# Problems Occurred from Block Planning and the Lack of Coordination between the Institutions in Land Consolidation Projects

### Turgut Ayten, Sabahattin Akkus, Hasan Çagla, Fuat Basciftci and Seyit Ali Yılmaz, Turkey

**Key words:** Land Consolidation Projects, Block Planning, The Lack of Coordination between the Institutions, Economy.

#### SUMMARY

One of the most important applications of Agricultural Development Programs in Turkey is Land Arrangement. Land Arrangement which is called Land Consolidation Process is consolidation of more than one parcel in an area in different places and in different size by taking into consideration of their parcel index, and putting them into the blocks which is designed to have road and water connections. Putting these kinds of applications into the investment program in developing Turkey is a phenomenon itself. For that reason, all of the preparations of the projects which are taken into the investment programs have to be done and applied sensitively and rapidly, and it is necessary to set up a healthy communication and start the application with information and document interchange. Feasibility of the first information in project solutions is very important. According to the data gathered from the first information, very important project factors are taken for the project. One of the most important project factors is block planning. Block planning is one of the most important factors which guides and constitutes road and irrigation in consolidation. Road and irrigation systems are the main components which constitute, increase or decrease the project cost. For that reason, block planning must be designed carefully in order to avoid much revision in following days.

As a result, the present time situation of the area in the project has to be well evaluated. Correctness of the project element eases the project solutions, shortens the period of work, get the social events under control. Besides, it provides to produce more economical projects.

In this paper, the effects of the block planning and the lack of coordination between the institutions to the parcels of business enterprises in land consolidation projects which are carried out according to the Land Consolidation Regulations are studied, and proposals are tried to be put forth.

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## **1. INTRODUCTION**

The land consolidation applications are done according to the 24.09.1979 and no.7/ 18231 Land Consolidation Regulations. This regulation is used in continuing the works of which awarding is done before this date and join its managements to City Private Administration with the regulation dated on 13.01.2005 and regulation no.5286 Amending some of the laws, and abolishing the General Management of the Village Service. The block planning and the classification studies which are done at the planning step have been done according to the regulations and instructions (Çay,2001). It is necessary to be very careful at this step, since the processes in planning reflect to application. The process referenced from the planning step must provide the project to continue without any changes.

The changes in the later steps of the projects cause negative events in labour, cost and time. Besides, this kind of changes will influence the point of view of the farmers' families negatively to the consolidation in the application area and will cause losing respect and trust of the responsible firm and the institution.

Land consolidation is a group of works which many institutions must work together and comply with the works of each other. For that reason, communication and coordination between the institutions are very important. The coordination between the institutions must be important in order to hinder the authorization chaos and to provide the healthy continuing of the projects.

## 2. BLOCK PLANNING IN LAND CONSOLIDATION STUDIES

#### 2.1. Block Planning Studies

Block planning (road network and irrigation system) is the skeleton of the land consolidation projects (Erkan, 1985). The skeleton must be prepared in a way according to the conditions and the needs of the project area that would not change again. The institutions which are to work in that area especially the related managements of the Directorate of State Hydraulic Work must be contacted, and the common areas must be determined. The research of the road, irrigation and drainage are generally determined on the 1/5000 scaled standard topographic maps. The scales of those kinds of maps are very small, so it is not possible to see many details.

TS 8C - Land Consolidation Turgut Ayten, Sabahattin Akkus, Hasan Çagla, Fuat Basciftci and Seyit Ali Yılmaz Problems Occurred from Block Planning and the Lack of Coordination between the Institutions in Land Consolidation Projects The block planners take into consideration of the new parcels which will be exit after the consolation have a side to road and provide to reach the irrigation system while they are planning (Taka, 1993).

The width and length rates of parcels are formed according to the standards in determination of the block sizes.

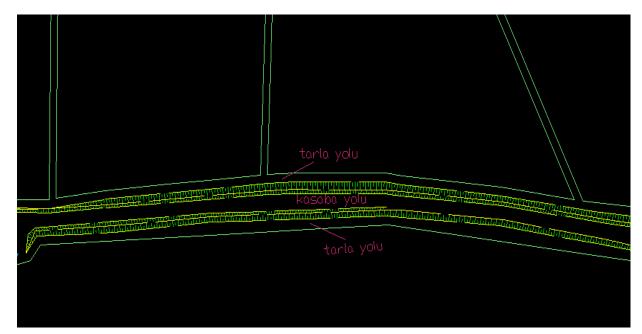
#### 2.2. The Matters are to be Consider in Block Planning

The scale of the map which will be used in block planning should be small. The perfect scale for it must be 1/1000. The details in the small scaled maps are clear enough and it provides forming a correct structure.

The present situation of the roads, brooks, creeks, canals and fixed establishments must be investigated and required researches must be done and the blocks must be designed as to the research results. The materials which will block the change pressures must be collect well.

