



# AGRICULTURE IN IRAQ

## GENERAL VIEW



PRESENTED

*BY*

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*IRAQ*

*JULY 2005*

*ALEPPO/SYRIA*

# COUNTRY PROFILE



## TOTAL AREA

438000KM

## TOTAL POPULATION

25409000



# Introduction



Since ancient days Iraq was known as the valley of the two rivers Mesopotamia. Its bountiful land, fresh water and varying climate contributed to the creation of agriculture since thousands of years.

Iraq with a total land of 435square kilometers is located between longitudes ( $38^{\circ} 48' E$ ) and between latitudes ( $29^{\circ} 37' N$ ). In length from –north to south it approximates 1000 Km and in width about 500 Km. Iraq is not far away (about 400 Km) from the mediterranean sea on the west and about 1000Km from the red sea on the south west and almost the same distance from black sea on the north and practically touching the Arabian Gulf at its southern limit.

**Iraq may primarily be divided into four main physical regions, these are:**

- ✦ **The lower Mesopotamia.**
- ✦ **The Desert Regions.**
- ✦ **The Upland hilly Regions.**
- ✦ **The Mountain Regions**

**The climate of Iraq in general arid and continental having very hot summer and sever cold winters. The rain fall precipitation on the northern part of the country is sufficient to support the winter crop, while in the middle and in the southern part, cultivation depends on irrigation.**

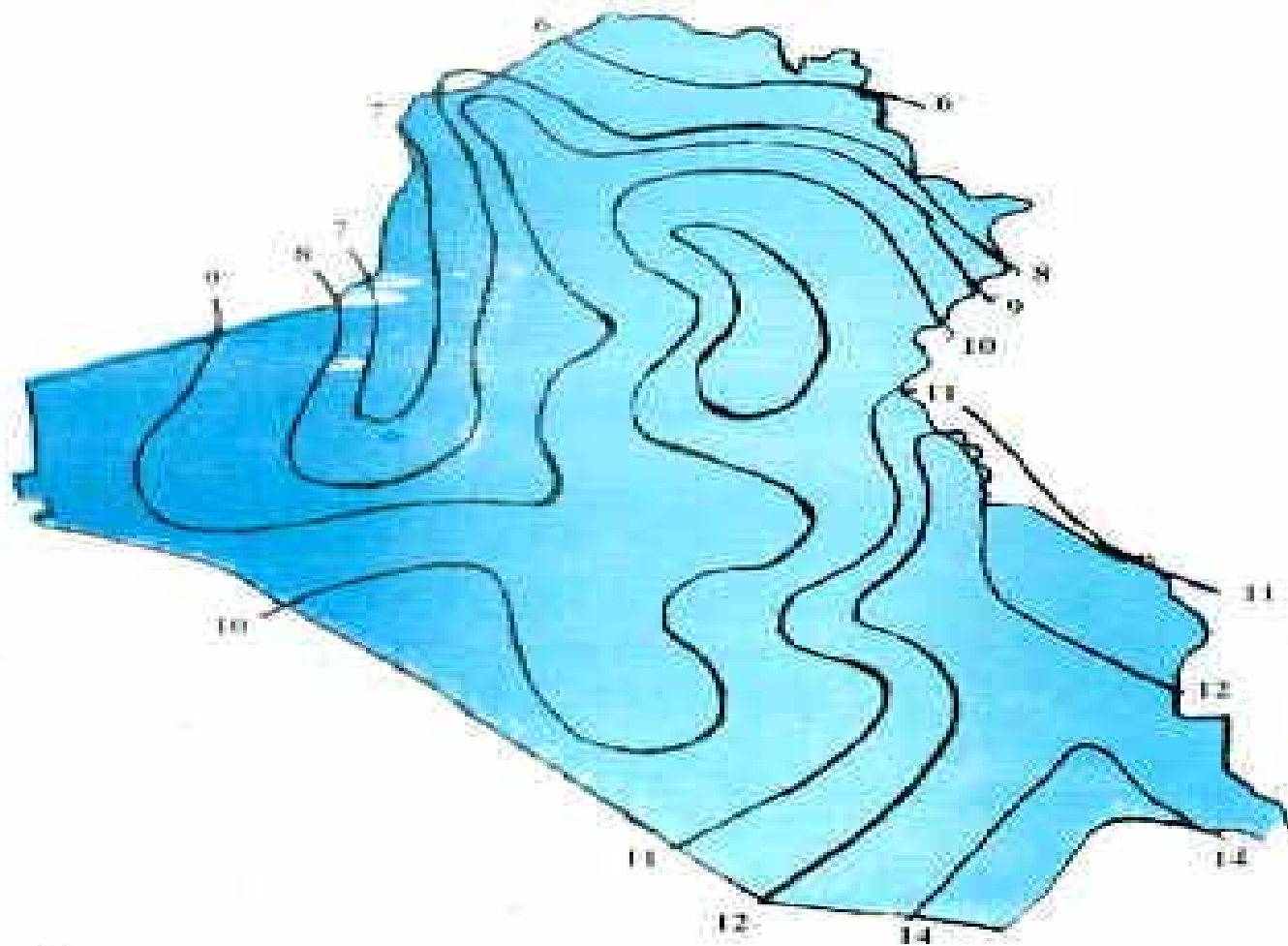
# CLIMATE

Most of Iraq has a continental climates. The mountain area has cool summers and cold winters ,while the plains and deserts have dry hot and to extremely hot summers and short ,cool winters.

