ACIAR CIM/2004/024 Better crop germplasm and management for improved production of wheat, barley and pulse and forage legumes in Iraq

Iraq-ICARDA-Australia

- **Background to project**
- **Agenda/objectives of planning meeting**

Planning meeting ICARDA 4-8 Sept 2005

History

- long development since 2003
  - visits to Australia by Iraq Minister (Nov 03), MOA scientists (Oct/Nov 04)
  - visits to Iraq by Trevor Flugge/Roger Hartley (Nov/Dec 03), Lindsay Falvey (Feb 04), Don Plowman (Mar 04), Paul Novelly (2004)
  - planning meeting at ICARDA with Drs Nakd Khamis/ Ram M A Al-Eis in Nov 04
  - official support from MOA in Oct 04

Agreed project focus

- better crop and forage varieties
- better crop and soil management
- institutional strengthening (training)

Proposal development and agreement

- proposal developed by ACIAR together with ICARDA, MOA Iraq and Australian partners in Jan-Dec 2004

- agreement signed by ACIAR and ICARDA (Apr 05) and ICARDA and MOA (July 05)

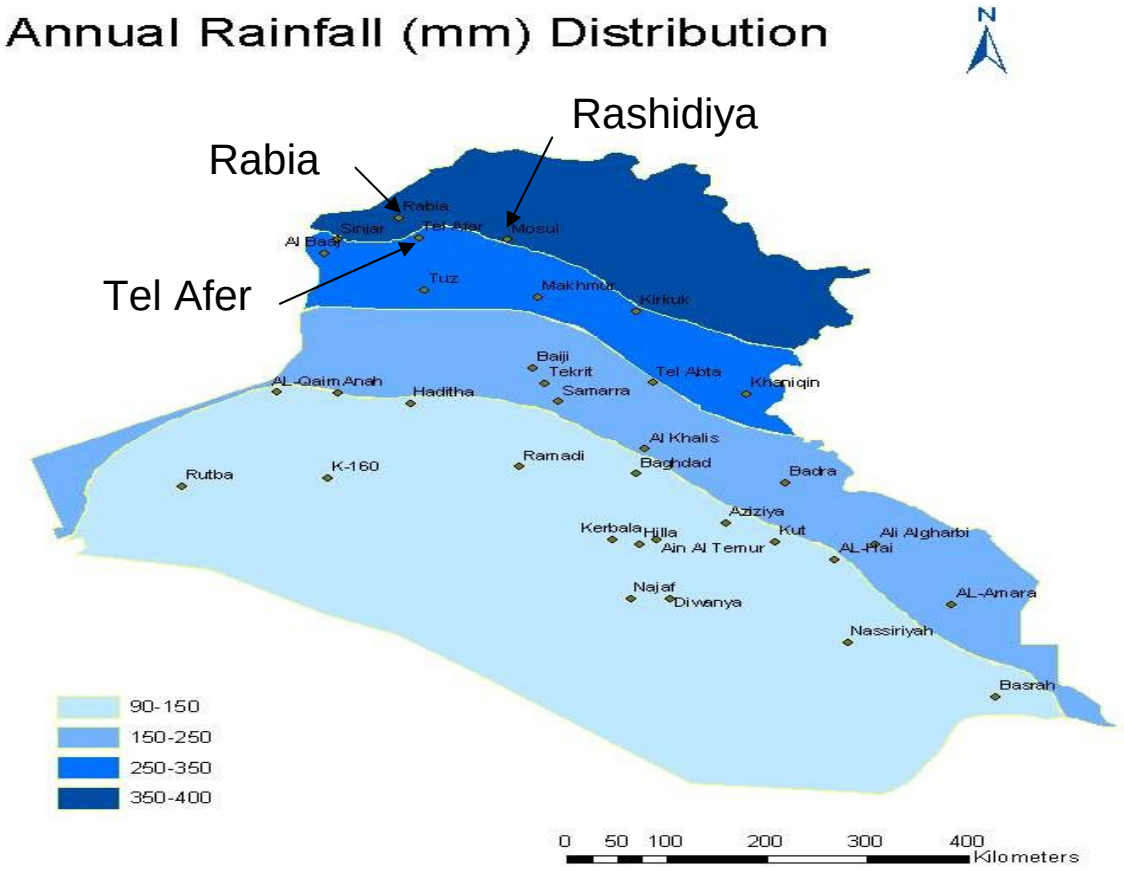
Objectives

Aim: To improve dryland cropping in northern Iraq through the testing, promotion and dissemination of improved crop cultivars and crop management practices.

