

Study no. 6

**THE AGRICULTURAL SECTOR IN THE
PERSPECTIVE OF ROMANIA'S ACCESSION TO
THE EUROPEAN UNION: IMPLICATIONS UPON
THE SYSTEM OF PAYMENTS**

Authors:

Daniela Giurcă – coordinator

Gheorghe Hurduzeu

Marioara Rusu

Cosmin Sălășan

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List of acronyms

RDA	Rural Development Agency
RADA	Rural and Agricultural Development Agency (Hungary)
API	Agency of Payments and Intervention
NCDP	Complementary National Direct Payment Scheme
CMO	Common Market Organization
NIS	National Institute for Statistics
MAFRD	Ministry Of Agriculture, Forests and Rural Development
MIS	Market Information System
MP	Master Plan
NMS	New Member States
CAP	Common Agricultural Policy
GAR	General Agricultural Register
SAPS	Single Area Payment Scheme
UAA	Utilized Agricultural Area
IACS	Integrated Administration and Control System
APIS	Agricultural Parcel Identification Scheme
DPS	Direct Payment Scheme
EU	European Union
LLU	Large Livestock Unit

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Introduction

The signing by Romania and Bulgaria of the Accession Treaty on April 25, 2005 represented a success and a European recognition of the great efforts that have been made in the latest years on the irreversible way to the European integration. Even though this “recognition” is conditioned by certain obligatory criteria, these might put under question the process only from the temporal point of view, but not from the decisional point of view. Although the progress that has been made so far in order to comply with the accession criteria is quite significant, it can be stated that the most difficult part, i.e. the implementation of commitments and the functionality of institutional mechanisms, represent an important challenge in the period to come.

The quite late completion (2004) of negotiations in Chapter no.7 “Agriculture” (one of the most controversial and difficult negotiation chapters), largely due to the evolution and changes in CAP, cleared up/rectified certain requirements from the initial Position Document presented by Romania, *but it also left a certain discretion of the political decision in the case of certain mechanisms, such as: selection of the direct payment scheme, their potential topping up by Complementary National Direct Payments from the national budget, payment modalities, transfers between the budgetary allocations (possibilities of topping up direct payments from the budget allocated to rural development) as well as the defining of the eligibility criteria for providing the direct support.* All these possibilities should be investigated and evaluated by the decision-makers in order to substantiate the future decisions.

The present study intends to investigate and substantiate the possible options referring to the application of single area payments as well as of the complementary direct payments from a budgetary and administrative perspective. A series of elements have been considered for these evaluations, namely: CAP legislation for the New Member States, the results of negotiations, the guidelines provided by the European Commission for the evaluation and approval of the national direct payments and the experience of the New Member States in relation to these issues.

For the estimation of the budgetary implications, the study presents a series of options for the application of the complementary national direct payments (*topping-up*), evaluated according to the methodology (guidelines) provided to the New Member States on the basis of the following elements:

- The results of negotiations and the financial package for Romania for the period 2007-2009;
- Evaluation of the single area payment scheme (SAPS);
- Evaluation of the complementary national direct payments (NCDP) that can be implemented immediately after the accession;
- Their funding source (national budget and/or the rural development funds that could be accessed through reverse modulation);
- The modality to grant them (supplement per area or differentiation by category of products – according to the criterion of compensating the losses or of the amplification of competitive advantages).

Another objective of the study is the formulation of guidelines and the presentation of certain options that should provide an orientation framework for decision-makers in order to substantiate the decisions in relation to the implementation of the single area payment scheme and of the market intervention measures.

The assessment of the administrative dimension of CAP implementation and the highlighting of the institutional needs in relation to the implementation as well as the analysis of the difficulties encountered in this process represent another side of the study.

The study also intends to identify the possible sectors that would need support by the Common Market Organizations (interventions through export refunds and public and/or private stocking).

1. CAP implementation possibilities in the New Member States (NMS)

According to the Accession Treaty, the farmers from the New Member States (NMS) have access to the possible support that can be provided to the markets regulated through the Common Market Organizations – CMOs) as well as to the direct payments. CAP implementation modality as well as the value of support in the NMS are regulated by the accession documents signed with each NMS in part. Thus, the value of support to NMS from the Community budget is 25 % of the value of direct payments allocated in EU in the first accession year, 30 % in the second year, 35 % in the third year, 40% in the fourth year and then a 10% yearly increase, until 100% of the value of EU-15 support is reached.

According to the regulations into effect and to the results of negotiations, the direct payments (both in crop and livestock production) will be granted regardless of the production level, according to the political decisions, both under the form of a simplified payment scheme (standard direct payment scheme – SPS) or applying the single area payment scheme (SAPS).

In this respect, the European Union left at the discretion of NMS the selection of the direct payment scheme as well as their potential top-up from the national budget (Complementary National Direct Payment scheme). As regards the maximum level of NCDP, it was agreed to be applied at NMS discretion in two modalities, namely: 30% of the value of direct payments in EU-15 or by 10% more compared to the pre-accession support value (in the case when the NMS decided to apply a support policy similar to CAP before the accession).

1.1. Single Area Payment Scheme (per hectare) - SAPS – methodological approach

According to the EU regulations, this support scheme can be applied three years after accession (in this period the NMS can improve its Integrated Administration and Control System – IACS which is necessary for the administration of the single payment scheme – SPS – see Annex 1). At the end of the three-year period, the European Commission will evaluate the IACS implementation stage and will decide whether this form of payment will continue (maximum two prolongations of 1 year each) or whether the single payment scheme (SPS) will be applied. According to these provisions, *it is possible that this payment scheme is valid five years after accession in the case of NMS. If after this prolongation of SAPS application, the management and control systems (IACS) from the NMS are not prepared yet to apply the SPS, it can be decided to continue SAPS application, but the support will be set at 50% of that of EU-15.*

The single area payment scheme (per hectare) SAPS consists of the payment of a uniform amount per hectare which is paid once a year and is decoupled from production. The eligibility conditions for this type of support are generally the following:

- Maintaining the respective land area in good agricultural and environmental conditions;
- The minimum eligibility criterion is the following: the minimum farm size is 1 ha and it should not consist of parcels less than 0.3 ha.

In this scheme, the value of payment per hectare is calculated by dividing the national ceiling of direct payments by the eligible agricultural area.

The eligible agricultural area is the utilized agricultural area established according to the definition by EUROSTAT¹ (regardless if it is or not in production at the respective moment) from the year prior to accession, adjusted according to the criteria approved by the Commission for each NMS in part (minus the area with non-eligible parcels under 0.3 ha, minus the area of holdings having 0.3 – 1 ha, minus the land areas that are not maintained in good agricultural and environmental conditions: eroded, polluted land, etc., minus other inadequate land areas or land with other destinations).

The land areas that have to be excluded from SAPS should be evaluated by the competent bodies of each NMS.

1.2. Complementary national direct payment scheme (NCDP) topping-up for NMS – methodological approach

The NMS have the possibility to supplement their direct payments after the accession (in the transition period) and, by the Commission's approval; this supplement may be under the form of complementary national direct payments (NCDP) the so-called "top-ups". The complementary national payments should not exceed 55% of the value of direct payments in the EU in the first accession year, 60% in the second year and 65% in the third; beginning with the fourth year, maximum 30% above the level of payments of the respective year. The European Union also provided "an exception to the rule" to the NMS, i.e. in the first three years after the accession NCDP can be partly funded from the rural development funds (that can be accessed by inverse modulation) from the financial package established for each NMS in part. This contribution should not exceed 20% of the allocation for the respective year, but the NMS can decide to replace the yearly rate of 20% by the following rates: 25% in the first year, 20% in the second year and 15% in the third year after the accession. According to the Community regulations, these amounts are co-financed from the national budget.

According to the current regulations, it is possible to apply NCDP in conformity with the national agricultural policy objectives and the evaluation and implementation modality depend upon the adopted payment scheme (SPS or SAPS), the calculation modality (as reference depending on the support level in EU-15 or as reference

¹ Total agricultural area, permanent pastures, hayfields and vegetable gardens, vineyards and orchards.

depending on the national support level from the pre-accession reference year), the funding source (if they are completely funded from the national budget or if the Member State uses the option to transfer from the rural development fund maximum 20% of the budget intended for Pillar 2 and in this case co-financing from the national budget is needed).

The Member State and the European Commission share the responsibility as regards NCDP implementation; out of this reason, the implementation methodology should be based upon a common framework for all the parts involved in their preparation, approval, management and control. Out of this reason, the European Commission prepared a set of guidelines for the NCDP evaluation and implementation in NMS.²

*According to these guidelines, NCDP (by Commission's approval) should be implemented only within the support schemes in conformity with CAP (arable crops: cereals, protein crops, oilseeds and fibre crops, as they are defined in Annex I to the Council regulation no. 1251/ 1999, starch potatoes, olive oil, grain pulses: lintseed, chick peas, vetch from the species *Vicia sativa L.* and *Vicia ervilla Willd.*, silkworms, bananas, raisins, tobacco, seeds according to Article 1 of the Regulation no. 2358/1971, hops, rice, beef and veal, sheep and goats, durum wheat, protein crops, rind fruit, energy crops, milk and dairy products.*

According to the methodological framework for NCDP implementation, in the case in which the Member State opts for SAPS application, all the payments within the EU support schemes are grouped into a single financial package to be equally divided for all eligible hectares, no distinction being made between the sectors.

The options for NCDP implementation in this case would be the following:

- For a group of sectors (for example, two schemes, one for the products included in the payment schemes from crop production and a payment scheme for the livestock production);
- For a certain sector or subsector (for example, for one or two products from arable crops and the uniform rest for all the arable crops);
- One scheme for the set-aside land areas or these land areas should be excluded from the payment scheme.

The supplementary payments (NCDP) cannot be applied to the sectors that are not covered by the support schemes in EU-15 (potatoes for consumption, sugar beet³, fruit and vegetables and other permanent crops). The Commission will check up if the NCDP are granted in agreement with the CAP payment schemes from EU-15.

² The guidelines for the approval of the complementary direct payments in the Member States, document that was put at the disposal of the research team of this study by MAFRD.

³ According to the new regulations referring to the Common Market Organization for sugar and sugar products, NCDP is permitted for the NMS. As the regulations were recently issued, we can state, according to MAFRD information, that in this case NCDP can be provided, and the evaluation methodology is to be established later.

2. The experience of the New Member States in direct support implementation and evaluation

As regards direct support implementation, most of the NMS (except for Slovenia and Malta) opted for SAPS. Out of the financial package for the 10 NMS, two thirds of the direct payments are allocated to Poland and Hungary, followed by the Czech Republic and Slovak Republic. The allocation of direct payments in the EU-10 NSM is presented in Table no.1.

Table 1: Direct payments in EU-10 NSM (million euro)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Czech Republic	227.9	265.7	342.4	427.8	513.2	598.5	683.9	769.3	854.6
Estonia	23.4	27.3	40.4	50.5	60.5	70.6	80.7	90.8	100.9
Cyprus	8.9	10.4	13.9	17.4	20.9	24.4	27.8	31.3	34.8
Latvia	33.9	39.6	55.6	69.5	83.4	97.3	111.2	125.1	139.0
Lithuania	92.0	107.3	146.9	183.6	220.3	257.0	293.7	330.4	367.1
Hungary	375.4	408.7	495.1	618.5	741.9	865.2	988.6	1 111.9	1 253.3
Malta	0.67	0.78	1.59	1.99	2.38	2.78	3.18	3.57	3.97
Poland	724.3	845.0	1 098.8	1 373.4	1 648.0	1 922.5	2 197.1	2 471.7	2 746.3
Slovenia	35.3	41.4	55.5	69.4	83.3	97.2	111.0	124.9	138.8
Slovak Republic	97.6	113.6	144.5	180.5	216.6	252.6	288.6	324.6	360.6

Source: Official Journal of the European Union, 30.03.2004

Besides the funds from the Community budget a large part of funds supporting CAP should come from the NMS national budgets.

As CAP implementation in NMS will follow a transition period (as specified in Chapter 1), these states can top up the direct payments from the Community budget with a national contribution (NCDP). The direct payments - SAPS including NCDP in the 10 NMS are presented in Table no. 2.

Table 2: Area payments for NMS (SAPS+NCDP)/ha in euro/ha

Country	Reference yield t/ha	2004	2005	2006	2007	2008	2009	2010	2011-2013
Czech Republic	4.20	145.7	159.0	172.2	185.5	212.0	238.5	265	265
Hungary	4.73	149.5	161.0	174.3	208.6	238.4	268.2	298	298
Poland	3.00	104.0	113.4	122.9	132.3	151.2	170.1	189	189
Slovak republic	4.06	140.8	153.6	166.4	179.2	204.8	230.4	256	256
EU-10	4.00*	138.6	151.2	163.8	176.4	201.6	226.8	252	252
EU-15	4.77	300.5	300.5	300.5	300.5	300.5	300.5	300.5	300.5
EU-10/ EU-15, %	83.8	46.1	50.3	54.5	58.7	67.1	75.5	83.8	83.8

Source: DG AGRI, Country Reports.

* Estimations

2.1. Implementation of direct payment schemes in Hungary and Lithuania

A comparative³ analysis of SAPS and NCDP implementation in Hungary and Lithuania may be useful under proportional comparability conditions.

In **Hungary**⁴, the eligibility criteria for SAPS specify that all physical and legal entities can be eligible for area payments provided under the SAPS scheme in conformity with the agricultural land area they use, if: (i) they submit an adequate application; (ii) they use an agricultural land area which is maintained in good agricultural and environmental conditions and (iii) the land area complies with the size criteria (> 1 ha).

Thus, the minimum size of farm eligible area should be at least 1 ha, while the size of an agricultural parcel should be at least 0.3 ha. Payments can be also asked for fruit and vine farms larger than 0.3 ha.

Hungary could apply SAPS in 2004 on 4,355,154 ha, as eligible agricultural area, using a financial package of 305,810,000 euro.

NCDP payments

As it has been previously specified, Hungary adopted SAPS and chose to top up SAPS payments by applying NCDP.

⁴ Complementary National Direct Payments in Hungary in 2004, translated and adapted by Emilia Teodorescu, IACS department, APIAIADR, document made available for the research team by MAFRD.

For the first accession year, the policy had in view to create 10 different NCDP schemes that were fully funded from the national budget, according to the methodology presented in chapter 1 (direct schemes that should not exceed 55% of the total EU-15 support; this amount was to be deducted from the total amount of direct support available for the sector within the single area payment scheme (except for the NCDP top up for ewes).

The general criteria for granting NCDP in Hungary also refer to the eligible entities; these are the following: a legal entity with its headquarters, or carrying out an economic activity (production, services, trade) or a natural person with the permanent or temporary residence, a natural person or legal entity or other organizations that have a property, obtain income/profit on *the territory of Hungary*.

Specific criteria are also added to the general criteria for each of the sectors included in the NCDP scheme. As example we shall present the specific criteria for NCDP eligibility for crops (including here arable crops, rice and tobacco):

- NCDP per area can be asked for only for those areas for which SAPS payments have been asked for;
- One NCDP application in a given market year can be made for each agricultural parcel;
- Each parcel for which NCDP are asked for on an area basis cannot be smaller than 0.3 ha, but the total area covered by the application should total at least 1 ha (SAPS areas included);
- Where the sowing or planting ended before June 15;
- The parcel should be a well-defined agricultural area;
- Parcels should be maintained under good agricultural and environmental conditions;
- The non-cultivation scheme for the respective area is not eligible;
- The value of support is established on hectare basis;
- If the total land area included in the application exceeds the baseline areas for NCDP, the eligible area per producer will be proportionally reduced in the given market year;
- the NCDP applicants can be the beneficiaries asking for support from RADA⁵.

NCDP payments for the livestock sector

For bovines and sheep, the general eligibility criteria refer to the fact that the applicants should: (a) have a registration number from RADA; (b) have adequate conditions for raising animals as they are defined in the relevant Hungarian and EU legislation; (c) ensure the continuous tagging and registration of animals; (d) have their

⁵ Rural and Agricultural Development Agency from Hungary

own register with the changes in the livestock herds that should be made available to the competent authority, on demand, for a period of three years.

The specific NCDP criteria for beef are the following: (a) the minimum eligible number of animals is one animal; (b) the sale of the animal should be certified by a certificate issued by the Hungarian System of Individual Identification and Registration of Bovines (ICRIS) and export or slaughterhouse certificate.

The specific NCDP criteria for dairy cows: (a) the premium can be applied to cows belonging to bovine species that are raised both for milk and for meat (Simmental) or born from crossings with this species, proposed by the applicant; (b) the minimum eligible number of animals is one animal; (c) the ownership upon the animal should be attested by a certificate issued by the Hungarian System of Individual Identification and Registration of Bovines and the livestock breeding associations; (d) the applicant should make legal proof of the use of semen belonging to a bovine species or to the Hungarian Simmental species for the whole herd of female bovines; (e) the applicant should use semen from registered and approved species, in conformity with the provisions of the Act on the animal species; (f) the applicant should prove that his/her animals are not infected with *Tuberculosis*, *Leukosis* and *Brucellosis*.

The support is granted according to the number of animals in the application. The right to the quota will be established at the moment of application approval, on the basis of the number of eligible animals.

NCDP for milk. All producers who have the milk quota and are registered in the Milk Quota Registration System can apply for NCDP for milk. The support is paid on the basis of milk quota.

NCDP specific criteria for milk: (a) the bonus can be asked for only by the producers who are registered in the Milk Quota Registration System; (b) the applicant should deliver raw milk to a registered milk processor (wholesale buyer) and/or sell directly milk and dairy products; (c) the applicant should comply with the specific milk producers registration requirements.

NCDP specific criteria for ewes: (a) the minimum eligible number of animals from the application should be 10 heads; (b) the applicant should ensure the use of the ram species registered and approved in agreement with the provisions of the Act on animal species; (c) the applicant raises eligible animals for a retention period of 100 days starting with the last day of the period of application submission.

The producers who raise sheep and goats in the less favoured areas can ask for NCDP for ewes on a supplementary basis. The premia will be granted only to the producers who are entitled to receive NCDP premia for sheep.

Table 3 sums up the NCDP value possible to be received in Hungary.

Table 3: Synthesis of Complementary National Direct Payments

NCDP scheme	Maximum payment level (euro)	Maximum payment rate (euro/unit)	Maximum level of eligible units (quota)
Bovines	12,877,000	136.09 euro/head	946,200 heads
Dairy cows	14,537,000	124.25 euro/head	117,000 heads
Milk	11,403,000	5.86 euro/t	1,947,280 tons
Milk*	18,302,000	9.40 euro/t	1,947,280 tons
Ewes	7,197,000	6.28 euro/head	1,146,000 heads
Ewes supplementary	1,155,000	3.85 euro/head	300,000 heads
Rice	746,000	231.56 euro/ha	3,222 ha
Tobacco – Barley	5,105,000	2,552.43 euro/ha	2,000 ha
Tobacco – Virginia	11,231,000	3,224.85 euro/ha	3,483 ha
Arable	327,554,000	93.03 euro/ha	3,520,790 ha

* If the Commission's proposal regarding NCDP payments for milk processing up to 85% is accepted

Source: synthesis after Complementary National Direct Payments in Hungary in 2004

In **Lithuania**⁶, the direct payments can be received according to several general principles, namely: (i) SAPS (according to EU regulations presented in chapter 1) and NCDP (based upon the option “up to 30%”) (ii) NCDP will be funded from EAGGF – Section Guarantee and the national budget; (iii) the NCDP amounts are allocated to the sectors having a crucial role in Lithuania's agriculture, in conformity with the provisions for the national strategy for agriculture and rural development, as well as with the available financial resources (national budget), so that these respect and not contravene the interests of the common agricultural policy.