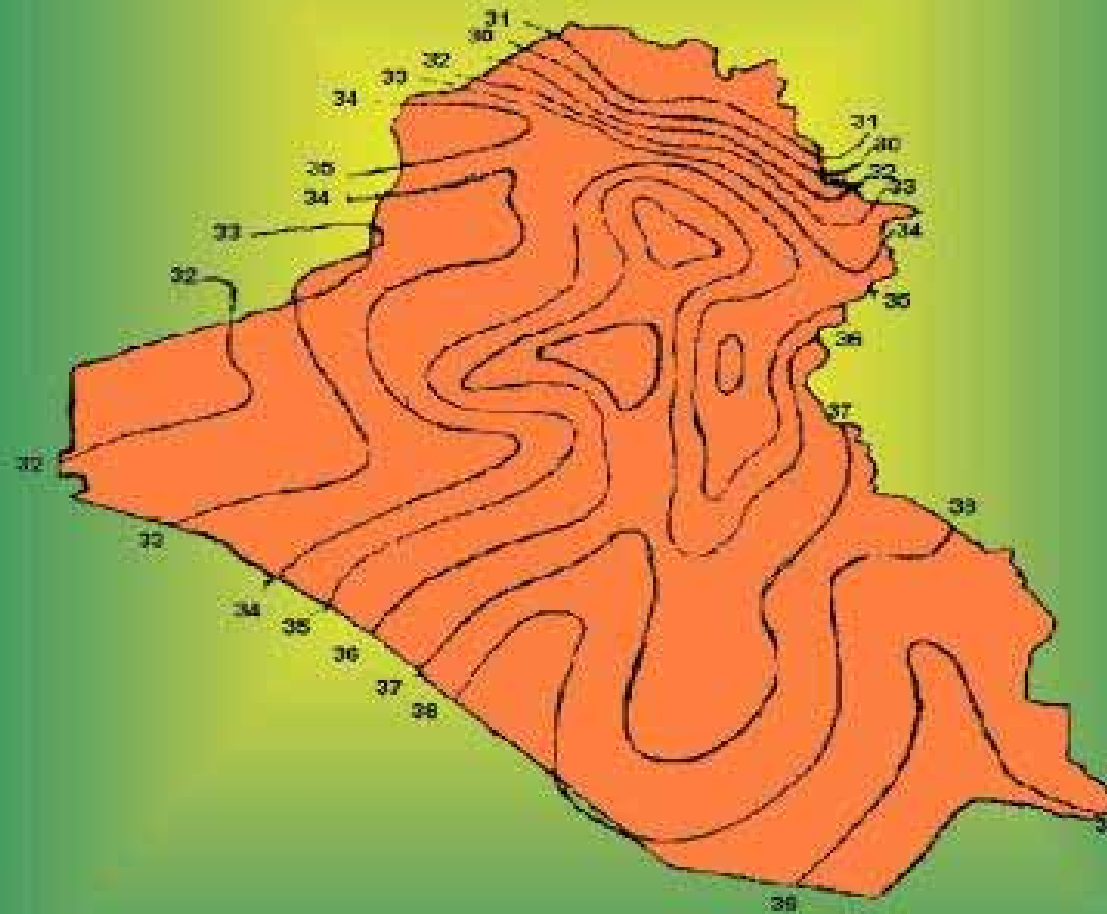
Temperature at shade is over43c.

Most of the country receives little rainfall, only about 150mm in the central plains and even less in the deserts .Average annul rainfall ranges from less 100 mm over 60% of the country in the south up to 1200 mm in the north-east

