Contribution of the CAP to achieving environmental, nature and landscape policy targets

Exploration of the possible use of the Common Agricultural Policy

Extended summary

H. van Zeijts, J.D. van Dam, K.P. Overmars, P.M. van Egmond, R. Kuiper, J.A. Lörzing, M.P. van Veen, H.J. Westhoek

Contribution of the CAP to achieving environmental, nature and landscape policy targets. Exploration of the possible use of the Common Agricultural Policy

© Netherlands Environmental Assessment Agency (PBL) The Hague/Bilthoven, 2010

Corresponding author: henk.vanzeijts@pbl.nl

Parts of this publication may be reproduced, providing the source is stated, in the form: Netherlands Environmental Assessment Agency, the publication title.

The Netherlands Environmental Assessment Agency (PBL) is the national institute for strategic policy analysis in the field of environment, nature and spatial planning. We contribute to improving the quality of political and administrative decision-making by conducting outlook studies, analyses and evaluations in which an integrated approach is considered paramount. Policy relevance is the prime concern in all our studies. We conduct solicited and unsolicated research that is both independent and always scientifically sound.

Netherlands Environmental Assessment Agency

Office The Hague Office Bilthoven
PO Box 30314 PO Box 303
2500 GH The Hague 3720 AH Bilthoven
The Netherlands The Netherlands

Telephone: +31 (0)70 328 8700 Telephone: +31 (0)30 274 2745 Fax: +31 (0)70 328 8799 Fax: +31 (0)30 274 4479

E-mail: info@pbl.nl Website: www.pbl.nl/en

Contribution of the CAP to achieving environmental, nature and landscape policy targets

Exploration of the possible use of the Common Agricultural Policy

The future Common Agricultural Policy is expected to provide opportunities to increase nature, environmental and landscape qualities of rural areas

Blooming field edges, warbling skylarks, panoramic views: farming supplies more than mere food. In current agricultural practice, however, intensive food production dominates. If farmers were to be paid for providing landscape, nature and environmental services, this could result in more beautiful landscapes, richer nature and a cleaner environment. The European Common Agricultural Policy (CAP) offers certain opportunities for Member States to pay farmers for providing these so-called public goods and services. Currently, many farmers receive direct income support in the so-called first pillar of the CAP. A much smaller budget is allocated to rural policy measures in the second pillar of the CAP. The European Commission possibly will allocate a larger part of the budget to financing environmental services in fields such as climate change, water management, biodiversity and the production of bio-energy. Additional budget has been made available, up to 2013, to further sustainable agriculture. This presents the question of how CAP budgets should be allocated in the subsequent period, from 2014 to 2020. A number of EU Member States favours only limited changes to this budget. Others – among which the Netherlands – favour progressive abolishment of current income support provided to farmers. In its place, investments would have to be made in knowledge and innovation, and farmers would be paid for providing public goods and services, such as those related to the environment, biodiversity and landscape.

Taking policy goals as a basis for calculating the cost of public goods

The PBL Netherlands Environmental Assessment Agency has applied a pragmatic method for calculating the cost of public goods, provided by agriculture. Because these goods, such as those related to landscape and nature, are not being traded on markets, it is not clear what price farmers should be paid for providing them. There are several methods for determining the price that citizens would be willing to pay for such public goods, and for certain regions several detailed case studies have been done. However, it would be very costly to collect nationwide data on citizens' preferences on a range of issues (e.g., nature, landscape, water quality). Therefore, the pragmatic PBL method uses negotiated policy goals as a starting point, presuming that these goals reflect the preferences of the general public. However, this presumption may not always be appropriate, as politicians have to weigh people's preferences on single issues against other issues. Moreover, policymakers have to translate outcomes of political processes to concrete goals and measures. Nevertheless, once established, policy goals relating to the quality of nature, landscape and the environment provide a strong starting point for calculating the costs of the delivery of public goods by farmers.

Payments for public goods are restricted to measures that go beyond current legislation

Governments would be justified to pay farmers for taking measures that benefit society. This is the case for nature conservation, landscape maintenance and water management, in regions where the quality of these public goods would otherwise be too low, according to policy goals.

Environmental, nature and landscape qualities High Objectives environmental, nature and landscape qualities Costs borne Payment public services by society Basic level public services Regulation and Costs borne mandatory standards by farmers Self-imposed, unpaid measures

Farmers would make a positive contribution by improving the quality in these areas.

In the case of environmental quality, on-farm measures are needed to decrease pollution of air, soil and water. Should farmers also be paid for taking these measures? A univocal answer cannot be given. On the one hand, payment for emission reducing measures seems contradictory with the 'polluter pays' principle. On the other hand, paying farmers located in environmentally sensitive areas could be considered, as these farmers would be affected disproportionately by additional regulations, compared with farmers outside these areas. In the PBL study, it is assumed that farmers would be paid only for those environmental measures that go beyond current legislation (Figure 1). In the study, an estimation is presented of the costs of on-farm measures taken to fill the gap between the current quality of nature, landscape and environment, and their desired quality, according to current policy targets and those for the year 2020. This year has been chosen because the next budgeting period of the CAP, which ranges from 2014 to 2020.

