



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



LAND CONSOLIDATION IMPLEMENTATION STUDIES IN TURKEY

FATMA TÜZ ZEHRA GÜLSEVER
Geodesy and Photogrammetry Engineer

Bakü, 27 February 2018

Contents

1. Introduction
2. Agricultural Structure in Turkey
3. Causes requiring land consolidation
4. Historical process land consolidation in Turkey
5. Description of land consolidation
6. Legal framework on Land Consolidation and Implementation Stage
7. Practices Expropriation Aim Land Consolidation
Gölbaşı LC Project and Amasya Merzifon Example
8. Evaluation

About TURKEY



Capital city: Ankara
Population: 78 million
7 Geographic Regions
81 Provinces
957 Districts





Agricultural Structure In Turkey

Total Area: 78 million hectares

Agricultural Area: 24 million hectares

Meadow+Grass 14.5 million hectares

Irrigable area: 8.5 million hectares

Consolidated Area: 5.1 million hectares

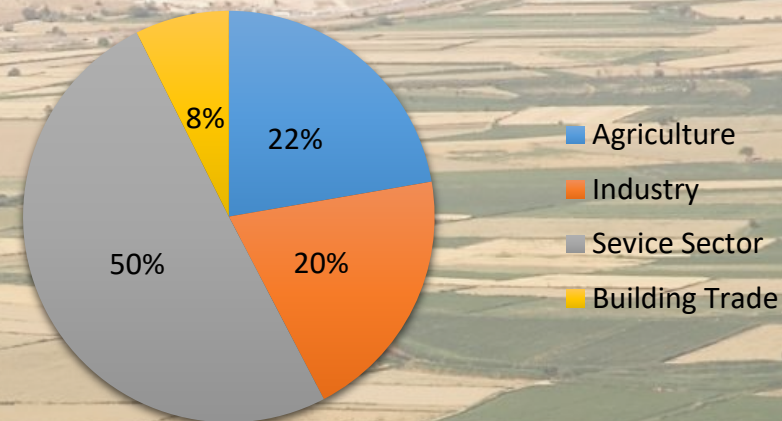
Farmer Number : 2,206,874

Cultivated Land : 14,927,689 hectares

Fragmentation : 11 Plot / Farmer

The average enterprises size: 6.8 hectares

The share of employment in economic sector



Years	Total Population (million)	Rural Population (%)	Agricultural enterprises (Million)	Average enterprises Size (hectares)
1950	20.8	75	2.2	10
1991	56.5	41	3.9	5.9
2001	62.0	36	3.0	6.1
2011	74.7	23	3.1	6.8

Land Consolidation Requirement

- Agricultural Lands are scattered, little therefore inability to use land efficiently and economically
- The empty plots
- Soil erosion, floods
- Irrigation needs
- Drainage
- Village settlement infrastructure
- Field road
- Land levelling
- Stoniness
- Public investment
- Pruductivity
- Lobour and fuel savings
- Meadow arrengaments



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 scape 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



with LC not only arrangement of parcels but also rural infrastructure

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

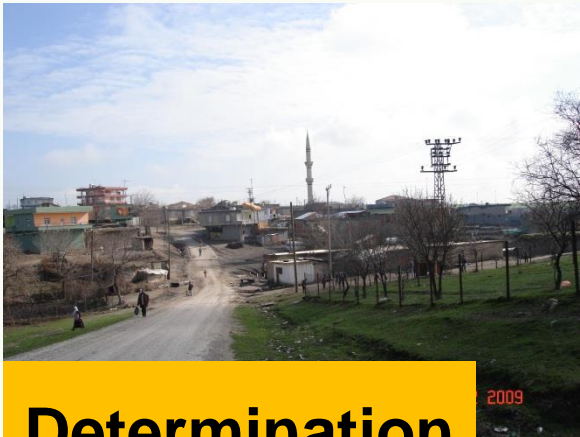
2. Rehabilitation (drainage, storage stone...)

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

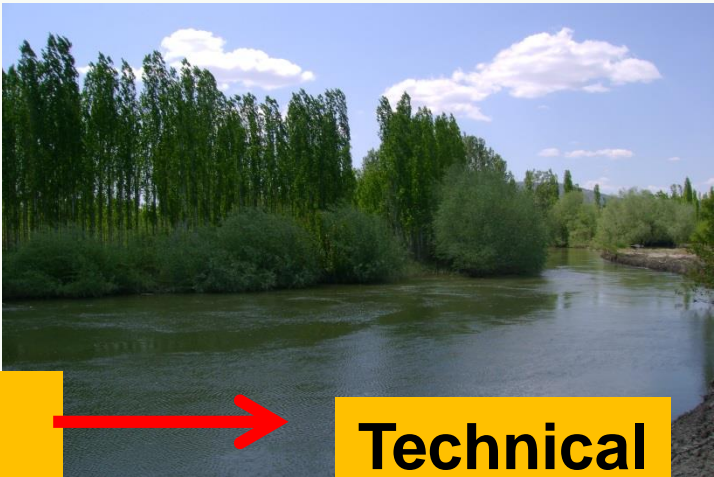


- Irrigation investments synchronization with LC (decrease investment cost and LC a tool acceleration investment)
- Physical infrastructure (parcellation, field road and field crossing , ecologic corridors, determination historical and protected area, village interroad, such as sewerage and drinking water pipeline social infrastructure , top drainage and covered drainage implemntations)
- Land Consolidation: To prevent the disintegration and disintegration of arable land by natural and artificial effects and to create new parcels which are more functional in economic, ecological and social aspects by combining more than one piece of land with natural characteristics, use integrity and ownership rights in fragmented lands, to determine the usage patterns and to provide land development services (regulation 5403, article 4)

LC PROCEDURE



**Determination
LC Area**



**Technical
survey**

**Technical
projects**



**Complete
LCproject 2-3
years**

**Parcellation
+
construction**



**Company
implementation
Controlling by
TRGM**

**Put out
the tender
projects
implementation**

Phases LC



Prepare Land consolidation project



Voluntary - Statutory LC
Acceptance List Study

Approval LC: yes
Landowners 2/3 and these
are own 1/2 total land in the
LC project area

Determination Project contactor



<p>Road and water system construction</p>	<p>Reallocation .Old parcel list .New parcellation plan (3time announcement) .Approval plan .Cadastré and Title</p>
---	--



Historical process land consolidation in Turkey

1961-1973 The General Directorate Soil and Water 28 348 hectare area consolidated with 46 projects

1984- 2005 GDRS 380 577 hectares area consolidated with land development projects with 465 projects

2005 to now Special Provincial Administrations LC with 6 projects

2006 GAP - “Land Consolidation Research Commission”

2007 By Law Number **5578** coming into force(5403 Number Soil Conservation and Land Use Law) (Appendix 3 par: 31.01.2007 -5578 / 4 Sec.) (Article 17) **DSI LC** with 37 projects and Baklan Municipality 1 Project (call private LC)

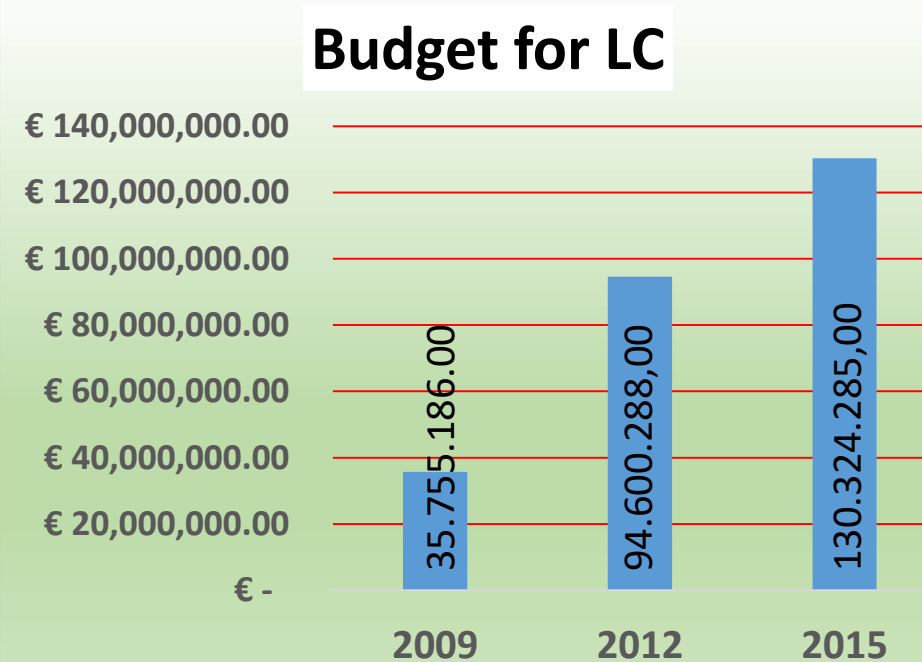
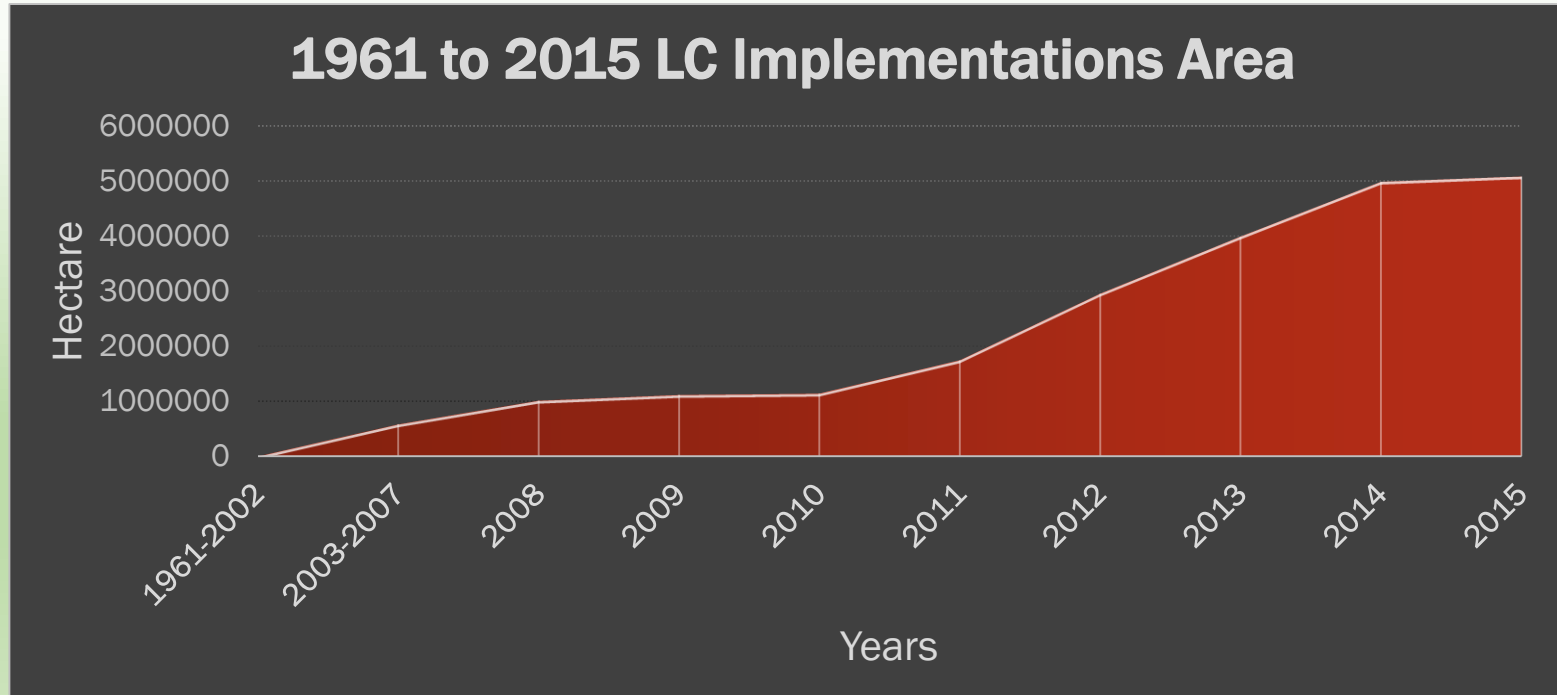
1984- 2010 GDAR (12 project ARİP) 166 Project 2 838 298 hectares area LC was contracted according to the **3083 no law**.

2011-2015 GDAR 2 142 049 hectares area with 135 Projects LC was contracted according to the **3083 no law**.

Land Consolidation Implementation Area and the Allocated Funding from Treasury in Turkey

After the 2009

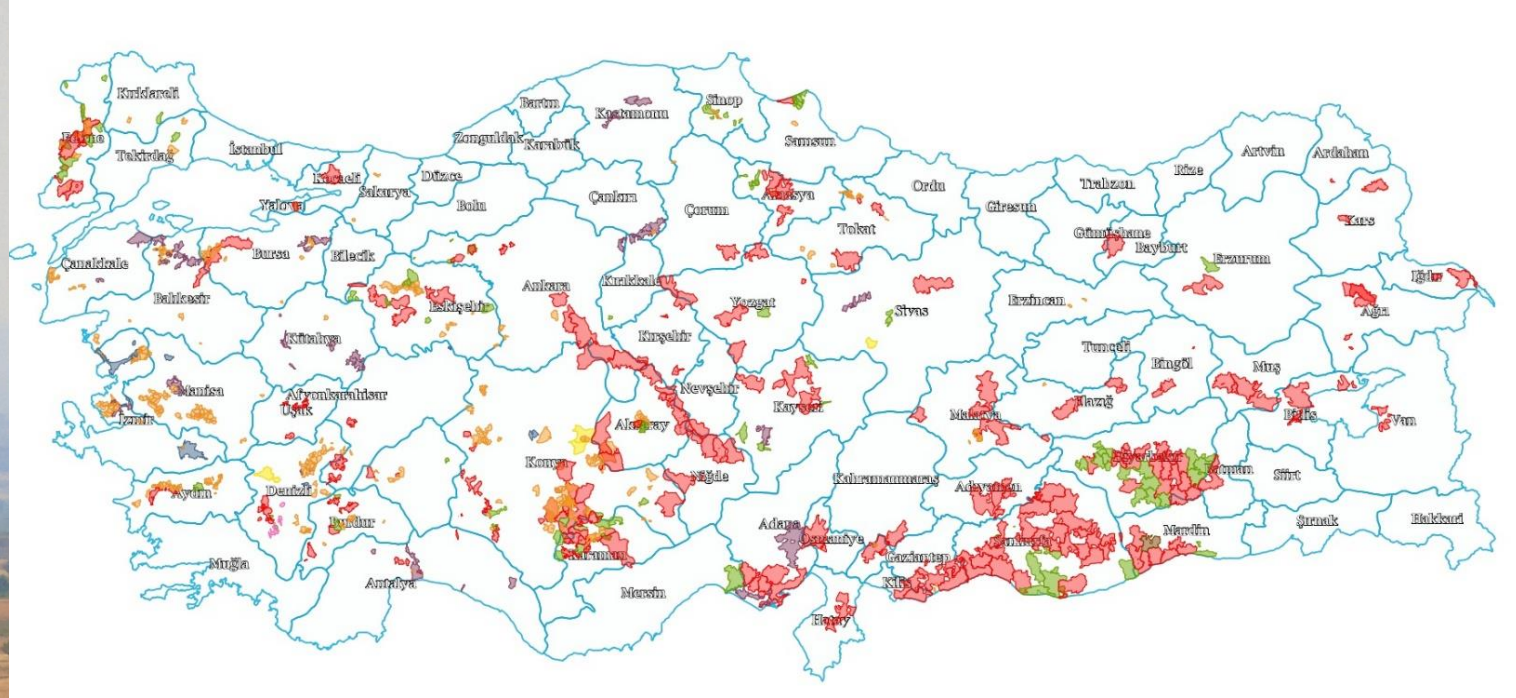
- Basin based land consolidation projects has started. (A Project area 20.000-30.000 hectares)
- Multi purpose land consolidation has started (ecology, hydrology, historical places, public investment, state investments etc.)
- Project area has been improved to 1 milliyon Ha per year
- Total budget per year has improved.



