CONSOLE

CONTract Solutions for Effective and lasting delivery of agri-environmental-climate public goods by EU agriculture and forestry

Research and Innovation action: H2020 - GA 817949

D5.6: Policy implications on new AECPG contract solutions

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QUALITY ASSURANCE PROCEDURES

An internal review and validation process was applied to ensure the quality and correctness of the current deliverable. The draft version has been developed by D. Viaggi and T. Runge and the document has been reviewed by the whole consortium

TABLE REVISION HISTORY DELIVERABLE

Row	Version	Date	Reviewers	Description
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2	V1.0			Review with few changes and recommendations

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Project Consortium

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Table of contents

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement GA 817949

1 Summary

This document concentrates on policy implications from the CONSOLE project. It looks at both the conditions necessary for a successful establishment of novel contract solutions and the policy design issues related to each of the four types of contracts examined in Console. For the four contract types looked at: land tenure related, result-based, collective and value chain approach, favouring factors like suitable context, acceptance and opportunities for application are described followed by a set of design elements and strategies for implementation. A particular focus is put on the Common Agriculture Policy with the next programming period starting in 2023. Attention is also given to contracts combining features typical for one contract type with another, as such hybrid solutions are often found in practice. Contract solutions making use of public funding are looked at as well as those being fully based on private funding.

2 Introduction and objective

This document illustrates the main policy implications derived from the multiple activities carried out within the CONSOLE project, taking on board insights gained from various WPs. The delayed start of the new CAP, initially foreseen in 2020 and finally postponed to 2023, its new green architecture with a stronger focus on the delivery of agri-environmental-climate public goods (AECPGs) alongside with the publication of the Green Deal and its consequent environmental and climate requirements was a momentum that determined a number of activities in WP5 and beyond. This report is the outcome of Task 5.4 of the project, which is described as follows:

"Task 5.4 Lessons learned and policy implications with a focus on the CAP reform (M18-M42)
Leader: UNIBO; Co-Leader: TI; Contributors: RER, EVENOR, ASAJA, INRA

Based on insights from 1.4-1.5, WP3 and WP4, policy relevant recommendation will be developed, with a special focus on the post-2022 CAP implementation, but also connected to the wide range of policies connected to the topic of the project, such as forestry, environmental regulation, country or local land tenure law, etc. The project will carefully monitor the advances with the CAP reform, in particular in regard to how environmental objectives will be addressed in national/ regional strategic plans and to what provisions will be made for collective and outcome-based approaches. Implications for AECPG contracts will be considered at the level likely more concerned during the life of the project (i.e. EU/Member states or local programming authorities) in order to yield policy-relevant indications. In addition, also longer-term policy issues will be addressed.

Recommendations will cover improvements such as the selection of an appropriate mix of policy measures, the design and targeting of policy measures (mandatory, incentive, awareness-raising), efficient policy delivery, institutional arrangements and policy integration, as well monitoring, enforcement and evaluation of policies. Best practice examples from national and EU level will illustrate recommendations. In order to validate the draft policy

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recommendations and their feasibility, a policy stakeholder workshop (WEU5.2) with up to 30 participants will be organised in Brussels. The AB (JRC-IPTS), and national agriculture administration related with the implementation of the post-2022 CAP will contribute to the policy analysis and implementation."

3 Methodology

This deliverable is based on deskwork benefiting from insights gained in other deliverables as well as from reported CoP experiences. Furthermore, additional input has been gathered during the European workshop (WEU5.2) that took place in the afternoon of the final CONSOLE conference on 13th October 2022. Besides a presentation that has been given based on the draft version of this document, five representatives from non-academic partners of the CONSOLE project participated in a round table discussion.

The following deliverables have mainly been used: D1.1, D1.5 - D1.8, D2.6, D3.2, 3.3, D4.1 - D4.3 and D4.5, some of them in their draft version. Also, discussions with the contact persons for the CoP national activities and the common drafting of a paper on eco-schemes (together with partners from the sister project EFFECT) enriched the work in this task. In addition, a note with the title "New elements in the post-2022 CAP to foster the provision of environmental goods and services and for climate action" has been prepared and made available to all partners as supporting document. Multiple sources of information have been used to compile this deliverable, not all of them being documented in a written form, therefore the decision has been taken not to list sources in the document.

