# Combine Harvesters and Fleet Management

## Efficient Harvesting

The combine harvester is a modern agricultural machinery designed to perform multiple harvesting operations as threshing, gathering, and winnowing, all in a single process. Available in various sizes, its suitable for crops like wheat, maize, rice, soybean, barley, sunflower, and more.

*Combine harvester operating in Sudan*

ICARDA
Science for resilient livelihoods in dry areas

**International Center for Agricultural Research in the Dry Areas (ICARDA)**
Zewdie Bishaw

This technology is TAAT1 validated.

8•8 Scaling readiness: idea maturity 8/9; level of use 8/9

Gender assessment 4

Climate impact 6 1

## Problem

- Traditional manual harvesting is time-consuming and demands significant labor.
- Conventional threshing methods are slow and risk potential grain loss.
- Manual separation of grain from chaff is inefficient, leading to impurities.
- Older methods may have limited capacity, resulting in slower operations.

## Solution

- Combine harvesters automates the harvesting process, reducing the need for manual labor.
- Its offers threshing mechanisms, minimizing grain loss during harvesting.
- Its incorporate separation technologies, ensuring effective grain separation and reducing impurities.
- Help to increases harvesting capacity.

## Key points to design your project

The Combine harvesters and fleet management technology cater to the interests of resellers, fleet managers, and users (farmers).

- They all benefit by addressing farmers' needs to reduce crop losses,
- contributing to global nutrition and empowering diverse farming communities.
- Costs vary based on technology size, ranging from 12,000 USD for small units to 500,000 USD for large units. The Hello Tracteur app optimizes fleet management.

Cost: $$$ **12,000—500,000**
**USD**
Unit of combine harvesters

**35 %**
Reduced harvest losses

**56—63 USD**
harvesting unit cost per Ha

**IP**
Open source / open access

Technology originally documented by

ProPAS

Commodities

Maize, Rice, Wheat, Soybean

Sustainable Development Goals

2 ZERO HUNGER
8 DECENT WORK AND ECONOMIC GROWTH

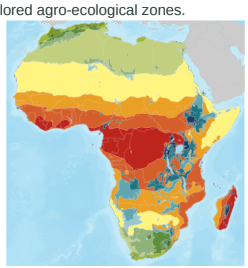
Categories

Harvest, Equipment, Mechanized farming

Tested/adopted in


Where it can be used

This technology can be used in the colored agro-ecological zones.



Target groups

Farmers