Objectives:

- **To identify, promote and widely disseminate amongst farmers in the rainfed cropping regions of northern Iraq "best-bet" improved varieties and crop management systems for wheat, barley and pulse and forage legumes.**
- **To introduce, evaluate and select improved germplasm of wheat, barley and pulse and forage legumes for adaptation to rainfed farming systems in northern Iraq.**
- **To identify, evaluate and select improved cropping system management options suited to rainfed farming systems in northern Iraq.**
- **To enhance the capacity of Iraqi research and extension program to identify and evaluate potentially valuable germplasm and better crop/soil management technologies and promote their adoption by farmers**

Location



Courtesy of the Iraq National program for the Preparation of Agro-Ecological Zones Maps

Location

Governorate of Nineveh

- three main agro-climatic zones
  - high rainfall areas (HRA) >450mm
  - moderate rainfall areas (MRA) 350-450mm
    - Rabia Research Station, Rashidiya Research Station
  - low-rainfall areas (LRA) <200-350mm)
    - Tel Afer Research Station

Implementation (Yr 1)

- Extension of best-bet technologies
  - on-farm demonstrations. 3-5 demonstrations in each agro-climatic zone (10-15 demonstrations total)

- Research on new technologies
  - evaluate improved lines/technologies in the three research stations (three trials for each crop and technology comparison)

Implementation

The Ministry will assign (with names to be advised):

- three research teams, each consisting of barley, wheat and legume scientists, an agronomist, a plant protection specialist and a socio-economist, to implement the research program under Objective 1(baseline surveys, on-station and on-farm trials, monitoring and evaluation) in each agroclimatic zone.
  - (* on-station program will depend on facilities)

- three extension teams, each consisting of 4 to 5 staff, to implement the demonstration program under Objective 1 in each agroclimatic zone.

Targets for Inception Meeting

ICARDA 11-13 July 2005

Formal

- background on agricultural situation and programs in Iraq and Ninivah
- preparatory activities for the 2005/06 crop season
  - baseline surveys
  - best-bet germplasm and crop management technologies for testing
  - seed, land and personnel resources required
- consider required capital items
- consider training needs
- discuss first annual planning meeting – ICARDA (4-8 Sept 2005)

Informal

- meet together and discuss programs and common interests

Project inception planning meeting

ICARDA 11-14 July 2005

Project inception planning meeting

ICARDA 11-14 July 2005

Inception meeting outcomes

- minutes produced
- preparatory activities initiated
  - baseline surveys
  - seed preparation
  - sites and personnel identified in Iraq ?
- very preliminary workplan for legume, cereal and crop management research and demonstration drafted

Purpose and agenda for meeting

1. **review agricultural and R&D situation and available background information in Ninevah**
2. **present results of baseline survey**
3. **develop detailed workplans for legume, cereal and crop management research and demonstration**
4. **discuss seed production, training and capital requirements**
5. **discuss project operations, finances, reporting**
6. **present seminars of relevance to Iraq on advances in cereal and legume improvement, crop management and crop-livestock interactions in Australia**
7. **discuss MOA desires for develop strategies and proposals to assist with rehabilitation of seed production, plant genetic resource, and research station infrastructure and facilities**

Budget - ACIAR

	Payment 1 1/5/05	Payment 2 1/11/05	Payment 3 1/5/06	Payment 4 1/11/06	Payment 5 1/5/07	Payment 6 1/11/07	TOTAL
ICARDA	54,203	62,637	54,203	62,637	54,203	62,637	350,520
Department of Agriculture, WA	13,000	13,000	27,000	19,000	13,000	13,000	98,000
CLIMA	13,000	13,000	13,000	13,000	19,000	27,000	98,000
University of Adelaide	19,000	27,000	13,000	13,000	13,000	13,000	98,000
Iraq: Ministry of Agriculture	356,660	66,500		66,500		66,500	556,160
TOTAL	455,863	182,137	107,203	174,137	99,203	182,137	1,200,680

