



SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

COIMBATORE-35.



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A++' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

DEPARTMENT OF AUTOMOBILE ENGINEERING

COURSE NAME : 19AUE308 - SPECIAL VEHICLES

III YEAR /VI SEMESTER

Unit 3- Agricultural Vehicles

Topic : Sugarcane Harvester



CONTENT



- Introduction
- Need for Sugarcane Harvester
- Components
- Construction & Working
- Advantages & Disadvantages
- Applications
- Manufacturing Companies



INTRODUCTION



- A sugarcane harvester is a large piece of agricultural machinery used to harvest and partially process sugarcane.
- The machine, originally developed in the 1920s, remains similar in function and design to the combine harvester.
- Essentially a storage vessel on a truck with a mechanical extension, the machine cuts the stalks at the base, strips the leaves off, and then cuts the cane into segments.





NEED FOR SUGARCANE HARVESTER



- Sugarcane harvesting normally needs more man power.
- The increase of man power increases the operating cost.
- Manual process requires more time.
- In order to overcome this, the sugarcane harvester can be used.

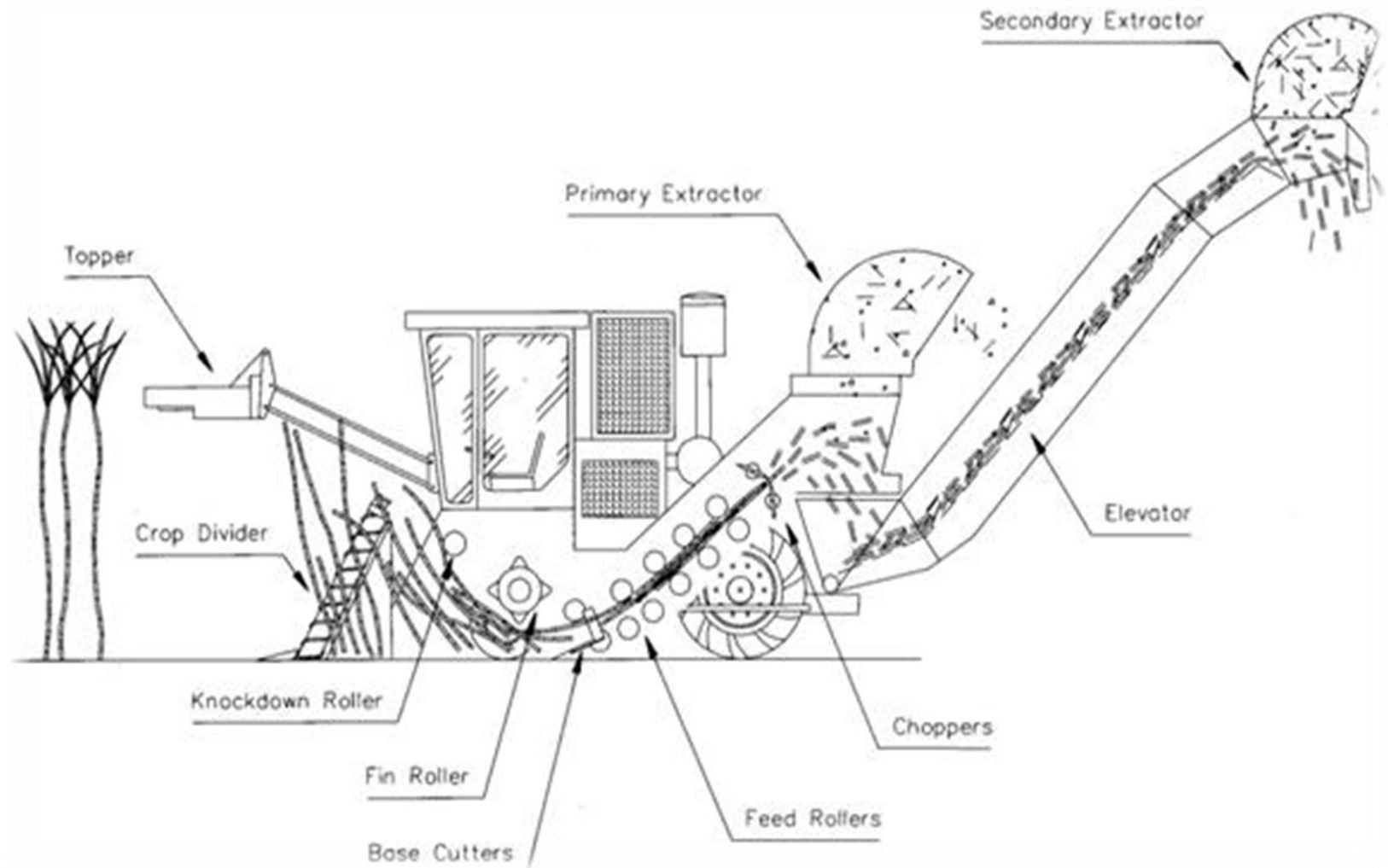




COMPONENTS



- Topper
- Crop divider
- Knockdown roller
- Fin roller
- Base cutter
- Feed rollers
- Chopper
- Primary extractor
- Secondary extractor





CONSTRUCTION



- The topper is used to cut down and discard non-productive tops.
- The crop divider is provided to remove sugarcane from the land.
- Certain roller assembly is placed to streamline the flow of canes.
- Chopper is used to cut down the canes into pieces





