Strategic Orientations and adaptability of the new Agro-Environmental Measures for the period 2000-2006: the case of Trás-os-Montes and Alto Douro

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1. Introduction

In an earlier paper (Poeta et al., 2000), we referred to a series of factors that help explain the results achieved in applying Agro-Environmental Measures (AEMs), in the Portuguese region of Trás-os-Montes and Alto Douro, between 1994 and 1998, as part of the Second Community Support Framework. That article analyses the factors that have been conducive to successful takeup of AEMs, bearing in mind that they are adapted to regional conditions, impose few significant chan-

ges on local production systems and, therefore, have been accorded a high level of farmers take-up.

The present study suggests a number of strategic orientations that we feel are fundamental to the successful implementation of the new AEP in Trás-os-Montes and Alto Douro, in the period 2000-2006, as part of the Third Community Support Framework.

In the sections that follow, a comparison will be made of our proposed guidelines and those presented as part of the Rural Development Plan (PDRu) of 2000-2006 for the region under consideration.

It should be stressed, however, that with the implementation of the new AEP yet to be launched, our critical reflections are necessarily of a relatively general nature and can only be further refined once the practical implications

Abstract

One of the objectives of this study was to define a number of strategic guidelines that we feel are fundamental to the successful implementation of the new Agro-Environmental Programme (AEP) in Trás-os-Montes and Alto Douro, in the period 2000-2006, as part of the Third Community Support Framework. The strategic orientations guidelines developed are based on the assumption of the need to conserve and protect the environment that surround us, by developing, or by preserving an agriculture that is increasingly balanced, environmentally-friendly, and more self-sufficient. To this end, various interviews were carried out with regional entities and organisms. In the final part of the study, a comparison was made between our guidelines and those presented as part of the Rural Development Plan (RDP) of 2000-2006, for the region under consideration. For this study, data was used from COSTA (2001).

Résumé

L'un des objectifs de cette étude est de définir un certain nombre de directives stratégiques qui s'avèrent fondamentales pour la réalisation du nouveau Programme Agro-Environnemental dans les régions de Trás-os-Montes et Alto Douro, pendant la période 2000-2006, au sein du troisième Cadre Communautaire d'Appui. Les orientations stratégiques développées se basent sur la nécessité de protéger l'environnement qui nous entoure, à travers la valorisation ou la conservation d'une agriculture de plus en plus équilibrée, éco-compatible et autosuffisante. A cet effet, plusieurs enquêtes ont été menées auprès d'organisations régionales. La dernière partie de cette étude illustre une comparaison entre nos directives et les orientations présentées en tant qu'élément du Programme de Développement Rural (PDR) pendant la péeiode 2000-2006, pour la région à l'étude. Pour cette étude, on a utilisé les données de COS-TA (2001). of the application of the new measures begin to emerge.

In general terms, a certain continuity can be identified between the new AEP and the basic structure of measures of the Reg. 2078/92 that preceded it. Certain adjustments have been made so as to specify more clearly how the contribution of traditional farming systems to environmental protection and conservation can be enhanced, particularly since the new AEMs commit farmers to something more than the mere

adoption of the current best practices (DGDR, 1999a).

2. Proposals to be contemplated for a future agro-environmental programme in Trás-os-Montes and Alto Douro

The results of our analysis of the AEP application during the Second Community Support Framework raised a number of key points that have been fundamental to the development of the strategic orientations we propose in this paper:

- firstly, Trás-os-Montes and Alto Douro are far from being one of the more problematic regions with regard to the negative impacts of agriculture on the environment:
- secondly, most of the farmers who showed interest in adopting AEMs did so because they saw them as a form of social support to farming, rather than as a

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means for the protection of the environment and conservation of natural resources and amenities.

