

## **Approaches and project plans for land consolidation in Romania**

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### **1. Current situation**

The way chosen by Romania to solve the restitution process (i.e. land that belonged previously to agricultural production cooperatives) resulted in a highly fragmented ownership pattern. Privatization and restitution of farm land has involved more than 5 million people, fragmenting land-ownership and causing the average farm size to fall to less than 3 ha. Farms are, moreover, divided into 4 or 5 separate parcels and in some cases even more. The average area per individual agricultural holding amounts for 1.73 ha. Based on data from the same census, it results that 26.2% of total individual agricultural holdings operate an area less than 0.3 ha each; these holdings use about 1.6% of UAA in the sector of individual holdings. It is worth mentioning that almost 50% of the individual agricultural units fall into the category of the UAA 0.31-2.0 ha; these units operate 24.7% of the UAA. There are 0.98 ha per each economic unit from this class. Most of Romania's UAA farmed in the individual agricultural holding system (37.6% of UAA) belongs to the agricultural units from the category of size 2-5 ha. The agricultural units from the size category 5.1-10 ha own 5.0% of total individual agricultural holdings and use 18.4% of UAA farmed by individual units; there are 6.6 ha UAA per agricultural unit. It is worth mentioning that the individual agricultural holdings with an area of more than 10.1 ha, representing only 1.1% of total individual holdings, operate 17.6% of UAA from individual holdings.

After 1989, in Romania's farming sector a polarized structure in land operation emerged and developed: on one hand a large number of small peasant household farms, and on the other hand a relatively low number of large-sized farms, organized according to private firm principles. According to the data of the General Agricultural Census (GAC), 4,462.2 thousand individual agricultural holdings are found in Romania (99.5% of the total number of agricultural units) that operate 7,708.8 thousand ha utilised agricultural area (UAA) (55.4% of UAA from Romania).

In an optimistic evaluation only a little more than 6% of total individual agricultural holdings from Romania could be compared with the family farms in the EU countries. This figure is quite relevant and does not impose additional comments on the efficiency of land resources allocation to the largest part of agricultural producers from our country.

Rural infrastructure has often deteriorated considerably and many rural roads, irrigation systems and erosion control measures are in poor condition. The roads and the irrigation and drainage systems that were originally designed to suit the cultivation of large tracts of land have often not been reconstructed to suit the new smaller family farms. Power and water

systems are prone to breakdown and other rural public facilities have also suffered from lack of attention.

Thus, a sound agricultural policy is needed and good projects need to be generated so as to accelerate the process of land consolidation into viable farms, able to face the competition in the European Union.

## **2. Current agricultural policy**

To date, agricultural policy has focused on several objectives namely: family farm establishment and development; land market establishment favouring size increase of family farm; land use concentration by supporting agricultural production associations and land leasing etc. The National Plans for Agriculture and Rural Development supported the reinforcement of agricultural farms, but no policy directly targeting the settlement of the fragmentation effects has been implanted to date.

One of the Romanian government's objectives is to develop special measures to transform semi-subsistence farms into commercial farms and to increase the size of farms in order to benefit from the economy of scale. The Romanian Government has presented a programme for the period 2005-2008 which pursues the achievement of the following objectives:

1. finalization of land property reform; and
2. stimulation of peasant households' transformation into commercial family farms.

In particular the first objective includes the following activities:

- finishing of the land reform programme, including completion of land restitution and fair monetary compensation when land restitution in kind is impossible;
- monitoring of the land property restitution programme;
- registration of all agricultural and forest areas by introducing a single cadastre;
- revision of agricultural land succession procedures.

