Mahuda seeds processing

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In our field visit we visited two villages first one is Aankli & second one is Gillibilli village.

In Aankli village we first assume that we can see the old process but after reached we get know that they have not use old method instead of that they can give their seeds to the shop where the oil is taken out from the seeds by using machine.

In these machine the oil is directly taken out from the dry seeds directly.
Second we visited Gillibilli village where we went Sonadi ben house were we see the old method & do practical of the old processes.

There are various stages for taking oil from seeds in which after cracking the nuts of seed the whole process is started.
Processes for Making Oil from Seeds

1. Drying the seeds
2. Grinding the seeds
3. Steaming the powder of seeds
4. Squeezing the steamed powder
After drying the seeds the first process is to grinding the seeds (making powder form of seeds) they use an wooden equipment "CHIPKO". It is the simple device operated by leg. Then after second process is to steaming the powder of seeds. they can make a bag & fill with the powder & put on the mouth of pot & steam it. Then last process is to squeezing the powder of seeds & make oil from it.
After visiting of field & see practical of all processes we decided an device for squeezing the seeds or making oil from it.

But we have some problems regarding to making prototype:

- The material of prototype is low cost & easily available.
- Effort needs in our prototype is less compare to old method equipments.
- Low cost prototype so villagers or people of tribal area can afford it.
Our group can decide various designs for all processes but in last we can final design a device for squeezing the powder of seeds.

First we decided a design for grinding the seeds & squeezing the seeds.
After discussion with group members we finally decide a design for squeezing the powder.

The material used for the prototype is wood & stainless steel. The most part of the design is of wood & lead-screw or bolts are of stainless steel.
In our prototype we can use two wooden blocks of taper angle (as a male female shaft) upper block is rotating & comes down so it press the bag of powder and the oil is taken out from it.

In the middle of the wooden blocks we can fix a lead screw in which the bottom wooden block is fixed & the upper part is rotates on the axis of lead screw.
As a testing of our prototype we can perform two tests. For first test we use mahuda seeds & for second test we use peanuts.

**FIRST TEST** - For first testing we use mahuda seeds for making oil. First of all we can grind the seed & make powder form of it. Then we can steam the powder of it for near about two hours.

Then after steaming the powder we make bags of powder & put it into the bottom wooden block. Now rotating the upper block it comes down & press the bag of powder and because of holes in bottom block the oil is fall down in container.

In first testing we make powder form of 350g & we get oil near about 50g from it.

We get less quantity of oil but it done because it was the first testing of prototype & the material is wood so it absorbs most amount of oil.
SECOND TEST-WE USE PEANUTS

- For second test we can use peanuts for making oil from of it. We can do two test with peanuts first test we do without steaming the powder of seeds & second by steaming the seeds.

- **WITHOUT STEAMING:**
  - first we test with only grinding the peanuts, the process is same.
  - First we test with the powder of 1 kg & we get near about 55 to 60g from it.

- **WITH STEAMING:**
  - second we test with steaming the powder of seeds, the quantity of powder is same 1 kg but these time we get 104 g.
THANK YOU