

Kurdistan Regional Government Ministry of Agriculture







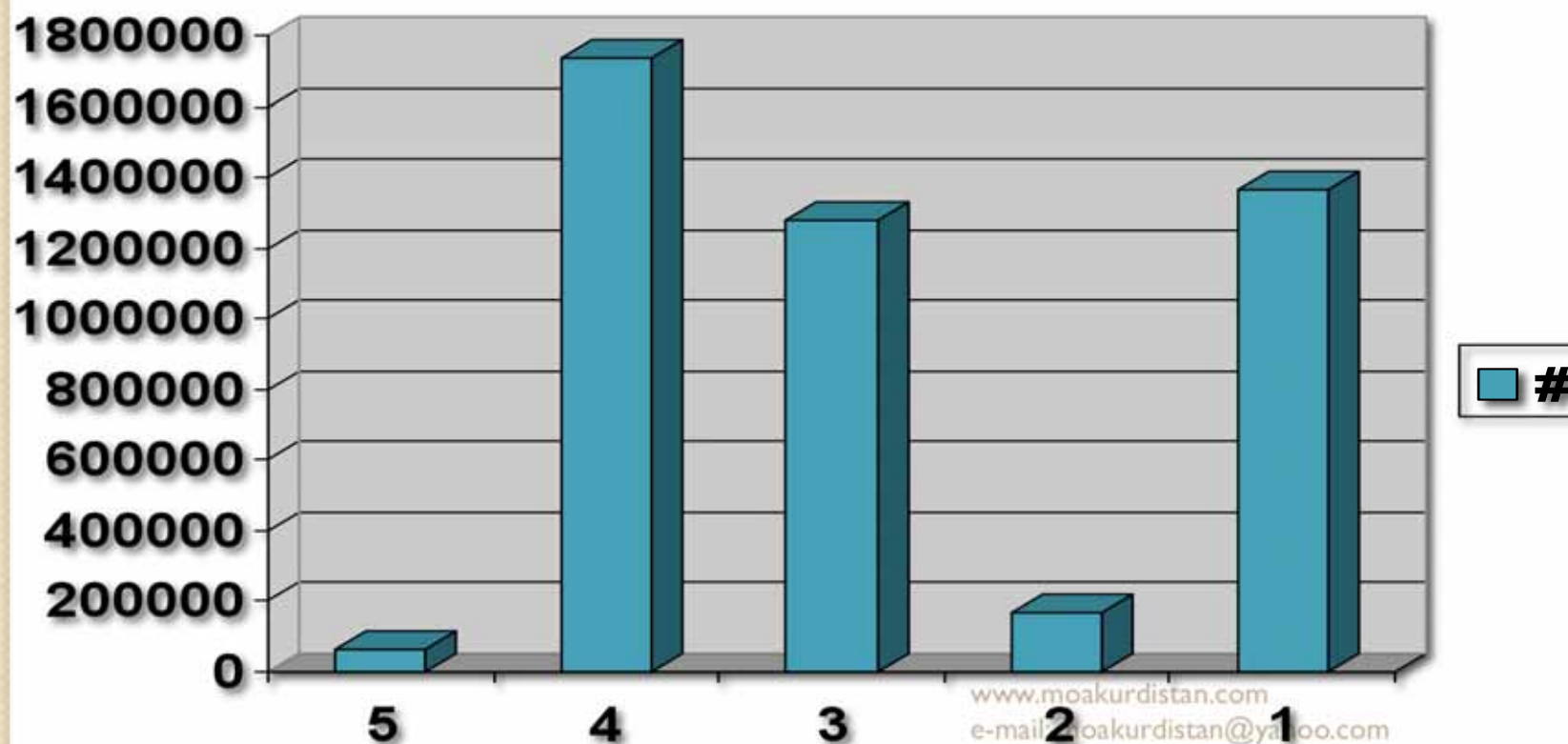


- The total population of Kurdistan Region is about 4,400 million.
- The kurdistan Region consist of Erbil, Dohuk and Sulaimania Governorates with Garmian Administration.