The second objective of establishing and enlarging family farms is a main concern of this Government. To this respect, supplementary measures to support policies for agricultural holdings are foreseen:

- state support stimulating agricultural land exchange and sale;
- promotion of investments for new farms and consolidation of existing ones;
- provision of a lifelong "land allowance" for each hectare of agricultural land sold by an owner of at least 62 years old;

## **3. Measures and activities to improve the situation**

Recently (January 2006), a farm consolidation project has started in Romania. The main objective of this project is to provide technical assistance for strengthening the institutional capacity to deal with land size related constraints and the formulation and implementation of sound agricultural and rural development policies enabling the development of a more competitive sector.

"Support in development of agricultural land consolidation policies" is a PHARE-funded project whose overall objectives were the following:

- to facilitate the restructuring of the agricultural and rural sectors through the implementation of reformed agricultural and rural policies,

- to stimulate economic growth and alleviate poverty,
- to facilitate an acceleration of the EU integration process
- to improve the agricultural structures in order to be able to compete with the other EU agricultural structures

The objectives of this project were the follows:

- To assist the Romanian Government to define a consistent land consolidation policy
- To establish an effective land consolidation policy capacity in the Ministry of Agriculture and Rural Development.

There were two target groups: on one hand there is the rural population who should benefit from increasingly efficient and effective mechanisms; and on the other hand there are officials of the MARD who would benefit from improved land consolidation management systems, procedures and skills.

***Results to be achieved:***

- training for the Staff of the Ministry of Agriculture and Rural Development
- to develop techniques and procedures to identify land consolidation needs as part of a more comprehensive rural development policy,
- to design interventions (measures) to be funded from available SAPARD and other EU structural funds as well as available national budget;
- to develop and implement policies aiming at mitigating the effects of fragmentation and support the sustainable development of rural areas,
- to design a preliminary land consolidation plan for the whole Romanian territory; and
- to adapt the land consolidation plan upon results achieved.
- to develop procedures and tools developed to support the analysis of the priority and critical land issues in Romania
- to prepare a strategy paper to address the issue of increasing the number of viable agricultural farms through restructuring and modernisation
- to prepare an action plan aiming at improving the functioning and effectiveness of the land market in Romania.
- to draft a policy paper on retirement schemes for farmers or to improve the existed one, restructuring of semi-subsistence farms and use of resulted available land for farm consolidation purposes
- to organise and promote wide debate on the policy proposals involving the farming community, decision-makers, academics, donors, etc
- to draft new legislation (laws, regulations, etc) for guiding future land consolidation programmes

This Technical Assistance project is aimed at assisting the Ministry of Agriculture and Rural Development to develop and strengthen its capacity to guiding the sustainable development of land consolidation policies in Romania's rural areas. In this respect, a "regional" farm consolidation pilot plan was prepared for three communities chosen by the Consultant out of six pre-selected counties. These are:

- Lupsanu (Calarasi county),
- Francesti (Valcea county) and
- Cornesti (Dambovita county)

The communes of Lupsanu, Francesti and Cornesti are considered to be representatives of the farming systems prevailing in overall Romania, and a lot of information (including ortho photoplans) is already available, this being a significant argument in the pre-selection criteria.

The IACS Twinning project has the orthophotos of the overall territory of these communes and started soon the pre-registration of farmers that cultivate each parcel of these territories. In Francesti 40% of working farmers cultivate holdings larger than 1 ha and their area include orchards (mainly plums) and arable land. On the contrary, in Lupsani only 8% of working farmers cultivate holdings larger than 1 ha and their area includes almost exclusively arable land while as many as 76% of working farmers have holdings of less than 0.3 ha (likely to be kitchen-gardens).

There are significant differences among the three chosen pilot areas (Francesti, Cornesti, Lupsanu) as far as the farm land management, fragmentation, geographical position, main agricultural activities, climate etc are concerned. Thus, the aforementioned differences made it possible to carry out an exhaustive study on the agricultural situation, the necessity to consolidate agricultural land, as well as to identify the problems in each area.

### ***Target groups***

The main target group (beneficiaries) of the project consists of the rural population who should benefit from increasingly efficient and effective mechanisms to support the economically, environmentally and socially sustainable development of rural areas.

