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Banana Harvester



Final Presentation 12/12/05
2.009 Fall 2005
Red Team



Ouick Facts:

- #1 fruit worldwide
- Most profitable agricultural export
- 100,000 workers in Central America
- Each plantation contains about 400,000 banana plants!

Current Process





- ~10 ft. tall tree, 1 bunch/tree
- 2 workers cut bunch with machete and severing tool





 1 worker pulls 20 bunches to factory for processing/packaging

The Product: Banana Stand



Key Attributes:

- Easy assembly
- Supports average 60 lb. bunch weight with safetly factor of 2
- Ergonomic trigger actuates grabbing motion

Testing: Puerto Ríco and Costa Ríca







2nd |teration:

<u>Competitive Advantage</u>

- Studies of current processes at corporate banana plantations and field tests with our device suggest a 10% increase in productivity
- Our stand also offers added flexibility by breaking up the two worker team to expand efficiency of current processes.

Market

- Central American workers (100,000+)
- Project 34% market penetration by year 6

Savings and Economics

- Estimated wages for 2-man team are \$2080/year.
- 10% productivity increase translates to \$208/team/year for corporation
- With estimated initial price of \$400, corporation could expect investment to pay off in just 2 years