Required outputs

- **agreed detailed workplan compatible with:**
  - **agreed objectives, outputs (Table 3.2), activities (3.3a Flow chart) and budget**
  - **resources**
  - **prevailing situation in Iraq**
- **an understanding and strategy to implement workplan**
- **identification of responsible persons for activities and outputs (reporting)**

Activities

Objective1 To identify, promote and widely disseminate amongst farmers in the rainfed cropping regions of northern Iraq "best-bet" improved varieties and crop management systems for wheat, barley and pulse and forage legumes

1. Compile and review current available information on farmers' practices and production and economic / marketing constraints.
2. Baseline survey and analysis of production constraints/limitations in individual agro-climatic zones (survey team to be identified from Iraq).
3. Compile, review and analyse existing information on potential available technology options, i.e., options already tested in Iraq, including registered Iraqi varieties of target crops and crop management options.
4. Round table discussion between project partners and representative farmers from the three agro-climatic zones to review options and decide best-bet technologies to be promoted in each zone
5. First Annual Project Planning meeting of all project partners (immediately following round table discussion).
6. Based on work plan, select sites and participating host farmers and farmer groups for on-farm demonstrations. 3-5 demonstrations in each agro-climatic zones (10-15 demonstrations total)
7. Implement on-farm demonstrations
8. Monitor demonstrations and jointly evaluate options with farmer groups to identify preferences and/or potential constraints to adoption.
9. Field days for farmers and development of extension material to disseminate information on new options.
10. Annual project review and planning meetings to review results of previous year and agree work plan for coming year
11. Assess potential adoption and impact of technologies based on information from baseline surveys and results from demonstrations.

[3.3a Flow chart pp. 22-25]

Activities

Objective 2. To introduce, evaluate and select improved germplasm of wheat, barley and pulse and forage legumes for adaptation to rainfed farming systems in northern Iraq

1. Identify potential lines from Iraq, ICARDA's international nurseries, Australia, and other sources.
2. First Annual Project Planning meeting of all project partners.
3. Introduce and evaluate improved lines in the three research stations (one in each agro-climatic zone).
4. Jointly evaluate lines with farmer groups.
5. Annual project review and planning meeting to review results of 1st years evaluation and agree work plan for 2nd cropping season

[3.3a Flow chart pp. 22-25]

Activities

Objective 3. To identify, evaluate and select improved cropping system management options suited to rainfed farming systems in northern Iraq

1. Based on collective knowledge, identify and prioritize those constraints/limitations in crop production systems which need further research to identify improved crop and soil management practices (potential research areas already identified with Iraqi partners are: tillage and sowing systems, pest and weed management, and new crop rotation options).
2. First Annual Project Planning meeting of all project partners
3. On-station research on crop management options to fill gaps in information.
4. Joint evaluation of options with farmer groups.
5. Annual project review and planning meeting to review results of 1st year and agree work plan for 2nd year

[3.3a Flow chart pp. 22-25]

Activities

Objective 4. To enhance the capacity of Iraqi research and extension program to identify and evaluate potentially valuable germplasm and better crop/soil management technologies and promote their adoption by farmers

1. **Annual Project Meetings: Develop program of training including on-the-job coaching, short term courses, workshops, individual visits to ICARDA and/or Australian partners, and selective longer term activities. MOA to nominate suitable staff for training.**

2. **Short-term training courses in germplasm evaluation, cropping systems management, seed production & seed quality control, integrated pest/disease/weed management, and extension methods (5 x 4 trainees = 20 Iraqi staff per year)**

3. **Individual training for MOA staff in economic analysis, adoption and impact assessment (2 persons).**

4. **Senior Iraqi scientists (one per year) visit one Australian research institute (6-8 weeks)**

5. **Support participation of Iraqi personnel in regional or international workshops and conferences of relevance to the project.**

[3.3a Flow chart pp. 22-25]