

Country Report on Knowledge Management Initiatives - Sudan -

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Strengthening Knowledge Management for Greater Development Effectiveness in the Near East, North Africa, Central Asia and Europe - Steering Committee
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ARC

- ❖ One of the ancient research institutions in Africa and the Middle East (Established 1902)
- ❖ ARC emerged as a public institution (semi autonomous) in 1967 due to the significant up-scale in agricultural research under the umbrella of the Ministry of Agriculture (MOA)
- ❖ In 2001 ARC was attached to the Ministry of Science & Technology to amalgamate all research institutions in other ministries
- ❖ ARC returned back to MOA

ARC Structure

Minister of
MOA&NR



DG



DDG

Finance &
administration

Human
Resources
Development

Research Programs &
International
Cooperation

Technology Transfer
& Knowledge
Management

Infrastructure

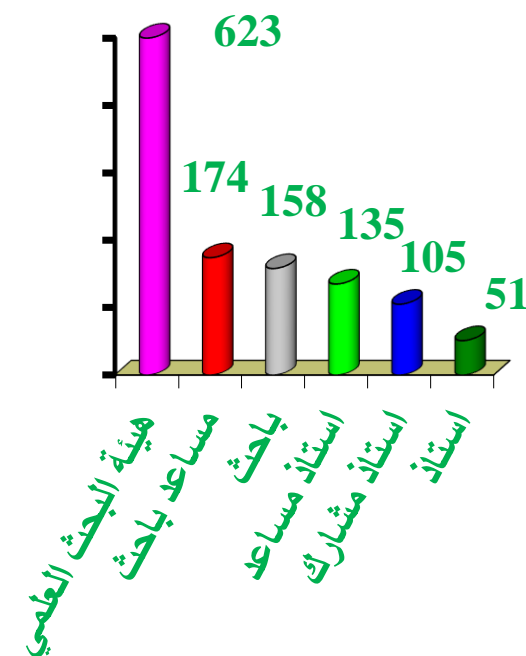
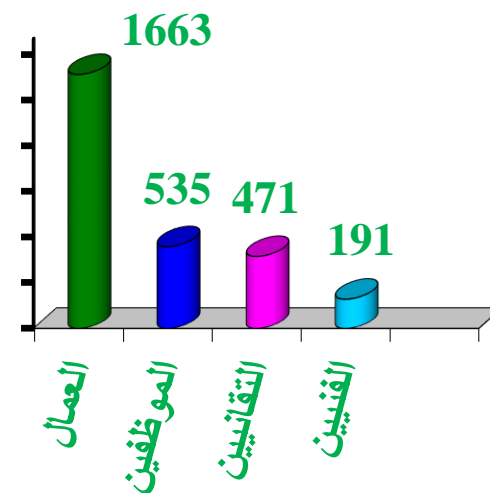
- ARC has:
 - 14 research centers
 - 27 research stations (covering all states)
 - 2 research units

Research Centers

1. Cereal crops
2. Oil seeds crops
3. Horticultural crops
4. Land and water
5. Integrated pest management
6. Legume and promising crops
7. Cotton and fibers
8. Seeds varieties conservation
9. Genetic resources conservation
10. Agricultural economics and policy
11. Biotechnology & biosafety
12. Agricultural engineering and water harvesting
13. Forestry and gum Arabic
14. Dry lands

Distribution of Research Stations

Area	Number
Northern	6
Khartoum	2
Clay plains and irrigated	6
Clay plains and rainfed	4
Western Savanna	7
Spate irrigation	2
Total	27



Research Units

- Tissue culture
- Gums mainly Gum Arabic

Key Strategic Areas and Thrusts

1. Sustainable crop production
2. Natural Resource Management
3. Socioeconomics and policy Analysis
4. Knowledge Management and Up-scaling

Key Strategic Areas and Thrusts

SA 1: Sustainable Crop Production (SCP)

- **Variety Development and Genetic Enhancement**
- **Crop Management**
- **Diseases and Insect Pests Management**

SA 2: Natural Resource Management (NRM)

- **Water management**
- **Land Management**
- **Forestry**
- **Plant Genetic Resources**
- **Animal Production**

Key Strategic Areas and Thrusts

SA 3: Socioeconomics and policy Analysis

- **socio-economic studies on production systems, natural resources use**
- **markets, trade and agricultural policies.**
- **evaluation of technologies, adoption and impact assessment.**

SA 4: Knowledge Management and Up-scaling

- **innovation platform (IP) that works along the value chains of a commodity.**
- **capacity strengthening of different actors and knowledge sharing.**

ARC and External Collaborations

- ☐ International: ICARDA, ICRISAR etc...
- ☐ Regional: ASARECA, IITA, AFAAS, FARA etc...
- ☐ International cooperation agencies: JICA, GTZ etc...
- ☐ International funding agencies: UNDP, IFAD, AfDB etc...
- ☐ Un organizations: UNDP, FAO, UNEP
- ☐ Others:
 - ✓ National Research Institutes
 - ✓ Universities
 - ✓ Private sector

