



Republic Of Turkey
Ministry of Food, Agriculture and
Livestock
General Directorate of Agrarian Reform



LAND CONSOLIDATION IN TURKEY

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and Land Consolidation in EU countries, 21-24 April 2013, Skopje, Macedonia

Session 5 Tuesday 23 April 2013
Experience from land consolidation processes: stakeholder involvement

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Turkey Agriculture Land Structure

- **3,1 million** agricultural holdings
- Average land is **6** hectares
- **65%** of them have less than **5** hectares
- Small fragmented (**6-7 part**) and unshaped land parcels
- Ongoing fragmentation by reason of inheritance law and others
- Problem for direct access road and water
- Empty land parcels and not farm anymore

Up to now LC in Turkey



Up to the present Turkey Land consolidation

▶ 1961-2002	450.000 hectar
▶ 2002-2012.....	2.493.000 hectar
▶ Total.....	2.943.000 hectar
▶ 2013 ongoing.....	2.000.000 hectar
3 ▶ 2013-2017 aim.....	5.000.000 hectar

IMPLEMENTATION OF LAND CONSOLIDATION AREA



Why land consolidation? (requirement LC)



LAND STRUCTURE Small fragmented unshaped cadastre parcels




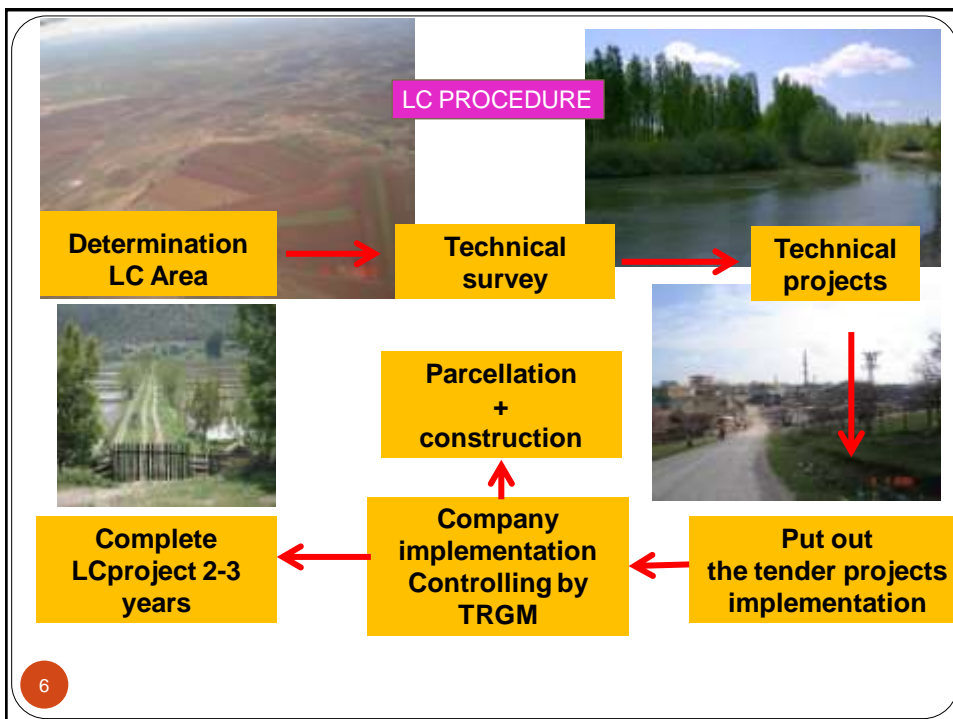
PUBLIC INVESTMENTS
Water Canals, roads



SYNCHRONISE WITH WATER INVESTMENT
ECONOMIES WITH INVESTMENT COAST AND ACCELERATE
FARMERS INCOME GROWTH

4 Using Satellite image

 ESKİŞEHİR BEYAZALTIN village Land Consolidation + Irrigation Project 16 well - 120 farmers – 1000 hectare			
		Before Land Consolidation	After LC
1	WHEAT YIELD	3 – 4ton /ha	7-8 ton/ha
3	SUGARBEET	40-50 ton/ha (open canal)	90 ton/ha (spring)
