MAHUVA NUT CRACKING DEVICE.

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In our summer school 2019 we had a field visit to GALIBILI village (Dist. Panchmahal) of Mahuva nut cracker.

In this visit, we observed a problem where people crack nuts with stones and handle the seed with their hands.

In this cracking operation, it causes hand injuries.

It also has a slow process of cracking.
Mahua longifolia is an Indian tropical tree found largely in the central and north Indian plains and forests. It is commonly known as mahuwa, mahua, mahwa, mohulo, or Iluppaier vippa chettu.

It is also used to make cooking oil and also added to make soap for good fragrance.

Beneficial for skin disease, rheumatism, headache, constipation, piles, hemorrhoids, chronic tonsillitis, heart disease, and diabetes.
Hand equipment use to crack the nuts by villagers and its problem

- In our field visit we had seen that people are cracking nuts with stones and hammers.
- While cracking they handle the nuts with their hands and after they beat with stones or hammer.
- Its also causes hand injuries while they tapping the nuts.
- While tapping Its give Medium load to crack the nuts.
1. **NUT HOLDING DEVICE WITH THE HELP OF SPRING MECHANISM**

**WORKING:-**

- This device was work as work holding device with the help of spring mechanism.
- Its helps to holds the nuts between the bolts.
- The bolts can help to join a nuts.
- After Holding we have to tap a hammer on the nuts and after the nuts will crack into 2 parts
PROBLEMS:

1. Material is costly
2. High maintenance
3. Villagers cannot afford
2. SINGLE HOLE NUT CRACKING DEVICE

**WORKING:**

- In this device it has single hole on both opposite side.
- In 1\textsuperscript{st} side of hole we hold the nuts
- After holding we press from another side.
- After pressing the nuts can press
PROBLEMS:-

1. In this design the nut can hold in holes
2. Nuts cannot crack properly
3. It cannot crack but it was press
MULTIPLE HOLE NUT CRACKING DEVICE

WORKING:

- In this device the content was quite similar to 1st design..

- We put 6 nuts in single operation.

- In this device it have 6 holes And press 6 nuts.

- But the problem was that 1st three nuts can crack easily but in 2nd three nuts cannot crack as we need.
PROBLEM:-

- Load distribution
- Cannot crack nuts properly
- 1st third holes can crack easily
- 2nd third holes cannot crack properly
SINGLE HOLE NUT CRACKER USING CUTTING SYSTEM

WORKING:
- In this device we should use blade to make a 2 parts of nuts
- In this device we make Single hole and on opposite side we make embossing wooden parts to help to insert the nut on blade
- This operation is very speedy and easy process
- It is very safety operation
- There is not having a chance of hand injuries
COMMUNITY FEEDBACK
In this equipment we should make some development to increase the efficiency.

- We make multiple hole to do fast operation.
- It also reduces the time.
- We also put box on the bottom side to collect the whole nuts in one box.
- We will also put 4 stands from bottom of the hole to hold the device.
thank you so much