Given the prior considerations, the principal strategy guidelines that we defend for the new AEP implementation in the region, all of them being more or less inter-related or associated, are the following:

(A) The double approach of the AEP

The key to successful implementation of the new AEP in Trás-os-Montes and Alto Douro requires that the strategy be simultaneously undertaken on two fronts, which constitute the principal orientation strategy that we propose in this paper, in line with two fundamental requirements:

- a) a greater environmental emphasis The need to give greater emphasis to the programme's environmental objectives, particularly those promoting sustainable agriculture, and would require a clearer identification of the relationship between the proposed measures and the environmental objectives they are designed to attain.
- b) incorporating the regional entire contextual environment The need to stress the crucial importance of incorporating into the design of the implementation strategy the region's entire contextual environment, in which, according to data collected in our research, the problem and process of demographic decline figures and consequences are the most prominent.

In this regard, it is imperative that the new AEP should not diverge too radically from what has gone before, but should encourage farmers in the predominant productive systems of the region to gradually and increasingly realign their farm practices with a series of environmental priorities.

(B) The long-term maintenance of agro-environmental practices

The question of the continuity of the agro-environmental practices encouraged by the AEMs is fundamental for programmes of this scope. They should be both sustainable (in general) and adhered (in particular) by those who participate, long after the financial incentives have been removed. Thus all these measures should generate a stream of benefits that will induce farmers to continue to produce in a way that respects agro-environmental priorities even when the financial motivation has been removed. In broader terms, AEMs need to incorporate a number of different characteristics: they must simultaneously provide a return on investment in the long term; be curative, inasmuch as they address existing difficulties; be preventive, by helping avoid future problems.

Without instilling such aims into the content and implementation of the AEP, we run the risk of weaning farmers off previous forms of "subsidy", only to addict them to a new, environmentally-inspired form of payment. One obvious way of promoting the longer-term adoption of the type of measures encouraged by the AEMs would be to aggressively develop the marketing of certified farm products that would facilitate both product differentiation on the part of producers and unambiguous identification on the part of consumers.

(C) Rewarding AEM take-up as a service to society

The desirability of "eco-conditionality", or measures by which monetary transfers are made in return for farmers' adherence to specific environmentally-friendly agricultural practices, constitutes the fundamental assumption on which the perspective adopted in this point is based. Clearly, the distinctive feature of AEMs, compared to other measures implemented in the agricultural sphere, is precisely the type of farming practices they seek to promote.

The purpose of this perspective is to guarantee that the aim of the AEMs be more ambitious than merely the generalisation of "best farming practice".

The term "subsidy", in our view, neither adequately translates the real image and mission of AEMs, nor is it consistent with their objectives. Furthermore, since it is generally accepted that greater social status attaches to payment in return for goods or services rendered, than to receipt of a subsidy, it is perfectly legitimate to strategically deploy the image of "service to the community and society" in pursuit of the widest possible adoption of AEMs and the techniques and practices they promote. If a new set of responsibilities relating to guardianship and protection of the environment are to complement the farmer's more familiar role as supplier of consumer goods, the corresponding functions should, of course, be remunerated. A broader acceptance of the specific concept of payment for environmental services could contribute significantly to a more generalised raising of environmental consciousness among farmers and consumers alike and, in turn, may generate among wider sections of the population a greater recognition of the importance of AEMs in achieving the aims of agricultural and rural development as a whole.

(D) Integrating AEMs into an ecologically profitable rural development model

It seems to us entirely consistent with the previous strategic guideline to integrate AEMs into an ecologically based income-generating rural development model in which, from the farmer's perspective, the achievement of environmental objectives is profitable. More specifically, this would be realised through a number of measures that support the sustainable and integrated development of the rural areas, precisely by promoting sustainability enhancing activities that are, in themselves, profitable.

Thus the main intent of the model is twofold: greater integration, on the one hand, and, on the other, the conception of the development model described above.

We agree with Fino (1993) that the aim of AEPs should be to defend the type of agriculture that respects the environment, while simultaneously evolving as an economic activity, rather than condemning farming to stagnation or retrogression "using defence of the environment as an excuse". The types of agricultural system that it is our aim to preserve and promote are those that can be both healthy and, obviously, economically viable; to do otherwise would lead to their irremediable collapse, without hope of reprieve, when financial aid is no longer available.

