Excerpt from the 2013 OECD report *Providing Agri-environmental Public Goods through Collective Action* (COM/TAD/CA/ENV/EPOC(2012)11/FINAL) by the Joint Working Party on Agriculture and the Environment (JWPAE):

THE NETHERLANDS CASE STUDY:

WATER, LAND & DIJKEN ASSOCIATION1

The first farmer associations on farmland conservation in the Netherlands were created in the early 1990s. Many had a broad environmental focus and were called "environmental co-operatives." The initial idea was to develop an overall contract with the government on environmental issues, including on biodiversity, landscape and heritage. Although this seemed initially difficult, the number of co-operatives increased during the late 1990s. They focused on farmland conservation, particularly on grassland bird protection. Since the Dutch government has been promoting a collective approach under the agri-environmental scheme as of 2000, the number of co-operatives has increased. Particularly in the lowland grassland areas in the western and northern parts of the Netherlands, collective action covers huge regional areas. Today, there are some 150 regional groups, involving over 10 000 farmers and covering more than half of the Dutch countryside. They focus on conservation issues, such as birds of grassland and arable land, and landscape features. They involve not only farmers, but also citizens and have a broad rural development approach, including rural tourism and farm education. As their professionalism has increased, many have been certified under the new Dutch agri-environmental scheme.

1. Brief outline of the case

1. This case study examines a regional farming co-operative, the Water, Land & Dijken (WLD) association in Laag Holland (Lower Holland). The WLD, governments and other non-governmental parties work co-operatively to protect grassland birds.

Case study area: Laag Holland

- 2. Laag Holland (Lower Holland) is a unique, typical Dutch open landscape located north of Amsterdam between the coast of the North Sea and the dykes of the Ijsselmeer (a former inland sea). The area has characteristic variations of wet and moist peat meadow areas, and lower lying polders. The former are cultivated from peat marshes, which have existed for over ten centuries; the latter are former lakes drained by windmills in the 17th century and are presently situated three to four meters below sea level.
- 3. Livestock farming is the dominant land use. There are some 1 000 farms in Laag Holland, managing 32 000 ha of land, of which 22 000 ha is grassland. Compared to average Dutch farm figures (and the average foreign perception of Dutch agriculture), farming in Laag Holland is relatively low intensive; the average livestock density is between 1.0 and 1.5 livestock units per hectare and the use of artificial fertilisers is low, partly due to the high "natural" nutritional content of the peat soils.
- 4. In the peat grassland areas, the medieval cultivation patterns have changed little. Relatively small fields with a rather high water table are surrounded by a high percentage of open water and reed beds. Fifteen hundred hectares can be reached only by boat. As the vast majority of livestock grazes in open air, the small-scale parcelling and high water tables make farming labour-intensive. Owing to this, the farm economy is in decline, especially in times of low dairy revenues. The cost of milk production is estimated to be 15-25% above the national average. As a result, farm incomes are lagging, the pace of farm termination is relatively high, and the region has been "losing" dairy quotas since the quota system began in 1983.

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5. In the lower laying polders, however, farming is much more diverse because of their more recent reclamation. Production circumstances are good and grassland alternates with arable and even horticultural land.

Public goods provided by collective action

- 6. Laag Holland is rich in public values: attractive landscape, many cultural heritage sites, and a rich biodiversity (including grassland birds, marshland birds and other waders, and rare vegetation including wet hay lands, heath lands and peat moors). Because of its attractive characteristics, the area is visited by thousands of national and international tourists yearly. The Dutch government has awarded the region with many spatial designations: National Landscape, two World Heritage Sites and Heritage sites of national importance, National Ecological Network, Less Favoured Area (LFA), Natura 2000 area, geese foraging area, National Buffer Zone, and Soil Protection Area.
- 7. The following public goods are delivered collectively by many stakeholders in this rich resource area:
 - grassland birds;
 - wintering geese and wigeons;
 - ecological management of road verges and dykes;
 - ecological dredging of ditches; and
 - on-farm education for school children.
- 8. This case study focuses on grassland birds because their preservation is the main purpose of collective action in Laag Holland.