Public goods delivered by Dutch farmers contribute significantly to the achievement of policy targets – annual costs can go up to between 0.7 and 1.1 billion euros

In the PBL study, public goods and services provided by agriculture have been selected on the basis of their potential contribution to achieving policy targets with regard to environmental quality and nature and landscape conservation. In the Netherlands, most of these policy targets currently have not been achieved. PBL estimation of the associated costs amounts to between 0.7 and 1.1 billion euros annually, with an average estimate of 0.9 billion euros (Figure 2). There is a great variety of potential on-farm measures:

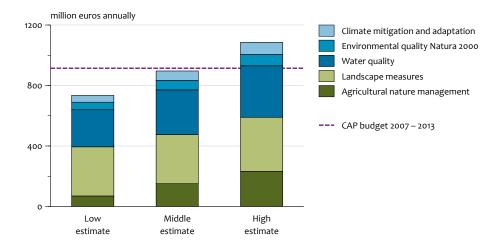
 Agricultural biodiversity. To halt the decline in grassland birds, field birds and plant species in agricultural areas, farmers could choose, for instance, to mow their grasslands later in the season, thus providing birds with shelter for their chicks. Or they could plant summer grain

- instead of silage to protect breeding birds, or plant herbal vegetation along field edges.
- Landscape. To enhance landscape qualities, reduce interruption of panoramic views and increase recreational value for areas around cities, farmers could introduce and maintain landscape elements and pathways.
- Water quality. Farmers could take voluntary actions that contribute to meeting quality standards for nitrate in groundwater, and for phosphate, herbicides and pesticides in surface waters. They could locally reduce fertilisation levels and create buffer zones to prevent dispersion of emissions.
- Environmental quality Natura 2000. Environmental pressures from agriculture on Natura 2000 areas could be lowered, if farmers in these areas were to install lowemission stables, and water managers would raise water tables.
- Climate. Farmers could prevent emissions of carbon dioxide and nitrous oxide from peat (mitigation), as well as free up agricultural land for water storage (adaptation).

CAP measures should be implemented gradually to prevent decline in farm incomes

The estimated annual costs of between 0.7 and 1.1 billion euros, associated with the above mentioned measures, include lower agricultural yields (because of less or no production from some of the farmland), investments (e.g., construction and maintenance of buffer zones), and additional labour efforts.

The Common Agricultural Policy is a possible financial source for financing these public services. Currently, Dutch farmers receive around 0.9 billion euros in EU agricultural subsidies, annually. They receive this income support 'unconditionally', which means that they are under no obligation to render any service in return. Withdrawing this income support would lead to an immediate reduction in income and may thus be in direct contrast to one of the objectives of the CAP (namely that of ensuring a reasonable income for farmers). Therefore,



a gradual reduction in this support would give farmers some time to adjust.

The CAP offers subsidy options to stimulate innovations, increase productivity and start up economic activities only indirectly related to farming. This may counter part of the reduction in income. Examples of such other activities are care farming, selling farm produce from home, and agricultural tourism, but may also include public services such as agricultural nature management. This last issue carries the added complication that the conditions of the EU State Aid prohibit government bodies from paying farmers anything over the actually incurred costs. On balance, this does not help farmers much. Only those farmers that can deliver services at low cost – for instance, because they have some land or labour to spare – could generate additional income in this way. If the conditions of EU State Aid were to allow for a more generous reimbursement, more farmers would be able to deliver services that would benefit the environment, nature and landscape.

Towards prioritisation of CAP expenditure on environment, nature and landscape

The estimated average cost of public goods is almost equal to the current CAP budget for Dutch farmers. However, most of the current budget is used for direct income support in the first pillar of the CAP. Therefore, a large shift from the first pillar to the agri-environmental measures in the second pillar – which would be the most practical way of arranging (extra) payments for public goods – is very unlikely. Member States generally oppose such a large shift, as this would lead to severe income losses for most farmers. Therefore, for the probably increasing but still limited budget, policy choices have to be made regarding Member States' budget allocations for environmental, nature and landscape payments. These choices could be prioritised as follows:

 European objectives (environmental quality, biodiversity) take precedence over national or regional objectives (landscape) – as CAP budget is made up of European funds;

- Areas with the largest possible contribution to the achievement of policy targets (e.g. areas with an already high level of biodiversity) take precedence over other, less promising areas – as means should be deployed with the highest level of efficiency;
- Positive side effects (nature, landscape) take precedence over negative side effects (emissions into the environment) – according to the 'polluter pays' principle.

This form of prioritising would support the current Dutch policy that strongly focuses on stimulating agricultural nature management. This policy could be used as a basis, but not necessarily; other choices are also possible. Measures could be found that benefit not only the environment and nature, but also landscape and water management. In this way, more effects could be produced at little extra cost. In addition, themes other than those in this PBL study could also be included, such as animal welfare. Science cannot dictate which objectives are to be financed from the CAP budget, this is a political choice, to be taken within the margins that the EU awards its Member States.