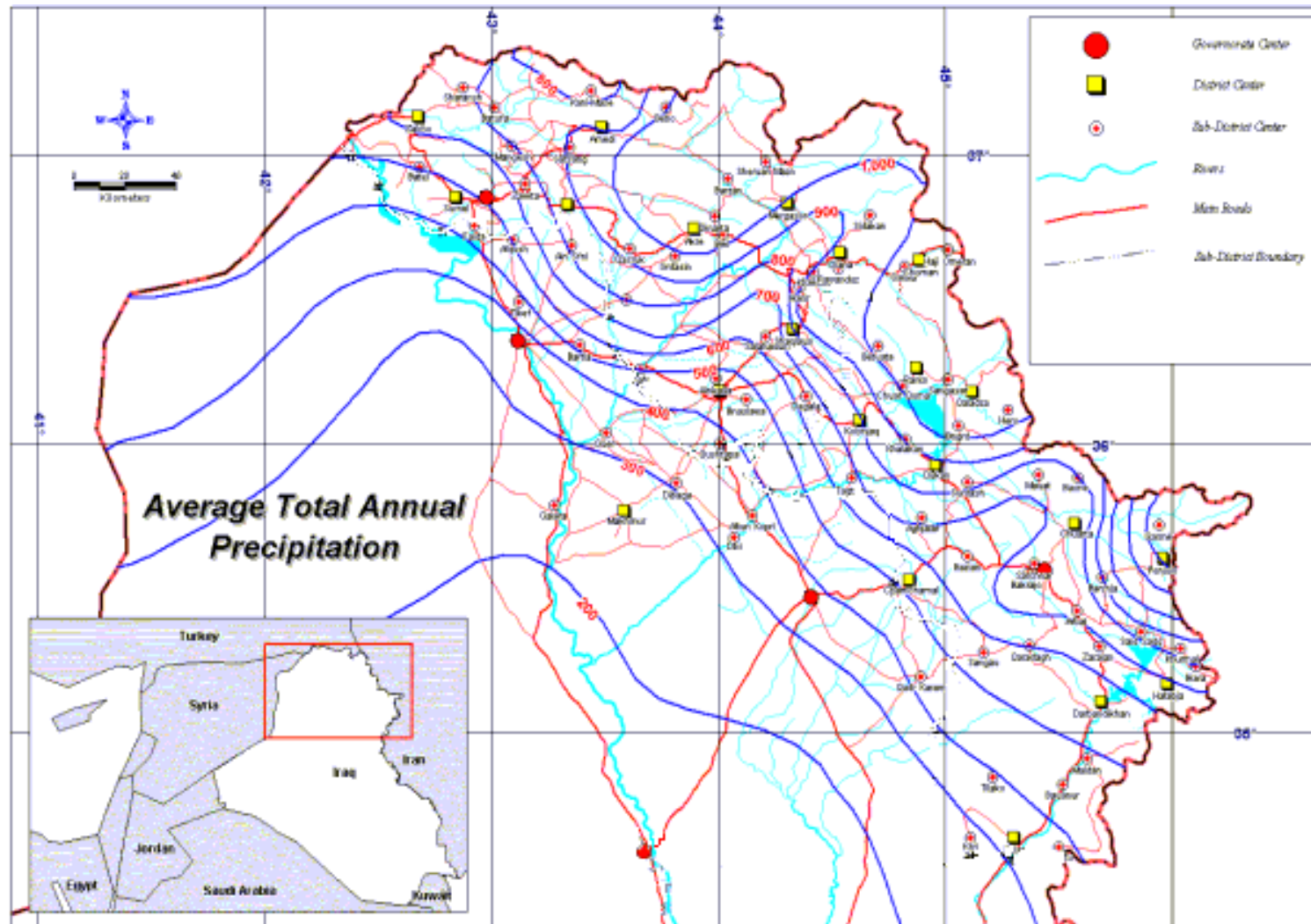
The Natural Resource Base

1- Land Resources

Total of arable land (hectares)				
1-Non irrigated	2- Irrigated	3-Forest	4-Range land	5- Orchard
1 368 388	167 406	1 280 267	1 739 000	62 230



2- Climate



- 
- Kurdistan Region characterized by “ Mediterranean “ type climate with cold and wet winter, and hot and dry summer except the mountain area characterized by mild summer.
 - The rainy season extends from October to end of April.
 - According to rainfall average , Kurdistan region is divided to three zones:
 - Guaranteed rainfall “secure zone” (more than 500 mm/year)
 - Semi guaranteed rainfall “semi secured zone” (350-500 mm/year)
 - Non guaranteed rainfall “non- secured zone” (less than 350 mm/year)

