

# Estimates of Deforestation Rates in the Amazon: The Case of Porongaba Seringal

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# Research Questions

- **Why Do Deforestation Estimates For the Amazon Differ?**
- **How Can These Estimates Be Evaluated?**
- **What Are the Policy Implications of These Differing Deforestation Estimates?**

# The Problem

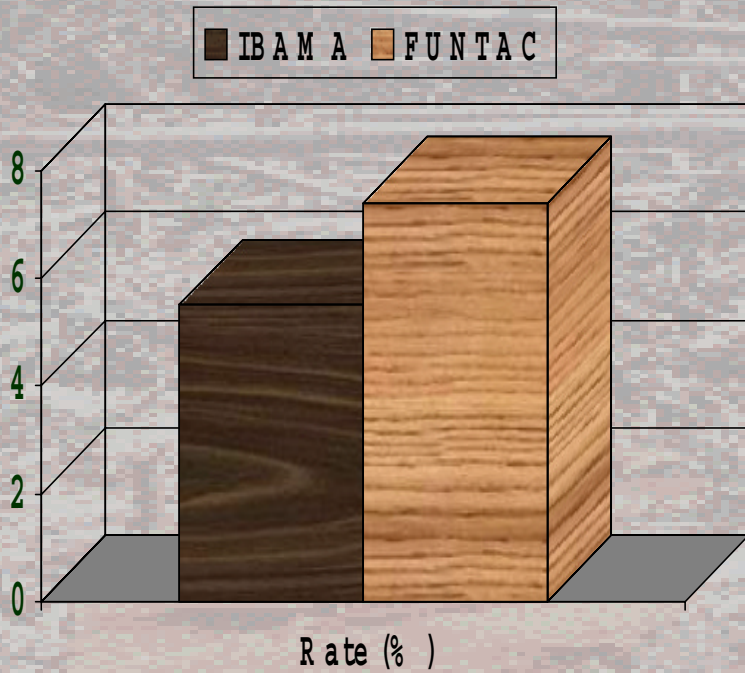
- **Deforestation** Rate Estimates for the Amazon Differ (IBAMA, FUNTAC)
- Spatial Diversity of Differences
- How Can They Be Evaluated?

