RBAPS - The Results-based Agri-Environment Payment Scheme (RBAPS) Pilot in Ireland

To test how results-based agri-environment schemes could work over wider areas and in differing landscapes, the EU Commission provided 70% funding for the Results-based Agri-Environment Payment Scheme pilot (called RBAPS Pilot) in Ireland and Spain. Two regions were selected in Ireland. Ecologists worked with 35 participating farmers to improve the biodiversity status of their farms. Farmers were paid on a per hectare basis conditional on a score achieved on a 1 to 10 scale.

Summary

The project is operated on 35 farms in two pilot regions. The first step in the scheme design involved selection of the biodiversity targets, i.e. the ecological benefit for which farmers are incentivised to manage their farmland. Locally applicable biodiversity targets in the pilot regions were selected to reflect legislative requirements and conservation concerns.

RESULT-BASED

Farmers apply to participate in the scheme. Their farm is assessed and they are assigned specific and appropriate biodiversity targets. Their performance is scored on a scale of 1 to 10 by the team of ecologists and the farmers are paid accordingly along a sliding scale.

PUBLIC GOODS

(Farmland) biodiversity

Landscape and scenery

Rural viability and vitality

Problem description

Two pilot areas were selected to test the success and potential scalability of results based schemes. County Leitirm was selected as a range of grassland quality and conservation value is present, supporting a variety of biodiversity, this broad species-rich grassland target was selected for measure development and testing. Such a target would also be more widely applicable within wider high nature value farmland settings. County Leitrim is a stronghold for the marsh fritillary butterfly and this invertebrate species is associated with extensive farming practices on wet ground. The second pilot area the Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland, and one in which there is least disturbance of natural wetland processes. The River Shannon Callows was selected as a pilot area as it has a dual Natura designation, including the River Shannon Callows Special Area of Conservation (SAC) and the Middle Shannon Callows Special Protection Area (SPA), and extensive areas of farmed land supporting a range of habitats and species of conservation importance. Although the focus for biodiversity targets in the callows was on the qualifying special conservation interests (SCI) of the Natura 2000 sites, consideration was taken of their ability to be delivered through a results-based approach.

Financing party:
Government (with EU-funding)
It is a public-private contract.

Contract conclusion:
Written agreement

Payment mechanism:
Incentive payments

Length of contract:
Max of 2 years

Start of the program:
2015
End: 2018

Length of project funding.

Objectives

The specific objectives of the RBAPS Pilot project were to:
- Promote the design, development and use in rural areas of results-based remuneration schemes to conserve and enhance biodiversity;
- Increase the understanding of factors that contribute to the success or failure of such schemes;
- Identify opportunities and conditions for increasing the use of such schemes in the EU and in particular in the context of the Common Agricultural Policy (CAP);
- Explore the potential for such schemes to be applied widely in the rural countryside and beyond grasslands, e.g. for the protection and enhancement of pollinators, soil biodiversity;
- Demonstrate the potential of these schemes to have positive ecological outcomes by developing, testing and using widely applicable monitoring approaches;
- Promote and increase awareness and better understanding of the benefits of results-based remuneration schemes particularly within the rural community.

Data and Facts - Contract

Indirect effects: Importantly, the pilot has fed into emerging results-based approaches in Ireland and throughout Europe. Members of the RBAPS Pilot team have assisted European Environmental Innovation Partnership (EIP) Operational Groups in Ireland with results-based elements. The County Leitrim species-rich grassland scoring assessment has formed the basis for grassland scoring assessments that have been included in the Hen Harrier and Freshwater Pearl Mussel EIPs, which between them aim to enroll >1,500 farmers by the end of 2019.

Participation: A total of 35 farmers participated in the scheme in Ireland in 2017, entering over 260 hectares of land across 143 fields (including enclosed fields and unenclosed plots (see Table 6.8). Participant farmers represented the wider farmer demographic, with a mixture of ages, part and full-time farmers and farming enterprises commonly found in the surrounding landscape. For most of the measures being trialed, land parcels with a broad range of scores were included in the pilot.

Involved parties: Team of ecologists/researchers funded by the EU through research funding and 35 farmers based in two regions of Ireland.