3- Water Resources

A- Surface water

Rivers	Length <i>Km</i>	Yearly water amount <i>M3</i>	% inside Kurdistan region	% out side Kurdistan region
Khaboor	160	2.20	42	58
Great zab	392	14.32	58	42
Small zab	400	7.07	64	36
River (awa spy)	230	0.70	100	00
Sirwan	384	5.86	41	59
total		30.15	59.8	40.2

B- Ground water

Governorate	The number of used wells for drinking water	The number of used wells for irrigation	The number of used wells for industries	The number of used wells for researches
Erbil	2 370	1 800	85	55
Dohuk	1 122	235	235	-
Sulaimania	12 022	1 524	-	-
Sub Total	15 514	3 559	320	55
total	19 448			



THE STATUS OF AGRICULTURE PRODUCTION AN OVERVIEW

I - Production of various crops (2008)

Crop	Production <i>Mt</i>
Wheat	300 000 (for year 2007)
Chickpea	18 972
Lentil	1 031
Sunflower	5 646

2- Summer vegetable production (2008)

Crop	Production <i>Mt</i>
Tomato	116 740
Onion	13 697
Okra	4 970
Eggplant	25 040
Cucumber	44 998
Green bean	1 804
Watermelon	51 160
Melon	6 321
Squash	8 168
Pepper	4 294

3- Winter vegetable production (2008)

Crop	Production Mt
Garlic	3 545
Carrot	29
Lettuce	2 458
Cauliflower	2 419
Cabbage	2 054
Table beet	2 569

4- Fruit production (2008)

Fruit	Production Mt
Grapes	9 004
Apple	11 092
Peach	17 711
Pomegranate	9 707
Pear	485
Apricot	2 245
Fig	1 386
Plum	1 292

5- Poultry production (2008)

Governorate	Type of projects		
	Broiler Project	Parent stock for hatching eggs	Parent stock for table eggs
	No. of projects	No. of projects	No. of projects
Erbil	357	8	1
Dohuk	89	1	0
Sulaimania	260	3	0
Garmian administration	107	0	0

Governorate	Type of projects		
	Layer projects for table egg	Hatcheries project	Slaughterhouse projects
	No. of projects	No. of projects	No. of projects
Erbil	8	13	4
Dohuk	0	2	2
Sulaimania	2	5	5
Garmian administration	0	0	0

6- Animal production (2008)

Governorate	Sheep	Goat	Cattle
Erbil	399 442	468 749	82 680
Dohuk	514 682	258 653	64 798
Sulaimania	1 281 195	530 753	225 313
Garmian administration	1 262 290	172 290	51 892
Total	3 457 609	1 430 445	424 683

7- Fish production (2008)

Governorate	Fish pounds	Fish project for producing fingers
Erbil	126	1
Dohuk	22	0
Sulaimania	54	0
Garmian administration	13	1
Total	215	2

8- Honey production (2008)

Governorate	No. of bee keepers	No. of beehives	Honey production Mt
Erbil	4 002	52 366	147
Dohuk	3 119	41 943	177
Sulaimania	6 657	72 326	289
Garmian administration	551	3 680	15
	14 329	170 315	628

9- No. of Agro metrological stations (2008)

Governorate	Agro metrological stations	Rain stations
Erbil	11	9
Dohuk	10	9
Sulaimania	7	9

10- Agricultural mechanization:

No. of Tractors(11,160)

No. of Harvesters(1,408)

About 90% of them are old

II - No. of Agricultural Research stations and extension centers (2008)

Governorate	Research stations	Extension centers
Erbil	3	12
Dohuk	4	9
Sulaimania	6	14
Garmian administration	1	3

I2- Capacity buildings activities for MOA's staff (2008)

Activity	No. of staff
Providing Scholarships for MOA's staff to get MSc. in agriculture in Australia	12
Providing Scholarships for MOA's staff to get MSc. in agriculture under KAHEAD project in Hawaii University/ USA	5
Training of MOA's staff in Murcia / Spain on Green houses	7
Training of MOA's staff on Quality Control management by Pegasus Institute in Italy	25
Training of MOA's staff under IAER project in Jordan , Syria and Egypt	275

