



Centurion
UNIVERSITY

Shaping Lives...
Empowering Communities...

COMBINE HARVESTER



Combine harvesting

Features

combines cutting, threshing, cleaning and hauling

tracks for mobility in wet fields

Advantages

high capacity

low total harvest losses

Disadvantages

Requires relatively large field sizes

Problem in terraced fields



Tractor operated combine harvester

Capacity: 1 acre/h

Cost: Rs 6 lakhs





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Combine harvesting

**Cutting, hauling,
threshing,
cleaning in one
combined
operation**

**Capacity: > 0.5
ha/h**

**Labor
requirement: 1
Operator**

Combine harvester (wheel type)

Capacity: 1 acre/h

Cost: Rs 12,00,000/-





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PARTS OF A COMBINE

HEADER UNIT

FEEDING UNIT

THRESHING & SEPERATION UNIT

CLEANING UNIT

Tractor operated
combine harvester

Capacity: 1 acre/h

Cost: Rs 6 lakhs





PARTS OF COMBINE HARVESTER

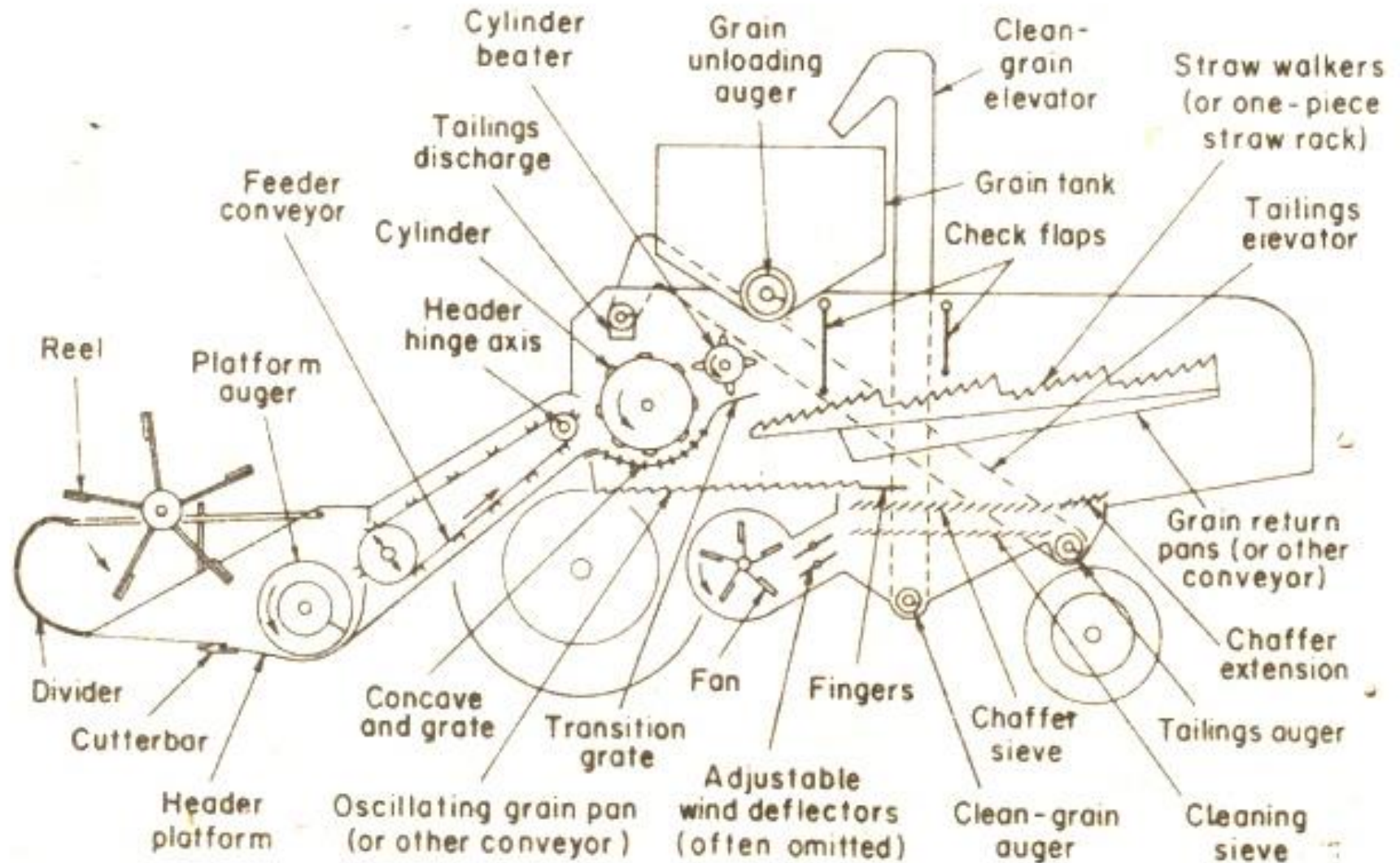
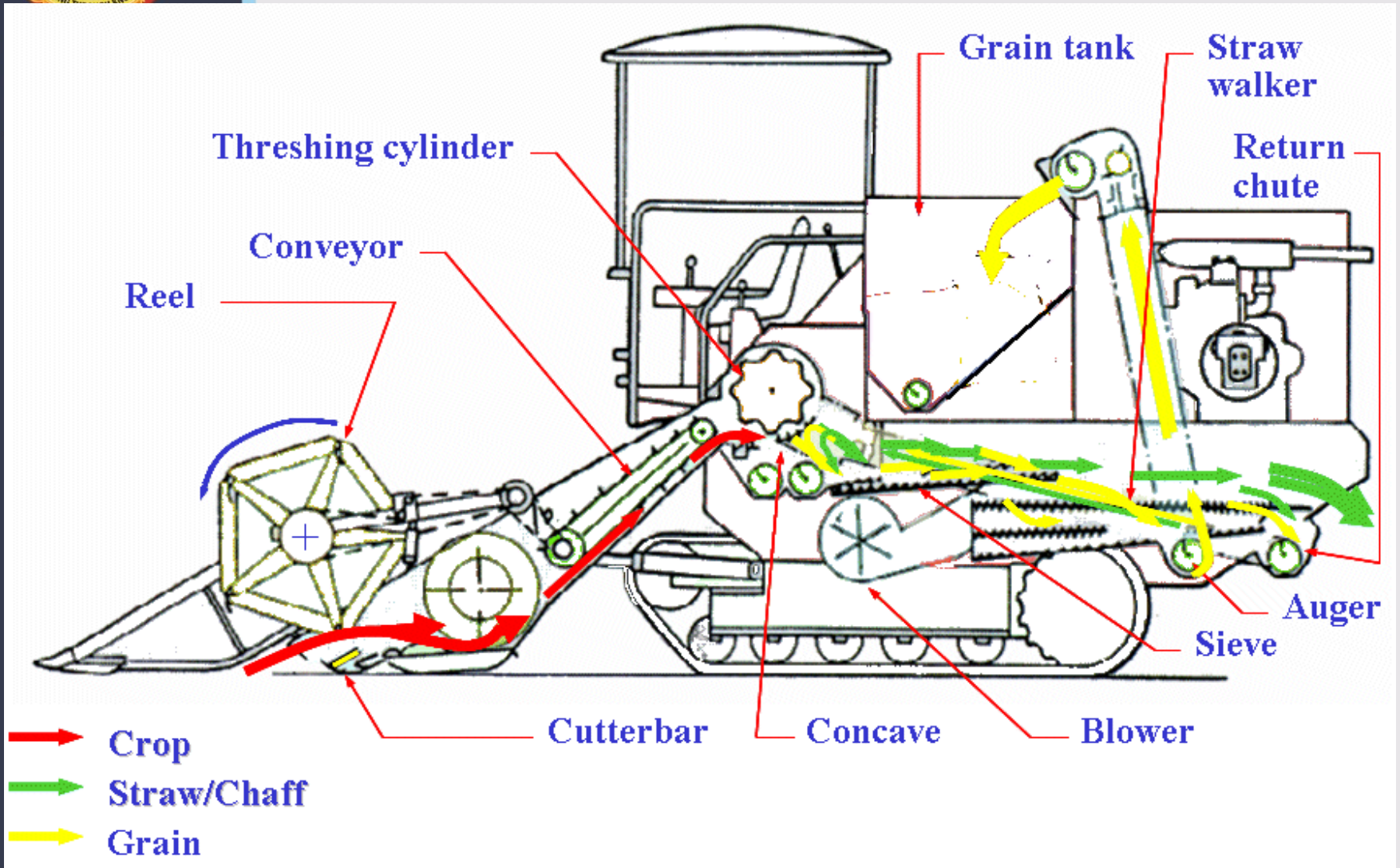


Fig. 17.1. Schematic arrangement of the basic functional components of a typical self-propelled combine.