(E) A zonal approach to the application of AEPs

In the light of the above discussion, it seems likely that the best results would be achieved through the combined implementation of various measures. In this regard, it seems worthwhile introducing the concept of "zonal plans" which, though by no means new, still found considerable favour among those regional entities and organisms interviewed during our research. In other words, by assembling a set of "broad band" variables that characterise a particular zone, relating for example to soil, climate, relief, and other more narrowly defined factors such as the existence of high value added products, heritage resources, specific habitats, along with their needs, problems and potentialities, it may be possible to identify zones with a high degree of homogeneity for which it would be easier to design a programme.

Such programmes would apply to a geographically delimited zone whose dominant production systems and degree of intensivity or extensivity had been previously specified; specific objectives (e.g. supporting biodiversity) would be established for priority action in each production system and "ecological niche", as well as at the broader agro-ecological level.

In our view, the establishment and execution of AEPs on the basis of zonal programmes provides the most effective way of recognising the diversity of environmental and natural conditions, agrarian structures and systems found across the EU, permitting a better response to the specific needs of each homogeneous zone.

In Trás-os-Montes, the specification of zones of the type described has already been undertaken by Poeta et al. (1998). The following broadly-defined zones were identified on the basis of the research team's general familiarity with the region and its conditions, rather than on new and detailed research:

Zone I: National/Nature Parks (Alvão, Douro Internacional, Montesinho and Peneda-Gerês): Zone II: Douro Demarcated Wine Region;

Zone III: Highland and Upland Areas;

Zone IV: Chestnut producing areas, olive/almond producing areas, fruit producing areas.

Notwithstanding the importance of identifying Priority Intervention Zones, we feel the respective AEMs should be "delivered" in "packages". We mean that implementation would consist of a basic "Level I" plan, containing a series of measures with the same sort of commitments as in those of the first intervention group ("Reduction of the pollutant effects of agriculture") and with the intention of achieving more than just the "best agricultural practice".

Were a "Level II" plan to be adopted, it would attract greater financial aid than that attributed to "Level I" and would include specific measures for key crops and activities. Measures applicable at "Level II" would be available on an individual basis, separated from those forming part of the "package".

With regard to implementation outside the Priority Intervention Zones, a series of measures would be available (as in the previous programme), some to be applied horizontally to those which satisfied the eligibility conditions (Group I - "Reduction of the pollutant effects of agriculture" and Group III - "Conservation of the landscape and natural resources") and the remaining measures (Group II - "Extensification and/or maintenance of traditional agricultural systems") being limited to where a specific conservation problem had occurred. The Zonal Plans fulfilling the function of integrating and co-ordinating the combined implementation of all the measures applicable in a given territory.

It should be added that, in order to verify the effects of this innovatory approach, Pilot Zonal Plans should be implemented in areas that are easily distinguishable at the regional level, for example, Nature and National Parks.

(F) Candidature for AEMs based on the farmunit rather than agricultural activity

AEMs should be transformed into a key means for implementing a territorially-based policy of rural development, targeting the farm-unit, rather than the activity or production system. The main reason for this proposal is that when only part of a property benefits from AEMs, there is the risk that the farmer will want to use the remaining land to make up the losses in productivity, thereby neutralising the effects obtained on the plots covered by the AEMs.

In spite of contributing to the achievement of the AEMs' strategic objectives in the agro-ecological zones in question, there are other risks that can probably be identified. As Rodrigo and Santos (1999) have commented, it is doubtful whether the gains from maximising the effect and the spatial continuity of the measures are compensated by the losses resulting from certain potential benefi-

ciaries finding them less attractive and consequently leaving the respective areas without any protection at all. This being the case, it seems preferable to provide the farmer with a financial incentive to apply for the entire eligible area to be included under the AEMs.

Other advantages, aside from the positive environmental effects, may spring from farm-based rather than activity-based candidatures for AEMs. For example, the process could be administratively simplified, with each applicant selecting the measures which are to be applied to the property in question. Thus, documentation would only have to be submitted once (for the farm) and not numerous times (for each activity), which would also make the monitoring of the process and any checking of paperwork much more straightforward.

