

Alert No. 70 (2 December 2021)

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3. Mechanical and biological chiseling impacts on soil organic C stocks, root growth and crop yield in a long-term no-till systems. By Thiago Massao Inagaki et al. Soil & Tillage Research 211. 2021.
4. A systematic global stock take of evidence on human adaptation to climate change. By Lea Berrang-Ford et al. Nature Climate Change Analysis. 2021.
5. Potato and soil conservation. International Year of the Potato 2008. FAO.
6. Climate, Land, Agriculture and Biodiversity (CLAB-Africa): An African initiative to support climate and biodiversity global negotiations. By Cheikh Mbow et al. University of Pretoria and Future Africa. 2021.
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10. [The Global Action for Sustainable Dryland Agriculture Action Framework \(2020 – 2022\) Improving livelihoods in drylands. FAO. 2021.](#)
11. [Conservation Agriculture systems alter the electrical characteristics \(Eh, pH and EC\) of four soil types in France. By Olivier Husson et al. Soil & Tillage Research 176:57-68. 2018.](#)
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14. [Integrated farming with intercropping increases food production while reducing environmental footprint. By Qiang Chai et al. PNAS 2021 Vol. 118 No. 38. 2021.](#)
15. [C-offset and crop energy efficiency increase due industrial poultry waste use in long-term no-till soil minimizing environmental pollution. By Jucimare Romaniw et al. Environmental Pollution. 2021.](#)
16. [Scaling readiness of the Conservation Agriculture system in Moldova. By Murat Sartas et al. IFAD, CGIAR, ICARDA, MEL. 2021.](#)
17. [Toward greater sustainability: how investing in soil health may enhance maize productivity in Southern Africa. By Christian Thierfelder et al. Renewable Agriculture and Food Systems 1-12. 2021.](#)
18. [Tillage System and Crop Sequence Affect Soil Disease Suppressiveness and Carbon Status in Boreal Climate. By Ansa Palojarvi et al. Frontiers of Microbiology 11, 2021.](#)

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URL: <http://www.fao.org/conservation-agriculture>

URL: <http://www.act-africa.org/>

URL: <https://ecaf.org/>

URL: <http://www.caa-ap.org/>

Conservation Agriculture (CA) is an ecological approach to regenerative sustainable agriculture and ecosystem management based on the practical application of context-specific and locally adapted three interlinked principles of: (i) Continuous no or minimum mechanical soil disturbance (no-till seeding/planting and weeding, and minimum soil disturbance with all other farm operations including harvesting); (ii) permanent maintenance of soil mulch cover (crop biomass, stubble and cover crops); and (iii) diversification of cropping system (economically, environmentally and socially adapted rotations and/or sequences and/or associations involving annuals and/or perennials, including legumes and cover crops). These practices are complemented with other complementary good agricultural production and land management practices to generate and sustain optimum performance.

CA systems are present in all continents, involving rainfed and irrigated systems including annual cropland systems, perennial systems, orchards and plantation systems, agroforestry systems, crop-livestock systems, pasture and rangeland systems, organic production systems and rice-based systems. CA systems operate regeneratively at multiple levels to optimally harness a range of productivity, economic, environmental, and social benefits as well as address local and global concerns related to food and water security, climate change, land degradation, biodiversity and smallholder agricultural development.

Conservation Tillage, Reduced Tillage, Low tillage and Minimum Tillage are not CA, and nor is No-Till on its own. For a practice or a method to be referred to as a CA practice or method, it must be part of a CA system. If not, then it is what it is, a practice or a method similar to any other with its own name e.g., no-till seeding, or mulching, or crop diversification, etc (more at: <http://www.fao.org/conservation-agriculture>).



The 2015/16 CA area information available from: [Global spread of Conservation Agriculture. By A. Kassam et al. International Journal of Environmental Studies. Published Online \(2018\).](#)

The 2018/19 CA area information is available at: [CA Stat — CA Global \(ca-global.net\)](#)

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