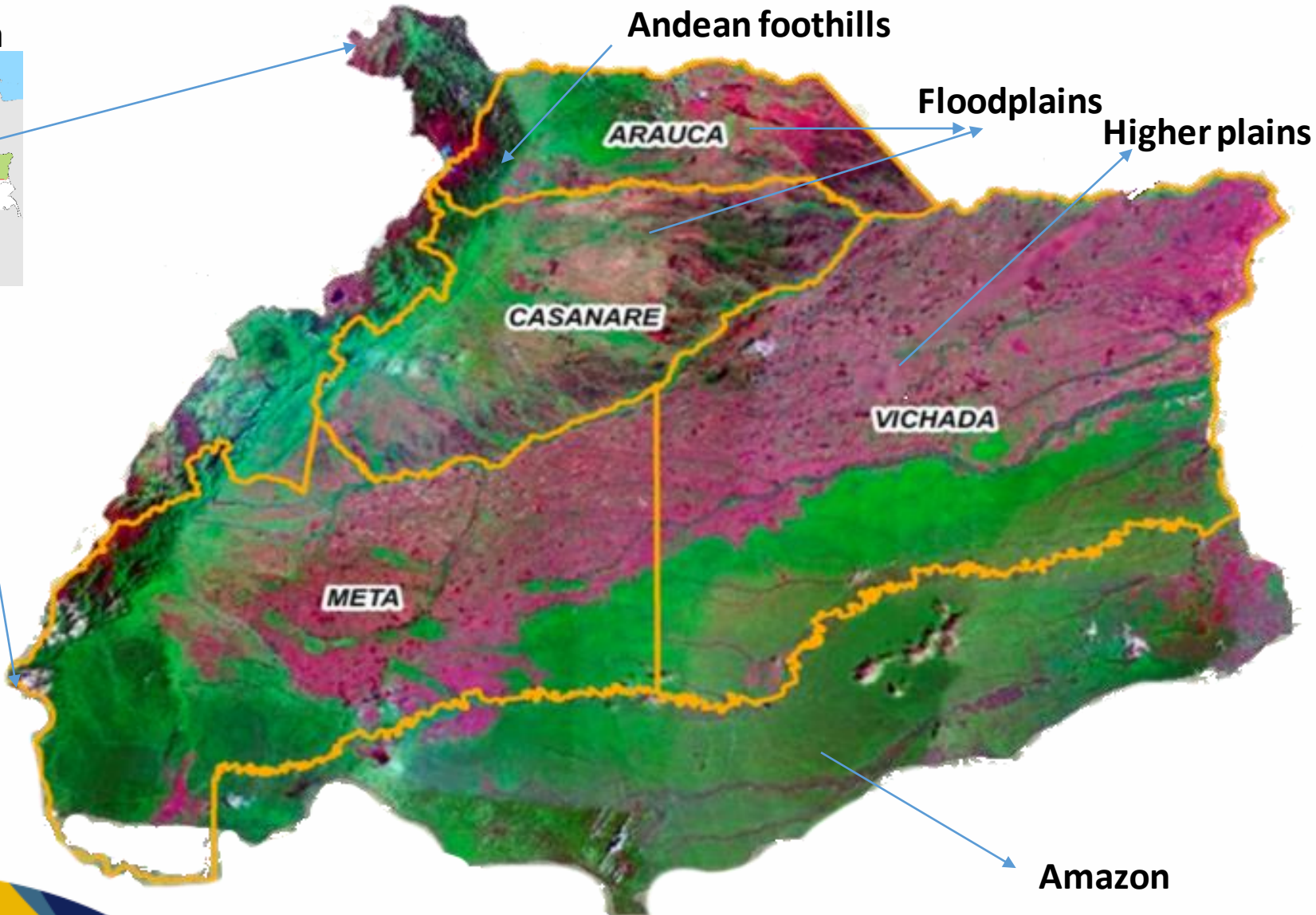
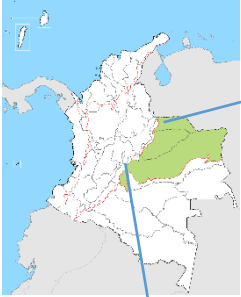
Carimagua pilot site
Colombia
GEOGLAMRAPP
Corpoica