In Lithuania the eligible agricultural area from SAPS is the part of the utilized agricultural area that was maintained in good agricultural and environmental conditions on June 30 2003 that was in production or not at that date⁷. The “utilized agricultural area” is the total area consisting of arable land, permanent pastures, permanent crops and vegetables as they are established by the Commission (EUROSTAT) for statistical purposes.

⁶ synthesis of the study *Implementation of the Single Area Payment Scheme and Complementary National Direct Payment Scheme in Lithuania, 2004*, APIA, translation by Lucia Vigtind and Monica Serbănescu, document made available by MAFRD to the research team

⁷ The eligible area for the single area payment will be maintained in good agricultural and environmental practice, either in production or not. The land area maintained in good agricultural and environmental conditions is the land complying with the minimum requirements established by the Ministry of Agriculture from Lithuania.

For the year 2004 in Lithuania direct support was allocated for areas of minimum 1 hectare per holding. The applicant for this type of payments, according to SAPS, is a physical or legal entity who is involved in farming and complies with the requirements for the approval of direct payments. Thus, he must have the agricultural land for which he asks for direct payments and have his/her holding registered in the Agricultural and Rural Business Register.

The amount for the single area payment was calculated by dividing the financial package established for the year 2004 to the agricultural area identified as eligible. The single area payment was evaluated at 35.87 EUR/ha in 2004; this payment can be received according to the EU regulations only once a year. In case when in a given year the single area payment exceeds the yearly financial package, the amount per hectare will be reduced proportionally by applying a reduction coefficient.

NCDP schemes in Lithuania

Lithuania decided to use the possibility to use for NCDP part if the funds dedicated to rural development, according to the methodology presented in chapter 1. Thus, in Lithuania, the EU Rural Development Fund and the national budget will supply the finance for NCDP (these amounts together with the related payments supplied through SAPS will not exceed 55% of the direct payments level in EU).

The cultivated land area, that is not supported by NCDP, is the difference between the utilized agricultural area (except for pastures, hayfields and area under perennial grass) identified by the Agricultural Census of 2003 and the sum of the land areas identified as having less than 1 ha/farm and the cultivated areas supported by NCDP.

In Lithuania it was decided that the total base area (the non-farmed area identified by the Agricultural Census of 2003 included) should be supported by SAPS. In the case of non-farmed and non-cultivated areas, no NCDP payments will be provided, only direct payments according to SAPS.

NCDP for arable crops

The decision-makers from Lithuania have to choose between two NCDP schemes for the crops, namely: (i) NCDP for arable crops supported by NCDP, other than for flax and (ii) NCDP for flax.

The whole financial package received from the Rural Development Fund is allocated to all eligible hectares by dividing this package by the eligible area, supported by NCDP.

Out of the total Single Area Payment, 39.69 EUR/ha is the payment for NCDP support allocated from the Rural Development Fund. This financial package for NCDP for arable crops was calculated taking into consideration the guidelines for the NMS according to the following methodology:

- the sectoral package of 55% of the EU level was calculated by summing up the sub sectoral packages of 55% of the EU level;

- the financial package for NCDP is the difference between the sectoral packages of 55% of the EU level and the part covered by SAPS;
- the maximum level of NCDP is obtained by dividing the NCDP-related sectoral package by the eligible area. Thus, the maximum NCDP value is 58.84 EUR/ha;
- the available financial resources taken into consideration (national budget) and the maximum identified NCDP value resulted in the established value of 56.81 EUR/ha;
- the value of total payment per ha for the NCDP supported crops is obtained by summing up the payment covered by SAPS and that covered by NCDP: 35.87 EUR/ha + 56.81 EUR/ha = 92.68 EUR/ha (SAPS + NCDP = 54% of the EU level);
- for flax the total amount to be paid will reach 100% of the EU level.

In the case when, in the respective year, NCDP for the arable crops in Lithuania exceed the yearly financial package, the payment per ha is proportionally reduced by applying a reduction coefficient.

NCDP for the livestock sector

NCDP payments for the livestock sector are based upon the results of negotiations from this sector; the payments are per animal head for: nursing cows, cattle premia, slaughtering premia for bovines and sheep.

In Lithuania, in order to simplify the direct payment scheme and for a better administration of these payments, the payments are included in a single NCDP per animal head. Those farmers are eligible for NCDP who have animals into ownership, that are registered animals, and who provides information about the evolution of animals at the Agricultural and Rural Business Information Centre on a regular basis, in conformity with the procedure stipulated in the legislation.

NCDP will be paid for: (i) dairy cows and heifers (born until March 31 of the respective year) that are raised for their meat (ii) bulls (with a minimum carcass weight of 185 kg or liveweight, weighing 340 kg at slaughtering), delivered for slaughtering at slaughtering units that are under the Lithuanian Veterinary and Food Department control or that are exported as live animals (but not younger than 9 months); (iii) cows for slaughtering for their meat, but not younger than 9 months, delivered to slaughtering units that are under the Lithuanian Veterinary and Food Service Department control and export animals but not younger than 8 months; (iv) sheep with at least one lamb and to a farmer who has 10 or more sheep mentioned in his/her application.

The financial package for NCDP in the livestock sector is completely funded from the national budget. The package is determined in conformity with the maximum acceptable payment level (55 % of the EU level) and the available financial resources (national budget).

The financial package from the national budget for the livestock sector is divided into sub sectors: (i) sub sectoral packages of 55% of the EU level; (ii) sub sectoral packages for NCDP that result from the difference between the subsectoral package of 55% of the EU level and the part of that package paid through SAPS; (iii) the maximum payment value for NCDP is obtained by dividing the sub NCDP sectoral package by the number of animals agreed upon in the accession document.

Detailed SAPS and NCDP for the year 2004 in Lithuania are presented in Annex 2.

3. Options for direct support to Romanian farmers after the accession

According to the documents into effect, Romania accepted to adopt the *acquis communautaire* (as it is specified under the chapter Agriculture), and in the very next period it has to submit to the Commission the national agricultural policy options related the application of the Complementary National Direct Payments. In this chapter, the study intends to investigate and substantiate the possible options referring to the possibility to apply these payments as well as to the evaluation of the possible maximum payments to the Romanian farmers after the accession.

3.1. The results of the negotiations with EU on the chapter Agriculture and the financial package for the sector

Romania obtained a budgetary allocation from the EU intended for CAP implementation of over 4 billion euro for the period 2007-2009. Out of this financial package the support foreseen for the *direct payments amounts to 967.9 million euro*, that includes the financial support to products or sectors for which quotas, reference areas or national ceilings have been established (according to Table 4). *This type of financial support does not require co-financing from the national budget, but it implies significant implementation costs.*

For the *market measures 732 million euro have been allocated*, which also includes the market intervention and the export refunds. *These amounts do not require national co-financing either, but they also imply implementation costs, that will have to be supported from the state budget mainly in the pre-accession period.* According to the European legislation the market intervention represents an intervention lever for market price stabilization, through buying the surplus production and its storage in public or private stocks. The export refunds represent another market intervention lever for certain exported products (among which mild and dairy products, beef, cereals, fruit and vegetables, sugar products, processed products, etc.), that represent a coverage of the difference between the export price and the international price, having in view that the prices of agricultural products are generally higher in the European Union compared to those on the world market.

The financial support for rural development from the EU budget amounts to a commitment of 2,308 million euro for the same period 2007-2009. The co-financing share required from the national budget amounts to 25%. On the basis of the methodology for the allocation of these funds, the yearly amount committed year should be paid in the year n+2.

According to the EU regulations on the Common Agricultural Policy application in the New Member States (see chapter 1) and to the results of the negotiations (see table 4), beginning with the year 2007, in Romania, 25% of the value of direct payments allocated in the EU will be provided from the Community budget, 30 % in 2008, 35 % in 2009,

40% in 2010 and then a 10% yearly increase, until 100% of the value of support in EU-15 will be reached.

Table 4: Value and legal benchmarks for the evaluation of the possible direct payments to be paid and of the market interventions for the main products regulated through CAP

Products	Negotiation results	EU regulation
<i>Arable crops</i>		(EC) No 1258/1999 (EC) No 1782/2003
- Base area	7,012,666 ha	(EC) No 1251/1999 (EC) No 1782/2003
- Reference yield	2.65 t/ha	
<i>Tobacco</i>		(EEC) No 2075/92
National quota (t) of which:	12.312 t	
- Virginia	4.647 t	
- Burley	2.370 t	
- Oriental semi-oriental	5.295 t	
<i>Seeds</i>		(EEC) No 2358/71, (EC) No 1782/2003)
- National quantity for rice seeds (t)	100	
- National quantity for other seeds (t)	2,294	
<i>Hops</i>		EEC 1696/71 amended by EC 1514/2001; inclusion of hops varieties according to EEC1517/77) and accredited by the bodies provided by EEC 890/78 and 1784/77
- National area (ha)	198	
<i>Nuts</i>		(EC) No 1782/2003
- National guaranteed area	1.645	
<i>Rice</i>		(EC) No 1782/2003.
- Base area	500 ha	
Reference yield	1,681 t/ha	
Flax and hemp fibres		

Products	Negotiation results	EU regulation
National guaranteed area <ul style="list-style-type: none"> ▪ Long fibres ▪ Short fibres 	42 tons 921 tons	(EC) No 1673/2000
<i>Milk and dairy products</i>		(EEC) No 3950/92, (EC) No 1788/2003 (EC) No 1255/1999 (EC) No 1782/2003
National reference quota out of which: <ul style="list-style-type: none"> – delivery to processing – direct sales – special restructuring reserve (since 2009) 	– 3.057.000 t with 35.93 g/kg fat – 1.093.000 t – 1.964.000 t – 188.400 t	
<i>Beef ceilings</i>		(EC) No 1254/1999 (EEC) No 1208/81 (EC) No 1760/2000 (EC) No 1825/2000
– special premia for fattening young bulls	452.000 heads	(EC) No 1254/1999
– special suckler cow premia	150.000 heads	(EC) No 1254/1999
– for slaughtering or export	1.233.000 heads, out of which: 1 148.000 bovines and 85.000 calves	(EC) No 1254/1999
Overall amount for additional payments	858.260 Euro	(EC) No 1254/1999
<i>Sheep</i>		(EC) No 2529/2001
National ceiling for sheep, out of which:	5.880.620 heads	
– in the mountain area	1.764.000 heads	
– in the plain area	4.116.000 heads	
Overall amount for additional payments	6.216.782 Euro	
Pastures and hayfields	654.898 ha	(EC) No 1255/1999

Products	Negotiation results	EU regulation
<i>Sugar</i>		(EC) 1260/2001
Total quota t	109.164 t	
- Quota A t	99.240 t	
- Quota B t	9.924 t	
Isoglucose t	9.981 t	
- Quota A t	9.790 t	
- Quota B t	191 t	
Sugar from raw sugar	329.636 t	
<i>Fruit and vegetables</i>		(EC) No 1432/2003
Producers' organization	5 producers with a value of commodities of 100,000 euro	
<i>Processed fruit and vegetables (tomatoes, peaches)</i>		(EC) 2201/96, (EC) 2699/2000
- National ceiling for processed tomatoes (t)	50.390	
National ceiling for processed peaches (t)	523	
<i>Wine</i>		(EC) No 1493/1999
- transition period until 2014 for the replacement of 30,000 ha hybrid vines (Noah, Othello, Isabelle, Jacquez, Clinton and Herbemont), not eligible for EU support		
- enlargement of area under registered noble vineyards 1.5% (ha)	188.700 ha	

Source: on the basis of negotiation results and of the European legislation into effect

The values presented in the previous table practically indicate the European Commission's recommendations expressed in the answer provided to Romania after the presentation of the position document, referring to the establishment of the area and reference yields on the basis of recent statistical values (2000–2002 average), for the crops included under the category arable crops; these values are necessary for the evaluation of the direct payments possible to be paid after the accession moment (the total eligible reference area for direct payments is 7,012,666 hectares – about 75% of the total arable land in Romania – while the reference yield necessary to direct payment evaluation is 2.65 t/ha). *The values taken as reference for the calculation of the direct payments may be go through positive modifications as a re-updating of the reference yields is expected (more recent period: 2004-2006); this might induce a slight increase in*

the reference yield necessary for the evaluation of the direct payments application margin (i.e. the consideration of the year 2004 might contribute to a significant increase in the reference yield). The benchmarks for the evaluation of direct payments related to the livestock sector are also based upon the Community regulations for each product in part (milk, beef and mutton and goat) and the results of negotiations.

According to the regulations into effect and of the negotiations results, the direct payments (both in the crop and livestock sector) will be paid regardless of the production level, function of the political decisions, under the standard form of the direct payments – SPS – or by applying SAPS (according to the options presented under chapter 1).

In the summer of 2005 Romania took the decision to adopt the second variant of applying the direct payments, namely the Single Area Payment Scheme (SAPS) establishing the minimum eligible farm size at 1 ha, and the minimum eligible parcel size at 0.3 ha⁸.

3.2. Providing direct payments from the Community budget according to SAPS

The main considerations that lay at the basis of Romania's opting for SAPS were mainly of technical and budgetary nature (lower implementation and administration costs, control only in relation with the respect of good agricultural and environmental conditions). Besides these considerations, this decision was also based on the possibility that the support is given to farms larger than 1 ha.

Although this decision affects more than half of the farms from Romania (according to the data of the Agricultural Census 49.5% of the 4.5 million farms of Romania operate less than 1 ha agricultural land), which practically eliminates them from receiving the support, prevailed in taking this decision. At the same time, the possibility that these small-sized farms might go through an accelerated restructuring process together with the uptake of a significant part of the rural development funds contributed to this decision to a certain extent.

Besides these considerations, another argument for choosing SAPS was the possibility to provide support to a larger range of crops (including the areas under crops for which the application of direct payments through CAP mechanisms is not provided, for example fruit and vegetables, sugar beet, potatoes, etc.).

According to MAFRD estimations based upon the NIS data (number of eligible farms larger than 1 ha with parcels of minimum 0.3 ha) the number of applications for support that should be processed and administered could amount to 1.8 million (number of eligible farms according to the General Agricultural Census).

The Single Area Payment Scheme (per hectare) - SAPS could be applied three years after accession (in this period Romania will be able to improve its IACS so as to administrate the Single Payment Scheme - SPS). At the end of this period the European

⁸ This payment scheme was also adopted by the majority of the New Member States (except for Malta and Slovenia) with the same option as regards the minimum eligible farm size (1 ha) and parcel size (0.3 ha).

Commission will evaluate the implementation stage and will decide if this form of payment will continue (maximum two prolongations of 1 year each) or if it will adopt the Single Payment Scheme (SPS). *Hence it is possible that this payment scheme is valid for five years in Romania's case, in the period 2007- 2011. If after the period of SAPS application prolongation (year 2011) the management and control systems are not prepared to apply SPS, SAPS application can be decided to continue, but the support level will be frozen to 50% of its value in EU-15.*

3.2.1. Eligibility criteria for SAPS

In conformity with EU procedures, in order to be eligible a farmer must fill in an application that must be registered by the Integrated Administration and Control System (IACS). *Romania's Government decided that in order to benefit from direct payments per area each farmer should use an area larger than or equal to one hectare and this area should be grouped into parcels of at least 0.3 ha each.*

Another requirement that should be complied with refers to maintaining the agricultural land in good agro-environmental conditions⁹.

It is well known that in the past, out of the desire to “report” to the communist leaders that the agricultural land area has increased, certain land areas were included in the agricultural land category, although they were not suitable for cultivation (degraded land, land subject to landslides, land areas affected by pollution, etc.). While in the past the yielding potential of land was “eroded” by aggressive agricultural practices in order to obtain “bumper crops”, since 1990, another factor with a much stronger negative potential against the environmental and land friendly practice has been manifested: the “precarious economic power” of the new land owners¹⁰. *Thus, the data obtained within the National Soil Quality Monitoring System revealed that an area larger than 12 million hectares of agricultural land is affected by one or several factors limiting the agricultural production capacity.*

The Agency of Payments and Intervention (API) together with the institutions specialized in this field will have to establish the list of good agricultural and environmental practices in the shortest time possible. The establishment of the size of inappropriate areas for the development of farming activities is a priority.

At the same time, it is necessary to define very clearly the concepts¹¹ agricultural area, utilized agricultural area, non-utilized agricultural area, and their contents. At

⁹ Good Agricultural and Environment Conditions

¹⁰ Toderoiu, F. (2002), *Agricultura - resurse și eficiență*, Editura Expert, Bucharest

¹¹ According to the General Agricultural Census, the total agricultural area consists of the utilized agricultural area (arable land, family gardens, natural pastures and hayfields, permanent crops), non-utilized agricultural area (agricultural area that is not cultivated out of economic, social or other reasons for which no agro-cultural use is intended for the next period –land used for tourism purposes, sports, abandoned land, etc.) and other areas (land under buildings, yards, quarries, rubble land, etc.). According to the Statistical Yearbook, the total agricultural area includes the land for agricultural uses into the ownership of physical or legal entities classified into: arable land, natural pastures and hayfields, vine and fruit plantations.

present in Romania it is not very clear which is the total agricultural area (Table no. 5). Without knowing the contents of these indicators, the action to identify the utilized agricultural area eligible for SAPS lacks accuracy.

Table 5: Total and utilized agricultural area

Source	Indicator	Area
General Agric. Census 2002	Total agricultural area (ha)	15,707,957
	Utilized agricultural area (ha)	13,930,711
	Non-utilized agricultural area (ha)	330,461
	Other areas (ha)	1,446,785
Statistical Yearbook 2002	Total agricultural area (ha)	14,836,600

Source: General Agricultural Census (GAC), 2002, Romania's Statistical Yearbook 2003, NIS

3.2.2. Gainers and losers of the Single Area Payment Scheme

The land reform, through the reconstitution and constitution of agricultural land ownership rights, resulted in the emergence of new types of entities where farming activities are carried out.¹²

But what are the profile and characteristics of (eligible) agricultural holdings that could benefit from SAPS and the profile and characteristics of those that will be excluded (non-eligible)?

According to GAC data in Romania there are 4.5 million agricultural holdings. Out of these, 76% are of mixed type (farm the land and raise animals), 20% are involved only in crop production and 4% developed only the livestock sector (Table 6).

Table 6: Structure of agricultural holdings by number, utilized agricultural area, activity sector and legal status

Indicator	Total agricultural holdings	Individual agricultural holdings	Agricultural holdings as legal entities
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¹² GAC defines the agricultural holding as being : "the economic agricultural production unit that carries out its activity under a current single management scheme and comprises all the animals into ownership and all the land areas that are partly or totally used for obtaining agricultural production, regardless of its ownership type, legal entity or size" (RGA, 2004:XVI).

Total number	4,484,893	4,462,221	22,672
Out of which:			
Operate land and livestock (%)	75.8	75.0	15.9
Crop production only (%)	20.0	19.7	81.4
Livestock herds only (%)	4.2	5.3	2.7
Number that use UAA (000)	4,299,361	4,277,315	22,046
UAA (000 ha)	13,930,710	7,708,758	6,221,952
Average utilized area by agricultural holding (ha)	3.11	1.73	274.43
Average utilized area by farm involved in crop production only (ha)	3.24	1.80	282.23
Eligible number (000)	1,845,738	n.a.	n.a.
Share of eligible number (%)	75	n.a.	n.a.
Eligible area (thousand ha)	12,651,448	n.a.	n.a.
Share of eligible area (%)	91	n.a.	n.a.