Activity	No. of staff
Training of MOA's staff on Cottage industry through FAO and UNIDO in Jordan, Syria and Italy	15
Short term training course in Australia	23
Management training courses in Korea	22
Technician training on Agriculture survey in Japan	2
Training on Agro metrology and stations maintenance in Spain	6
Green houses training in Lebanon	25
Training on heating system in green houses in Italy	3
Training courses in planning in USA	2

Agriculture projects under Investment Law No.4 issued by Kurdistan Parliament

#	Project	Name of Company	Governorate	Nationality	Cost US \$
1.	Rasun project for grant parent with poultry farm	Vano group and Big Dutchman company	Erbil	Germany+ local company	7,700,000
2.	Cattle breeding and dairy project	Kaver Co.	Erbil	Turkey+ local company	14,190,166
3.	Dairy project with fodder system	IK Development	Erbil	UK	12,500,000
4.	Cold storage	Hiwa company	Erbil	Local company	2,000,000
5.	Harrir tomato past factory (re operation of factory)	Marshal Fund company	Erbil	USA	1,700,000

#	Project	Name of company	Governorate	Nationality	Cost US \$
6.	Olive orchard and olive oil factory	C & J company	Erbil	Indian + local company	3,491,478
7.	Animal food factory	Hibub Al Rafidain company	Erbil	Local company	15,000,000
8.	Agribusiness (Dairy operation + plant feed fodder)with cattle breeding	Al Nur company	(first stage) in Erbil the other stages in Sulaimania , Dohuk and Garmian	Egypt+ local company	130,000,000
9.	Poultry farm and egg production	Sain Company	Erbil	Local company	3,126,080
10.	Establishing of green houses and cold storage	Khalid Group	Dohuk	Local company	
11.	Fruit orchard and cold storage	Qara Fruit company	Sulaimania	Holland	4,000,000 €



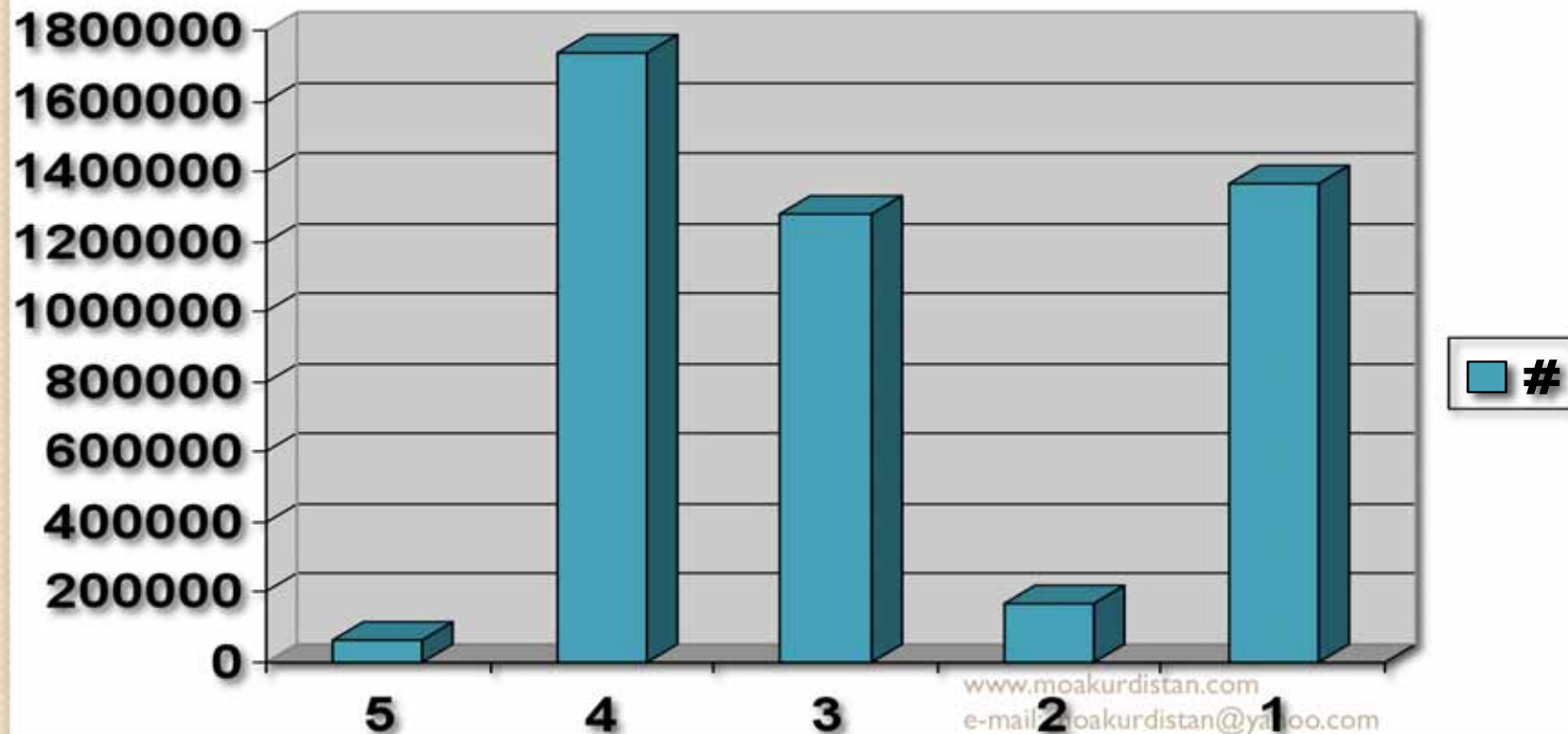
Strategic plan for agriculture sector in Kurdistan Region 2009-2013

