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Yann Desjeux, Pierre Dupraz, Michel Pech, Karine Latouche

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SIXTH FRAMEWORK PROGRAMME
PRIORITY 8
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Integrated Tools to design and implement Agro Environmental Schemes

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Agro Environmental Schemes in Basse-Normandie

Authors : Desjeux Y., Dupraz P., Pech M., Latouche K.

Authors' Institution : INRA-ESR, Rennes

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Abstract

The present discussion report aims at presenting an overview of the French case-study: the NUTS2 level of Basse-Normandie.

France is a specific case in Europe in terms of RDR enforcement with its CTE tool. Indeed this policy is addressing the issue of agricultural multi-functionality in a wider way than usual.

First, the present document will go through general features of the case-study area, highlighting the agricultural and environmental aspects.

Then the institutional mechanisms of AESs in terms of design, implementation, enforcement and evaluation will be tackled, with a specific emphasise on CTE.

At last, environmental aspects such as the official priorities, the efforts undertaken and the environmental impacts will be presented and analysed in order to have a deeper view of the ins and outs of the AES issue in Basse-Normandie.

This document presents results obtained within the EU project SSPE-CT-2003-502070 on Integrated tools to design and implement Agro Environmental Schemes (<http://merlin.lusignan.inra.fr/ITAES>). It does not necessary reflect the view of the European Union and in no way anticipates the commission's future policy in this area.

Participants to the project:

France Pierre Dupraz François Bonnieux Yann Desjeux Latouche K Pech M	INRA ESR 4 Allée Bobierre CS 61103 35 011 Rennes cedex France
The Netherlands Louis Slangen Arie Oskam Nico Polman	Wageningen University (WU) Costerweg 50 6701BH Wageningen The Netherlands
Belgium Guido VanHuylenbroeck Marijke Dhaese	Universiteit Gent (UGENT) Sint Pietersnieuwstraat 25 9000 Gent Belgie
United Kingdom Guy Garrod	University of Newcastle-upon-Tyne (UNEW) 6 Kensington Terrace NE1 7RU Newcastle upon Tyne United Kingdom
Germany Konrad Hagedorn Antonia Lütteken	Humboldt University of Berlin (UBER) Unter des Linden 6 10099 Berlin Germany
Italy Vasco Boatto	Universita Degli Studi di Padova (UNIPADU- CONTAGRAF) Via VIII Febbraio 35122 Padova Italy
Ireland William Dunne John Finn	Irish Agriculture and food development authority (TEAGASC) Sandymount avenue 19 4 Dublin Ireland
Finland Jussi Lankoski	MTT agri-food research (MTT) 31600 Jokioinen Finland
The Czech Republic Tomas Ratinger	Vuze-Research institute for agricultural economics (VUZE) Manesova 75 120 58 Prague The Czech Republic

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1 Introduction

The first step of the project ITAES is a comprehensive comparison of case-study areas in order to link institutional and contractual arrangements with farmers' uptake and the total cost of AESs, including administrative costs. Indeed, agro-environmental schemes (AESs) with the same targets are implemented in very different institutional settings and may lead to contrasted environmental and economic outcomes.

The case studies constitute the empirical basis of the first main objective of ITAES: “the construction of an integrated tool to analyse the interaction between the institutional process and the environmental outcome”.

Out of the four related operational objectives, they aim at the first one: “Comparison of nine case-study regions, illustrating success stories as well as failures, during the first year of the project. These case studies will provide the basic data to develop both the institutional analysis and the environmental assessment of AESs. Interviews with policy-makers, administrators and different stakeholders as well as the material provided by relevant documents, available statistical data and the European Rural Development Regulation 1257/99 mid-term evaluation will be fully used, in the different participant countries”.

1.1 Objectives and plan of the case study

The main objective is to provide usable data and materials for other WPs, especially WP4 and WP5. This work package must enable the construction of several indicators processed by the WP10.

- Describe the agricultural and environmental characteristics of the case-study;
 - Provide a relevant overview of the political, social and institutional context of the country;
 - Describe previous experiences of countryside stewardship policies;
 - Describe the design process of AESs and the role of the involved stakeholders, authorities and administration bodies;
 - Description of AESs including their objectives, prescriptions and outcomes;
 - Describe the institutional settings, the contractual arrangements and the implementation procedures of AESs;
 - Describe eligibility rules, objectives and contract prescription of AESs: Explicit and implicit environmental objectives, environmental quantitative objectives if any.
-
- Report the financing sources: local, regional, national funds, others.
 - Report the uptake of the different contracts/schemes and assess its determinants
 - Report the agricultural effects of the uptake including land use and diversification issues
 - Report the environmental impacts which are measured and checked by reliable scientific or professional authority

1.2 Reasons behind the selection of the case study

In France, the policy framework for the elaboration and the administration of AESs is designed at the national level.

The design and the implementation of the AESs are mainly organised at the NUTS 3 level. These policy processes are monitored, supervised and evaluated at the NUTS 2 level.

In the present case study, the NUTS 2 level has been chosen because:

- 1°) every farmer of a NUTS 2 region faces the same menu of RDR AESs;
- 2°) the monitoring, the control and the assessment of AESs are undertaken at the NUTS 2 level;
- 3°) the availability of statistical data is better and more meaningful at the NUTS 2 level than at the NUTS 3 level.

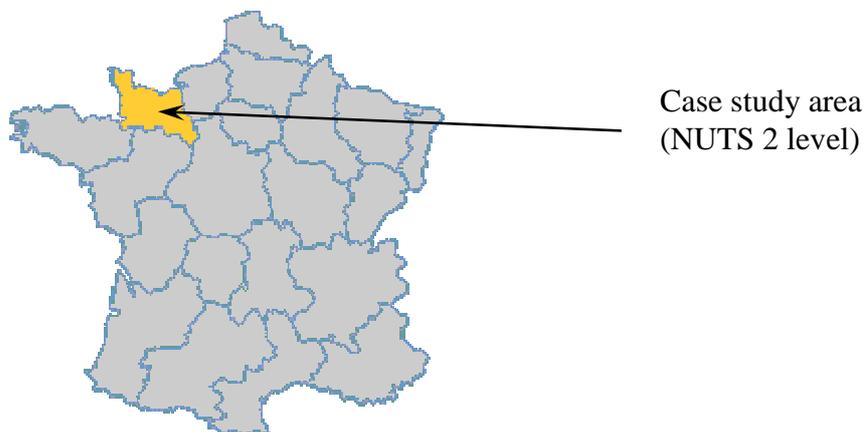
Not too far from Rennes, the NUTS 2 region of Basse-Normandie offers marshes and wetlands of special interest (RAMSAR agreement) which are farmed for dairy and cattle productions, intensively cultivated areas for the vegetable production, orchards and conventional annual crops. Across these different agricultural zones, the historical background of AESs and the farmers' participation in AESs are quite heterogeneous mainly due to the different farming systems that could be found along the NUTS 2 region.

Moreover three Regional Nature Parks (*i.e.* “*Marais du Cotentin et du Bessin*”: 120 sq.km, “*Parc Naturel Régional du Perche*”:182 sq.km and “*Parc Naturel Régional de Normandie-Maine*”: 234 sq.km) are located in Basse Normandie.

NB: The RNP “*Marais du Cotentin et du Bessin*” is fully located within Basse-Normandie, while the two other RNPs are straddling two regions (NUTS 2 level). Both of them present approximately 60% of their area within the case study area.

Through its ESR department, INRA-Rennes has good connections with the agricultural and administrative networks of Basse-Normandie as well as with RNP institutions, and has furthermore participated to the RDR mid-term evaluation of this NUTS 2 region.

2 General presentation of the case study region



Map 1: Localisation (at the national level) of the case study area.

2.1 Demographic and economic characterisation

Table 1: Socio-economic indicators

Size of the area (sq. km)	17 589 (= 1 758 900 ha)
NUTS level of the case study	NUTS 2
Number of NUTS 3 level	3 (<i>i.e.</i> Manche, Calvados and Orne)
Number of NUTS 5 level	1 814
Population	1 422 193* (1 432 409**, 01/01/02 estimation)
Density (inhab./sq.km)	81
Employment by sectors (31/12/02)**	
- Agriculture	7,1%
- Industry	19 %
- Building trade	6,7%
- Services	67,2%
of which catering and hotel business	3,9%
GDP/inhab. (euros) (2002)**	20 599
of which agriculture	4,5%
industry	23,6%
building trade	6,2%
services	65,7%
Unemployment (2003) ***	9,2%
Number of towns of over 100 000 inhab.	1 (Caen)

Source: * INSEE, 1999.

** INSEE, 2003.

*** INSEE, 2004.

Showing a population density of 81 inhabitants per sq. km, the region is quite few densely populated (with a slowly positive evolution) and 47% of total inhabitants live in rural areas. With more than 100 000 inhabitants, Caen is the only big urban area of the region. Therefore it exists in Basse-Normandie a network of small and middle-size towns properly distributed all over the regional territory and closely linked to the rural society.

Concerning the employment and more specially its tourism component (catering and hotel business), while it concerns 3,9% of the Services employment, its represents more generally 2,9% of the total salaried employment, which approximately means 3% of the total employment in the region (INSEE, 2001).

It is nonetheless interesting to note that the catering and hotel business sector presented an increase rate of 3,4% per year between 1991 and 2001 in terms of salaried employment share, while the number of total salaried employees rose of 0,07% per year during the same lapse of time (INSEE, 2001).

2.2 Geographical, environmental and agricultural characterisation

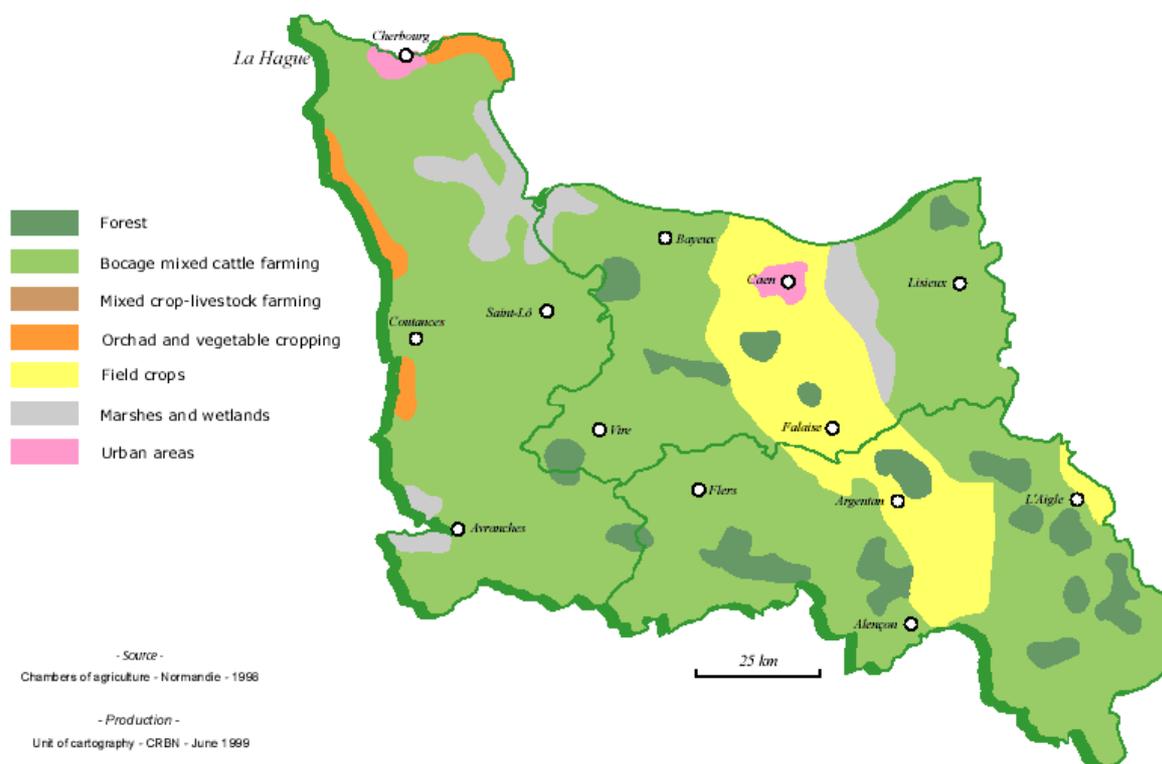
Table 2: Geographical indicators

Corine land cover nomenclature (level 1)	
- Artificial surfaces	7%
- Agricultural areas	82%
- Forest and natural areas	11%
Among which forest	8,6%
Hydrography network	
- Leaks length (km)	17 000
- Littoral length (km)	470
Topography	
- Highest point (m)	417
- Lowest point (m)	0

Source: (IFEN, 1995).

Data regarding wetlands and water-bodies was not available as land cover and environmental institutes have still not defined precisely whether these areas should be considered as natural areas. They are moreover facing difficulties to precisely assess the size of some water bodies due to a lack of data and manpower.

In addition, according to a DIREN officer working on such issues, wetlands are often included in agricultural areas and the differentiation between these two different “nomenclatures” has never clearly been set-up but the wetlands. Defining such definitions is currently one of the main priorities of the DIREN.



Map 2: Main agricultural areas in Basse-Normandie

Table 3: Agricultural indicators

Number of farms	35 762
Total UAA (ha)	1 264 133
UAA average per farm (ha)	35
Labour unit per farm	1,16
Main farming systems	- dairy farms : 29,3% - mixed cattle farms : 23,4% - sheep, goats and others herbivores : 21,5% - crops : 5,7%
Main productions in 2001	- milk : 24 639 000 hl - cheese : 272 773 t - butter : 96 509 t - beef : 134 512 t - pork : 94 743 t - chicken : 24 539 t - wheat : 1 188 300 t - industrial crops: 461 700 t - cider apple : 127 400 t

Source: Agreste (SCEES), 2000.

With an obvious rural orientation of the region, the global agricultural trend is essentially oriented towards dairy farming systems.

Nonetheless the recent evolutions of the cropping and livestock farming systems implied, within 30 years, a general decrease in grassland areas since they dropped from 79% to 50% of the UAA between 1970 and 2000.

Within the whole Basse-Normandie, 35 762 farms were existing at the end of 2000 (5,38 of the French farms). This figure is still decreasing every year with a rate of -3,5% per year.

In parallel, the UAA is also decreasing (- 7% between 1988 and 2001) and represents now 1 264 133 ha (Agreste, 2001).

The average size of the farms rose quickly and reached 35 ha in 2001, while it was 25 ha in 1988 (+2,84%/year).

Nowadays, more than one fourth of the farms (28%) have an UAA of 50 ha and above, while the farms for which UAA is below 5 ha represent nearly 33% of the total.

In comparison, at the National level the number of farms decreased of -2,89% per year between 1988 and 2000. With an average of 28,12 ha in 1988, France farms have reached an average size of 41,96 ha in 2000 (+3,85%/year) (Agreste, 2001).

In addition, nearly one third (29,5%) of the farm managers in Basse-Normandie are 60 and above (Agreste, 2002). That may have an important impact on the AES uptake in the region.

Regarding the distribution of land tenure systems, it has to be pointed out that tenant-farmed agricultural areas represent in the region 70,1% of the total UAA.

The evolution of farming practices is expressed, in terms of land-use and agricultural landscapes planning, by three main tendencies. Due to the expansion of the intensive animal production many grasslands were ploughed in aid of cereals and forage cropping. Land consolidations implied in the late 80's a huge logging of hedges as well as a mass decrease in hedgerow and field pattern. Furthermore, drainage activities of the valley-beds led to the extinction of some wetlands that are natural spots of denitrogenation.

Agronomic qualities of the soils present also some alteration signs. Mainly due to agricultural practices the humus rate decreases, implying soil erosion problems along with crusting phenomena.

In the meantime water pollution becomes more and more noticeable. Pollutions from agriculture are mainly generated by an over-fertilisation in cropping areas and a misuse of livestock waste (manure and slurry) in N-balance and fertilisation plans.

Nitrate leaching, nitrogen and nitrate percolation as well as surface water eutrophication phenomena are becoming more and more frequent. (DIREN Basse-Normandie, 2004)

The state of the environment and its evolution are characterised by different environmental indicators. This is affected by different human activities and natural processes. Hence, only in seldom cases unequivocal causality holds between farming practices and actual environmental changes.

With regard to the environmental situation of the case study region, the present statement can be summarised as follows (Table 4).

Table 4: Environmental indicators

Main environmental risks * (in decreasing order)	<ul style="list-style-type: none"> - water quality (pollution by nitrates and pesticides) - soil erosion - biodiversity - landscape
Main environmental assets **	<ul style="list-style-type: none"> - bocage areas (95 000 ha) - wetlands (25 000 ha) - littoral areas (470 km)
Environmental zoning areas	<p>Water quality or quantity *** Vulnerable zone to nitrates: 992 000 ha</p> <p>Soil erosion *** Zone with medium to high risk of erosion: 266 000 ha</p> <p>Biodiversity **** Zones of special interest for fauna and flora: 374 548 ha Nature reserves: 3 145 ha Zones of biotope order: 397 ha Protection forests: 81 ha Zones of community interest for birds: 151 940 ha Zones of special protection : 60 315 ha RAMSAR zones: 70 500 ha</p> <p>Landscape ***** Classified sites: 11 450 ha Registered sites: 45 484 ha</p> <p>Other ** Regional Nature Parks : 400 000 ha</p>

Source: * DRAF, 2001.

** DIREN, 2002.

*** CNASEA, 2003.

**** DIREN, 1995.

***** DRAC-DIREN, 1997.

Table 5: Comparison of environmental zoning shares

Environmental zoning	% within the global territory	
	France	Basse-Normandie
Vulnerable zone to nitrates	24,25% *	56,40%
Zone with medium to high risk of erosion	n.a.	15,12%
Zones of special interest for fauna and flora	30,36% **	21,29%
Nature reserves	0,40% *	0,18%
Zones of biotope order	0,19% *	0,02%
Protection forests	0,65% ***	0,00%
Zones of community interest for birds	1,46% **	8,64%
Zones of special protection	1,46% *	3,43%
RAMSAR zones	1,26% *	4,01%
Classified sites (landscapes)	0,50% *	0,65%
Registered sites (landscapes)	1,09% *	2,59%
Regional Nature Parks	10,92% **	22,74%

Source: * IFEN, 2001.

** IFEN, 2002.

*** IFN, 2000.

Given the data presented in Table 4 and Table 5, Basse-Normandie obviously presents environmental assets to be taken into account while designing agroenvironmental policies.

2.3 Overview of the institutional, social and political context

Due to the diversity of the national institutions among EU countries and among ITAES participant countries in particular, it is necessary to characterise the institutional context of the case study region. Regional prerogatives regarding the agricultural and environmental policies condition both the regional expression of the social demand for environmental services and the regional latitude for the design and implementation of the AESs.