Land Consolidation Projects Distribution in TURKEY

At the beginning to present
LC implementation area in TURKEY

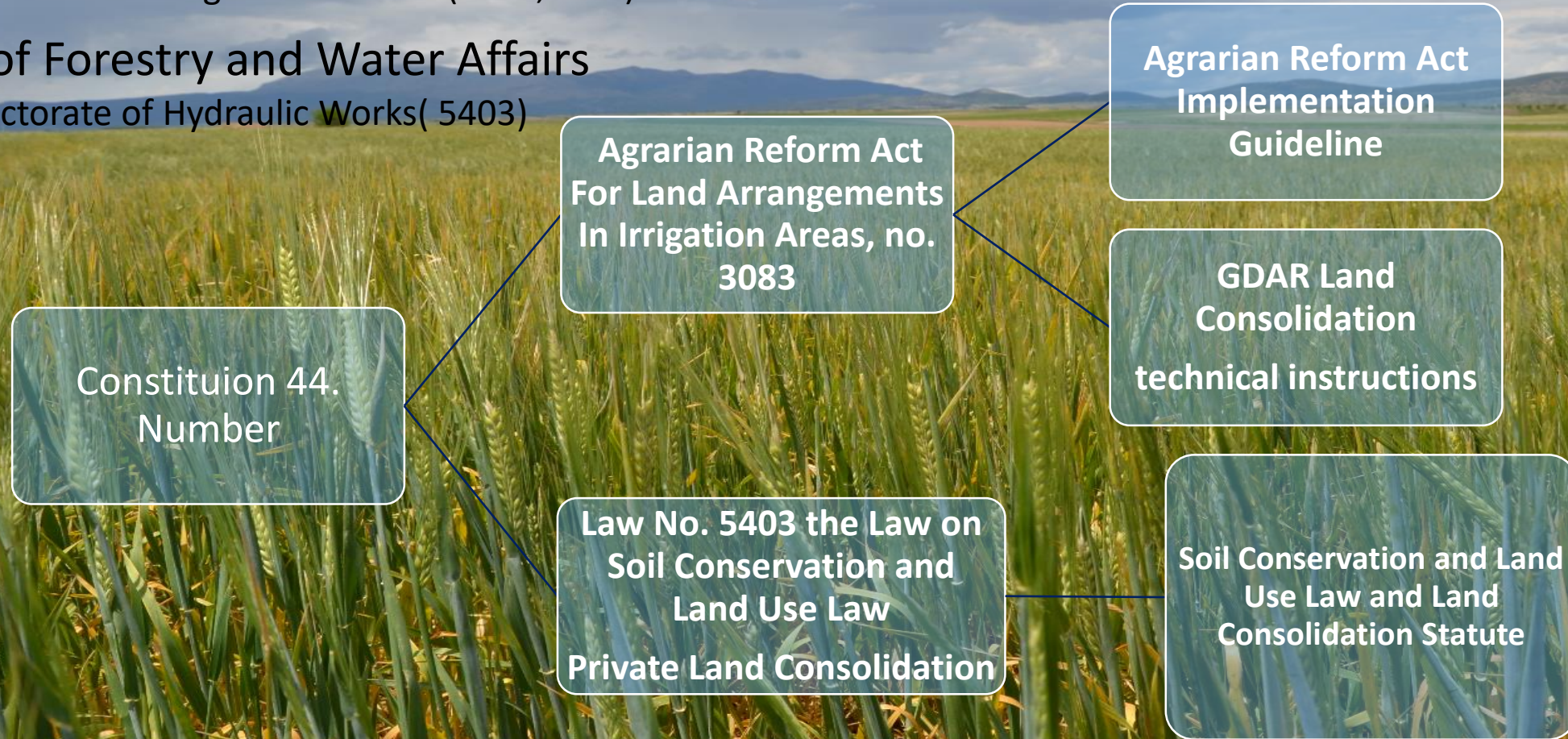
- ▶ 1961-2005540.000 hectar
- ▶ 2005-2015.....4.560.000 hectar
- ▶ Total.....5.10.000 hectar
- ▶ 2016 ongoing.....1.850.000 hectar
- ▶ 2023 aim..... .14.000.000 hectar



Current Law Legislation At Land Consolidation

- Ministry of Food Agriculture and Livestock
General Directorate Agrarian Reform (3083,5403)

Ministry of Forestry and Water Affairs
General Directorate of Hydraulic Works(5403)



3083 Law No. LC Implementation Phases

- Demand
- Pre study
- Evaluation
- Implementation Area

Council of Ministers
Decision

3083 Implementation Area

- Implementation Area land commentary
- LC Study Evaluation
- LC General Directorate Confirmation
- Announcement
- Consent from Landowners (voluntary or obligatory)

- Project
- Approximate Cost
- Offer Investment Program
- Bidding
- Delivery place the contractor

Implementation Stage

Land and Agrarian Reform application areas are the areas published at Official Gazette after being determined with the General Directorate Agrarian Reform's offer and the Cabinet decision. This decision is common weal.

Voluntary land consolidation

Statutory land consolidation

To 5403 law number regulation

Determination and finalization of land consolidation areas

ARTICLE 6 - (1) in order to establish viable enterprises in the agricultural sector and to ensure the rational use of agricultural land to form the parcel sizes at optimum metric, re-arrangement of existing parcel pattern according to the requirements of inter-parcel transportation, modern irrigation and agricultural mechanization techniques, and to do in-field development services if necessary; on the affirmation of those who have more than half of the land and who constitute more than half the number of the owners, on the request of the Ministry or the boards observing the public interest irrespective of demand, the project site for land consolidation is determined with the decision of the Council of Ministers.

(2) This decision of the Council of Ministers shall be considered as the decision of public interest in terms of land consolidation and other operations. After the announcement of this decision in the Official Gazette, the related head of village or municipality and the district's largest civil administration authority shall be notified by specifying the boundaries of the area of consolidation. The decision is announced with the usual tools in place.

KARAR BELGESİ (Muvafakatname)

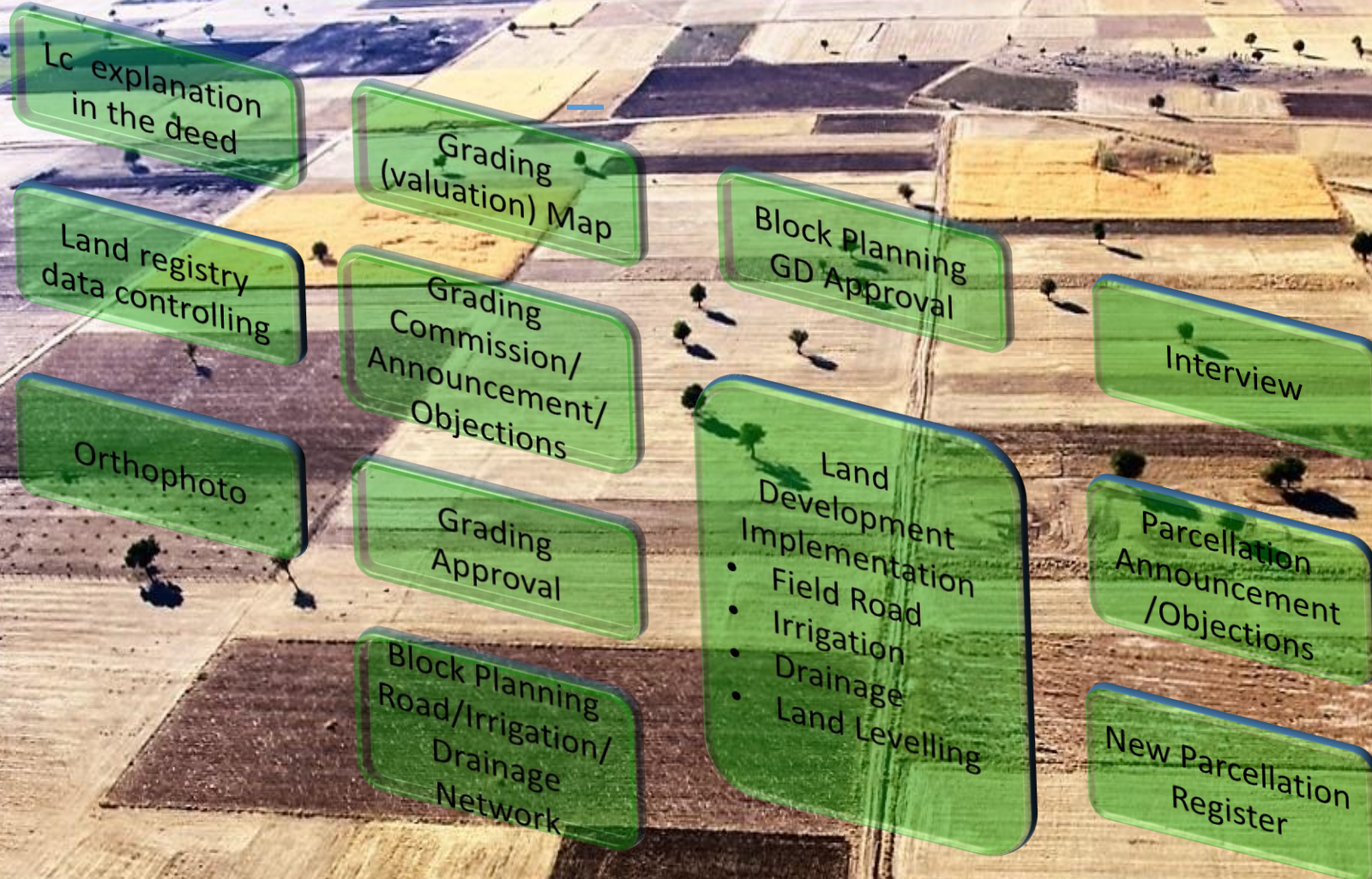
Diğerleri İçin: Bu kararın uygulanması için gerekli olan işlemlerin tamamlanması için ilgililerden istenilen bilgilerin sağlanması ve bu kararın gereğini yerine getirenlerin ve Tapu Sicilinde kayıtlı olanların bu kararın uygulanması için gerekli olan işlemlerin tamamlanması için ilgililerden istenilen bilgilerin sağlanması için karar verildi.

2019

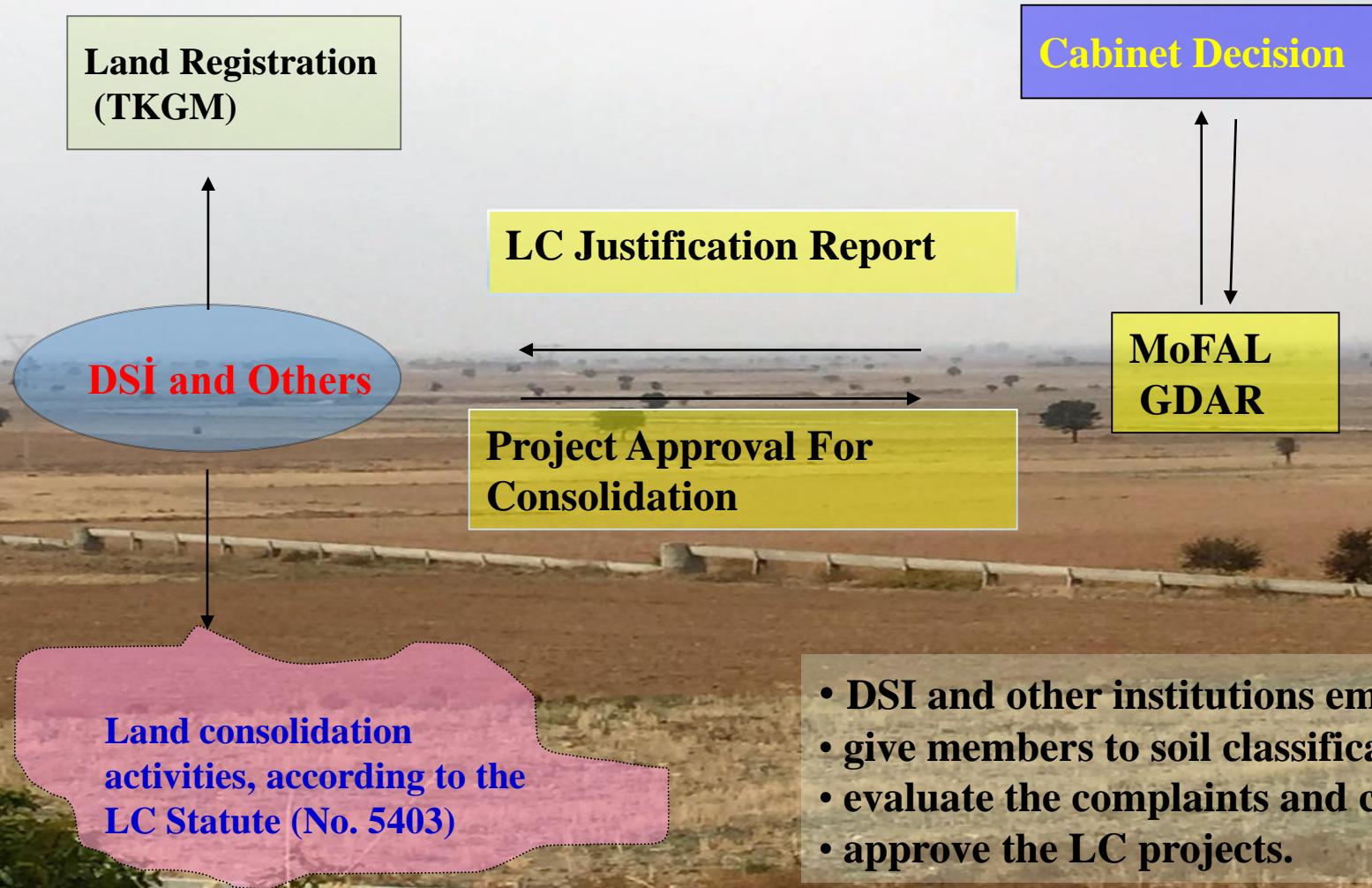
DIYARBAKIR İLİ BİSMİL İLÇESİ YENİCE KÖYÜ

NO	NOVADE	ADI	KARA ADI	ALAN (M ²)	PAR./MÜLHAT	İSİM
1	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
2	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
3	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
4	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
5	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
6	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
7	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
8	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
9	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
10	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
11	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
12	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
13	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
14	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
15	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
16	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
17	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
18	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
19	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
20	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
21	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
22	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
23	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
24	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
25	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
26	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
27	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
28	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
29	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
30	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
31	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
32	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
33	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
34	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
35	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
36	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
37	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
38	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
39	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
40	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
41	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
42	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
43	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
44	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
45	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
46	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
47	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
48	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
49	MEHMET	MEHMET	MEHMET	1000	1	MEHMET
50	MEHMET	MEHMET	MEHMET	1000	1	MEHMET

LAND CONSOLIDATION WORKFLOW



ACTION FRAMEWORK OF “PRIVATE LAND CONSOLIDATION”



Participation

LC is done in two ways: voluntary and compulsory

Farmers Participation In Etut(Pre-study Works) phase

For 3083 Law
Approval LC: yes
Landowners 2/3 and these
are own $\frac{1}{2}$ total land

For 5403 Law
Approval LC: yes
Landowners 1/2 and these
are own $\frac{1}{2}$ total land