### ***Specific activities***

In the frame of each project the following activities were carried out:

- informative meeting with the farmers and the interested parties;
- inventorying the current situation;
- owners;
- surveying maps;
- elaborating Map 1;
- workshops of professional training for farmers and the interested parties regarding evaluation;
- courses regarding rural development and entrepreneurship;
- evaluation – model test and field inventory. An evaluation model test was carried out as well as a set of field recording forms;
- discussions with land owners regarding their opinions and options in the proposed Farm Land Consolidation Plan;
- preliminary activities in Farm Land Consolidation Plan.

### ***Gained experience***

- the owners showed considerable interest in the initial informative meetings as well as in the workshops and professional formation;
- inventorying and identifying lots and owners in fragmented areas is an expensive and time-consuming process;
- the most laborious activity refers to land survey, specialized personnel, both of them scarce in some counties and absent in others;
- the proposed evaluation model seems to be understood and applied together with the temporarily established committee of the interested parties;
- field study highlighted that numerous parcels were neither productive nor used;

- the shareholders committees benefited from an excellent collaboration, which confirms the importance of the “bottom-up” method;
- due to the significant fragmentation, the amount of information regarding farm land consolidation is huge. The efficient farm land consolidation project management requires a performant data support, hardware and software;
- most land owners in the pilot areas took part in the discussions, assuring correct and relevant conclusions. The main position of the land owners as well as their contribution to farm land consolidation are essential for the success of the project. A number of 833 farm land owners were interviewed;
- a relatively small number of the interviewed owners were willing to let go of their land despite the disadvantages of farm land fragmentation;
- the interest of owners in the problems of land fragmentation was also shown, through them being members of associations or joint-ownership cooperatives. The establishment of cooperatives or associations is probably the most efficient way to eliminate problems created by farm land fragmentation.

### ***Alternative solutions for agricultural reform***

The main objective of the agricultural reform is to promote competitive farm development in Romania. This includes large-scale development of competitive commercial family farms, thus replacing the existing subsistence and semi-subsistence farms. The three identified alternatives are:

- farm land consolidation
- farm consolidation
- development of joint-ownership cooperatives or associations

**Land consolidation** represents the redistribution of fragmented lots and results in ownership over a smaller number of lots for each owner. The growth in size will thus be ensured through acquiring additional land available in the Land Fund or by direct purchase from private owners of farm lands. The number of subsistence and semi-subsistence farms will have to be significantly reduced in order to accomplish the objective regarding viable commercial farms. This objective assumes that about 80% of the farm owners give up their ownership. This measure may prove to have too harsh consequences for owners. That’s why the surface subject to consolidation will be divided into two areas:

- the area for consolidated family farms individually used; it is assumed that these farms will develop and will become viable commercial farms
- the area for joint-ownership cooperatives or associations, consisting of a large number of subsistence and semi-subsistence farms

Such a combination of classical farm land consolidation with the development of associations will be in many cases an excellent alternative. Negotiations will be essential to this alternative and can be long term according to the will of land owners to enter the corresponding agreements.

### ***Farm consolidation***

Farm consolidation represents the process through which a private farm land owner consolidates his/her own farm by adding a rented surface. Negotiation will last shorter, but we need to take into consideration that tenure contracts can be violated. As a safety measure, the new Land Code will need to have recording provisions of the tenure contracts in Land Register.

### ***Development of associations***

The areas with high fragmentation in small farms need to be eliminated according to the present alternative exclusively through the development of associations because there are no fields for sale so as to consolidate some farms or there are no interested farmers willing and able to purchase additional land. This alternative has numerous advantages by solving farm land fragmentation problems.

- accomplishing the objective to develop competitive commercial farms;
- raising the profitability degree in agriculture compared to the extremely low or absent level in subsistence or semi-subsistence farms;
- investments in equipment will be lucrative and economically achievable;
- the management of joint-ownership cooperatives or associations will be carried out efficiently by the committee of the association named by the shareholders (farm land owners);
- the exceeding amount will be redistributed to the shareholders according to their shares.