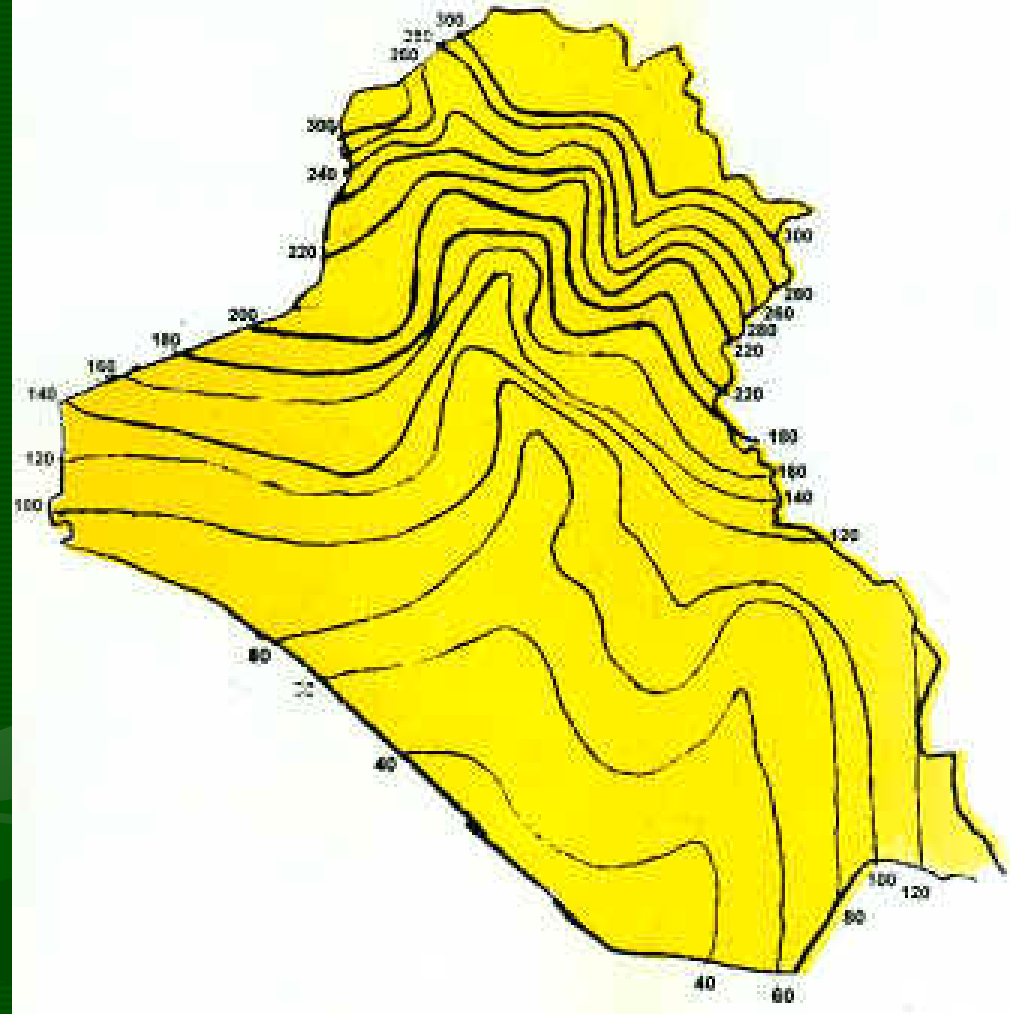
توزيع درجات الحرارة لشهر كانون الثاني العام 2001  
DISTRIBUTION OF TEMPERATURE FOR JANUARY 2001 IN C



توزيع درجات الحرارة لشهر تموز لعام ٢٠٠١  
DISTRIBUTION OF TEMPERATURE FOR July 2001 IN C



التوزيع السنوي لهطول الأمطار بالمنطقة خلال عام ٢٠٠٩  
ANNUAL DISTRIBUTION OF RAINFALL FOR THE YEAR 2001  
التوزيع السنوي لهطول الأمطار بالمنطقة ( m.m )



# IRAQ TOPOGRAPHY



Topographically, Iraq is shaped like a basin, consisting of  
The great Mesopotamian alluvial plain of the Tigris and  
the Euphrate rivers( **Mesopotamia means, the  
land**

**Between two rivers)**

اقسام سطح العراق  
**THE MAIN IRAQ PHYSICAL DIVISIONS**

Details	المساحة (كم) Area (Sq. Km)	%	التفاصيل
Plains (including marshes &lakes)	132500	30.2	السهول (بضمنها الاهوار والبحيرات)
Terrain lands	42000	9.6	الاراضي المتموجة
Mountains	92000	21.0	الجبال
Deserts	168552	39.2	الصحارى
<b>Total</b>	<b>435052</b>	<b>100.0</b>	<b>المجموع</b>

# POPULATION ( 2002 )

Total population

25409000

Rural population

7877000

About 25% is rural

Average population density

47 inhabitants/km

Average population growth

3.0% (1978-1997)