Shareholder Meeting (Public Services Institutions and Farmers)

Agrarian Reform and the other institution make a protocol for LC

- State Hydrolic Works
- Land Registry
- Highway
- TEİAŞ
- Ministry of Transport
- Forestry



Local Managements
Governerships
Municipalities
Villages governing
Cooperatives
Unions

Investigation - Planning
and Data

Cadastre map

Title

Parcel Data

Expropriation line



Determination of needs

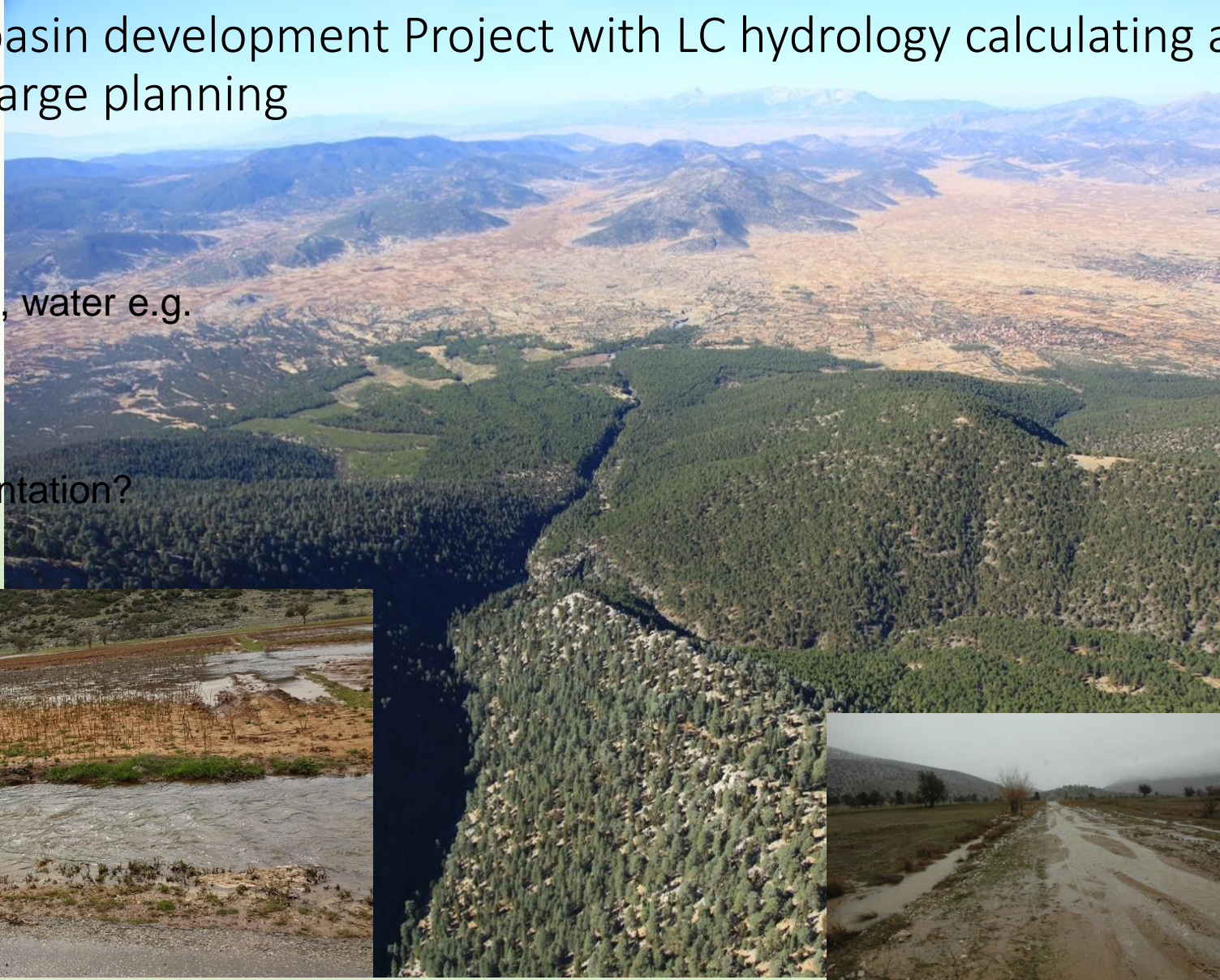
The basin development Project with LC hydrology calculating and surface discharge planning

Inclusive survey

Investment road, water e.g.

Social organism

How is implementation?



3083 Law number Land Grading (rating)in Land Consolidation

- 30 point asset point
- 40 point soil point
- 20 point location point
- 10 point commision point

Plot index = $0,4 \times \text{soil point} + \text{location point} + \text{asset point} + \text{commision}$

5403 Law Number Land Grading in Land Consolidation

- 70 point soil point (i)
- 20 point location point
- 10 point productivity
- $i = \text{Soil Index}$
- $A = \text{Soil profil group value}$
- $B = \text{Top soil quality value}$
- $C = \text{Land slope value}$
- $X = \text{The other soil feature value}$
- $i = A * B * C * X$
- Plot index = $0,7 \times \text{Soil Index} + \text{Location point} + \text{Productivity point}$
- Parsel endeksi hesaplanır. Bu değer parsel değer sayısını hesaplamak için kullanılır.
- $PDS = PE * \text{Alan} / 100$
- Plot value number = $\text{Plot index} * \text{Plot area} / 100$

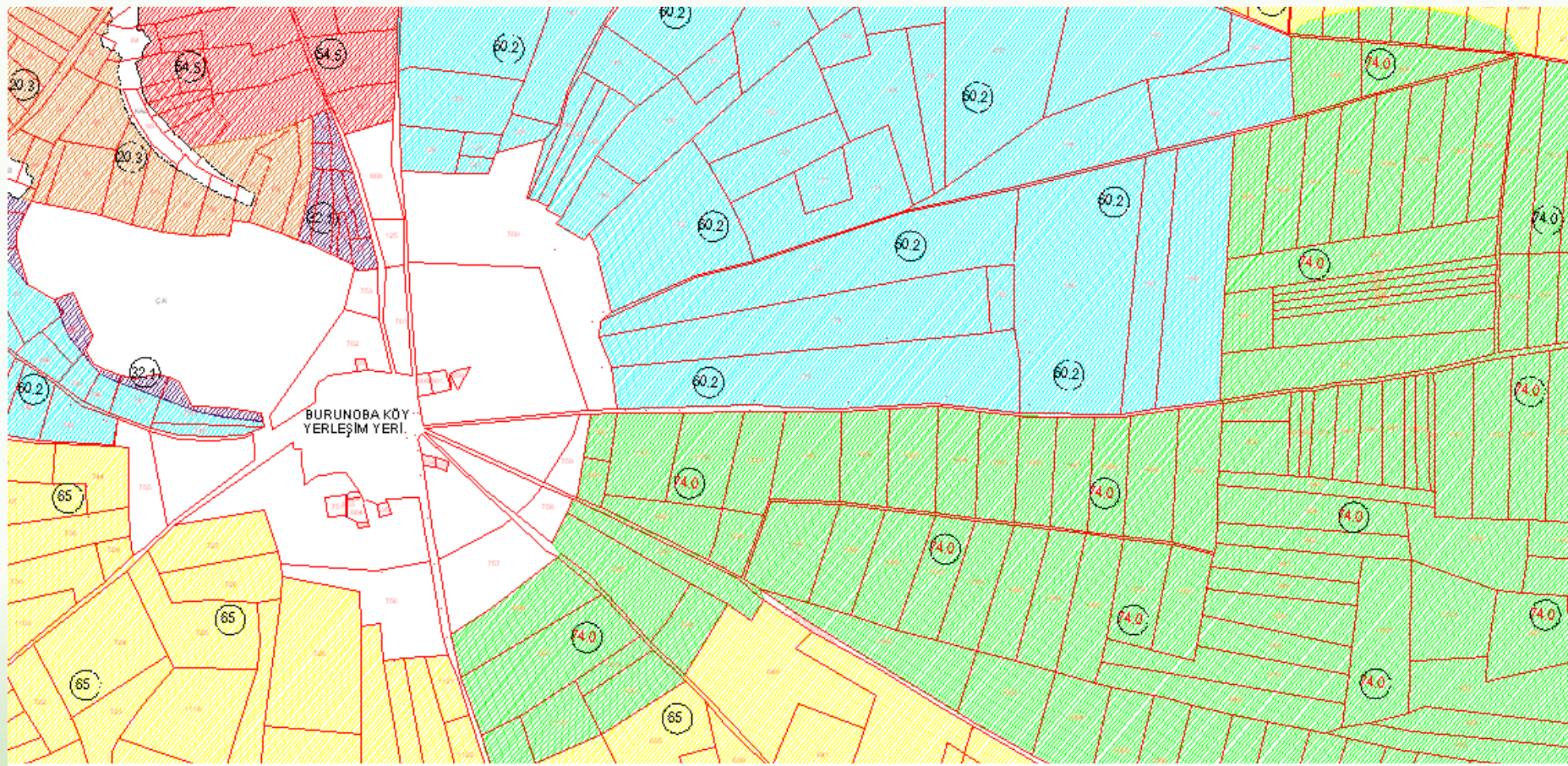
- For example in a Project area we have 5 grade;
- 1. Grade Point: 72
- 2. Grade Point : 67
- 3. Grade Point : 53
- 4. Grade Point : 45
- 5. Grade Point : 33

Correlation coefficient (denkleştirme katsayıları)








- 1.derecenin 1. dereceye denkleştirme katsayısı $K=72 / 72=1.0000$ 'dir.
- 1.derecenin 2. dereceye denkleştirme katsayısı $K=72 / 67=1.0746$ 'dir
- 1.derecenin 3. dereceye denkleştirme katsayısı $K=72 / 53=1.3584$ 'dir.
- 2.derecenin 1. dereceye denkleştirme katsayısı $K=67 / 72=0.9306$ 'olur.
- 3.derecenin 1. dereceye denkleştirme katsayısı $K=53 / 72=0.7361$ 'olur.
- Diğer derecelerin denkleştirme katsayıları aynı şekilde bulunur ve proje alanı için denkleştirme katsayılarını gösteren tablo aşağıdaki şekilde düzenlenir.

Grading equivalent table

	1	2	3	4	5
1	1.0000	1.0746	1.3584	1.6000	2.1818
2	0.9305	1.0000	1.2641	1.4889	2.0303
3	0.7361	0.7910	1.0000	1.1777	1.6060
4	0.6250	0.6716	0.8490	1.0000	1.3636
5	0.4583	0.4925	0.6226	0.7333	1.0000



BURUNOBA KÖYÜ DENKLİK DÖNÜŞÜM TABLOSU

RENKLER	PUAN ARALIĞI	DERECELER	PARSEL ENDEKSİ	74,0	65,0	60,2	54,5	46,9	32,1	20,3
	70-75	1	74,0	1,000000	1,138462	1,229236	1,357798	1,577825	2,305296	3,645320
	64-69	2	65,0	0,878378	1,000000	1,079734	1,192661	1,385928	2,024922	3,201970
	57-62	3	60,2	0,813514	0,926154	1,000000	1,104587	1,283582	1,875389	2,965517
	50-56	4	54,5	0,736486	0,838462	0,905316	1,000000	1,162047	1,697819	2,684729
	40-49	5	46,9	0,633784	0,721538	0,779070	0,860550	1,000000	1,461059	2,310345
	30-39	6	32,1	0,433784	0,493846	0,533223	0,588991	0,684435	1,000000	1,581281
	0-29	7	20,3	0,312308	0,337209	0,372477	0,432836	0,632399	0,632399	1,000000