In order to facilitate the reading, some parts of the text are highlighted in bold. Furthermore, examples of innovative contract features and interventions programmed under the new CAP in CONSOLE countries are presented in boxes.

4 General policy implications for AECPG provision solutions

Even though voluntary environmental measures have a longstanding history in the EU and are since 1992 an established instrument within the CAP, still the delivery of the aimed environmental effects alongside with efficient money spending remain a challenge. The reasons why voluntary measures are not delivering as expected are multifaceted. This was the starting point for looking for solutions how to improve the provision of AECPGs from agriculture and forestry. Looking at new solutions, such as result-based payments or collective implementation, and new strategies along the value chain or those connected to land tenure were seen as promising pathways and therefore explicitly highlighted by the Commission in this project call. In situations where AECPGs can hardly be improved by measures on single plots collective implementation may prove an alternative while flexible management choices in result-based

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contracts may incentivise participation of land managers. With the increasing environmental awareness of consumers and efforts of the business sector to increase sustainability in the value chain private initiatives have emerged. This has been further pushed with publication of the Green Deal giving explicit attention to environmental and climate policy and emphasising business' role to deliver towards the set objectives, further developed for the food sector in the Farm-to-Fork strategy.

4.1 Definition/scope

Contractual approaches for the voluntary delivery of AECPGs are the central component of CONSOLE. These can't be looked at without considering the political framework, alongside with environmental, climate and agricultural legislation and societal aspects affecting design, possibility and willingness to implement innovative contract solutions.

4.2 Suitable context, acceptance and opportunities for application

The general message is that the studied contract solutions have a potential to improve the provision of public goods, but all of them imply some trade-offs compared with traditional flat rate individual payments based on (estimated) compliance cost. Hence there is a need to first understand which is the context that is suitable for the use of each of the four assessed contract solutions.

Transparency on costs and benefits and expectations about hidden costs such as transaction costs is important.

There are different feelings about acceptability depending on the different contract characteristics. However, failure is always very dangerous because it leads to disappointment and thus can hinder acceptance of similar contracts for a long time.

In several cases opportunities are expected from new technologies, in particular related to digitalisation, that can improve monitoring and traceability.

4.3 Design and strategies for implementation

Though some classification of contracts based on their characteristics is possible (and considered helpful upon contract design), in practice there is **no standard recipe** and the **observed contract solutions show a broad range of different solutions and combinations of them**. So it is advised to consider the variety of possible options of different contract parameters and look for the right combination depending on each context and AECPG targeted. Not only the context of the landscape providing AECPGs should be considered here but also the context of AECPGs required by local population.

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The **legal context** is key, so it is important to plan the instrument checking carefully the opportunities and the limitation coming from the legal provisions, in particular as it may also concern rules affecting practical implementation details as well as rules for payment calculation.

Upscaling of pilot schemes, even if successfully tested, **is often difficult** and remains one of the clearest limitations of these kind of innovative contract solutions, that often work with a limited number of participants in very specific contexts. This should be acknowledged having in mind that involving larger numbers of farmers usually implies some adaptation of scheme design and potentially might require relaxing the environmental ambition. But even if the environmental achievements of the single farmer may then be lower, raising the bar for many farmers could be more effective than optimizing for a few, for example when water quality is addressed.

Replicability is also not straightforward and may imply important adaptations across the EU but also within one member state, in particular as regards finding suitable substitutes for a specific function in a different context (e.g. the aggregating agent in collective contracts serving as intermediary between supply and demand of AECPGs).

Therefore, the **role of intermediaries** that can facilitate the design, uptake and implementation is key and should be explicitly considered.

There is a strong **learning process** implied in adopting new contract solutions. Farmers with previous experience with AECPG contracts are generally more willing to consider taking up new ones. So, it is preferable to use **gradual implementation** and in a long-term view, allowing to test solutions and, for practitioners, to learn how the contracts could work as well as to identify proper solutions.

Also, the **use of multi-actor approaches** may be a strategic issue, going beyond the single dichotomy public-private, having in mind that the appropriate actors to involve may be different in each respective location and context.