# Acre and Porongaba Seringal

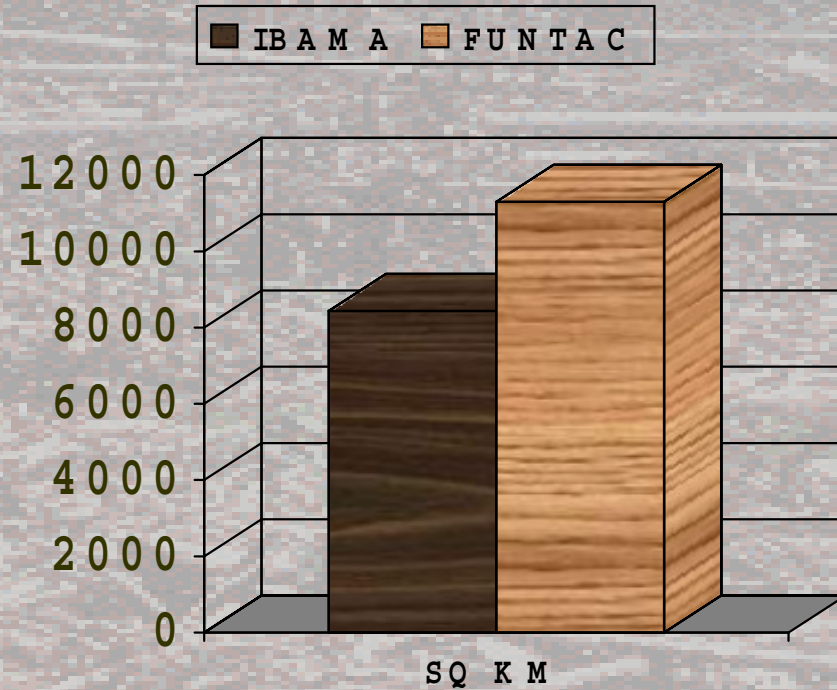


# Deforestation-Acre

Deforestation Rates-Acre-1996



Deforestation Area-Acre 1996



# Reconciling the Differences?

- Policy Implications of Accepting Figures
- Evaluating the Different Estimates

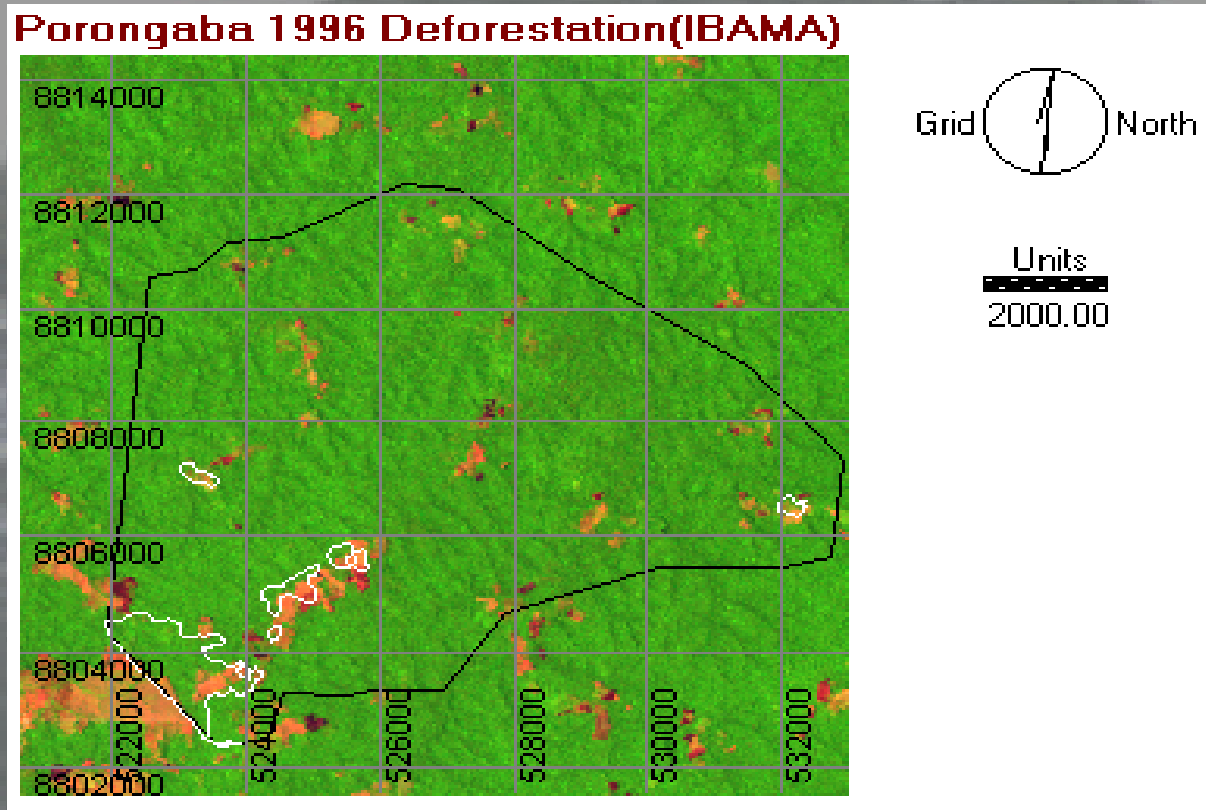
# Our Approach

- Case of Porongaba Seringal-Spatial Diversity of Deforestation
- 1992-Data-Brown et al.
- 1996-LANDSAT Imagery-Estimates
- 1999-LANDSAT Imagery-Classification
- Analysis