PICK UP DATA AND MAKE BLOCK PLANNING

BLOC PLANNING

AHMETBEY BELDE MERK

CADASTRE MAP

TRANSPORT REPORT

**ORTHOPHOTO
(current
topographic map)**

IRRIGATION REPORT

SOIL MAP

DRAINAGE REPORT

**PUBLIC
INVESTMENT PLAN
(irrigation etc)**

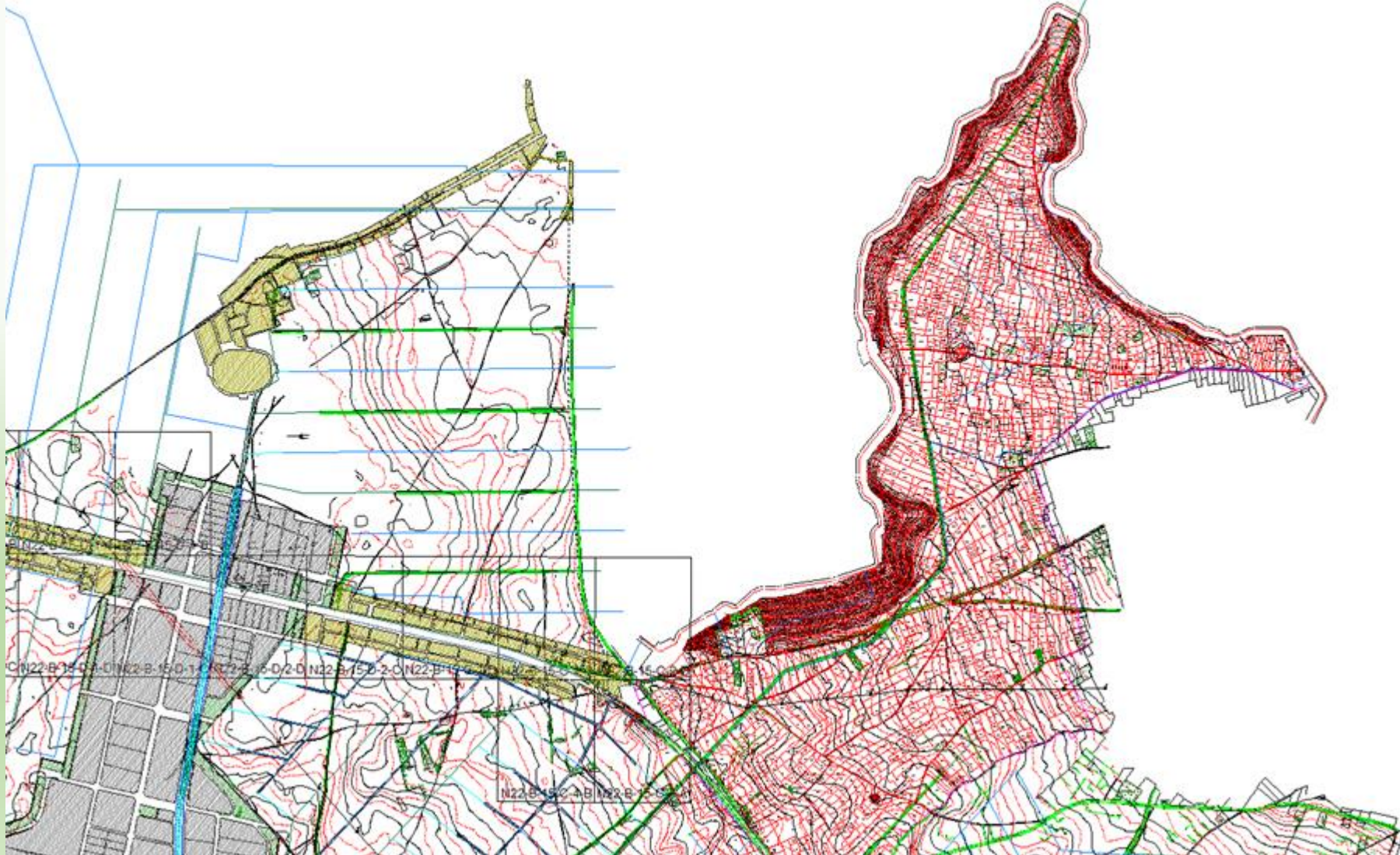


grand control point (gcp)
static surveying with gps in LC
area

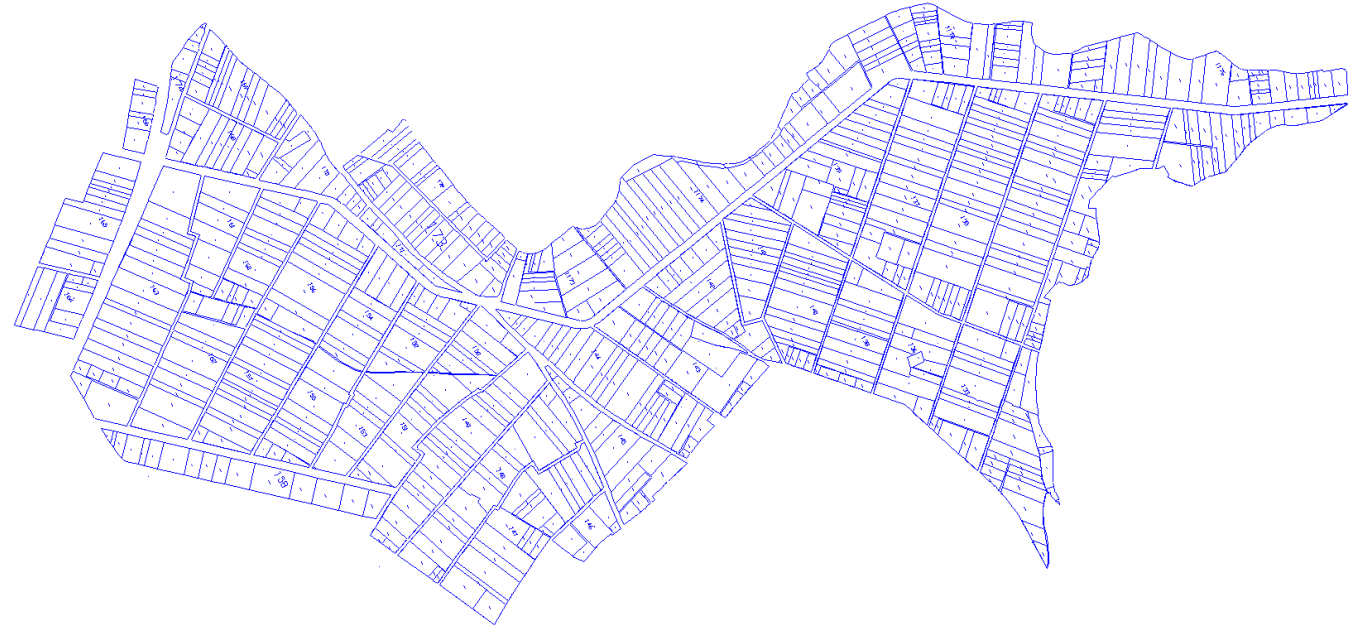
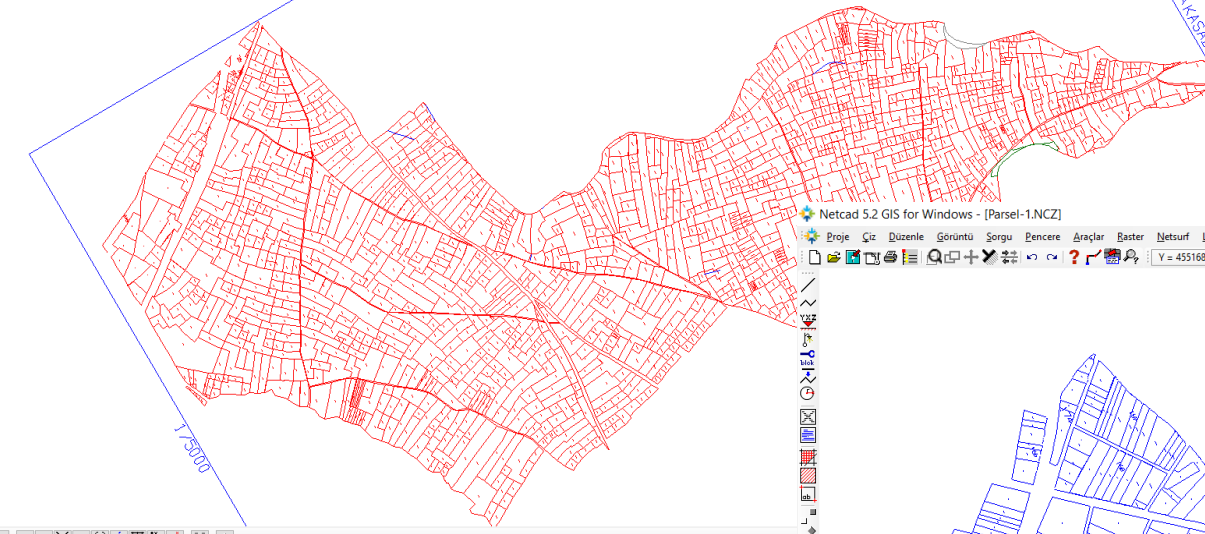


Denizli Acıpayam Dodurgalar Köyü

DODURGA A.T2 PROJESİ



Denizli Acıpayam Dodurgalar Köyü



Old parsel number: 1631

New parsel number: 756

Consolidation rate: 46 %.

DOP (Düzenleme ortaklık payı): 0,084

K A D A S T R O																					
İŞNO	SOYADI ADI	BABA ADI	KÖYÜ	KNO	PARNO	ALAN	HISSE	PAY	İSTM	DÜZENLEMESİ		PARSEL DEĞ.SAYI	ZAYIAT	Y E N İ							
										GMYN	GİREN			İNDEK	İNDEK	DEGSAY	PARNO	ALAN	HISSE	PAY	
ÖSTİMLAK : 0										ÖBLOKALAN : 5516139											
ÖDÜZENLEMESİ GİRMEYEN : 7266										ÖBLOKDSAY : 5007533											
ÖDÜZENLEMESİ GİREN : 6000391										ZAYIATOR : 0.083949											
80	FEVZİ AKYOL	İSMAIL	*	0	0/64	4800	1.00000	4800	0	0	4800	0.97	4656	400	4256	0.970	6209	156/3	6401	4387/6401	4387
80	FEVZİ AKYOL	İSMAIL	*	0	0/167	5180	1.00000	5180	0	0	5180	0.87	4507	387	4119					2014/6401	2014
2	KADRIYE ABAY	HAKKI	*	0	0/656	4220	1.00000	4220	0	0	4220	0.87	3671	316	3356	0.970	3356	156/4	3459	TAM	3459
756	HÜSEYİN TAY	TAHIR	*	0	0/2473	675	1.00000	675	0	0	675	0.97	655	56	598	0.970	8524	156/5	8788	617/8788	617
766	ZEYNEP TAY	MUSTAFA	*	0	0/659	8940	1.00000	8940	0	0	8940	0.97	8672	746	7926					8171/8788	8171
670	AHMET ÖZDEMİR	MUSTAFA	*	0	0/652	8740	1.00000	8740	0	0	8740	0.94	8189	704	7485	0.970	7484	156/6	7716	TAM	7716
256	FATMANA DAĞDAŞ	SAİT	*	0	0/651	15560	0.50000	7780	0	0	7780	0.94	7284	626	6657	0.970	7428	156/7	7658	6863/7658	6863
256	FATMANA DAĞDAŞ	SAİT	*	0	0/2545	3563	0.25000	891	0	0	891	0.97	864	74	790					795/7658	795
171	HALİL AY	CEMAL	*	0	0/2539	5850	0.15000	878	0	0	878	0.97	851	73	778	0.967	10682	156/8	11042	804/11042	804
171	HALİL AY	CEMAL	*	0	0/2545	3563	0.15000	534	0	0	534	0.97	518	45	474					490/11042	490
171	HALİL AY	CEMAL	*	0	0/248	3940	1.00000	3940	0	0	3940	0.77	3034	261	2773					2866/11042	2866
171	HALİL AY	CEMAL	*	0	0/651	15560	0.50000	7780	0	0	7780	0.94	7284	626	6657					6882/11042	6882
459	KADİR İLHAN	HÜSEYİN	*	0	0/650	11580	1.00000	11580	0	0	11580	0.93	10809	929	9880	0.878	9879	156/9	11252	TAM	11252
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/654	10760	1.00000	10760	0	0	10760	0.91	9842	846	8996	0.865	27789	156/10	32125	10399/32125	10399
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/631	5080	1.00000	5080	0	0	5080	0.87	4420	380	4040					4670/32125	4670
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/188	5400	1.00000	5400	0	0	5400	0.87	4698	404	4294					4964/32125	4964
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/534	3020	1.00000	3020	0	0	3020	0.97	2929	252	2678					3095/32125	3095
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/541	2300	1.00000	2300	0	0	2300	0.97	2231	192	2039					2357/32125	2357
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/1740	1540	1.00000	1540	0	0	1540	0.97	1494	128	1365					1578/32125	1578
377	HAMZA ALİ ERÇELİK	HASAN	*	0	0/2507	4938	1.00000	4938	0	0	4938	0.97	4790	412	4378					5061/32125	5061
218	KEZİBAN ÇAN	MEHMET	*	0	0/215	6080	1.00000	6080	0	0	6080	0.77	4682	403	4279	0.870	10799	156/11	12413	4918/12413	4918
426	MEHMET EVREN	VELİ	*	0	0/638	8200	1.00000	8200	0	0	8200	0.87	7134	613	6521					7495/12413	7495
72	EMİN AKYOL	AHMET	*	0	0/5160	4350	1.00000	4350	0	0	4350	0.87	3784	325	3459	0.829	3459	156/12	4174	TAM	4174
796	KEZİBAN TOZEN	HASAN HÜSE	*	0	0/628	9140	1.00000	9140	0	0	9140	0.87	7952	684	7268	0.827	10541	156/13	12742	8786/12742	8786
796	KEZİBAN TOZEN	HASAN HÜSE	*	0	0/627	4650	1.00000	4650	0	0	4650	0.77	3581	308	3273					3956/12742	3956
32	HATİCE AKIN	YUSUF	*	0	0/489	6260	1.00000	6260	0	0	6260	0.77	4820	414	4406	0.779	4406	157/1	5659	TAM	5659
670	AHMET ÖZDEMİR	MUSTAFA	*	0	0/481	7460	1.00000	7460	0	0	7460	0.77	5744	494	5250	0.775	5250	157/2	6776	TAM	6776
418	HATİCE EVRAN	MEHMET	*	0	0/2551	2688	1.00000	2688	0	0	2688	0.97	2607	224	2383	0.774	9960	157/3	12873	3080/12873	3080
423	HATİCE EVREN	MEHMET	*	0	0/31	658	1.00000	658	0	0	658	0.87	572	49	523					676/12873	676

K A D A S T R O													Y E N İ								
İŞNO	SOYADI ADI	BABA ADI	KÖYÜ	KNO	PARNO	ALAN	HİSSE	PAY	İSTM	DÜZENLEMEYE GMYN	GİREN	İNDEK	PARSEL DEĞ.SAY	ZAYIAT	HAKEDİŞ	İNDEK	DEGSAY	PARNO	ALAN	HİSSE	PAY
356	FATMANA EBECİM	MEHMET	*	0	0/5534	1500	1.00000	1500	0	0	1500	0.87	1305	112	1193	0.870	1193	130/1	1371	TAM	1371
80	FEVZİ AKYOL	İSMAİL	*	0	0/5539	6053	1.00000	6053	0	0	6053	0.77	4661	401	4260	0.826	4260	130/2	5159	TAM	5159
389	ÜMMÜ ERÇELİK	İSA	*	0	0/1649	6400	1.00000	6400	0	0	6400	0.77	4928	424	4504	0.805	4504	130/3	5597	TAM	5597
14	RAMAZAN AK	MEHMET	*	0	0/5551	3747	1.00000	3747	0	0	3747	0.77	2885	248	2637	0.772	2637	130/4	3416	TAM	3416
141	AYŞE ARIKAN	HASAN	*	0	0/5458	2247	1.00000	2247	0	0	2247	0.77	1730	149	1581	0.770	3989	130/5	5180	2054/5180	2054
150	KEZİBAN ARIKAN	İSMAİL	*	0	0/5596	1337	0.50000	669	0	0	669	0.68	455	39	415				540/5180	540	
152	MEHMET ARIKAN	İSMAİL	*	0	0/5596	1337	0.50000	669	0	0	669	0.68	455	39	415				539/5179	539	
152	MEHMET ARIKAN	İSMAİL	*	0	0/1650	4480	0.50000	2240	0	0	2240	0.77	1725	148	1577				2047/5179	2047	
827	KEZİBAN YAYKIRAN	İSMAİL	*	0	0/1650	4480	0.50000	2240	0	0	2240	0.77	1725	148	1577	0.775	1576	130/6	2035	TAM	2035
385	RECEP ERÇELİK	HASAN	*	0	0/5581	289	1.00000	289	0	0	289	0.68	197	17	180	0.792	2870	130/7	3623	227/3623	227
385	RECEP ERÇELİK	HASAN	*	0	0/1895	1420	1.00000	1420	0	0	1420	0.97	1377	118	1259				1589/3623	1589	
386	RECEP ERÇELİK	İSMAİL	*	0	0/1726	1800	1.00000	1800	0	0	1800	0.87	1566	135	1431				1807/3623	1807	
466	KAMİL KABAN	İSMAİL	*	0	0/1652	1900	1.00000	1900	0	0	1900	0.87	1653	142	1511	0.794	4629	130/8	5826	1902/5826	1902
514	AYŞE KAROL	İSMAİL	*	0	0/5556	4430	1.00000	4430	0	0	4430	0.77	3411	293	3118				3925/5826	3925	
3	MEHMET ABAY	ALİ	*	0	0/5558	10190	1.00000	10190	0	0	10190	0.79	8028	690	7338	0.799	7338	130/9	9184	TAM	9184
266	MEHMET DAĞDAŞ	ALİ	*	0	0/1656	9220	1.00000	9220	0	0	9220	0.80	7350	632	6718	0.822	6718	130/10	8169	TAM	8169
60	KAZIM AKSOY	MAHMUT	*	0	0/1640	7520	1.00000	7520	0	0	7520	0.87	6542	562	5980	0.878	5980	130/11	6808	TAM	6808
73	EMİNE AKYOL	İSMAİL	*	0	0/1729	2360	1.00000	2360	0	0	2360	0.97	2289	197	2092	0.912	4717	130/12	5170	2293/5170	2293
100	KAMİL AKYOL	MEHMET EMİ	*	0	0/1914	2960	1.00000	2960	0	0	2960	0.97	2871	247	2624				2876/5170	2876	
670	AHMET ÖZDEMİR	MUSTAFA	*	0	0/1666	2660	1.00000	2660	0	0	2660	0.87	2314	199	2115	0.926	2115	130/13	2285	TAM	2285
683	SÜLEYMAN ÖZDEMİR	AHMET	*	0	0/1672	1300	1.00000	1300	0	0	1300	0.87	1131	97	1034	0.933	7798	130/14	8355	1108/8355	1108
683	SÜLEYMAN ÖZDEMİR	AHMET	*	0	0/1662	2380	1.00000	2380	0	0	2380	0.77	1833	158	1675				1795/8355	1795	
683	SÜLEYMAN ÖZDEMİR	AHMET	*	0	0/1665	2200	1.00000	2200	0	0	2200	0.87	1914	165	1749				1874/8355	1874	
683	SÜLEYMAN ÖZDEMİR	AHMET	*	0	0/1671	4200	1.00000	4200	0	0	4200	0.87	3654	314	3340				3578/8355	3578	
192	ÖMER BAZ	AHMET	*	0	0/2166	1475	1.00000	1475	0	0	1475	0.97	1431	123	1308	0.970	8827	131/1	9100	1348/9100	1348
192	ÖMER BAZ	AHMET	*	0	0/2292	2475	1.00000	2475	0	0	2475	0.97	2401	206	2194				2262/9100	2262	
192	ÖMER BAZ	AHMET	*	0	0/1760	3061	1.00000	3061	0	0	3061	0.97	2969	255	2714				2798/9100	2798	
453	DUDU İLHAN	AHMET	*	0	0/1318	1520	1.00000	1520	0	0	1520	0.97	1474	127	1348				1389/9100	1389	
453	DUDU İLHAN	AHMET	*	0	0/2299	1425	1.00000	1425	0	0	1425	0.97	1382	119	1263				1302/9100	1302	
191	MUSTAFA BAZ	MEHMET	*	0	0/250	10760	0.16667	1793	0	0	1793	0.77	1381	119	1262	0.970	6509	131/2	6710	1301/6710	1301
191	MUSTAFA BAZ	MEHMET	*	0	0/1762	7760	0.50000	3880	0	0	3880	0.97	3764	324	3440				3546/6710	3546	