In France, as in other EU members, AESs implementation is a community requirement. AESs were first set up to promote an agricultural reorientation toward a better acknowledgement of the society expectations and the social demand by integrating schemes based on a global project of the farmer, including economical, social, territorial and environmental dimensions.

E.C. 2078/92 and E.C. 1257/99 regulations take place in a specific institutional context involving different actors as presented hereafter.

Generally speaking, all agricultural structures are involved; Farmers' Unions and syndicates, ADASEA, Chambers of agriculture, farmers' associations, farm management centres, etc...

Others are also met to be involved: Regional Nature Parks management committees, local development associations, local communities.

• Institutional actors and organisms:

- *DRAF and DDAF* (i.e. "Direction Régionale de l'Agriculture et de la Forêt" and "Direction Départementale de l'Agriculture et de la Forêt")

These two entities are decentralised services of the MoA at, respectively, the NUTS 2 and the NUTS 3 level.

The DRAF is in charge of implementing the agricultural policies at the NUTS 2 level. In terms of territorial development the DRAF brings informative elements needed to set up local development programmes. It acts under the authority of the NUTS 2 level Prefect in order to ensure the proper dispatching and harmonisation of the regional funding toward the different NUTS 3 levels. The DRAF identify complementary environmental measures to be proposed to the European Commission within the framework of the application of National Rural Development Programme (*Plan de Développement Rural National i.e. PDRN*).

The DDAF acts under the authority of the NUTS 3 level Prefect at this level. It implements the governmental agricultural, forestry and rural development policies in collaboration with other State services at the NUTS 3 level. Its spheres of activity are agriculture, rural development, hunting & fishing, water, sanitation and waste management, environment and forest.

With regard to AESs, the DRAF and the DDAF make sure that the mechanism is properly applied, and they are helped for some of their duties by the ADASEA.

- *DIREN* (i.e. *Direction Régionale de l'Environnement*)

This entity is a NUTS 2 level decentralised service of the Ministry of Environment and Sustainable Development. It acts under the authority of the NUTS 2 level Prefect and is in charge of defining, at the NUTS 2 level, the State policy within the field of environment, ensuring its consistency and evaluating the results.

- *Chamber of agriculture*

Professional public body, the Chamber of agriculture, set up at the NUTS 3 level, is a consular organism such as a Chamber of Commerce. All agricultural components are represented through 10 electoral colleges. This body acts as the spokesman of the agricultural and the rural community to Authorities. The chamber of agriculture is indeed interlocutor for agricultural issues of French or European authorities and local communities. But its main effective duty is to provide the farmers with relevant agricultural information, services and support.

- *CNASEA* (i.e. *Centre National d'Aménagement des Structures et des Exploitations Agricoles*)

This CNASEA is the National Agency of Farm Structure Improvement. This public body is acting on behalf of the MoA with regional branches at the NUTS 2 level (The national territory is entirely covered by 14 (15 since 1999) regional branches of the CNASEA). It is an organism of implementation of public actions intending to improve agricultural structures (and subsidising improvements in that matter). The CNASEA makes incentive payments on behalf of the MoA for specific issues, keeps up to date the statistics and draws computer tools. It intervenes in two main issues: vocational training and agriculture/rural development. Nonetheless, as an EU-recognised paying agency, it became used to deal with European funding schemes and got involved in the European funding schemes for regional development, employment and adult training (former Objectives 5b and 3 programs) as well.

Concerning AESs, the CNASEA is in charge of the compliance controls as well as the annual payments to the engaged farmers.

- *ADASEA* (i.e. *Association Départementale d'Aménagement des Structures et des Exploitations Agricoles*)

ADASEA is a non-profit associative body, acting at the NUTS 3 level on behalf of the CNASEA after approval of the MoA. Therefore it is in charge of enforcing part of the CNASEA agricultural missions at this level. ADASEA is financed by public grants on the one hand, and by advice/service sales to farmers on the other hand. Managed by representatives of the agricultural profession, the ADASEA provides the farmers with various information, support for young farmers installation, farm improvement, farmers retirement, administrative and technical services, farming territorial contracts (*Contrats Territoriaux d'Exploitation i.e. CTE*) file set-up and implementation, etc...

- Prefect

Although it exists in France a Prefect in each NUTS 2 and NUTS 3 region, only the NUTS 3 Prefect will be considered here. The Prefect is the representative of the Government as well as each of the Ministers at the NUTS 3 level. As being a senior civil servant appointed by the President of France, the Prefect is therefore the highest State officer at the NUTS 3 level.

• **Private or civil bodies and organisms**

- Farmers' and producers' associations

It concerns farmers organised in groups (mainly at the local or the NUTS 3 levels) and acting there as legal entities with common objectives (dairy farmers, vegetable producers, organic farmers, etc...). An association of this type has the duty to serve its members' interests towards other institutions. Although the farmers' and producers' associations were not involved in AESs under the 2078/92 regulation, they became part of the process with the 1257/99 regulation.

- Farmers' Union and agricultural syndicates

It exists in France various agricultural syndicates, each of them proposing different approaches and policies with regard to the agricultural situation. They are country-wise organised with NUTS 2 and NUTS 3 level branches.

The main farmers' Union country-wise is the National Farmers' Unions (*Fédération Nationale des Syndicats d'Exploitants Agricoles i.e. FNSEA*), main interlocutor of the MoA for agricultural issues.

As the associations, the farmers' union and syndicates are due to serve their members' interests regarding the agricultural policy, support and events.

- Environmental associations and other non-agricultural associations

Are gathered in this part all non-agricultural associations concerned by the AESs. Environmental associations are the most concerned and were officially involved from the 2078/92. The main goal of such organisms is to act in favour of the protection of the environment, biodiversity conservation and the management of rural environment. Unfortunately their involvement within AESs is low, comparatively with agricultural actors.

- Regional Nature Parks

A Regional Nature Park is characterised by a remarkable territory acknowledged as such by the Ministry of the Environment through official decree. This territory is then set up by local governments (regional councils and townships) and managed by an independent organism acting as a public establishment. They are certified and labelled by the Ministry of Environment. Each park council determinates economic development and conservation goals for a ten-year period. The certification is renewed after each period

after the proper assessment of the park achievements. Such a structure aims at protecting and managing the cultural, environmental and social heritage of the territory. It takes part in the rural development mechanism as well as the regional planning. Economic and environmental goals are implemented through two major tools. First, the land use plan of the involved municipalities should comply with these goals. Second, a park management team is responsible for a number of executive and persuasion tasks. It tries to co-ordinate the local implementation of the national policies concerning environment and the different economic sectors.

- Farm management centres (*i.e. Centre d'Economie Rurale, CER*)

They are independent and private companies aiming at supporting, at the NUTS 3 level, the farmers in their farm management, development and accountancy.

• **Forums**

- CRAE (*i.e. Comité Régional Agri-environnemental*) (1992-1999)

The creation of this committee was laid down by the implementation guidelines of the 2078/92 regulation. Main regional (NUTS 2 level) actors were involved: decentralised State services (DRAF, DDAF, DIREN), elected persons, representatives of the agricultural profession, Chamber of agriculture, environmental actors, NUTS 3 level CNASEA regional branches, relevant experts, ADASEA representative, etc... This committee aimed at examining the different NUTS 3 level AESs and sharing the regional budget between the different files and NUTS 3 levels. Therefore, under the 2078/92 regulation (given that this committee does not exist any more under 1257/99 regulation), the main duties of the CRAE was to define NUTS 3 level AESs budget and guidance.

- CDOA (*i.e. Commission Départementale d'Orientation Agricole*)

This committee has been officially introduced by the agricultural act of 1995, February the 1st, but a similar one was existing before (*i.e. Commission Mixte*). The CDOA is in charge of giving a Prefect opinions/advice regarding agricultural guidance (to be undertaken to ensure the NUTS 3 level agricultural development) and the means to be employed to reach the objectives. The CDOA is somehow the core of the decentralised co-management of the agricultural policy by the administration and the farmers' organisations. It has an advisory role and is involved in different issues (farmers establishment, farming authorisation, early retirement, milk quotas, AESs and CTEs).

Coming under the Prefect's authority, and as given in the article R313-1 of the rural code and the Agricultural Act of 9 July 1999, the CDOA is made up of Administration representatives, local communities representatives, agricultural professional organisations (*i.e. Chambers of agriculture*), representatives of the agricultural economic sector, environmental associations, farmers' unions, farmers' and producers' associations, consumers' associations and relevant experts. The CDOA is in charge, under 1257/99 regulation, to advise CTE standard-contracts and standard-measures as well as to validate or invalidate the CTE files submitted by the farmers.

For 2078/92 AESs (excepted for local programmes), the application file examination and validation was indeed done by the *Commission Mixte* up to 1995 (creation date of the CDOA). For local programmes (2078/92), this task was conducted by local steering committees, made up of representatives of the Administration, elected persons, project bearers, environmental associations, chambers of agriculture, ADASEA and representatives of the farmers.

Nonetheless, and independently of what has been presented above, actions in favour of the environment, in agricultural contexts are undertaken in many French regions by the local governments (whose mandate is not specifically focused on agriculture).

Basse-Normandie is among these regions, and all its 3 local governments (NUTS 3 level) are involved in such actions.

Although the agroenvironment notion is concerned by these actions, a specific attention is paid to the maintenance and the rehabilitation of landscapes elements as they somehow constitute the cultural identity of the region (hedgerows, ponds, coppices, etc).

In addition, agricultural intensification as well as huge damage due to the DED (Dutch Elm Disease) implied during the last decades a decrease of hedgerows and field patterns. Since the 80's, local governments at NUTS 3 levels are promoting and co-financing hedgerow maintenance, with municipalities and farmers as beneficiaries (and more recently private individuals).

Local government funds represents generally between 60 and 80% of the plantation cost, the beneficiary being liable for the remaining cost.

In Calvados for instance, some 1 500 km of hedgerows were planted (3 185 beneficiaries) since 1982, for a total allocated budget of 3 070 500 €.

Such actions are most of the time undertaken directly by the Local Governments but local organisations (e.g. chamber of agriculture, RNPs, etc) can also be sub-contracted for some specific tasks (e.g. files instruction, follow-up, etc).

Though the initial motivation for local governments to implement such activities was the maintenance of a regional and cultural landscape identity, it is acknowledged that the justification is now more based on stakes and issues as erosion and water control.

None of European funds are involved in those actions in Basse-Normandie. In fact INRA-ESR was given 2 explanations for this. Firstly, when this was first set-up in the early 80's, it was not existing any European fund nor policy available in favour of agroenvironment and landscape preservation. Of course, from 1992; and then from 1999, it could have been possible for local governments to apply for European co-funding, aiming at implementing agroenvironmental activities. But after having discussed the issue with some of the key-persons, it came out that they are indeed quite reluctant with European procedures and prefer to act on their own.

Overlapping between activities of the same type, undertaken by different actors cannot therefore be avoided, given that hedgerow plantations can also be included in a CTE or supported by independent associations, which shows a lack of coordination and communication between actors. Therefore, this multiplicity of actors, acting in the same way on similar issues is the root of complexity that can sometimes confuse the farmers willing to implement agroenvironmental measures in liase with hedgerow plantation, pond rehabilitation or coppice maintenance.

Apart from actions defined by a contract between a farmer and the State, some AE practices can be encouraged through agreements between farmers. The National Association for Agricultural Development (*i.e.* ANDA) has thus developed such a concept in 1991 in relation with the management of the fertilisers (*i.e.* *Ferti-mieux* label). Based on a voluntary basis, this operation consists in gathering all involved actors, for a determined territory, and in creating a steering committee¹. This one is in charge of spreading technical advice and recommendations to the farmers in order to improve the practices, which are then regularly evaluated.

¹ The steering committee is made up of representatives of the agricultural profession along with representatives of the MoA and MoE. It sometimes relies on a scientific and technical committee as well as secretarial staff (agronomists).

The *Ferti-mieux* label is given for two years renewable after having successfully achieved a 2-year probationary period. Technical progresses are evaluated every 4 years.

Similar actions has been then set-up, based on the same approach: “*Irri-mieux*” (management of the irrigation), “*Phyto-mieux*” (management of phytosanitary products), “*Pulvé-mieux*” (management of chemical sprays).

Table 6: Civil society organisations

	Civil society organisation	Main area of activity, targets Relevant for AESs	Time of foundation/ starting of activities relevant for AESs	Competence / responsibility (concerning which specific AES or measure is the organisation involved?)	Description of embedding in the decision-making process	Main partner for co-operation	Way of co-operation with main partners * (regular exchange meetings, common projects, financial contribution etc.)
50	PNR Cotentin		1991				
50-14	MSA						
50	Agrial (coop lait)						
50	Compagnie laitière Européenne						
50-14	Syndicats agri						
50-14	Other sundicats						
50	CCI						
50-14	Crédit Agricole						
50	Grpe Ornitho Normand						
50	Fédération Chasseurs, Pêcheurs						
50-14	Agrial + ADASEA comme experts						
14	CdC						
14	Danone						
14	Carrefour + Marie						
14	GRAPE						
14	CREPAN						

* If the way of co-operation differs among the different partners, use one line per partner.

3 General presentation of AESs:

Agri-environmental problems started to be taken into account with the European regulation 797/85 from March 13th 1985, regarding the improvement of the agricultural structures.

The implementation of the Article 19 of this regulation came in France with 4 years late between 1989 and 1991. As an experiment, this was done through the establishment of 4 types of targeted areas defined according to the type of environmental issue to be addressed (*i.e.* OGAF-Environment scheme, equivalent to an integrated land management operation).

Out of these 4 areas nation-wide, one was located in Basse-Normandie (*i.e.* “Marais du Cotentin et du Bessin”).

One year after (1992), the OGAF scheme (*Opération Groupée d’Aménagement Foncier*, equivalent to an integrated land management operation). was extended to 61 operations (*i.e.* Sustainable Farm Development Plan) country-wise. The scheme, although it was stopped in 1998 due to a lack of money, was somehow the precursor of CTE.

• 2078/92 regulation

The 1992 CAP reform came with the establishment of AESs in order to encourage the farmers to maintain environment-friendly practices and to take part in the maintenance of their rural environment (E.C. 2078/92 regulation).

Within this framework, the farmers receive an annual allowance (per hectare or per LU) in return of a 5-year commitment.

The objectives of such a policy were to reduce the pollution effects of the agriculture and to promote agricultural practices in liaison with the management of the rural environment.

To reach these goals, four types of programmes were set-up:

- 1° The grassland premium scheme (national level);
- 2° Zonal schemes based on national requirements (reduction of agri-inputs, 20-year set-aside, reduction of stocking rate, rearing of threatened breeds, conversion to organic farming and conversion from arable lands to extensive grasslands);
- 3° Local schemes based on local requirements (*Opérations Locales Agri-Environnementales i.e. OLAE*);
- 4° A training plan.

N.B.: Regarding the 20-year set-aside scheme, this programme has been indeed very fewly contracted country-wise since it was impossible for the municipalities (main actors of this scheme) to set-up a 20-year budget.

• 1257/99 regulation

From 1999, AESs, framed by the regulation 1257/99 and included within the PDRN, turn on:

- Actions included in the territorial and environmental part of the CTE, replaced in 2003 (decree n° 2003-675) by the Sustainable Farm Contracts (*Contrats d’Agriculture Durable i.e. CAD*);
- Various schemes applied apart from the CTE framework (*i.e.* rearing of threatened breeds, crop diversification (rotational measure) and the specific AES for quality soya bean production);
- The grassland premium scheme (*Prime au Maintien des Systèmes d’Elevage Extensif i.e. PMSEE*), converted into the grazing agro-environmental Scheme (*Prime Herbagère Agro-Environnementale i.e. PHAE*) in 2003.

Within the 5-year farming territorial contract (enforced since 1999) farmers are given the possibility to choose between two possibilities:

- to come within the framework of an individual approach taking into account the economical and environmental situation of the farm;
- to come within the framework of a territorial approach in order to reach common objectives.

Nonetheless farming territorial contracts remain contracted on an individual basis, between the State and the farmer.

Through these contracts the Government aims at reorienting the farms to a more sustainable way of production.

In practical terms, the farming territorial contract is made up of two parts: one relating to the economic and the employment, and a second one relating to territorial and environmental aspects. The farmer has then to choose at least one measure in each part. Concerning the environmental part, the farmer chooses these measures among a list of roughly one hundred measures proposed at the NUTS 3 level.

Table 7: Stakes and objectives presentation, for both economic and environmental part of the CTE (1257/99)

Economic and employment part		Territorial and environmental part	
Stakes	Objectives	Stakes	Objectives
Products quality	- To improve the quality of the products - To improve the tracing of the products	Water	- To maintain and to improve the water quality
Animal welfare	- To improve the animal welfare	Soils	- Erosion control - To maintain the physical, chemical and biological soil fertility
Economy - Autonomy	- To enhance the economical organisation of the producers - To diversify agricultural and non-agricultural activities - To improve the marketing networks of agricultural products - To enhance the added value	Air	- To maintain and to improve the air quality
Employment	- To maintain and to generate employment - To facilitate installations of young farmers - To support the farm transfers	Biodiversity	- To maintain natural species and biotopes - To maintain and to enhance domestic species
Work	- To fit skills to qualifications - To enhance working conditions and organisations	Landscape and cultural heritage	- To maintain and to promote the built heritage - To maintain, to promote and to enhance the landscape qualities
		Natural risks	- To control soil erosion, floodings, fires and avalanches
		Energy	- To reduce energy consumptions - To promote the use of sustainable energies

3.1 Brief historical overview of the agroenvironmental policies in the region

The experimental phase: article 19 of the 797/85 regulation

In 1991, France decided to set up an agroenvironmental programme following the article 19 of the 797/85 social and cultural EU regulation.

Four lines are then proposed: the protection of sensitive biotopes, the reduction of agricultural pollutions (due to intensive farming), the prevention of agricultural abandonment risks and the protection against forest fires in the Mediterranean part of the territory.

The first environmental contracts were indeed tested nation-wide within four OGAF from 1991.

In Basse-Normandie, the association in charge of the creation of the Regional Nature Park “marais du Cotentin et du Bessin” drawn up, in the early 80s’, an application file under the aegis of a steering committee chaired by the Prefect of the Manche (NUTS 3 level). The set up and the monitoring were conducted under the aegis of the same committee.

A first operation was implemented, in 1991, over an area said “experimental” of 8 000 hectares in the low valleys of the Douve and Taute (areas of main ecological interest).

In 1993, a first extension of this action was approved for the Douve and Taute valleys.

From article 19 to local programmes

In 1992, the CAP reform came with an agrienvironmental regulation within which local programmes take over the article 19.

By order of the Prefect in September 1994, the OGAF article 19 was converted into local programme for the “marais du Cotentin et du Bessin”. A second extension (Merderet and Ay valleys) was then accepted. Two contracts were added to the mechanism in order to meet the following problems encountered in some parts of the marshland.

In 1994, a first step in the agrienvironmental schemes design started, with support of the Chamber of agriculture of Calvados, for the Aure and Vire valleys, as well as the Veys Bay.