Grassland birds

- 9. Laag Holland, especially the peat grassland part of the area, is famous for its breeding birds. It is one of the Netherlands's most outstanding regions in terms of breeding densities. In 2006, 15 780 breeding pairs of waders (80 per 100 ha) were counted (Scharringa and Van 't Veer, 2008). Following an increase in the 1990s, there was a slight decrease the following decade. Density varies from 51 per 100 ha on regular farmland to 85 per 100 ha on land with an agri-environmental contract, and to 114 per 100 ha in nature reserves managed by farmers. The black-tailed godwit (Limosa limosa) is particularly important for preservation. In Laag Holland, 4 675 breeding pairs of this bird (23 per 100 ha) are registered, more than 10% of the Dutch population and about 5% of the entire European population.
- 10. In 2010, 9 236 nests were actively protected, of which 75% hatched. The majority of the protection takes place by means of agri-environmental contracts, while a minor part is done by unpaid (but co-ordinated) protection. The agri-environmental scheme for grassland birds involves 432 participants, 10 360 hectares and EUR 1.8 million. This is 24 ha and EUR 4 131 per participant. Easy accessible conservation measures ("light green" measures) cover 77% of the area and 39% of the budget and more drastic measures ("dark green" measures) cover 23% of the area and 61% of the budget.

2. Collective action

Main actor: Water, Land & Dijken Association

11. Grassland birds are the most important public good provided by regional farming cooperatives in the Netherlands. The case study focuses on the Water, Land & Dijken association (WLD), one of about 150 regional farming cooperatives in the Netherlands. Farmers (and often citizens) organise themselves on nature conservation at the regional level, sometimes in a broader context of rural development. The Dutch government has been encouraging these initiatives because they are important local "motors" to rural development and "self-regulation" of the agricultural sector.

- 12. The WLD was founded as a legal entity in 1997 to professionalise existing co-operation between farmers and conservationists. Its aim is to increase the value and importance of Laag Holland, including grassland bird preservation, to all its inhabitants. It has 650 members, of which 500 are farmers and 150 citizens. With support from 620 volunteers for conservational field work, it manages 55 000 ha of farmland, about 50% of the Laag Holland area. Because many of the large new polders are not eligible for LFA and agri-environmental support, the participation in these parts of the area is low. On the other hand, in the peat areas, the participation reaches up to 95% of the land. Because of various activities taken up by the association, it has become a regional focal point for rural development and a serious partner for policy consultation. Its activities include the following.
 - Overall co-ordination of farmland conservation: drafting conservation plans and acquiring agri-environmental contracts for grassland birds, wintering geese and wigeons and management of botanical grassland and landscape features.
 - Training and education: improvement of conservation skills and exchange of knowledge.
 - Enhancing other ecosystem services such as: monitoring and protecting the barn swallow, and managing road verges.
 - Developing and negotiating adequate arrangements with farmers in conservation areas purchased by conservation organisations (about 4 000 ha), where agri-environmental schemes are usually not operational.
 - Promoting and enhancing other rural development themes: rural tourism, farm education for primary schools and for the broader public to reconnect farming and civil society, landscape-friendly building activities, and enhancing innovative entrepreneurship.
 - Developing new financial arrangements for rural development, especially for farmland conservation, by organising private funding.

Mechanism of collective action

- 13. The WLD, the province of North Holland and other non-governmental parties, such as farmers, volunteers and conservation organisations, work collectively for preserving grassland birds in Laag Holland. Table 13.1 summarises the role of each.
- 14. The implementation of the scheme by the WLD takes place close to farms, thus substantially increasing the uptake. For example, the WLD makes individual contracts with participating farmers to selectively cut and re-distribute part of the payments they receive from the National Paying Agency. This "skimmed" budget is used 1) for result-oriented payments (according to the number of nests protected); and 2) for private conservations contracts, especially last-minute measures. For example, when a field is going to be mowed, but is still densely populated with birds, the WLD can agree with the farmer to postpone mowing.
- 15. The WLD also works closely with local governments. The Dutch government has shifted the responsibility for the agri-environmental schemes from the national to the provincial government. As part of this decentralisation and the revision of the agri-environmental programme, since 2011 regional co-ordinators and farmers' associations can receive a government certificate for their reliable role in the implementation of the agri-environmental scheme. The WLD received the certificate in 2011. The WLD (by obliging farmers to comply with the regional management plan) together with the province (by its implementation rules) provide strong guidance on the quality and location of agri-environmental measures.