Source: GAC 2002, NIS, 2004.

According to the provisions on SAPS implementation the agricultural holdings that raise animals and do not have agricultural land will not be eligible. This group is, in fact, the first not to benefit from direct area payments. However, it is estimated that the livestock sector will have indirect benefits. For the livestock breeders, "...the low costs of feed (cereals in particular) will add to the positive evolution of incomes due to higher product prices (dairy products in particular)"¹³ after the accession moment.

The utilized agricultural area summing up 13.9 million hectares is operated by 4.30 million agricultural holdings. The excessive polarization is obvious. There are:

a) *individual agricultural holdings* – 4.28 million in total, accounting for 99.5% of the total number of agricultural entities. These operate 55.4% of UAA and have an average size of 1.73 ha;

b) *agricultural holdings organized as legal entities* totalling 0.02 million, accounting for 0.5% of total agricultural holdings and operating 44.6% of UAA. The ratio of the average area per agricultural unit as legal entity (274.4 ha) to the average area of individual agricultural holding is 1:158.

According to data provided by NIS¹⁴ about 1,845,738 of agricultural holdings comply with the eligibility conditions for SAPS (area larger than 1ha and parcels larger than 0.3 ha). Thus, the eligible agricultural area sums up 12,651,448 hectares.

¹³ World Bank, ECSSD Environmentally and Socially Sustainable Development Working Paper no.39, Bucharest, 2005

¹⁴ Data made available by the MAFRD to the research team.

A second group of agricultural holdings is thus outlined that will not be able to apply for SAPS; out of total number, they account for 25% and operate 9% of UAA.

Taking into consideration the SAPS characteristics, the eligible and non-eligible agricultural holdings will be mainly analysed taking into consideration the indicator utilized agricultural area (Table 7).

Table 7: Eligible and non-eligible agricultural holdings by legal status

	Total UAA (ha)	Eligible area (ha)	Share of total eligible (%)	Non-eligible area (ha)	Difference non-eligible area (%)⁽¹⁾
Individual agricultural holdings	7,708,758	6,951,030	52.77	757,728	9.83
Legal entities:	6,221,952	6,220,865	47.23	1,087	0.02
Agricultural associations	975,564	975,545	7.41	19	0.00
Commercial companies	2,168,792	2,168,547	16.46	245	0.01
Public administration units	2,867,368	2,867,024	21.77	344	0.01
Co-operative units	2,365	2,355	0.02	10	0.44
Other types	207,863	207,394	1.57	468	0.23
Total	13,930,710	13,171,895	100.00	758,815	5.45

⁽¹⁾*This column represents the difference between the agricultural holdings non-complying with both eligibility criteria and those smaller than 1 ha. Source: GAC 2002, NIS, 2004.*

It should be mentioned that the format of statistical data published in GAC did not permit the identification of holdings that do not comply with the parcel size criterion, but the differences are not high. In the case of legal entities, these differences are even non-significant.

The analysis by the legal organization form reveals that 53% of the eligible UAA is represented by the individual agricultural holdings established by the enforcement of the land laws. These are generally agricultural businesses that are based upon family relations and resources. The invested capital in agricultural business is into the ownership of family members, who carry out economic activities of production, processing and marketing types and they also ensure the management of the respective business. This does not mean that they do not use hired work on a seasonal basis and that in the decision-making process they do not ask for specialized consultancy. In most cases the farm head is manager worker and assumes all the risks of his/her business.

Among the legal entities, the public administration units could be the main SAPS beneficiaries. Though representing only one tenth of the total number of eligible farms,

they operate almost 22% of total UAA. The statistical data and research on this category were absent throughout the whole transition period. The first references to them are made in GAC. Under these conditions, their characterization is quite a difficult task. *The clarification of characteristics and contents of these categories of farms is a priority action.*

The third potential beneficiaries of SAPS are the *commercial companies* established on the basis of Law 31/1991. These mainly come from the transformation of the former state farms (IAS) sector. Throughout the transition period, these went through a restructuring and privatisation process. The critical attitude at their address was a constant: there is a diffuse situation of ownership rights with these units, and although the decision-making process was decentralized, the managerial responsibility was weakened. The unfavourable economic results were a proof to this¹⁵. This category also includes the commercial companies with private capital that in most cases farm both agricultural land into ownership and land areas that are leased in or farmed on concession basis.

The agricultural associations, which are legal associations or formal agricultural associations established on the basis of the Law 36/1991, operate 975,545 ha (7%) of the eligible UAA. Although the operated land area decreased compared to the area operated in early 1990s (1.9 million ha), these units have quite an important position in Romania's agriculture. At the beginning of the land restitution process, many physical entities – new land owners opted for association. Davidovici¹⁶ considers that the association mainly represents a transitory land management form, until the issue of ownership titles and the establishment of the land market, a specific form of land capital utilization, that is a substitute of the normal land lease relations, a land management form that is determined by the pauperisation of the land owners.

The analysis of the agricultural holdings by the eligible area reveals that those included in the category over 1000 ha will be the most benefited. Although they represent only one tenth of the total eligible farms, they operate 29% of UAA (Table 8).

Table 8: Structure of eligible agricultural holdings by the size category

	Size category				Total
	1-5 ha	5-100 ha	100-1000 ha	> 1000 ha	
Number	15,171,122	264,352	8,509	1,755	1,845,738
Share in total (%)	85.12	14.32	0.46	0.10	100
Utilized agricultural area (ha)	3,693,675	2,411,626	2,866,359	3,679,787	12,651,448
Share in total (%)	29.20	19.06	22.66	29.09	100
Average area (ha)	2.35	9.12	336.86	2,096.75	6.85
Average number of	4	7	14	42	5

¹⁵ Marin, P. (2002), *Lecții ale tranziției. Agricultura 1990-2000*, Editura Expert, Bucharest

¹⁶ Davidovici, I. (2002), *Managementul creșterii agricole*, Editura Expert, Bucharest.

parcels					
Average area of parcel (ha)	0.59	1.26	23.70	50.32	1.51

Source: GAC 2002, NIS, 2004

The holdings sized 1 – 5 ha are found on the second place; although they operate 29% of the area they account for 85% of the total number of agricultural holdings. It is easy to notice that these have an average size of 2.35 ha and a low average size of parcels, i.e. 0.59 ha. *Many of them are expected not to be able to apply for support.*

The size category 100-1000 ha with 0.46 of the total number of holdings and 23% of UAA will represent the third great beneficiary of SAPS.

The group that will better fit the definition of the family farm, i.e. 5 – 100 ha is the most balanced as regards the number/area ratio: it accounts for 14% of the number of holdings and operate 19% of UAA. On the basis of the data presented above, it can be easily noticed the absence of a significant number of genuine family farms, that represent the backbone of agriculture organization in the EU Member States.

The main losers of SAPS application (non-eligible) will be the small and very small-sized agricultural holdings. These are generally known as subsistence and semi-subsistence farms. Bearing the “print” of the way in which de-collectivisation took place, they mainly had a social function throughout the transition period. In general these holdings do not yield incomes that could be potentially invested, and their viability as commercial companies seems to be limited out of this reason. They lack production means and cash resources, which make them vulnerable to the market pressures, providing them with low capitalization and modernization opportunities. Self-consumption has an important share on these holdings. The lack of capitalization possibilities, the low yields and the old age of most landowners partly explain the survival strategies, with no significant concerns in relation to the agricultural holding development in the future. *For this group of farms it is necessary to implement certain measures from the Second Pillar of CAP.*

According to the land use modality, the agricultural areas that have arable land, natural pastures and hayfields will be the main SAPS beneficiaries (Table 9). Mainly those with family gardens and permanent crops, both as regards their number and area, will be the losers.

Table 9: Structure of eligible and non-eligible agricultural holdings according to the land use

	Arable land	Family gardens	Natural pastures and hayfields	Permanent crops
Number of agricultural holdings				
Total	3,385,716	2,879,676	1,625,932	1,290,755
Share in total (%)	78.75	66.98	37.82	30.02
Total eligible	2,026,795	1,424,887	1,122,463	805,492
Share in eligible (%)	95.15	66.89	52.70	37.81
Share in category (%)	59.86	49.48	69.04	62.40
Total non-eligible	1,358,921	1,454,789	503,469	485,263
Share in non-eligible (%)	62.64	67.06	23.21	22.37
Share in category (%)	40.14	50.52	30.96	37.60
UAA (hectares)				
UAA total (ha)	8,773,748.7	168,864.74	4,644,004.74	344,092
Share in total (%)	62.98	1.21	33.34	2.47
UAA eligible (ha)	8,299,282.5	89,655.57	4,489,317.27	293,640
Share in eligible (%)	63.01	0.68	34.08	2.23
Share in category (%)	94.59	53.09	96.67	85.34
UAA non-eligible (ha)	474,466.17	79,209.17	154,687.47	50,452.3
Share in non-eligible (%)	62.527	10.439	20.385	6.649
Share in category (%)	5.41	46.91	3.33	14.66

Source: GAC 2002, NIS, 2004

The analysis of eligible farms by the crop structure and of their eligibility share reveal the prevalence of cereals (89-100%) (Annex 3). The cereals are particularly important for Romania's economy, as they are cultivated on more than half of the country's arable area and they have quite a high share in the crop rotation process. The cereal production, under different processing forms, provides first necessity food for the rural population, while being also extremely important in the livestock sector, as animal feed. Cereal crops need relatively low investments and production costs per unit of area compared to other species.

In the case of industrial crops the situation is quite similar. Thus, these crops will be included in the direct area payments in a proportion of 95-99%. By their technological particularities these crops need a high input consumption/hectare (fertilizers, selected seeds, irrigation) and a higher training level of those who grow them.

The vegetable growers will be one of the less favoured categories in SAPS application. Almost one third of the growers of fresh vegetables, strawberries and melons will not be eligible. Among these growers, there are cases when the vegetables are cultivated for completing their own food needs on small areas, on parcels found near the house. The same situation, however in a lower share, is found in the situation of fruit-tree and vine growing. Almost 30% of the areas under hybrid vine will not be eligible.

In the livestock sector it is obvious that the agricultural holdings that do not have agricultural land will be the main losers. Although their share in total is not significant with the exception of the poultry sector (18%) they represent in fact those specialized holdings that should be encouraged and supported by NCDP application. The average number of animals per agricultural holding is a relevant indicator for supporting this conclusion (Table 10).

Table 10: Structure of eligible and non-eligible agricultural holdings according to the number of animals by main species

	Species				
	Bovines	Pigs	Sheep	Goats	Poultry
Total heads	2,870,782	8,259,680	7,238,404	744,272	82,407,052
With no agricultural land (%)	1.93	8.65	3.53	2.66	17.78
On non-eligible holdings (%)	19.93	26.88	18.50	31.34	28.06
Total non-eligible (%)	21.86	35.52	22.03	34.00	45.84
Total eligible (%)	78.14	64.48	77.97	66.00	54.16
Average number of animals per holding	2.11	3.12	11.31	3.17	24.58
Average number per holding with no agricultural land	3.17	7.23	28.90	4.38	100.06
Average number per non-eligible holding (< 1 ha)	1.61	2.07	8.38	2.66	15.30
Average number per non-eligible holding total	1.69	2.50	9.46	2.74	22.79
Average number per eligible holding	2.27	3.61	11.97	3.45	26.33

Source: RGA 2002, INS, 2004

There is also a high share (20-30%) of agricultural holdings with less than one hectare that raise different animal species and that will not receive direct area payments. These practice a traditional household system of animal husbandry, that is characterized by a low level of concentration of animals, use of low-capacity buildings, low technical-material endowment, traditional organization of work, low labour qualification level, etc.

The main SAPS beneficiaries will be the growers of bovines and sheep, i.e. 78%. Most of these animals are raised on individual farms (holdings).

In conclusion, according to this analysis, in the next period Romania should define very clear what “agricultural holding” and establish the criteria/requirements as regards the “good agricultural and environment conditions. These two priorities add to the evaluation of land areas that do not comply with the established criteria for being excluded from support; these land areas could be included later on if they comply with the mentioned criteria.

3.2.3. Need of other support measures for the non-eligible farmers

One should not underestimate the social dimension of excluding the subsistence and semi-subsistence holdings from SAPS. After the accession these holdings will get no direct support (the main loss will be the support per area that is allocated according to the current agricultural policy in Romania). The minimum eligibility criteria for direct support through SAPS could induce a diminution of current estimations based upon the Census of 2002, while the previously analysed structure might suffer certain changes until the year before the accession.

The measures under CAP Second Pillar should have in view the structural reorganization of agriculture, mainly of subsistence and semi-subsistence holdings in the first place. We envisage here measures such as the early retirement schemes together with the implementation of certain support schemes for young farmers to develop their farm business, etc. In the given context, preparing the implementation of measures under the Second Pillar of CAP is of crucial importance and it would represent the main support option for the non-eligible farms for the direct payment schemes.

3.2.4. Evaluation of direct payments possible to be paid to Romanian farmers according to SAPS (from the EU budget)

According to the regulations of this scheme (see Chapter 1) the value of direct area payment is calculated by dividing the ceiling of the national direct payments by the eligible agricultural area. The eligible agricultural area is the utilized agricultural area established according to the EUROSTAT¹⁷ (regardless it is or not in production at that time) from the year before the accession, adjusted according to the criteria approved by

¹⁷ Total agricultural land, permanent pastures and hayfields, family gardens, vineyards and orchards

the Commission (minus the area with parcels less than 0.3 ha, minus the area of holdings having 0.3-1 ha, minus the land area that are not mentioned in good agricultural and environment conditions: eroded, polluted land, etc., minus other inappropriate land area or land with other destinations).

Working hypotheses

In our evaluation we started from the hypothesis that the total eligible area for direct payments is in conformity with the data provided by NIS from GAC for the areas larger than 1 ha, namely 12,651,447.6 ha.

- *It is presumed that SAPS will not be paid for the land areas that remained uncultivated (769,212.2 ha –see idle land in Annex 3);*
- *The period of SAPS application would be 5 years (during this time Romania will improve its IACS);*
- *The national direct payments ceiling (SAPS) for the period 2007-2009 is 967.9 million euro and it represents the financial flow for two years (2008-2009). The explanation is that in the first year after the accession the direct payments will be paid from the state budget and they are to be repaid by EU in 2008, while the payments of 2008 will be paid in 2009.*
- *The value of direct payments ceiling will be used in the year 2007 in a percentage of 48% (464.592 million euro) and in the year 2008 in a percentage of 52% (by 5% more than in the previous year, which represents 503.308 million euro);*
- *For the period 2009-2010 we estimate a yearly increase of 5% of the national ceiling for direct payments; then the increase will be 10%.*

Considering the above-mentioned hypotheses, the evaluation of the value of single area payment (SAPS), possible to be paid to agricultural holdings in Romania will be the following:

$$SAPS = \frac{PPD}{SAUe} \text{ where:}$$

PPD = value of national envelope for direct payments in the year 2007, 2008, etc.

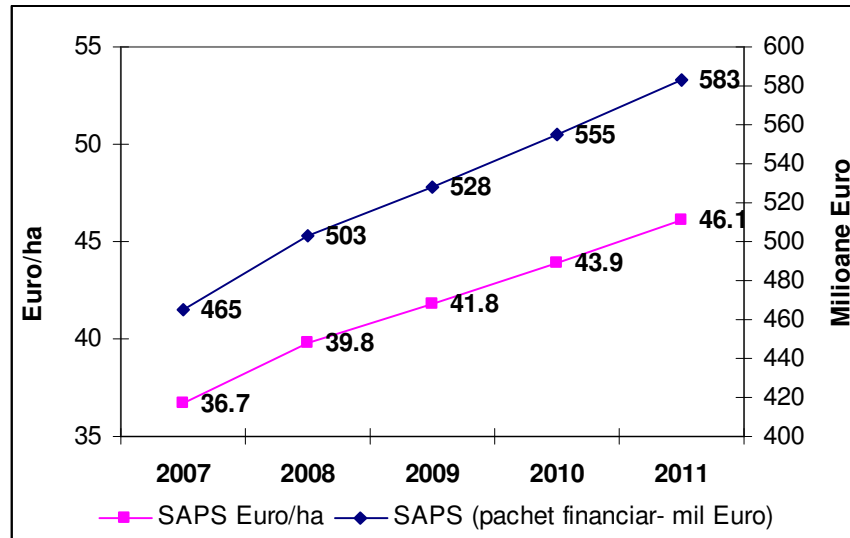
SAUe = eligible agricultural area

$$SAPS_{2007} = \frac{464,592 \text{ milEURO}}{12651447,6 \text{ ha}}$$

$$SAPS_{2008} = \frac{503,308 \text{ milEURO}}{12651447,6 \text{ ha}}$$

According to these hypotheses, the single area payment could be 36.7 euro/ha in 2007 and 39.8 euro/ha in 2008, a 5% increase up to 2010; the increase will be 10% after 2010 (Figure 1).

Figure 1: Estimated values of the financial package for SAPS and evaluations of SAPS /ha



Source: evaluations of the research team

A simple evaluation based upon the above-mentioned hypotheses following the calculation principles for SAPS and the distribution related to farm size is presented in Table 11.

Table 11: Evaluation of direct payments value (SAPS) in relation to farm size (financial package 2007-2009)

Number of farms > 1 ha	Utilized agricultural area – ha possible to be eligible for payment	% of area	Direct payments 2007 million euro (SAPS)	Direct payments/ farm 2007 euro	Direct payments 2008 million euro	Direct payments/ farm 2008 euro (SAPS)
Total	1,845,738	100	464. 592	36.7 Euro/ha	503.308	39,8 Euro/ha
<i>of which:</i>						

Number of farms > 1 ha		Utilized agricultural area – ha possible to be eligible for payment	% of area	Direct payments 2007 million euro (SAPS)	Direct payments/farm 2007 euro	Direct payments 2008 million euro	Direct payments/farm 2008 euro (SAPS)
Total	1,845,738	12,651,447.6	100	464.592	36.7 Euro/ha	503.308	39,8 Euro/ha
1-2 ha	693,471	994,631.47	7.9	36.525	52.7	39.569	57.1
2-5 ha	877,651	2,699,043.7	21.3	99.115	112.9	107.375	122.3
5-10 ha	213,881	1,409,952.64	11.1	51.776	242.1	56.091	262,3
10-20 ha	37,212	468,833.72	3.7	17.216	462.7	18.651	501.2
20-50 ha	9,472	281,056.4	2.2	10.321	1,089.6	11.181	1,180.4
50-100 ha	3,787	251,783.82	2.0	9.246	2,441.5	10.016	2,645.0
100-1000 ha	8,509	2,866,358.72	22.7	105.259	12,370.4	114.031	13,401.3
1000 and over	1,755	3,679,787.12	29.1	135.130	76,997.6	146.391	83,414.0

Source: Evaluations based upon the financial package for 2007-2009 and the results of the General Agricultural Census

As it can be seen from the previous table, more than 50 % of the amounts intended for SAPS will be directed to the large-sized farms of over 100 ha (the average value of the amounts allocated by SAPS/farm being in this case 12.3 thousand euro on the average for farms sized 100-1000 ha and 77 thousand euro on the average for those over 1000 ha in the year 2007). In the case of countries that have not adopted SAPS as payment scheme as well as for the EU Member States, if the sum of direct payments exceeds 5 thousand euro per farm, then a correction coefficient will be applied in order to reduce the amounts coming from direct payments.

The strong polarization of land ownership in Romania will be reflected upon these policy measures that have at their basis the support to farmers' incomes. Out of this reason, a future national policy option might be that the top-up complementary direct payments would be provided only to those farms that do not fall into the above-mentioned categories of size.