From the work conducted by a farmers’ group, the ADASEA, and local partners, the application file took shape through two orders of the Prefect in October 1995 for the Vire valley and Veys Bay in the Manche (NUTS 3 level) and in October 31st 1995 for Calvados (NUTS 3 level).

Four types of contracts are therefore proposed, based on various combinations of constraints (meadow cutting, agri-inputs and stocking rate).

From 1995, the whole interior marshlands of the Cotentin and Bessin is involved in and concerned by an agrienvironmental mechanism.

The renewal of the OGAF article 19

The first contracts signed in 1992 came to an end in 1997. Following a report established upon a request of the MoA, a new application file was drawn up with the support of a stock farmers’ group and the partners of the operation. Approved by the steering committee of the Manche, this renewal was the subject of an order of the Prefect in April 1997 for the initial area.

A second order of the Prefect allowed to go on with the renewal over the initial area and the expanded one up to 1999. Four types of contracts were therefore proposed (various combinations of meadow cutting, agri-inputs and stocking rate).

Since then, this mechanism has been taken over by the E.C. 1257/99 regulation and the farming territorial contracts.

3.2 AES objectives and uptake

Out of 1 340 CTEs registered up to September 2002, data about environmental premiums are unknown for 6 of them (Eureval-C3E, 2003). But the biggest lack concerns the investment premiums (economical part of the CTEs) which are missing for 72% of the contracts.

The share among the NUTS 3 levels shows the Manche predominance over the other 2 NUTS 3 levels (cf. Table 8). This predominance is also confirmed while comparing the CTE allocation among the total number of farm in the region.

Table 8: Allocation of CTEs signed up to September 2002 in Basse-Normandie

NUTS 3 levels	Number of CTEs	% of CTEs	% regional farms
Calvados	329	24%	25%
Manche	788	59%	51%
Orne	223	17%	24%

Source: Eureval-C3E, 2003

Nonetheless, these figures, given by Eureval-C3E, are dated from September 2002 while there were still at that time some contracts in the pipeline (although the process has been officially given up in August 2002). Therefore Table 8 does not exactly reflect the total number of contracts signed under the CTE process.

INRA-ESR Rennes tried to get more reliable figures directly from the concerned ADASEAs and these results are presented in the following table.

Table 9: Number of CTEs approved up to 31st December 2002

NUTS 3 levels	Number of CTEs	Difference with data given in Table 8
Calvados	624	+ 89,66 %
Manche	940	+ 19,28 %
Orne	390	+ 74,88 %
Basse-Normandie	1 954	+ 45,82 %

Huge discrepancies can be observed between these two tables (*i.e.* Table 8 and Table 9) with an average of + 45,8% at the regional level.

Of course, not all the CTEs were taken into account during Eureval-C3E evaluation, but discrepancies of Calvados and Orne can hardly be explained, unless the data used for the mid-term evaluation was fully not reliable, although they were indeed provided by the regional CNASEA office.

In addition, given that a CTE is made of different measures the data presented in Table 10 differ from the two previous tables.

The following table (Table 10) has indeed been done for a global overview of AESs representativeness in the region.

Table 10: AES Description and uptake (1992-2003)

Programme		Objectives	Nb of contracts	Area covered (ha) per 5-year programme
Grassland premium 2078/92		Maintaining assets associated with permanent meadows	2 211	97 800
Regional schemes 2078/92	Reduced livestock densities		327	6 867
	Conversion from arable to extensive grassland		289	6 031
	Reduced use of agri-inputs		63	1 585
	Rearing of threatened breeds (draught horses, donkeys and sheep)		427	7 747 UGB
	Conversion to organic farming		562	12 995
Local programmes 2078/92	LP wetlands	Preserving biodiversity of wetlands, water management	404*	7 335*
	LP planting hedgerows	Planting and maintaining hedgerows	200	4 023
	LP Aure	Reducing agri-inputs, preserving wetlands	60	2 070
	LP Orne	Extensive practices on grasslands, maintaining hedgerows, preserving zone of special interest	105	2 688
	LP Auge Merlerault	Extensive practices on grasslands, preserving biodiversity, managing pasture	90	1 845
	LP Auge Ornaïs	Restoring and maintaining fruit trees of special interest	75	1 479
	LP Val de Saire	Extensive practices on vegetables crops	85	1 475
	LP Haute Sarthe	Extensive practices on grasslands, reducing risk of abandoned land, preserving biodiversity, maintaining trees	52	1 201
	LP Ecouves	Managing peat bogs	40	1 007
	LP Haute Charentonne	Extensive practices on grasslands, reducing risk of abandoned land	30	738
AES 1257/99	Extensive practices on grasslands (coded between 2001 and 2009 + suffix)	Extensive practices on grasslands	900	32 951
	Reduced used of fertilisers (coded between 0901 and 1009 + suffix)	Reduced mineral or organic nitrogen inputs	431	31 776

Soil cover (coded between 0101 and 0409 + suffix)	Reduced naked soils by conversion from arable to extensive grassland, introduction of a new crop	1 050	119 055
Reduced used of pesticides and herbicides (coded between 0801 and 0809 + suffix)	Reduced pesticides and herbicides inputs, development of new techniques of protection (mechanical weeding, rotation, ...)	220	17 417
Irrigation and tillage (coded between 1101 and 1309 + suffix)	Control water resources and improvement of the soil structure	56	5 509
Biodiversity (coded between 1401 and 1809 + suffix)	Preserving fauna and flora, habitats of special interest and common biodiversity (rearing of threatened breeds), developing agroforestry and reducing risks (fire...)	161	3 509
Risk of abandonment (coded between 1901 and 1909 + suffix)	Restoring and maintaining the opening of lands	8	76
Landscape (coded between 0501 and 0709 + suffix)	Restoring, planting and maintaining landscape elements	890	/
Conversion to organic farming (coded between 2101 and 2109 + suffix)	Conversion to organic farming	130	5 518

Sources : CNASEA, 2003, AES and CTE evaluation

*: Data given by the Regional Nature Park “*Marais du Bessin et du Cotentin*”

As noticed above, local programmes 2078/92 concerning punctual or linear elements were converted into hectares (according to specific calculation rules) in order to be presented in a more eloquent way and to be compared with sizeable measures.

Also, it should be specified that in Table 10 the “number of contracts” represents the number of applications contracted per measure (especially in grassland premium 2078/92, regional programmes 2078/92 and AES 1257/99) and in any case the number of applicants involved, as a farmer is given the possibility to subscribe to more than one scheme (even on the same parcel for some measures). Thus, the total number of farmers involved in AES (2078/92 and 1257/99) is not the sum of the second last column of the table (it cannot be above this figure).

Thus, from the data given previously, an overview of the situation in regard to AESs in the region could be done as follows:

- **E.C. 2078/92 regulation:**

- The Grassland Premium programme covers nearly 100 000 ha (2 211 contracts) which represents approximately 8% of the total UAA.
- Regional Programmes target some 27 000 ha (1 668 contracts) through the reduction of livestock densities, the conversion from arable land to extensive grasslands, the reduced use of agri-inputs and the conversion to organic farming.
- Local programmes concern some 24 000 ha (1 191 contracts) with main activities based on wetlands preservation and hedgerows rehabilitation/maintenance.

- **E.C. 1257/99 regulation:**

- Nearly 216 000 ha (3 846 contracts, with multiple counts) are concerned by AESs 1257/99.
- The main programmes; in terms of area, undertaken within this regulation are the reduction of naked soils during winter (55% of the total area under 1257/99 regulation), the extensive practices on grasslands (15,3% of the global area) and the reduction of fertiliser uses (14,7% of the area).

Regarding the 1257/99 regulation and the CTE framework, among some 170 sub-measures stated from the *f* measure of the RDR and nationally proposed, Basse-Normandie kept about a hundred ones to be contracted by the farmers.

From this panel only 57 sub-measures were indeed contracted in total. Moreover 8 of them cover more than 80% of the whole contracted areas (Eureval-C3E, 2003), as detailed in table 8.

Table 11: Description of the 8 main measures and their weight within the contracted area

Measure	Designation	Objectives	Nb of ha concerned	% of the total contracted area
0301A	Winter covering of arable land (intercropping)	- Water quality improvement and control - Soil erosion control - Flooding control - Preservation of natural species	40 661	23,03%
2001A	Extensive management of grasslands through cutting (or grazing)	- Preservation of natural species - Flooding control - Development of landscape characteristics	24 961	14,14%
0901A	Reduced use (-20%) of nitrogen fertiliser	- Water quality improvement and control - Preservation of the physical, chemical and biological soil fertility - Preservation of natural species	18 321	10,38%

0801A	Integrated crop management	- Water quality improvement and control - Preservation of the physical, chemical and biological soil fertility - Preservation of natural species	16 332	9,25%
2001B	Extensive management of grasslands through cutting (or grazing), Option: Withdrawal of the organic fertilisation	- Preservation of natural species - Flooding control - Development of landscape characteristics	13 802	7,82%
0903A	Fertilisation adapted to analysis results	- Water quality improvement and control - Preservation of the physical, chemical and biological soil fertility - Preservation of natural species	13 455	7,62%
2001C	Extensive management of grasslands through cutting (or grazing), Option: Mineral fertilisation limited to 30-20-20	- Preservation of natural species - Flooding control - Development of landscape characteristics	11 593	6,57%
0303A	Stubble crushing and incorporation without tillage	- Water quality improvement and control - Soil erosion control - Flooding control - Preservation of natural species	11 169	6,33%

Source: Eureval-C3E, 2003

Nonetheless, with regard to the 1257/99 regulation and the data collected, some measures are not sizeable in terms of area (ha) and were therefore not taken into account in the previous table. Targeting the same objectives, these measures are detailed in the following table.

Table 12: Description of AESs with no surface area, undertaken within the CTE scheme

Measure	Designation	Objectives	Unit	Number of units
0502A	Plantation and maintenance of lined up or isolated trees	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Tree	3 263
0503A	Tree plantation on embankments	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Tree	2 945
0504A	Creation and maintenance of ponds	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Pond	26
0601A	Restoration of hedgerows	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	104 576,18
0601B	Restoration of hedgerows	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	10 457,50
0602A	Maintenance of hedgerows	- Water quality improvement and control - Soil erosion control	Metre	4 602 683

		- Preservation of natural species - Development of landscape characteristics		
0603A	Restoration of ditches	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	1 550 636,69
0604A	Rehabilitation of river banks	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	398 949,50
0604B	Rehabilitation of river banks	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	19 799
0605A	Rehabilitation and maintenance of low walls	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Metre	1 100
0610A	Restoration of ponds	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Pond	554
0615A	Maintenance of isolated trees	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Tree	7 880
0616A	Maintenance of coppices	- Water quality improvement and control - Soil erosion control - Preservation of natural species - Development of landscape characteristics	Coppices	99

Source: Eureval-C3E, 2003

In regard to the financial aspects of such a system, it came out that 13 measures (1257/99) make up a bit more than 90% of the total allocated budget. Among these 13 measures, 7 are among the 8 more contracted ones presented in the Table 11.

Table 13: Financial weight of the main AESs 1257/99

Measure	Designation	Allocated budget (€)	%
0202A	For vegetable farms, introduction of non-vegetable crops	1 719 420,55	14,43%
<u>2001B</u>	Extensive management of grasslands through cutting (or grazing), Option: Withdrawal of the organic fertilisation	1 551 429,69	13,02%
<u>2001C</u>	Extensive management of grasslands through cutting (or grazing), Option: Mineral fertilisation limited to 30-20-20	1 144 516,13	9,61%
<u>2001A</u>	Extensive management of grasslands through cutting (or grazing)	1 132 194,20	9,50%
<u>0301A</u>	Winter covering of arable land (intercropping)	1 127 244,58	9,46%
<u>0901A</u>	Reduce use (-20%) of nitrogen fertiliser	1 122 643,57	9,42%
0602A	Maintenance of hedgerows	908 031,48	7,62%
2100D	Conversion to organic farming. Option: permanent pastures	631 995,18	5,30%

2100C	Conversion to organic farming. Option: other annuals crops	551 277,09	4,63%
0102A	Conversion from arable land to temporary pastures	288 920,45	2,42%
<u>0801A</u>	Integrated crop management	272 051,56	2,28%
0101A	Conversion from arable land to extensive grasslands: permanent pastures for at least 5 years.	175 058,23	1,47%
<u>0303A</u>	Stubble crushing and incorporation without tillage	153 815,68	1,29%
Other measures		1 136 686,13	9,54%
<u>TOTAL Budget:</u>		11 915 284,52	100%

Note: Are underlined the measures that are also part of Table 11.

Source: Eureval-C3E, 2003.

3.3 New AESs designed and implemented within E.C. 1257/99 regulation

3.3.1 From CTEs to CADs as agroenvironmental schemes

The CTE setting-up had firstly been disturbed by several management problems due to the complexity of the procedures, the weakness of environmental efficiency of vague measures, the multiplicity of eligibility conditions as well as the reluctance of some farmers.

Then the increase of number of contracts (more than 42 000) as well as the average incentive per contract (€ 44 000, twice the forecasted amount), in the absence of real budget management rules, led to a huge progression of the expenditures and inevitably to a budgetary outburst of the CTEs.

Facing with this issue, Mr Gaymard, the newly nominated Minister of agriculture, requested an audit on the topic: the CTEs were finally suspended on August 6th 2002.

In spite of its cost, the CTE process was considered as being too ambitious, aiming at being a tool to be used for a total re-orientation of the agricultural policy. The audit (COPERCI, 2002) also emphasised the lack of environmental effectiveness of the CTEs, probably because of too many measures were proposed to the farmers.

On November 29th 2002, a new tool is presented, aiming at taking over from the former CTEs: the CADs.

Although the voluntary basis principle as well as the 5-year commitment are conserved, this new tool aims at presenting a more territorially focused approach with priority stakes defined at the territory level and a limited number of proposed measures. The procedures are also simplified.

On July 22nd 2003, the decree n° 2003-675 set up the framework of this new scheme, emphasising environmental issues, while the enforcement became official with the circular C2003-530 released on October 30th 2003.

It therefore passed more than a year between the cancellation of the previous mechanism and the official enforcement of the replacing scheme. Only the CTEs that were already in the administrative pipeline were signed during that time, while the ones that were about to be submitted were cancelled, although the farmers had already spent some money for it (between 700 € and 1 400 € for the support to properly set-up the CTE application file).

Such a situation and circumstances led somehow to a loss of farmers' confidence towards agroenvironmental mechanisms and professional bodies on the matter.

In addition, the CAD specificities which aim at particularly focusing on territorial and environmental issues, and given the previous experience of the CTE, can be bullet-pointed as follows:

- ✓ a simplification of the procedure, within for instance the enlargement of the eligibility rules or the possibility to contract at the block-of-parcels level and not any more at the parcel level;

- ✓ a compulsory environmental part and an optional socio-economic part (farmers can therefore contract only environmental commitments);
- ✓ a commitment ceiling fixed at 2 compatible and complementary measures per parcel, at the most, in order to stay coherent and to address at best the territorial and environment stakes defined within the standard-contracts;
- ✓ one to two priority environmental stakes defined per relevant territory. Each stake is, at the most, addressed through 3 agroenvironmental measures, taking into consideration the local characteristics;
- ✓ the average allocated budget should not exceed, at the NUTS 3 level, 27 000 € per farm per 5-year contract. Given this financial ceiling, the degression rule (cf. section 5.1) is no longer enforced, except regarding the conversion to organic farming (not concerned by the financial ceiling) for which the incentives are positively weighed according to the level of involved employment. Moreover parcels located within Natura 2000, farms located in less favoured areas, as well as young farmers can benefit from an additional incentive (+ 20% for Natura 2000, 10% for less favoured areas and 5% for young farmers).

Moreover, the CAD mechanism will hand-over the local programmes (2078/92) when the contracts will come to their end. Regarding Natura 2000 areas, the CAD will be the framework of the uptake of agroenvironmental measures in those areas.

At the end of September 2004, the situation in Basse-Normandie, relating to the CADs was as follows:

Table 14: CAD situation in Basse-Normandie up to end-September

	Nb of approved CADs	Engaged area (ha)	Main measures
Manche	214	5 180	Winter covering, extensive grassland management (outside marshlands), measures on marshland areas
Calvados	74	n.a.	Extensive grassland management, winter covering
Orne	48	n.a.	Extensive grassland management, winter covering
Basse-Normandie	336		Winter covering, extensive grassland management

Source: Interviews held with Adasea advisers (end-September 2004).

Regarding engaged areas, it came out that it is quite difficult at present to get reliable data from the concerned ADASEAs (unless they have already set up their own synthesis on the matter) as no computerised means have still been set up to collect and collate all data related to the CADs in Basse-Normandie.

Regarding the measures making up the contracts, although the previous Regional Synthesis (DRAF Basse-Normandie, 2002) from 2001 was used as a basis for the design of the CAD measures, no specific synthesis has been done for CAD measures. In case there was a need for modification, it has been done and applied through *ad hoc* orders of the prefect.

3.3.2 From the PMSEE to the PHAE as grassland scheme

Firstly set-up and implemented in 1992, the PMSEE process had been renewed in 1997. In 2001 74 000 French farmers were benefiting from this premium.

But a second renewal was not possible due to the opposition of the European Commission – which considered this aid more like a measure supporting the market than an environmental incentive – expressed during PDRN negotiations in 1999.

The French Government therefore decided to set-up a new programme to hand-over this grassland premium.

Therefore, after the end of December 2002 it was not anymore possible to subscribe to a PMSEE scheme, while the PHAE enforcement decree has been submitted on July 1st 2003 (*i.e.* decree C2003-5012).

Under this new regulation, the premium amount has been raised of 70% in comparison to the PMSEE allocated budget and is, on a national average, about 68 € per hectare (40€ for the previous PMSEE).

Farmers previously eligible for PMSEE incentive along with the newly installed young farmers are met to have a priority access to this new mechanism.

Although the PHAE is defined at the NUTS 3 level (CDOA), its prescriptions rely on the PDRN-measures 1903 (*i.e.* opening maintenance of extensively managed areas, such as mountain pastures, shrublands) as well as 2001 and 2002 (*i.e.* extensive grassland management through cutting or grazing).

Therefore, the contract prescriptions, although based on a national regulation, fluctuate from NUTS 3 level to NUTS 3 level as detailed in the table below.

Table 15: PHAE eligibility rules and incentives in Basse-Normandie NUTS 3 levels

	Orne	Manche	Calvados
% of UAA under grassland	At least 65%	At least 75%	At least 75%
Stocking rate	Between 0,5 and 1,4 LU/ha of main fodder areas (between 0 and 1,4 within Natura 2000 area)	< 1,4 LU/ha of main fodder area	< 1,4 LU/ha of main fodder area
Incentive*	75 €/ha/year	76,2 €/ha/year	76,2 €/ha/year

*: The final incentive indeed given to the farmers depends on the number of concerned farmers, as the global budget, at the NUTS 3 level, is redistributed to eligible applicants. But this final incentive cannot, in any case, exceed 76,2 €/ha/year (ceiling).