Table 13.1. Role of stakeholders for grassland birds preservation

WLD	Provincial government (province of North Holland)	Other non-governmental parties
 Negotiating with farmers on the relation between farmers' interests and ecological needs In its function of regional conservation coordinator: drafting a regional map with management "mosaics" (grassland use patterns) for grasslands birds Recruiting farmers to participate in the scheme Co-ordinating the protection work in the field: functioning as local floor managers and being contact points & advisors for farmers Implementing a private protocol on "good farm conservation", which every participating farmer has to comply with Co-ordinating the protection of 	 Designating priority areas and conservation targets for grassland bird protection in a regional agri- environmental plan Including rules for safeguarding the quality of grassland bird management in the same plan Requiring the regional conservation coordinator to develop "mosaics" for guaranteeing effective protection Commissioning the Dutch paying agency to only approve applications that are in accordance with the regional plan Taking responsibility for the monitoring of conservation results 	Farmers: Applying for participation in the regional management plan at the Dutch paying agency. Signing an agreement with the WLD for capping and redistributing part of their payments. Implementation of bird protection measures (adjusted grassland use) Volunteers: 650 volunteers assisting the farmers in tracing, marking, registering and protecting the nests Regional umbrella organisations for farmland conservation: Looking after the interests of the affiliated local organisations and helping create beneficial circumstances for the marketing of public goods
 Making individual contracts with participating farmers for redistributing money from the Dutch paying agency Organising information and education on grassland bird protection in order to improve the professional skills of farmers as conservationists 	National government Dutch paying agency ¹ : Checking whether individual applications for agrienvironmental contracts are in compliance with the regional management plan by the provincial government. Implementation of agrienvironmental payments Food and Consumer Product Safety Authority: Scheme enforcement by selective field	Conservation organisations: Purchasing and re-leasing about 4 000 ha of grassland, many of which are not eligible under the agri-environmental scheme Fauna management groups: local fauna managers (e.g. hunters) dealing with predators of grassland birds "Grassland bird circles": local groups discussing best management practices for grassland use and predation control

1. Governmental institution certified to implement payments that include the EU contributions.

3. Factors affecting collective action

Historically, there is little tradition of co-operation in the Laag Holland area; farmers were transporting their products individually (often by boat) to markets and shops to nearby Amsterdam. In addition, farmers in the region have always been relatively autonomous and resistant to government interference. Despite these barriers, the association on farmland conservation is now among the most successful ones in the Netherlands. Table 13.2 summarises the key factors for this success according to four categories: 1) the characteristics of the resources (Laag Holland and grassland birds); 2) the nature of the groups that depend on these resources; 3) the particulars of institutional regimes through which resources are managed; and 4) the nature of the relationship between a group of external forces and authorities. Many of the factors as listed below apply mainly to the extensive peat grassland areas in Laag Holland and far less to the newer polders where bird densities, and WLD membership, are much lower.

Table 13.2. Factors affecting collective action (Dutch case)

Resource system characteristics	Group characteristics
 Severe resource problem Long history of nature conservation in the area Close location to big cities 	Farmers' autonomyLocal leadership
Institutional arrangement External environment	
Pre-existence of a local environmental cooperative	Economic fragility and need for collective marketingDecentralisation

Resource system characteristics

- Severe resource problem: As the number of grassland birds has declined in spite of conservation efforts and the effects of agri-environmental measures were broadly criticised, the belief grew that the protection of species and populations that exceed farm boundaries need strong regional co-ordination. For other environmental topics, a regional (cross-farm) approach was considered to be effective (see, for example, Franks and McGloin, 2007). These two factors, the critical situation of the resource, and high expectation to a regional approach encourage stakeholders to act collectively.
- Long history of nature conservation: Since the 1930s, conservation organisations have been purchasing land to establish nature reserves. As the biodiversity values involved were directly linked to the use as grassland, the majority of the land was leased to local farmers. In other words, the farming community has long been aware of the public values of their region. Although a number of farmers have moved to regions with better production, the remaining farmers are proud of their region and are convinced that it is of special interest. Perceived this way, a co-operative approach to collective goods is a logical way to connect farming, nature conservation and the civil society (Renting and Van der Ploeg, 2001).
- Close location to big cities: Its location close to Amsterdam and other big cities has two effects:
 - Since the 1970s, there has been an increase in the number of "citizen" inhabitants who buy property as well as manage increasing tracts of land. The latter has not always been to the benefit of the regional values, however. Involving them in a regional approach and improving awareness is a way to safeguard regional values and "ecological capital" (De Rooij et al., 2010).
 - Many cities and towns have substantially expanded over the last decades. Collective
 action and emphasising regional values are perceived as ways to reduce further urban
 expansion.