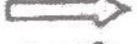



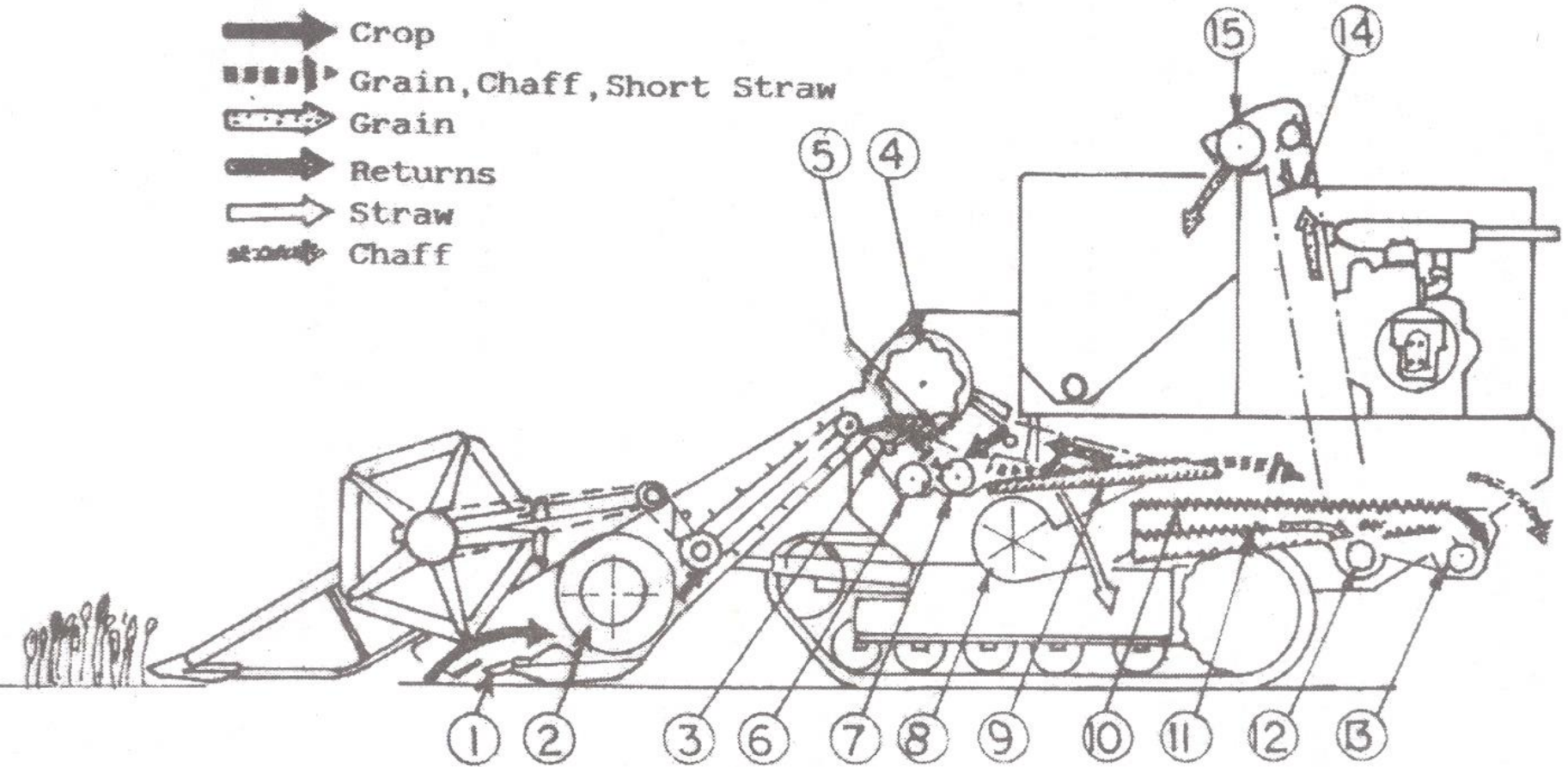
Combine harvester





CROP TIGER COMBINE

-  Crop
-  Grain, Chaff, Short Straw
-  Grain
-  Returns
-  Straw
-  Chaff



- | | | | |
|------------------------------|----------------------------|-----------------------------|------------------------------------|
| 1. Cutting knife | 2. Feeding auger | 3. Stone trap | 4. Threshing drum/separating rotor |
| 5. Concave & separating cage | 6. Front conveying auger | 7. Rear conveying auger | 8. Blower |
| 9. Preparation floor | 10. Upper frog-mouth sieve | 11. Lower frog-mouth sieve | 12. Clean grain auger |
| 13. Return auger | 14. Clean grain elevator | 15. Grain tank filler auger | |



COMBINE HARVESTER