AK MÜHENDİSLİK/ANKARA/230 18 03/230 18 75

NETTOP V2.01

LANDOWNERS CONSENT FOR LC

Interview with farmers and take their preference in the village for the new parcellation voluntary or compulsory } BOTH OF THEM INTERVIEW WITH FARMERS FOR NEW PARCELLATION



ÇİFTÇİ TERCH FORMU AT-5.1

İl: Çorum İlçe: Alaca Köyü: Bolatlık İşletme No: 301

Mal Sahibi: Kahraman GÜLER T.C NO: 22093642288

Bilgi Adı: Gazi TELEFON NO: 0 384 425 21 08

Adres: Gökören-Köyü-ALACA Bolatlık Köyü

Sıra No	Kadastro Parsel No	Tapu Alanı (m ²)	Hissesi	Hissesi Düşen Pay (m ²)	Endeks Değeri	Düğüne Blok	Tip	İSTEKLER	
							1. Blok	2. Blok	3. Blok
1	585	19.850.00	Tam	19.850.00	0.611331	110			
2	586	22.050.00	Tam	22.050.00	0.605480	110			
3	679	9.000.00	Tam	9.000.00	0.624350	120			
4	888	5.000.00	Tam	5.000.00	0.820112	171			
5	963	17.700.00	Tam	17.700.00	0.439778	157			
6	1029	24.200.00	Tam	24.200.00	0.694400	162			

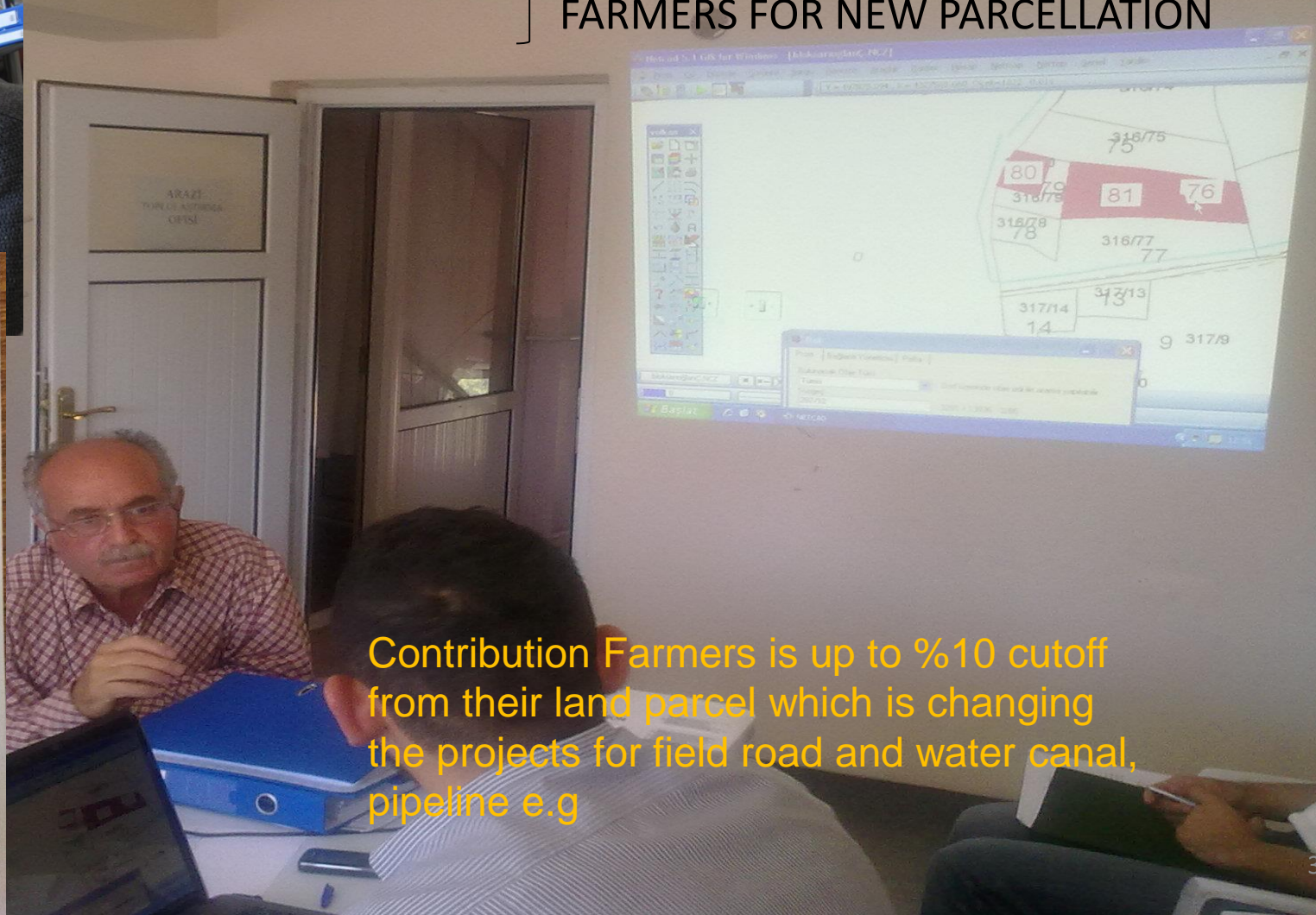
Not: 1. 585, 586 nolu parseller, bulunduğu blokta birleştirilsin.
2. 679 nolu parsel, bulunduğu blokta planlansın.
3. 888 nolu parsel, bulunduğu blokta planlansın.
4. 963 parsel, bulunduğu blokta planlansın.
5. 1029 parsel, bulunduğu blokta planlansın.
6. 585, 888, 963 nolu parsellerde aşırı mülk var. Ağaçlarını birinde kalmasını istiyorum. (Tip alanı sabit tesis olan parseller için (x) yazılacaktır.)

Beyan Sahibi: Kahraman GÜLER
Adi Soyadı: Kahraman GÜLER
İmzası: [Signature]

Muhtar: Alper KARACAYOL
Adi Soyadı: Alper KARACAYOL
İmzası: [Signature]

02.02.2018

U Top - Lider Anzı Toplantısı Sayfa No: 304 / 850



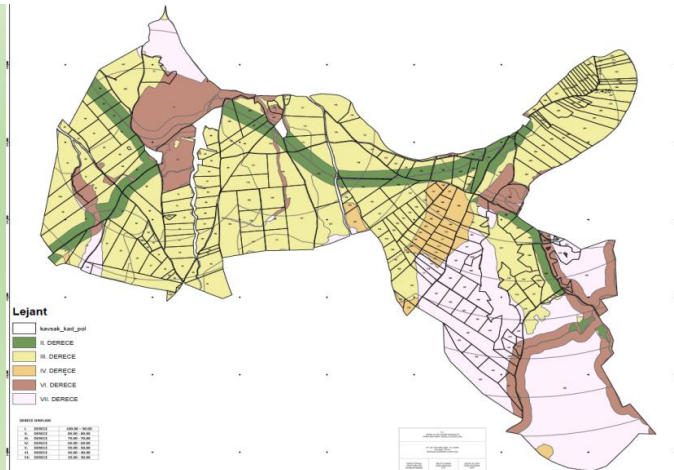
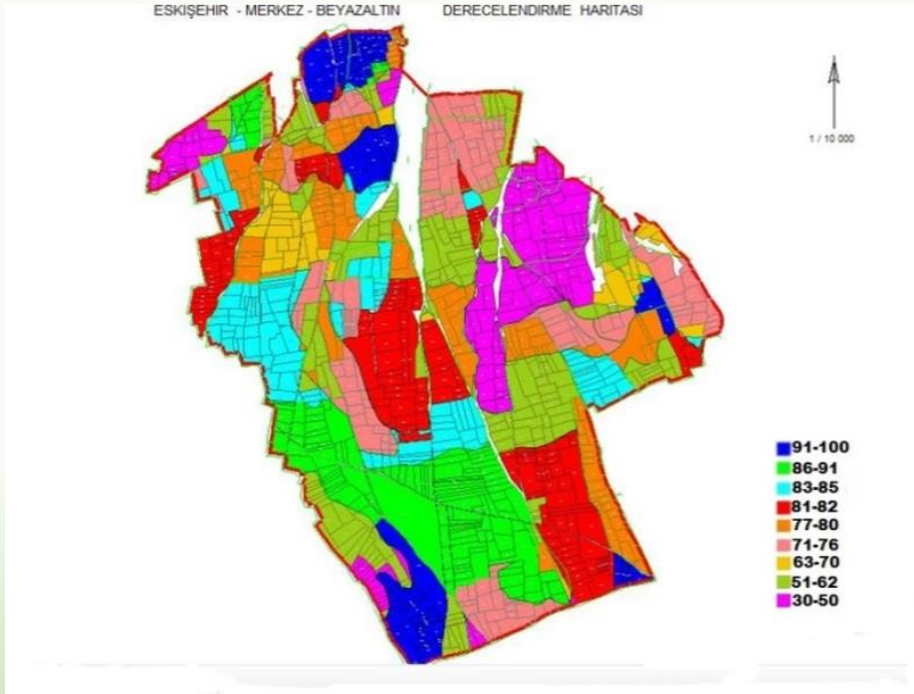
Contribution Farmers is up to %10 cutoff from their land parcel which is changing the projects for field road and water canal, pipeline e.g

Before the lc interview with farmers etut phase



Interview with farmers for taking choice ongoing LC project

FARMERS INVOLVEMENT



Publicity soil map for 15 days

Objection assessment

Publicity Parcellation map 15 days three times

Objection assessment



- In 3083 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.

ARAZİ TOPLULAŞTIRMA LİSTESİ (Yeni Blok Parsel Sıralı)

Çizelge No : AT - 8

Köy Adı: Akalan

Kesinti Oranı: 0.038037 Sayfa No : 2 / 83

İşletme No	Malikin				Ada No	Parsel No	Tapu Alanı (m ²)	Hissesi	Paya Düşen Alan (m ²)	Düzenlemeye (m ²)		Parsel Endeksi	Parsel Değer Sayısı	Kesinti Miktarı	Hakediş	Olduğu Blok	Yeni Blok Endeksi	Y. Parsel Değer Sayısı	Blok No	Yeni Parsel No	Yeni Parsel Alanı	Yeni Parselde Hisse Oranı	Yeni Parselde Paya Düşen Alan
	T.C. Kimlik No	Adı	Soyadı	Baba Adı						Girmeyen	Giren												
877		Mukaddes	ÖZDEMİR	Mevlüt	764	18	4,043.64	1/8	505.46		505.46	0.875100	442.32	16.82	425.50	838						486/3888	486.23
699		Osman	ÖZDEMİR	Ahmet	764	18	4,043.64	1/8	505.46		505.46	0.875100	442.32	16.82	425.50	838						486/3888	486.23
875		Havana	ÖZDEMİR	Ahmet	764	18	4,043.64	2/8	1,010.91		1,010.91	0.875100	884.65	33.65	851.00	838						972/3888	972.46
876		Huri	ÖZDEMİR	Ahmet	764	18	4,043.64	1/8	505.46		505.46	0.875100	442.32	16.82	425.50	838						486/3888	486.23
873		Gülhizar	ÖZDEMİR	Ahmet	764	18	4,043.64	1/8	505.46		505.46	0.875100	442.32	16.82	425.50	838						486/3888	486.23
1255		Eşana	ÖZDEMİR	Ali	764	25	17,465.01	Tam	17,465.01	0.00	17,465.01	0.875100	15,283.63	581.34	14,702.29	838	0.875100	14,583.52	838	14	20,034.75	16665/20035	16,664.98
1255		Eşana	ÖZDEMİR	Ali	764	25	17,465.01	Tam	17,465.01	0.00	17,465.01	0.875100	15,283.63	581.34	14,702.29	838						136/20035	135.71
1255		Eşana	ÖZDEMİR	Ali	764	33	5,229.67	36/56	3,361.93		3,361.93	0.875100	2,942.03	111.91	2,830.12	838						3026/20035	3,026.28
1255		Eşana	ÖZDEMİR	Ali	764	33	5,229.67	36/56	3,361.93		3,361.93	0.875100	2,942.03	111.91	2,830.12	838						208/20035	207.77
337		Ümmügülsüm	ÖZDEMİR	Ali	764	22	3,392.54	Tam	3,392.54	595.04	2,797.50	0.875100	2,448.09	93.12	2,354.97	838	0.875100	1,438.82	838	15	2,691.09	1644/2691	1,644.18
337		Ümmügülsüm	ÖZDEMİR	Ali	764	22	3,392.54	Tam	3,392.54	595.04	2,797.50	0.875100	2,448.09	93.12	2,354.97	838						1047/2691	1,046.91
1306		Turgut	ÖZDEMİR	Şükrü	764	24	2,151.65	1/2	1,075.83		1,075.83	0.875100	941.45	35.81	905.64	838	0.875100	905.64	838	16	2,069.81	1035/2070	1,034.90
1305		Ramazan	ÖZDEMİR	Şükrü	764	24	2,151.65	1/2	1,075.83		1,075.83	0.875100	941.45	35.81	905.64	838						1035/2070	1,034.90
878		Rahime	ÖZDEMİR	Halil İbrahim	764	23	1,853.44	Tam	1,853.44	710.68	1,142.76	0.875100	1,000.03	38.04	961.99	838	0.875100	237.79	838	17	1,099.29	272/1100	271.73
878		Rahime	ÖZDEMİR	Halil İbrahim	764	23	1,853.44	Tam	1,853.44	710.68	1,142.76	0.875100	1,000.03	38.04	961.99	838						828/1100	827.57
958		Fatma	ÖZDEMİR	Ali	764	27	15,494.66	Tam	15,494.66	0.00	15,494.66	0.875100	13,559.38	515.76	13,043.62	838	0.875100	11,620.53	838	18	13,609.30	13279/13609	13,279.09
958		Fatma	ÖZDEMİR	Ali	764	27	15,494.66	Tam	15,494.66	0.00	15,494.66	0.875100	13,559.38	515.76	13,043.62	838						330/13609	330.21

ARAZİ TOPLULAŞTIRMA LİSTESİ (Eski Parsel Sıralı)