(G) Awareness and competency-building among farmers, technical staff and society

If we think of AEMs as a 'new product' about to penetrate a new market, then, logically, one of the first phases of the process, if policy implementation is to be a success, will be to increase awareness of its existence and potential benefits among users, 'knowledge intermediaries' and the public at large. We know from publicity and public information campaigns involving other products or services, how important it is to stimulate curiosity and interest at a general level before providing more detailed information on the item in question. There is every reason to suppose that this approach is also appropriate in familiarising and increasing consumer and public awareness of policy innovations such as AEMs.

For these measures to be successfully implemented, in our efforts to generate interest, we need to communicate a clear and unambiguous idea of the purpose of the measures, what they aim to conserve, why, where and how, so that people will come to act increasingly in line with the policy objectives.

As Rodrigo and Santos (1999) emphasise, given that take-up of AEMs is voluntary, everything begins with the initial decision to apply for inclusion in the programme. For example, in order to have the desired take-up of the measure that provides for "the conservation of woodland consisting of indigenous shrubs and trees", it is crucial that the owners of farmland know that something which can be classified in this way actually exists on their property.

However, there is still much to be achieved both in Trás-os-Montes, in particular, and in Portugal, as a whole, not least of all in the creation of appropriate institutional and operational structures at the regional level to ensure that the implementation of the AEMs can be monitored.

In summary, the strategic guidelines that we feel should be applied in this context are as follows:

1. The familiarisation phase. In our view, in the current

- phase of agro-environmental intervention, the preferred strategy should begin with the familiarisation programme, supported by material containing appropriate technical information that, in expanded/adapted form, could be subsequently employed in the training of both farmers and technical staff from the public, private and associative sectors. These efforts should target, in particular, those areas that are currently of substantial environmental importance, as well as those with potential for environmental improvement, with special emphasis being given to the measures that are most directly and explicitly conservationist in character.
- 2. The training phase. Not only do producers have to be provided with the technical means to fulfil the commitments assumed as beneficiaries of the AEMs, but also 'knowledge intermediaries', namely the technical staff from the regional branches of the Ministry of Agriculture and Rural Development (MADRP), the respective crop/livestock producer associations, the Institute for the Conservation of the Nature (ICN), and the National/Nature Parks and other zones benefiting from 'protected area' status, will require training in how to select candidates, provide initial technical guidance, and administratively monitor implementation and, ultimately, evaluate performance.
- 3. The technical extension phase. The widespread take-up and successful implementation of the AEMs not only depend on appropriate familiarisation and training of farmers and primarily administrative staff, but also on the continuous monitoring undertaken and technical back-up provided by extension agents that, in our view, should be provided by the MADRP.
- 4. 'Educating' the consumer. Successful implementation of the AEMs also needs to take into account the final consumers of the farm products originating in areas covered by AEMs and the public at large who, consciously or otherwise, will indirectly enjoy the effects of environmental conservation and/or more directly 'consume' the improved environmental amenities afforded, in part, by these policy measures. If the products made possible by these 'new' productive contexts are to be fully appreciated both by consumers and the wider population, a conscious effort needs to be made to 'educate' the public - not merely in the abstract, but in concrete terms of a desire to sustain a consumer culture that respects the environment, and a willingness to pay the price for the higher quality products that embody these values, and that will commercially sustain their production long after farmers have ceased to benefit from AEMs.

(H) Defining the parameters of multifunctional monitoring

The literature on the monitoring and evaluation of the AEMs applied to mainland Portugal, in 1994, reports the

lack of clarity with which environmental aims were specified, and the absence of an adequate monitoring process, that together would have allowed an accurate and realistic assessment to be made of the programme performance. With these criticisms in mind, it seems obvious that, in the new agro-environmental initiatives, parameters that clearly reflect programme outcomes must be devised and applied.

The identification of performance indicators thus constitutes a basic and crucial step in narrowing the gap between programme aims and achievements. In our view it is essential to improve the definition and specification of environmental aims, primarily by more clearly identifying their precise nature, the justification for particular conservation initiatives, and the identification of quantifiable environmental variables to assist in the monitoring process.