### ***Estimated necessary resources***

The necessary human resources will be influenced to a certain extent by the chosen method and the relative methodology. Various professional skills and a sound specialized background will be needed. The following categories of personnel will be necessary:

- committees of the interested parties
- legal accreditation personnel
- land evaluators
- land surveyors
- cartographers
- IT and GIS specialists
- land cadaster personnel
- ANCPI/OCPI personnel
- regional personnel

Table 1. Total of personnel for land consolidation

Personnel category	Total of personnel per year				
	10 000 ha/year	50 000 ha/year	150 000 ha/year	250 000 ha/year	400 000 ha/year
Commissions of interested parties					
Central level					
Local level	10 (part time) 10 (")	10 50	10 150	10 250	10 400
Legal accreditation personnel	4	20	60	100	160
Topographer	5	25	75	125	200
Photogrammetry	0,1	0,5	2	3	5
Evaluator	2	10	30	50	80
Land surveyor	3+2	10+10	30+30	50+50	80+80
Cartographer	2	10	30	50	80
IT and GIS specialists	2	10	30	50	80
Land survey personnel	1	5	15	25	40
ANCPI(OCPI) Personnel	1	5	15	25	40
Administrator + technical assistance personnel – regional level		2	6	10	16
Total of necessary personnel	20+2	97+10	293+30	485+50	778+80
Costs	0,4 Mil. €	1,8 Mil. €	5,5 Mil. €	9,1 Mil. €	14,6 Mil. €

### ***Evaluation of necessary resources***

The following methodology was used to calculate personal resources regarding Land consolidation of individual viable family farms (Classical Farm Land Consolidation). Initially the personnel categories necessary to simulate a consolidation for a 10 000 ha piece of land were identified. The number of employees was thus established for each category according to the following assumptions:

<i>Assumptions</i>				
10 000 ha	50 000 ha	150 000 ha	250 000 ha	400 000 ha
<i>Before land consolidation</i>				
5 500 farms	27 000 farms	83 000 farms	140 000 farms	220 000 farms
17 000 parcels	83 000 parcels	250 000 parcels	415 000 parcels	680 000 parcels
<i>After land consolidation</i>				
1 000 farms	5 000 farms	15 000 farms	25 000 farms	40 000 farms
900 km Kg	4 500 km Kg	13 000 km Kg	22 000 km Kg	36 000 km Kg

Kg = length of boundary

Finally the costs were calculated. The figures were extended to three targets: 50.000, 250.000 and 400.000 hectares/year. The costs were calculated considering a gross salary of 17.000€/year for the personnel to take part in the agricultural reform. This salary needs to cover office endowment costs, equipments, transport and general costs.

The time required to apply farm land consolidation measures in agricultural units of individual ownership of 7,7 mil. Hectares.

150 000 hectares	50 years
250 000 hectares	30 years
400 000 hectares	20 years

### ***Farm land consolidation with 50% viable family farms participation and 50% association participation***

Association formation influences the time allocated to the elaboration of the second plan, negotiations, measurements and delimitation, mapping and survey description. Costs are estimated to go down by approximately 20% with the following results:

Table 2. Costs for the LC procedure with 50% family farms participation and 50% association participation

	10 000 ha	50 000 ha	150 000 ha	250 000 ha	400 000 ha
Costs	0,3 Mil. €	1,4 Mil. €	4,4 Mil. €	7,3 Mil. €	11,7 Mil. €

### ***Farm land consolidation with 100% surface in association***

Association formation influences the time allocated to the elaboration of the second plan, negotiations, measurements and delimitation, mapping and survey description. Costs are estimated to go down by approximately 40% with the following results:

Table 3. Costs for the LC procedure with 100% surface in association

	10 000 ha	50 000 ha	150 000 ha	250 000 ha	400 000 ha
Costs	0,3 Mil. €	1,4 Mil. €	4,4 Mil. €	7,3 Mil. €	11,7 Mil. €