Çizelge No : AT - 6

Köy Adı: Akalan

Kesinti Oranı: 0.038037 Sayfa No : 34 / 83

İşletme No	Malikin				Ada No	Parsel No	Tapu Alanı (m2)	Hissesi	Paya Düşen Alan (m2)	Düzenlemeye (m2)		Parsel Endeksi	Parsel Değer Sayısı	Kesinti Miktarı	Hakediş	Olduğu Blok	Yeni Blok Endeksi	Y. Parsel Değer Sayısı	Blok No	Yeni Parsel No	Yeni Parsel Alanı	Yeni Parselde Hisse Oranı	Yeni Parselde Paya Düşen Alan
	T.C. Kimlik No	Adı	Soyadı	Baba Adı						Girmeyen	Giren												
1339		Verasette İştirak - 1339			605	7	997.36	Tam	997.36	0.00	997.36	0.294300	293.52	11.16	282.36	875	0.294300	282.36	875	8	959.42	Tam	959.42
		Meral		Ahmet İsmail																			
		Zühal		Ahmet İsmail																			
		Bayram		Ahmet İsmail																			
		Mustafa		Mustafa																			
692		Osman		Bayram	605	8	12,382.90	Tam	12,382.90	0.00	12,382.90	0.615986	7,627.69	290.13	7,337.55	875	0.571094	5,538.90	875	9	9,698.76	Tam	9,698.76
692		Osman		Bayram													0.736906	1,798.65	882	7	2,440.82	Tam	2,440.82
1187		Ömer Hüseyin		Ömer	605	9	14,565.10	Tam	14,565.10	0.00	14,565.10	0.574324	8,365.09	318.18	8,046.91	882	0.727392	4,200.00	875	13	5,774.05	Tam	5,774.05
1187		Ömer Hüseyin		Ömer													0.460385	3,846.91	882	9	8,355.84	Tam	8,355.84
1362		Zeynep		Ahmet	605	10	6,705.07	1/2	3,352.54	0.00	3,352.54	0.294300	986.65	37.53	949.12	882	0.665300	787.06	876	1	2,366.03	1183/2366	1,183.02
1361		Ramazan		Ahmet				1/2	3,352.54	0.00	3,352.54		986.65	37.53	949.12		0.665300	787.06	876	1	2,366.03	1183/2366	1,183.02
1362		Zeynep		Ahmet				1/2	3,352.54	0.00	3,352.54		986.65	37.53	949.12		0.875100	162.06	888	6	19,614.16	185/19614	185.19
1361		Ramazan		Ahmet				1/2	3,352.54	0.00	3,352.54		986.65	37.53	949.12		0.875100	162.06	888	6	19,614.16	185/19614	185.19
497		Nurittin		Mevlüt	605	11	27,877.62	1/4	6,969.41	0.00	6,969.41	0.294720	2,054.03	78.13	1,975.90	882	0.313858	1,975.90	875	12	6,295.52	Tam	6,295.52
496		Mustafa		Mevlüt				1/4	6,969.41	0.00	6,969.41		2,054.03	78.13	1,975.90		0.304338	1,975.90	882	8	19,477.35	6492/19476	6,492.45
493		Esat		Mevlüt				1/4	6,969.41	0.00	6,969.41		2,054.03	78.13	1,975.90		0.304338	1,975.90	882	8	19,477.35	6492/19476	6,492.45
494		Fatmana		Ahmet				1/4	6,969.41	0.00	6,969.41		2,054.03	78.13	1,975.90		0.304338	1,975.90	882	8	19,477.35	6492/19476	6,492.45
693		Ramazan		Osman	605	12	3,172.75	Tam	3,172.75	0.00	3,172.75	0.335905	1,065.74	40.54	1,025.21	882	0.389354	1,025.21	882	6	2,633.10	Tam	2,633.10
2514		Hayriye		Rahmi	605	13	5,875.86	Tam	5,875.86	0.00	5,875.86	0.772210	4,537.40	172.59	4,364.81	882	0.772295	4,364.81	882	5	5,651.74	Tam	5,651.74
370		Yakup		Mehmet Ali	605	14	4,392.84	Tam	4,392.84	0.00	4,392.84	0.772219	3,392.23	129.03	3,263.20	882	0.771461	3,263.20	882	4	4,229.90	Tam	4,229.90

Land Consolidation Implementation Process

Project Administration Works

- 1 – *Etut Report*
- 2 – *Property map procurement (from Cadastral Directorate),*
- 3-*1/5000 scale topographic map supply (if any –),*
- 4 – *Old property lists (at 1), (from Land Registry Directorate)),*
- 5 – *Preparation of the old property alphabetical list (at 2),*
- 6- *Preparation of land ownership cards (at 3),*
- 7 – *Decision document (Muvaffakatname) to be annoncument and taken,(Voluntary or Obligotary)*
- 8 – *The Decision Of The Council Of Ministers,*
- 9 – *Preparation Of Tender Document,*
- 10 – *Tender Of Land Consolidation Project*

Land Consolidation Implementation Process

After The Tender Works To Be Done By Contractor

11-Status (topographic) Map

12 – Cadastral survey and control of Parcel areas (land registry and cadastral area)

13– Soil Survey Report and grading (Classification) map preparation (approval and announcement)

14-Interview With Farmers

Land Consolidation Implementation Process

After The Tender Works To Be Done By Contractor

5-Projecting

- a) Planning of blocks and parcels,
- b) Preparation of new property Properties,
- c) Approval of Parcel Plan (provisional Confirmation),
- d) Suspension and announcement of the Parcel planning project,
- e) Examination and evaluation of objections,
- f) Application and temporary distribution of wooden piled corners of new parcels,

16 – Final Approval Of The New Parcel Plan

Land Consolidation Implementation Process

After The Tender Works To Be Done By Contractor

Field Road construction and the other land development investment



Agriculture Aim Land Consalidation



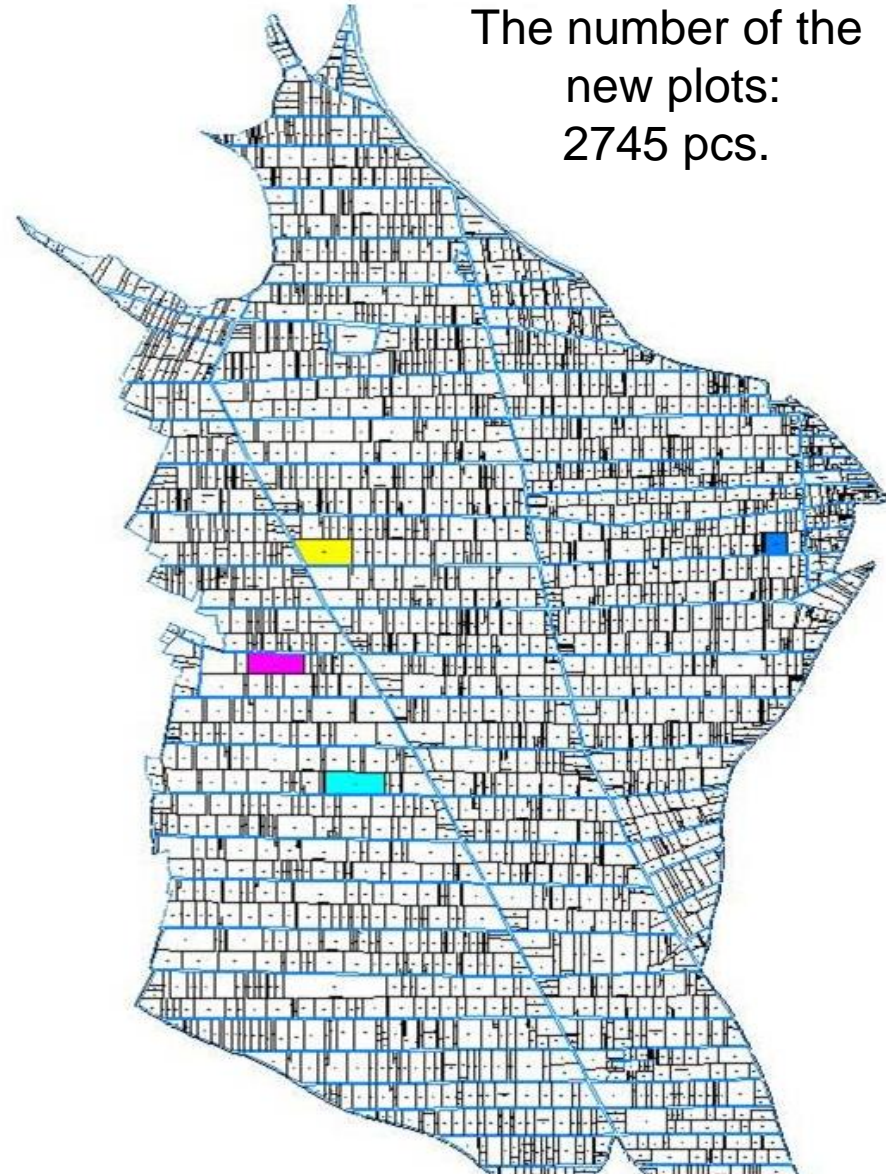
The number of former plots :
11 342 pcs.



The Cadastral Map Showing the Previous
Situation DENİZLİ Nikfer Village

27 Parcels

1 Parcel

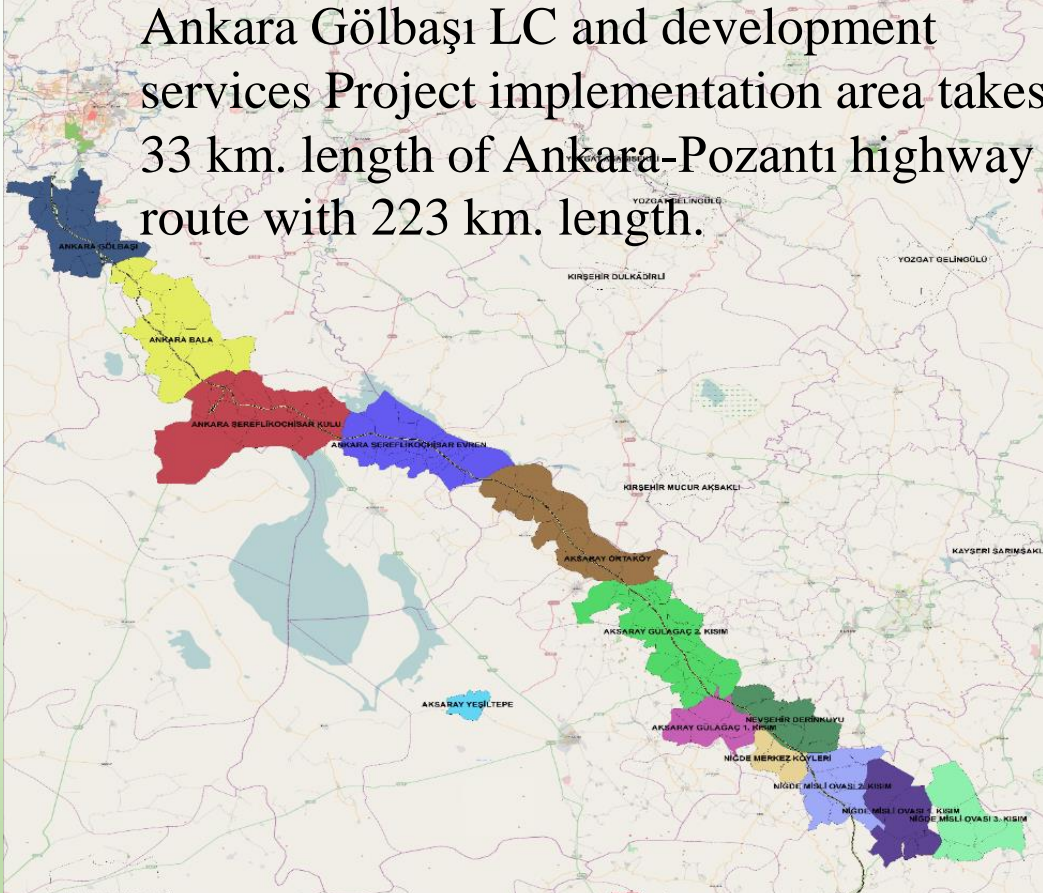


The number of the
new plots:
2745 pcs.

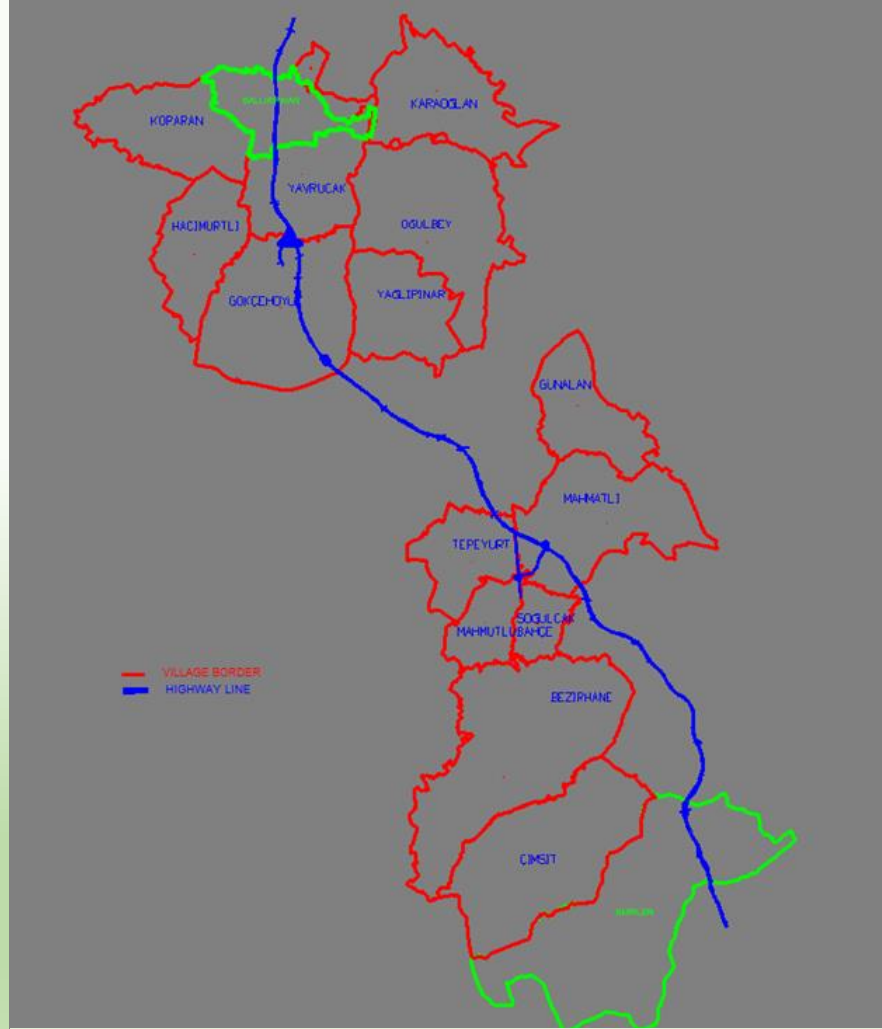
The Map After the Consolidation

Expropriation Aim at Land Consolidation Example; Gölbaşı LC and Land Development Project for Highway

Ankara Gölbaşı LC and development services Project implementation area takes 33 km. length of Ankara-Pozantı highway route with 223 km. length.



A protocol on consolidation between GDAR and GDH has been signed for reorganization of highway route, which is in Gölbaşı LC Project implementation area, in 04.04.2013.