**Ministry of Agriculture , Ministry of Water
Resources , Ministry of Industry , Ministry of
Trade , Ministry of Planning and Governorates**

Bases of strategic plan

1- Land Resources

Total of arable land (hectares)				
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Bases of strategic plan

2-Population of the region

- 1- In 2008 about 4,400,000
- 2 - Annual Increase 3%.
- 3- In 2013 about 5,000,000

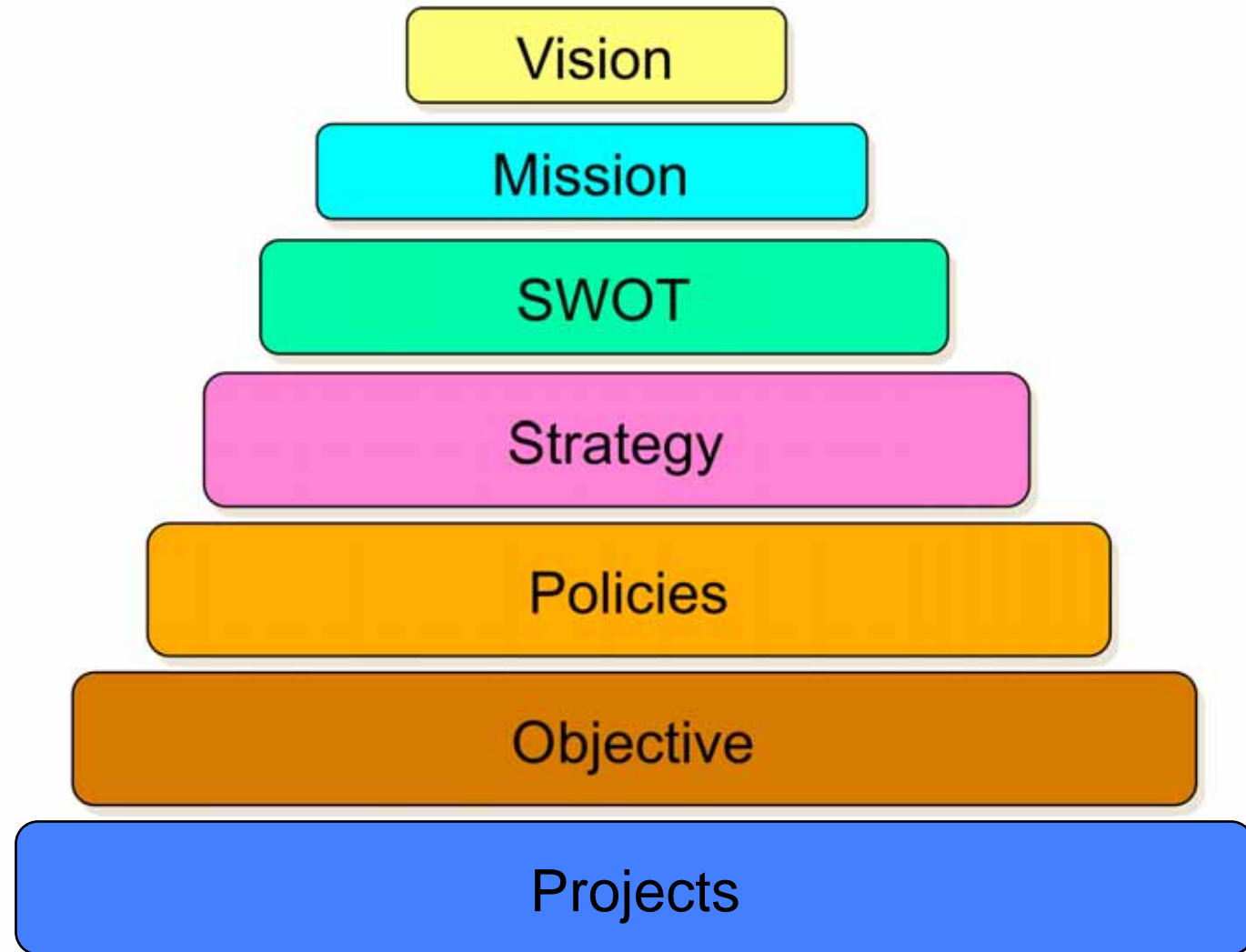
3-Individual need per capita

#	Crop or food	Unit	Ability in (2008)	Our plan for (2013)	USDA standard
1	wheat	Kg/year	68	100	73.7
2	Chicken meat	Kg/year	5.9	19.6	65
3	Red meat	Kg/year	22.7	40	
4	Fish meat	Kg/year	0.15	1.3	
5	Chick pea & lentil	Kg/year	7	12	

3-Individual need per capita

#	Crop or food	Unit	Ability in (2008)	Our plan for (2013)	USDA standard
6	Vegetable	Kg/year	54.6	132	106
7	Fruits	Kg/year	12.5	50	65
8	Table egg	Egg/year	75	129	180
9	Vegetable oil	Liter/year	---	15	15.4 WFP
10	Milk	Liter/year	45	80	176
11	Honey	Kg/year	0.14	0.24	----

Strategy Planning





VISION

The agriculture sector plays the leading role in the socio-economic development in Kurdistan Region.



MISSION

Self-sufficiency in food basket of the region through the best usage of natural resources, financial and human resources and also the maximum utilization of foreign expertise and advanced technology.



Internal & External environment Analysis

A- Strengths:

1. The Availability of vast areas of arable lands in the region.
2. Suitable climate for agricultural , a sufficient water resources for agriculture.
3. There is an adequate number of technical staff to work in this sector for the current phase.



b- Weaknesses:

1. Lack of experience of the staff in the related ministries and lack of skills and experiences of the farmers.
2. Lack of modern technology in agriculture sector.