CONSTRUCTION

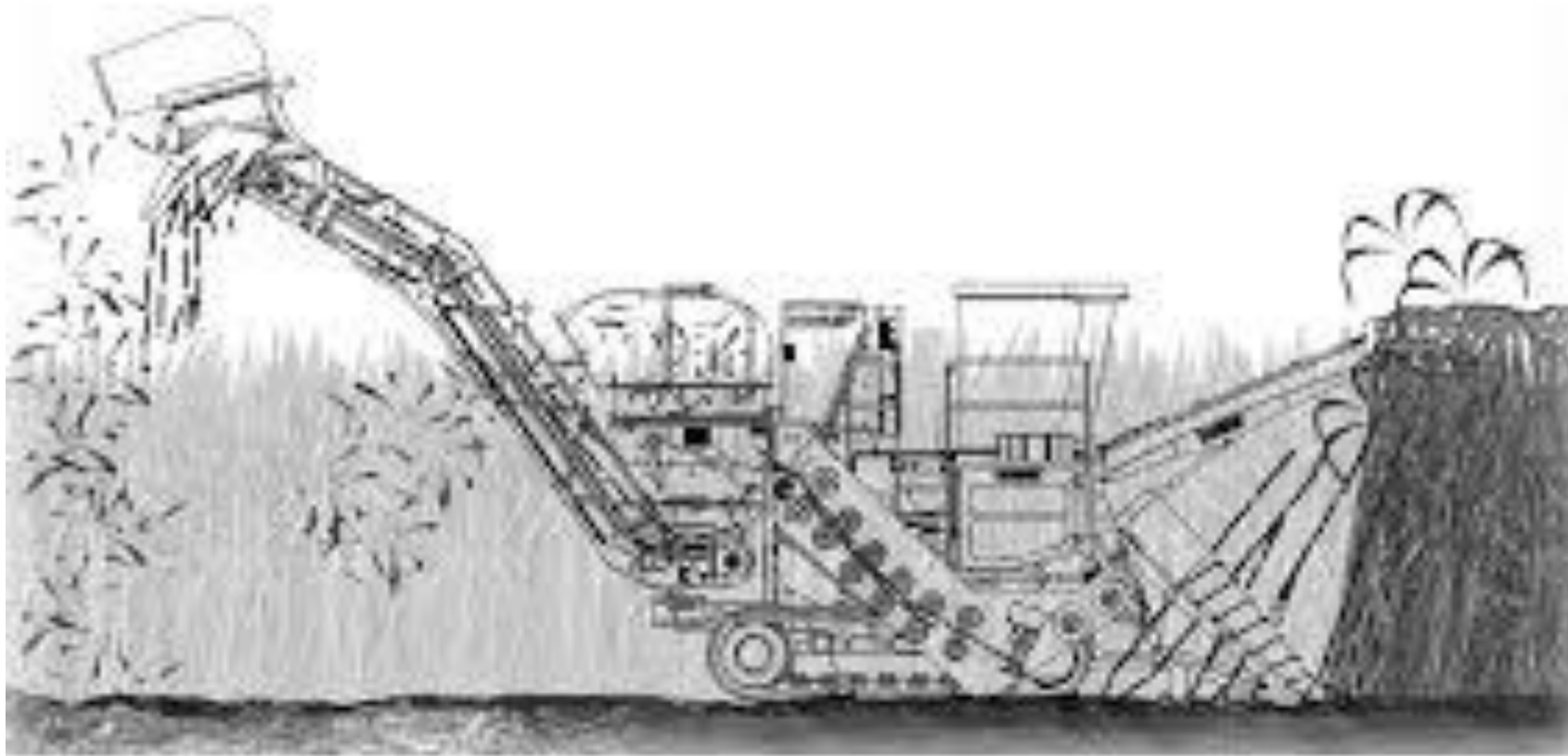


- The primary extractor is provided to send away the discarded non-productive tops.
- The secondary extractor is provided to send the cutted canes out.





WORKING PRINCIPLE





ADVANTAGES



- Easy to Harvest
- Reduces Harvesting Time
- Reduces man power





DISADVANTAGES



- Requires proper maintenance.
- Improper operating can lead to life loss.





APPLICATION



- For harvesting the sugarcane
- For removing the wastes from the sugarcane simultaneously during harvesting





MANUFACTURING COMPANIES



- Shakthiman
- John Deere
- Zoom Lion

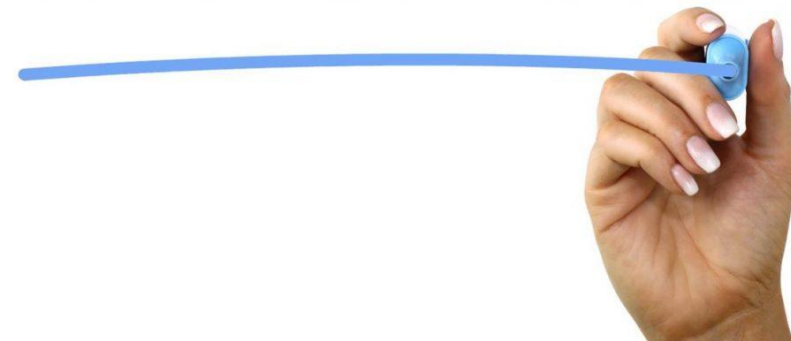


JOHN DEERE



1. Mention the components of Sugarcane Harvester.
2. Why Sugarcane Harvester is needed?
3. What is the cost of Sugarcane Harvester?

ASSESSMENT





REFERENCE



- ❖ https://en.wikipedia.org/wiki/Sugarcane_harvester
- ❖ <https://www.youtube.com/watch?v=FgYp7oPwqaY>



THANK YOU !!!