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# LAND DEVELOPMENT MACHINERY



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# Earth Moving Equipment

They are essentially equipment to move the soil from one place to another to modify the contour of field surface.

Earthmoving operations are necessary for:

- i) Terrace building
- ii) Filling of gullies or depressions
- iii) Land smoothing for irrigation or surface drainage
- iv) Construction of drainage ditches
- v) Building of earth dams
- vi) Building of embankments
- vii) Construction of ponds
- viii) Irrigation channels etc.



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# LAND DEVELOPMENT

**Machinery used for developing the land to make it suitable for cultivation**

**Machinery are:**

**Backhoe dozer**

**Backhoe loader**

**Tracer blade**

**Hydrodozer**

**Trencher**

**Hydraulic scraper**

**Land leveler**

**Laser lever**



# BACKHOE DOZEER



**Used for excavating soil, garbage handling, widening of rural roads and removal of bushes and trees etc.**

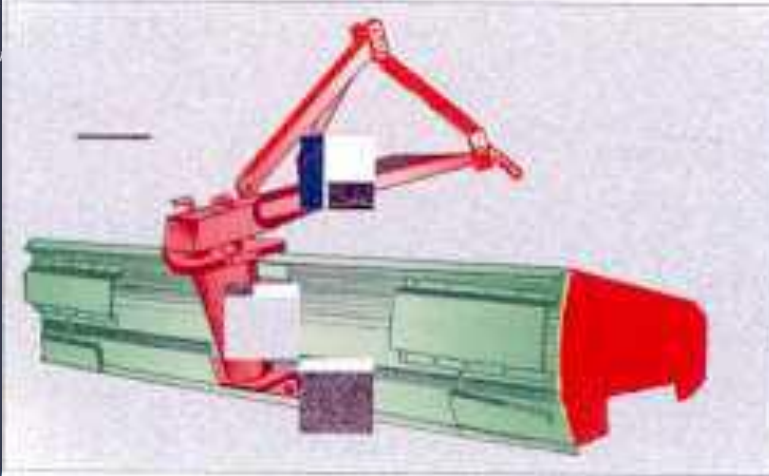
**Agricultural land levelling, making bunds & terracing of farm, and site clearance.**



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# TRACTOR MOUNTED TERRACER BLADE



**It is attached to the tractor with the 3-point linkage system and is hydraulically controlled.**

**It consists of replaceable blade attached to curved steel body, side wings and indexing arrangement for tilting and angling of the blade.**



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# HYDRODOZER



**This is a tractor front mounted dozer.**

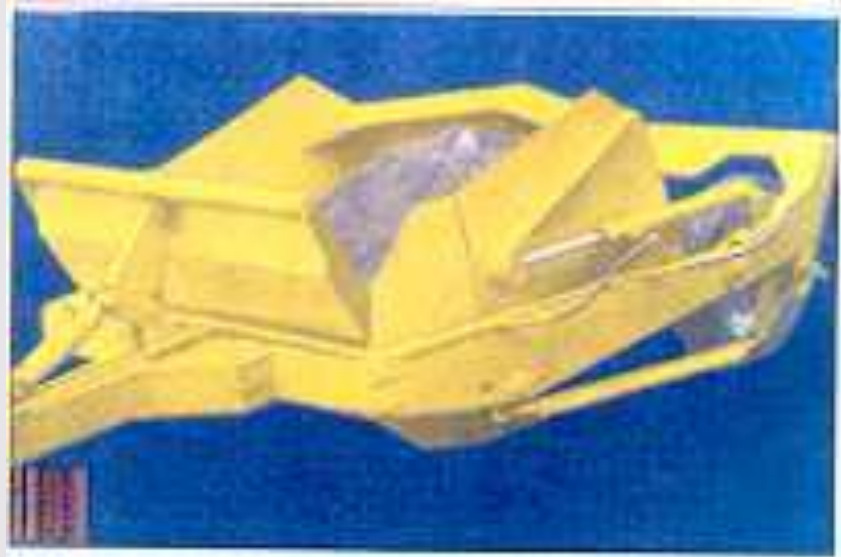
**Used for land shaping, field terracing, construction of roads, contour bunding etc.**



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# HYDRAULIC SCRAPER



**The hydraulic scraper is towed behind the tractor.**

**The scraper consists of cutting blade, hydraulic system, hitch point, hitch bar, apron, bowl, wheels, apron cylinder, side frame.**