Examples of Externally Funded Projects

- Western Sudan Agricultural Research Project (WSARP): Farming System Research & Extension (FSR&E), USAID and World Bank
- On-farm Research Project (UNDP and FAO): South Darfur, North Kordofan and River Nile states
- The Nile Valley project , ICARDA
- International Fund for Agricultural Development (IFAD): North Kordofan, South Kordofan, Butana, and Sennar states
- The Integrated Pest Management project (IPM) FAO
- Climate Change project (smart agriculture in Africa)
- TAAT wheat, sorghum and millet compact (ADB): Gazeera, Drafur, Kordofan, and Gedaref states etc...
- Water Harvesting (FAO)
- Enhance women capacity in agriculture: AfDB & MBC (Darfur states)

National Committees for Technology Release

- Crop varieties
- Crop husbandry
- Pests & diseases



Technology-Generating Institutions

1. ARC: In the last six months ARC (applied research) through research programs and projects:
18 technologies have been released regarding:
 - ✓ Spacing
 - ✓ Plant density
2. Universities:
 - In the form of dissertations and thesis (mostly basic)
3. National Council for Research focus on environment friendly construction material, medicinal plants
4. Animal Resources Research Corporation
5. Food Research Center (focus on quality food and ARC released varieties)

Main Technology Transfer Activities Implemented

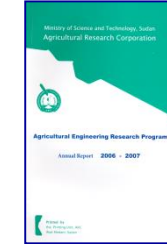
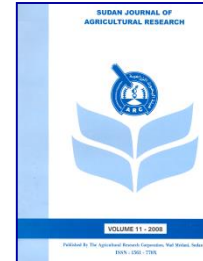
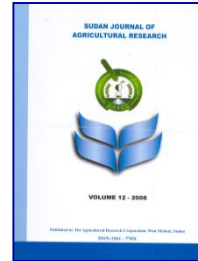
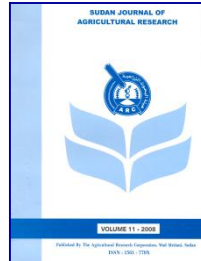
- Participatory experimentation on crop husbandry (breeding) verification trials
- IPM using participatory methods namely FFS
- On-farm trials
- Demo farms

Extension Methods

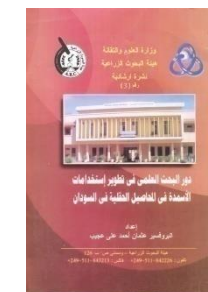
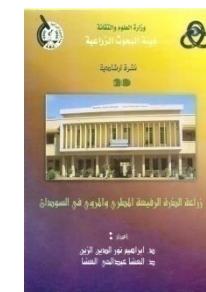
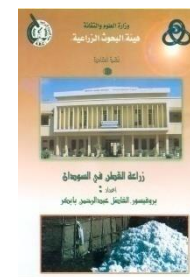
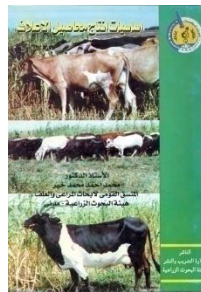
- Field days
- Mass media (radio and TV)
- Mobile workshops
- Extension messages, leaflets etc.
- Technical visits
- FFS
- Innovation platforms
- Others

Research Program Publications

Sudan
Journal of
Agricultural
Research

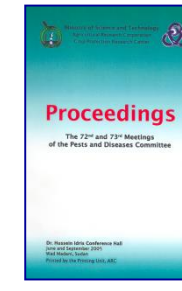
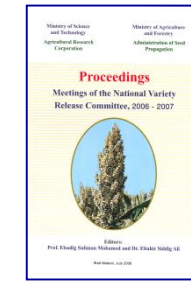
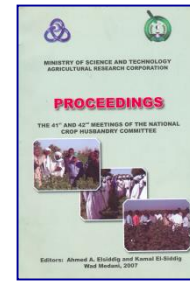


Annual
Reports



Extension
Bulletins

Books



Proceedings
and Meetings
of Technical
Committees

Challenges to KM

- Poor institutional linkages
- Knowledge is scattered
- Adoption gaps (partial as well as poorly assessed)
- High illiteracy rate among the majority of traditional producers
- Poor utilization of ICT
- Poor farmers organizations
- Policy issues (i.e. the feral system) regarding extension at state level and its relation with the deferral administration for Extension and Technology Transfer

The Way Forward: Writeshop outcomes

Knowledge Identification	Knowledge creation
<p>Need:</p> <ul style="list-style-type: none">• Consider both scientific and indigenous/local	<p>Need: Capacity building</p> <ul style="list-style-type: none">• Capacity building• Not fully participatory• Financial support
Knowledge Storage	Knowledge dissemination
<p>Need:</p> <ul style="list-style-type: none">• iCloud• Data base• Capacity building• Financial support	<p>Need:</p> <ul style="list-style-type: none">• Capacity building• Coordination among partners/networking• Financial support

The way forward: Other Objectives

- Establishment of KM technical committee (division of tasks/roles)
- Policies aiming at creating enabling environment
- I Cloud
- Farmers organizations
- Networking
- Capacity building

Thank You