



## **SCREENING CHAPTER 25 SCIENCE AND RESEARCH**

**AGENDA ITEM: 4. Specific Research Actions -  
Coordination of agricultural research**

**AGRICULTURAL RESEARCH IN TURKEY:  
Current Status and Prospects for Adaptation Period to EU Acquis**

**Country Session: The Republic of TURKEY  
14 November 2005**



## OUTLINE

- INTRODUCTION
- HISTORICAL BACKGROUND
- CURRENT STATUS
- PROSPECTS FOR THE ADAPTATION OF THE EU ACQUIS



## INTRODUCTION

- Share of the agricultural sector in the country's economy is still high compared the EU countries,
- Agriculture in Turkey, generating 11.71 % of the national income and supplying 32 % of employment, still preserves its characteristics of being an important economic and social sector,
- Taking into consideration agricultural developments in the world, as well as the harmonisation process during candidacy period to the EU,
- Turkey has been developing a competition oriented, sustainable agricultural sector.



# **HISTORICAL BACKGROUND**

## **(Milestones)**



## HISTORICAL BACKGROUND

<u>Year</u>	<u>Institution Established</u>
*1925:	Eskisehir Agricultural Research Station ( <b>now Anatolia Agricultural Research Institute</b> )
*1926:	Ankara General Agriculture Laboratory ( <b>now Central Field Crops Res. Inst.</b> )
*1930:	<b>Manisa and Tekirdag Viticulture Research Institutes, Ankara Poultry Res. Inst.</b>
1931:	<b>Adana and Izmir Plant Protection Res. Inst.</b>
*1933:	<u>Establishment of Higher Agriculture Institute</u> ( <b>now Ankara Univ. Faculty of Agric. and Veterinary; Istanbul Univ. Faculty of Forestry</b> )





## HISTORICAL BACKGROUND

<u>Year</u>	<u>Institution Established</u>
1963:	Izmir Agricultural Res.Inst.and PlantIntroduction Centre ( <b>now Aegean Agricultural Res. Inst.</b> ); Tokat Soil & Water Resources Res. Inst.
1934:	Ankara Regional Plant Protection Research Institute ( <b>now Central Inst. For Plant Protection</b> )
1936:	Antalya-Citrus Research Station ( <b>now Western Med. Agric. RI</b> )
*1938:	<b>Fig Research Institute</b>
1944:	Samsun-Regional Seed Improvement Station ( <b>now Black Sea Agric. Res. Inst.</b> )



## HISTORICAL BACKGROUND

<u>Year</u>	<u>Institution Established</u>
1947:	<b>Tarsus Soil and Water Resources Res. Inst.</b>
*1948:	<b>Istanbul Univ. Forestry Faculty</b>
1953:	<b>Eskisehir Soil and Water Resources Res. Inst.</b>
1954:	<b>Ankara Soil and Fertilizer Res. Inst.</b>
*1956:	<b>Aegean Univ. Faculty of Agriculture</b>
*1958:	<b>Erzurum Ataturk Univ. Faculty of Agric.</b>



## HISTORICAL BACKGROUND

<u>Year</u>	<u>Institution Established</u>
*1961:	Yalova-Atatürk Horticultural Res. Inst. (now <b>Central Hort. Res. Inst.</b> ) and Bursa - Canning Res. Inst. (now <b>Central Food Technology RI</b> )
*1969:	<b>Cukurova Univ. Faculty of Agriculture</b>
1987:	Trabzon, Egirdir and Bodrum <b>Aquaculture Res. Institutes</b>
1991:	<b>General Directorate of Agricultural Research (GDAR)</b>
1994:	Ordu- <b>Apiculture Res. Institute</b>
*2000:	South-eastern Anatolia <b>GAP Project Area Training, Extension and Research Centre</b>





# CURRENT STATUS



## CURRENT STATUS

- Agricultural Research is considered essentially a public duty which is mainly covered by the Ministry of Agriculture and Rural Affairs (MARA) in Turkey.
- GDAR of MARA and the research funds of the universities are financially and administratively supporting the research projects.
- TUBITAK, SPO, some agro- industry companies, and international bodies, such as CIMMYT, ICARDA, CIHEAM, FAO, IPGRI, CLIMA, CIP, UNDP, UNIDO, EU-FP and UNEP are the other important research supporters.