Group characteristics

- Farmer autonomy: In their opinion, regional governance is best served by an organisation "of their own", which is close to farmers and carries out things "their way".
- Local leadership: Since the late 1970s, there has been a group of knowledgeable, motivated and respected young farmers who have developed ideas for the future and have tried to influence government policies.

Institutional arrangement

• Existence of a local agri-environmental co-operative: When the first agri-environmental plans for the regions were published in the early 1980s, farmers considered these to be insufficiently tailored to their specific circumstances and in response, collective action was taken. As a part of this action, an early and small-scale co-operation between farmers and conservationists, the Samenwerkingsverband Waterland (the Partnership Waterland), was established in 1981. For many years, this partnership has developed regional knowledge and co-ordinated the voluntary (unpaid) protection of grassland birds by reflecting local needs for the development of Dutch agri-environmental plans. This Partnership became the founding basis of the WLD.

External environment

- Economic fragility and the need for collective marketing: The regional agricultural production capacities are limited, as are the income perspectives from primary production. This has fuelled interest in broadening the economic basis of farming. As the agri-environmental scheme for the region covers only part of the public goods available, there is growing awareness that the marketing of rural goods is better done collectively. In this way, the association functions as a producer co-operation, a model with a long history in Dutch farming (although not in this region).
- Decentralisation: Increasing decentralisation of government policies for nature conservation and rural development has created room for types of regional self-organisation and self-regulation, where regional collectives fit in well. These can be considered as a new mode of rural government with new institutional arrangements (Wiskerke et al., 2003).

4. Cost-effectiveness of collective action

- 17. There is no hard evidence of the cost-effectiveness of collective versus individual delivery of public goods in the Netherlands. Generally speaking, however, collective action may bring better outcomes, although it may under the current scheme design create additional costs.
 - *Benefits*: It is probable that collective action will provide better results in terms of bird population. Although scientific evidence is lacking, supporting arguments are:
 - as there is increasing proof that an individual and general approach to bird protection is hardly effective, a targeted regional approach with fine-tuned management mosaics (grassland use patterns) is expected to provide better results (Oerlemans et al., 2007);
 - the regional approach and the existence of a conservation organisation by and close to farmers lead to a broader scheme uptake, and thus to a larger coverage of targeted protection;
 - information and education efforts of the WLD bring a better understanding of the ecological needs and a more professional management;
 - the efforts of many volunteers, only possible under the umbrella of regional coordinations, are of vital importance to the conservation results;
 - the WLD employs five regional field co-ordinators who enable fine-tuning of the management during the breeding season; and
 - although the WLD has no role in official field inspections (official inspections are done
 by Food and Consumer Product Safety Authority), the presence of the field co-ordinators
 provides a high level of compliance with the scheme's obligations.
 - Costs: The current design of the Dutch agri-environmental schemes does not encourage a cost-effective implementation. First, the implementation cost of the Dutch agri-

environmental scheme is 40% of the total scheme expenditure. Payments for regional cooperatives for their role as regional co-ordinators share 5% of the total expenditure, and the overhead costs for the Dutch paying agency are estimated at about 35% of the total budget. The remaining 60% is paid to farmers. However, it is expected that the governmental costs would rise by more than 5% if the regional co-ordination by co-operatives would be in governmental hands. Second, the complex character of the Dutch scheme and the unofficial position of the regional co-operatives (C.2.6.) result in relatively high costs. It is the general opinion that a less complex scheme design and an implementation shift to the region would enhance the cost-effectiveness of the Dutch agri-environmental scheme.