# 1992 Seringal Data

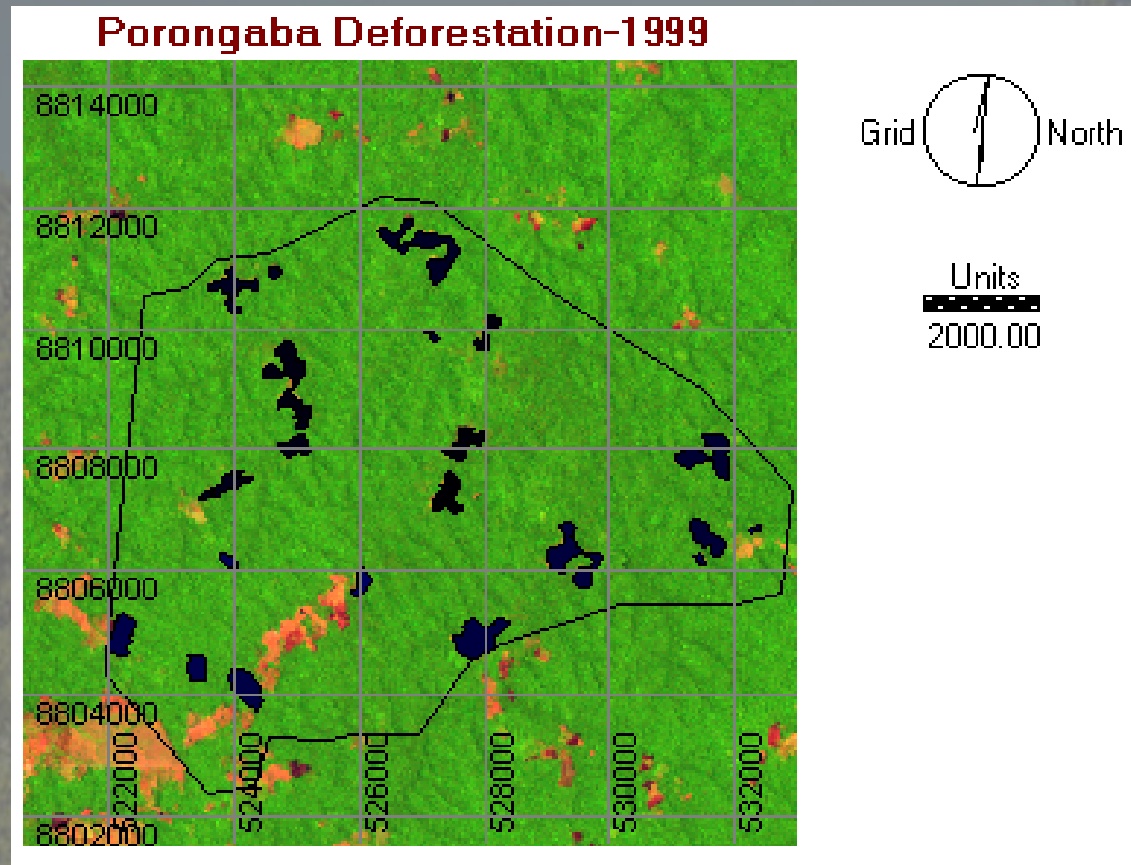
- 6,800 hectares-Part of Chico Mendes Extractive Reserve
- 22 Households
- Clearing on average approx 1.5 hectares-.5%
- Total Clearing approx 215 Hectares
- Another 200 Hectares of Regrowth

# 1996 Seringal Data



- **275 Hectares-Apparent 1% (Acre-IBAMA-5.5%, FUNTAC 7.4%)**
- **Serious Classification Problems**
- **No Regrowth Classification**

