

FAO - ICARDA collaboration for Sustainable crop production in the Near-East region



31th Near East Regional Conference, 2012

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Collaboration in dryland areas – CWANA



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FAO's Plant Production and Protection Division (AGP)

→ Promotes Sustainable Crop Production Intensification

→ Areas of intervention:

- Seeds and Plant Genetic Resources
- Conservation Agriculture and Ecosystem Services
- Farming system and Crop Production
- Pests prevention and Pesticide Management
- Horticulture and Industrial Crops
- Plant Production for Climate Change



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AGP – ICARDA sectoral collaboration

KEY AREAS OF PARTNERSHIPS

TYPE OF COLLABORATION

- Conservation Agriculture
- Rangelands/grasslands systems
- Plant Genetic Resources (PGR)
- Seed sector development
- Wheat rust management
- Biotechnology capacities
- Regional Networks

- Technical consultations
- Trainings and capacity building
- Networks and partnerships
- Joint missions

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Collaboration in Conservation Agriculture

- **Promotion of CA** in Morocco and Jordan, facilitated with ICARDA promoted equipment
- **Regional workshops** on CA in Maghreb (Algeria, Tunisia, 2010-12)
- **Jointly implemented projects:**
 - Sustainable agriculture practices in the drought affected region of Karakalpakstan (2003-2007)
 - Conservation Agriculture for Irrigated Areas in Azerbaijan, Kazakhstan, Turkmenistan and Uzbekistan (2010-2012)



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Collaboration in Rangelands/Grasslands

→ **Rangelands/Grasslands represent 70% of the agricultural area in the world and are an irreplaceable resource for livelihoods**

- 8th International Conference on Dry Lands Development: *Human and Nature – Working Together for Sustainable Development of Dry Lands*, China, 2006
- 9th International Conference on Dryland: *Development Sustainable Development in Drylands – Meeting the Challenge of Global Climate Change*, Egypt 2008
- International conference on Food Security and Climate Change in Dry Areas, Jordan, February 2010



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Implementation of Global Plan of Action

→ The GPA has helped catalyze a series of global and national initiatives for conservation and use of crop diversity

- Some 15 regional or **crop specific networks** established,
- Over 300 new **genebanks** established and the total number of accessions in collections worldwide has increased by approximately 20% since 1996,
- New instruments and legislations on **plant breeders rights, seeds, biosafety and farmers rights** in place,
- Greater protection to crop wild relatives with expansion of **protected areas**,
- Global increase in awareness, international collaborations and partnerships

ICARDA genetic resources	
Crops	Accessions conserved
Barley	24998
Wild <i>Hordeum</i>	1977
Bread wheat	13576
Durum wheat	19592
Primitive wheat	912
Wild <i>Triticum</i>	1584
<i>Aegilops</i>	3985
Faba bean	9424
Chickpea	13553
Wild <i>Cicer</i>	270
Lentil	10425
Wild <i>Lens</i>	587
<i>Lathyrus</i>	3341
<i>Vicia</i>	6143
<i>Medicago</i>	8397
<i>Tritolium</i>	4536
<i>Pisum</i>	6105
Other range species	5782
Others	219
Total	135,406

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Partnership for conservation and use of PGRFA

- **Second State of the World report on Plant Genetic Resources for Food and Agriculture (SOW-PGRFA)**
 - Report for the Near East and North Africa region
 - Two thematic studies *“Managing plant genetic resources the agro-ecosystem: global change, crop associated biodiversity and ecosystem services”* and *“Plant genetic resources for forage crops, pastures and rangeland species”*.
- **Second Global Plan of Action for PGRFA (2011)**
 - The Near East, North Africa and Central Asia Consultation



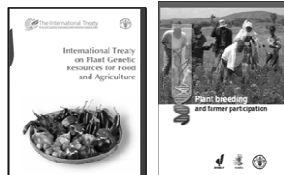
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Collaboration in crop management

