

## Regenerative Agriculture: A Green Economy Tool for a Sustainable Crop Production

**Authors :** Meisam Zargar, Yurii Pleskachov, Mostafa Abdelkader, Aldaibe Ahmed, Maryam Bayat, Malek H. Walli, Shimendi Okbagabir

**Abstract :** The increased need of humankind for foodstuffs highlights the intensification of agricultural production. It is necessary either to increase the size of the sown area or to look for new approaches to improve agricultural land productivity. Developing new areas for cultivation is possible due to the intensification of soil cultivation. Nevertheless, this will decrease the effectiveness of de-carbonization programs since this approach will inevitably increase greenhouse gas emissions. Therefore, searching for new solutions to conserve natural resources while obtaining stable predicted crop yields is a vital scientific and technical task. For a long time, destructive land use methods have been used in crop production. The present stage of civilization's development and implementation of new techniques and methods of tillage and crops require the solution of technological, economic, and environmental problems simultaneously with the possibility of creating conditions for the regeneration of soil resources. Implementing these approaches became possible due to the development of new technology for the cultivation of crops based on the exact selective impact on the object of processing. This technology of particular effects of TIV combines the positive accumulated experience of traditional farming systems and resource-saving approaches. Particularly high-quality indicators and cost savings with introducing TIV can be achieved when used on row crops, including vegetables and melons.

**Keywords :** agricultural machinery, vegetable, irrigation, strip system

**Conference Title :** ICAACS 2024 : International Conference on Agriculture, Agronomy and Crop Sciences

**Conference Location :** Tbilisi, Georgia

**Conference Dates :** October 03-04, 2024