5. Government policy for collective action

- 18. In the 1990s the Dutch government perceived regional co-operatives as a potential contract partner for the delivery of public goods and services. As such, it provided occasional support to help them develop their organisational skills and to elaborate regional "bids" to the national and provincial governments.
- 19. From 2000 to 2009, regional co-operatives were assigned formal roles under the revised Dutch agri-environmental scheme.
 - From 2000 to 2003, they could be applicants and final beneficiaries of the Dutch agrienvironmental scheme. They could make different individual contracts with farmers as to the content and payment of the agri-environmental measures, as long as the targets of the scheme (in terms of numbers of birds or plants) were realised.
 - In 2003, the European Commission no longer allowed the Netherlands to operate the scheme in this way. This was because: 1) the co-operatives were in practice functioning as regional paying agencies, but did not have the obliged certification for this task; and 2) the Commission urges that the payments be directly related to the measures taken and not to the results achieved.
 - From 2003 to 2009, the co-operatives could still be contract partners with the government and conclude individual contracts with farmers, but only if the collective contract adds up exactly to the sum of all individual contracts as to the content of the agri-environmental measures. In addition, the Dutch paying agency no longer paid the co-operatives but directly paid participating farmers. To create more flexibility, some Dutch co-operatives shifted to the model of "private" capping and redistribution of payments based on a private agreement between the association and its members.
 - During these same ten years, the Dutch government paid co-operatives for the co-ordination and educational costs in accordance with the number of hectares under the collective approach. These payments were entirely funded nationally and separate from the operation of the agri-environmental scheme co-financed by the European Union (under which participating farmers were paid from the Dutch paying agency).
- 20. In 2010, with the revision of the Dutch agri-environmental scheme, the position of regional co-operatives as contract partners was also abandoned. As a result, co-operatives no longer have any official roles in the enforcement of the agri-environmental scheme. The first reason of this reform was the envisaged difficulty for co-operatives to enforce the obligations on Good Agricultural and Environmental Condition, which are compulsory for any payments involving the EU budget. The second reason was the administrative burden in case of contract changes made by one farmer, but influencing the entire collective contract. However, in many regions, farmer associations are assigned the role of regional co-ordinator for grassland birds. Many provinces enable them to elaborate the regional management plans and thus to provide guidance to the content and locations of on-farm protective measures. Under the new scheme, the Dutch government pays for this unofficial role and separately for a number of additional services (such as training) provided by regional co-operatives.

- 21. Since it was the general expectation that the revision in 2014 of the Common Agricultural Policy (CAP) will include a further shift from production support to support for public goods and services, and the Dutch government consideres regional collectives to be a useful means for their delivery, the Ministry of Agriculture initiated the so-called CAP pilot projects in four regions, including Laag Holland (2011-13). The intention is to further experiment with the collective delivery of services (in terms of effectiveness and costs), focusing on the degree of guidance that regional collectives can provide, and exploring the opportunities to develop useful "policy formats" for a collective approach under the future CAP.
- 22. The European Commission's proposals for the CAP 2014-2020, presented in October 2011, include a new formal position for collective action, mentioning "groups of farmers" as potential applicants and beneficiaries under the agri-environmental part of the proposals for rural development (EC, 2011). The proposals also mention broader possibilities for EU support for co-operative actions, including the organisational costs involved. The WLD is pleased with these possibilities and is now formulating ideas for:
 - the practical implementation of these new possibilities;
 - extending the role of regional co-operatives to first pillar CAP payments (direct payments), where 30% of the budget is reserved for environmental measures. Co-operatives could also play an important role in developing an effective "collective delivery"

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NETHERLANDS CASE STUDY SUMMARY

Name	The Water, Land & Dijken Association (NLD1)
Brief description of the case	The Water, Land & Dijken Association is a regional farmers' co-operative for nature conservation in the Netherlands. The association organises and motivates farmers to conserve grassland. It also provides guidance on the content and location of conservation measures.
Location	The Laag Holland area (50 000 ha) in the province of North-Holland.
Public goods	Biodiversity (focus on grassland birds); landscape; farmland conservation; rural tourism; education and cultural heritage.
Emergence of the action	The association was founded in 1997 to professionalise the existing co-operation between farmers and conservationists, and to give shape to the need for an independent regional organisation for the "marketing" of public goods and services.
Group size	650 members, of which 500 are farmers.
Participants	Farmers and citizens.
Activities undertaken by the group	 Acquisition of agri-environment contracts for grassland birds and wintering geese; Elaboration of the management plan for grassland birds; Enhancing other ecosystem services; Training and education of conservation skills; Negotiating adequate arrangements with farmers in conservation areas; Promoting other rural development activities; Fundraising for farmland conservation.
Farmers' role	Taking conservation measures to deliver public goods (protecting nests, mowing late); attending information and training sessions.
Non-farmers' role	Financially supporting the association, some being actively involved as conservation volunteers or advisors.
Government's role	Setting out the rules for a regional approach; paying for the association's work in the context of a collective approach, control, payment and monitoring.
Factors affecting collective action	Severe resource problem; long history of nature conservation; location close to big cities; farmers' autonomy; local leadership; pre-existence of agri-environment co-operation; economic fragility; decentralisation.
Factors affecting farmers' behaviour towards collective action	Presence of cross-farm public goods (like grassland birds); fragile farm economics and availability of financial incentives; trust in the regional association.
Others	In 2010, the Dutch government selected the association to be one of four pilot projects for "pilot projects for collective delivery of environmental services" under the post-2013 Common Agricultural Policy.