



FACTORS IN THE EXPANSION OF SILVICULTURE IN MATO GROSSO DO SUL, BRAZIL, FROM 2005 TO 2010

Caroline P. Spanhol (UFMS*)

Elton Gean Araújo (UFMS)

Dieisson Pivoto (UFRGS**)

Giana Mores (UFRGS)

Homero Dewes (UFRGS)

(Authors)

*Federal University of Mato Grosso do Sul, Brazil

** Federal University of Rio Grande do Sul, Brazil

Planted forests in Brazil



South America Map

INTRODUCTION

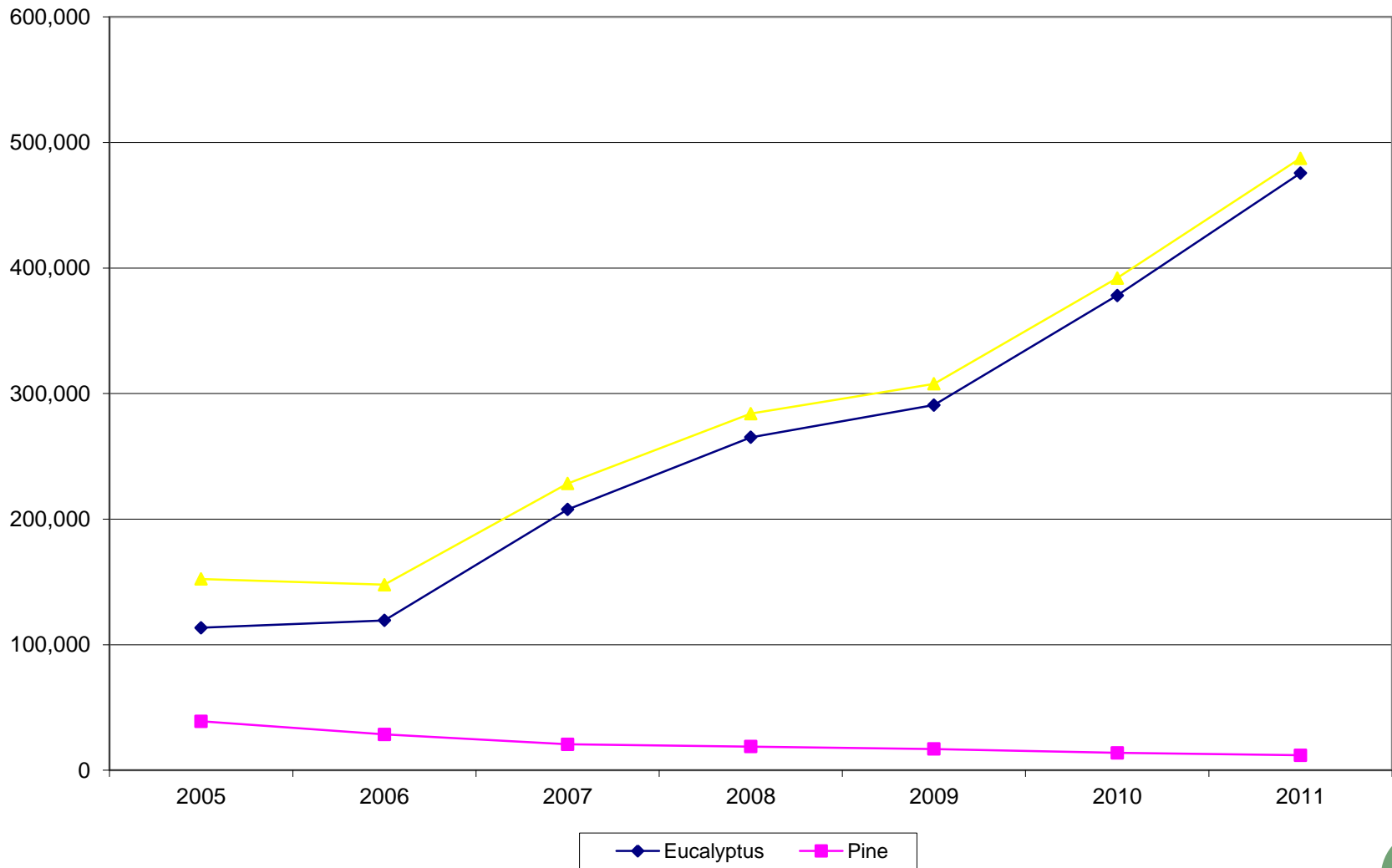


Figure 1 – Change in the amount of planted forests in MS.



○ Problem statement

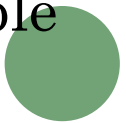
- What factors have contributed to the increase in the area used for planted forests in the State of Mato Grosso do Sul?