About 20% of the labour force is engaged in agriculture

# TOTAL AND AGRICULTURAL LABOR FORCE

1000 persons

YEAR	TOTAL LABOR	AGRI. LABOR
2000	5739.00	1017.00
2001	5879.00	1042.00
2002	6098.00	1116.00

# TOTAL POPULATION, TOTAL AND • CULTIVATED AREA

YEAR	TOTAL POPULATION	TOTAL AREA Ha	CULTIVATED AREA Ha
2001	24813000	43505250	6018380
2002	25409000	43505250	7065750

# GROSS DOMESTIC PRODUCT AND AGRICULTURAL PRODUCT

Million us \$      current prices

YEAR	GROSS DOMESTIC PRODUCT	GROSS AGRI. PRODUCT
2000	83544	26848
2001	81038	26296
2002	81849	25010

# LAND USE

YEAR	PERMANENT CROPS AREA		SEASONAL CROPS AREA		UNCULTIVATED AREA	FOREST AREA	PASTURE AREA
	RF	IR	RF	IR			
2001	22.50	246.00	845.00	1755.25	3149.63	478.50	30.25
2001	24.00	244.50	1701.25	1946.25	3149.75	478.50	30.25

AREA : 1000 Ha  
AREA

RF : RAINFED AREA

IR : IRRIGATED

# LAND DISTRIBUTION

LAND TYPE	AREA M Ha	%	% TO TOTAL AREA
<b>CULTIVATED AREA</b>	<b>11.1</b>		<b>100</b>
<b>IRRIGATED AREA</b>	<b>5.575</b>	<b>100</b>	<b>50.2</b>
<b>#IRRIGATED</b>	<b>2.805</b>	<b>50.3</b>	
<b>#NON IRRI.</b>	<b>2.770</b>	<b>49.7</b>	
<b>RAINFED AREA</b>	<b>5.540</b>		<b>49.8</b>
<b>#HIGH RF</b>	<b>.831</b>	<b>15</b>	
<b>#MODERATE</b>	<b>1.274</b>	<b>23</b>	
<b>#LOW RF</b>	<b>3.435</b>	<b>62</b>	

# NATIONAL PRODUCTION AREA AND PRODUCTIVITY

YEAR	CROP	IRRIGATED			RAINFED			TOTAL		
		AREA	PRODC TIVITY	PDCROT ION	AREA	PRODCT IVITY	PDCRO TION	AREA	PRODC TIVITY	PDCRO TION
2002	WHEAT	31585	507	16001	34364	288	9894	65949	393	25895
	BARLEY	11088	239	2648	27533	207	5686	38621	216	8334
	RICE	2165	903	1938	-	-	-	2165	903	1938
	MAIZE	7342	786	5786	-	-	-	7342	786	5786
	SORGHUM	1045	388	405	-	-	-	1045	388	405
<b>TOTAL</b>		53225	503	26778	61897	252	15580	115122	386	42358

# NATIONAL PRODUCTION AREA AND PRODUCTIVITY

YEAR	CROP	IRRIGATED			RAINFED			TOTAL		
		AREA	PRODC TIVITY	PDCROT ION	AREA	PRODC TIVITY	PDCROT ION	AREA	PRODC TIVITY	PDCRO TION
2003	WHEAT	36121	466	16821	32428	200	6471	68549	340	23292
	BARLEY	13445	245	3416	29084	178	5188	42529	202	8604
	RICE	1225	664	813	-	-	-	1225	664	813
	MAIZE	3628	650	2357	-	-	-	3628	650	2357
	SORGHUM	541	283	153	-	-	-	541	283	153
<b>TOTAL</b>		54960	472	23560	61512	190	11659	116472	302	35219

# LOANS OF THE AGRI. COOPERTIVE BANK (الف دينار (I.D.000) )

Purposes	2001	2000	1999
Agricultural supply	-	0	0
Co-operative marketing (1)	-	0	0
Machinery services	-	0	0
Poultry	-	0	0
Livestock	-	0	0
Agricultural machines	-	0	0
Establishment and development of orchards	-	0	0
Buildings and structures	-	0	0
Wells excavation and Irrigation projects	1266625	1420000	-
Land reclamation	-	0	0
Other purposes	15971005	19988861	349306
<b>Total</b>	<b>17237630</b>	<b>21408861</b>	<b>349306</b>

# AGRICULTURAL FARMERS COOPERATIVES

Details	2001	2000	1999
Local and agricultural co-operatives Number	881	870	808
N0. Of members	205037	222410	213564
Collective farms Number	3	3	3
N0. Of members	169	169	159
Specialized Co-operatives Number	49	49	49
N0. Of members	16397	16327	16380
Total Number	933	922	850
N0. Of members	221403	238906	230103

