



Food and Agriculture Organization
of the United Nations

Conservation Agriculture:

Definition by FAO: <http://www.fao.org/ag/ca/1a.html>

Conservation Agriculture (CA) is an approach to managing agro-ecosystems for improved and sustained productivity, increased profits and food security while preserving and enhancing the resource base and the environment. CA is characterized by three linked principles, namely:

1. **Continuous minimum mechanical soil disturbance.**
2. **Permanent organic soil cover.**
3. **Diversification of crop species grown in sequences and/or associations.**

CA principles are universally applicable to all agricultural landscapes and land uses with locally adapted practices. CA enhances biodiversity and natural biological processes above and below the ground surface. Soil interventions such as mechanical soil disturbance are reduced to an absolute minimum or avoided, and external inputs such as agrochemicals and plant nutrients of mineral or organic origin are applied optimally and in ways and quantities that do not interfere with, or disrupt, the biological processes.

CA facilitates good agronomy, such as timely operations, and improves overall land husbandry for rainfed and irrigated production. Complemented by other known good practices, including the use of quality seeds, and integrated pest, nutrient, weed and water management, etc., CA is a base for sustainable agricultural production intensification. It opens increased options for integration of production sectors, such as crop-livestock integration and the integration of trees and pastures into agricultural landscapes.

quantifying parameters: <http://www.fao.org/ag/ca/6c.html>

1. **Minimum Soil Disturbance:** Minimum soil disturbance refers to low disturbance no-tillage and direct seeding. The disturbed area must be less than 15 cm wide or less than 25% of the cropped area (whichever is lower). There should be no periodic tillage that disturbs a greater area than the aforementioned limits. Strip tillage is allowed if the disturbed area is less than the set limits.
2. **Organic soil cover:** Three categories are distinguished: 30-60%, >60-90% and >90% ground cover, measured immediately after the direct seeding operation. Area with less than 30% cover is not considered as CA.
3. **Crop rotation/association:** Rotation/association should involve at least 3 different crops. However, repetitive wheat, maize, or rice cropping is not an exclusion factor for the purpose of this data collection, but rotation/association is recorded where practiced.