4.4 Role of the CAP, of other policies and private sector

The **new CAP to be implemented from 2023 onwards** provides opportunities for the consideration of new contract solutions for AECPG provision on different grounds:

- it assumes a strong focus on AECPG, expanding the dedicated budget;
- it is outcome-oriented considering national needs and targets;
- it includes new instruments that might be suitable for some of these new solutions, among them the eco-schemes;
- it explicitly mentions the result-based payments and the collective approach.

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On the other hand, much more freedom is given to member states when it comes to the choice and design of instruments. Thus, the **actual use of innovative solutions is left to member states** and there could be disincentives to more complex solutions. Here, the willingness of administration to engage in novel approaches is key. But also, acceptance at local level is of utmost importance as participation by practitioners is on voluntary basis.

One interesting option would be to keep on devoting a **dedicated budget** within the CAP **to test and stimulate the development of new contract solutions**, , e.g. through pilot schemes. Those might also involve researchers and be designed as Operational Groups under the EIP Agri. Calls for new Operational Groups targeting innovative contract solutions seems promising. Implementing these pilots with a design allowing the creation of natural experiments would be an ideal solution for producing solid knowledge about the topic.

The successful implementation of innovative contract solutions may imply a wide range of roles for different national, regional or even local policies, spanning from public procurement policies, to private and public land tenure, to different environmental related provisions and their implementation.

The **role of the private sector and of value chain members** can be key as in some cases new solutions require implementation by the value chain actors. This is particularly true for value chain contracts that contain environmental clauses. Even though in other cases the role of private involvement is less direct, since publication of the Farm-to-Fork strategy greater attention is given to solutions involving business and private funding.

In any case the increased environmental awareness and attention to **green marketing** is an important driver for valorisation of AECPG provision. On the other hand, short term high-relevance topics (e.g. energy prices) may quickly drive attention in the opposite direction.

5 Policy implications on land tenure-related contract forms for AECPG provision

5.1 Definition/scope

In land tenure-related contracts for AECPG provision the landowner as lessor agrees on **particular management prescriptions** with the lessee, the tenant. The tenant farmer is limited in his rights by such provisions, especially his right to exercise freedom of cropping. In return, the farmer (in rare cases also forest manager) usually receives a **reduced rent** for the additional environmental and/or climate efforts he/she undertakes.

5.2 Suitable context, acceptance and opportunities for application

Land tenure rules are laid down in national law and this leads to variations from member state to member state. This does not only affect the **length of rural lease**

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contracts, but also the **range of management prescriptions** that can be included. Furthermore, there is a significant variation in the share of rented agriculture land across the EU. When demand for agriculture land is particularly high tenants are more likely to accept environmental clauses. On the other side in areas threatened by land abandonment landowners might accept a zero or even a negative rent to ensure that their land is managed sustainably, in particular if publicly owned. Land tenure contracts with environmental clauses are applicable in a wide range of circumstances, either in environmental sensitive regions that require a particular management, such as the presence of a source of drinking water, animal or plant species sensitive to certain agricultural operations, or on land that is threatened by land deterioration like soil erosion.

Long-lasting provision of AECPGs requires coordination with land tenure in any case and the higher the share of rented land from farmers, the more relevant it becomes for farmers' participation in contract solutions. If the length of the land lease contract is sufficiently long, they are also suitable for longer term provision of public goods, in particular when connected to the provision of dedicated AECPGs. One example is carbon sequestration that requires a multiple years basis in order to incentivise farmers to adapt their practices beyond short-term economic optimisation. On the other side, land tenure contracts may be used as a follow-up of 10- or 20-years contracts to ensure environmentally friendly use after environmental improvements on land, e.g. through non-productive investments like restoration of water courses or wetlands or afforestation of agricultural land. Furthermore, environmental improvements likely to affect land value are less popular and may result in management restrictions set by the landowner (e.g. keep arable land status). This may also become relevant in connection to uptake of new widespread measures such as eco-schemes, even though designed for participation on an annual basis.

Land tenure contracts need to build on the general **national regulation on land tenure**. This can facilitate their design or hinder their development depending on the context legislation.