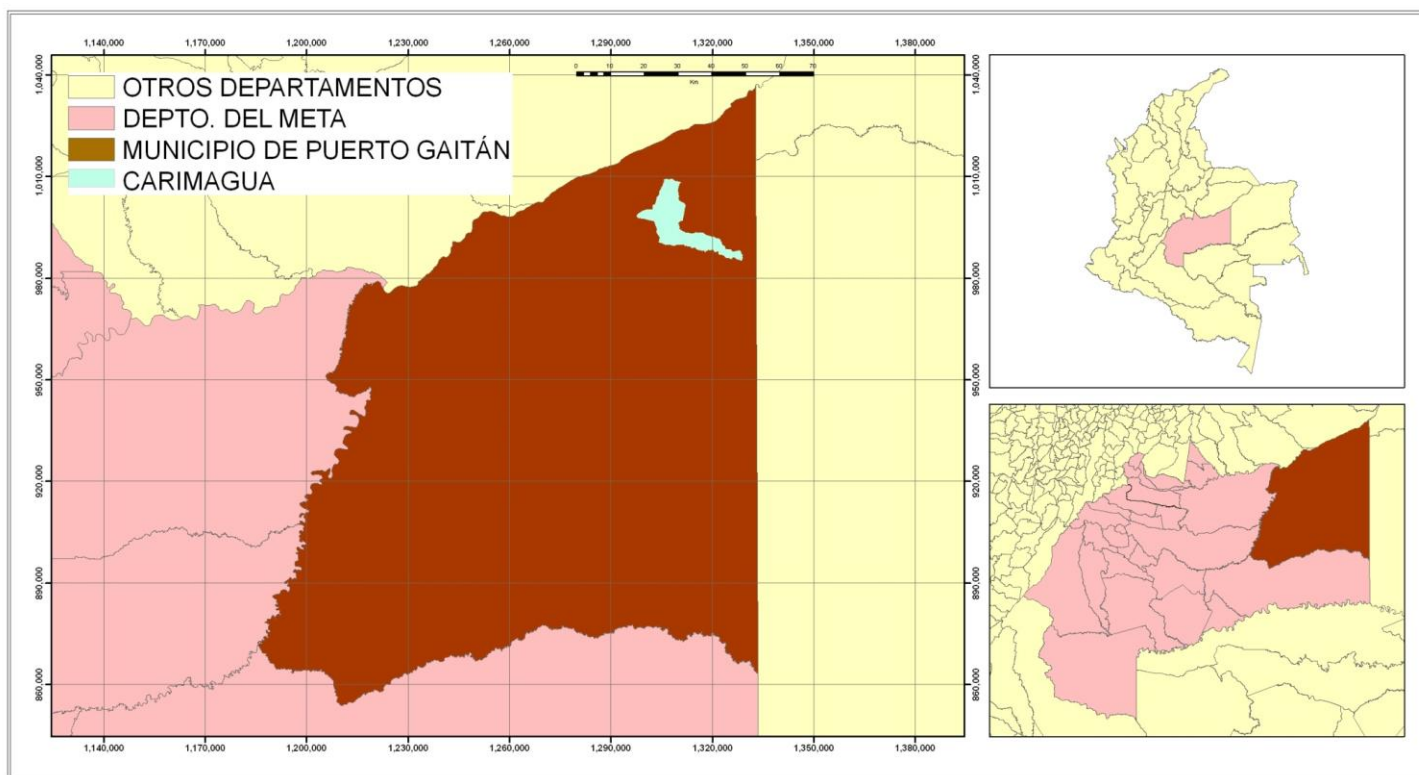


Orinoquia region

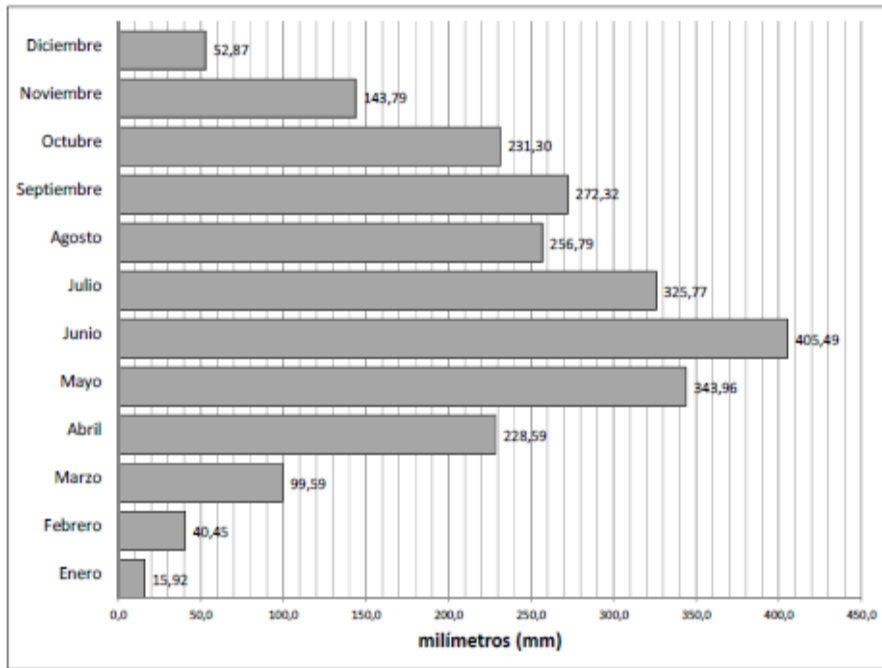
Colombia



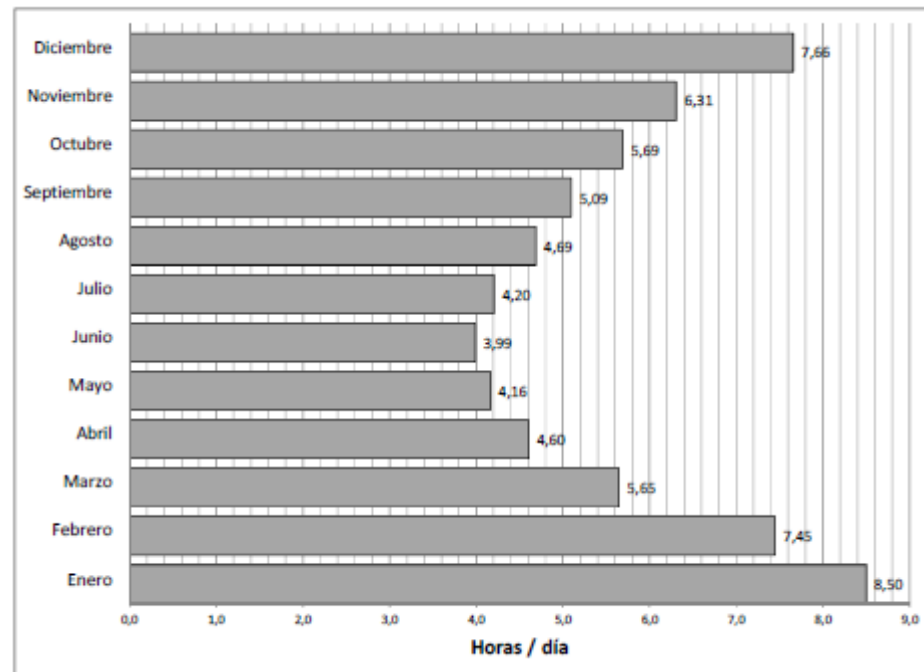
Carimagua location