Regarding the uptake of the PHAE as a new scheme, and although the incentive has been increased of 70%, a considerable fall in the total engaged area has been noticed in 2003 and early 2004.

This can be explained by the complexity of the new mechanism and inappropriate prescriptions, but not only.

The first year of PHAE implementation coincided with the end of the second round of PMSEE (1992-1997; 1997-2002), as well as the enforcement of CADs. Therefore, farmers willing to subscribe to PHAE were also given the opportunity to undertake such commitment (*i.e.* PHAE prescriptions) within a CAD (*i.e.* Extensive grassland management measure).

In addition it was impossible to simultaneously undertake a PHAE and a CTE on a same parcel if a similar measure is already implemented within a CTE framework. For instance, the extensive grassland measure undertaken within a CTE was paid 91,47€/ha/year while the PHAE is between 75 and 76,20€/ha/year.

4 Overview of the AES institutional settings

For a first overview of the basic characteristics of AESs, the classification according to the distinction between programmes which apply throughout a region and those targeted on designated areas should be combined with the second division between programmes with general application to all farming and those focused on particular agroenvironmental issues.

For the French case, this categorisation is shown in the following table in which an horizontal programme is accessible to a large population of farmers and is not based on any geographical zoning while a vertical programme targets a geographical zone and is usually designed locally with specific objectives.

Table 16: Classification of agri-environmental measures and programmes

	Horizontal programmes	Vertical programmes
Wide focus	Grassland Premium (2078/92)	CTE (AESs 1257/99)
More specific focus	Regional schemes (2078/92)	Local programmes 2078/92

Adapted from IEEP 1998:31².

4.1 Contract description and eligibility rules

2078/92 and 1257/99 agroenvironmental schemes are 5-year individual contracts (except 2078/92 long term set aside: 20-year contracts, but this scheme has been scarcely contracted throughout the country).

An overview of the contracts' rules is given in the Table 17.

Table 17: Contract description and eligibility rules

Program	Eligibility	Contract specification	Entered area	Obligations on practices or objectives
Grassland premium 2078/92	- Extensive animal farms. - Farmer less than 60 years old. - Stocking rate <1,4 LU/ha of grassland area (Nb of LU present on the farm > 3) - Grassland area > 75% UAA	One package of measures	Whole farm area	Practices
Regional schemes 2078/92	All farmers (less than 60 years old) within targeted zones of specific interest	Unitary measure with prescribed changes of practices for specific crops or herds	Farmers' choice of land lots in the eligible area	Practices
Local programmes 2078/92		Package of measures for specific land lots		Practices / objectives
CTEs 1257/99	All farmers more than 21 and less than 56 years old, and farmers between 56 and 60 years old with successors according to certain conditions.	Combination of environmental unitary measures and investment measures	Farmers' choice of land lots	Practices

Contract specification : number of measures in a contract (unitary measures, package) => degree of complexity and choice possibility

Entered area refers to the eligibility of land parcels the AES contractors are allowed to enter in the scheme.

Obligations on practices or objectives refer to the kind of obligations on which the AES payments are based. For practice obligations, the payments are based on the specified farming practices. For objective obligations, the payments are based on the environmental output, or related indicators.

² Assessment of the impact of certain agricultural measures, IEEP, 1998. This classification is used in the Commission Working Document "State of application of Regulation (EEC) No. 2078/92: Evaluation of Agri-environment Programmes" (VI/7655/98). It is noted: "As with all classifications of agri-environment measures, there are complexities which make some of the divisions a bit arbitrary. In particular, in the 'programmes for designated areas' column, the degree of 'focus' appears to depend on the type of environment within the zone. Also, individual measures within a 'wide focus programme' may only apply on highly specific fields. However, the classification provides a useful analysis in an attempt to discern patterns of implementation across Europe. Using the IEEP table as a basis, it is possible to make a series of observations concerning implementation."

In any case, prerequisite conditions to contract AESs (both 2078/92 and 1257/99) are to be up to date in terms of payment of the social contributions and to be in possession of legal authorisations to farm.

Moreover, the complete CTE application file must contain:

- a fulfilled administration form;
- a farm diagnosis and a synthesis;
- a cadastral record and a CAP statement;
- a copy of the statutes in case the applicant is legal entity.

For 1257/99 AESs, the farmers with the nationality of one of the EU State members, Andorra and Switzerland can legally apply for a CTE. In addition, all applicants must show minimum agricultural skills (agricultural degree or experience) to be eligible for such schemes.

4.2 Institutional organisation for the AES design and implementation

A synthesised overview of the main actors involved in the different phases (*i.e.* diagnostic and design, contracting, enforcement and evaluation) of the AESs (2078/92 and 1257/99) process is done through different elements presented in Table 18.

These phases, for the concerned AESs; will be more detailed in the following parts of the present document (*i.e.* sections 5, 6 and 7)

Table 18: Institutional organisation for the AES design and implementation

	Diagnostic and design		Contracting			Enforcement		Evaluation
	Surveying of targeted elements (problem, area,...)	Designing schemes	Promotion of schemes, information and technical support	Administration of contract (including payments to farmers)	Relevant decisional comity and authority	Monitoring	Controls	
Grassland premium 2078/92	- MoA	- MoA	- DDAF - DRAF - Municipalities	- ADASEA (pre-instruction phase) - DDAF - CNASEA for payments	- MoA - DDAF - Prefect (signing on behalf of the State)	/	- DDAF for administrative controls - CNASEA for fields controls	/
Regional schemes 2078/92	- DDAF / Prefect - Agricultural profession	- ADASEA - Chambers of agriculture - DIREN - DDAF / Prefect	- Chambers of agriculture - Farmers' organisations - ADASEA - DDAF		- CRAE (advising) - Prefect (signing on behalf of the State)	- CRAE - DDAF / Prefect		- MoA - CRAE - Prefect - EU
Local programmes 2078/92	- Farmers - Associations - Chambers of agriculture - ADASEA	- ADASEA - DDAF - DIREN - Associations - Eventually, local government (NUTS 3 level)	- Chambers of agriculture - Farmers' organisations - RNPs - Local governments (NUTS 3 level) - Associations		- CRAE (advising) - Local steering committee - Prefect (signing on behalf of the State)	- CRAE - DDAF / Prefect - Local steering committee	- DDAF for administrative controls - CNASEA for fields controls - Local steering committees	
AESs 1257/99	- DRAF - DDAF - DIREN - Farmers' organisations - Individual farmers	- Chambers of agriculture (in consultation with the profession) - DDAF / Prefect - DIREN - Associations - DRAF (for NUTS 2 level harmonisation)	- Chambers of agriculture - Farmers' organisations - Agri-food industries - ADASEA - RNPs - Farm management centres - Associations - DDAF		- CDOA (advising) - Prefect (signing on behalf of the State)	- Chambers of agriculture - Agri-food industries - RNPs - ADASEA - Associations	- DDAF for administrative controls - CNASEA for fields controls	- CNASEA (through independent consultants) - MoA - Regional evaluation steering groups (on behalf of the DRAF)

5 The procedures of the design of AESs

5.1 Legal aspects

During Berlin Summit in March 1999, EU members agreed on the Agenda 2000 which had reformed the CAP.

The Rural Development Regulation (regulation 1257/99 established on May 17th, 1999) became therefore the second CAP pillar and established:

- an acknowledgement of the agricultural multi-functionality, in response to the society expectations;
- an integrated approach of the rural economy, through the multi-sector development;
- an enhanced flexibility, through the subsidiarity principle leaving the choice to EU-Members to decide the way they will apply the rural development measures in their country at the most suitable level;
- An EAGGF-G funding for all RDR measures.

In order to apply the RDR, France agreed on a national plan covering the whole French territory (PDRN), completed by some rural development parts integrated into Single Programming Documents designed and implemented at NUTS 2 levels (*Documents Uniques de Programmation i.e. DOCUP*).

In July 9th 1999, the Agricultural Act recognised the multi-functionality of the agriculture and set up the farming territorial contracts, aiming at gathering, within the same mechanism, most of the measures coming under the RDR.

In addition to RDR measures, either included in the PDRN through the CTE mechanism or in the DOCUP, three schemes have been implemented in order to enhance the impact of particular measures (*i.e.* the improving machinery plan, the young farmer grant and the natural handicap compensatory allowance).

Given the coexistence of two parts (economic and environmental) within the same tool, the farming territorial contract mechanism is quite heavy to manage.

This mechanism is made up of two main phases:

- a NUTS 2 and NUTS 3 level set-up in order to draw up the AESs list to be proposed to the farmers;
- the set-up of the contract at the farm-level.

The original feature of the CTE process in comparison with 2078/92 AESs lies in:

- 1) the consideration of the territorial entity of the farm within the local context;
- 2) the economic approach of the design;
- 3) the possibility to have the individual contract included in a collective approach;
- 4) the possibility given to the farmers to contract more measures than proposed in the basic standard-contract;
- 5) the absence of deadlines for applications, thus giving the farmers the possibility to set up their contracts according to their own rhythm.

Nonetheless, some drawbacks of the context evolution (2078/92 *vs.* 1257/99) could be highlighted:

- 1) It does not exist under 1257/99 regulation any equivalent to the CRAE;
- 2) The will of quantitative results clearly announced by the MoA, compelled in that way the management organisms to focus more on quantitative aspects than on qualitative ones;

- 3) The will to include, within the same contract, an economic and an environmental part, therefore implying an increased complexity of the process;
- 4) The complexity and the abundance of prescriptions and measures, implying certain opacity of the system;
- 5) The application file is more unwieldy to set up in comparison with 2078/92 AESs, since it concerns the set-up of a global project (with two indissociable parts) done from a farming diagnosis;
- 6) Given the space distribution of the CTE within a same NUTS (2 or 3) level, the territorial approach of the French application of the 1257/99 regulation is, by far, less pronounced than it was under the previous regulation (OLAE).

Concerning the budgets allocation between AESs and their contractors (budget management rules) it varies according to the concerned programmes and could be summarised as follows (Table 19).

Nonetheless, the payments (paid annually), at the farm level, follow the same principle whatever the regulation concerned. It is a matter of an incentive per hectare (or LU or metre) calculated from additional costs and loss of earnings implied by the implementation of the committed measure.

Table 19: Budget management rules of AESs

Program	Budget management rules
Grassland premium (2078/92)	National budget. Premium paid by the CNASEA
Regional schemes (2078/92)	NUTS 2 regional budget allocated between the different measures and NUTS 3 regions according to settled priorities. In case of no-use of the total budget at the NUTS 3 level, the remaining money goes back to the NUTS 2 level for a NUTS 3 redistribution.
Local programmes (2078/92)	National budget allocated between the different local programmes through the NUTS 2 level (CRAE).
CTE (1257/99)	Ceiling per farmer for investment aids, slightly digressive environmental aid per farm, additional incentives for collective projects. Digressive payment according to the total surface of engaged areas (it does not concern linear or punctual measures) and the generated income (conversion to organic farming has its specific degression rules).

As detailed in Appendix 1, most of the measures (1257/99) were presenting an “extra-payment” of 20% whenever contracted within a Natura 2000 area. Although the CTEs contracted within a Natura 2000 area were quite scarce, this extra-premium rule was unfortunately an official directive *that has never been enforced in Basse-Normandie*.

The two main reasons given by Authorities (*i.e.* DIREN and CNASEA) were that:

- all the Regional Documents of Objectives had not been finalised and validated on time;
- even though the Regional Documents of Objectives were validated, no cross-checking was conducted between CTE contracted areas and Natura 2000 areas, in spite of the pressure of the DIREN. In other words, it was not checked whether eligible CTE areas were located within Natura 2000 zone.

The degression rule, introduced and enforced with 1257/99 AESs, is a new component in the budget management and needs to be explored.

Indeed, for 1257/99 AESs the annual area incentives are calculated following decreasing scale rules (punctual or linear elements/measures are not concerned by such rules).

Moreover, the degression rules do not concern already engaged areas under 2078/92 regulation.

Concerning surface measures (apart from the conversion to organic farming that follows a specific rule), and if the total engaged area is above 2 minimum farming areas (*Surface Minimale d'Installation i.e. SMI*) the calculation is done as follows:

- by multiplying the whole area engaged by the correspondent incentive (= theoretical aid amount);
- this amount is then divided by the total area engaged (= average amount/ha);
- the aid is then calculated by brackets, multiplying the average amount by the adequate number of hectares (comprised within the concerned bracket) to which a degression ratio is applied, following the given rules:

Committed area up to 2 SMI	Committed area above 2 SMI and below 4 SMI	Committed area above 4 SMI
100%	60%	30%

The amount that should be paid to the farmer each year as incentive is the result of the addition of the products calculated.

NB: An example of calculation as well as a developed definition of SMI are given in Appendix 2.

Conversion to organic farming measure presents specific degression rule related to the whole concerned aid (and not to the SMI) and are weighted according to the level of employment involved on the farm.

Incentive over 5 years	< 45 734€	> 45 734€ and < 76 224€	> 76 224€ and < 114 336€	> 114 336€ and < 152 449€	< 152 449€
Ratio	100%	85%	50%	25%	25%
Weighting	0	1,5 LU* + 15%	1,5 LU + 15% 2 LU + 20% 3 LU + 30% 4 LU + 40%	1,5 LU + 0% 2 LU + 20% 3 LU + 30% 4 LU + 40%	0

*: In the context LU refers to the Labour Unit

The total amount of the contract is therefore the addition of the products calculated for each concerned bracket.

When, within a same NUTS 3 level or within a same contract, two different values of SMI are coexisting, the Prefect can then, after CDOA advice, use the national SMI (25 ha) as a basis for the degression calculation.

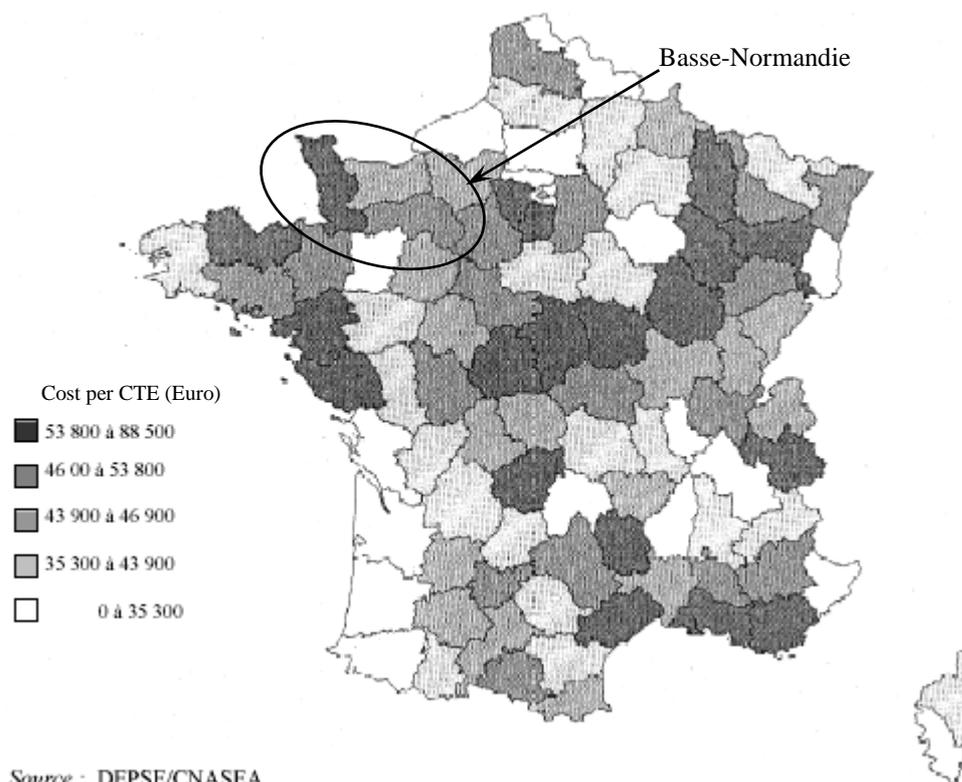
The origin of such degression rules comes from the establishment of the control of the agricultural structures, set up in 1980 (orientation law n°80-502, 04/07/80) and reviewed in 1999 (orientation law n°99-574, 09/07/99). This aims at regulating the land demands in order to promote the young farmers establishment and to reduce in this way the farm enlargement phenomenon. In an obtaining of direct aids logic and thanks to numerous early retirements

loads of farmers started to turn towards farm arrangements establishment (agricultural society, joint-venture, etc...) in order to avoid the farm accumulation rule enforced by the control of agricultural structures. The excess of farm enlargement (to the detriment of farm establishments) led, up to 1999, to a farm concentration unbalancing the territorial development.

The degression principle within the CTE framework was inspired by this logic of agricultural and land structures control. Moreover, it also permitted to limit the overspending and financial abuses.

In spite of such rules, the audit asked by the MoA and achieved by COPERCI, pointed out on July 5th 2002 high disparities between NUTS 3 levels, due to a weakness of the budget management (COPERCI, 2002).

Map 3 gives a good overview of such a situation.



Map 3: Financial aspects of the CTEs (NUTS 3 scale), at the national level

In addition and regarding the financial aspects of the conversion to organic farming it came out that in Europe (*cf.* Appendix 3), only France, Luxembourg and the Netherlands do not propose to the farmers both a conversion aid and an on-going maintenance aid (Defra/GA, 2004). The Netherlands are not supporting at all the organic farming while in France, organic farms are supported financially only while converting (during the first 5 years). In other words, existing organic farms do not get any specific subsidies for this kind of agriculture.

In 1997, an organic farming development plan was approved by the French Government in order to make up for lost time compared with other EU countries. Since 1999, conversion aids are included within the CTE framework and the amount of the incentive have increased in spring 2000, from +39% up to +320% (MoA, 2001).

Such relatively high level of conversion aids is mainly designed to support a specific niche market linked with organic production.

The absence of an on-going maintenance aid in France can be analysed as a non-acknowledgement, from a financial point of view, of positive externalities produced by organic farming systems, and therefore a non-acknowledgement of the willingness to pay of the taxpayer.

In 2004 the MoA decided on 6 main lines in favour of the promotion of the organic farming. One of them aims at stimulating the support from the Authorities towards the organic farming. While other EU member States propose an incentive supporting the organic farming after the conversion phase, France do not. This aid is not harmonised and this lack of harmonisation is considered as leading to distortions of competition. Therefore France will bring the request to have such an harmonisation to the European Commission. However, and in case this request would not be granted the Government agrees to have it included within the next National Rural Development Plan (MoA, 2004).

5.2 Actual organisation of the AES design

This design phase is crucial in order to propose adequate and relevant AESs to the farmers. As described hereafter the AESs design is indeed the result of different steps undertaken at different levels.

