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

Combine harvesters and fleet management offer transformative solutions to challenges in traditional grain harvesting by minimizing yield losses. Integrating this technology involves:

- Evaluating unit sizes and costs, considering sources.
- Training, communication support, and
- Collaboration with agricultural institutes.

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

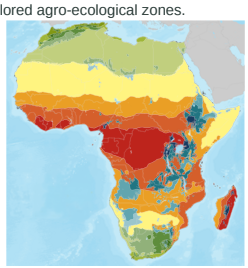
Categories

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