Carimagua climate

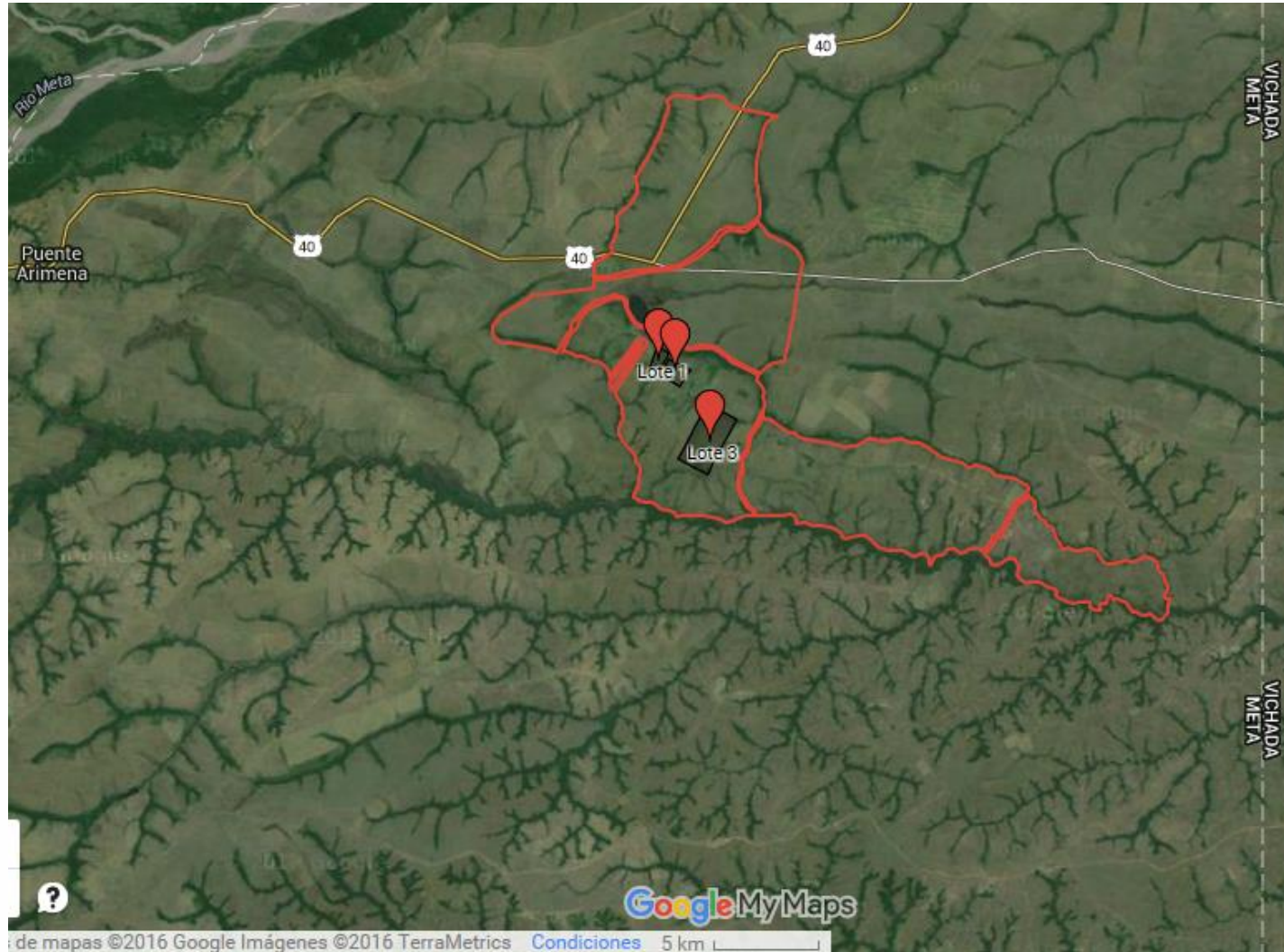


Rainfall

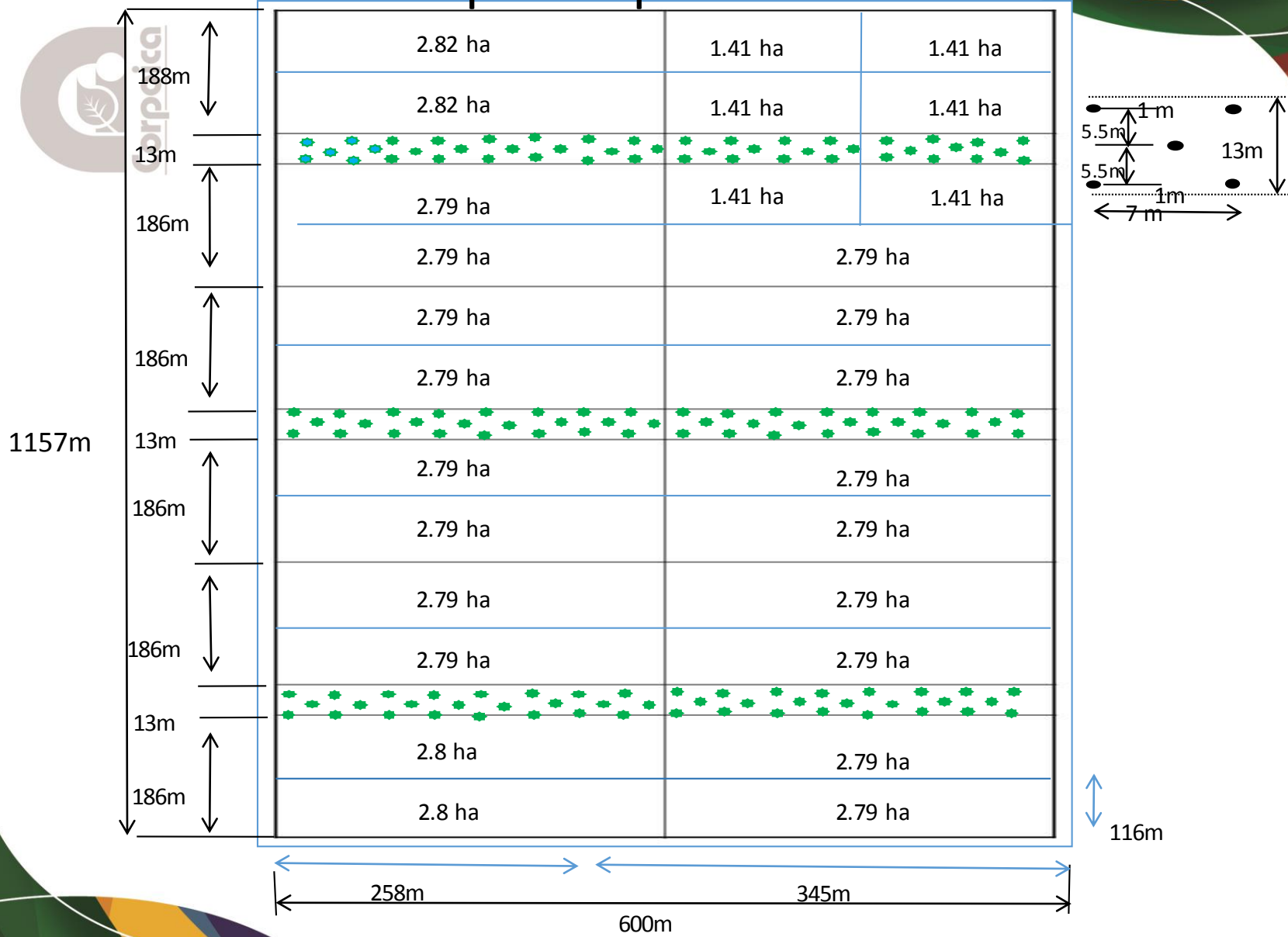


Hours of daylight

Carimagua experimental paddocks



Map of paddock 1



Features of paddock 1

- Total paddock size: approximately 74ha
- Number of sub-plots: 21 (2.8 ha) + 6 (1.4 ha)
- Pasture type: *Brachiaria dictioneura*
- Management strategy: rotation
(5-7 days grazing period; 28-35 days of no grazing)
- Number of cattle: two herds each with 54 heads of cattle
(Brahman)