The breakdown by crops of the SAPS value was made starting from the data existing in GAC, according to the eligibility criteria. As the detailing level available by crops does not refer to the criterion referring to the average eligible area of parcel of 0.3 ha, all the eligible areas of over 1 ha were considered in the calculation. Out of this reason, between the total eligible area that was previously estimated (12,651,447.6 ha)

and the total eligible area, evaluated according to the data by crops from GAC, there is a difference of about minus 84 thousand ha (that can be considered a negligible difference - 1%). Table 12 presents the evolution of estimated SAPS values by crops.

Table 12: Estimated SAPS value by crops

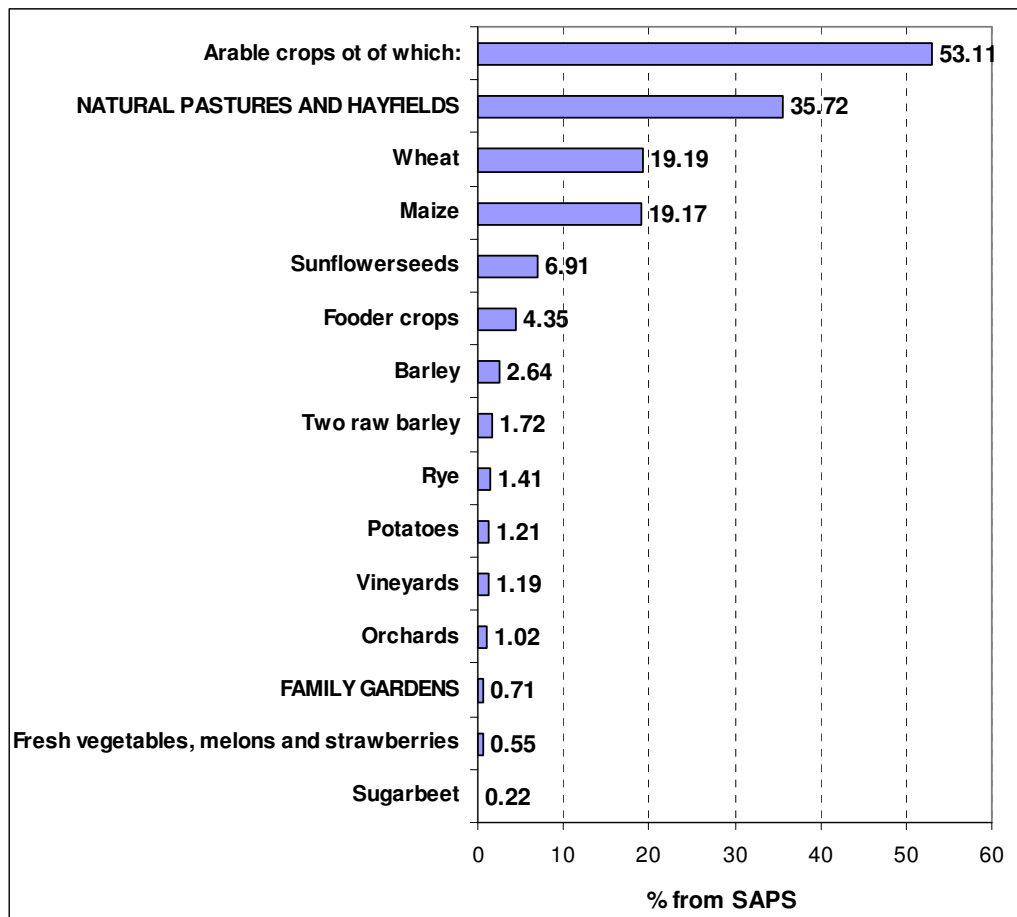
Categories of use in the utilized agricultural area	Eligible area ha <i>Evaluation based on Agricultural Census over 1Ha</i>	SAPS Value 2007 Millions Euro <i>(36.7 Euro/ha)</i>	SAPS Value 2008 Millions Euro <i>(39.8 Euro/ha)</i>	SAPS Value 2009 Millions Euro <i>(41.8 Euro/ha)</i>	SAPS Value 2010 Millions Euro <i>(43. Euro/ha)</i>	SAPS Value 2011 Millions Euro <i>(46.1 Euro/ha)</i>
Arable crops, out of which:	6,674,313	245,097	265,522	278,798	292,738	307,375
<i>Common wheat</i>	2,411,761	88,566	95,946	100,744	105,781	111,070
<i>Rye</i>	25,825	0.948	1.027	1.079	1.133	1.189
<i>Barley</i>	331,856	12.187	13.202	13.862	14.555	15.283
<i>Two-row barley</i>	215,901	7.928	8.589	9.019	9.469	9.943
<i>Oats</i>	177,754	6.528	7.072	7.425	7.796	8.186
<i>Maize</i>	2,408,717	88.454	95.825	100.616	105.647	110.930
<i>Sorghum</i>	10,498	0.386	0.418	0.439	0.460	0.483
<i>Other grains</i>	8,758	0.322	0.348	0.366	0.384	0.403
<i>Peas</i>	15,020	0.552	0.598	0.627	0.659	0.692
<i>White beans</i>	31,920	1.172	1.270	1.333	1.400	1.470
<i>Other grain pulses</i>	2,191	0.080	0.087	0.092	0.096	0.101
<i>Sunflower</i>	867,853	31.870	34.525	36.252	38.064	39.968
<i>Rapeseed</i>	76,501	2.809	3.043	3.196	3.355	3.523
<i>Soybeans</i>	72,719	2.670	2.893	3.038	3.189	3.349
<i>Linseed</i>	1,847	0.068	0.073	0.077	0.081	0.085
<i>Other oilseeds</i>	15,193	0.558	0.604	0.635	0.666	0.700
Flax	423	0.016	0.017	0.018	0.019	0.019
Fibre hemp	1,086	0.040	0.043	0.045	0.048	0.050
Hops	337	0.012	0.013	0.014	0.015	0.016
Tobacco	4,261	0.156	0.170	0.178	0.187	0.196
Durum wheat	7,703	0.283	0.306	0.322	0.338	0.355

Categories of use in the utilized agricultural area	Eligible area ha <i>Evaluation based on Agricultural Census over 1Ha</i>	SAPS Value 2007 Millions Euro <i>(36.7 Euro/ha)</i>	SAPS Value 2008 Millions Euro <i>(39.8 Euro/ha)</i>	SAPS Value 2009 Millions Euro <i>(41.8 Euro/ha)</i>	SAPS Value 2010 Millions Euro <i>(43. Euro/ha)</i>	SAPS Value 2011 Millions Euro <i>(46.1 Euro/ha)</i>
Rice	475	0.017	0.019	0.020	0.021	0.022
Potatoes	152,237	5.591	6.056	6.359	6.677	7.011
Sugarbeet	27,850	1.023	1.108	1.163	1.222	1.283
Medicinal and aromatic herbs	12,251	0.450	0.487	0.512	0.537	0.564
Other industrial crops	6,028	0.221	0.240	0.252	0.264	0.278
Feed tubers	6,727	0.247	0.268	0.281	0.295	0.310
Fresh vegetables, melons and strawberries	69,008	2.534	2.745	2.883	3.027	3.178
Flowers and ornamental plants	382	0.014	0.015	0.016	0.017	0.018
Fodder crops	546,968	20.086	21.760	22.848	23.990	25.190
Crops for producing seeds and planting stock for commercialisation purposes	12,561	0.461	0.500	0.525	0.551	0.578
Other crops	7,462	0.274	0.297	0.312	0.327	0.344
FAMILY GARDENS	89,656	3.292	3.567	3.745	3.932	4.129
NATURAL PASTURES AND HAYFIELDS	4,489,317	164.859	178.597	187.527	196.903	206.748
PERMANENT CROPS, out of which:	458,203	16.826	18.229	19.140	20.097	21.102
<i>Fruit trees</i>	127,957	4.699	5.090	5.345	5.612	5.893
<i>Fruit shrubs</i>	284	0.010	0.011	0.012	0.012	0.013
<i>Vineyards</i>	149,305	5.483	5.940	6.237	6.549	6.876
<i>Nurseries</i>	2,350	0.086	0.093	0.098	0.103	0.108
<i>Other permanent crops</i>	12,896	0.474	0.513	0.539	0.566	0.594
Total	12,567,248	461	500	525	551	579

Source: evaluations based upon the financial package for 2007-2009 and of the results of the General Agricultural Census

According to the evaluations above, more than 53% of the value of payments provided through the SAPS scheme will be directed to the farms cultivating arable crops, mainly cereals: wheat and maize, with a share of 19% of the total SAPS value each and natural pastures and hayfields (more than 35% of total SAPS). In Figure 2 the possible configuration of the cultivation of land to which SAPS support has been provided is presented.

Figure 2: Possible configuration of direct support by crops



3.3. Evaluation of the possible support to Romanian farmers through the Complementary National Direct Payment Scheme (NCDP) topping-up

According to the EU regulations, Romania has the possibility to top up the direct payments provided through SAPS (with approval by the Commission), by Complementary National Direct Payments top-ups. These complementary payments will be received in Romania's case, too, according to the methodology presented under Chapter 1 (according to the guidelines for NCDP approval for the New Member States).

Working hypotheses

For the evaluation of the direct support, possible to be provided through NCDP, the methodology presented in Chapter 1 was used, as well as certain methodological approaches used by certain NMS. The main hypotheses that lay at the basis of the evaluation are the following:

- Complementary National Payments + SAPS payments cannot exceed 55% of the value of direct payments at EU level in the year 2007, 60% in 2008 and 65% in 2009, and beginning with 2010 maximum 30% over the level of payments in the respective year;
- NCDP evaluation was made according to the EU regulations only for the products included in the CAP-conform support schemes (see Chapter 1);
- The value of SAPS support necessary to evaluate NCDP is the value estimated in the previous chapter;
- The maximum eligible area for applying NCDP is the same as in the case of SAPS (according to NIS 12,651,447.6 ha¹⁸);
- *The application of NCDP is based upon the option 30% (as the pre-accession option is not valid in Romania's case);*
- *NCDP is not provided to the crops that are not covered by the support schemes from the EU-15 schemes (namely potatoes for consumption, sugar beet, fruit and vegetables and other permanent crops) and these crops will be excluded from these schemes. According to the latest regulations sugar beet was excluded from this category for which granting NCDP has been recently agreed upon¹⁹.*

3.3.1 NCDP evaluation for arable crops

¹⁸ Agricultural holdings with an agricultural area larger or equal to 1 ha and the average parcel area larger or equal to 0.3 ha.

¹⁹ As these decisions are recent we do not have more details referring to this subject.

For the arable crops the evaluation of the financial package available for NCDP is based upon the total support permitted according to the CAP regulations and the results of the negotiations (see Table 4).

According to these benchmarks a simple evaluation can be made of the value of direct payments possible to be granted in the year 2007 for total arable crops as follows:

$$PDa = (Sr * pr) * PiUE, \text{ where:}$$

PDa = value of direct payments for arable crops (at the level of those in EU-15)

Sr = value of reference area negotiated for Romania

pr = reference yield

$PiUE$ = intervention price in EU – 63euro/t (according to EC1258/1999 and EC1782/2003)

$$PDa = (7,012,666 * 2.63) * 63 = 1,170,764,589 \text{ euro}$$

The value of direct payments possible to be granted per hectare in Romania in the year 2007 is calculated by the adjustment by the negotiated percentage (25% of the level of payments in EU -15 and the maximum complementary national payment level, see Table 13) and it is:

$$167 \text{ Euro} * 55\% = 91.85 \text{ Euro/ha}$$

The maximum admitted level for arable crops in the year 2007 is calculated as follows:

$$91.85 \text{ Euro/ha} * 7,012,666 \text{ ha} = 644,113,372 \text{ Euro}$$

Following the same methodology however applying different percentages (see Table 13) the amounts for the period 2008-2011 were evaluated.

Table 13: Evaluation of maximum ceilings for the direct payments (SAPS) and NCDP for the arable crops

Nr	Specification	2007	2008	2009	2010	2011
1.	% of the value of direct payments in EU - 15 (According to negotiations)	25%	30%	35%	40%	50%
2.	Maximum NCDP (According to negotiations)	30%	30%	30%	30%	30%
3.	Total permitted (SAPS+NCDP) % (According to negotiations)	55%	60%	65%	70%	80%
4.	Euro/ha total permitted (167 Euro* row 3)	91.85	100.2	108.55	116.9	133.6

5.	Total permitted ceiling for arable crops (million euro) <i>(row 4*7,012,666 ha)</i>	644.113	702.669	761.224	819.780	936.892
6.	Total payments according to SAPS (million Euro) <i>(from Table 12, the total arable row)</i>	257.522	278.982	292.931	307.578	322.956
7.	Maximum admitted ceiling for NCDP (million euro) <i>(row 5 - row 6)</i>	386.591	423.686	468.293	512.202	613.935

Source: estimations of the research team

The maximum value of complementary direct payments possible to be allocated for the arable crops is quite consistent (386 million euro for the year 2007, 423 million euro for the year 2008, etc. – see Table 13); similarly to SAPS, the possible distribution of the total value of NCDP by the category of size would be in the favour of farms over 100 ha. Table 14 presents the NCDP evaluation for arable crops in relation to the category of farm size as well as the maximum amounts possible to be provided through NCDP for arable crops/category of farm size.

The amounts to be allocated by NCDP will depend to a large extent upon the national budgetary availabilities. *According to the MAFRD estimations, the amounts that might be allocated to NCDP from the national budget might reach about 300 mil euros in the year 2007. In these conditions, the national budget would not be sufficient for covering the NCDP possible to be provided for the arable crops.*

If it is decided to use the possibility of deviating the maximum admitted amounts of 20% of the rural development budget for the period 2007-2009 for topping up the direct payments (NCDP), namely 461.6 million Euro, then only 25% co-financing from the national budget will be needed, namely 115.4 million euro, so that the available amount for NCDP would be 575.5 million euro for the period 2007-2009; this amount would not cover the maximum payment level permitted through NCDP only for arable crops for this period (1,278 mil. euro). In order to pay the maximum NCDP permitted level for arable crops, other 702 million euro would be necessary from the national budget for the period 2007-2009.

Starting from these premises it can be stated that the possibility of paying direct payments per hectare in Romania (taking the arable crops as an example) is not restrictive from the point of view of the negotiated results, but it is restrictive due to the national budget. In order to pay NCDP at the maximum admitted level only for arable crops, Romania should have an available budget of 1267 million euro for the period 2007-2009. As the evaluations for this period do not exceed 300 million euro each year, it is obvious that the funds would not even be sufficient for covering the maximum payment level for a NCDP eligible category, namely the arable crops.

Table 14: Evaluation of NCDP value for arable crops in relation to the farm size

No. of eligible farms over 1 ha	Utilized agricultural area – ha	%	Maximum ceiling for NCDP in 2007 mil euro	Maximum ceiling for NCDP in 2008 mil euro	Maximum ceiling for NCDP in 2009 mil euro	Maximum ceiling for NCDP in 2010 mil euro	Maximum ceiling for NCDP in 2011 mil euro	Euro/ha in 2007 and euro/farm	Euro/ha in 2008 and euro/farm	Euro/ha in 2009 and euro/farm	Euro/ha in 2010 and euro/farm	Euro/ha in 2011 and euro/farm
Total	1,845,738	100	385.59	423.69	468.29	512.20	613.94	30	33	37	40	49
1-2 ha	693,471	7.9	30.31	33.31	36.82	40.27	48.27	44	48	53	58	70
2-5 ha	877,651	21.3	82.26	90.39	99.91	109.27	130.98	94	103	114	125	149
5-10 ha	213,881	11.1	42.97	47.22	52.19	57.08	68.42	201	221	244	267	320
10-20 ha	37,212	3.7	14.29	15.70	17.35	18.98	22.75	384	422	466	510	611
20-50 ha	9,472	2.2	8.57	9.41	10.40	11.38	13.64	904	994	1.098	1.201	1.440
50-100 ha	3,787	2.0	7.67	8.43	9.32	10.19	12.22	2.026	2.227	2.461	2.692	3.226
100-1000 ha	8,509	22.7	87.36	95.99	106.10	116.05	139.10	10.267	11.281	12.469	13.638	16.347
1000 and over	1,755	29.1	112.15	123.23	136.21	148.98	178.57	63.905	70.218	77.611	84.888	101.748
Category ≤100 ha total		48.3	186.08	204.46	225.99	247.18	296.27					

Source: estimations of the research team

If the decision makers decide to use the rural development funds then the budgetary effort for ensuring the maximum permitted direct payments would be 805 million euro out of which 115.4 million euro would be necessary for co-financing and the remaining amount for providing direct payments at the maximum permitted level only for arable crops.

It is very likely that in the first three years after accession there will be no such amounts available from the national budget for such type of support; these would be rather necessary for the administrative and institutional consolidation and for the co-financing programs in the rural development sector. *In these conditions the use of rural development funds is imposed. This also out of the consideration that the financial uptake of these funds in the first years after the accession would not be at the desired level and then this deviation would support the efficient use of these funds.*

The NCDP scheme in the case of arable crops could be limited to the funds coming from the Second Pillar and from the related co-financing and be distributed as a uniform (flat) payment for all the arable crops.

Another policy option would be that NCDP are allocated to farms smaller than 100 ha. In this case, the total amount would be reduced by about 52% (the share of medium-sized farms of over 100 ha is 48%) and the value of NCDP possible to be allocated to farms smaller than 100 ha would be significantly lower (186 mil euro in 2007, 203 mil in 2008, 225 in 2009 etc. – see Table 14.

Another option for applying NCDP to arable crops would be to pay these top-ups only to certain crops from the category, i.e. to those potentially competitive (e.g. sunflower) while the remaining amount should be allocated to the livestock sector.

Such a decision should be based upon more accurate evaluations based upon the reference areas and yields of all the arable crops. The evaluations are made according to the same methodology previously presented with the difference that the amounts are evaluated for each crop in part. The NCDP evaluations by crops and the calculation base are presented in Table 15. According to this evaluation variant and as it can be noticed from the table, the largest part of the funds possible to be provided through NCDP is concentrated under the crop maize (60% of the NCDP possible to be provided) and wheat and rye (28% of the value of NCDP possible to be provided). For sorghum no NCDP can be provided, as from our estimations admitted ceiling is already exceeded by SAPS payment. At the same time, if differentiated schemes are applied for the selected crops (wheat, rye, barley, two-row barley, sunflower and soybeans) no NCDP can be provided for the other arable crops (the remaining eligible area that is not covered by this scheme, namely 357,089 ha) as the total amounts for direct payments would exceed the total admitted amounts as direct payments by the EU for the respective years.

NCDP evaluation for the other crops that might be eligible, namely rice, tobacco, hops, flax and hemp, nuts, etc., can start from the same methodology. The estimations for these crops are presented in Table 16.

As it can be seen, in this case, too, there are certain products, namely flax and hemp for which NCDP is no longer possible. In this category, the most significant NCDP can be provided for tobacco.