- **International Treaty on PGRFA**
 - Third and the Fourth Sessions of the Governing Body
 - Involved in the panel of experts to evaluate proposals
- Preparation of **Genebank standards**
- **Participatory Plant Breeding**
- **IPM and pest management**
- **Diversification** and horticulture



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Seed sector development in *ECO* region

- Strengthening the **Seed Supply in the ECO Region** with specific emphasis on Central Asia.
- ECO members: AFG, AZR, Iran, KAZ, KYG, PAK, TAK, TURK, TUR, UZB
- Implementation from 2006 to 2009:
 - Harmonization of regulatory framework for ECO member countries on variety release mechanism, PVP, Sanitary and phytosanitary measures and seed certification scheme
 - Capacity strengthening on seed marketing
 - Establishment of a regional seed association (ECOSA, 2009)
 - Consultation meetings
 - Preparation of country and regional reports



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Collaboration in Seed sector development - *Emergency seed relief and rehabilitation projects*

- **Afghanistan Variety and Seed Industry Development Project**

- Establishment of a Variety Registration System
- Second Annual Seed Analysts Workshop (4-6 May 2010)
- Joint publication: National Catalogue of Wheat Varieties in Afghanistan (2011)



- **Rehabilitation and Development of the National Seed Industry in Iraq**

- Training in variety description and maintenance (March - June 2008)
- Study tours to Syrian seed program and ICARDA (1-15 January 2009)



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Collaboration in fighting Wheat Rust - *Awareness and Contingency planning*

- Series of **National and Regional Wheat Rust Awareness and Contingency Planning Workshops**: North African, West- and Central Asia, Turkey, Azerbaijan, Syria, Morocco and Egypt,
- Joint **presentations**: New Delhi, India (2008) and Mexico (2009)
- Joint **field visits**: Mexico (2009) and Tunisia (2009)
- Join **publication**: *Principles for Rapid Variety Release, Seed Multiplication and Distribution in Developing Countries to counter the Threat of Wheat Rust*, Thomas Osborn and Zewdie Bishaw, in Borlaug Global Rust Initiative Technical Workshop Proceedings (2009).



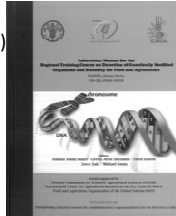
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Strengthening Biotechnology capacities

- FAO Regional Project with JOR, LBN, SYR, SUD, YMN, UAE (2009-11)
- Raising biosafety awareness, hands-on training for GMO detection, publications for development of a strategic regional network



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Strengthening of regional Networks

- **FAO-ICARDA International Technical Cooperation Network on Cactus (CACTUSNET) (est. 1993)**
 - 32 member countries world wide, including Algeria, Egypt, Iraq, Iran, Israel, Jordan, Mauritanian, Morocco, Pakistan, Syria, Turkey and Tunis
- **Collaborating activities:**
 - International Congresses and Workshops (India 2011, Italy 2013 (planned))
 - Cactus as multipurpose biofence project ongoing, India, Jan 2012



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FAO-ICARDA Collaboration-*Future direction:* *Participatory Holistic Partnerships*

- **Complementary approach:** 'Save and grow ' and 'Integrated agricultural production systems for the poor and vulnerable in dry areas'.
- Continue collaboration to **mainstream drylands** into regional and global priorities:
 - **Joint projects**, networks and fund raising RNE regional priorities
 - **Analysis** of constraints and **indicators** to develop integrated approach
 - **Partnerships** for promotion of seeds, cereals and legumes production
 - Promote **diversification** and use of adapted crop diversity
 - Platform for **participatory technology development** with farmers



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Tackling the Global Challenges – TOGETHER

- **Eradicating hunger**
- **Increasing production** and its contribution to economic growth and development, while ensuring sustainable ecosystem management and strategies for tackling climatic change
- **Improving livelihoods** of the population living in rural areas, including smallholder farmers, in particular women
- Ensuring a **fairer and more inclusive** food and agriculture systems at local, national and international levels
- Increasing **resilience** of livelihoods to agriculture and food security threats
- Strengthening **governance mechanisms** for the needs for food and agriculture

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