

Tree planting and C-sequestration in the Tobacco industry:

The case of Souza Cruz, Brazil

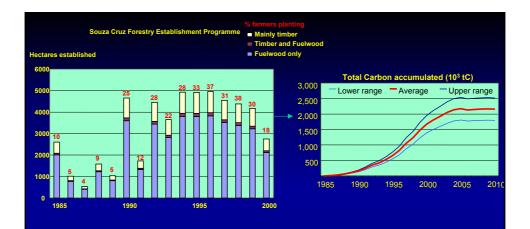
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Area of influence of Souza Cruz

Introduction:

A large part of the tobacco produced in Brazil is dried with fuelwood. Traditionally the fuelwood is extracted from natural forests. The Souza Cruz Tobacco Company has over 22,000 contracted tobacco farmers using fuelwood to dry tobacco. Aware of the negative impact of the fuelwood extraction on natural forests, Souza Cruz initiated a reforestation program among their contracted farmers, in order to cover at least 50% of the fuelwood demand through farm plantations. Objectives of this study:

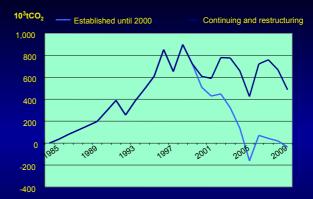
- To evaluate the impact of the 1980-2000 reforestation program on carbon sequestration
- To advise the company on future reforestation strategies that could enhance the C-sequestration potential of the program



Results:

- Between 12 to 38% of the registered farmers plant between 0.6 to 1.1 ha of forest per year
- Around 80% of the plantations is for fuelwood (to dry tobacco) and 20% for timber.
- The Souza Cruz Forestry Program has accumulated more than 2 000 000 ton of Carbon (as of 2000)





Conclusions:

If tree planting continues as in 2000 and the forestation program would be restructured from mainly fuelwood to mainly timber as the final product, the Souza Cruz forestry program would sequester from 2001 to 2010 between 400,000 and 700,000 tC/Yr according to the lower range scenario or between 500,000 and 900,000 tC/Yr in the higher range scenario (on the average between 450,000 and $800,000 \pm 12.5\%$).