Land tenure solutions may be interesting to **address very local topics**. As these contracts require a number of preconditions, they are usually suitable only in rather specific contexts and possibly not for upscaling to larger amounts of land. In particular it is of high interest in case of public lands or land in hands of institutional or other non-profit bodies. Other very suitable cases are those of marginal land, where the trade-offs between environmental clauses and productivity may be lower. In cases where land is threatened by land abandonment, landowners are more likely to be willing to accept zero rents to ensure that extensive farming, mainly grazing, is maintained.

Bargaining power between the key actors that are landowner, regardless if public, institutional, or private, and the tenant farmer or more rarely a forest manager is decisive. While general acceptance in generic surveys seems good, experience shows that participation is not straightforward and needs to be considered carefully. However, **interest by farmers may change with the**

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conditions of land markets, in particular when access to agricultural land is difficult farmers are more likely to accept leases with environmental clauses.

5.3 Design and strategies for implementation

In general, the crucial point is the flexibility of practices connected to a reasonable degree of monitoring. As often the environmental effects may be difficult to check and excessive constraints may discourage participation, it is important that **prescriptions** are **restricted to simple items** that are easy to monitor. **Specific provisions for small and hobbyist farmers** may be included to incentivise environmentally friendly and sustainable land management.

The **balance of power and flexibility between landowner and tenant** is crucial and this largely depends on local laws. Potential excessive constraints for one of the parties may hinder participation.

The **dominant forms are exceptions to the classic rural leases** that modify the usual focus on production of agricultural commodities, either through management practices identified as being favourable to environmental protection or through prohibition of potentially harmful practices. They may require substantial improvements as well as the maintenance of current practices, with these usually being extensive. The measures to be undertaken must be stipulated when the contract is signed or subsequently agreed. Failure to comply with these measures may result in the termination of the lease.

While management prescriptions prevail, being simpler to control and monitor than environmental outcomes, there are also examples where farmers are paid for the result, e.g. water quality improvements.

5.4 Role of the CAP, of other policies and private sector

Connection with the CAP may be high as such tenure contracts affect freedom to farm. Usually designed to go above mandatory requirement, this could be tricky in practice with CAP programming period not always being in line with duration of land tenure contracts. This might affect the willingness of landowners to accept a reduced rent or to conclude longer-term contracts. On the other side, land tenure contracts may be used as a follow-up of 10 or 20 years to ensure environmentally friendly use after environmental improvements on land, e.g. through non-productive investments like restoration of water courses or wetlands.

In the next programming period, the consideration of land tenure can become more systematic and could be connected for example with explicit policies against land abandonment.

Member states have a clear interest in ensuring that the EU instruments articulate well with land tenure based contracts. But while the CAP rules are changing from one programming period to the next one, in particular as regards the enforcement of mandatory requirements as set down in cross compliance/conditionality, **national land tenure rules look back to a long history**,

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in other cases they are the result of a disruption like in countries of Eastern Europe. The CAP defining the boundaries for agricultural practices eligible for EU payments, it is clear that this is likely to affect the content of land tenure contracts. In principle, lessees can claim CAP financial support for all land, including that under rural leases with environmental clauses and participate in AECMs or in future eco-scheme measures. Some limitations are, however, set so as to **avoid double funding**, this is in particular relevant for state owned land, but also in the case of institutional ownership caution is required to avoid overlapping regimes causing a deadweight-effect. Accordingly, the development of national strategic plans is likely to reconfigure how rural leases with environmental clauses interact with contractualised CAP payments.

Another aspect is the necessity to engage for **at least 5 years in AECM under the second pillar of the CAP**. Farmers with **short term leases** are therefore less likely to participate. Some member states have foreseen clauses allowing farmers some flexibility when it comes to the (unforeseen) end of a lease, but still farmers hesitate entering into schemes if they are not sure to be able to manage the land for the required period.

On the other side, land tenure contracts are not limited to farmers eligible under CAP, but can also be a way to include small and hobby farmers to manage the rented land in line with environmental ambition of the land owner.

6 Policy implications on result-based contract forms for AECPG provision

6.1 Definition/scope

Result-based schemes are **designed for environmental performance** by requiring **specific environmental results** as opposed to just carrying out pre-defined agri-environmental management practices. Therefore, result-based contract solutions specify an environmental outcome as the reference parameter instead of prescribing management practices to farmers or forest owners. Allowing freedom of management decisions requires **measurable AECPG indicators**. The payment is triggered if the agreed environmental outcomes are achieved.