### ***Reform legislation regarding farm land consolidation***

The future agricultural reform will have to be applied on the basis of a sound legislative support. The most important aspects of this legislation refer to:

- the conditions and the provisions regarding Farm Land Consolidation
  - the right to initiate the process
  - extending the surfaces requiring consolidation
  - aspects related to opinion
- the neutral and independent responsible authority for the procedure of Farm Land Consolidation
- redistribution principles for farm land
- provisions regarding the formation of joint-ownership cooperatives or associations
- provisions and procedure evaluation
- decisional process
  - permissive order (if necessary)
  - ownership-formation order
  - order regarding compensation including payment conditions
  - order of possession acquirement
  - cost-distribution order
  - conclusive order including the provisions regarding appeal submission

It is necessary to highlight that future land fragmentation will be forbidden by the new legislation.

### ***Institutional framework***

#### **Land Consolidation Agency**

It is imperative to establish with no further delay a Farm Land Consolidation Agency in Romania to be in charge of the agricultural reform.

#### ***Central level***

At central level, with the head office in Bucharest, the responsible bodies for farm land consolidation (Farm Land Consolidation Board) will be in charge of the rural development and land survey policy together with the other boards. The main attributions and responsibilities of the Agency Board are:

- to set and maintain the planning and monitoring technical system of farm land consolidation country-wide
- to communicate with the local offices and to draw reports
- IT and GIS (Geographic Informational System) technical support
- to sustain local offices in promoting farm land consolidation activities for land owners and the public
- responsibility, competency, personnel acquirement and legal guidance for local offices

The personnel of the agency head office will include top specialists such as lawyers, economists, IT specialists, public relations personnel and administrators.

It is absolutely vital to understand the relationship between the central and the local level as far as production responsibility, technical and operational guidance, legal support and financial conditions are concerned.



### *Local level*

Local offices of Farm Land Consolidation need to be established in each county. Each office will be endowed with all necessary personnel as well as with backup administrative and technical personnel. In some cases this will be possible short term at the level of the local offices situated in the project area.

### Land Consolidation and Land Development Department (DFFIF)

During farm land consolidation, the Land Department will sell the land to farmers who wish to extend their properties, thus creating far more competitive commercial farms. The use of Land Department eases to a great extent the elaboration of the second plan in Farm Land Consolidation.

It is recommended that Romania should establish a Land Consolidation and Land Development Department in charge of the management of state-owned land to be used in Land Consolidation Process. The department will not only be in charge, but it will also have the necessary qualification to buy and sell properties with the aim to support land consolidation and other private projects.

### ***Institutional solutions***

The Farm Land Consolidation Agency and Land Consolidation and Land Development Department will have to be allocated to the Ministry of Internal Affairs at the head-office of National Agency of Land Cadastre and Real-estate Publicity. The solution is viable because these three agencies manage numerous land-related problems and their close and efficient collaboration is easy to achieve. Each agency will benefit from the suggested institutional solution. National Agency of Land Cadastre and Real-estate Publicity is already an institution with numerous specialists, such as land cadastre and geodesy specialists and juridical experts, and Farm Land Consolidation Agency needs access to essential official information from cadastre and Land Register.

At the regional level the three agencies have to be coordinated so as to obtain the mentioned benefits. Cadastre Agency will be in charge of the necessary judicial accreditation preliminary to land consolidation works. The updated and verified information will be at the disposal of the Land Consolidation Agency personnel. After the conclusion, the descriptions and survey maps will be urgently submitted to the Land Cadastre Agency.

As far as the owners are concerned, assembly of the three agencies also represents an advantage.

### ***Long term projections in land consolidation***

The objective to implement the agricultural reform is mainly a political topic. The surface of individual farms is considered the most urgent and it covers 7.7 million hectares subject to agricultural reform. The diverse objectives in the realization of a consolidated surface per year will generate the following programme:

Table 4.

