

# **Land Consolidation: A Key for Sustainable Development French Experience**

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## **ABSTRACT**

The rural land management in France principal aim is to improve the land practice organization of land properties both agricultural and forest ones.

Since July 2001, the rural code explains that land management procedure includes the local land policy of the communes or districts. Particularly, environment, listed monuments and sites become ones of the most important aims in land management.

These topics are already used in actual practice since the beginning of the nineties. Officialize them means that the classical way of land management typical rural is changing in a most general way.

The French way of land management the most used is "remembrement" (regrouping of lands). We can call it land consolidation. In this paper, we will talk about this procedure based on land parcels organization and property management.

There are seven procedure sorts in land management in France, but the classical one is "remembrement".

In land consolidation procedure, land exchanges are based on agronomic value and not on financial one. The aim of this land management is to obtain a better organization of land properties and land farming concern.

There is an important participation of the owners during several public inquiries during all the procedure.

In France, a land consolidation means that the areas and boundaries are updated and certified by the procedure. French State, with the agricultural ministry, is the organism payments office of the procedure. The technician in charge of the operation is a private surveyor (member of the "Ordre des Géomètres-Experts", Private Expert Surveyors Organization) certified by the agricultural ministry. He makes the plan in a technical and juridical way according with the local commission of land management who decides.

## **ABSTRAIT**

Le principal but de l'aménagement foncier en France est d'améliorer les exploitations agricoles ou forestières.

Depuis juillet 2001, le code rural stipule que l'aménagement foncier doit inclure l'aménagement du territoire communal. En particulier, l'environnement, les monuments historiques et les sites remarquables deviennent l'un des buts de l'aménagement foncier.

Ces sujets sont déjà traités dans la pratique depuis le début des années 90. Les officialiser signifie que la méthode classique d'aménagement foncier est en changement général.

La procédure d'aménagement foncier la plus utilisée en France est le remembrement (regroupement de parcelles). Dans notre article, nous parlerons de cette procédure basée sur l'organisation parcellaire et la gestion de la propriété.

Il existe sept procédures d'aménagement foncier en France, mais la plus utilisée est bien le remembrement.

Dans cette procédure, les échanges de terrains sont basés sur la valeur agronomique des parcelles et non sur leur valeur vénale. Le but de l'aménagement foncier est d'obtenir une meilleure organisation de la propriété foncière et de l'exploitation agricole.

En France, un remembrement signifie que les surfaces et les limites des parcelles sont mises à jour et certifiées par la procédure. Le technicien en charge des opérations est un géomètre-expert (membre de l'ordre des géomètres-experts) agréé par le ministère de l'agriculture. Il établit le projet d'une manière technique et juridique en accord avec la commission communale d'aménagement foncier qui est l'organne décisionnel.

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# **Land Consolidation: A Key for Sustainable Development French Experience**

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## **1. INTRODUCTION**

The aim of land management is to put up in value and to improve the farming concern of land property as well agricultural or forest ones. Land management is also a part of local sustainable development.

To be successful, a land management has to respect the natural environment, rural patrimony and landscapes as it is described in the rural code. A good knowledge of the local area is necessary and this is the reason why the "impact study" as been created in 1977. In 1993, the "preliminary study" became obligatory and permit to decisioners to be informed of the preliminary state of environment before define the perimeter and the type of land management procedure they want to choose.

## **2. PRELIMINARY STUDY OF LAND MANAGEMENT**

### **2.1 Content**

The preliminary study of land management (EPAF) contains the land management statement, the initial statement of environment study, propositions to justify the chose of one land management procedure respecting the environment. Three parts have to be analyzed.

#### 2.1.1 Land Management Study

An Expert Surveyor who analyses the statement of land property and agricultural farming concern does the first part of the EPAF. A general study of the local area concerning demography and agricultural datas is also necessary.

The size and form of parcels is analyzed and conclusions are presented with the farming concern map and the land owners map.

#### 2.1.2 Environmental Study

The specialist of environment analyses the landscape, the hydraulic situation and the ecological statement.