Management requirements for farmers: Annual training was offered by the project team to participating farmers over the two years of farmer contracts. A half-day classroom setting was used to present the scheme concept, its comparison with more familiar management-based schemes and the RBAPS Pilot scheme aims. The classroom session was followed by a half-day of field-training (preferred by farmers) for each measure which focused on the use and understanding of the applicable scoring assessment, the rationale for the results indicators and discussion on optimal management to achieve the best possible outcome (and payment). Most farmers participated willingly at the farmer training events, with some requesting additional training as they found it both helpful and enjoyable.

Funding/ Payments: To establish payment rates, the principal threats to the biodiversity targets were considered and the associated cost (including income foregone and additional costs) of achieving the biodiversity target was calculated in line Common Agricultural Policy regulations. Up to 10% transaction costs were also included under each measure. The payment structure aimed to achieve a balance between incentivising farmers to deliver the highest possible score in their particular farm setting, while giving a clear signal that the delivery of higher quality also results in a higher reward. Payment rates for the low-medium quality scores were set at a level sufficient to cover costs of farmers' participation in the scheme, while creating payment increments to incentivise further progression towards delivery of higher quality outputs. Tiered payment levels provide a financial incentive to the farmer to deliver the highest quality environmental product in their particular farm setting. Payments for good performance (6-7 out of 10) ranged from €170 to 330 per hectare depending on the species richness of the farm. While payments for those scoring 10 out of 10 ranged from €350 to €450 per hectare

Controls/monitoring: To facilitate testing of the developed measures, farmer contracts were implemented for two years in each pilot region, with associated advice and supports from the RBAPS Pilot teams. Payments to farmers were conditional on achieving biodiversity targets.

In the Shannon Callows capital works were also included in the available measures to incentivise farmers in undertaking works which would lead to improvements in the biodiversity target. A common design approach was used to quantify the assessment of ecological quality across the two regions and five measures. The assessments relied on the use of results indicators which are proxies employed to quantify the quality of the biodiversity target. Measure specific result indicators were identified and trialed for their fairness, robustness and reliability in assessing the quality of the farmland for the measure they were most suited to provide and to indicate general environmental condition. It was extremely important that the results indicators were both linked to the biodiversity target and feasible for the farmer to deliver. The RBAPS Pilot scores were designed to reflect the variation in the quality of the selected biodiversity target which was assessed by totaling the points awarded for result indicators and translating into a scoring scale from 0 (very low) through to 10 (very high) (Table 6.2.) All RBAPS Pilot scorecards are available at www.rbaps.eu. The monitoring stage had two main objectives. First, it served to assess the relationship between the RBAPS Pilot quality score and the associated result indicators, i.e. was there a significant positive correlation between the quality score and the chosen biodiversity target. Secondly, it assessed the impacts of the scheme on the biodiversity targets and in reaching the scheme objectives, although in the pilot project, this was constrained by the very short timeframe over which farmer contracts operated.

Renewal / termination: 3 year project only.

Risk/uncertainties of participants: There is a risk that the cost of participating is less than the payment received, although the researchers aim to design the scheme so that this does not happen.

Conditions of participation: A call for participant farmers was made through various media sources in selected areas where selected biodiversity targets were confidently expected to occur. Applicant farms were checked for suitability and for potential double payments with other agri-environment schemes (lands entered to other agri-environment schemes were excluded from entering the RBAPS Pilot). For the scheme, all participant farmers were required to be in receipt of Basic Payment.

Context features

Landscape and climate: The pilot regions were chosen in High Nature Value (HNV) farmland, and offered contrasting farming methods, climate and physical challenges. Each region focused on different biodiversity targets associated with grassland and perennial cropland, with the teams testing, monitoring and evaluating the developed scoring assessments (score cards, guidance and methodologies) across the full spectrum of quality. The scoring assessments were also tested by the participating farmers, farm advisors and with the agricultural ministry.

Farm structure: Small scale, low intensity beef cattle and sheep farming is targeted in these two regions.