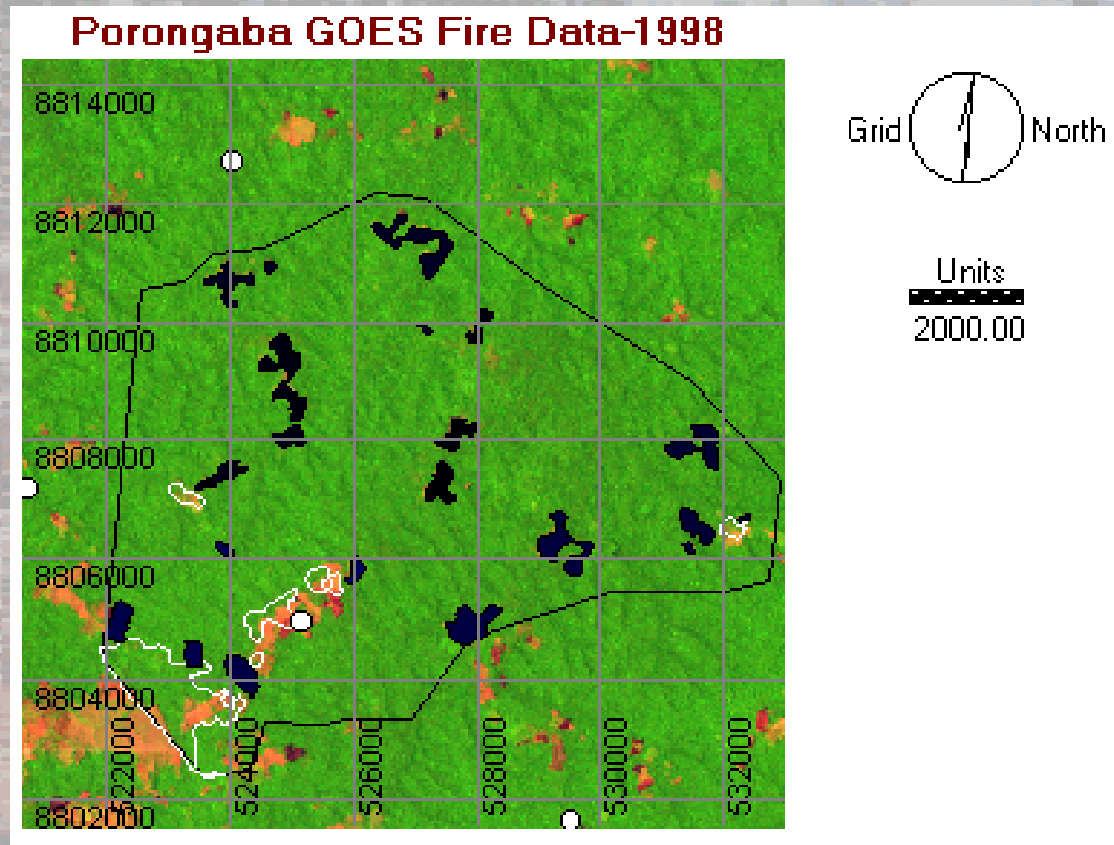
# 1999 Seringal Data



- **350 Hectares-Apparent 1.9%**
- **Based on More Accurate Classification**

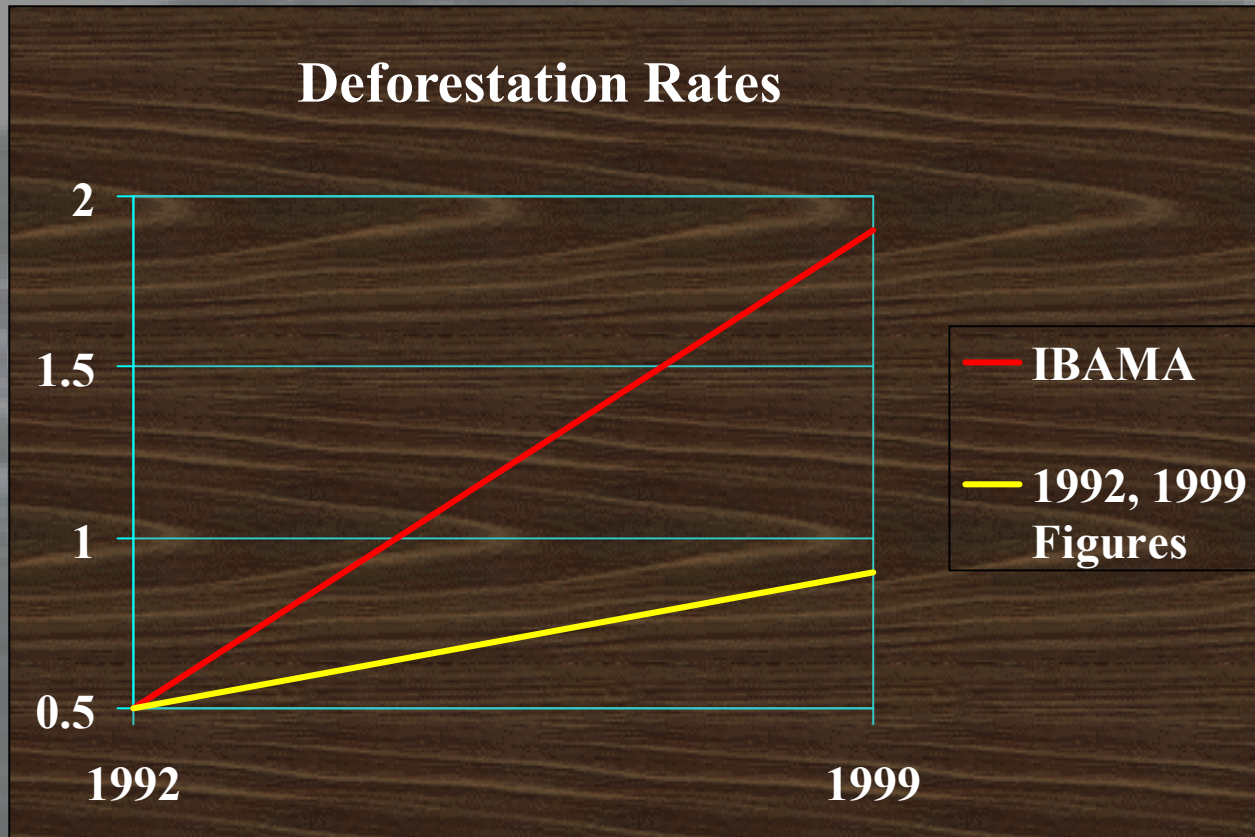
# Searching for Data Reliability

## GOES Data



- GOES Hotspots Not Reflective

# RESULTS



- Which Rate?

# Conclusions

- **Data and Classification Problems**
- **Generalizability (Scaling Up)**
- **Policy Implications**
  - **Governmental Level**
  - **Rubber Tappers**