The value of this part of preliminary study has been improved during the five past years.

#### 2.1.3 Land Management and Perimeter Propositions

The third part of the preliminary is done both by the Expert Surveyor and the Environment Specialist who have to work hand in hand. The aim of this chapter is to propose to the local commission of land management (CCAF) the most efficient procedure and the good perimeter to make the procedure successful.

In most of cases, land consolidation procedure is chosen by the CCAF because this is the most efficient way of land management.

## **2.2 Technical Specifications and Financing**

### 2.2.1 Technical specifications

Land management preliminary study is a technical document essential in the choice of the procedure. In the law, this study is essential since 1995, but in practice, it has been used since the beginning of the 90' in several cases.

Chosen land management procedure must follow the EPAF conclusions to respect landscapes, the quality and the functioning of the hydraulic system, the natural harmony and the wildlife.

In any case, the land management procedure can deteriorate the initial situation of the environment and if it is possible, the procedure would try to improve this situation.

As an essential piece of the public inquiry about the perimeter of land management, the EPAF is a sort of introduction to the procedure and must be realized with the best quality.

### 2.2.2. EPAF Financing

The cost of the preliminary study of land management is about 15 and 40 € per hectare. There are some variations due to the territory specifications like relief or little parcels size. We can consider that in France, the average cost of a preliminary study of land management is 25 € per hectare.

The totality of the financing is the charge of the Department Council, in case of classical land management, or of the big linear work Society, in case of the highway or railway building for example.

The local land management commission (CCAF) has to make her choice between several procedures. The most used is land consolidation. This is the topic of next chapter.

## **3. LAND CONSOLIDATION PROCEDURE**

Land consolidation aim is to improve the farming concern, agricultural and forest, and to participate to the land management of the district.

We will consider two types of procedure : classical one and big linear work one.

Both procedures are similar. The difference is the compensation of the creation of a big linear work like an highway. Actually in France, most of the procedure is used while a big linear work is created. The classical procedure is less used because cost problems.

Land consolidation procedure is constituted of several parts:

- Definition of perimeter (in the EPAF)
- Classification of parcels

- Preliminary plan
- Land consolidation plan
- Ownership intake

### **3.1. Perimeter**

Land consolidation perimeter is chosen by the local commission during the preliminary study. The perimeter must be appropriate to the territory as well as possible.

The first public inquiry guarantees the transparency of the procedure. During all the land consolidation, several public inquiries permit to all the owners of farmers concern to be informed. They can make complaint to the local commission or to the department commission and to the administrative court of justice in case of big contentious.

### **3.2. Classification**

Classification operation is the real first part of land consolidation procedure. This is an essential part because a good classification makes a good land consolidation. In fact, land consolidation exchanges are based on parcels agronomic value and not on monetary value or cadastral fiscal value.

The CCAF is responsible of all the procedure parts and she works with the private expert-surveyor to realize the classification.

Based on agronomic value, situation and serve of parcels, the classification operation must determinate a point value per hectare in several classes. These classes are determinate on the land quality, the soil depth, conditions of farming concern, dry character of parcel, etc.

Land consolidation unit point is used to determinate each class value. By convention, the first class is 10000 points valued and the others are determinate in function of the parcels characteristics.

Exchanges of land are based on the value in point of each owner property and this is the link between surface and quality.

For example, we can have a classification table like this :

Class	Value per hectare <i>points</i>	For 1 ha from precedent class we must have
1	10 000	
2	9 500	1 05 26
3	9 000	1 05 56
4	8 300	1 08 43
5	6 500	1 27 69
6	4 000	1 62 50
7	1 000	4 00 00

The expert-surveyor, with a delegation of the local commission and with all person knowing land territory goes on the terrain to observe the parcels and to classify them. Reference parcels are chosen to determinate the base of classification because their characteristics are the most representatives of each class. These references parcels will be the base of discussion while the local commission will examine the complaints of owners after the public inquiry.

The classification maps are colored in function of precedent table. Colors choice is a convention.