Location: The two pilot regions are in Ireland; County Leitrim and the Shannon Callows. County Leitrim is dominated by small, extensive, low-income family farms. Farm habitats encompass primarily grasslands with field boundaries, wetlands, scrub and woodland and upland habitats, mainly peatlands. Designated sites tend to be concentrated in uplands meaning much of the lowlands, including extensive areas of semi-natural grassland, fall outside of Natura 2000 protection. As a range of grassland quality and conservation value is present, supporting a variety of biodiversity, this broad species-rich grassland target was selected for measure development and testing. County Leitrim is a stronghold for the marsh fritillary butterfly and this invertebrate species is associated with extensive farming practices on wet ground. The Shannon Callows has by far the largest area of lowland semi-natural grassland and associated aquatic habitats in Ireland, and one in which there is least disturbance of natural wetland processes. The River Shannon Callows was selected as a pilot area as it has a dual Natura designation, including the River Shannon Callows Special Area of Conservation (SAC) and the Middle Shannon Callows Special Protection Area (SPA), and extensive areas of farmed land supporting a range of habitats and species of conservation importance.
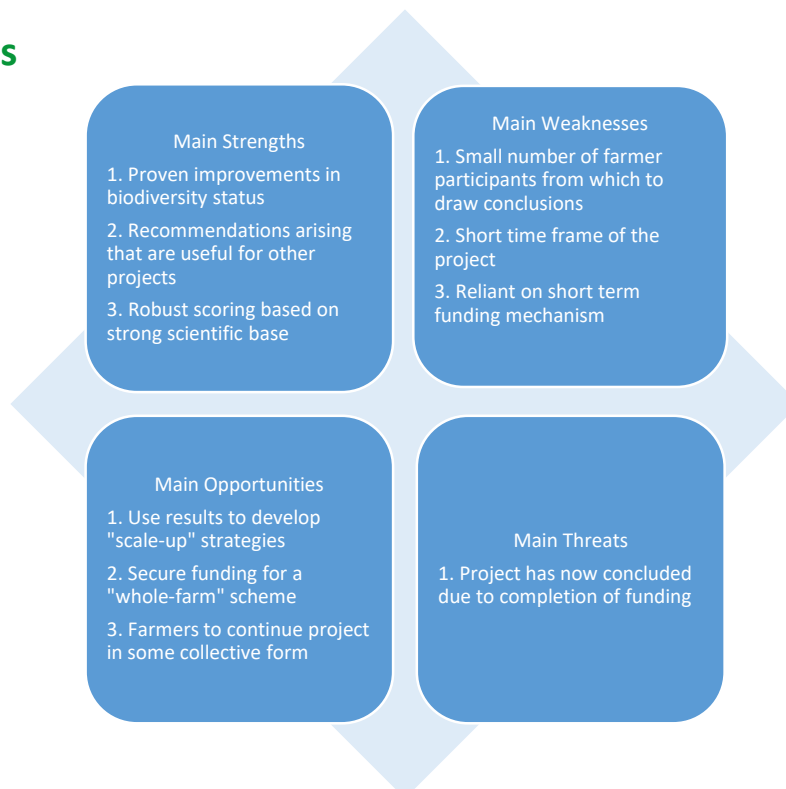
SUCCESS OR FAILURE?

The project was a success as in all regions. Positive correlations were found between the RBAPS Pilot quality score and the biodiversity target. The proven strength of relationship between the scoring assessment and biodiversity target gives confidence in the scoring system. Using such a system makes it possible to reduce the requirement for more detailed ecological monitoring making results-based payment schemes easier to monitor compared to prescription-based measures. Monitoring also showed that the scheme did have positive impacts on certain biodiversity targets compared to non-participant (control) farms, although caution is required in the interpretation due to the small sampling sizes available.

Reasons for success:

The farmer training, both in class and in field, was a success factor. Farmers were asked to score their own fields and this gave them confidence with the scoring system. The social aspect of the training days was also a contributing success factor. Farmers' attitudes, understanding and criticisms of the approach were explored through a series of systematic questionnaires and interviews, providing valuable insight into how results-based approaches could appeal to the wider farming community, thus informing better design of future programmes. The results showed that tiered payment structures that link the quality to the payment rate can incentivise change in farmer attitudes and management and bring about benefits for biodiversity targets. A key success factor was that payment rates were designed to reflect the value of the biodiversity being produced, the effort required to produce it and also the prevailing market concerns.