6.2 Suitable context, acceptance and opportunities for application

Usually result-based contracts target **just one AECPG.** The AECPG that is most often targeted is biodiversity; since some years and with a fast growth carbon sequestration is also targeted, while other public goods are only seldom addressed. The AECPGs considered may be further limited by the fact that the instrument addresses single fields or specific grassland plots, while effects may be produced only if a large uptake is achieved.

There is a rather wide acceptance of the concept of result-based contracts by farmers and stakeholders. However, the **monitoring by external staff** of environmental performance of the farm is much less accepted and more

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context-specific. Also new organisational solutions to monitoring now becoming more accepted (e.g. **citizens science or farmers' self-monitoring**) may be a valuable support in a wider use of these contracts.

The key issue in implementing result-based contracts is the possibility to allocate the merit of AECPG improvement to a specific farmer. Some implications of this concern:

- The role of measurability of result indicators, that is in turn connected to the environmental target;
- The spatial scale of environmental effects, that can affect the actual possibility to detect the contribution of each farm.

An important consideration is to **fix the floor which must be exceeded to unlock payment** and therefore result-based contracts have to be based on sound measurement of environmental baselines and the monitoring of changes in these baselines. In many cases opportunities are expected from new technologies, in particular related to digitalisation, that can improve monitoring of **parameters usable for the calculation of payments**.

6.3 Design and strategies for implementation

The most direct drawback of result-based solutions is to put **more uncertainty on famers**. So, any strategy to reduce ex ante uncertainty about the outcome of the contract for farmers may help increasing the willingness to enter the contract.

Gradual implementation facilitates the **learning process by farmers**. One option actually is to have **hybrid or mixed contracts with a fixed component plus a part related to results**; this is the solution mostly used in practice. Another option is an implementation in which the result-based component grows over time. Alternatively, a result-based scheme could be operated through a points system or staggered payments so as to reduce the financial risk from poor performance that otherwise may prevent farmers to participate. Also, targets which are demonstrably achievable and which do not involve great financial outlay are likely to reduce risk perception.

In addition, it is recommended to include so called **force majeure clauses** to deal with circumstances laying outside the control of the contracting party, such as extreme weather events or other natural calamities.

Others are to **provide advice or extension services** or even information support tools attached to the result-based contract. Many farmers do not (yet) have the required ecological knowledge or expertise to identify the most promising management taking into account local specificities, so as to achieve the expected result at the lowest possible costs.

Details on the calculation of the result-based payment (e.g. comparison with fixed thresholds or among peers, proportionality or not with results etc.) may

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entail different self-selection or different effort, and then be key for the environmental outcome.

The design of result-based contracts, **usually targeting single fields or specific grassland types**, can limit the environmental effects requiring a certain area perimeter. Taking care of engaging farmers with a sufficiently large farmland or targeting selected habitats might help to overcome this weakness.

Result-based contracts were results are calculated using models (if feasible) are generally more effective than input-based solutions.

Where the **environmental condition is poor at the inception** of the commitment, targets which require improvement are uncontroversial. Where the **land is already in good environmental condition** the situation is more complex. In this case, there is an argument that the **'targets'** should simply be set at the level of maintaining the existing condition of the land.

In any case, a result-based contract needs to be designed in such a way as **not to create an incentive** for participants **to deteriorate** the condition of their land prior to entering into commitments with a view to maximising the opportunity for improvement and, thereby, remuneration.

If public funds are used, a further challenge is the ensure **WTO Green box compatibility**. This requires that AECM payments must meet the fundamental requirement that it has no, or at most minimal, effects on production or trade-distorting effects.

When designing result-based schemes it is crucial to strike the right balance: the higher the floor, the less will be scope to earn remuneration for achieving targets; and, the lower the expected payments, the less likely it is that farmers and other land managers will engage voluntarily in such contracts.