**The scraper working is controlled by the hydraulic arrangement.**

**For unloading, the bucket is tilted hydraulically.**

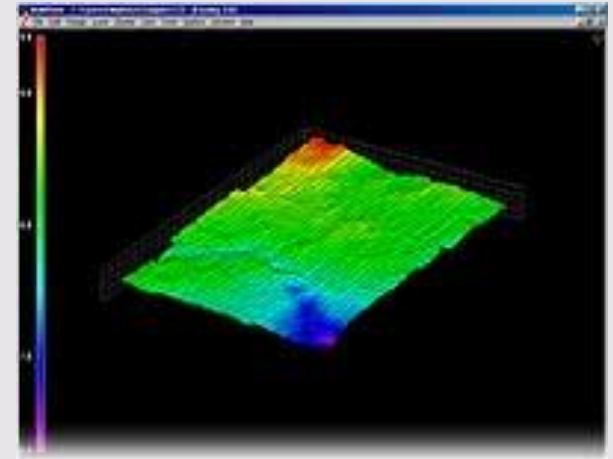
**It is used for collecting the soil from one place and unloading at the other. It is used for rough leveling, cutting of high spots and filling of depressions.**



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# Laser Guided Land Leveling







# TRADITIONAL METHOD OF LAND LEVELING

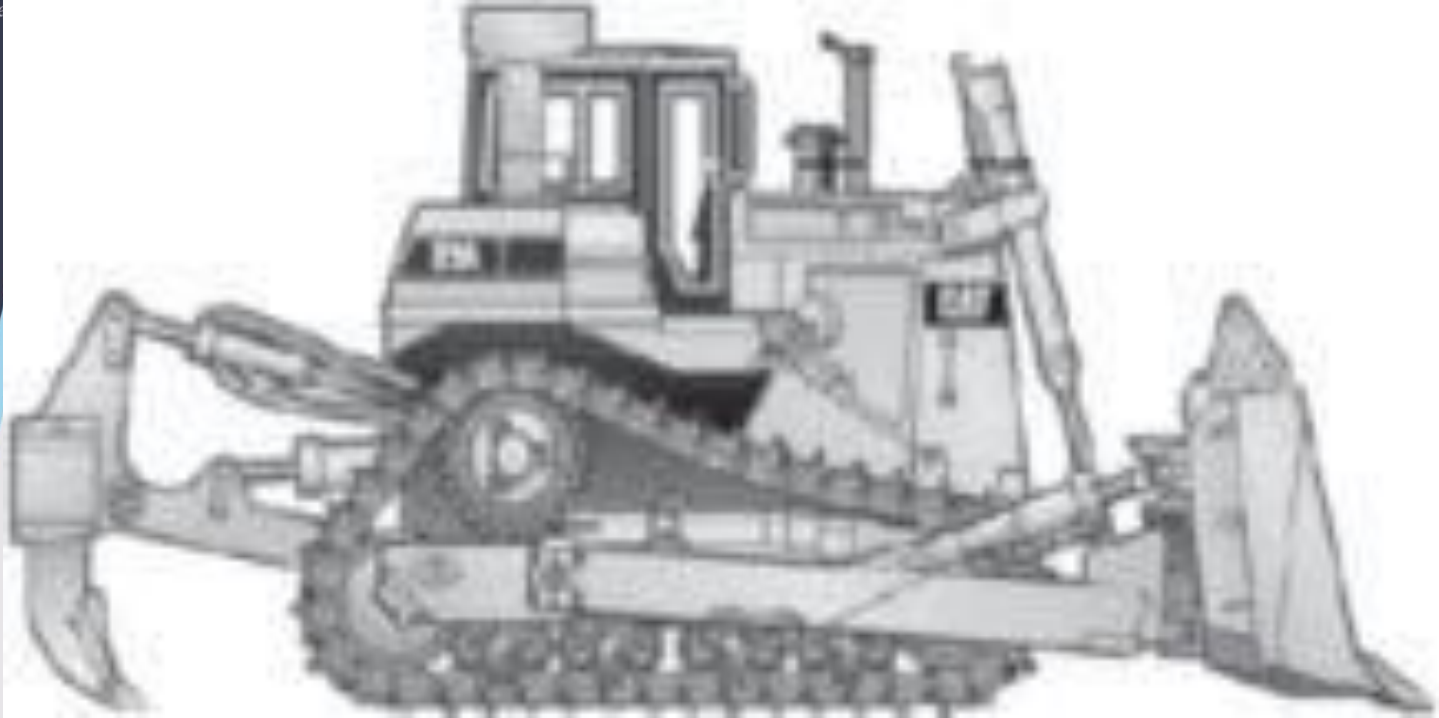




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# BULL DOZER



Bulldozers are highly effective in initial condition to level the highly undulated land