SWOT analysis

Main Strengths

1. Proven improvements in biodiversity status

2. Recommendations arising that are useful for other projects

3. Robust scoring based on strong scientific base

Main Weaknesses

1. Small number of farmer participants from which to draw conclusions

2. Short time frame of the project

3. Reliant on short term funding mechanism

Main Opportunities

1. Use results to develop "scale-up" strategies

2. Secure funding for a "whole-farm" scheme

3. Farmers to continue project in some collective form

Main Threats

1. Project has now concluded due to completion of funding

May 2020

Main external factors influencing success

Political/governance, economic/market, social, technological, legal and environmental factors can all have a strong impact on the success of contract solutions. In this case study, an in-depth analysis found that the following, selected factors were of specific importance.

CONSOLE

Low intensive agriculture, low income: The 2 pilot regions for RBAPS are particularly sensitive agricultural areas:

(1) In **Leitrim**, small fields predominate on the lowland, in a bocage (mixed woodland and pasture) landscape with a high density of hedges. Grasslands are predominantly semi-natural or semi-improved.

(2) In **Shannon**, the Shannon Callows represent the largest unregulated floodplains in north-west Europe, providing numerous ecosystem services, including water storage, flood attenuation, carbon storage and biodiversity protection. The habitats on the Shannon Callows (derived from the Irish word caladh meaning river meadow) are composed of a mosaic of habitat types, which support a wealth of wildlife, including, plants, insects, birds and mammals.

>> *Many of these habitats depend on traditional agricultural practices to support the wildlife that flourishes there. Under these preconditions, the small and low intensity suckler cow and sheep family farms generate rather low income, being 100% based on direct payments. The option of additional result-based payments in this context is a competitive way for boosting farm income*. <<
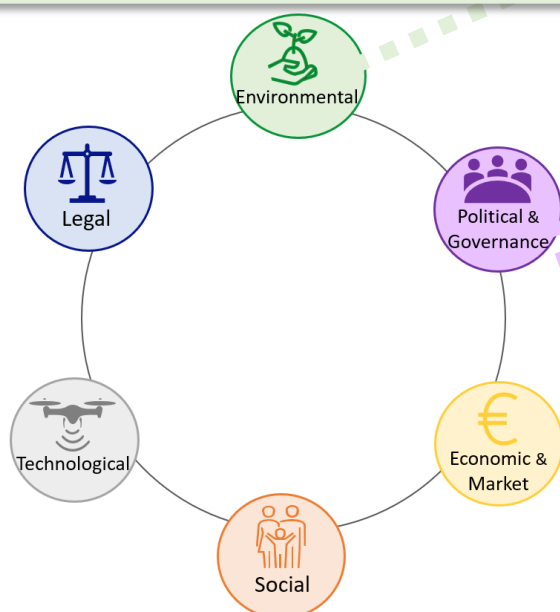
Developments in the Program since 2020: The project concluded in 2018.

Orchestrated cooperation of multiple actors:

★ Co-ordinating partner for RBAPS in Ireland and Spain is the **European Forum on Nature Conservation and Pastoralism (EFNCP)**. The EFNCP is a European network, providing a direct link between local projects involving low-intensity farming and policy-making processes at national and EU levels.

★ The project is administered by **locally-based teams** and comprised four **full-time staff members** and a **project co-ordinator from the EFNCP**. The team members are ecologists with considerable experience of working with farmers in High Nature Value areas and had a strong level of experience in local agricultural practices. Each team designed and implemented their respective scorecards (for assessment of ecosystem quality) and capital works programs, and was responsible for administering payments to farmers in that pilot area.

★ Each pilot area is also supported by the input and advice from **local stakeholder advisory groups**, which comprised of local farmers, representatives from farming organisations, government bodies, and farm advisors.

★ Thus, during the first year of the project, **local farmers** were instrumental in the design and development of the measures, which were then further refined during two years of farmer contracts.