Implementation (time, years)	Necessary consolidated surface, hectares per year	Number of farmers involved
20	Aprox. 400000	Aprox. 220000
30	Aprox. 250000	Aprox. 140000
50	Aprox. 150000	Aprox. 80000

The necessary time is not just a matter of available technology, but also a human problem due to the large number of farmers involved in the project. The relationships among farmers affect to a large extent the time allocated to the negotiations, and sometimes negotiations could be rather delicate. The figures in the table need to be considered as approximate. If the 400 000 ha per year target is chosen, a period of about 5 years is required until the agricultural reform reaches the maximum level. The figure of 400 000ha/year means that an annual project of 10 000ha is implemented in each region after the initial period of 5 years.

### ***European support for Romanian rural development***

According to MARD, farm land consolidation projects in Romania will benefit from three types of funding available in the frame of the new European Agricultural Fund for Rural Development (EAFRD): 113, 121 and 125. Rural development will be sustained through a axis-divised strategy, including quantitative objective, intentions and the applied indicators.

Table 5.

<b>NRDP</b>	<b>EAFRD</b>
Axis 1: Improving competitiveness in the agricultural and forest sector	45%
Axis 2: Improving environment in the rural area	25%
Axis 3: Living standard in the rural area and diversifying rural economy	30%
Total	100%
out of which: Axis 4: Applying the Leader approach	2,5% (2010-2013)
Tehcnical assistance	301 M€ (4% of the total EAFRD)
CNDP contribution	500 M€
Total EAFRD	8,022 mio €

The Romanian Government will have to co-finance these measures with 20% of EU contribution. Subsidies for farm land consolidation in EAFRD and country support depend on numerous aspects such as competitive applications for financial support, and the required amount. A vague estimate of public contribution to Farm Land Consolidation in 2007-2013 won't be under 15 M€per year.

For measure no. 125 *Infrastructure for developing and adapting the agricultural sector*, EAFRD allocated approximately 487 mil. € MARD needs to co-finance with 20% or 122 mil.€ which raises the figure to 609 mil.€ for the entire 2007-2013 period. The annual amount will be of 87 mil.€ Due to the importance of other projects only a part of the mentioned amount will be able to be used for farm land consolidation. 15 mil.€is estimated to be used for farm land consolidation in measure no. 125. It is most likely to also give subsidies according to measure no. 113, Earlier Retirement and to measure no. 121, Modernization of agricultural units. That's why 15 mil.€is considered a sure amount. For measure no. 121 private contribution must be co-financed with 50% of the total costs of the measure.

## **4. Conclusions**

Romania will be entirely affected by the future agricultural reform. This means that its implementation will take place in all its 41 counties. The project of reform needs to start with a country-wide awareness campaign through multiple means, such as the press or mass-media, so as to convince people regarding the project of premature retirement, life pension, land consolidation and the reorganization of farm lands and the possession structure. The

objective of farm land consolidation is the development of viable economic structures which will enable the establishment of productive units with economic character, following the regulations regarding soil and environment protection.

The agricultural reform will be gradually accelerated. Institutions need to be established centrally and regionally and the personnel need to be educated and trained accordingly.

The coordination of the committees of the interested parties needs to be well planned so that the foreseen awareness campaign can take place. The informative material needs to be gathered and distributed. Then the initiation of the first projects can be taken into consideration. It is assumed that there will be enough subsidies for farm land consolidation in the 2007-2009 period. After this initial period the agricultural reform will be accelerated in numerous regions. Even if the agricultural reform will reach the level of 400.000 hectares per year in 2010 and later, it's estimated that there will be enough available subsidies.

#### Land consolidation projects

- ✓ Assist Romanian Government to define a coherent land consolidation policy
- ✓ Establish an effective land consolidation capacity in MARD
- ✓ Setting up durable rural development measures