○ Objectives

- The aim of this study is to **examine the factors which have contributed to the increase in the amount of land used for planted forests in MS.**



PROCEDURES

- Quantitative descriptive study.
 - Data available: 2005 to 2010
 - Variables studied:
 - Price of hardwood pulp
 - Total exports of the MS forestry sector
 - Total MS beef exports,
 - Price of Land
 - Area of Planted Forest
 - Descriptive analysis, correlation tests and the multiple linear regression model.
- 

RESULTS (I)

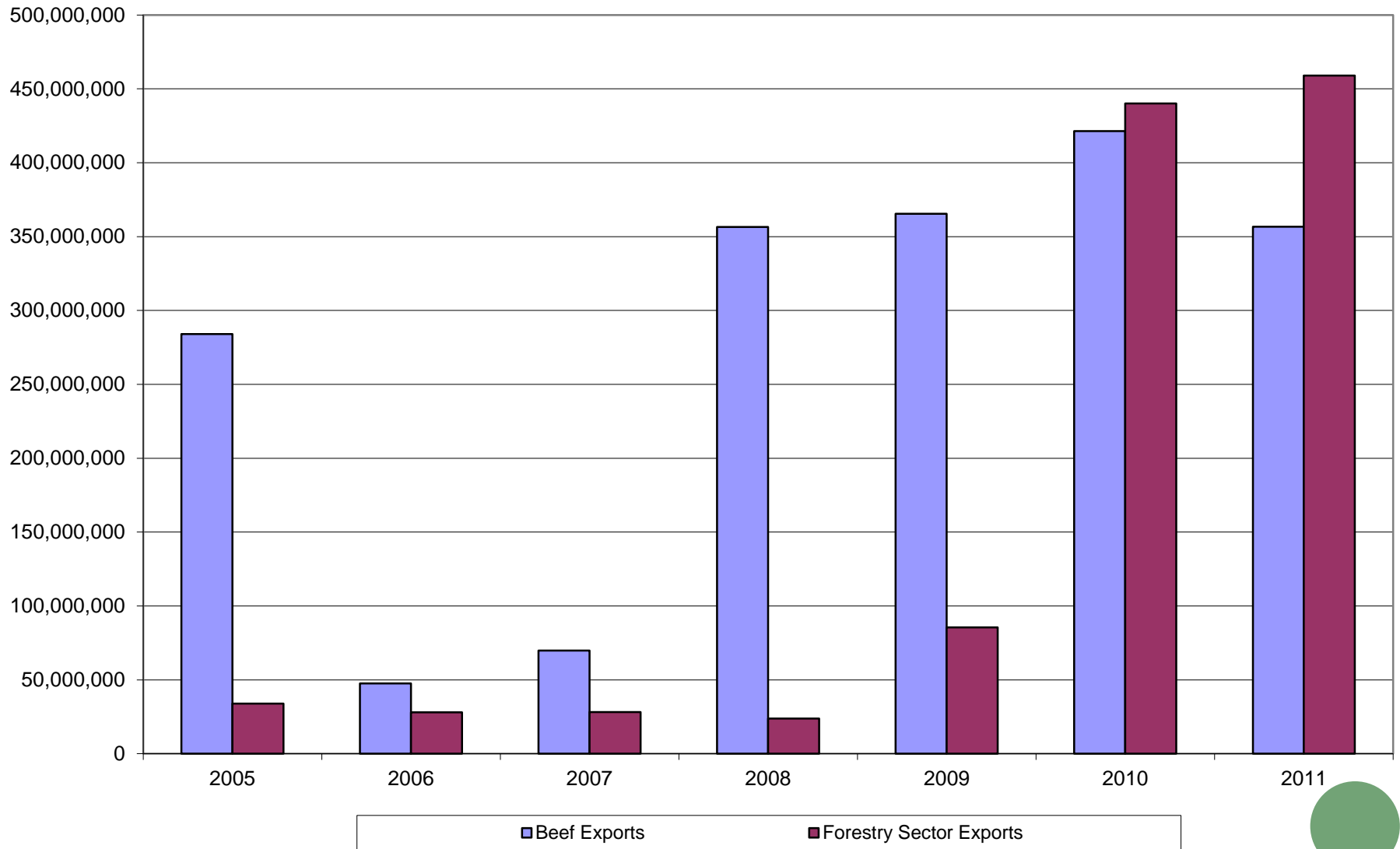


Figure 2 –Change in the exports of beef and forestry products from 2005 to 2011.

RESULTS (II)

- The resulting correlation allows us to identify the existence of positive correlations between the area of forest planted variable and the price of wood pulp ($r = 0.60$), price of land ($r = 0.94$) and forestry exports ($r = 0.75$).
- The area of planted forest is **strongly** associated with the **price of land and forestry products exports**, and **moderately** associated with the **price of wood pulp**.
- **99%** of the variation in amount of land used for planted eucalyptus forests can be explained by the regression model (P_{terra} , P_{cel} , Exp_{flor}).



FINDINGS

- A strong positive correlation was found between variation in the **area of planted forest with forestry sector exports and the price of land.**
- It is important to note that the areas of planted forests have encroached on areas which were previously pasture intended for livestock production.
- This suggests a change in land use in the state, as well as diversification of its productive matrix.





Thanks for your attention!