# AGRICULTURAL EXTENSION •

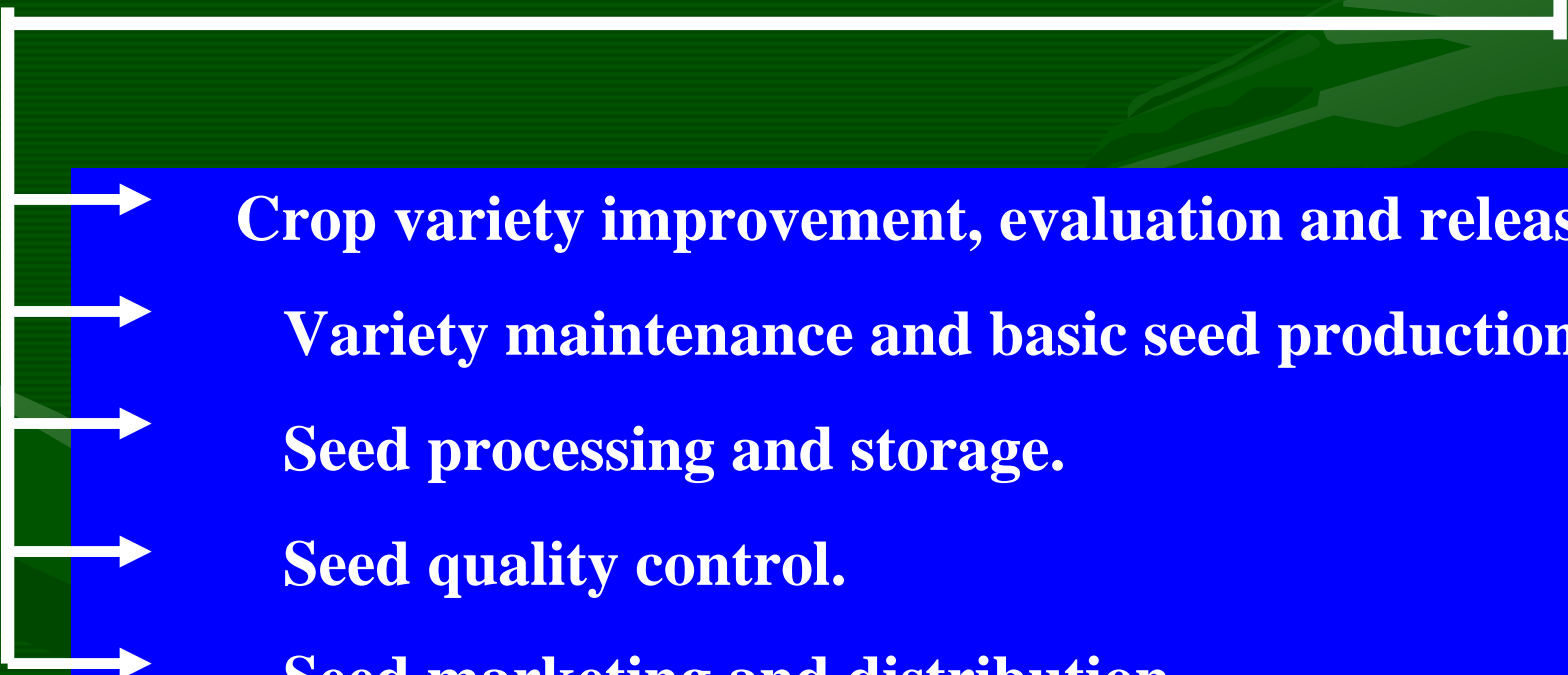
Extension services in Iraq are the responsibility of the state Board of Extension and cooperatives (SBAEC) under the Ministry of Agriculture located at Abu-Ghraib/ Baghdad. SBAEC has training centers in some Governorates; currently, there is only one officer for 3000 farm families. Linkage and coordination is weak between the central extension organization and extension bodies in the governorates due to lack of the extension specialists and extension materials.

Some national Agricultural projects include extension activities within farming communities, especially in term of transfer of technology.

# Components of Iraqi National Seed Program

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The seed program is defined as an outline of measures and activities that are necessary to make high quality seed available at the right quantity and time. The viability of any seed program should consist of the basic components :

- 
- Crop variety improvement, evaluation and release.**
  - Variety maintenance and basic seed production .**
  - Seed processing and storage.**
  - Seed quality control.**
  - Seed marketing and distribution.**

**For building a strong seed program several basic considerations should be monitored:**

**1**

**Evaluation of the existing seed system**

**2**

**Availability of eligible varieties which can be included in the seed program**

**3**

**Choosing the best seed production arrangement under the specific circumstances of the country**

**4**

**Making the right choice for what to produce locally and what to import**

**5** The technical level of seed quality control organization

**6** Farmer's awareness about new crop varieties

**7** The existing technical capabilities in seed production

**8** The cost of production of seed and its effect on prices

**9** Availability of seed production facilities and equipments

## **In Iraq two seed supply systems exist**

- **The formal system which comprises of the public sector supported by the private seed sector .**
- **The informal seed sector in which the farmers produce seed for themselves and their neighbors .**

## *Formal and informal sectors distributed seeds*

Crop	Total (Tons)	Seed distributed by Companies (Tons)	%	Seeds produced by farmers (Tons)	%
Wheat	160,000	36,000	22.5	124,000	77.5
Barley	120,000	9,000	7.2	111,000	92.5
Rice	18,000	800	4.5	17,200	95.5
Maize	3,600	650	18	2,950	82
Cotton	2,500	1,000	40	1,500	60