3. Low development levels in agriculture sector and weakness of agricultural extension
4. Supporting other economic sectors more than agriculture sector.

C_ Opportunities:

- 1.The government supports agricultural sector and considering the year 2009 as year of agriculture in the region.
- 2.Desires of the investors to invest in agriculture sector.
- 3.Universities support to the special sectors of agriculture and irrigation.

D- Threats:


- The continuation of implementing water projects by the neighboring countries especially which cause reduction in the flowing water entering to Iraq as general and specially the region.
- Market is filled with the cheap priced agricultural production from neighboring countries.
- Natural disasters like drought , flood ...
- Decreasing the level of ground water.

Policies

1. Ministry of agriculture supports the agriculture production and this support will gradually be reduced as the progress achieved.
2. Encouragement of increasing the unit area of cultivation (large scale farm) instead of cultivation in small areas (small scale farm), and urge people to establish companies and specialized agricultural associations.
3. Keeping and maintaining the water resources and organizing the usage of water in the region and Iraq.
4. Securing the adequate water for agriculture in order to increase the irrigated areas.
5. Best Usage of water in agricultural sector by introducing new technology of irrigation..
6. Encouraging the foreign and local investors in agriculture sector through programs that have specific, measurable and reliable goals and the ability of these programs for evaluation.
7. Transition from using old agricultural methods to modern agricultural methods and using advanced technology.
8. Increasing the yield per unit area.