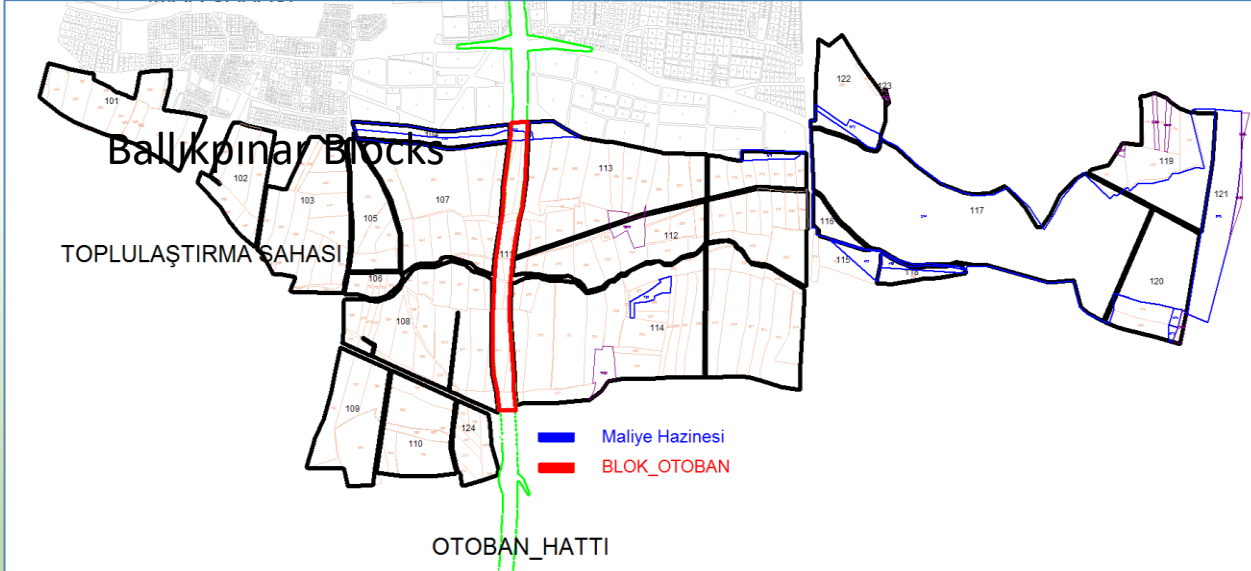


11 LC Projects implement in this 223 km. route by GDAR. Gölbaşı Project includes 16 villages



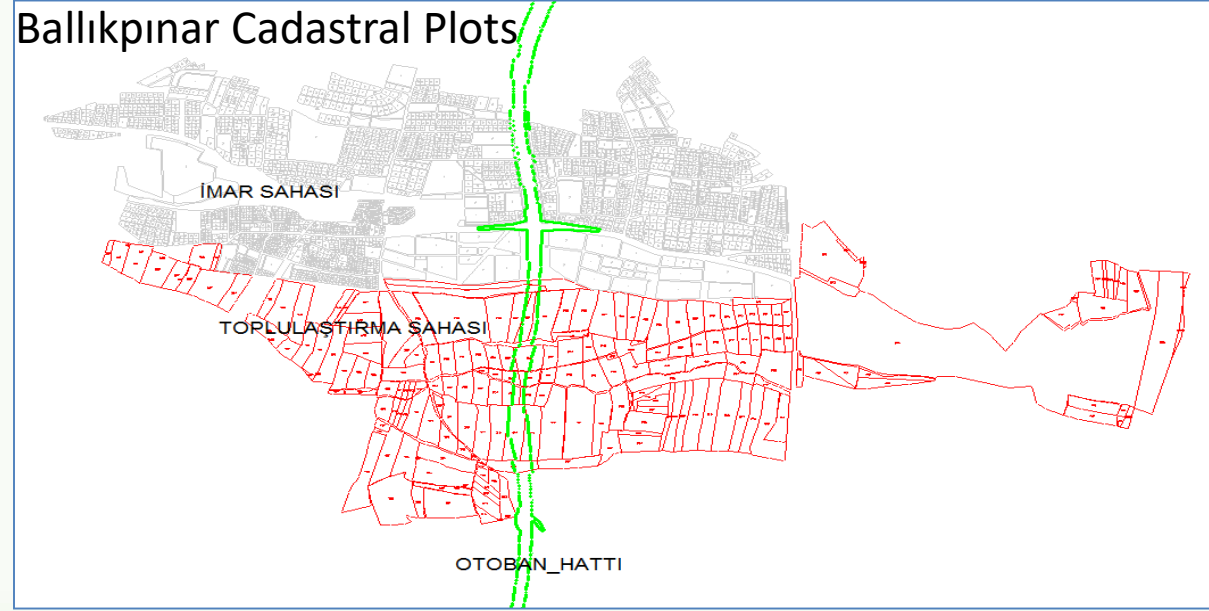
Ballıkpınar Village LC Area

Parcel number in project area dropped from 269 to 147.
LC rate is 54%.

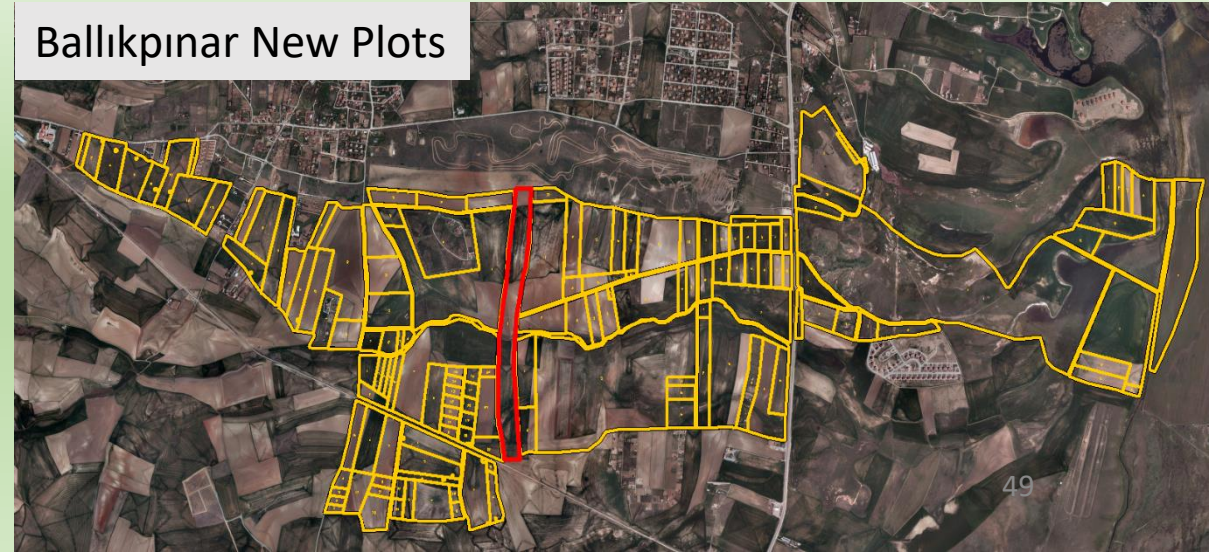


DOP (contribution reallocation plan) the amount of deduction was about 1,5% in this study in Ballıkpınarı village Project. Drainage and ecological corridors are protected, and it is planned to keep a frontage on field road for every plot at the new formed block.

