Towards supportive national agriculture policy and legislation

Policy implications of collaborative agricultural research in CAC region - Partnership of CGIAR and NARS
Access to Water and Water Use Efficiency (IWMI)
Establishment of Water Users Associations (WUA)

IWMI with its regional and national partners:

- Contributed to WUAs creation & sustainable operations;

As a result of effective partnership:

- Re-registration of WUAs as NGO via Ministry of Justices in Uzbekistan
- Improvement of WUA Governance, representation by zones or water user groups based upon hydrographic boundaries in Kyrgyzstan
National Water Use Policy and IWRM Principles

Introduction of IWRM principles in national water resources management policy:

• Revised Law on Water and Water Use (2009) in Uzbekistan
• Irrigation Management Transfer Reform process (2013) in Tajikistan
National Water Use Policy and IWRM Principles

- **Uzbekistan**: Law of Water and Water Use (2009)
Regional Cooperation in Germplasm Enhancement
Kazakhstan-Siberia Network on Wheat Improvement (KASIB) and Shuttle Breeding “Mexico-KASIB” Program:

- 19 Breeding programs of Kazakhstan and Russia are united by KASIB Network and Shuttle Breeding
- By 2014:
  - more than 10,000 wheat lines and varieties involved in breeding programs of Kazakhstan and Russia;
  - 10 varieties developed and released, 4 of them in 2012/2013 crop season

The KASIB Network and Shuttle Breeding Program recognized as one of the best example of the effective regional and international cooperation in Kazakhstan and Russia
Cultivation of yellow rust resistant winter wheat varieties in CAC countries

- Cultivation of yellow rust susceptible winter wheat varieties has caused frequent disease epidemics in the CAC in recent years
- International collaboration resulted in adoption of accelerated testing, release, and seed multiplication of resistant varieties in the past five years
- Area under resistant varieties has been continuously increasing in the past three years

Examples:
  - **Tajikistan**: Ormon, Alex, Chumon
  - **Uzbekistan**: Yaksart, Hazrati Bashir, Gozgon, Bunyodkor, Farovon, Barhayot
Conservation Agriculture (CA) - the way to improve soil moisture and fertility in the field
Wheat Production in Kazakhstan

• In the beginning of 2000s large-scale Conservation Agriculture activities was initiated by CIMMYT in the North Kazakhstan.

• Due to these efforts, the area under CA-based practices has been increasing
  From 0 ha in 2001
  To 2,000,000 ha in 2012

• Government of Kazakhstan has been subsidizing farmers who are adopting CA-based technologies (Government Decree #221 of 4 March 2011 and MoA Decree #938 of 22 August 2011 – US$6/ha)

• Application of CA-based technologies has become an official state policy in agriculture in Kazakhstan (7-th place in world).
Access to Seed – Quality Seeds is a Basis of High and Stable Productivity
National Seed Policy

- National Seed Policy for Uzbekistan was prepared in 2008 by ICARDA in close collaboration with FAO and national partners in Uzbekistan
- National Seed Policy is aimed to facilitate the achievement of the following objectives:
  - Timely and effective distribution of adequate quantities of high-quality seeds of high-yielding varieties of crops at market prices to farmers;
  - Supporting development of national seed production industry infrastructure and services
  - Creation of favorable conditions for private investments in seed production industry;
  - Supporting private sector in seed production meeting requirements of agriculture development
Agrobiodiversity – is a Core to Cope with Future Challenges in Agriculture
CIS Model Law
on Conservation of Crop Genetic Resources and Their Sustainable Use (2009)

Adopted at the 33-th Plenary Session of Inter - Parliament Assembly of countries-members of CIS (Decree №33-8 of 3 December 2009)

• Calls to facilitate establishment of unified approach to collection, conservation, study and sustainable use of plant resources of crops.

• Adopted in order to development of legislation in this area for ensuring food, ecology and bio-resource security of country, neighboring countries in the region and world in the whole and for hungry and poverty alleviation and improvement of livelihood of people, living in these areas.
In situ Conservation

- List of High Value Tree and Shrub Species to Forest Code – Kyrgyzstan
- 609,900 ha of Protected Areas in Kyrgyzstan
- 100,000 ha of State National Park (Tarbagatai) – in Kazakhstan
On Farm Conservation

- National Registers on Local Fruit Trees Maintained *In Situ*/*On Farm* in countries of Central Asia
- Government Program on Subsidies for orchards and tree nurseries (40% of expenses) – *Kazakhstan* (since 2009)
- National Law on Conservation and Sustainable Use of Crop Genetic Resources – *Tajikistan*
On Farm Conservation

- Government Program on Development of Fruits Production and Viticulture in Uzbekistan - 44,000 ha of new orchards and 30,000 ha of vineyards (2008-2013)
- 250,000 ha of orchards and 127,000 ha of vineyards in Uzbekistan (2013)
- Decree of the President on “Measures for Further Development of Viticulture for 2013-2015 in the Republic of Uzbekistan” of 13 March 2013 – 23,000 ha of new vineyards
- Loan of $23.3 mln to farmers will be provided by Government of Uzbekistan for restoration of old orchards and vineyards as well as for establishment of new orchards.
Ex Situ Conservation

- International Treaty on PGRFA – Kyrgyzstan and Armenia are members (accession)
- Regional Strategy for Conservation, Replenishment and Use of Plant Genetic Resources for Food and Agriculture in Central Asia and the Caucasus for the period until 2015 (2008)
Access and Benefit Sharing

Model Agreements:

- Material Transfer Agreement (MTA):
  - Non-commercial use
  - Commercial use
- Prior Informed Consent (PIC) to protect Traditional Knowledge
- Agreement on Information Access and Exchange
Recommendations
Increasing Water Use Efficiency

- Creating policy environment for conjunctive management of surface and ground water
- Revitalization of irrigation systems based on increasing water and energy productivity

- Farmers driven approach to deal with water scarcity and soil salinity should be supported
Recommendations

National and Regional Seed Production Policy

• Facilitate regional exchange of germplasm and associated information/data through enhanced national policies

• National Seed Body to be established to oversee seed industry development and should have representation from all stakeholders including research and private sector

• National seed industry associations should be constituted covering all companies, enterprises, etc involved in seed production and marketing in CAC

• Regional seed association to be established to support regional harmonization

• Create profitable environment for the private seed production sector

• Membership of OECD, ISTA and ISF should be encouraged and technical support provided
Recommendations
Conservation Agriculture (CA)

- Governments in CAC countries to support application of CA practices by farmers to enhance agriculture production

- Governments in CAC countries to support production of CA equipment by local machinery industry.

- Alternative strategies for policy makers that can be adopted according to the prevailing conditions in the region should be discussed with all stakeholders including farmers in the region

- A regional network on Conservation Agriculture should be established
Recommendations

Plant Genetic Resources Conservation and Use

- Strengthen national, regional and international cooperation in area of PGR study, conservation and use (PGR Board)
- Support from national governments and international agencies to operation of Central Asian and Trans-Caucasian Network on Plant Genetic Resources (CATCN-PGR)
- Implementation of Regional Strategy for Conservation, Replenishment and Use of Plant Genetic Resources for Food and Agriculture in Central Asia and the Caucasus of 2008
- Joint programmes on mainstreaming neglected and underutilized species (NUS) in production systems to cope with future challenges (soil salinity, water scarcity, drought, frost, pest and diseases)
- Broaden involvement of women in conservation and utilization of plant genetic resources
- Involvement of private sector in PGR activities at national, regional and global levels
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