Moreover, the technical monitoring and the assessment of the 'ecological' impact of AEMs sketched out above could provide the means of continuously adjusting the implementation process as and when changes in environmental conditions were detected.

Finally, it would probably make sense to combine this monitoring process with the periodic verification, once, in many cases; it will be done by direct or remote observation of farmers' compliance with the commitments associated with agro-environmental measures.

3. Comparative analysis of proposed strategic guidelines and the new agro-environmental programme

It appears that some of the guidelines referred to above are, in fact, incorporated into the new AEP to be implemented at national level. From our reading of the new Rural Development Programme (DGDR, 1999a and 1999b) into which the AEMs are integrated, we are able to draw the following evidence:

(1) The twofold approach seems to have been continued, to some extent, in the new programme, though with a more pronounced emphasis being given to the specifically environmental character of the measures. This is evident in the inclusion of measures that bear directly on the environment protection, relating to soil, water and genetic diversity, and others relating to spatial and landscape aspects of territorial conservation including the protection of the traditional character of farmland. Since, without demographic viability, traditional forms of farming will disappear, these measure can be thought of as indirectly combating rural depopulation. In some cases, such as the measure relating to "improvement of the quality of the village environment", the aim of "using rural heritage conservation to reduce the effects of depopulation" (DGDR, 1999a) is quite explicit. In a

similar way, the measure focusing on "traditional systems of polyculture" aims to "counteract the rapid rate of land abandonment, which has serious environmental consequences, particularly the greater propensity for fires" (DGDR, 1999a). Indeed, all measures go beyond the mere prevention of the abandonment of farming, an objective that is already enshrined in the Compensatory Allowances.

- (2) An effort also seems to have been made to support practices at a long-term, given that when a candidate "signs up" for a measure, there is a new component in addition to an incentive, and the compensation for both loss of income and the additional take-up costs applied to non-productive investments of a purely environmental nature, that are nonetheless essential to turning paper commitments into concrete practices (permanently) (Revista do Agricultor, 1998). However, in order to set up some of the mechanisms underpinning the long-term sustainability of environmentally-friendly farming practices, it may be possible to solicit support from initiatives other than the AEMs. For this reason, the whole Rural Development Programme of 2000-2006 needs to be analysed very carefully.
- (3) It is encouraging to see the new programme sharing the view, already stressed above, that successful AEMs shall incorporate a payment in recognition of the service farmers provide to society. Since part of its mission is to help promote the production of agro-environmental public goods, the new policy is able to justify this innovation in market terms, (i.e. legitimate payments for real services rendered to society), and not more as a compensation for socio-economic disadvantage or exclusion. It should be noted that the AEP of 2000-2006 has stressed - as we did - that, farmers benefiting from the AEMs should take on "commitments that go beyond the mere acceptance of best practice" and embrace more widely and deeply the values and objectives that have inspired the policy reforms (DGDR, 1999a).
- (4) To some extent the new programme also echoes the "ecologically-based income-generating rural development model ": each member state of the EU has to formulate "rural development plans" that cover all the components contained in the basic regulations, thereby increasing the likelihood of producing an overall outcome that is not only integrated and balanced with regard to the various measures, but also territorially meaningful, inasmuch as the plan has to be applicable to at least one NUT II region (DGDR, 1999a). Moreover, the new policy makes it clear that the incomes that farmers generate can provide a fundamental contribution to the building of social cohesion and sustainable territorial dynamics. However, we feel that the degree of convergence between these aspects of the new policy and our own proposals should not be exaggerated, sin-

ce the integration proposed applies only to rural development measures and is not extended to other influential national or Community policies.