## CURRENT STATUS

- ☐ 2 Turkish Representatives in Standing Committee for Agricultural Research (SCAR) of the EU
- ☐ Attending meetings as observer
- ☐ Nomination for 8 Working Groups in SCAR



### **Main Research Contributors)**

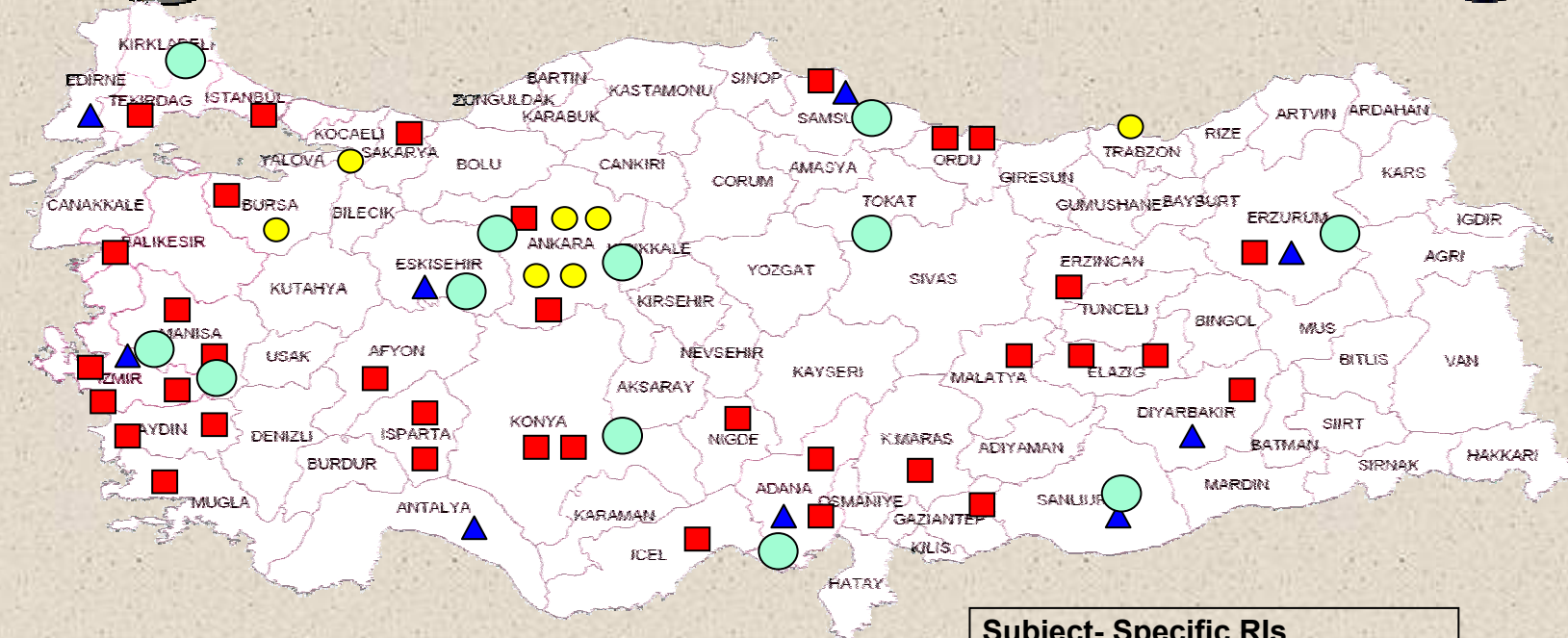
- **GDAR (with 60 RIs)**
- **Ministry of Environment and Forest (with 11 RIs)**

### **FACULTIES OF**

- AGRICULTURE (23)
- VETERINARY (19)
- FOOD TECHNOLOGY (14)
- FORESTRY (9)
- FISHERIES (5)



## Existing GDAR Research Institutes



- 7 Central RIs
- ▲ 9 Regional RIs
- 32 Subject-specific RIs
- 12 Soil and water RIs

### Subject- Specific RIs

14 Horticulture and Field Crops  
3 Plant Health  
4 Animal Husbandry  
3 Aquaculture  
8 Animal Health





## Identification of Community Research Needs

The task of identifying the community research needs in agriculture is primarily undertaken by the integrated efforts of the

- MARA
- Universities
- TUBITAK
- SPO



## Allocation of Resources for Agricultural Research and Development

In the past the impact of agricultural research undertaken in Turkey has been difficult to quantify. *(It has been criticised as being based on personal interest and as providing a relatively poor return on investment of public funds.)*

With “**Turkey Agricultural Research Project-TARP**” the main change of emphasis in research planning and implementation from 1996 has been to move from a uni-disciplinary project or experimental research approach to an *integrated multi-disciplinary* approach, and investment in research is allocated according to prioritised **Areas of Research Opportunity** and **Research Programmes**.



