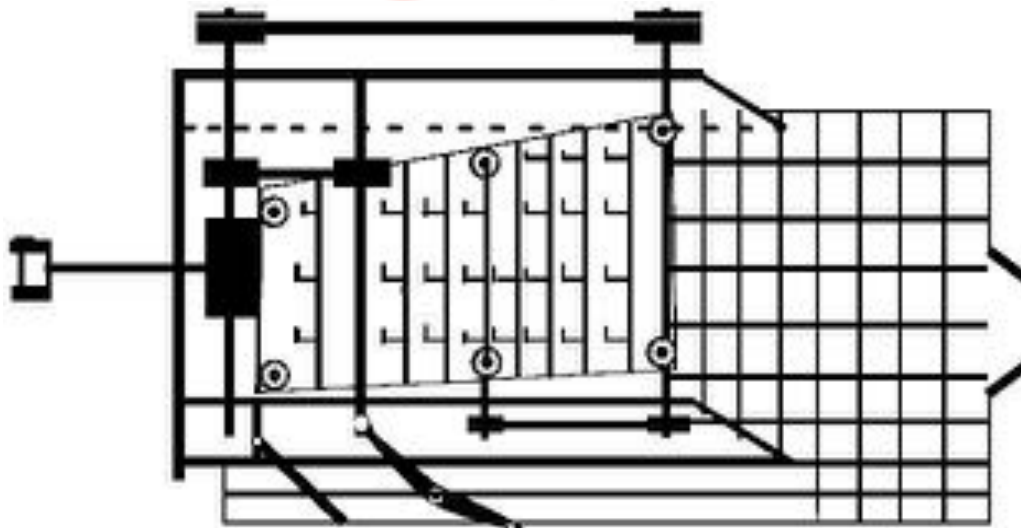


Design And Fabrication Of Economic Groundnut Harvesting Machine

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Abstract - The most of land in India is use for the purpose of agriculture since the origin of humanity groundnuts is highly cultivated. It is rich in protein and oil and has a large energy value. The groundnut is used as a food and cooking oil. At present there is lock of workers in the field of agriculture .Harevesting of groundnut is a major problem people go for other sources of oil extraction .those oils various effect on health of human being. To overcome issues, it is decided to design a groundnut harvesting machine will be sample in operation more economical one and can be handled easily in our agricultural fields .this project describes about the design &fabrication of a simple groundnut harvesting machine.

DESIGN DIAGRAM



INDRODUCTION

The purpose of this project is to design and fabricate mechanism of simple groundnut harvesting machine. The design is an environment friendly and simple harvesting, separating system etc. This project consists of designing and fabrication of an automatic groundnut harvesting machine considering various parameters This project involves the process of designing and fabrication of different parts of the harvesting machine considering various forces and economic factors of use. This project is mainly about generating a new concept of groundnut harvesting that would make it easier. After the design has completed, it was transformed to its real product where the design is used for guideline.

WORKING AND PRINCIPLE

The groundnut harvester working principle is that the digging shovel digs up the soil and crops through the impetus of the tractor. And the digging shovel makes the crop and soil to separate through vibration sieve. The soil first drops down from the clearance of vibration sieve, finally the crop crashed down on to the road from the back. Groundnut harvester machine is mainly used for harvesting the groundnuts. This groundnut harvester can finish digging and cleaning soil, during one operation, which is suitable for working in small piece of groundnut planting field to decrease labour and to improve the working efficiency at the same time. Groundnuts harvester machine is widely used to harvest groundnut. Groundnuts harvester is suitable for sandy soil, and hilly areas. Groundnut harvesting machine is easy to connect the rear of the tractor, easy to connect, reliable for power output. We adopt the design of bi- directional wheel and two-level vibrating wheel, so it can quickly separate the harvested plants from the non-harvesting plants, non- twine, high efficiency, and low breakage. We adopt the design of bi-directional roller for breaking soil and double-deck vibrating sieve, which can well effectively meet the clay soil and semi-sandy soil; it can well do the separation more cleanly. Bi- directional roller can break big block, it is facilitate the sub sequent processing.

CONCLUSION

From this project we can conclude that our method is more convenient to harvest the groundnut compared with the previous method the groundnut is plucked off and also are vested simultaneously by which time is reduced and it is more economical one it also reducing the labour requirements. (It may also be modified as paddy harvesting by changing the blades).There is no wastage of groundnuts and it may also prevents the labour rents for harvesting process done manually since it is lower cost it can be easily for small side agriculture field. When comparing with previous process it saves more economical values and the increasing of profit will be satisfactory.

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