(5) In a manner that is similar to our proposals regarding the application of AEMs in packages, the new policy proposes two distinct forms of farmer take-up, namely the Agro-Environmental Agreement (AAA) and the socalled Agro-Environmental Agreement plus (AAA+). Taking up the latter option is worth an additional 15% in classified areas (in particular, those of the proposed Natura 2000 Network) and 10% in all other areas (DGDR, 1999a). Beneficiaries will be required to adopt, at least, one of the territory-specific measures on their farms (that can be replaced with one of the measures applied 'horizontally' or to the 'perimeter' in counties where no specific measures are available) and one 'horizontal' or 'perimeter' measures. If the farm is already included in a perimeter or zonal plan, it has to adopt the corresponding measure. In addition to the specific requirements of each measure that a farmer adopts, there exists a broader commitment to the conservation and valorisation of key components of the agrarian landscape and the environment, such as hedges, walls, trees, etc. (DGDR, 1999a).

While indicating that, in general, it favours the implementation of new zonal plans, the DGDR document (1999a) nevertheless makes the caveat that "the diversity of natural, structural and socio-economic conditions to be found within Portugal's frontiers would have to be taken into account", and that, therefore, "such plans would need to relate to appropriate geographical areas, and this would necessitate the definition of homogeneous agro-ecological zones" (DGDR, 1999a). To date, therefore, there is no clear evidence that the measures contained in the new AEP will be applied within the framework of zonal plans.

- (6) Some of the measures included in the new AEP are applicable to the whole farm property (e.g. "organic farming"), in line with our own views, while other measures can be adopted on a plot-by-plot basis (e.g. "integrated protection").
- (7) It is, as yet, to early, to draw any conclusions regarding the extent to which the new programme will reflect our concerns regarding the need for (a) an aggressive campaign to rapidly make local agricultural officials, in general, and technical staff, in particular, more conscious of the values and objectives enshrined in the AEMs and (b) a strengthening of training efforts for both technical staff and farmers. The DGDR document (1999a) mentions that information concerning the Rural Development Plans will be disseminated in time-honoured fashion via items in the press, radio and TV, by the distribution of fliers and pamphlets at agricultural and related fairs and exhibitions, over the counters of both the Ministry's local offices (Zonas Agrárias) and

farmers' organisations, as well as events more specifically designed to increase the potential beneficiaries' awareness of how the revised measures seek to safeguard the rural natural environment and heritage. However, as far as we are aware, only a small number of meetings and seminars of this type have been organised to date, in just a few of the region's counties, despite the clear need for this preparatory phase of the programme to be done as early and effectively as possible. However, as consumers, we have been favourably impressed with the efforts to increase the awareness of the environmental issues involved and their recognition of the added quality of life and of food products that the measures directly or indirectly confer. Because of that, we prefer products labelled as produced under conditions of "integrated protection" or "organic farming". Nevertheless, we feel that the availability and level of acceptance of such products still leave much to be desired. Indeed, our informal contacts with consumers would suggest that, from the very beginning, the price differential between labelled and 'regular' products conferred the status of luxury item on what was essentially nothing more than higher quality basic goods. Their consumption has been largely restricted to the better-off families of the urban elite, as in the case of meat products made from local breeds of livestock.

(8) Finally, the Rural Development Plan of 2000-2006 (DGDR, 1999b) identifies parameters that may be used not only to monitor the effects of AEMs, but also to correct their implementation as and when required, defining a set of indicators appropriate for each measure. The practicability of a "two-in-one" approach that uses common indicators for both monitoring and control purposes remains to be seen. Currently, more detailed information on this question is not available, though the DGDR document (1999a) does refer, in more general terms, to two systems: (A) management and control, designed to ensure the correct use of public funds, detect and correct any irregularities or fraud that may arise and guarantee the quality and effectiveness of the Plan implementation and (B) monitoring, operating on two levels, first on the progress of each project and the execution of the measures themselves and, second, on the implementation and effectiveness of the Plan as a whole. These two systems will draw on a series of quantifiable performance indicators and the results of the various measures involved (DGDR, 1999a).

4. Concluding remarks

From the study undertaken, we can conclude that the AEMs under consideration should be thought of as a means to an end, namely the protection and conservation of the rural environment and natural resources.