4	ONION	3 ton	5 ton
5	POTATO	2.5 -3 ton	4 -4.5 ton
6	LAND SALES PRICE (\$/ha)	2200	7250
7	LAND RENT (\$/ha)	170	660
8	ACCESS IRRIGATION WATER	% 70	% 100
9	ACCESS ROAD	%10	% 100
10	IRRIGATION LABOUR COST	1 labour for fix system ,removal, transport to parcel	No labour
11	FUEL SAVINGS		% 20
12	BOUNDRY DISPUTE	% 40	% 0
	SUGARBEET IRRIGATION (1 Ha)	<ul style="list-style-type: none"> • 35-40 pistol • 9 hour • 9-10 water • Add 5 lt/ha diesel 	<ul style="list-style-type: none"> • 60 pistol • 6 hour • 8 water • Uniform irrigation
13	Energy Savings	100 thousand (\$)	60 thousand (\$)
14	Water Savings		% 59



New approaches in LC

REGIONAL LC NOT ONLY ONE VILLAGE LC

Handle basin all of needs

MULTI PURPOSE LC

LC aims not only agriculture land shape and size improvement but also restructure of rural infrastructure and protection landscape, nature, spice

Having specified goal in the project

- Parcel shape and size
- Improvement of riverbed
- Field road, in village road and villages access road the others tourism road e.g.
- Drainage problem and solution underground and on the surface drainage
- infrastructures water, Energy, road, railway, airport ...
- Physical improvement cross field, levelling, collect storage stone rock
- Historical and conservation area determination in the agriculre area
- As drinking water pipe line, sewerage social investment service



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with LC not only arrangement of parcels but also rural infrastructre

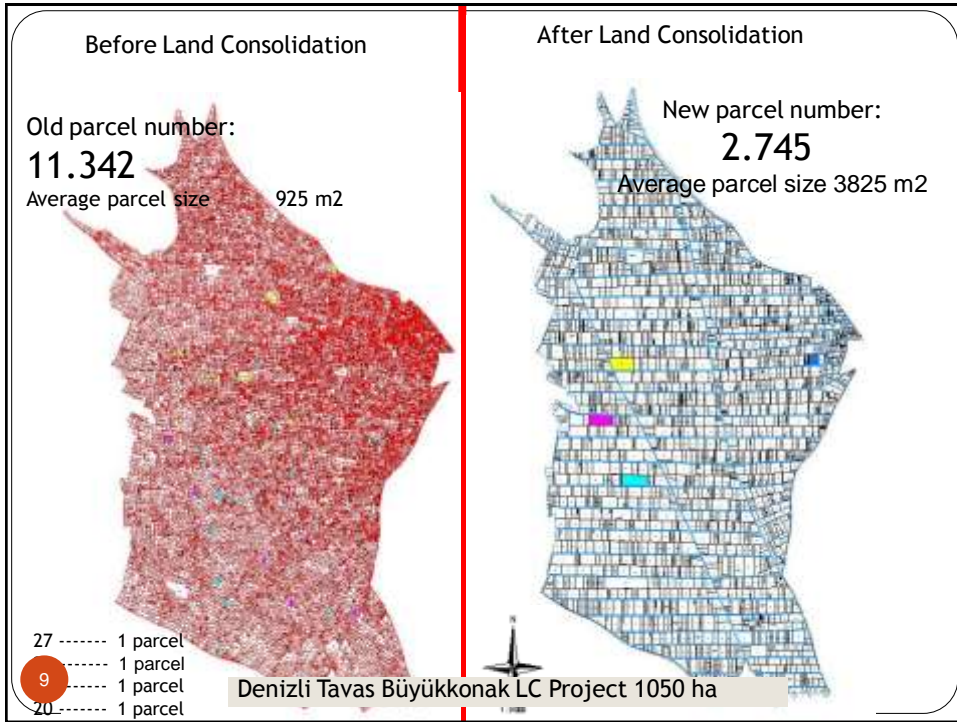
1. Expropration, different infrastructure types (water canal, pipeline, road, railway..)