# SEED STATUS PRE-WAR

FORMAL SECTOR

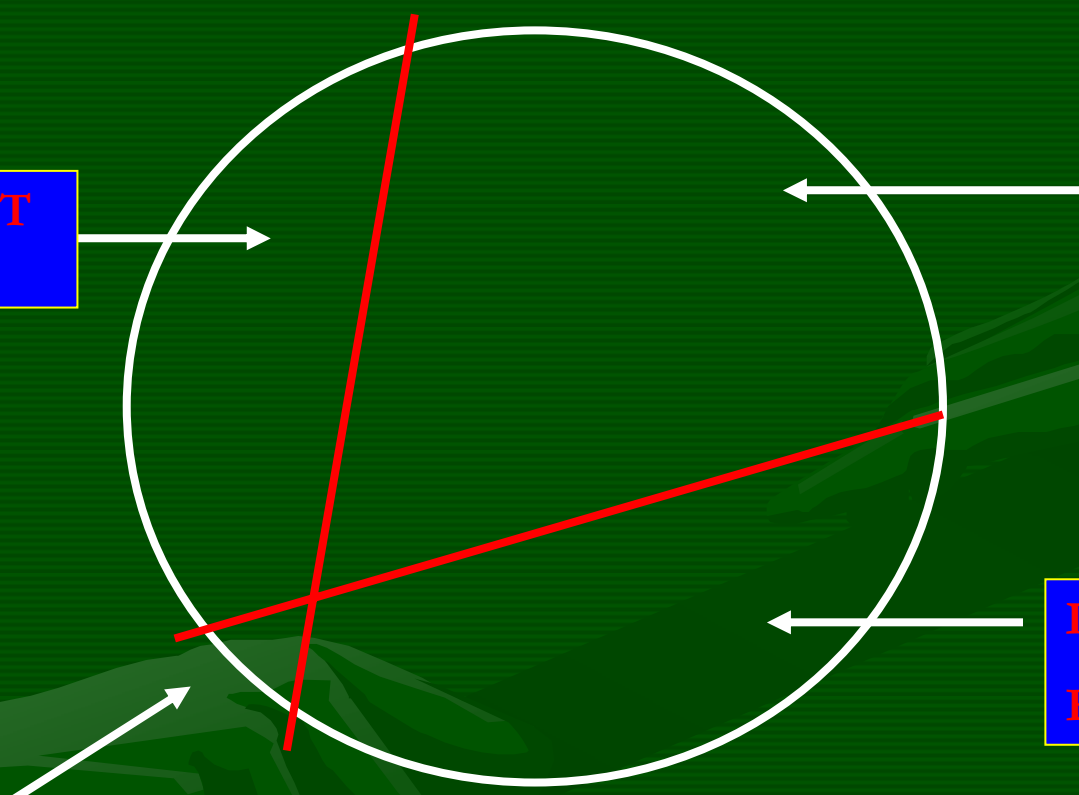
INFORMAL SECTOR

GOVERNMENT  
AGENCIES

FARM-SAVED  
SEED

LOCAL TRADING &  
EXCHANGE

PRIVATE SEED  
COMPANIES



# SEED STATUS PRE-WAR

FORMAL SECTOR

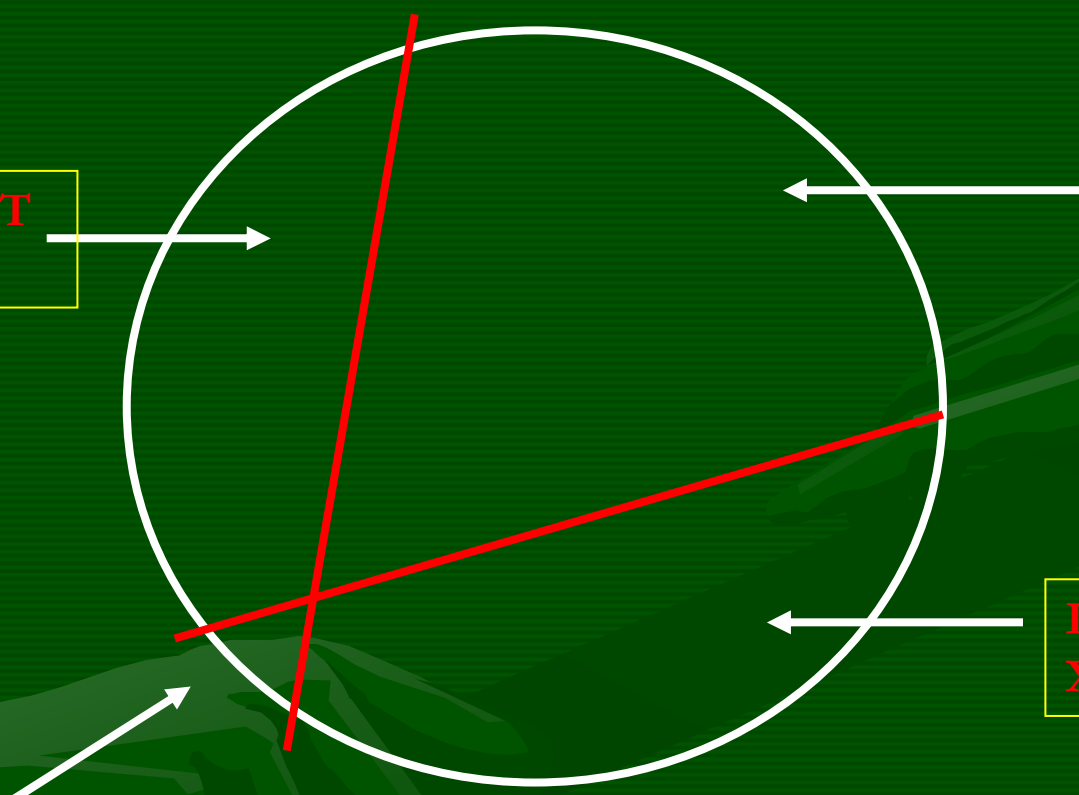
INFORMAL SECTOR

GOVERNMENT  
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XCHANGE

PRIVATE SEED  
COMPANIES



# SEED STATUS IN THE FUTURE

**FORMAL  
SECTOR**

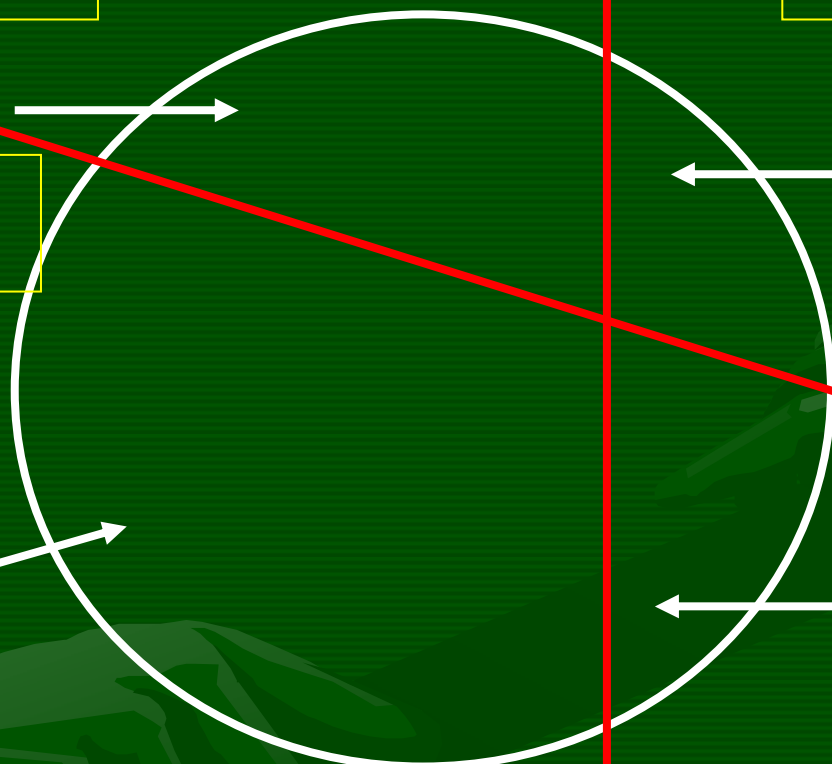
**INFORMAL  
SECTOR**

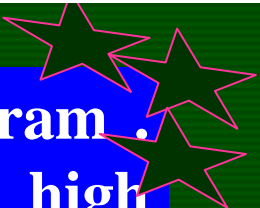
**GOVERNMENT  
AGENCIES**

**FARM-SAVED  
SEED**

**PRIVATE SEED  
COMPANIES**

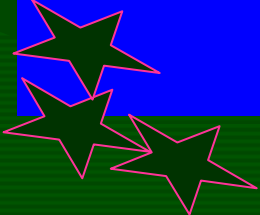
**LOCAL TRADING &  
EXCHANGE**





**These two systems are required in a viable seed program . The formal system generates new varieties, produces high quality seeds and distributes them to farmers whereas the informal sector covers the farmers requirements in a wide range of crop varieties and environments that the formal sector does not yet reach . The government which assisted by the private seed sector has taken care of the two systems .**

**In addition to the State Board for Seed Testing and Certification (SBSTC), the national seed program involves a number of agencies in agricultural research, seed multiplication and processing under the auspicious of the Ministry of Agricultural. These are as follow :**