Policies

- 9- Adopting of modern methods of marketing agricultural productions.
- 10- Rebuilding of the agriculture infrastructure continuously to ensure the sustainable development of agriculture sector.
- 11- Creation of an adequate environment in the rural areas by creating agricultural interests to encourage the reverse migration of the farmers to the villages.
- 12- Maintaining and developing of water resources.
- 13- Treatment of sewage in order to be used for agriculture sector.
- 14- Human resource development .
- 15- Strengthening the relations between agriculture research and extension centers in ministry of agriculture with ministry of higher education & scientific research.
- 16- Reviewing the methods of production of plant and animal and introducing of new varieties for improvement of production and increase its value .
- 17- Preparedness for natural disasters such as drought, floods and agricultural pests etc.



18-Using the Surface water and reducing the usage of ground water.

19-Usage of modern methods in soil management and protection from drift and erosion.

20- conducting training courses to MOA's staff and farmers continuously and providing them with new technology.

Base line 2008---Target 2013

1- Plant production

Crop	Base line 2008 M ton	Target2013 /M ton
Wheat	300 000*	500 000
Chickpeas	18 972	50 000
Lentil	1 031	10 000
Vegetable	302 000	660 000
Fruits	53 000	250 000
Honey of bee	628	1 200

* The data is for the of 2007

Base line 2008---Target 2013

2- Vegetable oil:

Crop	Base line 2008 M ton	Target2013 M ton	Oil 20%-30% M ton	Feed 70%-80%/ M ton
Sunflower	5 646	25 000	7 500	17 500
Maize	-	200000	60 000	140 000
soybean	-	9 000	2 700	6 300
Olive oil	-	24 000	4 800	19 200
Total	5 646	258 000	75 000	183 000

Base line 2008---Target 2013

3-Animal production :

Production	Base line 2008	Target2013
Red meat	100 000/M ton	200 000/M ton
Chicken meat	26 000/M ton	98 000/M ton
Table Egg	330 million Eggs	646 million Eggs
Fish meat	800 /M ton	6 700 /M ton
milk	200 million liters	400 million liters

Base line 2008---Target 2013

4-Irrigation

Subject	Base line 2008	Target 2013
Irrigated area	167 406 (ha)	402 250 (ha)
Small irrigation project	1 680 (projects)	2 330 (projects)
Big irrigation project	3 (projects)	18 (projects)
Pond	33	533
Small dams	12 under implementation	31
Big dams	3 dams with the capacity of 10billion and 500 million cubic meter of water	11 dams with the capacity of 34 billion and 500 million cubic meters of water

Base line 2008---Target 2013

5- Storing capacity :

subject	Base line 2008 M ton	Target2013 M ton
Silo	(5) Silos with total capacity of (220 000) M tons	(23) Silos with total capacity of (1 030 000)M tons
Cold stores	(4 200) M tons and (9 000) M ton under implementation	(93 200) M tons

6- Agro-industry projects

subject	Base line 2008 M ton	Target2013 M ton
Agro industry factories	122 small factories	122 small factories and 30 medium size factories

The main risks facing the strategic objectives:

1. If the required budget is not available in due time the plan's objective will be affected and there will be wasting of time.
2. Construction of Dams and water barriers on the rivers flowing into Kurdistan region by the neighboring countries will cause the shortage of water resources of the region.
3. Due to the current financial systems, the contracts can't be made with the original companies having high quality of technology, equipments and machines, this will consequently lead to have a poor quality of required technology; machines and waste of huge amount of money which affect the agriculture sector negatively .