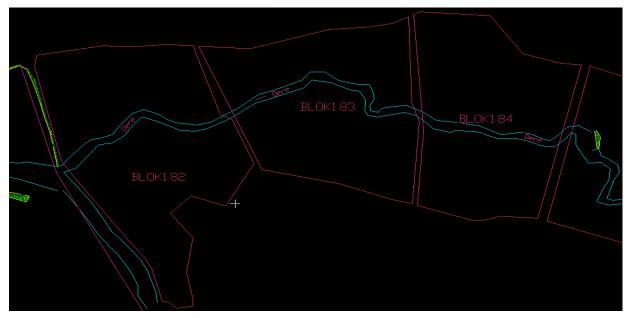
The project start and end of the current roads in block planning must be researched carefully. If the road connects the two villages, the blocks mustn't be formed to close it, the road must be protected. Closing the roads which connect the villages causes the people wronged who use the road.

Whether the new parcels are benefited from the roads on the condition of the protection of the old cadastral roads must be seen in the area but not on the map, and then it must be decided. In some of the cases there are big height differences between the old road and the fields, and hinder reaching the road directly. In these cases, the present road must be widened and a service road must be opened. Figure 1.





The present deep brooks and creeks mustn't be closed because their sources are closed or because of the worry of their participation share would be very high. Figure 2.



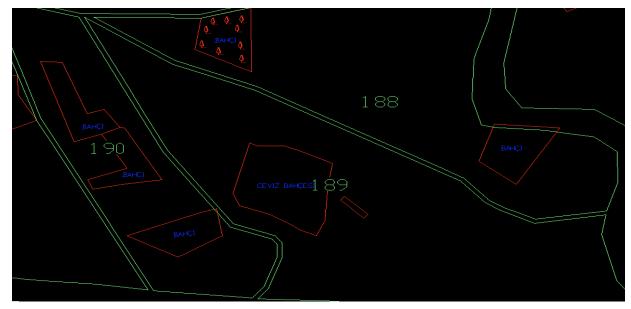
#### Figure.2

The filling of these kinds of brooks and creeks raises the costs. Besides, it will drain water coming from the left and right surface when it rained a lot. Ways must be leave to the both sides of the brooks and creeks to connect the road.

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The topography of the land must be taken into the consideration in block planning. Perpendicular ways mustn't be thought in sloppy lands, but spaces between the blocks parallel to the slope must be left.

The fixed establishments in the consolidation area must be determined carefully before the block planning. Otherwise, when the fixed establishments wanted to remain in the middle of the blocks, the difficulties are faced to reach the road and irrigation system to the blocks. Figure 3.



#### Figure.3

When it isn't succeeded, the skeleton of the Project is deformed. Once the skeleton is deformed, the rate of participation has been changed, and the change removes all the studies up to that time.

The state of the cadastral parcels must be considered. The width of the block must be arranged according to the situation. If this study isn't done the new parcels will be narrow and long and not suitable to cultivate.

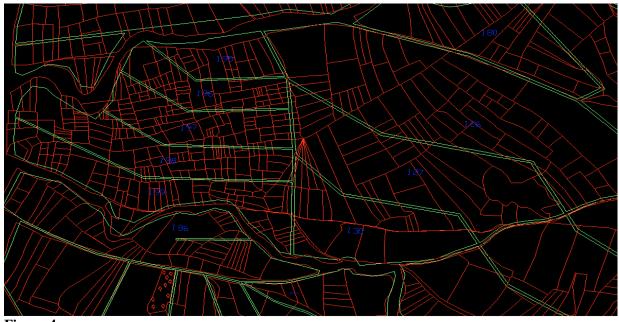


Figure.4

Information must be taken if there will be a traffic roads or widening in the Project area from the Region Highways Managements, and if there will be, block planning must be done according to that situation.

# 3.THE INSTITUTIONS CARRIED OUT THE LAND CONSOLIDATION AND COORDINATION PROBLEM

#### **3.1.** The Institutions Carried out the Land Consolidation

The land consolidation is carried out the institutions and the organizations below:

- **1.** The General Directorate of Land Agriculture Reform (GDLAR, the institution which gives, the permission ,carries on and controls the land consolidation),
- **2.** The Hydraulic Works of State (HWS, the institution arranges and applies the irrigation projects before land consolidation),
- **3.** The Management of Deed Registration (institution which provides the meter squares of the parcels, names of the owners and the shares, and gives the title deeds),
- **4.** The General Directorate of Deed and Cadastre (GDDC, provides the map sheets where the cadastral parcels are found, gives the numerical information of the parcels, and controls the offices and lands),
- 5. The contractor firms which performs the engineering jobs in Land consolidation.

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# **3.2.** Coordination Problems between the General Directorate of Land Agriculture Reform and The Hydraulic Works of State

Land consolidation and irrigation construction jobs can't be carried on parallel way because of the irrigation and consolidation are the jobs of separate institutions, two responsible firms carry out the work, and related to this problems the different dates of starting and finishing the jobs; and there are important delays on returns of the investments.

Land consolidation studies must be carried out with the irrigation as a need of the projects. Although much care has been taken to the carrying out the two jobs and from the planning step to application, coordination with two institutions is not possible, and this makes getting the expected output difficult. In these situations, land owners hinder the construction of the irrigation systems because they are projected without looking at the borders of properties.