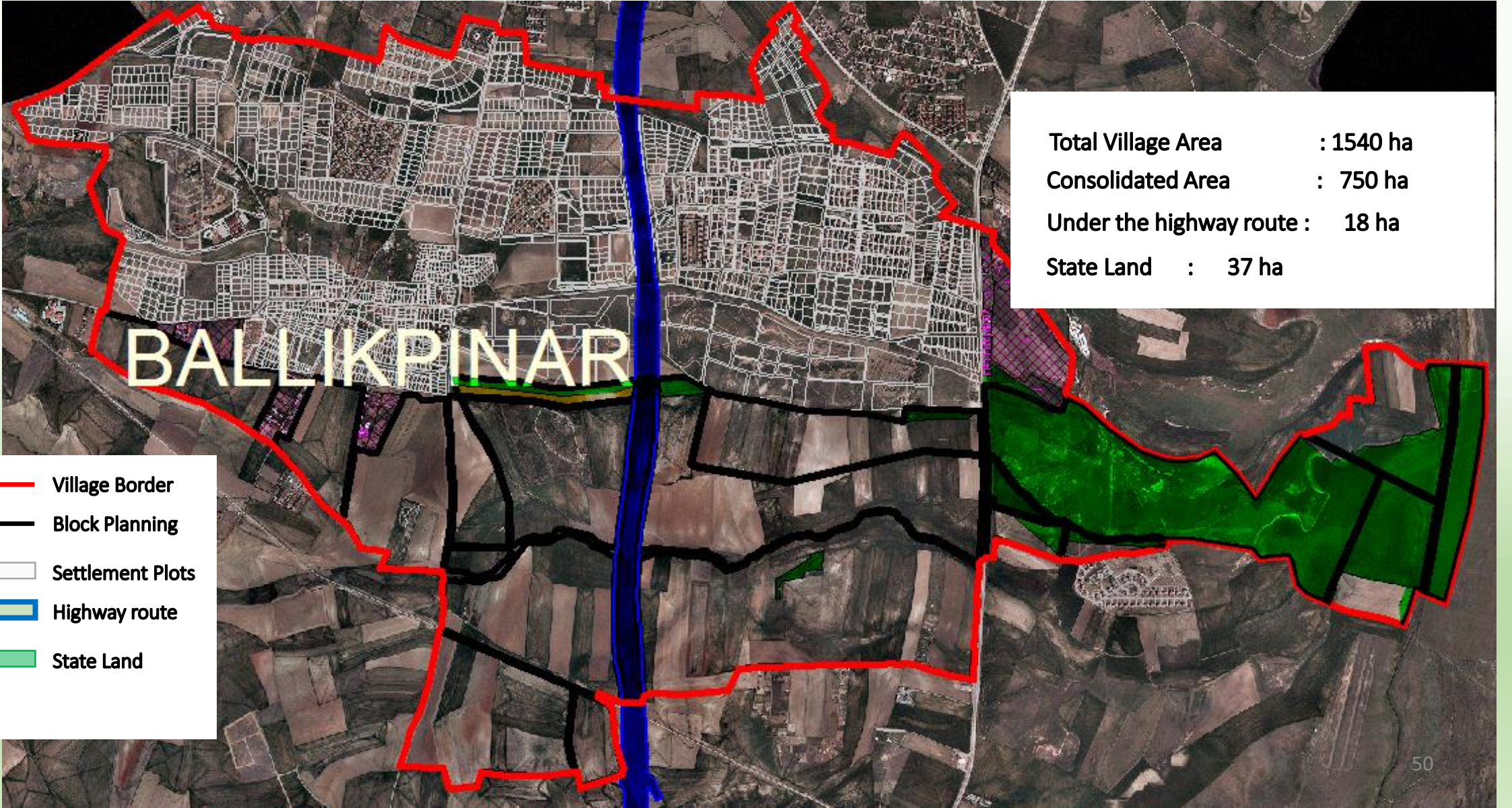
Ballıkpınar Cadastral Plots



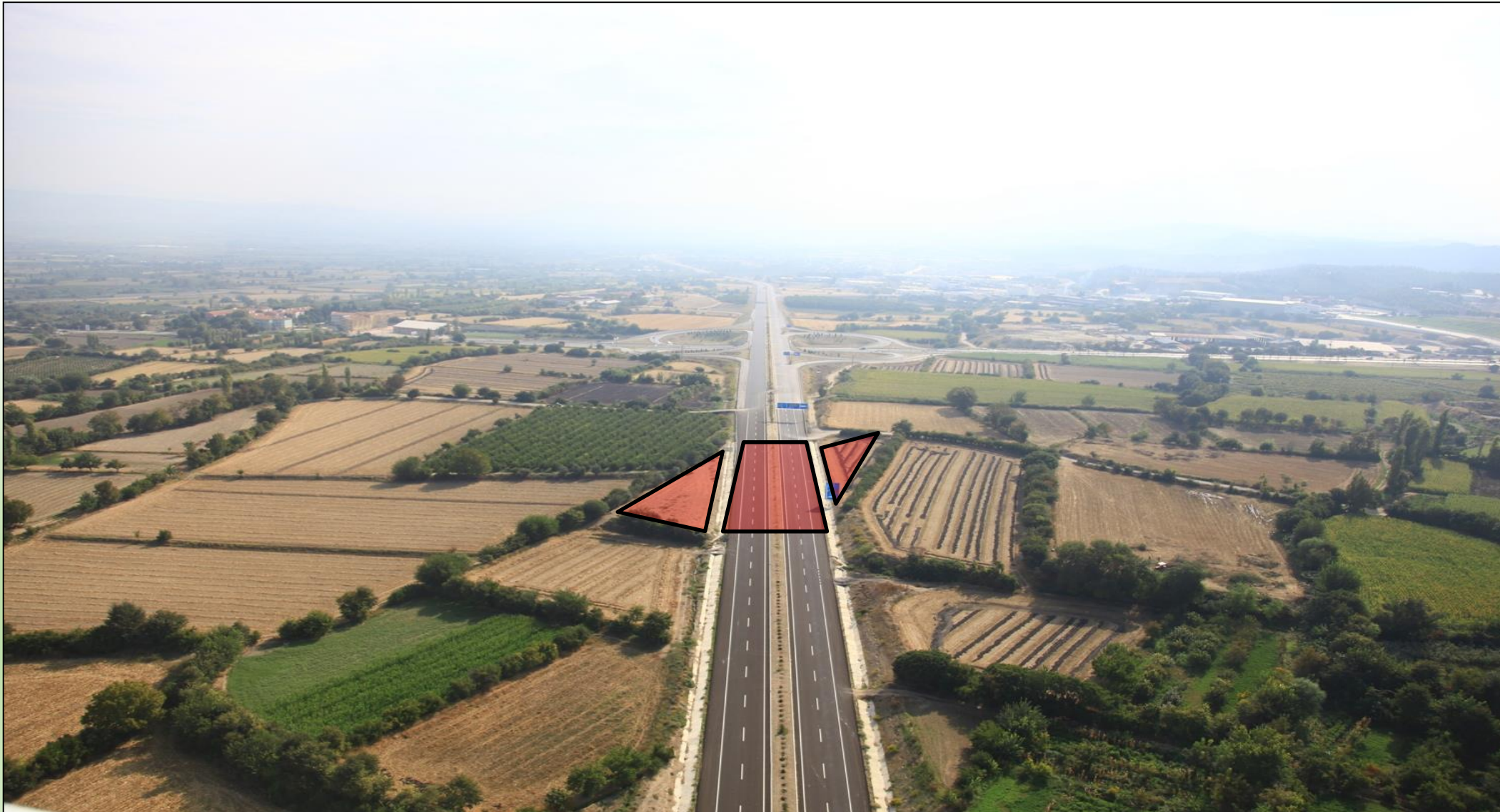
Ballıkpınar New Plots



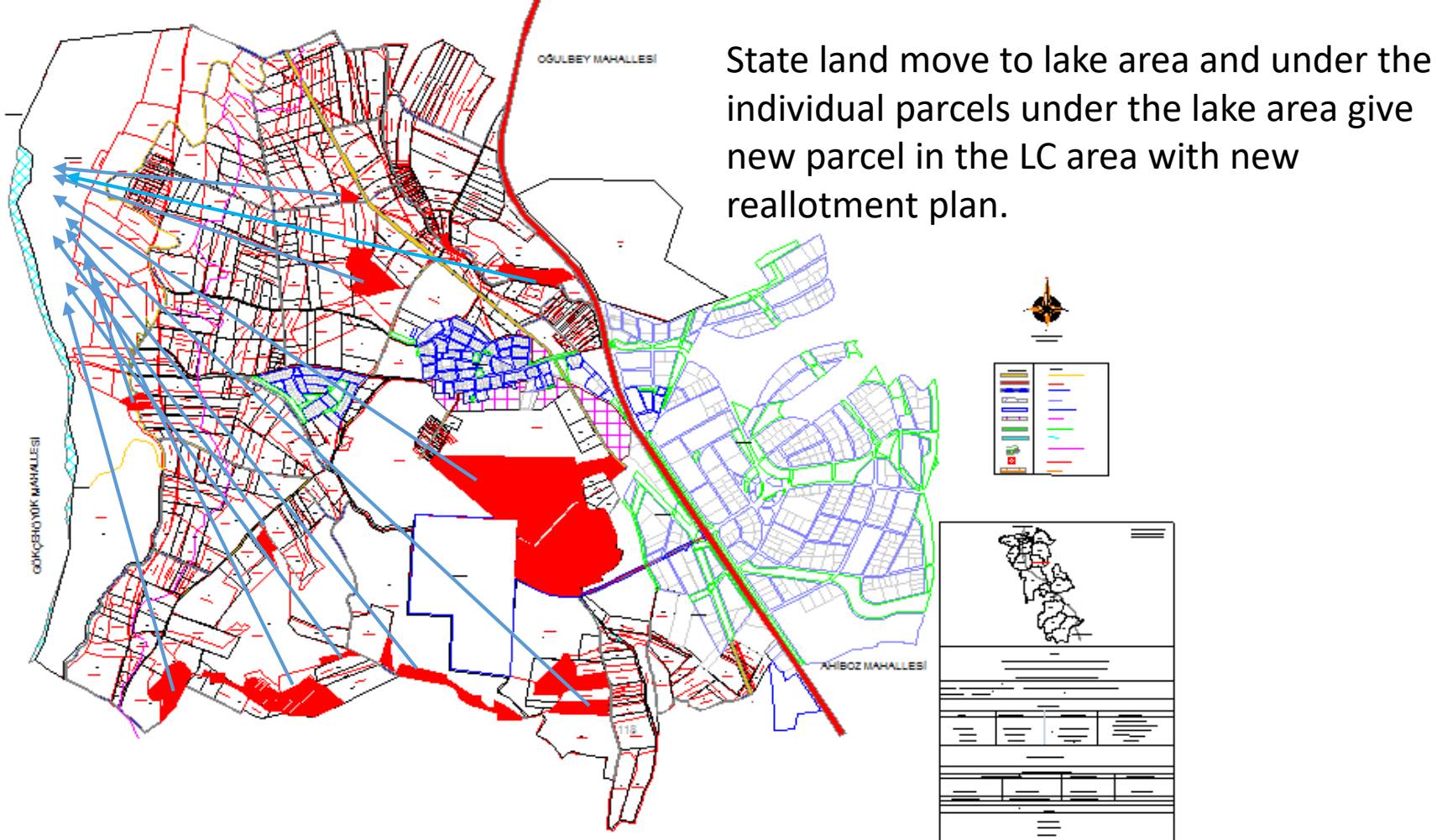
Ballıkpınar Village in LC Area



Highway route in agricultural area without land consolidation implementation

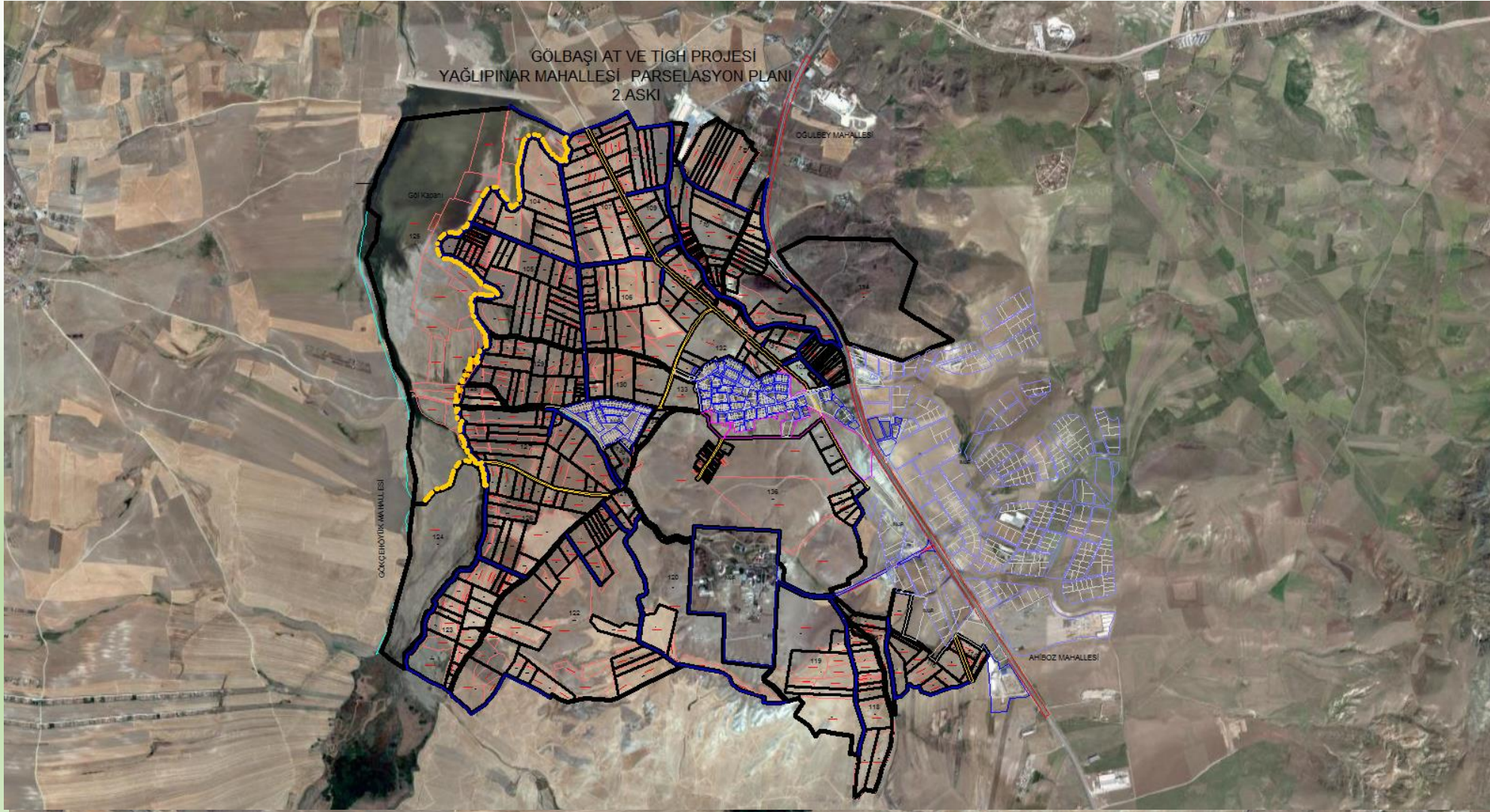


Expropriation Aim at Land Consolidation Example Gölbaşı LC and Land Development Project for Lake Trap



Expropriation Aim at Land Consolidation Example Gölbaşı LC and Land Development Project for Lake

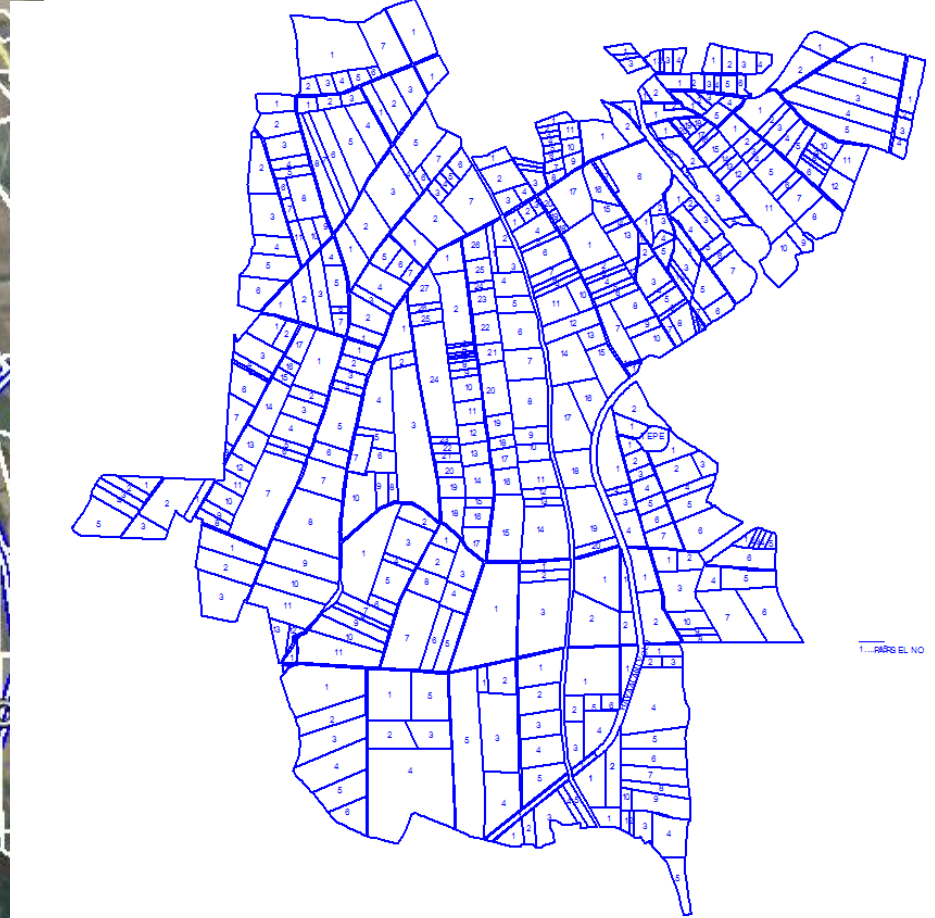
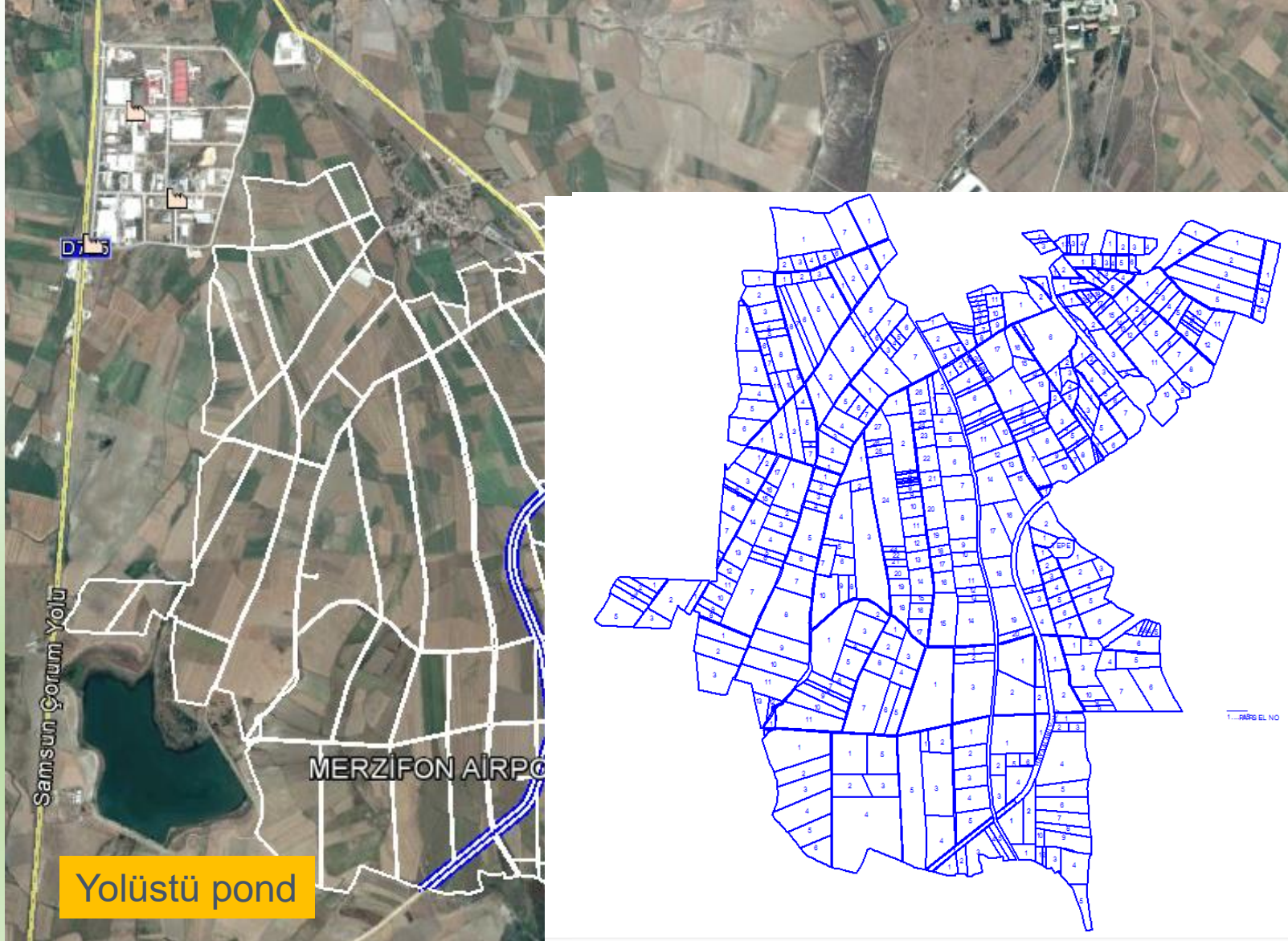
Lake trap in Yağlıpınar Village Gölbaşı LC Project



Agricultural plots
Under the lake area
142 hectares

Contribution
reallotment plan:0,024

Amasya Merzifon LC and Land Development Project Yolüstü Project Area



Total Project area:16800 hectares
Yolüstü Village one of the 23 villages in the Project
Yolüstü Village LC Area : 1140 hectares
Irrigation system pipe line length: 33 780 m.
Airport Highway length 6038 m.and transfer 2,2 hectares state land in the highway route
and total 10,7 hectares
Start date the project: 2011
contribution reallocation plan:0,029
Land consolidation rate:%28
Before lc plot number:663
After lc plot number: 478

Turkish Electricity Transmission Company (TEİAŞ)

By the protocol held between GDAR with Turkey Electricity Transmission Company Headquarters (TEİAŞ) in 22.04.2015 if the areas in the transformer center and immovable that corresponding the poles yet to be obtained by expropriation exist, about areas given in the plan by TEİAŞ will be left on behalf of Treasury or not registered area.



Conclusion and Evaluation

Even if an awareness of LC is formed among other state agencies and farmers by the implementations, increasing the information work will increase the participation and thereby accelerate the work. Participation can be increased with an organizational structure as unions. Establishing of this structure is need for monitoring and evaluation activities on field, too.



Conclusion and Evaluation

Agricultural activities across the Turkey display differences.

The agricultural lands meeting different needs in different areas shows we need to use different steps on planning from the agricultural point and determine services with specific solutions at every region.

The fact of using LC as a tool to solve different needs' solution at the performing of these steps comes up.

• Plantation Diversity (rose hip, Lavandula stoechas, etc)



Conclusion and Evaluation

- Priority at LC is currently on the areas which opened or will open to irrigation, and the aim is for all lands. GDAR is keeping its work based on basin. Also Law number 5403 has provided great opportunities on spreading of LC across the country with other investment institutions for expropriation purpose
- After 2002 LC has taken among prior labors of MoFAL and continued with rising allowance by the years
- We should deal with integrated solution at agriculture
- Land Banking System should be occurred and used in LC Projects
- Private and Public Sector Employment in LC should be run up.



Conclusion and Evaluation

Specified fields afforestation in the consolidation lands protocol was signed between General Directorate of Forestry, General Directorate of Desertification and Erosion Control, General Directorate of Nature Conservation and General Directorate National Parks and GDAR in 03.12.2013.



Land levelling and cutting trees in land consolidation area



Before LC in Denizli Acıpayam Plain



After LC Denizli Acıpayam Plain



Thank you for your attention!

Contact: Fatma Tüz Zehra GÜLSEVER email: ftzgul@yahoo.com