



## Strategies for the Promotion of Conservation Agriculture in Central Asia

International Conference  
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Tashkent, Uzbekistan

**Justification:** Four decades of Conservation Agriculture (CA) research and development activities in many regions across the world have enabled CA systems to be established in different countries and cropping systems, based on the joint effort of national and international organizations. Currently (2015/16), farmers globally practice CA on some 180 M ha of cropland corresponding to about 12.5% of global cropland). Initially CA was promoted by farmers in the USA and Brazil, but since 1990, countries such as Canada, Argentina, Uruguay, Paraguay and Australia have adopted CA over a wide area. Successful CA experiences can be found also in many other countries in all continents including Europe, Russia, Africa and Asia, including in Central Asia and Caucasus, West Asia, South Asia, South-East Asia and East Asia. Despite being implemented in diverse agro-climatic areas worldwide, the current level of practice of CA in Central Asia countries is relatively limited and needs to be promoted for a broader adoption in the region.

Agriculture is considered to be a strategic sector of the national economy in numerous countries across the world. It continues to contribute to food security and provides significant value to economic growth and rural development. However, the prevailing production trends, such as mono-cropping resulting from the dominance of a small number of crops, and tillage-based soil management with no biomass mulch cover have affected soil structure and biodiversity, caused land and environmental degradations and reduced yields and factor productivity that have serious long-term social and economic implications for sustainability. These practices in the tillage-based conventional production systems have all contributed, at all levels of development, to soil degradation and loss of agricultural land, decrease in attainable yields and input factor productivity, and excessive use of seeds, agrochemicals, water and energy, increase in cost of production, and poor resilience. They have also led to dysfunctional ecosystems, degraded ecosystem and societal services, including water quality and quantity, nutrient and carbon cycles, suboptimal water, nutrient and carbon provisioning and regulatory water services, and loss of soil and landscape biodiversity. They all constitute the unacceptable food, agricultural and environmental costs being passed on to the public and to the future generations.

In this regard, CA paradigm (comprising the practical application of three interlinked principles described below) is able to raise productivity sustainably and efficiently, reduce costly inputs, regenerate degraded land, minimize soil erosion, and harness the flow of ecosystem services. CA is an ecosystems approach to farming capable of enhancing not only the economic and environmental performance of crop production and land management, but also promotes a mind-set change for producing 'more from less', the key attitude towards sustainable production intensification.



CA is a key production and land management strategy for achieving real sustainable agriculture, if the following three core linked principles of CA are applied concomitantly, along with complementary good agricultural practices of crop and production management:

- Minimizing or avoiding mechanical soil disturbance continuously, and thus seeding directly into untilled soil, and keeping soil disturbance from all cultural operations, including weeding and harvesting, to the minimum possible.
- Maintaining a permanent biomass cover over the soil, including from crop biomass, stubbles and specially introduced cover crops and intercrops.
- Managing an economically and ecologically adapted diversified cropping through crop rotations, sequences and associations, involving annuals and perennials, including legumes.

The implementation of these complementary CA principles through locally devised and tested practices does not only reduce the risk of erosion, soil organic matter loss, compaction, inappropriate use of water, but also ensures better soil management, climate change mitigation through agricultural practices, conservation of biodiversity, safety of plant protection products application and help avoid the build-up of pest populations.

With the objective of promoting the sustainable crop production intensification, these CA principles need to be strengthened by additional best management practices, particularly: (i) use of well-adapted good quality seeds; (ii) enhanced crop nutrition, based on healthy soils; (iii) integrated management of pests, diseases and weeds; (iv) efficient water management and (v) efficient farm power, energy and labour management.

Consequently, a systematic approach to accelerating the adoption and promotion of CA system is crucial to create a basis for sustainable intensification of agricultural production at the national, sub-regional and regional level. To achieve this, relevant stakeholders ranging from regional CA experts to practising CA farmers have to review international attempts, attainments, challenges, and lessons learned in a participatory manner for transforming the prevailing agricultural practices based on shared experiences, dialogue and action at the national level.

The Sub-regional Office of FAO for Central Asia (FAO-SEC) in cooperation with CIMMYT, ICARDA and the national counterparts in 2012 conducted the study on the status of CA in Central Asia to develop policy recommendations for promotion of CA. Based on the outputs of the study, the Strategic Framework for 2013-2030 for promotion of CA was elaborated to achieve sustainable increases in agricultural production. The purpose of the strategic framework was to serve as a road map to the formulation of country-specific strategies and action plans for the promotion and up-scaling of CA. Subsequently, projects on CA dissemination have been implemented in Azerbaijan, Kyrgyzstan, Tajikistan, Turkey and Uzbekistan and support has been provided to the formulation of the national strategies on adoption and promotion of CA in the farmers' fields. The outputs of these projects were

presented in the 6<sup>th</sup> and 7<sup>th</sup> World Congresses on CA held in Winnipeg (Canada, 2014) and Rosario (Argentina, 2017), respectively.