Table 15 Estimation of possible NCDP for different arable crops

Eligible arable crops	<i>Reference area</i> <i>Ha</i> (total eligible 7012666 ha)	Reference yield <i>t/ha</i>	<i>EU intervention price PiUE</i> <i>Euro/t</i>	<i>Direct payments</i> <i>Pda</i> <i>Mil Euro</i> <i>EU-15 level (100%)</i>	<i>Direct payments to be paid to Romania</i> <i>Pda 2007</i> <i>Mil Euro</i> <i>(55% of EU-15)</i>	<i>SAPS 2007</i> <i>Mil Euro</i>	<i>NCDP 2007</i> <i>Mil Euro</i>	<i>Direct payments to be paid to Romania</i> <i>Pda 2008</i> <i>Mil Euro</i> <i>(60% of EU-15)</i>	<i>SAPS 2008</i> <i>Mil Euro</i>	<i>NCDP 2008</i> <i>Mil Euro</i>
Wheat+rye	2.272.809	2,65	63	379	208.7	89.5	119.2	227,7	97,0	130,7
Barley+two-row barley	569.531	3,1	63	111	61.2	20.1	41.1	66,7	21,8	44,9
Maize	2.848.145	3,5	63	628	345.4	88.5	257.0	376,8	95,8	281,0
Sorghum	2.755	1,5	63	0,26	0,1	0,4	-0,2	0,2	0,4	-0,3
Sunflower	891.687	1,3	63	73,0	40.2	31.9	8.3	43,8	34,5	9,3
Soybean	70.650	2	63	8,9	4.9	2.7	2.2	5,3	2,9	2,4
Total differentiated schemes	6.655.577	2,65	63	1,201	660.5	233,0	427,5	750,5	252,4	468,1
Total non-differentiated schemes	357.089	2,65	0,95	0,95	0,5	12,1	-11,6	0,6	13,1	-12,5

Table 15: Estimation of possible NCDP for different arable crops – continued

Eligible arable crops	<i>Direct payments to be paid to Romania Pda 2009 Mil Euro (65% of EU-15)</i>	<i>SAPS 2009 Mil Euro</i>	<i>NCDP 2009 Mil Euro</i>	<i>Direct payments to be paid to Romania Pda 2010 Mil Euro (70% of EU-15)</i>	<i>SAPS 2010 Mil Euro</i>	<i>NCDP 2010 Mil Euro</i>	<i>Direct payments to be paid to Romania Pda 2011 Mil Euro (80% of EU-15)</i>	<i>SAPS 2011 Mil Euro</i>	<i>NCDP 2011 Mil Euro</i>
Wheat+rye	246,6	101,8	144,8	265,6	106,9	158,7	303,6	112,3	191,3
Barley+two-row barley	72,3	14,9	57,4	77,9	15,7	62,2	89,0	16,5	72,5
Maize	408,2	100,6	307,6	439,6	105,6	334,0	502,4	110,9	391,5

Sorghum	0,2	0,4	-0,3	0,2	0,5	-0,3	0,2	0,5	-0,3
Sunflower	47,5	36,3	11,2	51,1	38,1	13,1	58,4	40,0	18,5
Soybean	5,8	3,0	2,7	6,2	3,2	3,0	7,1	3,3	3,8
Total differentiated schemes	780,6	257,1	523,5	840,6	270,0	570,7	960,7	283,5	677,2
Total non-differentiated schemes	0,6	21,7	-21,1	0,7	22,8	-22,1	0,8	23,9	-23,2

Source: estimations based upon the documentation of negotiations, of the guidelines methodology for NCDP calculation provided by MAFRD and SAPS evaluations

Table 16: Estimation of possible NCDP for crops other than arable crops from the EU support schemes

Other eligible crops for NCDP	Support at EU-15 level	Possible support to be provided to Romania in 2007	SAPS 2007	NCDP 2007	Direct payments to be paid to Romania Pda 2008	SAPS 2008	NCDP 2008	Direct payments to be paid to Romania Pda 2009	SAPS 2009	NCDP 2009
		<i>Mil Euro (55% of</i>	<i>Mil Euro</i>	<i>Mil Euro</i>	<i>Mil Euro (60 % of EU-15)</i>	<i>Mil Euro</i>	<i>Mil Euro</i>	<i>Mil Euro (65 % of EU-15)</i>	<i>Mil Euro</i>	<i>Mil Euro</i>

		<i>EU -15)</i>								
Rice	0.06	0.03	0.02	0.02	0.04	0.02	0.02	0.04	0.02	0.02
Flax and hemp for fibre	0.09	0.05	0.06	-0.005	0.05	0.06	-0.005	0.06	0.06	-0.004
Tobacco	32.13	17.67	0.16	17.51	19.28	0.17	19.11	20.88	0.18	20.70
Nuts	0.20	0.11	0.05	0.06	0.12	0.05	0.07	0.13	0.06	0.074
Total NCDP				17.59			19.19			20.79

Other eligible crops for NCDP	<i>Direct payments to be paid to Romania Pda 2010 Mil Euro (70% of EU-15)</i>	<i>SAPS 2010 Mil Euro</i>	<i>NCDP 2010 Mil Euro</i>	<i>Direct payments to be paid to Romania Pda 2011 Mil Euro (80% of EU-15)</i>	<i>SAPS 2011 Mil Euro</i>	<i>NCDP 2011 Mil Euro</i>
Rice	0.04	0.02	0.02	0.05	0.02	0.03
Flax and hemp for fibre	0.06	0.07	-0.002	0.07	0.07	0.004
Tobacco	22.49	0.19	22.30	25.70	0.20	25.50
Nuts	0.14	0.06	0.08	0.16	0.06	0.10
Total NCDP			22.40			25.63

Source: estimations based upon the documentation of negotiations, of the EU policy on commodities evaluated in conformity with the regulations specified in Table 4, of the guidelines methodology for NCDP calculation provided by MAFRD and SAPS evaluations from Table 12

Having in view all the maximum values of NCDP evaluated by each crop in part, in relation to the available funds from the budget and the political decision referring to NCDP allocation for certain crops, different support schemes can be chosen.

The variant of maximum NCDP could be chosen for certain arable crops (sunflower, soybean) and of a flat rate payment per ha for the other crops reduced as compared to the maximum permitted level. However, the complications and costs should be had in view referring to the monitoring through IACS versus the uniform NCDP application at a level established in relation to the available budget.

3.3.2. NCDP evaluation for the livestock sector

The evaluation of NCDP related to the livestock sector is made according to the same methodology as in the case of crops starting from the evaluation of the maximum possible support to Romania beginning with the year 2007. In this case, too, the evaluations are made on the basis of EU regulations application for each product in part (milk, beef and mutton and goat meat) and the results of the negotiations (Table 4) and the estimated SAPS values for the pastures and hayfields related to the sectors (Table 12).

3.3.2.1. NCDP evaluation for milk

The milk quota allocated to Romania is 3,057,000 tons each year (the quality indices are 35.93g fat/kg) out of which 1,093,000 tons for processing and 1,964,000 tons for direct sales. Owing to this market specificity, that is at present disorganized, Romania also obtained, beginning with the year 2009, a reserve (restructuring quota) of 188,000 tons of milk/yearly and the amendment referring to the quotas for direct sales and processing deliveries. These quotas will have to be revised and eventually re-established on the basis of more recent reference periods 2004 – 2006, when the statistics of the sector is expected to be more accurate.

In order to reach the negotiated milk quota, 826,216 dairy cow heads are necessary, with an average yield of 3,700 l/cow/year. According to the EU regulations, these herds need 413,108 ha permanent pastures (maximum 2 large livestock units (LLU)/ha).

The direct payments for milk are evaluated according to the EU regulations EC 1255/1999 amended by EC 1782/2003 namely:

- The premia for the amount related to quota starting with 2006-2007 is 24.94 euro/ton;
- Additional premia/payment per area of permanent pasture.

The total direct payments per ton of eligible milk (quota) i.e. premia + additional premia/payment per area of pasture cannot exceed in the year 2007 41.7 euro/ton while the payment per permanent pasture cannot exceed 350 euro/ha (regulations for EU-15).

According to these hypotheses, we evaluated the direct payments related to the milk and dairy sector as follows:

$$PDI = (Ql * pl) + ps$$

where:

- PDI = value of direct payments for milk (euro);
- Ql = milk quota (t) for the evaluation of direct payments at EU-15 level, i.e. 100% (negotiated quota+reserve quantity in this case);
- pl = premia related to quota (euro/t);
- ps = premia supplement that can be paid for all the milk quota (16.76 euro/t) or it can be combined with a direct payment of 350 Euro/ha on the area of permanent pasture eligible to the respective quota (established for each producer in part):
 - Premia supplement (psq) for all the milk quota = $3,245,400 * 16.76 = 54,392,904$ Euro *or*
 - Premia supplement (psp) = $413,108 \text{ ha} * 350 = 144,587,800$ Euro

variant 1 PDI (*with psq*) = $(3,245,400 * 24.94) + (16.76 * 3,245,400) = 135,333,180$ Euro

variant 2 PDI (*with psp*) = $(3,245,400 * 24.94) + (413,108 * 350) = 225,528,076$ Euro

According to these evaluations, the direct payments/t of milk related to the quota at EU-15 level will amount to 41.7 euro/t in the case when the supplement to the premia will be applied to the total milk quota; if it is considered that for reaching the quota 877,135 dairy cow heads are necessary (average yield: 3.7 t/head) it can be ascertained that the support related to an eligible cow will be 155 euro/head at EU-15 level. However, if the supplement to premia is applied to the area of permanent pasture, the possible direct payments to be paid at EU-15 level would be 69.4 euro/t, and in these conditions the support related to eligible cow would be 257 euro. Table 17 presents the evaluation of possible direct payments for milk to be paid in Romania. Table 17 sums up the evaluation of possible direct payments for milk to be paid in Romania.

Table 17: Evaluation of direct payments for milk possible to be paid in Romania

	Maximum level of direct payments EU-15	Possible support to be provided to	Possible support to be provided to	Possible support to be provided to	Possible support to be provided to	Possible support to be provided to

	<i>Mil Euro</i>	<i>Romania in 2007 mil Euro (55% of EU-15)</i>	<i>Romania in 2008 mil Euro (60% of EU-15)</i>	<i>Romania in 2009 mil Euro (65% of EU-15)</i>	<i>Romania in 2010 mil Euro (70% of EU-15)</i>	<i>Romania in 2011 mil Euro (80% of EU-15)</i>
Direct payments milk - variant 1 <i>of which:</i>	135,333	74.4	81.2	88.0	94.7	108.3
<i>for premia</i>	80,940	44.5	48.6	52.6	56.7	64.8
<i>for supplements to premia (psq)</i>	54,392	29.9	32.6	35.4	38.1	43.5
Euro/eligible animal in variant 1 (3.7 t milk per year)	154	84.7	92.4	100.1	107.8	123.2
Direct payments milk - variant 2 <i>of which:</i>	225,528	124.0	135.3	146.6	157.9	180.4
<i>for premia:</i>	80,940	44.5	48.6	52.6	56.7	64.8
<i>for supplements to premia (psp)</i>	144,587	79.5	86.8	94.0	101.2	115.7
Euro/eligible animal in variant 2 (3.7 t milk per year)	257	141.4	154.2	167.1	179.9	205.6

Starting from this judgement by which we evaluated the maximum level of support for milk and dairy products to be provided to Romania (by SAPS and NCDP) we shall choose for NCDP estimation for milk the second variant in which the supplements to premium are provided per hectare of permanent pasture. The results and calculation methodology are presented in Table 18.

Table 18: Estimation of possible direct payments to be provided for milk (variant 2)

	2007	2008	2009	2010	2011

Direct payments milk					
Million euro	124.0	135.3	146.6	157.9	180.4
SAPS for pasture (413108 ha necessary for the milk quota) million euro	EC	16.4	17.2	18.1	19.0
NCDP for milk Total for quota	108.9	118.9	129.3	139.8	161.4
NCDP for milk euro/eligible animal (3.7 t milk per year)	124.1	135.5	147.5	159.3	184.0

As it can be seen the maximum admitted value for NCDP is significant (more than 108 million euro in 2007, 119 million in 2008 and 130 million in 2009), the total value possible to be allocated in the period 2007-2009 being 407 million euro.

3.3.2.2. NCDP evaluation for beef and veal and sheep meat

The evaluation of the maximum permitted level of direct payments (100% of EU-15) for beef and sheep meat was according to the previously used methodology, according to the hypotheses presented in Table 19.

The direct payments for beef and veal were calculated as follows:

$$PD_v = \sum P_v + P_{av}$$

in which:

- PD_v = direct payments for beef;
- P_v = premia specific to sector;
- P_{av} = additional payments for beef.

The results of the evaluations of direct payments for beef and veal at the level of those applicable in EU-15 are presented in Table 19.

Table 19: Evaluation of direct payments for beef and veal EU-15 level

Negotiated ceilings	Heads	Euro/head	Premia - Euro	Additional
---------------------	-------	-----------	---------------	------------

	(1)	EC 1254/1999 (2)	P_v (1*2)	payments Euro P_{av}
Special premia for fattening young bulls	452,000	210	94,920,000	
For special suckler cow premium	150,000	200	30,000,000	
For slaughtering or export out of which	1,233,000			
– For adult bovines	1,148,000	80	91,840,000	
– For calves	85,000	50	4,250,000	
Additional payments				858,260
Total direct payments for beef and veal applicable in EU-15 = 221.868 million Euro				

The total value of support to beef and veal at the level of that applicable in EU-15 is 221 million euro.

The evaluation of direct payments for *mutton meat* was based upon the same methodology using the results of negotiations and EU regulations into effect: (EC) No.2529/2001. The direct payments for mutton and goat meat were calculated as follows:

$$PDo = \sum Po + Pao$$

where:

- PDo = direct payments for mutton meat;
- Po = premia specific to sector;
- Pao = lump sum for additional payments for mutton meat

The results of direct payments evaluations for mutton meat at the level of those applicable in the EU-15 are presented in Table 20.

Table 20: Evaluation of direct payments for sheep meat EU-15 level

Negotiated ceilings	Heads (1)	Euro/head EC 1254/1999 (2)	Premia – Euro P_o (1*2)	Lump sum for additional payments Euro P_{ao}
National ceiling sheep of which:	5.880.620			

– In the mountain zone about 30%	1.644.186	28	46.037.208	
– In the plain zone about 70%	3.836.434	21	80.565.114	
Additional payments				6.216.782
Total direct payments for sheep meat applicable in EU-15 – 132.819 million euro				

The total value of support for sheep meat applicable in EU-15 is 132.819 million euro.

In order to evaluate NCDP it is necessary to estimate the value of SAPS that is allocated for the pastures and hayfields necessary for animals corresponding to the ceilings provided for in the final documents of the accession negotiations. In order to estimate the areas under natural pastures and hayfields a transformation coefficient into LLU will be used. Table 21 presents the evaluation of the pastures and hayfields necessary for the livestock sector eligible for CAP support. For a density of 1.8 LLU/ha for the livestock sector eligible for CAP support, an area under natural pastures and hayfields of 1,850 thousand hectares is necessary, representing 41% of the area under pastures and hayfields eligible for SAPS support (areas larger than 1 ha with parcels larger than 0.3 ha).

Table 21: Evaluation of the pastures and hayfields necessary for the livestock sector eligible for CAP support

Negotiated ceilings	Heads	LLU coefficient	LLU	Ha Natural pastures and hayfields at a density of 1.8 LLU/ha	% Of total
Livestock sector eligible for CAP support out of which:			3,328,509	1,849,170	41
<i>Beef and veal</i>			<i>1,620,200</i>	<i>900,111</i>	<i>20</i>
For the special premia for young bulls fattening	452,000	0,6	271,200	150,666	
For the special suckler cow premium	150,000	1	150,000	83,333	
For slaughtering or export out of which	1,233,000		1,199,000	666,111	
– For adult bovines	1,148,000	1	1,148,000	637,777	
– For calves	85,000	0,6	51,000	28,333	

Negotiated ceilings	Heads	LLU coefficient	LLU	Ha Natural pastures and hayfields at a density of 1.8 LLU/ha	% Of total
<i>Sheep meat</i> <i>National ceiling sheep</i>	5,880,620	0,15	882,093	490,051	11
<i>Milk</i>	826,216		826,216	459,008	10
Total SAPS eligible natural pastures and hayfields (source Table 12)				4,489,317	100

The NCDP value possible to be provided for the livestock sector is presented in Table 22. For this evaluation the same methodology was used as for the other sectors; however, for the milk sector the variant of allocating the additional premia to the milk quantity was taken into consideration. Total SAPS for the livestock sector evaluated for the year 2007 is 68 million euro (15% of SAPS for 2007) and the possible NCDP value provided to sector is 205 million euro. For this sector, besides the maximum possible values for SAPS and NCDP, the value of NCDP per/LLU was also evaluated. As it can be seen from Table 23, the value NCDP/LLU was evaluated per total livestock sector (a flat rate payment) as well as per component sectors (per animal head), so that depending on the available budget, the decision-makers could opt only for certain support schemes in case of need.

Table 22: Estimation of possible NCDP to be paid to the livestock sector through the EU support schemes

Other eligible productions for NCDP	<i>Sprijin la nivelul UE-15</i>	<i>Sprijin posibil de acordat României În 2007 Mil Euro (55% din UE-15)</i>	<i>SAPS 2007 Mil. Euro</i>	<i>NCDP 2007 Mil. Euro</i>	<i>Plăți directe de acordat României 2008 Mil Euro (60 % din UE-15)</i>	<i>SAPS 2008 Mil. Euro</i>	<i>NCDP 2008 Mil. Euro</i>	<i>Plăți directe de acordat României 2009 Mil. Euro (65 % din UE-15)</i>	<i>SAPS 2009 Mil. Euro</i>	<i>NCDP 2009 Mil. Euro</i>
Beef and veal	221.9	122.0	33.05	89.0	133.1	35.81	97.3	144.2	37.60	106.6
Sheep meat	132.8	79,7	18.0	55,0	86,3	19.5	60,2	93,0	20.5	65,8
Milk variant 1 <i>In which the additional premium is paid to the milk quantity</i>	135.3	74.4	16.9	57.6	81.2	18.3	62.9	88.0	19.2	68.8
Total	490	270	68	201,6	294	74	220,4	319	77	241,3
Euro/LLU	147,2	81,0	20.4	60,6	88,3	22.1	66,2	95,7	23.2	72,5

Other eligible productions for NCDP	<i>Direct payments to be paid to Romania 2010 Mil. Euro (70% of EU-15)</i>	<i>SAPS 2010 Mil. Euro</i>	<i>NCDP 2010 Mil. Euro</i>	<i>Direct payments to be paid to Romania 2011 Mil. Euro (80% of EU-15)</i>	<i>SAPS 2011 Mil. Euro</i>	<i>NCDP 2011 Mil. Euro</i>
Beef and veal	155.3	39.48	115.8	177.5	41.45	136.0

Sheep meat	93,0	21.5	71,5	106,2	22.6	83,2
Milk variant 1 <i>in which the additional premium is paid to the milk quantity</i>	94.7	20.1	74.6	108.3	21.1	87.1
Total	343	81	261,9	392	85	306,8
Euro/LLU	103,0	24.4	78,7	117,8	25.6	92,2

Source: estimations based upon the documentation of negotiations, EU policy, products evaluated according to the regulations specified in table 4, to the methodology of guidelines for NCDP calculation provided by MAFRD, of SAPS evaluations in Table 12.

Table 23: Estimation of the possible support provided as NCDP for the livestock sector.

Sector	Maximum NCDP 2007 Euro/head	Maximum NCDP Euro/head	Maximum NCDP 2009 Euro/head	Maximum NCDP 2010 Euro/head	Maximum NCDP 2011 Euro/head
Beef and veal /LLU	54.9	60.1	65.8	71.5	84.0
Sheep meat	9,4	10.2	11.2	12.2	14.2
Milk variant 1/LLU	69.7	76.2	83.3	90.3	105.5
Euro/UVM uniform payment	60,6	66,2	72,5	78,7	92,2

Under the hypothesis in which the structure of eligible animal farms (those with over 1 ha) remains according to GAC data, then the maximum total sum that can be paid according to the eligibility criteria for the livestock sector would be 199 million euro (see Table 24) in 2007, by 6 million lower as compared to the variant estimated in Table 22.

