Cattle Ranching in the Rainforest
The Brazilian Amazon Case Study

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Case overview

• Started with the colonization of the Amazon in the 60s

• Cattle ranching = a main driver of the colonization
  - Slash & Burn + one annual crop + pasture
  - Landownership strategy: pasture is a tool for land appropriation
  \[ \Rightarrow 75\% \text{ of deforested area} = \text{pasture (1mio km}^2) \]
  \[ \Rightarrow \text{Cattle ranching based on deforestation} \]

• Great interest for pioneers for cattle ranching
  – “Cattle ranching is money” / Providence state of the pioneers
  – Low income but secure income, savings,
  – Flexibility of the management

• Livestock network is the base of local development
  – Low demographic density (4-5 bovines/habitant)
  – Traders, Slaughterhouse, dairy factories, leather industries, ...
Cattle ranching expansion based on slash & burn
Two main challenges

- Pasture degradation process
- Increase productivity of deforested areas

Monitoring:

CLFI: Crop-Livestock-Forestry Integration

• Identify the existing CLFI
• Building new CLFI for small and medium-scale producers
• Assess the performances / Criteria
  - Agro / Production (yields)
  - Socio-economy / Gross margin, cash flow, calendar, labor
  - Environmental / Energy, soil organic matter
Degraded pasture

Seeding and annual crop

Seeding forage or 2nd crop

Plantation of trees
Evaluation

• Agronomic
  – Better yields and gross margin (+)
  – Inputs (-)
  – Animal well-being (+)

• Environment:
  – Reducing deforestation (+++)
  – Carbone sequestration (++)

• Economy
  – Depend on the initial situation
  – Diversification (+)
  – Flexibility (-)

• Social
  – Easier to work (+)
  – Less accidents, especially during slash (+)
  – Self-esteem at individual and community scale (+)
  – Knowledge, work organization, farm management

• National policies (+)
Lessons

- Complexity in terms of:
  - Planning of the activities
  - Work management
  - Knowledge
  - Cash flow management along the year

- Collective initiative
  - Reduce the risk, ex: fire regulation
  - Market access for inputs and productions
  - Qualified labor/workers ↔ capacity building

- Pasture management more complicated

- According to the scale of the farm

- Local stakeholders don’t want add value to pasture
Thank you / Obrigado