To date, a whole range of factors have been identified that have caused significant damage to the environment, the presence and effects of which must be limited and mitigated as far as possible. Currently, our rural context is simultaneously dominated by what might be described as "too much" and "too little" agriculture. Both tend to be the outcome of strategies to increase rural family incomes. In Trás-os-Montes and Alto Douro, for example, on the one hand the gradual abandonment of farming activity has undoubtedly resulted in "too little" agriculture and certain deleterious environmental effects, while in certain localities farmers' attempts to intensify production have led to "too much agriculture" with its own distinct patterns of ecological disturbance. In both cases, however, there is a clear need to conserve and protect the environment that surrounds farmers and other rural enterprises, by preserving and developing an agriculture that is increasingly balanced and environmentally-friendly.

However, this aim cannot be separated from that of making agriculture profitable. Indeed, the AEMs under discussion appear to offer one of the best ways of attaining what is environmentally desirable by making agriculture itself more self-sufficient.

The strategic guidelines hitherto developed by the AEMs are based upon this very assumption, as a document of the DGDR (1997) affirms: "AEMs are and should continue to be one of the fundamental instruments for achieving sustainable development – from the standpoint not only of the farms themselves, the agricultural sector as a whole, and the regions in which these activities are concentrated, but also in the interests of defending our environment, natural resources and socio-cultural heritage – and, as such, must be treated as an integral part of the EU's agricultural and rural development policy".

Thus, the AEMs are an extremely important means of conserving and protecting our environment, managing natural space, develop an agriculture that is balanced and environmentally-friendly, giving rise to goods produced according to the highest standards of food safety and security, generating new ways of using human resources and combating the demographic desertification that has so severely blighted the countryside we seek to protect.

The integration of pre-established key agro-environmental parameters into the implementation, management and monitoring of AEMs, in parallel with attempts to raise the environmental consciousness and professional competence of farmers and technical staff, combined with the active dissemination of appropriate new techniques and production technologies, will all contribute to making farming more self-sustainable. In this way, once the financial transfers cease to be available, the distinct and varied production systems that characterise so much of our rural areas can move forward on the basis of acceptable profitability within the constraints that both environmental regulation and responsibility impose.

References

COSTA, A. A. (2001). Reflexão sobre o Programa de Medidas Agro-Ambientais Aplicado no Período 1994/1999, como Contributo para Futuros Programas Agro-Ambientais a Aplicar em Trás-os-Montes. Trabalho de Síntese para prestação de Provas de Aptidão Pedagógica e Capacidade Científica. Vila Real, Universidade de Trás-os-Montes e Alto Douro: 301 pp.

DGDR (1997). Medidas Agro-Ambientais - Avaliação Intermédia da Execução e do Impacte Socioeconómico do programa de aplicação a Portugal Continental (1994-96).

DGDR (1999a). Plano de Desenvolvimento Rural (PDRu) 2000-2006. Lisboa.

DGDR (1999b). Plano de Desenvolvimento Rural (PDRu) 2000-2006. Anexos. Lisboa.

FINO, M. L. (1993). Medidas Agro-Ambientais: sua Aplicação em Portugal. Revista do Agricultor, n.º 53, pp. 33 - 38.

POETA, A. D.; POETA, M. I.; SILVA, M. C. e MAR-TA, A. A. (1998). Estudo da Aplicação das Medidas Agro-ambientais no período 2000/2006. Vila Real: Departamento de Economia e Sociologia da Universidade de Trás-os-Montes e Alto Douro.

POETA, M. I.; MARTA, A. A.; POETA, A. M. e SIL-VA, M. C. (2000). "Les Mesures Agri-Environmentales au Portugal: le Cas de Trás-os-Montes". Medit-Rivista di Economia, Agricoltura e Ambiente, n.º 3. Bologna: Centre International de Hautes Etudes Agronomiques Méditerranéennes, pp. 42 - 48.

REVISTA DO AGRICULTOR (1998). Agenda 2000: Propostas de Reforma da Política Agrícola Comum. Revista do Agricultor, n.º 113, pp. 19 - 24.

RODRIGO, I. e SANTOS, J. M. L. (1999). Agricultura e Ambiente no Ribatejo e Oeste. Lisboa: Departamento de Economia Agrária e Sociologia Rural do Instituto Superior de Agronomia.