## Allocation of Resources for Agricultural Research and Development

Since 1996, with the implementation of the **Agricultural Research Master Plan**, the general perception has been as follows:

There is a need to focus agricultural research into areas where the economic, social and environmental impacts are likely to be high.

*Necessary measures have been taken for the last 10 years to manage research in order to ensure that*

***Relevance in agricultural research is determined by priority setting and funds are allocated to high priority programmes.***



## Project Proposal, Evaluation and Approval System Applied by MARA

1. System is open to the scientists from public and private research institutions and universities
2. Researcher has the idea, seeks collaboration opportunities with other disciplines and other institutions with complementary skills, and if applicable, private sector interest and support
3. Preliminary Proposal is first considered at the Institute level then forwarded to the related “**Research Advisory Committee (RAC)**” for evaluation in terms of “**Relevance**” and “**Research Benefit**”, if approved





4. **“Final Project Proposal”** is submitted to the RAC as the second step, **Scientific Quality** assessment by **“Peer Review”** process
5. Proposal and evaluations are reviewed by **“Agricultural Research Council”** , and **GDAR** gives permission to the Research Institute regarding the realisation of the work by the researchers.

***The only consideration for the continuation of supporting of a contracted project is progress reports by the implementing institute, Project Leader and Programme Coordinator.***





## Human Resources at GDAR

The breakdown of research staff according to academic degrees

	<b>BSc</b>	<b>MSc</b>	<b>PhD</b>	<b>Assoc. Prof.</b>	<b>TOTAL</b>
<b>Number</b>	618	623	356	11	1608
<b>Percent</b>	38.44	<b>38.74</b>	<b>22.14</b>	0.68	100.00



## CURRENT STATUS

### Human Resources at GDAR

Of the total staff (1608)

Men: 1102 (68.54 %)

Women: 506 (**31.46 %**)

#### GDAR- as of October, 2005:

- ☐ Total Research Staff: 1608
- ☐ Annual Average On-going Project Number: 600
- ☐ Annual Project Implementing Budget: 8.8 Million € 5 (*excluding Revolving Budgets' contributions and salaries*)
- ☐ Annual Average Report/Paper Number: 300



## **Current Research Activities**

- Biodiversity /Genetic Resources
- Plant Improvement
- Integrated Growing / Production Systems / ICM
- Post-harvest Technologies
- Agricultural Economy/Marketing
- Animal Husbandry / Breeding / Health
- Fishery Management
- Food and Feed Technologies
- Soil and Water Resources Management
- Organic Agriculture
- Biosafety



## CURRENT STATUS

### Achievements

- ☐ After 80 years of intensive efforts, many research projects have been undertaken, a huge amount of publications made, very significant technology transfers and adaptations realized and a very good experience gained.
- ☐ Thousands of qualified research scientists were trained through continuous training programmes organized both in Country and abroad.
- ☐ A satisfying research infrastructure with up to date technological devices and tools were developed using local and international resources especially in the last 20 years.



# PROSPECTS FOR THE ADAPTATION OF THE EU ACQUIS





## PROSPECTS FOR THE ADAPTATION OF THE EU ACQUIS

As a consequence of 10th March Decision of Supreme Council for Science and Technology, and within the framework of National Strategic Plan, MARA, in collaboration with TUBITAK, developed National Agricultural Research Strategy Plan for 2005-2014.



## **Envisaged Agricultural Research Strategy:**

Undertake high quality relevant research and disseminate the results in much more effective ways in order to:

- supply public with safe and high quality foods
- produce high value-added products and address healthy nourishment concerns
- increase the productivity and profitability without harming the environment
- ensure sustainable use of natural resources
- integrate agriculture and other policies in rural areas
- ensure sustainable economic growth



## Concluding Remark

No significant difficulty is anticipated in adapting the relevant EU Acquis under this chapter by the time of accession.