

Rice Transplanter



Rice Market

- 20% of the world's calorie supply, and 30% of Asia's
- Top producers are China (31%) and India (20%)
- Grown primarily for domestic use



Photo by Stuart Ling - Wikipedia

Current Products

- Cost
 - Price of equipment: \$250-17,500 (used)
 - GDP per capita: ~\$5600 (China), ~\$3100 (India)
- Technical limitations
 - Need large, flat fields
 - Cannot plant on field edges
 - Frequently overturn in the mud



Yanmar Agricultural Equipment, Co.

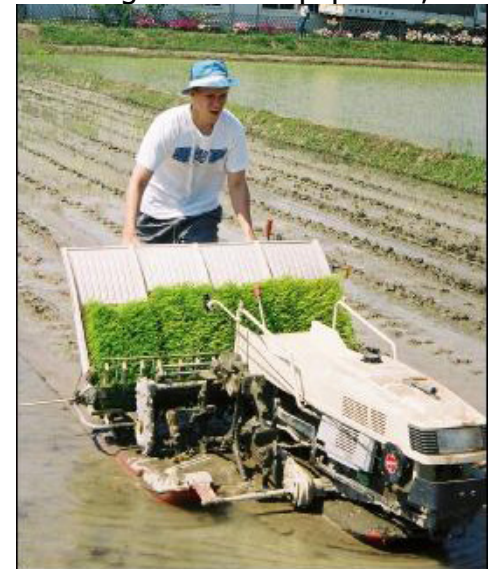


Photo by Aaron Kingsbury

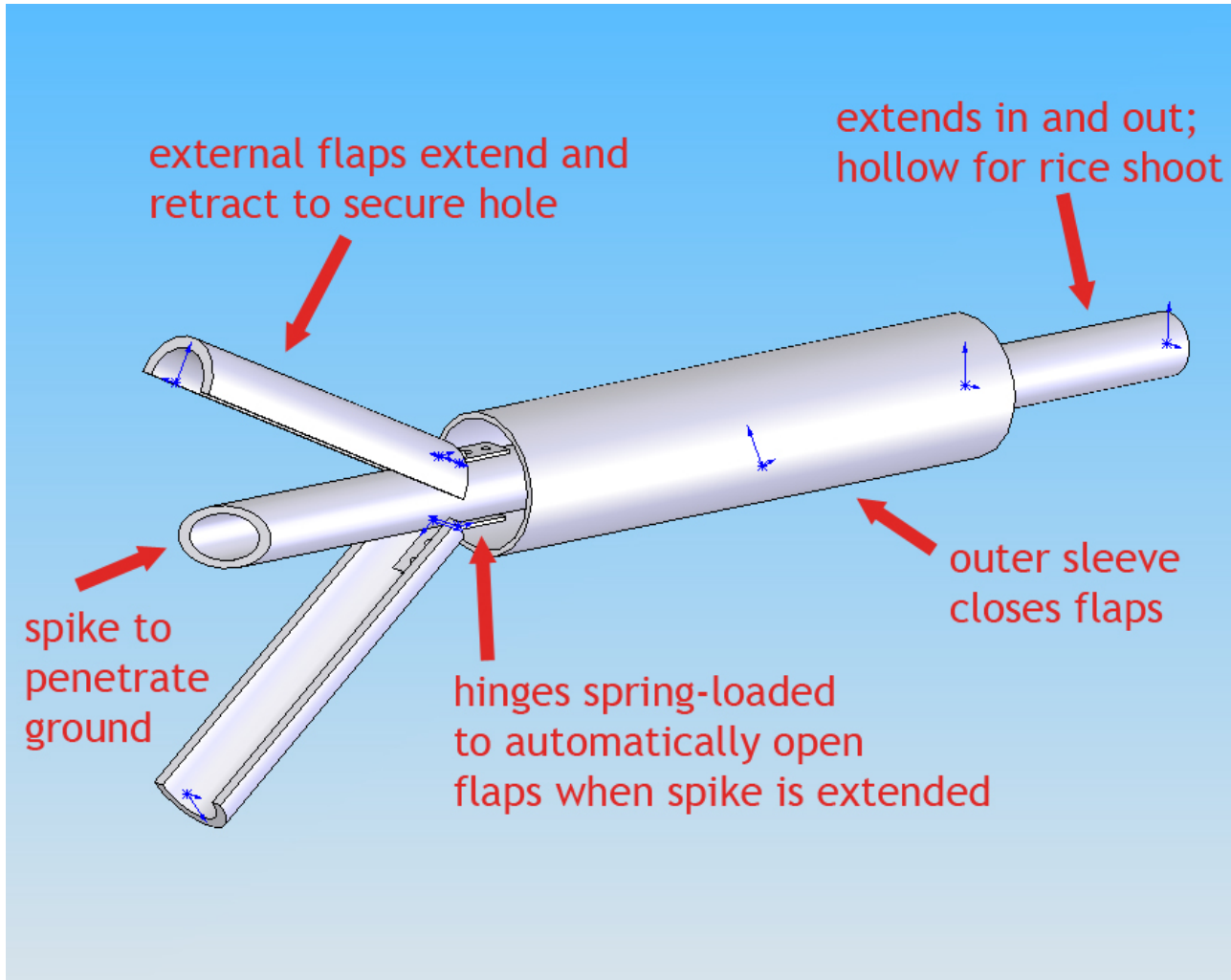
Technical Requirements

- Prevent back-problems in field workers
- Extremely low-cost
- Simple and rugged
- Easily transportable
- Can be repaired using local materials
- Usable in a variety of terrains

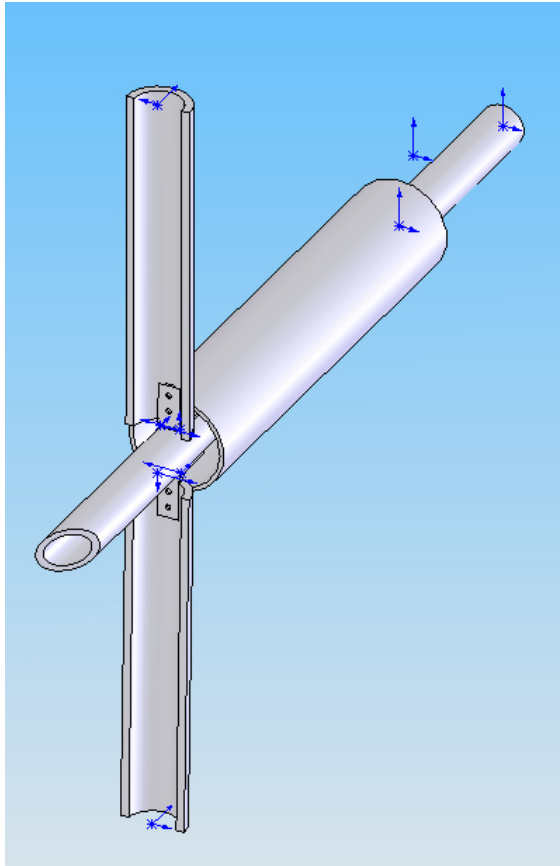


Photo by Jan-Pieter Nap - Wikipedia

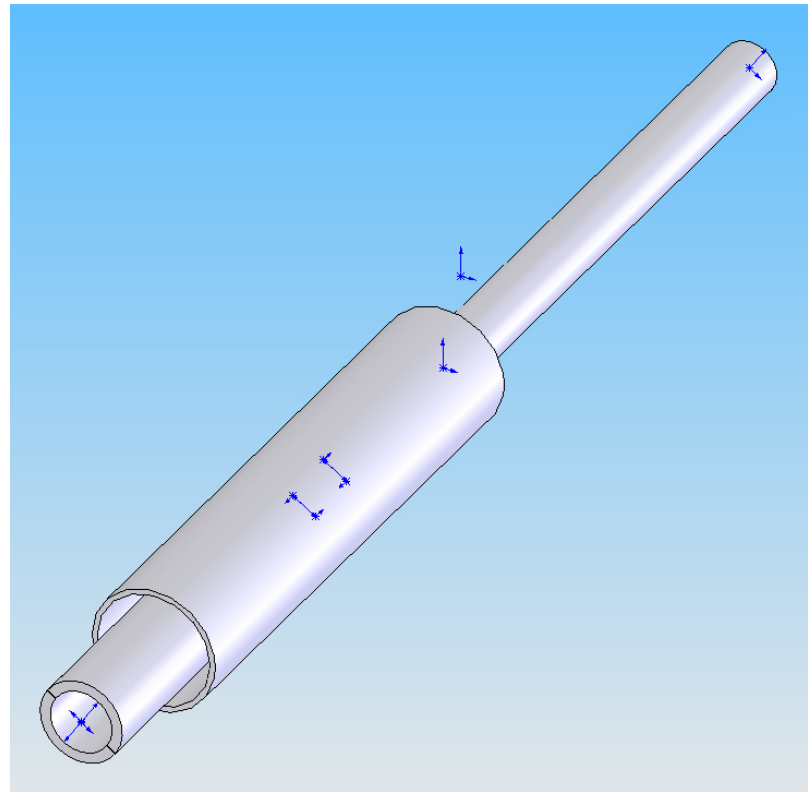
Sketch Model



Sketch Model



Open initial position



Closed position after retraction