NUTS 2 / 3 level set-up

The way to apply the farming territorial contracts at the NUTS 3 level is deeply thought and discussed at this stage of the process.

Stakes specification

In 1999, at a national level, lots of NUTS 3 levels have already had deeply thought about the objectives that they were going to be included within the AES 1257/99 process and the way this new mechanism was going to be implemented, as well as the objectives to be met, at the local level.

This was done from an inventory of the agricultural situation within the NUTS 3 level (strong points, weak points, and environmental statement).

In Manche and Calvados, this phase (conducted in collaboration with the DDAF, the Chambers of agriculture and the ADASEA) led to a breakdown into 12 homogeneous territories (6 within each NUTS 3 level) and permitted to achieve socio-economic and environmental diagnosis in prior to the set-up of territorial standard-contracts.

In Orne NUTS 3 level, this phase was far from accepted by the profession which was, from the beginning, against the mechanism. Facing with reluctance, and in order to get this tool approved, the DDAF set up a NUTS 3 level standard-contract open to everyone.

From these diagnosis it came out 4 main stakes: water, soils, biodiversity and landscapes/bocage.

Design of the measure prescriptions at the NUTS 3 level

This was the duty of the chambers of agriculture technical staff who realised this work from the AESs prescriptions under the former mechanism and the national list as drawn up in the November 17th 1999 decree.

This phase was one of the agricultural actors' priorities.

It permitted to complete a NUTS 3 level catalogue gathering all the measures and their requirements.

This phase also set up a set of compulsory measures, related to pre-defined stakes, that will have to be implemented by the CTE contracting farmer. For instance, in Manche, all standard-contracts had to compulsorily propose measure related to the three stakes (*i.e.* water, soil and landscape) identified as priority in this NUTS 3 level.

NUTS 2 level harmonisation

At the end of 1999, a national frame was imposed to all NUTS 3 levels and they were asked to draw up NUTS 3 level agroenvironmental synthesis. This was mainly conducted by the DRAF, along with the representant of the DIREN. Given that Manche was quite efficient within the previous phases of the process, it gave a considerable input to this NUTS 2 level standardisation.

Therefore, the regional harmonisation was somehow an extension of the measures set up in Manche to the other two NUTS 3 levels. It is indeed easy to understand that these measures were not properly adapted to Calvados and Orne NUTS 3 levels.

Of course it implied some difficulties to get this synthesis consistent which explains that the final version of the document was finally submitted on November 2001 following the approval from STAR committee³ (required for any proposition or modification).

Standard-contracts and collective projects set-up (Figure 1)

The standard-contracts and their prescriptions (detailed prescriptions of the measures presented in tables 11 and 12 are given in Appendix 1) make-up the legal basis upon which the farmers apply for their farming territorial contracts (although they can also design their own contract).

Such contracts are defined in the November 17th 1999 decree and must be ratified by the Prefect after the CDOA approval.

Standard-contracts gather a relevant set of measures met to fit with socio-economic and environmental stakes within an identified territory (*e.g.* catchment area) or a particular production sector. It nonetheless may exist general standard-contract (*e.g.* conversion to organic farming).

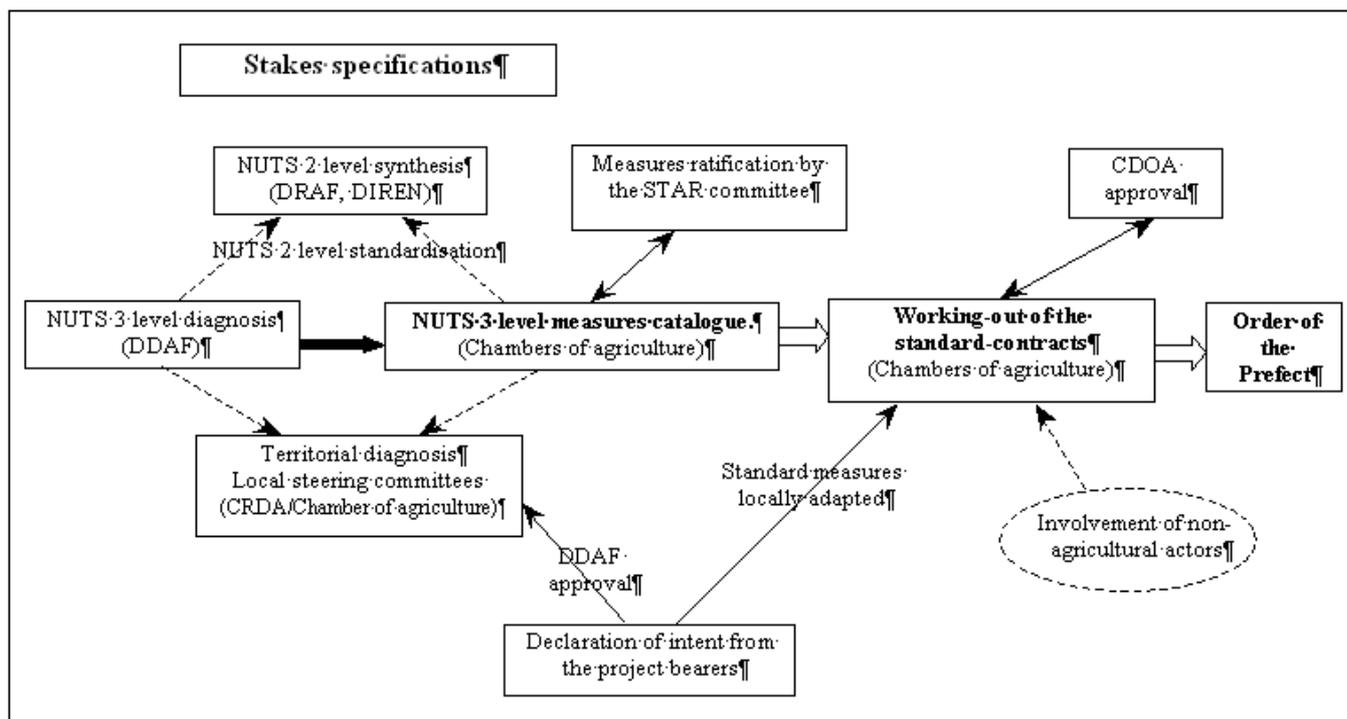
The decree specifies that in case of collective projects the standard-contract must be the subject of a declaration of intent to the DDAF. All standard-contracts fulfilling those requirements will therefore be considered as collective projects.

During the set-up of the territorial, sector and collective standard-contracts steering committees, led by the Regional Committee for Agricultural Development (*Comité Régional de Développement Agricole i.e. CRDA*), conducted some territorial diagnosis in which very few environmental actors were involved.

Many standard-contracts were designed by the Chambers of agriculture along with the DDAF and the ADASEA. Moreover non-agricultural actors were scarcely involved in this design. Which may represent one of the weak points of the mechanism.

A standard-contract is made up of a relevant set of measures meeting agricultural and/or society's preoccupations. This is improved through a collective approach of the system (*e.g.* quality charter, specific production sector, environmental/territorial target, etc.).

³ Committee at the EU level which study the consistency of measures adopted for co-financing.

Figure 1: Framework of the standard-contracts design method

Following this framework, 48 standard-contracts were designed and approved in Basse-Normandie and most of them concerned specific production sectors.

Table 20: Standard-contracts in Basse-Normandie

	Manche	Calvados	Orne	Total at the NUTS 2 level
Total number of standard-contracts	18	21	9	48
General standard-contracts	5	4	3 (among which 1 at the NUTS 3 level)	12
- organic farming	2	1	2	5
- sustainable farming	1			1
- integrated farming	1			1
- rural tourism	1	1		2
- farm products		1		1
- farm hand-over		1		1
Territorial standard-contracts	7	7	3	17
Sector standard-contracts	6	10	3	19
- milk sector	1	5	2	8
- meet sector		3		3
- grassland sector	1	2		3
- cider sector	1			1
- vegetable sector	2			2
- pig sector	1		1	2

6 The procedures of the implementation of AESs

6.1 Legal aspects

Some of these legal aspects, at the farm/farmer level have already been given in part 4 of the present document.

In addition, given that concerned AESs are 5-year contracts, a specific attention has to be paid for tenant parcels.

In the application law concerning AESs 2078/92 it was indeed specified that in case the lease was coming to an end before the end of the concerned AESs these latter remained attached to the parcel. Therefore, the next tenant-farmer had no other choice than keeping those AESs on his new tenant parcels until the end of the 5-year contract.

For AESs 1257/99, the regulation has been a bit modified. Indeed, a farmer cannot contract measures for a tenant parcel if he cannot prove that the current lease is still valid for the coming 5 years.

If, and in case of absolute necessity, the farmer is obliged to break the lease agreement, two solutions are therefore considered (agricultural act n°99-574 and decree DEPSE/SDEA/C2002-7010). If the new tenant farmer agrees to go on with the AESs on the concerned parcel, then he will be committed until the contract expiry. But if the new tenant farmer does not want AESs on his farm, then the assignor will be liable for paying the CNASEA back the total amount received so far for these AESs, except if the assignor stops for good all agricultural activities after having achieved at least 3 years of his contract.

Although the national application of regulation 1257/99 repeals the national application regulation 2078/92 it is nonetheless possible for a farmer (or legal entity) to contract 1257/99 AESs even if he was committed to 2078/92 AESs, but under certain conditions.

It mainly concerns PMSEE and OLAE schemes.

A farmer engaged within a PMSEE scheme can contract a CTE (1257/99) if these two schemes are located on two different parcels and if the CTE does not include any surface engaged in the same type of action.

Regarding OLAE scheme, the coexistence with a CTE is possible providing that the measures undertaken do not concern the same parcel. This is also possible with Regional Schemes (2078/92).

Nonetheless, it is possible for a farmer, under a 2078/92 scheme (regional or local scheme) to have it converted into a 1257/99 one. In such a case, the 5-year commitment is renewed with the new agreement.

6.2 Actual organisation of the AES implementation

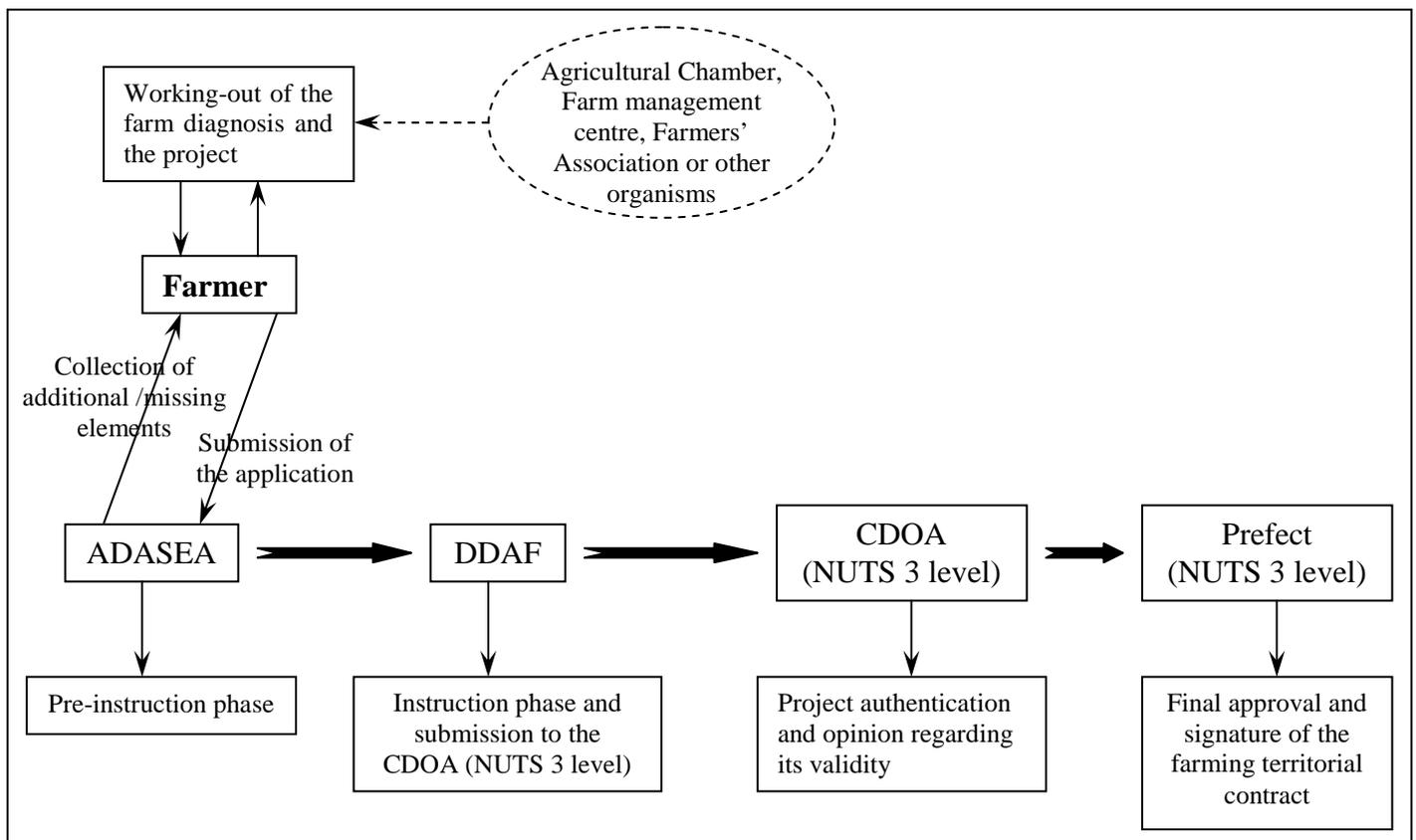
In order to reach their objectives, AESs and more recently the farming territorial contract mechanisms should come along with a good communication and animation towards the farmers. This task is mainly conducted by the structures already involved in the design process: Chambers of agriculture, projects bearers, Farm management centres, Farmers' Unions, ADASEA and DDAF.

Some training on the topic and informative sessions were organised by the Agricultural Chambers while the Farm management centres, the project bearers, the Farmer's Unions and associations communicated through an individual approach to their members.

In Basse-Normandie, the main organisms that supported the farmers in the contracts implementation were:

- the chambers of agriculture and the Farm management centres (for most of the contracts);
- the Organic Farming Group (for the conversion to organic farming contracts);
- the ADASEA (at the beginning of the process);
- the RNP “marais du Cotentin et du Bessin” (for the contracts located on the Park territory).

Figure 2: Framework of the approval mechanism



In order to get the project approved, several steps have to be followed.

1°) The farmer draws up his farm diagnosis and designs his global farming project. To achieve this, he can be helped by an organism of his choice. Only 10% of the farmers did it alone while 30,5% were supported by the Farm management centre, 17,6% by the Agricultural Chamber and 19% by Farmers' Association (Eureval-C3E, 2003).

Regarding the cost of such a support, it came out that $\frac{3}{4}$ of the approved contracts cost less than € 1 400 with a majority between € 700 and €1 400.

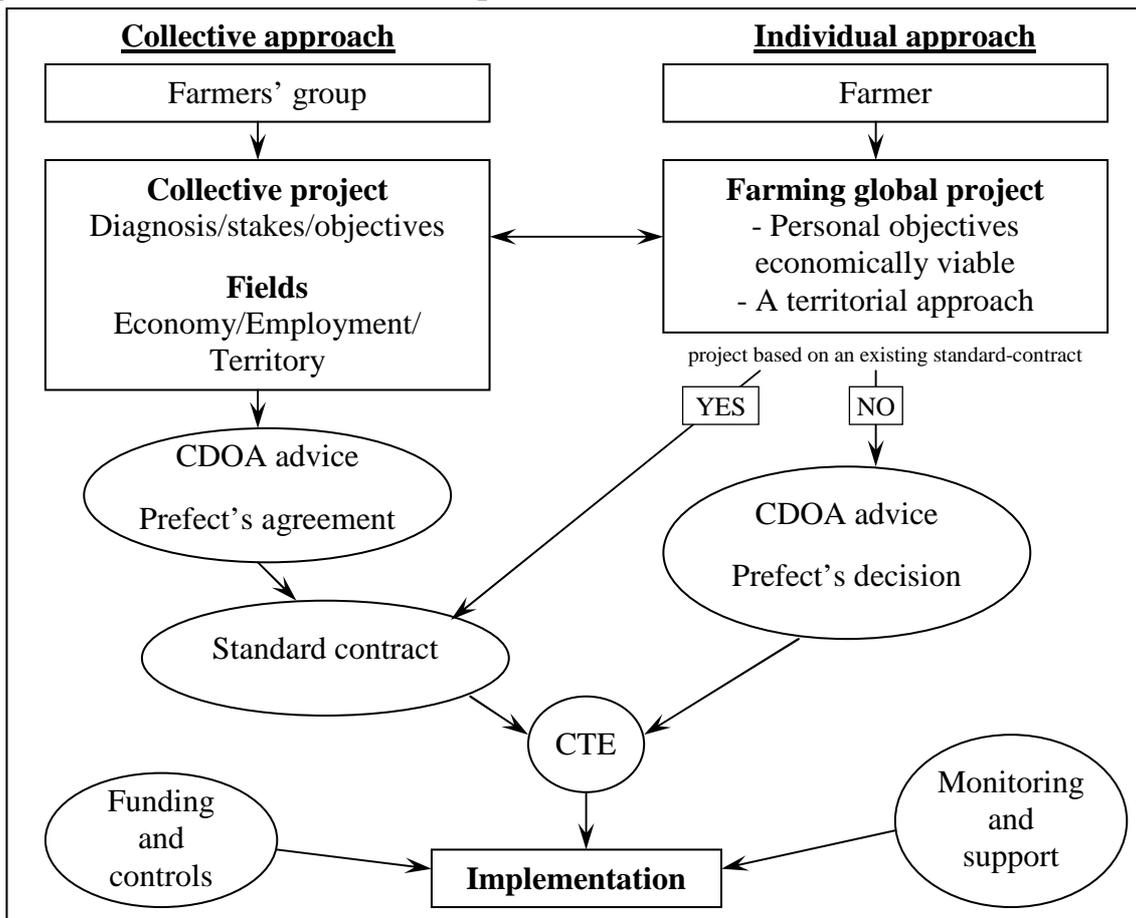
2°) Then the farmer submits his application file to the ADASEA in order to get it pre-instructed (check-up of the documents, of the eligibility of the bearer, of the adequacy between the project consistence and the territorial stakes, etc.). The ADASEA can, in case of missing, incomplete or unclear elements, go and visit the farmer in order to finalise the diagnosis/project. The main goal is to get a clear and homogeneous file to be submitted to the CDOA.

3°) The file is then transmitted to the DDAF, for the instruction phase. The project consistence is deeply checked, along with its accordance with the chosen standard-contract.

- 4°) Finally the file is transferred to the CDOA which gives its opinion and authenticates the project.
- 5°) It is at last up to the Prefect to validate and to approve the contract.
- 6°) Once approved, the file is sent back to the farmer for signature, and from only this step the CTE process is considered as ongoing.