2. Rehabilitation (drainage, storage stone...)

3. Agriculture purpose and nature (greenhouse, viticulture...)



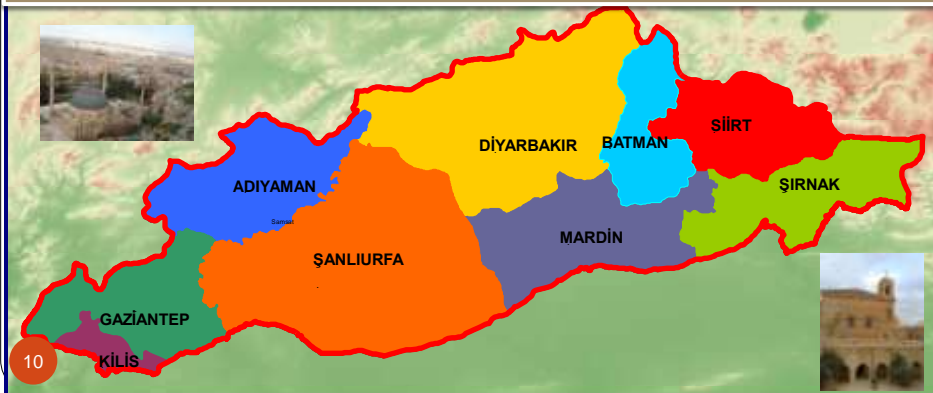
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SOUTHEASTERN ANATOLIA PROJECT

7 800 000 ha Project area is 10 % of all country's land.

- 13 large scale irrigation and 79 LC project.
- 22 Dam 19 HEPP (7 500 Mw, 27 387 Gwh/Year)
- 1 058 000 ha Irrigation area
- 2.194.000 ha Land Consolidation area



On going GAP LC 2013

Characteristics	Program 2008-2012	Fulfillment
Settlements (Village)	1.835	
Population	1.061.000	
Project Area (ha)	2.194.000	
Investment coast (\$)	575.000	
Implementations		
Land consolidation(ha)	2.194.000	1.755.000
Sewerage (village number)	905	1.166
Drinking water network(km)	70	107.57
Field road (km)	43.606	15000
Land improvement + drainage(km) 23.000 ha	9000	4.320
Addition services		
Soil mapping (ha)	2.161.000	1.888.238
Ortophoto (ha)	2.308.182	2.308.182

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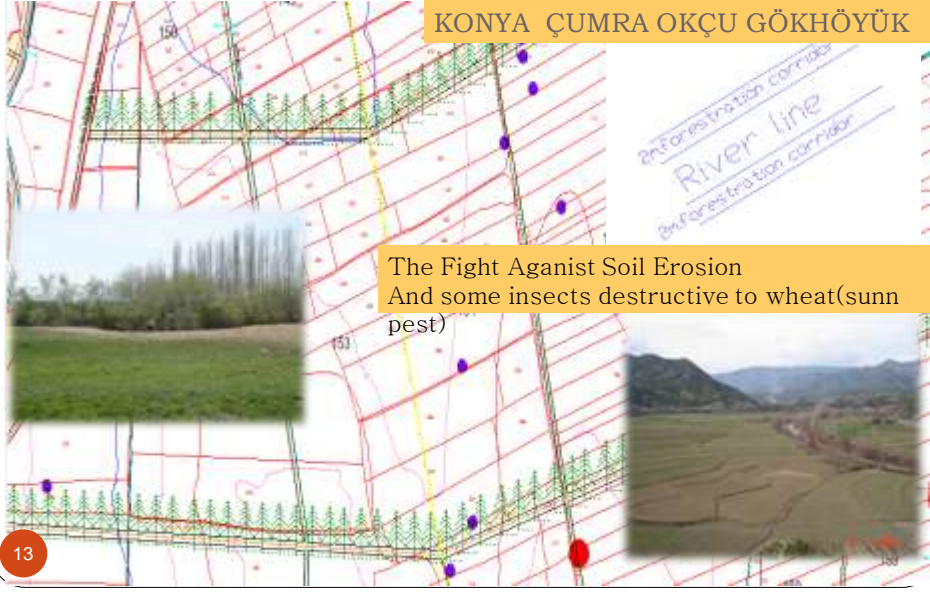
Sewerage Planning



waste water pipeline 3100 KM.
septic tank number 1166

FORESTATION CORRIDOR NEAR THE FIELD ROAD AND RIVER LINE

KONYA ÇUMRA OKÇU GÖKHÖYÜK



The Fight Against Soil Erosion
And some insects destructive to wheat (sun pest)