Table 24: NCDP evaluation for the livestock sector according to the eligibility criteria by sectors and total 2007

	Bovines	Sheep
Total heads	2,870,782	7,238,404
Total eligible (%) livestock farms with over 1 ha	78.14	77.97
NCDP maximum (No of animals in eligible farms *NCDP/animal head)		
Mil euro	138	56.4
Total livestock sector 194,4 million euro		
Average number of animals per eligible farm	2.27	11.97
Euro/eligible farm	140	119.7

A synthesis of the maximum amount of the direct support possible to be granted (SAPS and NCDP) to Romania in the period 2007-2011 is presented in the table 25.

<i>Sectors</i>	<i>SAPS 2007 Mil Euro</i>	<i>NCDP 2007 Mil Euro</i>	<i>SAPS 2008 Mil Euro</i>	<i>NCDP 2008 Mil Euro</i>	<i>SAPS 2009 Mil Euro</i>	<i>NCDP 2009 Mil Euro</i>	<i>SAPS 2010 Mil Euro</i>	<i>NCDP 2010 Mil Euro</i>	<i>SAPS 2011 Mil Euro</i>	<i>NCDP 2011 Mil Euro</i>
Total crop sector										
Arable	257.5	386.5	278.9	423.6	292.9	468.2	307.5	512.2	322.9	613.9
Euro/arable ha	36.7	55.1	39.8	60.4	41.8	66.8	43.9	73.0	46.1	87.5
Total other schemes crop sector		17.59		19.19		20.79		22.40		25.63
Total livestock sector	68	205.3	74	224.5	77	245.6	81	266.6	85	312.2
Euro/LLU	20.4	61.7	22.1	67.4	23.2	73.8	24.4	80.1	25.6	93.8
Total NCDP permitted		609.39		668		734.69		801.3		951.73

Table 25: Evaluation of possible direct support to be paid to Romania from the EU budget and the national budget in the period 2007-2011

Considering that, from MAFRD estimations, the available national budget in the post-accession period for this type of support could amount to about 300 million, it can be ascertained that, if it is decided not to use the possibility of deviating the support from the rural development package, NCDP could be paid at 50% of the total permitted value; then MAFRD, depending on the agricultural policy objectives and on the complexity of their implementation through IACS will decide on certain payment schemes to be applied. For example, one of the options could be a combination of NCDP for the livestock sector (about 200 Euro in 2007) while the rest a uniform payment for the crops or two – three payment schemes for the crops with market integration potential (cereals excluded).

4. Identification of sectors that will need support

Out of the over 4 billion euro allocated by the European Union for CAP implementation in the period 2007-2009, over 18% (732 million euro) are foreseen for the market intervention measures and export refunds. This support does not need national co-financing; however, for Romania to benefit from these funds, it will have to cover from the national budget, prior to accession, the implementation costs of these policies.

According to the EU legislation, market intervention represents an intervention lever for market prices stabilization, through buying surplus production and its stocking into public or private stocks.

Export refunds represent another intervention leverage for certain exported products (among which milk and dairy products, beef, cereals, fruit and vegetables, sugar products, processed products, etc.) that represents the coverage of the difference between the export price and the international price, having in view that the prices of agricultural products are generally higher in the European Union than those on the world market.

An evaluation of the necessary funds for this type of interventions should be based upon forecasts on market developments. As in Romania the market information system is an early stage and there are no market forecasts on medium and long term in Romania, these being also difficult to produce, as in the last 15 years the agricultural policies were not consistent, similarly to the support provided to the sector, the base for a reliable forecast is extremely fragile.

Table 26 presents the forecast of supply and use of the main arable crops eligible for CAP support taken over from a previous study²⁰. The working hypotheses from this study on the scenario of Romania's accession were based upon SAPS application beginning with 2007. It was considered that the prices of products will increase as a result of the increase in farmers' incomes, the direct budgetary support will represent 30% of the support in EU-15, and the modulation mechanism will be applied as rural development measure, as an alternative to reduce the direct payments on certain categories of farms. It was also considered that all these policy measures will stimulate the agricultural sector, but in spite of all these productivity will be low compared to the other Member States. According to these hypotheses, the forecast for the period 2007-2010 resulting from the running of the model are briefly the following:

- The land area under wheat will increase by over 2,100 thousand ha. It is expected that the market will regulate this area, that although would have the potential to increase as regards the land resources, will remain quite stable as a reaction to certain more coherent policies. A 10% increase until the year 2010 is sustainable if it is based upon a stable macro-economic background. This rationale is also valid in the case of rye (the harvested area would be 570 thousand hectares.). In this case, the consumption as feed will not influence too much the dynamics of this product as the livestock sector and food industry will be restructured until the

²⁰ AGMEMOD - *Project An Econometric Model for the Romanian Agriculture*, authors Kevorkian, C.; Gavrilescu, D.; Giurca, D.; Serbanescu, C.; Vilceloiu, S. – elaborated in the Institute of Agricultural Economics – NIER within an European Project Frame 5.

year 2009 and the effects will not be perceived immediately. The consumption of maize as feed will increase instead as this product is traditionally used as fodder. A significant increase will be also found in barley (800 thousand tons).

- The structure and dynamics of production will be self-regulated over time, the market rules replacing the traditional productivist values, although (on the medium term) the pre-accession trend will be maintained after the accession moment, too. The livestock herds (dairy cows and other bovines) will follow a decreasing trend.

The figures presented in Table 26 are the result of running a market model²¹ created for EU-27, in which were included a series of variables in relation to the support provided by the previous agricultural policies (1996-2002) as well as the hypothesis of implementing SAPS beginning with the year 2007. As we found no other forecasts based upon a coherent model that should include all the previously-mentioned variables and hypotheses, we considered it useful to present these values in order to have a reference point for the identification of products that will need support through export refunds and stocking.

Table 26: Forecast of supply and production utilization by main arable crops 2007-2010

	2007	2008	2009	2010
Wheat				
<i>Thousand ha</i>				
Area	2099.60	2103.12	2103.52	2106.03
<i>t/ha</i>				
Average yield	3.09	3.19	3.28	3.38
<i>Thousand tons</i>				
Production	6478.52	6709.46	6896.27	7125.27
Stocks at the beginning of year	2074.38	2168.57	2270.09	2373.36
Imports	606.08	657.60	707.26	759.94
Total supply	9158.98	9535.62	9873.62	10258.57

²¹ AG-MEMOD model for Romania is a dynamic partial equilibrium econometric model for several products. The products taken into consideration are the following: wheat, maize, meat and milk; the data used in the model come from the National Commission for Statistics; the database used included the period 1996 (after the enforcement of the European Agreement) up to 2002, while the projections for the mentioned products are until 2010. The variables used closed on imports, exports and stocks. This model can be also run with other AGMEMOD models elaborated within the same project by the EU Member States and the EU NMS. The linkage between the models is through price variables.

	2007	2008	2009	2010
Domestic consumption	6560.55	6841.88	7084.84	7339.86
Feed	1767.00	2065.24	2188.92	2258.61
Other	4793.55	4776.65	4895.92	5081.25
Exports	429.86	423.65	415.42	426.39
Stock at the end of year	2168.57	2270.09	2373.36	2492.33
Barley				
	<i>Thousand ha</i>			
Area	478.30	484.01	488.82	494.66
	<i>t/ha</i>			
Average yield	3.14	3.15	3.16	3.16
	<i>Thousand tons</i>			
Production	1503.74	1524.68	1542.84	1564.32
Stock at the beginning of year	192.76	196.98	199.60	197.95
Imports	113.61	113.14	112.67	113.00
Total supply	1810.11	1834.80	1855.11	1875.27
Domestic consumption	1517.54	1539.06	1561.46	1582.69
Feed	461.62	478.13	495.24	521.35
Other	1055.92	1060.93	1066.22	1061.34
Exports	95.59	96.14	95.70	95.09
Stock at end of year	196.98	199.60	197.95	197.50
Maize				
	<i>Thousand ha</i>			
Surface	3209.96	3226.12	3242.36	3258.68
	<i>t/ha</i>			
Average yield	3.65	3.85	4.06	4.27
	<i>Thousand tons</i>			
Production	11721.49	12405.71	13162.67	13363.02
Stock at beginning of year	12531.10	12584.21	12600.51	12547.87
Imports	45.39	45.35	44.82	45.07
Total supply	24297.98	25035.27	25807.99	25955.96

	2007	2008	2009	2010
Domestic consumption	11509.48	12228.65	13052.20	13182.72
Feed	9422.93	10119.63	10766.70	11027.41
Other	2086.55	2109.02	2285.50	2155.31
Exports	204.30	206.11	207.92	207.32
Stock at end of year	12584.21	12600.51	12547.87	12565.92
Sunflower				
	<i>Thousand ha</i>			
Area	915	911	906	902
	<i>t/ha</i>			
Average yield	<i>Thousand tons</i>			
Production	1,207	1,220	1,234	1,243
Stock at beginning of year	14	56	30	20
Imports	21	24	26	29
Total supply	1,241	1,300	1,290	1,292
Domestic consumption	836	813	801	785
Feed	690	674	658	642
Other	146	139	144	143
Exports	349	458	469	486
Stock at end of year	56	30	20	21

Source: synthesis based upon AGMEMOD - Project "An Econometric Model for the Romanian Agriculture" authors Kevorkian, C.; Gavrilescu, D.; Giurca, D.; Serbanescu, C.; Vilceloiu, S. – elaborated in the Institute of Agricultural Economics - NIER within an European Project Frame 5.

As it can be noticed, the main products for which export refunds could be granted are maize and sunflower (the only products with a positive foreign trade balance forecast). At the same time, the wheat and maize stocks could represent a reference point for a possible support to stocking in the case when the cereal prices would be down below the intervention price in the period 2007-2010.

The milk and dairy market forecast (Table 27) as well as the meat market forecast (Table 28) reveals that there might be some interventions in dairy products (maybe in butter, depending on the developments in processing, and in beef and veal eventually).

Table 27: Livestock herds forecast

	2007	2008	2009	2010
Bovine herds				
<i>Thousand heads</i>				
Stock at the beginning of year	2.820	2.764	2.741	2.659
Dairy cows	1.827	1.744	1.717	1.628
Calves	350	351	354	356
Other bovines	642	668	670	675
Calf crop	2.397	2.557	2.729	2.911
Imports of bovines	24	26	28	31
Total supply	5.241	5.347	5.498	5.601
Bovines for slaughtering	1.324	1.317	1.314	1.311
Cows and heifers	1.202,88	1.207,97	1.199,52	1.199,52
Calves	39.00	39.00	39.39	39.78
Other	0.00	0.00	0.00	0.00
Exported bovines	70	69	67	65
Losses	55	54	53	52
Stock at the end of year	2.764	2.741	2.659	2.650
Suckler cow quota				
<i>Kg/head</i>				
Slaughtering weight	282	289	295	302
<i>Thou heads/end of year</i>				
Dairy cows	1.827	1.744	1.717	1.628
<i>t/year</i>				
Yield/cow	2.08	2.12	2.08	2.16
<i>Thousand tons</i>				
Milk				
Milk quota	3.810	3.702	3.576	3.520
Milk (other than quota)	1.990	1.844	1.709	1.583
Domestic consumption	850	855	860	865
Processed milk	5.800	5.546	5.285	5.103
Consumption by calves, net export	4.950	4.692	4.425	4.238

Source: synthesis based upon AGMEMOD - Project "An Econometric Model for the Romanian Agriculture" authors Kevorkian, C.; Gavrilesco, D.; Giurca, D.; Serbanescu, C.; Vilceloiu, S. – elaborated in the Institute of Agricultural Economics– NIER within an European Project Frame 5.

Table 28: Meat market forecast

	2007	2008	2009	2010
<i>Thousand tons</i>				
Beef and veal				
Production	297	324	350	375
Imports	15	16	17	18
Domestic consumption	221	225	228	233
Exports	69	88	110	128
Intervention /SPS stock	23	26	29	32
Pork				
Production	455.01	456.25	457.49	458.74
Imports	52.46	52.94	53.42	53.91
Domestic consumption	468	463	457	452
Exports	39	45	53	61
Stock at the end of year	12	13	14	14
Poultry				
Production	254	282	314	350
Imports	95	96	99	101
Domestic consumption	269	269	270	271
Exports	84	114	148	185
Stock at the end of year	5	5	5	5
Consumption				
	<i>Kg/head</i>			
Beef and veal	9.26	9.24	9.20	9.19
Pork	21.15	20.95	20.70	20.48
Poultry	12.16	12.17	12.23	12.28

Source synthesis based upon AGMEMOD - Project "An Econometric Model for the Romanian Agriculture" authors Kevorkian, C.; Gavrilesco, D.; Giurca, D.; Serbanescu, C.; Vilceloiu, S. – elaborated in the Institute of Agricultural Economics - NIER within a Frame 5 European Project.

The lack of statistical data necessary for a realistic assessment of the possible support to common market organizations (fresh fruit and vegetables, processed fruit and vegetables, wine) has limited the possibility of these evaluations. At the same time, the rigours related to the compliance with the sanitary-veterinary standards could be an extremely restrictive factor for the eligibility of farmers that can benefit from support through the Common Market Organizations.

Estimating the maximum possible support to the sugar sector

As sugar production is at present non-competitive and the sector remuneration represents a sensitive subject, we tried to assess in an optimistic variant (in case Romania will produce sugar at the level of negotiated quota) the support that can be granted to this sector. We mention that we do not expect a highly bright future in the case of the sugar sector for the period 2007-2011; hence we do not consider that funds will be used for export refunds in this case. The evaluated sums are not likely to be used, the estimations representing only reference points for “what would happen if production would reach the maximum negotiated level”.

The common market organization for sugar was regulated by CR No 1260/2001 (the sector policy regulation has recently changed), by which EU provides support to sugar beet producers by a complex system of price support and limitation by quotas. Each year a target price is established for white sugar²². In order to maintain the price around the target price value, the intervention agencies can buy (in extreme cases) white or raw sugar (offered for intervention) at the intervention price²³, depending on a standard quality.

The sugar quantity that can be sold on the domestic market in EU, or that can be eligible for export refunds, is limited by quotas. There are two types of quotas, “A” quota and “B” quota. Each Member State is allocated both “A” quota and “B” quota. What does “A” quota and “B” quota mean?

In the sugar sector, in order to compensate the budgetary costs for intervention and export refunds, processors are asked to pay a contribution of up to 2% of the intervention price for “A” and “B” sugar that is processed. If in one year this contribution is not sufficient to cover the budgetary costs of sugar price support, an additional fee of up to 30% of the intervention price can be imposed to the “B” sugar quota. However, in exceptional circumstances, the contribution can increase up to 37.5%.

In order to support the sugar beet producers, processors are asked to pay a minimum price for sugar beet. The minimum prices are based upon a base price for sugar beet that is established each year for the sugar beet with a minimum contents of sugar of 16%²⁴.

As the contributions paid by the sugar processors almost fully cover the EU budgetary costs, *it is often said about the policy in the sugar sector that it is “self-financed”*. However, it should be mentioned that in EU, too, sugar is an expensive product, as consumers pay a higher price for it compared to the price they pay for other agri-food products.

²²The intervention price for A sugar in 2003-2004 market year for one ton of sugar produced from 7.7 t sugar beet was 63.19 euro/100kg.

²³ In the EU zones where it was considered that there is no sugar deficit, the intervention price was 63.19 EURO/100kg. The intervention price for the white sugar is high, in certain areas that are considered to have sugar deficit. In Spain, for example, the intervention price was 64.88 EURO/100kg.

²⁴ For the year 2003/2004 the base price for sugar beet was 47.67 EURO/ton. The minimum price for sugar beet processed into sugar from „A” quota is 98% of the base price, and the minimum price for the sugar beet processed into sugar from “B” quota is 68% of the base price. These minimum prices for sugar beet are higher in the zones declared as having sugar deficit. Beginning with 2007/2008 the minimum price for sugar beet will be 29.8 Euro/t, in 2008/2009 26.7 euro/t, in 2009/2010 25.1 euro/t and beginning with 2010/2011 it will get stabilized at 25.1 euro/t.

Significant changes are expected in the sugar policy beginning with the year 2005, and the implementation will last about 4 years. The policy of this sector may be subject to revision in the year 2008. The proposal of policy reformation in this sector has in view the following:

- significant diminution of exports by the diminution of export subsidies;
- removal of market interventions and the diminution of domestic sugar price, and in exchange for this, granting decoupled payments for sugar producers.

The European Commission appreciates that the reform in the sector will maintain, however, the sugar production within competitive parameters. *The main losers will be the producers, who, by the direct payments that are received, will benefit from a partial compensation for their income losses. Consumers will be the main gainers, as it is appreciated that the sugar price will dramatically decrease as a result of the policy changes.* The decreasing trend in jobs in this sector (a generalized trend not only in the EU Older States²⁵ but also in the countries that joined EU in 2004) will be probably maintained and out of this reason a professional reconversion scheme was proposed intended for the factories that will not be competitive any longer. The main reform measures that have been proposed are the following:

- Decrease of the intervention price, from 632 Euro/ton to 421 Euro/ton, on a gradual basis, for a three-year period;
- Decrease of sugar beet minimum price, from 43.6 Euro/ton to 25.1 Euro /t in 2010/2011 on a gradual basis;
- Removal of public intervention and the introduction of a private stocking system;
- Diminution of the EU production quotas by 2.8 million tons (from 17.4 million tons to 14 million tons) on a gradual basis, in three-year time;
- Diminution of export subsidies by 2 million tons (from 2.4 million tons to 0.4 million tons);
- Introduction of decoupled support to sugar beet producers (that can partially compensate - 60% - the income losses);
- Transferable quotas between the operators in the Member States;
- A reconversion scheme of 250Euro/ton, intended for the non-competitive factories that will get out of the market.

Under these conditions, it is possible that a series of gains of the completed negotiations in this chapter, too, may be modified at the moment of accession. At the same time, reaching the established quotas may become an important objective, as if these productions are not obtained, it is possible that these quotas are lost or transferred to other Member States.

The estimation of the EU support to this sector, after 2007, is based upon the optimistic hypothesis that until 2007 Romania will produce sugar at the level of

²⁵ In the period 1990–2001 the number of sugar factories in EU decreased from 240 to 135 and the number of jobs decreased by 17,000.

negotiated quotas and the Common Market Organization in this sector will remain unchanged (CR No 1260/2001). The sugar extraction rate will be 10.69 tons sugar beet /1 ton of sugar (72 % of the EU average). No evaluations have been made related to the necessary budget for reaching the isoglucose quota.

According to the hypotheses presented in Table 29, we evaluated the total budget intended to reaching the sugar quota from sugar beet both for producers and for processors (applying correction coefficients in relation to the yield in Romania) as well as the necessary budget for producing the sugar quota from raw sugar. For the accuracy of evaluations, the value and the circuit of fees from the self-financing scheme specific to this sector were also considered.