Indeed a farmer willing to implement a CTE is proposed two different approaches (an individual one and a collective one) as detailed in Figure 3.

Figure 3: Framework of CTE subscription



At the beginning of the process and at a national level, it was considered the possibility to contract AESs 1257/99 without necessarily contracting a farming territorial contract. But given that the incentives (for a same AES) were from the beginning higher within a CTE context, none of the AESs were subscribed separately.

Nonetheless, and although it was possible in other NUTS 2 regions, a farmer in Basse-Normandie who was willing to contract an agrienvironmental measure had no other choice than contracting a farming territorial contract. Indeed, this has restrained the farmers who wanted to implement agrienvironmental measures, without setting up a global farming project.

7 The enforcement aspects

7.1 Legal aspects

Concerning the grassland premium (2078/92) this AES is directly managed by the MoA and the CNASEA. Its enforcement does not imply any consultation at a local level but at the national level this scheme is nonetheless the subject to a strong lobbying from the profession. Regarding regional programmes (2078/92), local actors choose at the NUTS 3 level one or several schemes among a national list (reduction of the stocking rate, conversion from arable to extensive grasslands, reduction of agri-inputs, rearing of threatened breeds, conversion to organic farming, 20-year set aside and vocational training). NUTS 3 level actors then determine the application zone of this scheme and the total area that could potentially be engaged in order to set the needed budget. The CRAE, involving all local partners, reaches then a decision concerning the consistency, the feasibility, and the requested fund of the project.

For local programmes (2078/92), the consultation takes place at a territorial level (within a NUTS 3 level) through local steering committees. The prescriptions are done at the local level while the management and the files examination are conducted by a local steering committee.

The CTE enforcement (1257/99) is fully decentralised at the NUTS 3 level.

The CTE enforcement guidelines are given in the circular DEPSE/SDEA/C99-7030 (Nov. 17th, 1999). It is up to the Prefect, through the DDAF and in liaison with the CDOA to draw the agroenvironmental mechanism, the stakes definition and the prescription. It is at the NUTS 3 level that the monitoring and the evaluation are conducted. From a general point of view the file set up, at the farm level, is most of the time supported by the ADASEA or the chambers of agriculture as well as the support in the implementation of the programme.

But in Basse-Normandie, NUTS 3 level distinctions should be noticed.

In Calvados, the file set-up has been mainly done by the ADASEA and the chamber of agriculture. In Manche, it has been conducted by the farm management centres and the producer groups (mainly SILEBAN, a vegetable producer group). In Orne the set up has been homogeneously achieved by the ADASEA, the chamber of agriculture and the farm management centres.

7.2 Monitoring and technical support

The contract achievements monitoring was set up lately and hurriedly by the organisms that supported the farmers to carry out their project (as specified in the circular C99-7030). Monitoring and registration forms were designed by the ADASEA and the Chambers of agriculture.

In Basse-Normandie it indeed appeared that some 40% of the farmers faced some difficulties to enforce their CTE (Eureval-C3E, 2003) – mainly its environmental part – due to the farmwork planning and to the technical respect of some of the prescriptions.

7.3 The actual organisation of the AES control

AESs control rules are basically given in E.C. 3887/92 regulation (articles 6 and 7) although it has been reviewed and refined with the enforcement of the E.C. 1257/99 regulation (R 1750/99). Nonetheless, the rules are more or less the same whatever E.C. 2078/92 or E.C. 1257/99 AESs are concerned.

Given this regulation, the controls can be done in two different ways:

- An administrative control on supporting documents undertaken by the DDAF. It is a matter of a consistence control of the files with regard to the concerned regulation. This

is conducted during the instruction phase over 100% of the cases. Each year the contracting farmer must justify the respect of his agroenvironmental commitments by sending to the DDAF a confirmation of commitment, his CAP declaration as well as a payment receipt regarding the social contributions.

In case a farmer does not respect these obligations, he is asked by the Prefect to sort out the situation and the payments are suspended. If the situation is not sorted out by the deadline fixed by the Prefect, then the contract is cancelled (after CDOA advice).

- An on-site control undertaken by the CNASEA over an annual rate of 5% of the contracts, randomly chosen. In addition an on-site control is imperative when an anomaly has been raised during the administrative control and has not been solved (oriented control). Moreover; the farmers who provided a fake declaration or falsification will be inevitably controlled the year after. Therefore, a bit more than 5% of the farmers are controlled every year.

All the contracted measures are concerned by such controls. It aims at verifying whether the farmer respects his commitments towards the contract and all the requested elements (specified in the prescriptions) are checked.

The misachievement of the prescriptions over a year implies different levels of consequences; from the non-payment of part of the annual aid, the refund (by the farmer) of already received payments, the payment of a penalty, to the complete cancellation of the contract.

7.4 Control outcomes

Although it can appear that controls are one of the weak points of the AESs it must nonetheless be pointed out that for Basse-Normandie the CNASEA regional office counted 1 permanent inspector between 1992 and 1999 and 5 since then. In such conditions it is therefore easy to understand that the controls was a difficult task to achieve.

Although the MoA, in its circular C99-7030, was in great favour of conducting these controls in collaboration with other controlling organisms (ONIC, ONIOL, etc...) this inter-administrative co-operation has unfortunately never really been set up.

N.B.: Relations, in terms of controls, data and information exchanges, are compulsory from early 2004.

In the following tables, only data regarding Local Programmes (2078/92) and CTEs (1257/99) are presented due to the impossibility to get reliable data about the two other 2078/92 programmes.

It is nonetheless obvious to notice that, with regard to the compliance rates (Table 16) CTEs in the region were faced with implementation difficulties. Indeed, over the 5% random sample, only 20% of the contracts were fulfilling the requirements in 2003.

Table 21: AESs compliance with the prescriptions for 2003 control campaign in Basse-Normandie (NUTS 2 level).

Programme	Control rate	Nb of controls conducted	Compliance control rate
Grassland premium 2078/92	5%	n/a	n/a
Regional programmes 2078/92	5%	n/a	n/a
Local programmes 2078/92	5%	58	48,3%
CTEs 1257/99	5%	85	20%

Source: CNASEA, 2004

Nonetheless, from the CNASEA data, and given that the sample control ratio is fixed at the NUTS 2 level (5%), some discrepancies on the matter, regarding CTEs, can be noticed at the NUTS 3 levels.

Indeed, 1,5% of the contracts were controlled in Manche, 6,3% in Calvados and 11,9% in Orne. In addition, respective non-compliance rates are broken down in Table 22.

Table 22: Breakdown of the control results within the region

	Local Programmes 2078/92		CTE 1257/99	
	Nb of controls	Non-compliance rate	Nb of controls	Non-compliance rate
Calvados	28	50,0%	35	80,0%
Manche	7	28,6%	13	92,3%
Orne	23	60,9%	37	75,7%

Source: CNASEA, 2004

With regard to the CTE results given in Table 22, we notice that non-compliance rates between NUTS 3 levels are in inverse proportion to the control rates.

In any case, the minimum non-compliance rate (*i.e.* 75,7% in Orne) is by far too high to conclude that the process is reaching its goals (at least in terms of compliance and thus efficiency).

Nonetheless, this rule is reversed while considering significant anomalies within irregular cases (Table 23).

Table 23: Presence of significant anomalies among non-compliant and controlled contracts

	Calvados		Manche		Orne		Basse-Normandie	
	Local Programmes	CTE						
Nb of controls	28	35	7	13	23	37	58	85
Nb of irregular cases	14	28	2	12	14	28	30	68
% of which with significant anomalies	42,9%	78,6%	50,0%	66,7%	35,7%	82,1%	40,0%	77,9%
% of controlled contracts with significant anomalies	21,4%	62,9%	14,3%	62,2%	21,7%	62,2%	20,7%	62,4%

Source: CNASEA, 2004

In this example, results are aggregated by great category of schemes. For this subsection, results per measure, regarding non-compliance rate and the importance of anomalies, would be more appropriate.

8 Institutional aspects of evaluation

The commitment stipulating the evaluation of measures included in the NRDP is mentioned in Articles 48 and 49 of E.C. 1257/99 regulation, while the implementation issue is tackled in Section 5, Articles 41 and 44, of E.C. 1750/99 regulation.

The evaluation is undertaken at the regional level (NUTS2) following locally designed prescriptions. Nevertheless, and in order to be able to draw a national synthesis, national guidelines are essential.

Generally speaking, the evaluation aims at:

- measuring and/or assessing, as objectively as possible, results as well as socio-economic and environmental effects of the CTE policy;
- understanding its implementation and enforcement process;
- supporting the backers to have opinion on the evaluated policy.

The evaluation calendar is broken-down into different phases, corresponding to the different periods of the programme: first, during the enforcement/implementation (mid-term evaluation) and second, after the end of the programme (*ex post* evaluation).

Moreover, an evaluation can also be done on a continuous basis (*in itinere* evaluation) or on a thematic basis. These are optional and can be decided either on a regional or on a national level.

The DRAF is in charge of enforcing mid-term and *ex post* evaluations at the regional level. Such evaluations must be carried out by external and independent evaluators (appointed after invitation to tender) and must follow a national methodological framework designed at the national level.

National guidelines were designed in France by AScA (independent consultancy firm, appointed by the MoA) while the mid-term evaluation was conducted in Basse-Normandie) by Eureval-C3E (consultancy and expertise company). In parallel, the CNASEA was in charge of providing all evaluators with required raw data.

While the deadline for achieving the mid-term evaluation was December 31st 2003, the *ex post* evaluation will have to be over by December 31st 2005.

9 Environmental priorities targeted by Regional AESs

Although the aim of the CTEs was quite vast, the environmental magnitude was necessarily present, given that the objective of such contracts was to “set-up farming systems ensuring a sustainable agricultural development” (art. L.311-3 of the Rural Code).

9.1 Official environmental priorities and motivations in the case-study region

There are no precise objectives presented in the French PDRN and these are directly related to the CTE enforcement (national design, but decentralised at the NUTS2 and 3 levels).

Nonetheless, some standard-measures are nation-wise enforced, among which the conversion to organic farming, the protection of endangered breeds and the conversion of arable lands to grasslands.

According to the Regional Agroenvironmental Synthesis (DRAF Basse-Normandie, 2002) the main priorities targeted at the case study level were defined (by local and regional branches of the MoA) as being:

- 1°) Water quality;
- 2°) Soil erosion;
- 3°) Biodiversity;
- 4°) Landscapes.

But the identification of such priorities has been done hurriedly and does not sound quite relevant and appropriate for most of the environmental actors of the Region.

This identification has been done, as presented previously in the document (section **Erreur ! Source du renvoi introuvable.**), at different levels:

- NUTS 3 level (through the NUTS 3 level environmental diagnosis);
- NUTS 2 level (through the Regional Synthesis);
- Territory level (while designing CTE standard-contracts).

At these different levels, the definition of the stakes to be taken into consideration has not always been clearly and precisely done, especially in terms of prioritisation.

This is acknowledged as being mainly due to a lack of time, a low involvement of non-agricultural actors while discussing the stakes and priorities, and a strong willingness of the agricultural profession to have the CTE tool accessible to all farmers. To these reasons can be added a strong governmental willingness to get a high level of uptake, that had implied the fact that nowadays very few CTEs and standard-contracts are properly addressing environmental and territorial stakes.

9.2 Appropriateness of official priorities with regional features/specificities

No environmental experts have been interviewed and questioned on the topic so far, but according to INRA - ESR, Rennes such official hierarchy (as presented in part 9.1) reflects the wishes of the dominant farmers' organisations.

By comparing Basse-Normandie with other French regions, the INRA researchers would have prioritised biodiversity in remarkable zones (*e.g.* RamSAR convention zones, RNPs), landscapes (the region being remarkable by its bocage land-use pattern), water quality in arable zones (cereal and vegetable areas) and erosion in very limited areas.

Indeed, and given as an example, it is quite surprising to notice that biodiversity has not been presented as a main priority in the regional synthesis while it is considered by environmental actors as a main stake (in the same way that water) in the Region. This is especially true in Manche NUTS 3 level where is located the *Marais du Cotentin et du Bessin* RNP, one of the main wetlands with a specific heritage recognised through the RamSAR convention.

Nonetheless, further discussions with appropriate experts on these points can be considered in order to confirm the reliability of such an opinion.

10 Expected environmental efforts

10.1 The baseline situation and the code of good farming practices

Good farming practices introduce the essential environmental standards applied to all farmers within a given territory. In this way are defined minimum criteria that must be respected by all farmers in order to meet essential requirements in terms of environmental protection of natural resources as well as in terms of soil management aiming at preserving the biodiversity.

The general principle points out that when a farmer provides environmental services above the level of reference of the good farming practices, he should be correctly remunerated.

In other words, and from the point of view of the allocation of environment property rights, the usual good farming practices are the thresholds above which farmers' practices may provide amenities to be remunerated by the society and therefore by public authorities.

AESs prescriptions are clearly defined in this way and a conceptual framework for such an approach is presented in the Figure 4.

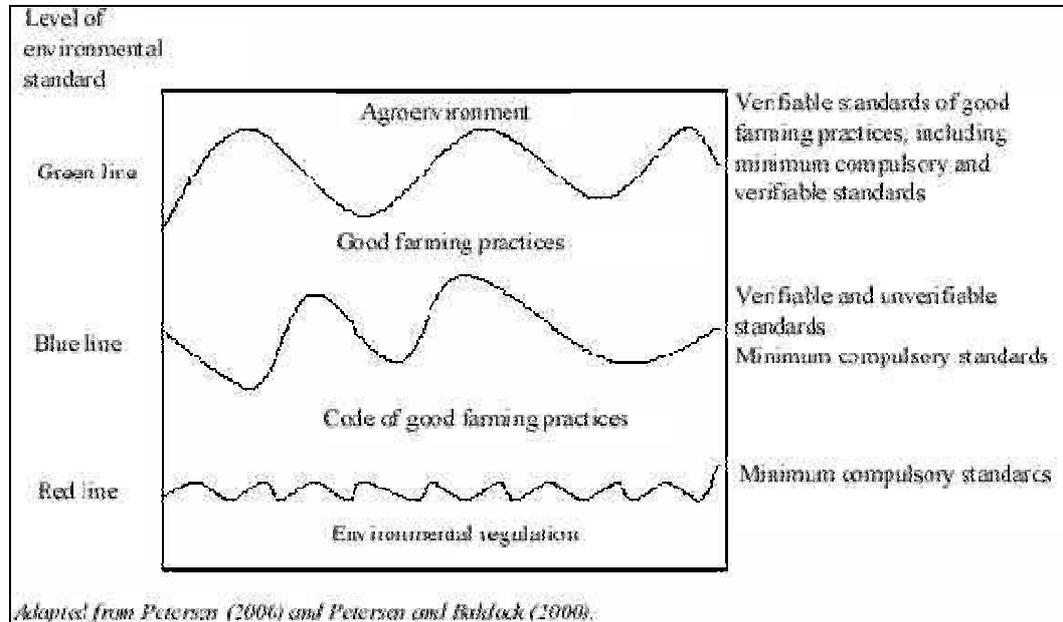


Figure 4: Conceptual framework for environmental standards

The first level (or red level) of environmental standard refers to the enforcement of Regional, National or European environmental legislation.

The second level (or blue level) includes the enforcement of the environmental law and is defined as the minimum standard the farmers must comply with.

The third level (or green level) fixes the level of reference above which a farmer becomes eligible to payments in return of the provision of amenities. The upper limit depends on political objectives and the resource availability.

Moreover, bounds between the second and the third level is not clearly fixed as it may depends upon the region, the agricultural system concerned and is liable to variations in time.

The code of good farming practices was not taken into account (or at least not enforced) in the implementation of 2078/92 AESs.

In contrast, the E.C. 1257/99 regulation explicitly introduces the reference to the good farming practices for the design of AESs and specifies (chapter VI, art. 23.2) that agri-environmental commitments shall involve more than the application of usual good farming practices.

At present, and in most of the cases, good farming practices are only based on existing regulations and legislations within EU members as well as on the enforcement of EU regulations at a national level (RDPs).

As specified in the E.C. 1750/1999 regulation (article 19), a farmer willing to be committed to AESs must go beyond the respect of the usual good farming practices.

Although tackled in article L411-27 of the rural code, the good farming practices are explored more in details in part 9.26 of the PDRN, enforcing the RDR in France.

Indeed the good farming practices are defined in France at three different and complementary levels:

- 1°) Nation-wise, as a national and an operational adaptation of EU regulations, coming along with national regulations;
- 2°) At the local level, given that agroenvironmental measures can be adapted, by NUTS 3 Authorities, to the local context. Anyway, proposed measures are all designed as respecting good farming practices;
- 3°) The good farming practices introduced in the regional (NUTS 2 or NUTS 3 level) agroenvironmental measures, can be used as a basis for the incentive calculation. The amount paid to the farmers conveys the level of efforts made above the minimal level of good farming practices.

Additionally in France, these good farming practices are broken-down into 7 different categories (Appendix 4):

- Farm management;
- Use of fertilisers;
- Nitrogen fertilisers;
- Livestock farming;
- Irrigation;
- Use of chemicals and pesticides;
- Soil conservation.

With regards to these pre-defined categories, the respect of the good farming practices is controlled by the Authorities while proceeding to the on-site controls (Part 7.3).

10.2 Relevance and specificities of AESs objectives and prescriptions

It is quite a sensitive issue to evaluate whether the proposed menu of AESs and measures reflects the settled environmental priorities. The farmers are given a huge number of alternatives (*i.e.* 157 different measures) among which they will choose to implement the more adequate to their specific situation and not always to the local environmental situation.

The document ITAES WP5 P12 DR 01 provided a general conceptual framework and a reference list of indicators which may be used to monitor and evaluate the performance of AES at the regional level. As suggested in the document ITAES WP3 P1 DR 02, we consider the main indicators from the list and indicate the relevance of each of them to AES objectives in the French case study area. This is displayed in form a matrix below (Table 24).

How to assess the relevance of the different indicators in the French case study region rose much debates.

For the time being, we assess the relevance of the different indicators in our case study region according to the uptake of the AES measures.

The higher the uptake, the higher the relevance of the corresponding indicator, even if the environmental objective is not a priority in the region and regardless “strong” and “weak” measures⁴.

In the table below, the measures were ranked according to their contracted areas and to their payments to farmers.