**National Seed Committee (NSC) established in 1995 and chaired by the Minister of Agriculture, which decides seed policies and provides guidance in all matters concerning seed production, distribution, seed pricing policies and importation of seed .**



**National Committee for Registration and Release of Agricultural Varieties which is responsible of the approval of new varieties produced by Agricultural Research centers**



**Agricultural Research Centers which are responsible for introducing new varieties and producing and maintaining breeder and foundation seeds**



**Seed production company (currently three major ones in the country) are responsible for producing registered and certified seed, processing, treating and distributing seeds to farmers, one of these companies is a private shareholder company which distributes seeds under contract with the government**



**Seed Growers (about 1500) are producing seeds through contracts with seed production companies .**



**SBSTC is the only authorized organization responsible for seed quality control in the country. This includes testing of all imported and locally produced seed, field inspection of crops which are in the certification process, as well as lot identification and labeling, and isolation to ensure that certified seeds are not intermixing with other crop varieties and are free from infected plants.**

## NUMBER OF CROP VARIETIES RELEASED DURING 1992-2004

CROP	NO. VAR	CROP	NO. VAR	CROP	NO. VAR
WHEAT	34	PEANUT	1	CHICKPEA	3
BARLEY	19	COTTON	3	LENTIL	1
TRITICAL	1	SOYBEAN	2	TOBACCO	4
RICE	8	SUGAR	1	BROADBEAN	2
MAIZE	12	CAN. SAFFLOWE	1	VETCH	1
SORGHUM	3	RAPE	3	TOMATO	63
SESAMI	3	CUCUMBER	32		
SUNFLOWE	9	EGGPLANT	7		

CROP	NO.VAR	CROP	NO.VAR
PEPPER	5	MELON	2
CORNFLOWER	4	ONION	5
BEAN	3	CABBAGE	6
PEA	1	CARROT	3
WATERMELON	5	OKRA	1

The following table indicate the total national seed requirement in Iraq .

Crops	Seed Requirement (Ton )	Supply Sources
	Cereal	
Wheat	184000	Iraqi seed companies
Barley	103900	Iraqi seed companies
Tritical	4900	Iraqi seed companies
Rice	16000	Iraqi seed companies
Maize	3800	Iraqi seed companies
Sorghum	240	Local market and importation



Legumes		
Chickpea	860	Local market
Lentil	570	Local market
Oil crop		
Sunflower	150	importation
Canola	45	importation
Sesami	240	Local market
Peanut	150	Local market
Soybean	5	Local market and importation

Industrial crop		
Cotton	996	Iraqi seed companies
Sugar beet	18	importation
Sugar can	30	importation
Vegetable		
Potato	97000	Iraqi seed companies and importation
Onion	62	importation
tomato	51	Local market and 13importation
Eggplant	13	Local market and 13Importation
Pepper	4	Local market and importation
Cucumber	89	Local market and importation
Watermelon	96	Local market and importation



Melon	62	Local market and importation
Squash	23	Local market and importation
Bean	101	Local market and importation
Broad bean	4400	Local market and importation
Lupines	464	Local market and importation
Pea	30	Local market and importation
Lettuce	2	Local market and importation
Cornflower	1	Local market and importation
Okra	401	Local market and importation
Forage and pasture		
Alfalfa	396	Local market
clover	1270	Local market

# AGRICULTURAL POLICY

The agricultural sector is very important to Iraq for a number of reasons:

- 1-It supports a rural population of about 7 mill. People or about 27% of the total population.
- 2-It provides employment to about 20% of the labor forces in the country
- 3-It generates 29% of GDP.
- 4-Agriculture does have the capacity to add to the economic wealth and prosperity of the people of Iraq.

The Iraqi policy in the past has functioned under a command economy with a mixture of policies involving control of prices, outputs, and production, as well as significant input subsidies.

A new policy for the Agriculture sector should focus on : .1

- Rehabilitation of agricultural services.
- Rehabilitation of damaged infrastructure.
- Establishment of markets for agricultural inputs driven by the private sector.
- Removing all constraints on production and marketing of agricultural products.
- Removing price control over agricultural products.
- Promoting on-farm production efficiency and on farm water use efficiency.
- Analysis of factors that cause persistent low productivity and starting programs to increase productivity.
- Starting social programs in rural areas.
- Removing input subsidies gradually.

# Sources

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2-RECONSTRUCTION OF AGRICULTURE,FOOD SECURITY AND WATER RESOURCES MANAGEMENT IN IRAQ,2003,FAO AND WORLD BANK

3-AGRICULTURAL DEVELOPMENT INIRAQ,2002,MINISTRY OF AGRICULTURE

4-SEED STATUSE IN IRAQ,2003, VAN GASTEL,ICARDA

5-IRAQI YEAR BOOK,2002, IRAQI PLANING MINISTRY