1- PROJECTS OF MINISTRY OF GRICULTURE

2009-2013

Projects	2009	2010	2011	2012	2013
Ensuring certified seeds	30 000 (M ton)	30 000 (M ton)	40 000 (M ton)	50 000 (M ton)	50 000 (M ton)
Building seed cleaning factory	0	0	0	2	2
Ensuring of sprinkler irrigation systems	2 000	2 000	2 000	1 000	2 000
Ensuring solar cells for farmers wells	400	400	400	400	400
Procurement of 4 Helicopters	4	0	0	0	0
Ensuring plastic houses	1 000	1 000	2 000	2 000	2 000
Setting up 4 nurseries for vegetables	4	0	0	0	0

Projects	2009	2010	2011	2012	2013
Building a bank for seeds and cereal & conducting researches on the cereal.	1	0	0	0	0
Installation of animal research center	1	0	0	0	0
Building plant protection labs in Erbil, Sulaimania & Dohuk.	3	0	0	0	0
Cultivation of olive by farmers	(2500) ha				
Urging the private sector to cultivate olive tree for oil extraction	(30000- 35000) ha				
Establishing an artificial insemination center in Erbil	1	0	0	0	0
Installation of fodder analysis lab	0	3	0	0	0
Drip Irrigation systems	2 000	2 100	2 000	1 500	1 500

Projects	2009	2010	2011	2012	2013
Establishing of the central parks	3		0	0	0
Improving of the natural pastures	3 250 (ha)	4 500 (ha)	3 750 (ha)	3 750 (ha)	3 750 (ha)
construction of Laboratory for fish diseases	1	0	0	0	0
Providing Portable hatchery	0	1	0	0	0
Installation of agro-meteorology stations	4	0	0	0	0

Projects	2009	2010	2011	2012	2013
Supporting farmers for procurement of tractors	400	1 000	1 000	1 000	2 000
Supporting farmers for procurement of harvesters	100	200	200	200	0
Supporting farmers for procurement of orchard tractors	100	130	0	0	0

Projects	2009	2010	2011	2012	2013
Preparing Agricultural Production map					
Procurement of Fertilizer					
Procurement of vaccines and drugs					
Procurement of pesticides					
Development of Potato project					
Development of Olive project					
Introducing new varieties of seed and seedlings					
Avian flu campaigns					
Supporting cultivation of sunflower, maize and soybean					
Supporting cultivation of lentils and chickpeas					

Projects	2009	2010	2011	2012	2013
Bee disease campaign					
Supporting fish breeding projects					
Breeding fish by enclosed system					
Operation of portable and fixed seed cleaners					
Insuring spare parts for agro-metrological stations					
Agricultural survey activities					
Operating of agricultural bank					
Conducting training for MOA's staff in all agriculture activities inside the region and abroad					
Conducting extension activities for the farmers in the field					
Conducting research in research centers					



2- Projects of Ministry of water Resources Regarding the agriculture sector (2009-2013)

Projects	2009	2010	2011	2012	2013
Building 650 small irrigation projects					
Building 5 big irrigation projects					
Building 10 big irrigation projects by using pumps					
Maintenance of big irrigation projects					
Cleaning big irrigation projects					
Cleaning 4850 small irrigation projects					
Building 500 ponds					
Insuring 300,000m plastic pipes					
Insuring heavy machinery for digging new wells					

Projects	2009	2010	2011	2012	2013
Building (1675) water reservoirs					
Building 19 small & medium dams					
Conducting researches in all flat areas					
Building 8 big dams					

3- Projects of Ministry of Trade Regarding the agriculture sector 2009-2013

Projects	2009	2010	2011	2012	2013
Construction of 18 silos with total capacity (770 000) M tons					
Construction 40 cold stores With total capacity (80 000) M tons					

4- Projects of ministry of Industry Regarding the agriculture sector 2009-2013

Projects	2009	2010	2011	2012	2013
Installation of 4 dairy projects					
Setting up 6 factories for tanning & processing of raw leather					
Setting up 5 factories for fruit processing					
Setting up 6 factories of isolating, packaging & canning fruits					
Setting up 3 factories of isolating, packaging & canning vegetable					
Setting up 2 factories for vegetable processing					
Setting up one factory for fruit jam and juice					
Construction 3 factories for vegetable oil					

Grand total of agriculture sector budget 2009-2013 for the ministries (Million USD)

Ministry	2009	2010	2011	2012	2013	Total
Agriculture	568,62	560,173	650,104	621,571	654,404	3054,872
Water resources	133,725	1300,625	1538,675	1796,225	2254,775	7024,025
Trade	88	55,8	99	55	60	357,8
Industry	8	17	9,6	0	0	34,6
Grand total	798,345	1933,598	2297,379	2472,796	2969,179	10471,297



THANKS *for* Listening

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