⁴ Indeed, “Strong” and “Weak” measures were defined as such, for a given indicator, by AScA while designing the methodology to undertake the RDP mid-term evaluation report (AScA, 2002)

Table 24: Indicators of environmental performance of AES

INDICATOR	RELEVANCE
<i>VI.1.A. To what extent have natural resources been protected in terms of soil quality, as influenced by agri-environmental measures?</i>	
VI.1.A-1. Soil erosion has been reduced	*
VI.1.A-2. Chemical contamination of soils has been prevented or reduced	**
VI.1.A-3. The protected soil gives raise to further benefits at farm or societal level	*
<i>VI.1.B. To what extent have natural resources been protected in terms of the quality of ground and surface water, as influenced by agri-environmental measures?</i>	
VI.1.B-1. Reduction of agricultural inputs potentially contaminating water	**
VI.1.B-2. The transport mechanisms (from field surface or root zone to aquifers) for chemicals have been impeded (leaching, run-off, erosion)	*
VI.1.B-3. Improved quality of surface water and/or groundwater	
VI.1.B-4. Water protection gives rise to further benefits at farm or societal level	*
<i>VI.1.C. To what extent have natural resources been protected (or enhanced) in terms of the quantity of water resources, as influenced by agri-environmental measures?</i>	
VI.1.C-1. The utilisation (abstraction) of water for irrigation has been reduced or increase avoided	
VI.1.C-2. Water resources protected in terms of quantity	*
VI.1.C-3. Protected water resources give raise to further benefits (farm or rural level, environment, other economic sectors)	*
<i>VI.2.A. To what extent has biodiversity (species diversity) been maintained or enhanced thanks to agri-environmental measures through the protection of flora and fauna on farmland?</i>	
VI.2.A-1. Reduction of agricultural inputs (or avoided increase) benefiting flora and fauna has been achieved	**
VI.2.A-2. Crop patterns [types of crops (including associated livestock), crop rotation, cover during critical periods, expanse of fields benefiting flora and fauna have been maintained or reintroduced	*
VI.2.A-3. Species in need of protection have been successfully targeted by the supported actions	
<i>VI.2.B. To what extent has biodiversity been maintained or enhanced thanks to agri-environmental measures through the conservation of high nature-value farmland habitats, protection or enhancement of environmental infrastructure or the protection of wetland or aquatic habitats adjacent to agricultural land (habitat diversity)</i>	
VI.2.B-1. "High nature-value habitats" on farmed land have been conserved	*
VI.2.B-2. Ecological infrastructure, including field boundaries (hedges...) or non-cultivated patches of farmland with habitat function have been protected or enhanced	**
VI.2.B-3. Valuable wetland (often uncultivated) or aquatic habitats have been protected from leaching, run-off or sediments originating from adjacent farmland	
<i>VI.2.C. To what extent has biodiversity (genetic diversity) been maintained or enhanced thanks to agri-environmental measures through the safeguarding of endangered animal breeds or plant varieties?</i>	
VI.2.C-1. Endangered breeds/varieties are conserved	*
<i>VI.3. To what extent have landscapes been maintained or enhanced by agri-environmental measures?</i>	
VI.3-1. The perceptive/cognitive (visual, etc) coherence between the farmland and the natural/biophysical characteristics of the zone has been maintained or enhanced	**
VI.3-2. The perceptive/cognitive (visual, etc) differentiation (homogeneity/diversity) of farmland has been maintained or enhanced	*
VI.3-3. The cultural identity of farmland has been maintained or enhanced	**
VI.3-4. The protection/improvement of landscape structures and functions relating to farmland results in societal benefits/values (amenity values)	**

Key ** = Highly relevant; * = relevant; blank = not relevant

10.3 Use of the knowledge about the agroenvironmental technology in the design of AESs

It exists serious limitations in the evaluation of AES effects based on the measurement of environmental characteristics. The main limitations result from threshold effects, delayed response of agricultural change, equivocal causality of environmental outcomes and the costs of environmental measurements. Because of threshold effects and scale economies in the provision of some environmental services, reaching a critical mass of contracted areas is also important for the effectiveness of many AESs.

Regional adaptation of CTEs designed for Basse-Normandie did not take into consideration threshold and/or scale effects.

Nonetheless lower limits were set up for few specific measures, under which a farmer is not allowed to contract.

This is for instance the case of measure 0301A (winter covering) where at least 5% of the farm UAA, with a minimum of 2 ha, must be involved. For this particular measure, two levels of incentive are proposed whether the farmer is enforcing the specifications over less than 40% of the bare soils or more than 40%. In the latter case, the incentive per hectare and per year is increased by 50%.

The measure 0303A (stubble crushing and incorporation without tillage) is presenting the same rule in terms of uptake and no less than 5% of the area covered by annual crops can be involved in the contract.

Regarding hedgerows, the farmer cannot generally claim for subsidies if he is planning to plant less than 100 linear metres.

11 Environmental impacts

The general framework to assess AES environmental impacts is summarised below

$\text{Environmental effects (farm scale)} = (\text{appropriate objectives}) \times (\text{appropriate management prescriptions}) \times (\text{compliance}) \times (\text{performance effects})$

$\text{Scheme effectiveness} = (\text{Environmental effects}) \times (\text{participation}) \times (\text{scheme threshold effects})$

(cf. WP5 Discussion report, J. Finn; I. Kurz)

The profit in terms of environmental quality resulting from AESs is not easy to assess as (CNASEA, 2003):

- AESs have rarely immediate effects on the environment;
- It is difficult to bring out proper effect of AESs in comparison to the influence of other CAP tools (directives, direct aids of Pillar I, etc...) and other human activities.

11.1 Mid-term evaluation analysis and outcomes

The mid term evaluation of the Rural Development Regulation has been the opportunity for the MoA to develop and implement a method for the appraisal of AES environmental impacts. The institutional framework of the evaluation has been given in Part. 8 of the present document.

Eureval-C3E has therefore conducted the evaluation for Basse-Normandie NUTS2 level, while raw data related to AESs undertaken in the Region were provided by the regional CNASEA office.

To process these loads of data, Eureval-C3E resorted to a sub-contractor (*i.e.* SIRS) that also dealt with maps and cartography issues.

N.B.: According to INRA - ESR, Rennes and professional institutes some data presented in the mid-term evaluation report are not realistic. Therefore it is advisable to be cautious while interpreting the results.

Indeed, two mid-term reports were conducted simultaneously by Eureval-C3E, one targeting AESs (*i.e.* E.C. 2078/92 regulation background) and the other one focusing specifically on CTEs.

Objectives, methodology and results were already presented in the discussion report WP5 P1 DR01 (*i.e.* French contribution through the translated PDRN mid-term evaluation).

The consultancy enterprise (AScA) wrote an agroenvironmental assessment guide where the potential impact of the different AES measures is qualified as “High”, “Low” and “no expected effect” for each indicator (AScA, 2002). However, the classification of measures as weak or strong for a particular indicator is quite unclear. For instance, there is no consistency between being strong and the premium which is offered.

Within this framework, the evaluation committee had the opportunity to maintain or to change the qualification of the different measures at the NUTS2 level. It indeed was maintained in Basse-Normandie.

Moreover different environmental zonings corresponding to some indicators have been used: zones with high or very high erosion risks, nitrate vulnerable zones, and so on.

Combined with the measure qualification, these zones allow the assessment of the concentration and more or less relevant location of contracted areas (cells are the 1,814 municipalities of the region).

The mid term evaluation showed that the measures are poorly targeted, the share of contracted areas in zones of interest always remaining under 10%, and usually under 2 or 3%.

Calculated indicators aim at evaluating agricultural areas concerned by AE measures, having a potential impact on the environment, for a determined environmental stake. These areas are then compared to the whole agricultural areas concerned by the stake.

$$I = \frac{\text{Contracted area (ha)}}{\text{Total stake area (ha)}}$$

7 groups of indicators were indeed taken into consideration:

1°) Soil erosion (S1): Area concerned by measures having a positive effect on soil erosion, within zones presenting a medium to high risk of erosion.

Table 25: Uptake rate for indicator S1

S1 Level of risk	Potential impact of the measures	Relevant AE measure areas (ha)	UAA per concerned level of risk (ha)	Ratio
Medium	Low	286,67	110 408,00	0,26%
Medium	High	2 887,75	110 408,00	2,62%

High	Low	147,62	87 939,00	0,17%
High	High	2 757,45	87 939,00	3,14%
Very high	Low	7,72	67 700,00	0,01%
Very high	High	4 968,66	67 700,00	7,34%

2°) Water quality – Nitrates:

- Reduction of inputs (Qn1): Share of “vulnerable nitrate zones” where measures aiming at reducing the nitrogen inputs have been contracted;
- Reduction of transfers (Qn2): Share of “vulnerable nitrate zones” where measures aiming at reducing the nitrogen transfers to aquifers have been contracted.

Table 26: Uptake rate for indicators Qn1 and Qn2

Water quality – nitrates	Potential impact of the measures	Contracted area (ha)	Contracted length (linear metres)	UAA within vulnerable zones (ha)	Ratio
Qn1	Low	16 331,42	-	410 198	3,98%
Qn1	High	35 851,34	-	410 198	8,74%
Qn2	Low	818,77	55 682	448 875	0,18%
Qn2	High	32 546,8	-	448 875	7,25%

3°) Water quality – Pesticides:

- Reduction of inputs (Qp1): Share of “pesticides areas” where measures aiming at reducing the agri-inputs have been contracted;
- Reduction of transfers (Qp2): Share of “pesticides areas” where measures aiming at reducing the pesticide transfers have been contracted.

Table 27: Indicators Qp1 and Qp2

Water quality – Pesticides	Potential impact of the measures	Contracted area (ha)
Qp1	Low	17 088,68
Qp1	High	8 953,69
Qp2	Low	301,73
Qp2	High	42 859,56

4°) Water quantitative management:

- Irrigation giving up (Q1): Share of water distribution areas where measures aiming at reducing the irrigation have been contracted;
- Irrigation reduction (Q2): Share of water distribution areas where measures aiming at reducing water quantities have been contracted.

None of potentially concerned measures were undertaken in Basse-Normandie.

5°) General biodiversity:

- Input reduction (B1): Share of the regional area where input reduction measures, favourable to the biodiversity, have been contracted;
- Crop arrangement (B2): Share of the regional area where crop arrangement measures, favourable to the biodiversity, have been contracted;
- Vegetation in critical periods (B3): Share of the regional area where measures aiming at promoting the setting up of vegetation, favourable to the biodiversity, during critical periods of the year have been undertaken;
- Ecological infrastructures (B4): Part of the regional territory covered by measures promoting ecological infrastructures (or unexploited plots) potentially used as habitat.

Table 28: Uptake rate for indicators B1, B2, B3 and B4

General biodiversity	Potential impact of the measures	Contracted area (ha)	Contracted length (linear)	Potential area of uptake (ha)	Ratio
B1	Low	30 812,39		568 372	5,42%
B1	High	14 790,99		568 372	2,60%
B2	Low	4 971,61	5 182	461 472	1,08%
B2	High	29 219,20		461 472	6,33%
B3	Low	0		2 896	0%
B3	High	48,76		2 896	1,68%
B4	Low	445,79	1 921 016	69 167	0,64%
B4	High	1 410,77	34 094 413	69 167	2,04%

6°) Remarkable biodiversity:

- Species protection (Br1): Share of the regional area concerned by measures specifically targeting the protection of remarkable species;
- Habitats protection (Br2): Share of Natura 2000 areas concerned by measures aiming at protecting those habitats;
- Rare breeds protection (Br3): Number of engaged animals compared with the total number of the concerned breed. But none of the concerned measures (1501 to 1506) were contracted.

Table 29: Indicators Br1, Br2 and Br3

Remarkable biodiversity	Potential impact of the measures	Contracted area (ha)	Length relevant of specie preservation (ha)
Br1	-		
Remarkable biodiversity	Potential impact of the measures	Contracted area (ha)	Estimated regional UAA within Natura 2000 sites
Br2	-	62 895 242	50 048,11
Remarkable biodiversity	Potential impact of the measures	Number of engaged animal	Total stock of the concerned breed
Br3	-	0	-

7°) Landscape:

- Diversification (P1): Share of the regional area concerned by measures contributing to maintain and enhance the landscape diversification;
- Territorial identity (P2): Share of the regional area concerned by measures contributing to the heritage preservation and/or the creation of a territorial identity.

Table 30: Uptake rate for indicators P1 and P2

Landscape	Potential impact of the measures	Contracted area (ha)	Contracted length (metres)	Regional UAA (ha)	Ratio
P1	-	86 415,34	46 432 359,72	1 260 454	6,85%
P2	-	28 537,77	46 432 260,51	1 260 454	2,26%

According to the mid-term evaluation report, the CTE programme sounds irrelevant in terms of effectiveness, mostly because the policy kept on wavering between two objectives:

- to improve the environment by targeting areas with strong stakes;
- to let the process accessible to all in order to make aware as many farmers as possible of environmental and territorial issues.

The latter point has been mainly favoured to the detriment of an environmental improvement.

The report does not mention any clear conclusion either recommendation.

11.2 AES effects on agricultural practices

This section aims at identifying and if possible quantifying the AES effects on farmers' practices.

AESs and measures can change or maintain the current practices, which depends on their prescriptions.

Measure prescriptions, in the Regional agroenvironmental synthesis, precisely specify the expected practices or changes in practices. Hence the AES effects on agricultural practices will depend on the farmers' compliance with their contractual commitments. For a particular scheme or a particular measure the compliance rate may be assessed by using random control outcome (refers to section 7.4).

Generally speaking, within a given programme, the most contracted measures are those offering a good level of incentive for low environmental constraints.

The implementation of agroenvironmental measures within the CTE process had implied some changes of agricultural practices among some of the concerned farms, but it had also strengthened the application of already applied practices. This was not the case under the previous regulation (*i.e.* 2078/92) given that it was impossible to subsidise the existing.

11.2.1 Improvement effects

= Changes of agricultural practices to achieve environment quality.

The improvement effects are correlated with measures aiming at changing the agricultural practices.

Indeed, most of the measures proposed in the PDRN aim at improving the current situation (*e.g.* winter covering, extensive grassland management, reduction of inputs, etc...).

It is nonetheless quite difficult to properly assess the impact of such measures in terms of improvement effects as it mainly depends on the farmers' compliance with the prescriptions.

11.2.2 Protection effects

= Maintenance of existing agricultural practices to maintain environmental quality.

Protection effects refer to measures aiming at maintaining an already-existing agricultural system and/or practices acknowledged as having a positive impact on the environmental quality.

Within the CTE process, only measures aiming at maintaining fixed landscapes elements (low walls, hedgerows, etc...) and those aiming at preserving the genetic diversity of local endangered breeds and species can be considered as having potential protection effects on the environment.

11.3 AES environmental impacts/indicators

The AES environmental impacts and indicators issue, as proposed by the EU, has been deeply tackled by Euveral-C3E while implementing the RDP mid-term evaluation, and was presented in the discussion report WP5 P1 DR01 (*i.e.* French contribution through the translated PDRN mid-term evaluation). This has been summarised in section 11.1 of the present document.

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13 Glossary

ADASEA: “Association départementale d’aménagement des structures des exploitations agricoles”

Non-profit organisation (association) whose members are farmers’ unions, the body in charge of farm structures, experts (farm accountants, real estate and land value specialists) and the Ministry of Agriculture.

ANDA: “Association Nationale pour le Développement Agricole”.
National association for the agricultural development.

CAD: “Contrats d’agriculture durable”
Sustainable Farm Contract which replaces CTE scheme and which is simpler and focusing on major environmental issues.

CDOA: “Commission Département d’Orientation Agricole”
NUTS 3 level commission for agricultural guidance

CNASEA: “Centre National d’aménagement des structures des exploitations agricoles”
agency acting on behalf the Ministry of Agriculture with regional branches at the NUTS 2 level

CRAE: “Comité Régional Agri-Environnemental”
Agrienvironmental regional (NUTS 2 level) committee

CRDA: “Comité Régional de Développement Agricole”
Committee created within the chamber of agriculture, involved in territorial diagnosis (CTE standard-contracts design process), in liaison with local steering committees.

CTE: “Contrat Territorial d’Exploitation”
farming territorial contracts

DDA: “direction départementale de l’agriculture”
Representant of the Ministry of Agriculture at the NUTS 3 level

DOCUP: “document unique de programmation”
The DOCUP have three main objectives. Documents concerning aim 1 and 2 of European legislation and financed by AEGGF. Those documents are designed and implemented at a regional level.

FNSEA: “Fédération Nationale des Syndicats d’Exploitants Agricoles”
National Farmers’ Unions

OGAF: “Operation Groupée d’Aménagement Foncier”
Equivalent to an integrated land management operation

OLAE: “Opérations Locales agri-environnementales”
Agri-environmental local operations

ONIC/ONIOL: “Office national interprofessionnel des Céréales/ Des Oléoprotéagineux”

Those institutes manage crops and CAP funding attributed to crops. They are the competent institutes to implement and pay rotational measure instead of the CNASEA.

PDRN: “Plan de développement rural national”
National Rural Development Programme

PHAE: “Prime herbagère Agro-environnementale”
The Grazing Agro-environmental Scheme has replaced in 2003 the grassland premium scheme (*i.e.* PMSEE).

PMSEE: “Prime au Maintien des Systèmes d’Elevage Extensif”
Grassland premium scheme (replaced in 2003 by the PHAE).

SMI: “Surface Minimale d’Installation”
This area of reference is the minimum area required to be officially recognised as a farmer under the French law.

