## Summary

The Caquetá region of Colombia is representative of the environmental and economic conditions prevailing in most of Colombia's Amazon region. The department of Caquetá, located in the Amazon River basin, occupies an area of 8.9 million hectares, most of it under jungle. The average annual rainfall is 3500 mm, with an annual relative humidity of 80.7%. Dual-purpose production systems can be found on 87% of the farms in the region, and 86% of the total area is planted to improved pastures. In 1997, the early adoption process of the legume Arachis pintoi, cv. Maní Forrajero Perenne, was studied. Sampling was carried out on farms within the area of influence of Nestlé de Colombia. Basic data were collected by surveying a sample chosen from all the farms supplying milk to the Nestlé plant in Caquetá.

groups. The first was a completely randomized sample, whose size was determined through conventional statistical methods (variance of farm milk production and assumption of different levels of confidence and permissible margins of error). A total of 174 farms were included. The level of confidence was between 80% and 85%. Because the adoption of this technology is still very recent, for the second group a further survey was made of 52 farms that were using the new forage material.

A combined survey strategy was used, with two sample

- In Caquetá, as well as in most tropical regions, the phase of "early adoption" of pastures takes much longer than for crops.
   Most "early adopters" of *A. pintoi* (82%) were satisfied with the results they had obtained so far. The average area planted per farm was 9.6 ha to the legume associated with grasses and 1.3 ha in
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  The average area planted per farm was 9.6 ha to the legume associated with grasses and 1.3 ha in seedbeds. Of these "adopters", 85% said they would expand the areas planted to *Arachis* by an average of 11 ha/farm the following year, 10 ha the next year, and within 3 years, by another 11 ha/farm.

  3. The adoption rate of *A. pintoi* was about 9.2%.

Estimates indicate that 3000 ha are planted to this

- legume, mainly in association with grasses.
  4. Farmers, who are "early adopters" of *A. pintoi*, tend to be richer than those who are "non-adopters", that is, they have larger farms, invest more, and have twice the capital. Being richer encourages "adopters" to invest more in new technologies.
- 5. The areas planted to the new material were small, representing less than the 10% of total area in pastures.6. Previous economic studies have demonstrated that
  - 6. Previous economic studies have demonstrated that establishment costs increase considerably when a traditional, pure *Brachiaria* pasture is replaced by an association based on *A. pintoi*. The cost of grass +
  - association based on *A. pintoi*. The cost of grass legume seed accounts for 40%-52% of total investment in establishing associated pastures.

Farmers need more information on the use, management, and productive and environmental

7.

potential of A. pintoi. Most of the interviewees (70%) said they had not received any type of technical assistance.