Agronomic variables of productivity

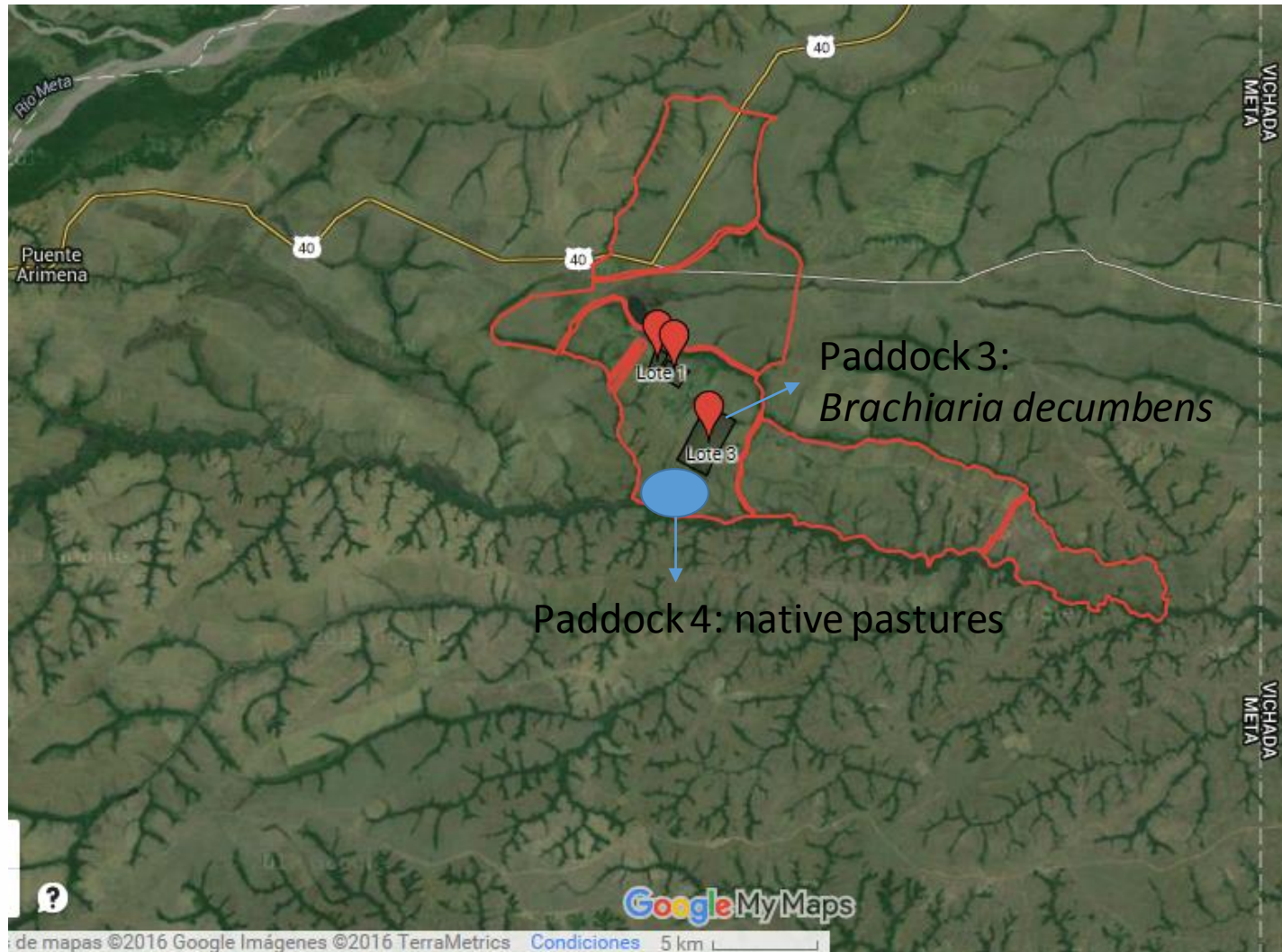
- Monitoring strategy (data from 2011 to present): 1 sampling per month of 10-20 random points around the sub-plots.
- Ground cover percentage: Metal frame of 50 * 50 cm = 0.25m², 10 – 20 random sampling points of each of the sub-plots.
- Available biomass (top 15 cm) (kg MS/ha): every 28 days (during wet season) and every 35 days (during dry season).
- Species composition (% of grasses, legumes and other species) (Toledo y Schutze-Kraft, 1982).
- Nutritional quality of forages: one sampling occurs during dry and wet season
 - PC (Kjeldahl, AOAC, 1984) (Proteína cruda)
 - FDN (Van Soest, 1967) (Fibra Detergente Neutra)
 - FDA (Van Soest et al., 1991) (Fibra Detergente Acida)
 - DIVMS (Tilley y Terry, 1963) (Digestibilidad Invitro de la Materia Seca)



Paddock 1: 250 m (MODIS terra)



Future paddocks





Data requirements

Paddock 1 requires high resolution Landsat and Sentinel-2 imagery with 1-2 days of temporal resolution.

Paddocks 2 and 3 that are both 100 ha in size require moderate MODIS (250 m) images (17 grids in 100 ha).

Because of high cloud cover Sentinel-1 (radar) needs to be combined with high resolution optical images.



The team





Thank you