In 2017, the International Consultation Workshop on Strategies for the Promotion and Uptake of Conservation Agriculture Systems in the Central and West Asia and North Africa Region was conducted in Konya, Turkey. The workshop allowed the updating of the status of CA in the region, analysis of the constraints and opportunities for CA adoption, and the review of the draft National Strategy for promotion of CA in Turkey.

Building on the above described experiences and lessons learned, FAO-SEC in cooperation with the Ministry of Agriculture of the Republic of Uzbekistan, in the framework of the *TCP/UZB/3601: Demonstration of diversification and sustainable crop production intensification* is organizing an International Conference on **Strategies for Promotion of Conservation Agriculture in Central Asia**.

**Objective:** The main objective of the Conference is to review the status of CA in the countries in the region, analyse and identify the opportunities for and constraints to adoption of CA, including the diversification of cropping systems and improved crop management techniques in Central Asia, and the opportunities and strategies for upscaling the adoption of CA at the regional level.

The Conference will also allow an exchange of local experiences with international experts, presentation and discussion of the draft national strategy to accelerate the promotion of CA in Uzbekistan and across the regions, taking into account biophysical, economic, social, policy and institutional factors as well as public, private and civil society partnerships.

**Output:** The expected outputs of the Conference are the followings:

- The status of CA in Central Asia and across the region will be updated and key obstacles for further promotion of CA will be identified;
- A network of CA researchers, farmers and practitioners for further cooperation will be strengthened;
- The report on the status of CA in Uzbekistan and the draft National Strategy will be finalized based on the feedback and updated information received from colleagues representing countries in the region with similar climatic conditions, farming practices and cropping systems;
- Experiences of farmers in Uzbekistan on diversification of cropping systems and adoption of CA will be shared with the Conference participants.

Following **topics** are expected to be presented and discussed:

- Conservation Agriculture: A Sustainable Agricultural Paradigm;
- Rehabilitating degraded soils with Conservation Agriculture;
- Conservation Agriculture and water management;
- Machinery adapted to Conservation Agriculture;



- Socio-economic and policy aspects of Conservation Agriculture;
- Conservation Agriculture and Climate Change mitigation.

**Consultation Program:** The Conference participants will present and discuss the information on the status of CA in their home countries in a two-day session. On the second day, a panel discussion will be organized to present and discuss the report on the status of CA in Uzbekistan and the draft National Strategy. On the third day, a field visit will be organized to irrigated CA farmer fields.

### Registration

All participants are kindly requested to register by entering <https://goo.gl/forms/MrLoUOkA7QjbfHR2> (registration in Russian - <https://goo.gl/forms/cqgTPGAtSqZhz3tN2>) to attend at the Conference.

### Abstract submission

Participants willing to make oral or poster presentations on any of the above-mentioned topic are expected to send abstracts prepared according to the guidelines given below. **The deadline for abstract submission is 30 July, 2018.** Abstracts submitted by this date will be considered for evaluation. Authors will be notified of provisional acceptance of abstracts by **15 August, 2018** and for the form of presentation as oral or poster presentation.

- All abstracts must be sent to the e-mail [ca.conference2018@gmail.com](mailto:ca.conference2018@gmail.com) with a copy to [fao-uz@fao.org](mailto:fao-uz@fao.org).
- The official languages are English and Russian so only abstracts written in English or Russian will be accepted for review.
- Abstracts should not exceed 300 words, be written in Times New Roman 12 font and single space.
- The title should be in capital and in bold; followed by 1.5 spacing.
- Authors should be written with their affiliation numbered as superscript. The presenting author should be underlined.
- Five key words should be written in alphabetic order as italic.
- Abstracts should be based on original work. Should give full information on the objective and topic in case of review and on objective, materials and methods and major results obtained in case of research work.
- Abstracts must NOT contain tables, pictures or diagrams.
- All abbreviations must be spelled out on first use.
- Abstracts should be thoroughly checked for spelling and grammar.

### Presentation Type

During submission, please specify if you wish to make an oral or poster presentation. Please note that in case of high number of oral presentation submissions received or based upon the topic and content of the abstract, the Scientific Committee reserves the right to offer poster presentations for some of the abstracts.



### Manuscripts

- All presenters (oral and poster) are expected to submit a manuscript for publication **by 25 August 2018**.
- The manuscripts of the presented abstracts should be prepared according to the guidelines sent with the acceptance notice of the abstract. The guidelines will be posted on the website.
- The total number of pages should not exceed 8 pages written in Times New Roman 12 font.

### Language

The working languages of the workshop will be Russian and English with a simultaneous interpretation.

On behalf of the organizers, we are very happy to invite you to the International Conference to share your experience and be a part of the network. If you have any further questions concerning the Conference, please contact with the following addresses:

**Organizing Committee**  
[ca.conference2018@gmail.com](mailto:ca.conference2018@gmail.com)

**FAO Representative in Uzbekistan**  
[fao-uz@fao.org](mailto:fao-uz@fao.org)  
Tel: +99871 1501885