The classification operation is presented in a public inquiry in which all the ownership is verified by the mortgages service to determinate the real owners of all the land consolidation perimeter parcels. The classification maps are noticed during minimum 15 days in the city hall, and there is a register to record the record all the owners complaints.

The CCAF will examine the complaints and make changes in the classification maps if she judges this is necessary.

The classification is one of the important parts of land consolidation and after all these operations, the preliminary plan can be studied.

### **3.3 Preliminary Plan**

The private-surveyor has to build, with the local commission of land management assistance, a new map of land consolidation. Exchanges are based on the classification of parcels and the balance must be respected with a one percent tolerance on the points of each owner. Surface tolerance is about ten percent. The difficulty of the procedure is in the discussion between the owners. In France, people are very attached to their property because of familial transmission of it. In some mountain region, this fact is more important than in the big agricultural plains. Related to the perimeter's surface, the study of the preliminary plan can take several months of discussion, arbitration, terrain visit an so on.

Before the preliminary plan reflection begins, the terrain teams make a land survey of the entire perimeter to build a new cadastral map which will be the base of the preliminary plan map study.

The general accuracy is about 10 or 20 centimeters for map's scale of 1/2000 in rural sectors and sometimes 1/1000 if the perimeter includes hamlets or little villages.

The preliminary plan is submitted to a public consultation which is not an official public enquiry but which permits to all owners to see the new proposal land consolidation map. At this moment of the procedure, owners can make requests if they don't agree the commission proposals.

### **3.4 Land Consolidation Plan**

The preliminary plan consultation is a guarantee to make a good land consolidation plan. The study of owners requests permits to correct various mistakes and to improve land parcels

exchanges. Also, if corrections are made at this moment, there will be less essential complaints in the plan public enquiry.

The plan public inquiry is one month long. All new proposal land consolidation maps are presented in the city hall, with the previous property register of each owner. The complaints are registered like during the classification enquiry.

The local commission has to examine all the complaints and there is a new presentation after these analyses.

Owners can make new complaints if they always don't agree with the proposal plan before the departmental commission of land management. This commission can make a new proposal will be submitted to the owner.

In some difficult cases, if the owner is always in conflict with the proposal, he can make a complaint before the administrative court of justice which will decide according to right.

#### **4. RELATED WORK**

A big part of land consolidation procedure concerns the related works. Land consolidation permits improvement of dirt tracks, country roads and parcels serve.

Planting different trees is also possible if hedges have to be cut because of the new parcels forms.

Creation or improvement of ditches can be made to regulate the hydraulic system according to the respect of nature harmony.

All the proposal related works are submitted to the land consolidation plan public enquiry and can be contested by every owner.

#### **5. FINANCING**

##### **5.1 Land Consolidation**

The financing is the charge of the department council which can use state and Europe financing helps. In several cases, owners or farmers can participate directly to the financing, but this is only in some particular cases.

Actually, the average cost is about 250 €per hectare.

In big plain regions where land consolidation is realized for the second or the third time, the cost is less expansive, about 125 €per hectare.

In difficult regions, like mountain ones, the cost is more expansive, due to the form of parcels and less sized ones. The cost is about 430 €per hectare.

The important cost of land grouping has to be considerate in the local sustainable development. The balance between the number of owners and the value of land parcels and the result of land consolidation can measure the success of the procedure.

## **5.2 Related Works**

The related works cost is very variable. It depends on the type and the nature of realization of related works and particularly if road surfaces have to be build.

The average is about 150 € per hectare. It is variable between 80 and 500 € per hectare depending on cases.

## **6. CONCLUSION**

Land management procedures were created to improve the agriculture just after the second world war. The evolution of practice and of needs of various actors in this topic has transformed the procedure. Now, we can really speak about land management, land consolidation in first position, as a tool of local sustainable development. But the problem of financing this procedure, the cost are already high, doesn't facilitate the task. Land consolidation is the best tool to harmonize the agriculture improvement and the land use by all the local actors.