Table 29: Work hypotheses for evaluating the maximum possible support to be provided to the sector of sugar and sugar products

Productions in 2007	Tone	CR No 1260/2001	
Total quota of sugar from sugar beet, out of which:	109 164	Base price for sugar beet, Euro/t sugar beet	47.67
– A quota	99 240	Sugar beet for A quota Euro/t sugar beet	46.72
– B quota	9 924	Sugar beet for B quota Euro/t sugar beet	32.42
Total quota of refined sugar from raw sugar	329 636	Intervention piece for sugar A 2003–2004 (at a rate of 7.7 t sugar beet for 1 t of sugar) Euro/t sugar	631.9
Total quota of isoglucose	9 981	Intervention price for B sugar Euro /t sugar	392
– A quota	9 790	Fees for the self-financing scheme (applicable to the entire sugar quota) Euro/t sugar	12.76
– B quota	191	Fees for the self-financing scheme for B quota Euro/t sugar	224.21
		Additional fees for A sugar Euro/t sugar	13.0
		Additional fees for B sugar Euro/t sugar	246.0
		Support to raw sugar processing Euro/t sugar	29.2

Source: own evaluations

According to the estimations based upon the previous EU regulations, the total budget for reaching the sugar quota negotiated by Romania is *68.93 million Euro*, out of which:

- 63.5 million Euro for reaching the quota of sugar from sugar beet, out of which:

- for sugar beet producers -33.9 million euro;
- for processors – 29.6 million euro;
- the value of fees entering the self-financing chain is 7.3 million euro;
- for raw sugar processing 5.5 million euro, and the value of fees for self-financing that enter the processing circuit of sugar quota is 4.2 million euro.

For the period 2007–2009, the budget intended for this sector will total 206.7 million euro, which represents more than 28% of the budget intended for the market measures from the financial package for Romania, necessary in the case when Romania would produce at the level of negotiated quotas.

Recently, changes have been operated in the sector policy (according to the principles previously presented), which means that the previously estimated budget is considerably reduced.

If we operate only two changes in the rationale of the previous evaluation, namely: decrease in the intervention price from 632 Euro/ton to 421 Euro/ton and decrease of the minimum sugar beet price from 43.6 Euro/ton to 26.9 Euro/ton, and consider that in Romania's case the negotiated quotas will be reduced according to the general trend forecast for the EU (20% of the current level), *the total budget for reaching the sugar quota from sugar beet might reach 33 million euro.* The budget for the sugar beet producers would be 14 million Euros, by 65% lower compared to the first variant, while for processors the budget could be 18.8 million Euros, hence by 36.5% lower compared to the first variant. At the same time, the budget for raw sugar refining would be probably down by 20%.

If the sector policy changes according to the principles presented until 2007, then new negotiations might take place, by which the already negotiated quotas could be diminished, by maximum 20% and maybe it could be obtained a part of the compensations that would be granted to producers and processors from the EU for the diminution of effects of the change in this policy. The maximum value of these compensations that could be applied in Romania's case would be:

- 2.2 million Euros for the non-performant sugar factories for reconversion;
- 11.9 million Euro direct payments for sugar beet producers.

If the same "treatment" principles are applied as in the case of the other direct payments (25% of the value of those from the EU in 2007, 30% in 2008 and 35% in 2009) then the value of this decoupled support could reach 10.6 million Euros in the period 2007–2009 (if the level of negotiated production quota is reached).

Out of the previous estimations, the support provided through SAPS for the eligible sugar beet producers in the period 2007-2009 is 3.3 million Euros (evaluated for the areas under sugar beet in the year 2002 GAC).

However, it is possible that these compensations are not obtained for processing through the negotiations, if the yields do not increase to the level of the already negotiated quotas until 2006–2007 up to the level of already negotiated quotas. *The increase of the sugar beet production and sector revigoration until that moment becomes*

imperative; until that moment it becomes imperative and in order to provide a new base of negotiations at the accession moment and this for providing similar compensations to those that will be provided in EU for the reconversion of non-performant processing units.

5. Establishment of the Integrated Administration and Control System and the trap of the operationalisation vicious circle

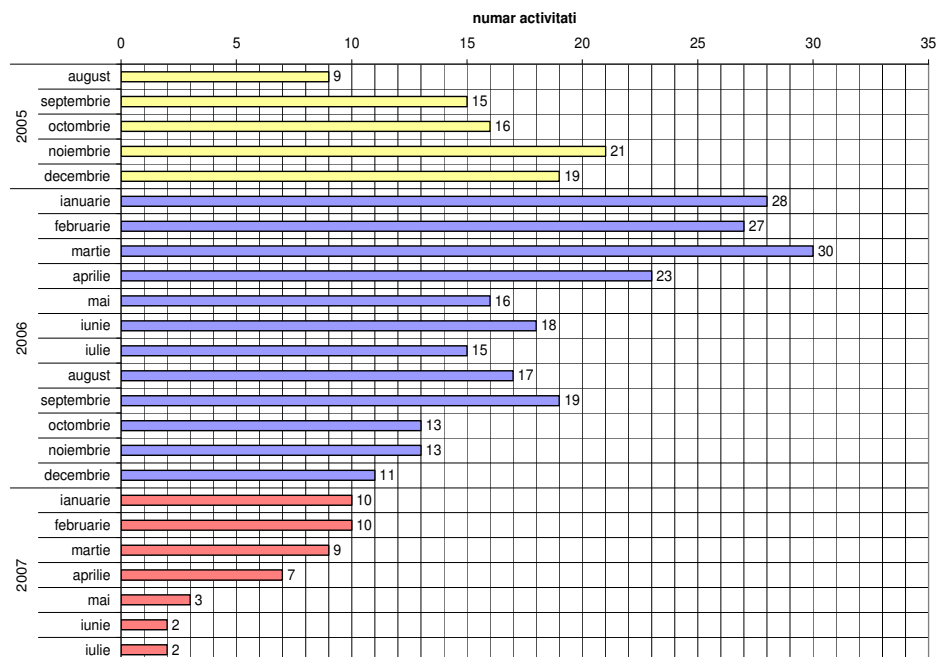
For the management of the EU funds that Romania will receive after the accession, Romania should establish several institutions that should be fully operational until the date of accession. The Agency of Payments and Intervention (API) is one of these and within it the Integrated Administration and Control System (IACS). IACS is a technical management and control tool that is applied to certain payment schemes. It is a set of norms and procedures related to institutional organization, IT infrastructure and human resources. Practically, the whole process on the basis of which API will distribute to the Romanian farmers their due payments from the European budget will be the responsibility of IACS. The main objective had in view is represented by the management and control of applications submitted by farmers in order to be allocated the Community support on a fair basis. Without a functional IACS Romania will not be able to manage the numerous and complicated administrative procedures for CAP implementation and mainly the administration of direct payments received from the EU, of complementary national direct payments and top-up schemes.

IACS should be organized and implemented, with all its necessary logistics, until the end of 2006. This institutional construction represents a huge challenge and MAFRD has a difficult task to be accomplished in a very short period of time. The analysis of the main IACS activities in time, based upon the information provided by MAFRD²⁶ reveals that the balance is inclined towards the activities to be accomplished rather than towards those that have already been accomplished. (Figure 3). In the short period of time left until accession this institution has to carry out two important and difficult tasks, namely: a) set up of the administrative network for SAPS implementation and b) preparation of the absorption capacity of funds that will come from the European Union.

We shall next try to identify the present stage of this building and the potential dangers in IACS operation and to propose a few solutions having in view the following four main directions of action: (i) development of organizational structure, providing the logistics and qualified staff for IACS implementation; (ii) informing the farmers and all stakeholders on the contents and operation modalities of the payment schemes; (iii) elaboration of detailed administration and control procedures and IT ensurance; (iv) establishment of the Agricultural Parcel Identification System (APIS).

Figure 3: Distribution of the activities of the Integrated Administration and Control System by months and years

²⁶ Master Plan for the Implementation of the Integrated Administration and Control System in Romania (MP), MAFRD, 2005.



5.1. Development of the organizational structure, ensurance of necessary logistics and qualified staff for IACS implementation

As we have already specified, the creation of the organizational structure and staff training seem to be one of the great challenges for MAFRD. Getting aware of the need to speed up the process, a series of measures have already been adopted; however, a consistent policy and a significant budgetary effort are still needed. Thus, MAFRD decided to develop this institution into a pyramid-like structure encompassing the national, county, and local/communal level using mainly the existing MAFRD structures. At the same time, it was decided that API, the Rural Development Agency (RDA) and ANCA should have a common headquarters, so as to avoid the waste of time in solving up different problems.

The institution will be served both by permanent staff (2,283 persons) and by staff hired on a limited period of time (1,056 persons), mainly for the activities related to the control and entry of applications for support. For the year 2006 the tasks load is tremendous: the staff should be trained and at the same time this staff should train other people and should carry out their normal specific activities. Although it is foreseen that over 80% of the recruited staff is staff with higher education and experience in national agricultural policy administration, the structure of staff lacks knowledge in issues related to CAP, GAEC, GIS, GPS, IACS. Another great handicap is represented by work on computer, with which a large part of the staff is not familiar.²⁷

²⁷ Master Plan, 2005.

Considering all these issues, the training of staff should follow two main directions: a) general training focused on PC utilization and general information on EU and CAP; b) specialized training that deals with IACS specific issues (databases, SIPA, GIS, specific software utilization, etc.). The establishment of partnership forms between the public sector and the private sector as well as the attraction of institutions with competence in this field (universities, research institutes, NGOs, professional associations and farmers' associations, etc.) could be also beneficial.

An analysis of the number of staff necessary for IACS operation reveals that the staff is not sufficient, mainly in the conditions in which MAFRD manifested its intention to implement NCDP. It can be appreciated that the qualified staff in Master Plan represents a minimum necessary only for the administration of direct payments. For the introduction of other forms of support, the number of staff will have to be increased, depending on the schemes that will be opted for.

On the other hand, the amount of material resources necessary for a good IACS operation is quite impressive: buildings, vehicles, furniture, computers, scanners, fax machines, GPS, etc. The purchase of this is a huge challenge, as it requires a lot of time, money and documentation.

5.2. Information of farmers and stakeholders on the contents and operation modalities of the payment schemes

An extremely important task for API is to obtain maximum benefits through the mobilization of the greatest possible number of eligible farmers in the action of filling in and submitting the applications for financial support. Another aspect that should be envisaged is that an adequate previous training of farmers will result in a lower volume of administrative and field control activities to be carried out later.

For this purpose, both the information campaigns (newspapers, TV, radio) and the information materials should be designed by target groups. The analysis of the education and agricultural knowledge of farm heads indicate the existence of at least two such groups. The individual farm heads generally have a low education and agricultural training level: about 9% graduated high school and about 3% graduated a faculty; 8% graduated an agricultural high school, and only 3% graduated an agricultural university (Table 30).

Table 30: Structure of farm heads by education and agricultural training

	Individual farm head (%)	Farm head in legal agricultural units (%)
Educational level		
No schooling	3.66	0.0
Primary school	27.46	0.46
Secondary school	29.92	2.05
High-school (first two grades)	5.24	2.14
Vocational or apprentice school	17.79	0.87
High-school	9.21	27.50
Post high-school	3.12	5.93
University short-term	0.74	5.93
University long-term	2.85	55.13
Agricultural training		
High-school (first two grades)	3.82	1.23
Vocational or apprentice school	14.53	0.55
High-school	7.60	17.83
Post high-school	2.69	3.88
University short-term	0.67	5.56
University long-term	2.34	34.79

Source: GAC 2002, NIS, 2004

The situation is quite different in the case of farm heads on legal agricultural units. Over 70% of them graduated a university and over 40% an agricultural university. The existence of such extremely different groups presupposes the elaboration of individualized information patterns.

It should not be overlooked that in the three pilot communes where the Farm Register was implemented, a certain reserve was noticed from the part of small farmers as regards their registration; this was the result of the lack of information, fear of having

to pay fees, lack of interest, etc.²⁸. In order to avoid such situations we consider it useful that those institutions that are mostly trusted by rural people should get also involved in the public information and awareness campaigns.

5.3. Design of detailed administration and control procedures and IT supply

The drawing up of written procedures that will have in view all the stages in SAPS development, from submitting the applications for funding up to paying the support, is a task assigned to API, as an institution that does not have a fully operational structure yet. For the elaboration of manuals for IACS operation and of those on the payment, accountancy, book-keeping, Romania will benefit from the contribution of twinning projects in the year 2006. At the same time, the establishment of the application form structure is a task for the year 2006. The structure of this form depends on the decisions that will be taken in relation to the type of support schemes (SAPS, NCDP).

The control procedures should be strengthened starting with the year 2007. The administrative control is specific to the local and national level, while the field control is specific to the county level. This will become one of the core activities of IACS: the administrative control will have in view both the formal control of applications for funding and the cross-cutting control will take place at local and national level; the field control will take place on a sample of minimum 5% of the total number of applications on the basis of the risk assessment analysis established at central level.

Another important subsystem is IT supply that will have to satisfy an estimated number of almost 2 million applications. Time will be the main obstacle to this development. It should not be overlooked that the software will have to be tested and the staff should get familiar with it before actions are initiated. For the management system of direct payment support schemes it was estimated that the design and implementation will need at least 5 years under the conditions of allocation of adequate financial and human resources²⁹. At the same time, according to the same study, the design of the database for the agricultural holdings entitled to ask for financial support will need a period of 2 – 3 years and the livestock identification system will also need the same period of time.

5.4. Establishment of the Agricultural Parcel Identification System (APIS)

One of the most sensitive points in the development of a functional IACS, as it is considered by most of the experts in the field, is the establishment of APIS. At this level, the process has been much delayed, as the procurement of the necessary maps entered under the incidence of laws on the information considered to be secret of state. Romania

²⁸ Master Plan, 2005.

²⁹ Kevorchian, C. (2002) –*Sisteme integrate de administrare și control*, Colecția ESSEN2, INCE, București.

decided to develop APIS on the basis of orthophotography plans for the whole agricultural area of the country. The operation is under way and raises doubts as regards the completion term. Certain technical aspects should be considered in this case: the nature of activities determines the flights to take place only in certain favourable periods, namely in spring, until the development of vegetation and in autumn until the land is covered by snow.

The lack of updated cadastral information and of digital maps at large scale will render the APIS establishment process more difficult. It is estimated that Romania will operate a system that contains 1.8-2.5 million physical blocks (on the average 43,000-66,000 per county and 630-990 per commune)³⁰. A huge volume of work. The digitisation of physical blocks represents another important operation whose result depends on the availability of orthophotography images.

The establishment of the linkage between APIS and farmers has a crucial importance. It needs time, human and material resources as well as appropriate software. It is an operation that should be done in a most careful and accurate way so as to avoid the additional burden upon the control work. The objectives of the MP are extremely ambitious, but the time and available staff will represent significant obstacles.

Agricultural parcel identification, the foundation of the future APIS, can be carried out by using the following sources: a) plans of the parcels with identified owners or holders; b) cadastral plans (1:2000; 1:5000; 1:10000) and cadastral registers from the cadastral offices at county level; c) cadastral documentations drawn up for granting the provisional cadastral number necessary for the registration in the land book; d) agricultural registers that contains data based on affidavits on the owned land areas, categories of use, ownership modality.

The delays in IACS building up were sanctioned in the EU Monitoring Report³¹ in which it is stated that “the ensurance of the necessary administrative capacity is still in a planning stage. Considerable efforts are necessary in order to build up and strengthen the administrative capacity, if Romania wants to have functional agencies of payments by the accession moment. Furthermore, it is necessary to speed up the information campaigns on the EU payment schemes provided to farmers and operators”.

Besides the concerns that are expressed, it is recognized that “... in the last six months, Romania intensified its efforts related to IACS building up. However, in spite of the progress that has been made, the large part of the implementation activity has not been accomplished yet. The time left for the completion of the Agricultural Parcel Identification System (APIS) is extremely short, the same as the accomplishment of the Master Plan for APIS, submitted to the European Union in August 2005. The orthophotography taking process has not been completed yet. Thus, there is a high risk for Romania not to have a functional APIS by the time of accession, and significant efforts are necessary to solve up this problem.”

³⁰ Master Plan, 2005.

³¹ Raportul comprehensiv de monitorizare 2005 privind România, Delegația UE la București.

SAPS application needs high administrative costs, however less complex administrative structures (than in SPS case³²) under the conditions in which the whole utilized agricultural area is eligible and the support is single area support. On the other hand, the control does not focus upon specific crops. The payments are decoupled from production and all the crops are eligible.

In the presented context, the application of a single decoupled NCDP scheme would be preferable to coupled schemes. In the case of NCDP implementation, special problems appear in the case of livestock module. It should not be forgotten that all the beneficiary animals should be registered. At present the great majority are registered on paper and not in a computer database. At the same time, the control procedures are made more difficult for the coupled payments. The APIS high costs and the administrative complexity associated to coupled NCDP recommends the national support application on a most simplified basis.

³² Single Payment Scheme.

6. Conclusions

Starting from the main objective of the study, namely the substantiation and evaluation of possible options of application of the complementary national direct payments from budgetary and administrative perspective, certain problems appeared as a result of the analysis; as a result of the analysis a few problems appeared in relation to:

(a) Land eligibility for support after the accession. Besides the already established general eligibility principle (a farmer/producer who uses an area larger than or equal to one hectare of land that should be divided into parcels of at least 0.3 ha each) there is another series of characteristics that confer this status in conformity with the EU regulations that should be cleared up as soon as possible, namely:

- *Defining the list of “good agricultural and environmental practices”. In this respect, the habilitated institutions should collaborate and define these criteria for Romania.*
- *Establishing the size of land areas unsuitable for agricultural activities and their most urgent identification (eroded land areas, affected by serious pollution, slope rubble land, land on dry riverbeds, land with alkaline soil are only a few examples of land areas unsuitable for farm production).*
- *Clear definition of terms: agricultural area, utilized agricultural area, non-utilized agricultural area, their contents mostly, and their reporting to the common system/nomenclature of definitions used by the monitoring agencies (Agency of Payments and Intervention, Integrated Administration and Control System)*
- *Redefining the term agricultural holding. It is necessary to clear up the eligibility from this point of view, too. The most illustrative example as a result of the analysis based upon the GAC data are the so-called “public administration units” from the category of legal entities that might be one of the main beneficiaries of single area payments. Although these represent only one tenth of the total number of eligible farms, they operate almost 22% of total utilized agricultural area. The characterization of this category on which reference is made for the first time in GAC as well as the clarification of the eligibility terms for direct payments on land areas operated by this category could be a difficult but necessary operation.*

Without knowing very clearly what is the contents of these indicators and terms, the action of identification of utilized agricultural area eligible for support as well as its monitoring after the accession will lack accuracy.

(b) Deviation of rural development funds to complementary direct payments. The strong polarization of agriculture in Romania will impact the direct support after the accession in two ways, namely: eliminating the subsistence and semi-subsistence farms (holdings) from the direct payments per ha (about 20% of the total estimated on GACV basis) and in the second place by focusing the possible direct support to be provided (through the

single area payment and complementary payments) towards the larger farms (over 100 ha) in a percentage of over 50% of the possible amount of support to be provided. Under these conditions, the rural development funds should compensate in reality the non-eligibility of a subsistence farm or the non-significant direct support that can be provided to a small-sized farm compared to that provided to larger-sized farms. Measures as the early retirement schemes accompanied by the introduction of certain schemes aiming at the support to young farmers for the development of farming activities, etc. would be in fact those that would focus on *the structural reorganization of agriculture, mainly of subsistence and semi-subsistence holdings. In the given context, the preparation of the implementation of measures under CAP Second Pillar is of an extreme importance, and it would represent the main support option for the non-eligible farms from the direct payment schemes and for those that would receive non-significant support.* Although it is appreciated that Romania would easily comply with the eligibility criteria for support through the rural development measures, considering the current stage of institutional capacity building, the personnel needs as well as the design of projects in the rural areas and the knowledge of this policy, we are quite reserved in forecasting a 100% uptake of rural development funds for the period 2007-2009.