Flumes have been installed without water is supplied and in following years the flumes are destroyed or used for different reasons by the farmers. ( as happened in Çumra and İçeriçumra).

Problems occurred from the expropriation is faced in the projects done with the partnership of the Hydraulic Works of State. Since the expropriation prices of the places of the irrigation and drainage canals which are expropriated by the HWS aren't taken by the people or because they didn't do the official registration from the deed registration office, the canal parcel numbers stay on the owners. Whether the participation fee will be paid from the parcels to the common establishments has become a problem. Since the situations are not clear, they have caused the projects be seriously late.

#### **3.3 Problems Faced with the Deed Registrations**

The mistakes like having not the same share rates in the deed registers and the cadastral parcels in the consolidation field, letter mistakes in people's names or surnames, being not the same person of the user of the land ( using still the name of his or her father) and the owner can be often seen. Differences which exceed the recommendations between the lands in deed registers and cadastral science folder, and the numerical lands have existed. Correction of the mistakes legally takes too much time, and this put the applicators in a difficult condition. The mistakes occurred from the deed registers can be corrected according to the no.1458 circular of GDDC (Çay, 2001).

The negativity which can be existed from 'same right' loss must be reduced by evaluation of inheritance positions if there are deed register information of the parcels which will consolidated.

#### **3.4.** Problems about the Cadastre

Inharmoniousness of the horizontal control points which include the consolidation field delays the substructure works. The period of the projects gets longer because the Cadastre institution has too much work and this causes the control mechanism work slowly. Ground TS 8C - Land Consolidation

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Integrating Generations FIG Working Week 2008 Stockholm, Sweden 14-19 June 2008 study must be finished before passing the consolidation study, the state of the ground must be analyzed and the inharmoniousness of the sheet and ground, technical mistakes must be found out and corrected (Tartar, 2005).

Updating the cadastre or the new establishment cadastre must be provide in the preparation studies of consolidation.

### **3.5.** Problems Occurred from the Contractor Firms

The contractor firms in consolidation must have two groups: construction group and the group which gives the engineering services. While the construction firms are very strong in Turkey, the members of the engineering group which carries out and forms the project are inefficient. The technical knowledge and the communication skills must be very high because they will meet and speak to the farmers. Their convincing skills should be very high because they will provide the communication between the institutions.

#### 3.6. Authorization and Responsibility Chaos

Since different profession groups has worked together in land consolidation job, and they may have disagreements in a subject and this sometimes causes damages in their relations. Because of this, some of other the project members get serious responsibilities although they don't have any relation with his subject since they sign together in getting the Money.

### 4. CONCLUSION AND PROPOSALS

The profitable investments can't be done because of the lack of a qualified staff in the studies before the consolidation and making consolidation on the wrong places. For that reason, skilled specialist engineers must be employed on the study, project and application steps. Specialist Agriculture and Survey engineers must be in the project group in block planning, and they work together (Çay, 2005).

Block planning layouts mustn't be 1/5000 scaled maps but definetely 1/1000; studies must be done on the maps which numerical measured cadastre parcels are drawn.

Block planning must be drawn on the classification maps, and they must be turned out to big scales.

While the cadastre parcels and the block planning maps overlap, numeric rates of cadastre parcels must be calculated, if there weren't they must be turned into numeric rates.

The institutions and the organizations which take authorization and the responsibility in land consolidation studies must be communicate sincerely in their institutions and with other institutions. Alterations in the projects must be done after consulting with other institutions. The alterations mustn't be in the dimension and form that spoil the essence of the project, and the related people must be informed about the alterations.

TS 8C - Land Consolidation Turgut Ayten, Sabahattin Akkus, Hasan Çagla, Fuat Basciftci and Seyit Ali Yılmaz Problems Occurred from Block Planning and the Lack of Coordination between the Institutions in Land Consolidation Projects Deed Registration managements and Cadastre managements must give priority to the land consolidation project for the public benefit.

The firms which do the land consolidation should employ the technical staff who are to give the engineering services. They should be careful to their staff be experienced and skilled.

#### REFERENCES

#### Arazi Toplulaştırması Sempozyumu, 15 Eylül 2005, Konya, 2005

Arazi Toplulaştırma Tüzüğü. Köy Hizmetleri Genel Müdürlüğü. Ankara, 1979.

Arazi Toplulaştırma Yönetmeliği. Köy Hizmetleri Genel Müdürlüğü. Ankara, 1982.

Çay,T., Arazi Düzenlemesi ve mevzuatı.Konya,2001

**Çay,T.,** Konya da Yapılan Arazi Toplulaştırma projelerinde Uygulama Problemleri,Türkiye'de

Erkan, H., Arazi Toplulaştırma (Ders notları). Konya, 1985

Takka, S., Arazi Toplulaştırması. Kültür Teknik Derneği Yayınları. No:1 Ankara, 1993

**Tartar.M.,** Konya da Yapılan Arazi Toplulaştırma projelerinde Uygulama Problemleri,Türkiye'de Arazi Toplulaştırması Sempozyumu,15 Eylül 2005,Konya,2005

#### CONTACTS

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