



## Appreciation Award

### Manual hand lever-based Tapioca plant uprooter /digger

S Vanchinathan  
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S Vanchinathan (14), a class 9 student, loves making small mechanical gadgets to address local needs. He wants to become a doctor and then join civil services to serve the people. The roots of tapioca plants are usually very deep. Plucking out tapioca requires a lot of effort and a small area of 1000 square meters requires two people per day to undertake the task. Realising the difficulties behind the operation, Vanchinathan designed a Manual hand lever-based Tapioca plant uprooter /digger.

It makes use of two levers, which move about a lever shaft (similar to shaft for

driven wheels). One lever has a jaw to clamp around the tree and the second lever helps in digging of the soil. The two levers are pushed together. The simultaneous application of pulling and pushing force helps in easy uprooting of the plant.

Using this device harvesting of tapioca from over an area of 1000 square meters can be done by a single person in a single day which otherwise requires two persons. The tool has also reduced drudgery involved in the task.