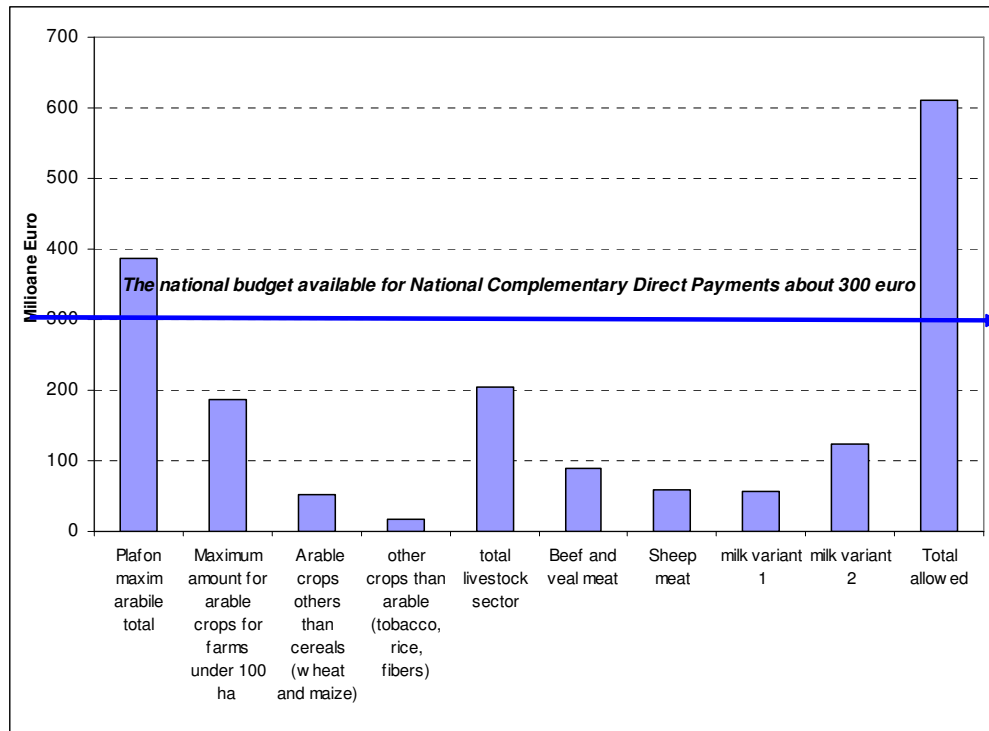
Maybe the decision to use the possibility of deviating the sums intended for rural development measures towards direct payments in the first two years after accession should be taken after a “cold analysis” of the preparation stage of the sector. If it were considered that the sector is not sufficiently prepared, then the utilization of funds intended for Romania would be facilitated through topping up direct payments at least in the first years after the accession, under the mention that these funds should not be distributed to large and very large farms.

(c) options regarding the allocation of complementary national payments

According to the evaluations presented in the present study, the possible maximum amounts to be provided to Romanian farmers through complementary direct payments are quite consistent), over 609 million Euro only in the year 2007 (see Figure 4). The options of allocating this support should be based upon a maximum indicative framework (reducing the maximum admitted amounts to be allocated from the available budget) and providing equal amounts to all eligible farmers (this would be the simplest option from IACS standpoint) or it should be based upon the evaluations by sectors and the decisions be taken according to the available sums from the budget and the agricultural policy options. Figure 4 presents the maximum admitted amounts to be allocated in the year 2007.

Taking into consideration that from MAFRD estimations, the available national budget in the post-accession period for this type of support might amount to about 300 million, it can be stated that NCDP could be paid at 50% of the total permitted value; then MAFRD, depending on the agricultural policy objectives as well as on the complexity of their implementation through IACS, is to decide upon certain payment schemes. For example, the option could be a NCDP mix for the livestock sector (about 200 Euro in 2007) and the rest a uniform payment for crops or two-three payment schemes for crops with market integration potential (cereals excluded).

Figure 4. Maximum possible support to be provided through Complementary National Direct Payments in the year 2007 versus the available national budget



In order to manage the EU funds that it will receive after the accession, Romania should establish several institutions that should become fully functional by the moment Romania joins the EU. The Agency of Payments (API) and the Integrated Administration and Control System (IACS) are among these. IACS is a technical management and control instrument that is applied to certain payment schemes. IACS should be organized and implemented, with all the necessary logistics, until the end of 2006. *This institutional building represents a tremendous challenge and MAFRD has an extremely difficult task, impossible to accomplish in such a short period of time, namely:* building up the administrative network for SAPS implementation and the preparation of the uptake capacity of funds that will be released from the EU budget. The main challenges Romania has to face in this respect are the following:

- Set up of the Agricultural Parcel Identification System
- Training of staff that will serve these institutions
- The material resources necessary to a good operation
- Eligible farm information campaign

The implementation of complementary national direct payments would raise particular problems to IACS in the case of the livestock module. It must not be forgotten that all the beneficiary animals should be registered. Currently most of them are registered on paper and not on the computerized database. At the same time the control procedures are quite difficult for the coupled payments. The high costs of the IACS building and the administrative complexity associated to coupled PNCD recommend the application of national support on a most simplified basis.

(d) *Identification of possible sectors that might need support through the Common Market Organizations* (interventions through export refunds and public and/or private stocking) represented another research objective. The main products for which export refunds could be provided would be maize and sunflower (the only products with a positive balance of foreign trade forecast.). At the same time, the wheat and maize stocks might represent a reference point for a possible support for stocking in case the price of cereals decline under the intervention price in the period 2007-2010.

The milk and dairy market forecast as well as the meat market forecast reveal that there might exist certain interventions, mostly probable in dairy products (butter maybe, depending on processing developments, beef and veal eventually).

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Annex 1

Single Payment Scheme (SPS)

According to the recent regulations starting with 2005–2006, direct payments allocation in EU has significantly changed, so that all direct payments are integrated into a single payment form, decoupled from production that is allocated per farm (SPS). The sum related to this scheme is divided into *payment entitlements* in order to facilitate their transfer between the producers.

The payment entitlements are calculated by dividing the reference area by the number of hectares on farm. The application for an entitlement is made in relation to the *eligible hectares*, defined as being any type of utilized agricultural land except for permanent crops, forests and other areas utilized for non-agricultural purposes, on December 31, 2002. These “eligible” hectares can be used for any agricultural activity, except for the production of vegetables, fruit and potatoes.

For the livestock production with no baseline equivalent in terms of area or where the entitlement totals over 10000 euro, the application will be made according to the particular conditions on each farm. The payment entitlements can be transferred, with or without the related land, between farmers from the same EU Member State.

A EU Member State can define the regions within in which the transfer of payment entitlements is limited and can adjust the entitlements at the regional average level. Any entitlement that has not been used for 5 years, except for the *force majeure* cases or other exceptional circumstances, will be allocated to the national reserve. Within this scheme, farmers will receive entitlements for the set-aside areas, calculated in relation to the reference period (2000–2002), and to the number of eligible hectares (the area should cover at least 0.1 ha and be at least 10 m wide. Smaller width can be accepted, i.e. 5 m, in particular cases, justified by the specific environment conditions).

These can be subject to rotation or used for the cultivation of energy crops. The organic crop producers will be exempted from the obligation to set-aside. Payments will be conditional to: environment preservation, plant and animal health, and the respect of norms on animal health, food safety, etc. (*cross-compliance requirement*). One issue that raised a series of heated debates and that has not been fully cleared up refers to the practical modality to apply this requirement. In the regulations that have been published so far, the EU definition for cross-compliance is very general as it is quite difficult to establish standards that are valid for each and every EU Member States. Out of this reason, the *Member States will be actively involved in the establishment and implementation of the necessary standards for the respect of this requirement.*

The beneficiaries of direct payments will be obliged to maintain the whole land area in good agricultural and environmental conditions. This obligation applies to all eligible farms, sanctions being applied for any non-compliance. At the same time, it will be applied to all sectors, both to utilized and non-utilized agricultural areas. The farmers who receive the single farm payment or other CAP-based direct payments, but who do

not comply with the standards imposed by the current legislation will be penalized by the partial or full diminution of payment, according to the severity of the case. Thus:

- penalties will be applied for the non-respect of the 18 priority European standards (*good agricultural practices*);
- the control will be done through the Integrated Administration and Control System (IACS).

The Member State can retain 25% of the non-allocated funds due to the non-respect of standards; these sums are at the disposition of the respective Member State, and can be spent in another way.

Granting direct payments through the single farm payment system simplifies the main component of the current Integrated Administration and Control System (IACS) from the European Union; for the new member states, still far from IACS implementation, the new configuration facilitates the process. The crosscut control between the entitlements and the necessary areas for their activation will be also through IACS. *As a result, agricultural parcel identification and the identification of animals remain of utmost importance in this variant.*

In order to provide a certain type of audit to farms that receive CAP support an “*agricultural advisory system*” will be established *that* will be obligatory as part of cross-conformity requirement. In a first stage, this system will be limited to the producers that receive direct payments of over 15 000 Euro per year or to those having a turnover of over 100 000 Euro per year. The other farmers will be able to enter the system on a voluntary basis.

The advisory service will provide advice to farmers on a *feedback* basis, as regards the standards and good practice in the production process. The farm audit will also imply the structuring and regularization of stocks, as well as the accountancy related to the material flows and processes on farm defined as relevant for environment protection, food safety and animal welfare.

Had Romania opted for the application of the single payment scheme it would have had to apply the regional implementation option as the other states that opted for this scheme did. (Slovenia and Malta); that means that it could have applied uniform “entitlements” /hectare for any region. The regional ceilings would have been calculated by dividing the national ceiling by regions. The national ceiling of the single payment scheme is calculated on the basis of parameters used in the calculation of direct payments (base area, reference yields and ceilings) and the production quotas adjusted by the gradual percentage of direct payment introduction. The national ceilings for arable crops, beef and mutton can be coupled within this single payment (if the member state decides this).

2. DIRECT PAYMENTS IN SAPS AND CNPD (55% OF THE EU LEVEL) IN LITHUANIA IN 2004

	Sectors	Cultivated areas by sectors	Agricultural areas by sectors, thou ha/livestock number, thou units	Funds from the financial package, mil EUR				Value of payment				Support level, % of the EU level
				Total sum of financial package up to 55% of EU level	Value of financial package for SAPS (25% of EU level)	Value of financial package for NCDP (30% option)		SAPS, EUR/ha	NCDP, EUR/ha, EUR/animal		Total payment, EUR/ha; EUR/animal; EUR/t	
						EU Rural Development Fund	National budget		NCDP from EU Rural Development Fund	NCDP from national budget		
A	Livestock sector	Pastures, grassland and perennial crops	769,627	51,63	27,61	0,00	0,00	35,87			35,87	
								24,02				
	Suckler cows		24,0				3,48			144,81		53%
	Bulls		100,0				14,77			147,71		54%
	Adult animals for slaughtering		220,0				5,67			25,78		55%
	Sheep		9,0				0,10			11,58		53%

	Sectors	Cultivated areas by sectors	Agricultural areas by sectors, thousand/livestock number, thousand units	Funds from the financial package, mil EUR				Value of payment				Support level, % of the EU level
				Total sum of financial package up to 55% of EU level	Value of financial package for SAPS (25% of EU level)	Value of financial package for NCDP (30% option)		SAPS, EUR/ha	NCDP, EUR/ha, EUR/animal		Total payment, EUR/ha; EUR/animal; EUR/t	
						EU Rural Development Fund	National budget		NCDP from EU Rural Development Fund	NCDP from national budget		
B	Crops supported by NCDP	Cereals, rapeseed, vegetables, starch potatoes	1151,700	106,74	41,31	45,72	19,71	35,87	39,69	17,12	92,68	54%
		Starch potatoes	0,54	0,05	0,02	0,02	0,009	35,87	39,69	17,12	92,68	54%
		Flax	7,40	1,26	0,27	0,29	0,70	35,87	39,69	94,54	170,10	100%
C	Crops without NCDP support	Sugar beet, rind fruit, potatoes (except for starch potatoes), fruit and vegetables, soil breaking up, etc.	358,704	12,87	12,87	0,00	0,00	35,87	0,00	0,00	35,87	
D	Agricultural land area		2287,971									
E	Amount to be paid, mil EUR			172,54	82,07	46,03	44,44					

Annex 3

Analysis of eligible farms by cropping structure and eligibility share

Category of use of the utilized agricultural area	TOTAL			
		Eligible	%	Non-eligible
Total farms				
ARABLE LAND				
Grains:				
a) common wheat	2461499.92	2411761	97.98	49738.66
b) durum wheat	7778.16	7703.1	99.03	75.06
c) rye	26521.41	25824.73	97.37	696.68
d) barley	336080.78	331856	98.74	4224.78
e) two-row barley	217955.33	215900.5	99.06	2054.8
f) oats	183174.15	177754.4	97.04	5419.79
g) maize	2710420.47	2408717	88.87	301703.47
h) sorghum	11091.8	10497.96	94.65	593.84
i) rice	475.22	475.22	100.00	0
j) other grains	8885.37	8758.13	98.57	127.24
Grain pulses				
a) peas	15172.54	15019.7	98.99	152.84
b) white beans	35449.79	31919.81	90.04	3529.98
c) other grain pulses	2210.31	2190.95	99.12	19.36
Industrial crops				
a) flax	423.89	422.7	99.72	1.19
b) hemp	1092.62	1085.55	99.35	7.07
c) hops	337.88	337.07	99.76	0.81
d) tobacco	4447.29	4261.09	95.81	186.20
e) oilseeds				
- sunflower	874744.60	867852.6	99.21	6891.98
- rapeseed	76527.75	76501.08	99.97	26.67
- soybean	72776.12	72718.79	99.92	57.33
- linseed	1848.02	1847.08	99.95	0.94

Category of use of the utilized agricultural area	TOTAL			
		Eligible	%	Non-eligible
- other oilseeds	15219.39	15193.24	99.83	26.15
f) medicinal and aromatic herbs	12263.34	12250.88	99.90	12.46
g) other industrial crops	6199.09	6027.83	97.24	171.26
Potatoes	185726.83	152237.4	81.97	33489.40
Sugar beet	28878.62	27849.35	96.44	1029.27
Feed tubers	7303.15	6726.25	92.10	576.90
Fresh vegetables, melons and strawberries				
a) in field				
- fresh vegetables	39846.13	32711.09	82.09	7135.04
- melons	23181.06	22298.12	96.19	882.94
- strawberries	1060.85	880.87	83.03	179.98
b) in gardens, for marketing purposes				
- fresh vegetables	12576.54	8643.73	68.73	3932.81
- melons	2346.15	2233.76	95.21	112.39
- strawberries	245.69	185.1	75.34	60.59
c) under glass and plastic tunnels		0		0.00
- fresh vegetables	2252.04	1848.53	82.08	403.51
- melons	172.18	164.91	95.78	7.27
- strawberries	47.28	43.75	92.53	3.53
Flowers and ornamental plants		0		
a) in field	239.68	184.16	76.84	55.52
b) under glass and plastic tunnels	218.66	197.24	90.20	21.42
Fodder crops		0		
a) annual crops for hay and green mass	163254.94	156908	96.11	6346.93
b) green maize for silo	28511.10	27958.39	98.06	552.71
c) other green fodder crops	8856.30	8472.6	95.67	383.70
d) other silo crops	2244.12	2192.84	97.71	51.28
e) areas under perennial crops	372032.56	351435	94.46	20597.53

Category of use of the utilized agricultural area	TOTAL			
		Eligible	%	Non-eligible
Plants for seeds and planting stock, for marketing	12932.26	12561.05	97.13	371.21
Other arable crops	7664.90	7461.5	97.35	203.40
Idle arable land	791562.42	769212.2	97.18	22350.25
TOTAL ARABLE LAND	8773748.70	8299283	94.59	474466.17
FAMILY GARDENS	168864.74	89655.57	53.09	79209.17
NATURAL PASTURES AND GRASSLAND				
a) natural pastures	2711518.67	2690851	99.24	20667.32
b) natural pastures on slopes	479856.17	473067.9	98.59	6788.30
c) natural grassland	1452629.90	1325398	91.24	127231.85
TOTAL NATURAL PASTURES AND GRASSLAND	4644004.74	4489317	96.67	154687.47
PERMANENT CROPS		0		0.00
Fruit – trees		0		0.00
a) apple-trees		0		0.00
- on bearing	57629.58	53628.62	93.06	4000.96
- young	1959.40	1700.58	86.79	258.82
b) pear-trees		0		0.00
- on bearing	3576.71	3191.29	89.22	385.42
- young	558.61	494.9	88.59	63.71
c) plum-trees		0		0.00
- on bearing	55441.80	49791.55	89.81	5650.25
- young	4037.58	3454.86	85.57	582.72
d) apricot-trees		0		0.00
- on bearing	3201.41	3114.16	97.27	87.25
- young	413.85	389.14	94.03	24.71
e) peach-trees		0		0.00
- on bearing	3454.81	3395.44	98.28	59.37
- young	472.38	463.84	98.19	8.54
f) cherry and morello cherry-trees		0		0.00

Category of use of the utilized agricultural area	TOTAL			
		Eligible	%	Non-eligible
- on bearing	6472.25	6198.95	95.78	273.30
- young	249.40	222.12	89.06	27.28
g) quince-trees		0		0.00
- on bearing	263.48	254.1	96.44	9.38
- young	12.30	10.39	84.47	1.91
h) mulberry-trees		0		0.00
- on bearing	62.99	62.05	98.51	0.94
- young	4.89	4.17	85.28	0.72
i) other fruit-trees		0		0.00
- on bearing	389.47	356.7	91.59	32.77
- young	143.54	131.68	91.74	11.86
Nuts and others		0		0.00
a) chestnut-trees		0		0.00
- on bearing	62.17	58.51	94.11	3.66
- young	6.99	6.34	90.70	0.65
b) nut and hazel nut-trees		0		0.00
- on bearing	1027.07	1008.34	98.18	18.73
- young	324.75	320.84	98.80	3.91
c) other species		0		0.00
- on bearing	21.26	17.89	84.15	3.37
- young	46.33	44.98	97.09	1.35
Other fruit-trees		0		0
a) mulberry-plantations for sericulture	337.17	335.61	99.54	1.56
b) other species	160.68	152.2	94.72	8.48
Fruit-shrubs	318.94	283.44	88.87	35.50
Vineyards		0		0.00
a) vines on bearing with grapes for:		0		0.00
- noble wine	83114.60	73660.11	88.62	9454.49
- other wines	94154.65	66263.29	70.38	27891.36
b) on bearing vines with table grapes	8306.68	7680.33	92.46	626.35

Category of use of the utilized agricultural area	TOTAL			
		Eligible	%	Non-eligible
c) young vineyards not on bearing yet	2117.67	1699.52	80.25	418.15
Nurseries		0		0.00
a) vine nurseries	369.67	360.54	97.53	9.13
b) fruit-tree nurseries	859.00	844.52	98.31	14.48
c) forest nurseries	685.62	680.57	99.26	5.05
d) other nurseries	463.73	462.5	99.73	1.23
Other permanent crops		0		0.00
a) land under preparation for orchards	4738.84	4497.94	94.92	240.90
b) land under preparation for vineyards	6588.37	6491.83	98.53	96.54
c) land under preparation for other permanent crops	2043.28	1905.81	93.27	137.47
TOTAL PERMANENT CROPS	344091.92	293639.7	85.34	50452.27