Legal Framework

Agrarian Reform Act For Land Arrangements In Irrigation Areas, no. 3083 (1984)

•Soil Conservation and Land Use no.5403 (2007)

Relating institutions

Ministry of Water and Forestry, Ministry of Transport, Ministry of Interior, Ministry of Energy, Ministry of Culture Tourism

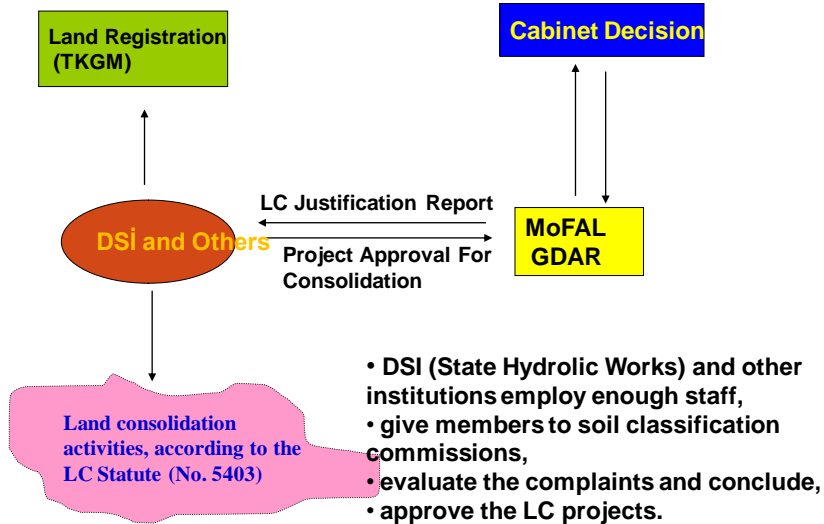
•General Directorate of Hydraulic Works, Land Cadastre and Registry, Highways, Forestry, Municipality, Railway, State Airports, Province administration e.g.

Agrarian Reform and the other institution make a protocol for LC



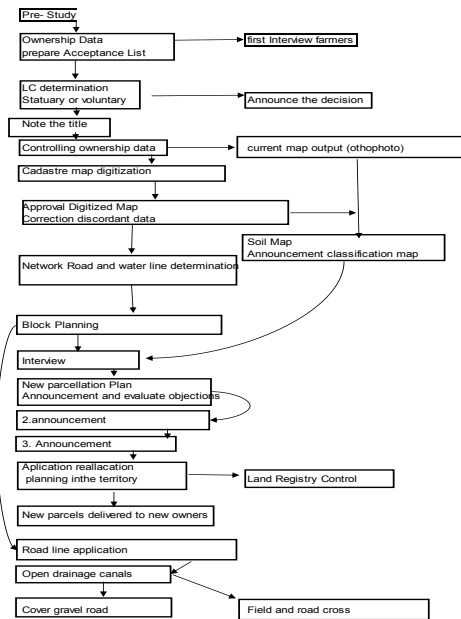
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ACTION FRAMEWORK OF “PRIVATE LAND CONSOLIDATION”



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Land Consolidation Phases



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- Local Managements
Governerships
Municipalities
Villages governing
Cooperatives
Unions

Ministry of Transport

Protection of Cultural and Natural Heritage

Investigation - Planning
and Data

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[illegible]

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Before the lc interview with farmers etut phase



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Interview with farmers for taking choice ongoing LC proje

FARMERS INVOLVEMENT



Publicity classification map for 15 days

Objection assessment

Publicity Parcellation map 15 days three times

Objection assessment



- grading commision is five persons
- 1. president,
- 2. engineer from GDAR,
- 3. engineer from GDAR,
- 4. multicpity president or village head man,
- 5. one is select landowners by election from among landowners in the project area.

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Problems

- MONITORING AND ASSESSMENT
- AWARENESS LC IN FARMERS AND OTHER AGENCIES
- UNORGANIZED LC, REQUIREMENT AN ASSOCIATION FOR LC
- LAND BANKING AND INHERITANCE LAW
- AWARENESS ENVIRONMENT
- COOPERATE WITH GENERAL DIRECTORATE STATE HYDROLIC WORK



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We need soil and water security now and future !



Thanks for your attention

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