14 Appendixes

APPENDIX 1

Conditions, commitments and payments of the main measures (1257/99)

Measures	Designation	Specifications and farmers' commitments	Payments
0301A	Winter covering of arable land (intercropping)	<ul style="list-style-type: none"> - Winter covering of arable land on, at least, 5% of the UAA, with a minimum of 2 ha. - Rotational measure. - Intercrops should belong to the following families: Graminae (rye, rye grass, ...), Brassiceae (rape, ...), Leguminosae and Hydrophyllaceae. - Sowing within maximum 15 days after harvest and by October 31st at the latest. - No use of chemicals except rye grass destruction. - Organic fertilisation allowed if intercrop sown before October 1st (maximum: doses: manure: 25t ; slurry: 30m³). - Intercrop destruction not allowed before February 15th 	<p>In case of less than 40% of the bare-soil is concerned Basic incentive: 76,22€/ha/year Incentive in case of CTE:91,47€/ha/year + 20% in case of Natura 2000 area</p> <p>In case of more than 40% of the bare-soil is concerned Basic incentive: 114,33€/ha/year Incentive in case of CTE: 137,20€/ha/year + 0% in case of Natura 2000 area</p>
2001A	Extensive management of grasslands through cutting (or grazing)	<ul style="list-style-type: none"> - Bans: levelling, afforestation, burn-off, slashing and burning, underground draining, silage, direct foddering in case of exclusive cutting management. - Organic fertilisation: 65 Units N/ha in case of exclusive cutting management, 45 Units N/ha in case of mix management (cutting + grazing) and 30 Units N/ha in case of exclusive grazing management. - Mineral fertilisation limited to 60-60-60 / ha / year. - To keep up to date a registration book recording all organic and mineral fertilisation activities undertaken within the whole farm. 	<p>Basic incentive: 76,22€/ha/year Incentive in case of CTE: 91,47€/ha/year +20% in case of Natura 2000 area</p>

		<ul style="list-style-type: none"> - Localised chemical weeding (on thistles, nettles, etc...) allowed upon approval of the technical committee. - Maximum 1,8 LU/ha in case of grazing. - Planning of grazing and cutting activities. - Respect of the cutting dates (annually given by the technical committee). - Tillage forbidden. - Liming input allowed if soil pH < 5,8 in case of marshland and 6,2 in other cases. 	
0901A	Reduces use (-20%) of nitrogen fertiliser	<ul style="list-style-type: none"> - Compulsory combination with 0903A measure. - Rotational measure. - All farm areas sensitive to nitrogen inputs (river banks, etc...) must be included. - Respect of nitrogen application ceiling, established by an authorised organism, on all non-included areas. - The 20% reduction of nitrogen applications will be set-up with regard to reference data established for each concerned crop (N balance method from soil and remainders analysis). - Over the 5-year period, soil analysis on all included plots (or homogeneous land blocks) according to the ratio of 1 analysis for 3 ha. - N remainders analysis before spring, for winter crops. - Registration of agricultural practices on all farm fields. 	<p>On straw cereals Basic incentive: 56,25€/ha/year Incentive in case of CTE: 70,28€/ha/year +20% in case of Natura 2000 area</p> <p>On maize: Basic incentive: 85,68€/ha/year Incentive in case of CTE: 102,75€/ha/year +20% in case of Natura 2000 area</p> <p>On vegetables: Basic incentive: 129,28€/ha/year Incentive in case of CTE: 155,04€/ha/year +0% in case of Natura 2000 area</p>

			<p>On oleaginous: Basic incentive: 76,83€/ha/year Incentive in case of CTE: 96,04€/ha/year +20% in case of Natura 2000 area</p> <p>On other cash crops (oleaginous excluded): Basic incentive: 88,12€/ha/year Incentive in case of CTE: 110,07€/ha/year +20% in case of Natura 2000 area</p>
0801A	Integrated crop management	<ul style="list-style-type: none"> - Respect of local technical recommendations from agricultural services, control of the spray every 3 year and to keep up to date a registration book. - Fixed measure. - To manage the product (with regard to their chemical composition) on the basis of a plot diagnosis. - Local chemical application. - No chemical treatments during the high-transfer risk period. - Careful supervision of the parcels. - Use of less disease-sensitive varieties. - No chemical treatment along the river banks. - In case of sloppy plots (slope >5%), parcels located along a waterway, sandy soils or plot drained for less than 5 years and other sensitive parcels, different and specific type of molecules must be applied depending on the type of water concerned (groundwater or surface water). - In case of maize cultivation, and as a rotational measure, the atrazine (herbicide) must be banned if its concentration in the water is above the 	<p>Basic incentive: 37,47€/ha/year Incentive in case of CTE: 44,97€/ha/year +20% in case of Natura 2000 area</p> <p><u>In case of no-use of atrazine on maize cultivation</u> Basic incentive: 50,82€/ha/year Incentive in case of CTE: 60,98€/ha/year +20% in case of Natura 2000 area</p>

		standards	
2001B	Extensive management of grasslands through cutting (or grazing), Option: Withdrawal of the organic fertilisation	- Same specifications as 2001A except that the organic fertilisation must be suppressed.	Basic incentive: 150,54€/ha/year Incentive in case of CTE: 180,65€/ha/year +20% in case of Natura 2000 area
0903A	Fertilisation adapted to analysis results	- A combination with the 0901A measure implies a reduction of 11,13€ the incentive. - Expected yield = average of the 8 previous years - The whole farm area should be targeted - Fertilising schedule established according the balance method in order to define the NPK needs. - Over the 5-year period, soil analysis on all included plots (or homogeneous land blocks) according to the ratio of 1 analysis for 3 ha. - Yearly N remainders analysis done in early spring for winter crops with the ratio of 1 analysis for 20 ha. - Input registration of fertilising components.	Basic incentive: 9,27€/ha/year Incentive in case of CTE: 11,13€/ha/year +0% in case of Natura 2000 area
2001C	Extensive management of grasslands through cutting (or grazing), Option: Mineral fertilisation limited to 30-20-20	- Same specifications as 2001A except that the mineral fertilisation must be limited to NPK 30-20-20	Basic incentive: 104,80€/ha/year Incentive in case of CTE: 125,77€/ha/year +20% in case of Natura 2000 area
0303A	Stubble crushing and incorporation without tillage	- Minimum area to involve: 5% of annual crop area, with a minimum of 1 ha - Stubble/maize canes crushing and scattering within 15 days after the harvest (except if the straws are collected and/or the stubble is less than 20 cm high) - Superficial stubble cultivation (maximum 5 cm) within 15 days after the harvest. - No ploughing before March 1 st of the coming year.	Basic incentive: 45,73€/ha/year Incentive in case of CTE: 54,88€/ha/year +0% in case of Natura 2000 area

Source: DRAF, 2002

Measures	Designation	Specifications and farmers' commitments	Payments
0502A	Plantation and maintenance of lined up or isolated trees	<ul style="list-style-type: none"> - Minimum 10 trees/100m. - Protection and maintenance of the line with the installations of stakes, individual protections as well as regular pruning. - Respect of legal distance between individuals. - Use of species adapted to the local conditions. 	Basic incentive: 10,54€/tree Incentive in case of CTE: 12,65€/tree (up to 30 trees/ha) +20% in case of Natura 2000 area
0503A	Tree plantation on embankments	<ul style="list-style-type: none"> - Minimum 10 trees/100m. - Density plantation: 1 tree every 8-10 metres. - Use of minimum 3 years old local species. - Respect of legal distance for tall trees. - Clearing twice a year. - Undertaking of excavation work. - Mulch laying. - Fence installation on both side. - Pruning in 3rd and 5th year. - Achievement of 2 selective weedings. 	Basic incentive: 10,67€/tree Incentive in case of CTE: 12,81€/tree (up to 30 trees/ha) +20% in case of Natura 2000 area
0504A	Creation and maintenance of ponds	<ul style="list-style-type: none"> - In concerns only <i>ex nihilo</i> ponds - Minimum area: 50sqm. - Banks stabilisation, maintenance and plantation. - No remblai levelling on the edge of the pond. - No reusing of the remblai to fill in another pond or wetland. 	Basic incentive: 101,63€/pond Incentive in case of CTE: 121,96€/pond (with the limit of one pond / ha) +20% in case of Natura 2000 area
0601A	Restoration of hedgerows	<ul style="list-style-type: none"> - Cleaning of the hedgerow to be rehabilitated but one dead tree will be kept per 100 metres in order to maintain the settlement of some species. - Replacement of missing elements and introduction of new plants in order to reach a density of one stem (or stump) for 2 metres. - Use of local broad-leaved species and adapted species proposed by the Forestry Development Institute. - Plantation under mulching after a deep soil work (subsoiling). - Use of young plants (max. 4 years). 	Basic incentive: 2,87€/m Incentive in case of CTE: 3,45€/m (up to 200m/ha) +20% in case of Natura 2000 area <u>In case of collective approach</u> Basic incentive: 3,43€/m Incentive in case of CTE: 4,12€/m (up to 200m/ha) +0% in case of Natura 2000 area

		<ul style="list-style-type: none"> - Adapted protection (fence or individual protection). - Introduction of bushy species after one year. - Mechanical clearing around the stems. - Optional commitment: lateral pruning (maximum twice within 5 years; 1st and 5th year). 	
0601B	Restoration of hedgerows	- Same specifications as 0601A, but with installation of a protective fence.	<p>Basic incentive: 3,13€/m Incentive in case of CTE: 3,76€/m (up to 200m/ha) +20% in case of Natura 2000 area</p>
0602A	Maintenance of hedgerows	<ul style="list-style-type: none"> - First lateral pruning the first two years of the contract. The second pruning will be done before the end of the contract. - Collection and burning of the residues. - Replacement of the missing individuals (minimum density 1 tree/20m) - Mechanical clearing around the stems. - In case of low hedgerow, use of the crusher (or cutting material) minimum twice a year. 	<p><u>In case of low hedgerow</u> Basic incentive: 0,09€/m Incentive in case of CTE: 0,11€/m (up to 400m/ha) +20% in case of Natura 2000 area</p> <p><u>In case of high hedgerow (1 side)</u> Basic incentive: 0,17€/m Incentive in case of CTE: 0,21€/m +20% in case of Natura 2000 area</p> <p><u>In case of high hedgerow (2 sides)</u> Basic incentive: 0,36€/m Incentive in case of CTE: 0,43€/m (up to 400m/ha) +20% in case of Natura 2000 area</p>
0603A	Restoration of ditches	<ul style="list-style-type: none"> - Utilisation of the parcels located within the liable to flooding areas. - To draw a working plan. 30% minimum of the work must be achieved by the second year. - The ditch must be clean out once during the 5 years. - The work must be done from August 1st. 	<p>Basic incentive: 0,26€/m Incentive in case of CTE: 0,31€/m (up to 400m/ha) +20% in case of Natura 2000 area</p> <p><u>In case of one mechanical clean out/5 years</u> Basic incentive: 0,36€/m</p>

			<p>Incentive in case of CTE: 0,43€/m</p> <p><u>In case of two mechanical clean out/5 years</u> Basic incentive: 0,46€/m Incentive in case of CTE: 0,55€/m (up to 400m/ha)</p>
0604A	Rehabilitation of river banks	<ul style="list-style-type: none"> - Removal of dead trees (but one dead tree will be kept per 100 metres in order to maintain the settlement of some species). - Utilisation of the parcels located along the waterway. - Fertilisation forbidden within 10 metres from the waterway. - Clearing and pruning of edging trees. 	<p>Basic incentive: 0,77€/m Incentive in case of CTE: 0,92€/m (up to 200m/ha) +20% in case of Natura 2000 area</p>
0604B	Rehabilitation of river banks	<ul style="list-style-type: none"> - Same specifications as 0604A measure, but with the installation of a protective fence (at least one post every 4 metres with 4 rows of barbed wire) 	<p>Basic incentive: 1,11€/m Incentive in case of CTE: 1,33€/m (up to 200m/ha) +20% in case of Natura 2000 area</p>
0605A	Rehabilitation and maintenance of low walls	<ul style="list-style-type: none"> - Stone wedging. - Clearing of the low wall and the surroundings. - Using of the same type of stone as the original low wall in case of rubble stone replacement. 	<p><u>In case of low wall rehabilitation</u> Basic incentive: 0,63€/m Incentive in case of CTE: 0,76€/m (up to 400m/ha) +20% in case of Natura 2000 area</p> <p><u>In case of low wall maintenance only (rehabilitation already achieved)</u> Basic incentive: 0,32€/m Incentive in case of CTE: 0,38€/m (up to 400m/ha) +20% in case of Natura 2000 area</p>
0610A	Restoration of ponds	<ul style="list-style-type: none"> - Minimum area: 10sqm - Measure undertaken within a management scheme with the communities. The rehabilitation should be relevant. - Cleaning of deadwood, scrap iron, rubbish, etc... - Emptying and cleaning out of the pond. 	<p>Basic incentive: 88,92€/pond Incentive in case of CTE: 106,71€/pond (maximum 1 pond/ha) +20% in case of Natura 2000 area</p>

		- Remodelling and compaction of the pond edges.	
0615A	Maintenance of isolated trees	<ul style="list-style-type: none"> - Pruning. - Ground maintenance. - Installation of individual protection 	Basic incentive: 3,81€/tree Incentive in case of CTE: 4,57€/tree (up to 20 trees/ha) +20% in case of Natura 2000 area
0616A	Maintenance of coppices	<ul style="list-style-type: none"> - Size of the coppice between 50 and 1 000sqm. - Ground and tree maintenance by crushing. - The surrounding area must also be properly maintain. 	Basic incentive: 10,17€/100sqm Incentive in case of CTE: 12,20€/100sqm. (up to 1 000sqm/ha) +20% in case of Natura 2000 area

Source: DRAF, 2002

APPENDIX 2

SMI definition and example of degression calculation

Defined in article L312-6 of the Rural Code, the SMI is presented as the minimum area (under mixed farming system) from which a couple will be able to get enough money for a basic living. The value of the SMI is set at the NUTS 3 level, and depends on the type of crop concerned as well as on the production area. Regularly revised, the SMI under mixed farming system cannot, in any case, be less than 30% of the national SMI (25 ha at present, revised every 5 years).

For other productions (*e.g.* specialised farming systems, tree growing, etc...) coefficients, defined by the MoA, are applied to the SMI as defined above.

For instance, in Manche, the SMI is defined for 7 different production areas:

- | | |
|----------------------------|--------------------------------|
| - La Hague: 27ha | - Bocage St Lô-Coutances: 22ha |
| - Val de Saire: 25ha | - Avranchin: 20ha |
| - Cotentin: 25ha | - Motainais: 20ha |
| - Bocage de Valognes: 22ha | |

For specialised farming systems, the SMI value is different from above as shown in these few examples:

- | | |
|--------------------------------|---|
| - Fruit cropping: 12ha | - Flower cropping (open field): 1,8ha |
| - Nursery (fruit trees): 4,5ha | - Flower cropping (greenhouse, not heated): 0,525ha |
| - Cider apple orchard: 22,5ha | - Flower cropping (greenhouse, heated): 0,225ha |

Concerning the degression rule as presented in part 5.1. an example of calculation will be done with the following data:

- SMI: 25ha
- UAA: 110 ha
- 3 measures contracted over 80ha:
 - Measure 1: 50ha (incentive: 91,47€/ha/year)
 - Measure 2: 20ha (incentive: 228,67€/ha/year)
 - Measure 3: 10ha (incentive: 121,96€/ha/year)

Theoretical aid amount: $(50 \times 91,47) + (20 \times 228,67) + (10 \times 121,96) = 10\,366,50\text{€}$

Average amount/ha: $10\,366,50 / 80 = 129,58\text{€/ha}$

Degression application:

0 – 2 SMI	50 ha x 129,58 € = 6 479 €
2 – 4 SMI	30 ha x 129,58 € x 0,6 = 2 332,44 €
Total aid:	8 811,44 €

APPENDIX 3

Comparison of organic farming aid rates paid by the EU Member States for conversion and on-going payments

Member state	Conversion aid (Euro/Ha/Year)	On-going maintenance aid (Euro/Ha/Year)
UK	<u>Yrs 1&2 (average)</u>	
England	Arable (AAPS) & permanent crops 265	44 (from 2005: 88)
	Other improved land 206	34 (from 2005: 88)
	Unimproved land 26	7 (from 2005: 88)
	Top fruit (Yrs 1-3) 882	44 (from 2005: 88)
Wales	Arable (AAPS) & permanent crops 265	51
	Enclosed 206	51
	Unenclosed 26	15
Scotland	Arable 323	44
	Vegetable & fruit 441	21
	Improved 176	21
	Unimproved or rough grazing 7 (Also capital payments provided)	735 payment for any area
Austria	Arable 327	(all as for conversion)
	Market gardens 508	508
	Grass 250	250
	Vines, hops, Fruit 800	800
Belgium	<u>Yrs 1 & 2</u>	
	Annual crops (AAPS) 181	112
	Other annual crops 300	300
	Grass 297	173
	Vegetables 991/867	744
	Perennial crops (fruit) 842	842
Czech Republic	Horticulture 82.5 (approx.)	82.5 (approx.)
	Arable 55 (approx.)	55 (approx.)
	Grassland 27 (approx.)	27 (approx.)
Denmark	<u>All farms</u>	<u>All farms</u> 114
	Arable with no milk production 409 in Yrs 1&2 275 in Yr 3	
	Intensive pig holdings 382 in Yrs 3-5	
Finland	Yrs 1-5	
	All farms 147	All farms 103
France	Yrs 1&2 Yr3 Yr4 Yr5	None
	Seeds and Vegetables 511 255 255 170	
	Other annual crops 409 205 205 136	
	Orchards 511 255 255 170	
	Grass 180 90 90 60	
	Olives 640 640 385 255	
	Other permanent crops 980 980 588 392	

Germany (National rates can be varied -20% to + 40% by Länder)	Arable and grass 125 Permanent crop 600	100 500
Greece	Annual Crops (incl.veg) 170-300 Perennial crops 440-840	170-300 (all as for conversion) 440-840
Hungary	Some help with direct costs, e.g. purchase of equipment. System of direct payments currently being devised	System of direct payments currently being devised.
Ireland	All holdings (excl hort. under 3ha) 112 Horticultural holdings under 3ha 149	56 75
Italy	Paid under regional programmes Arable 90 – 250 Grass 200- 250 Olives 320 – 400 Vines and fruit trees 450- 700	(all as for conversion) 90 – 250 200 – 250 320 - 400
Luxembourg	Yrs 1&2 Yrs 3-5 Holdings up to 70 ha 175 150	None
Netherlands	None	None
Poland	Arable 70 Vegetable 116 Top Fruit 140 Berries 128 Grassland 23	58 93 128 116 19
Portugal	Arable without irrigation and olives 181 Irrigated crops, hort. & glasshouse 302 Fruit without irrigation 362 Fruit with irrigation 604 Vines 483	181 (all as for conversion) 302 362 604 483
Spain	Paid under regional programmes across regions 305	305 (all as for conversion)
Slovenia	Grassland 200 Horticulture 370 Glass Houses 450 Inspection and certification costs 50	(all as for conversion) 370 450 50
Sweden	Grass 57 Cereals 149 Oil seed, sugar beet, potatoes 253 Vegetables 575 Fruit 862 Per livestock unit 195	57 (all as for conversion) 149 253 575 862 195

Defra/GA, 16.9.2004, Support014

APPENDIX 4

The good farming practices as detailed in the French PDRN

TOPIC	GENERAL COMMITMENT
Farm management	To maintain the farm as a good father. Proper maintenance of ways and footpaths.
Use of fertilisers	To get a market authorisation before selling any fertiliser.
Nitrogen fertilisers	Vulnerable zones : farming must keep up to date a registration form, regarding the use of nitrogen fertilisers, fertilisers application during the requirements periods and not to spread more than 170 units of nitrogen (livestock source) per hectare. Structural exceeding zones: to comply with programmes of structural surplus resorbtion (application on available and suitable areas, effluents treatment/processing, exportation out of exceeding zones...).
Livestock farming	To follow animal welfare conditions To declare the farm and to keep up to date farm and animal records To use only allowed medicines and substances To follow general prescriptions and guidelines or those fixed by local Authorities
Irrigation	To manage the use of water resources (Art.2, water regulation 1992) ensuring: To preserve marshy areas as well as wetlands To protect from all pollutions and to rehabilitate the quality of surface and groundwater, as well as sea water up to territorial waters To develop and protect water resources To promote water as an economic resource and to enhance its distribution.
Use of chemicals and pesticides	Any unauthorised use is forbidden (related to market authorisation procedure) To be cautious while carry and stocking To forbid to leave packagings to burn them in natural areas To destroy all out-of-date or unused
Soil conservation	Forbidden use of mountain areas where grazing is forbidden For municipal lands where grazing is allowed, the related regulation must be strictly followed