6.4 Role of the CAP, of other policies and private sector

The new CAP highlights the result-orientation of the whole framework. The new CAP Strategic Plans Regulation says: "*[s]upport under payments for management commitments may also be granted in the form of (…) result-based interventions*".
The emphasised attention given to result-based contracts under the new CAP is positive, but still the programming by member states remains rather limited. Changing from the traditional practice-based to result-based measures would require CAP management and control authorities to shift from verifying compliance to measuring results.

Furthermore, farmers and other land managers should only receive support for activities which go beyond those that are mandatory by virtue of existing legislative frameworks. With the new CAP and its enhanced conditionality, it is likely that this will affect the minimum requirements and thus attractiveness of voluntary measures.

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In the **eco-schemes** there are several **attempts to integrate an outcome-oriented component**: Instead of just compensating income foregone or additional cost, the premia calculation may be done by taking into account the environmental target to be achieved. Furthermore, eco-schemes may be designed as a top-up to farmers direct payment calculated on hectare basis. This approach goes in the direction of remunerating AECPG provision rather than simply compensating cost. But while this type of financial compensation does not provide incentives to go beyond the required minimum outcome, there are also eco-schemes that are directly designed as result-based. Only if farmers do achieve specific environmental outcomes, e.g. the presence of a certain number of herbal plants in grassland, they get a payment.

A **specific set of indicators** is explicitly required to enable result-based approaches, also in view of benchmarking amongst farm types and/or within regions. One prominent example are suitable indicators related to carbon sequestration. Designing them in a such a way that allows to overcome the problem that there is a time lag between the adapted management to increase soil carbon and the desired environmental effect.

Designing result-based schemes within the CAP remains a challenge as member states have to justify the level of payment. Even though some additional flexibility has been given under the new CAP, for second pillar measures a flat rate payment per hectare is applied. Thus, also for measures targeting environmental results there is no payment by environmental result, but rather in line with the effort necessary in order to achieve the expected result. Such schemes being named result-oriented.

Besides measures receiving EU co-funding, there is also the possibility to design measures that receive exclusively public funding at national level. Here, the EU state aid rules have to be respected. It is important to recognize that the **new EU guidelines for state aid in agriculture, forestry and rural areas** will allow, for the first time, that all payments ("eligible costs" in EU terminology) are based on the "value of forest-environment and climate services". This makes a radical change possible in future, designing 100 % result-based state aid schemes where the society can determine the value of non-market services, such as carbon sequestration and storage, biodiversity, water quality and soil quality.

Result-based could be activated as a top up in farms adopting specific environmental related information systems, e.g. through FSDN, the foreseen extension of the FADN system to include environmental parameters.

The use of result-based solution in the context of **private contracts** may be easier to implement because of less constraints and the fact that business operators are used to think by results (e.g. in relation to quality).The activation of private funds opens up the potential to offer payments that go beyond income foregone or additional cost as for the AECMs with EU co-financing where payment calculation continues to have to follow this line in order to be WTO compatible.

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Austria: Within the Austrian Agri-Environmental Program (ÖPUL) the already well-established measure to improve biodiversity called Result-based Nature conservation Plan (RNP) will continue and scale up from approx. 150 to 700 farmers. In contrast to conventional ÖPUL measures, the RNP defines environmental objectives to be reached as basis for 2nd Pillar payments, and not management practices. The RNP represents a dual system of 1.) control criteria, which are used primarily by the technical control service (so called indicators) and 2.) environmental area objectives, on the basis of which farmers primarily orientate their farming methods (so called additional indicators). Besides the documentation by the farmer, control of RNP is carried out by specially trained staff of the national control body. An app for mobile devices was developed to support farmers in their documentation.

Germany: An eco-scheme measure has been designed where farmers are paid for the management of individual permanent grassland plots with proof of at least four regional plant indicator species. In some Laender there is the possibility to get an on top payment for the presence of further indicator species (6 to 8). In view of easier administration Apps have been developed helping farmers to follow monitoring requirements and for documentation of the plants.

Finland: The new forestry aid scheme (to be in force from January 2024) will allow incentive payments in climate-environmental contracts making use of national funding. It implies a hybrid payment scheme where landowners are paid for both, lost income and climate-environmental benefits (results). In the Finnish case, the benefits are based on amount of deadwood on the contract site. Forest owners will receive payments not only to cover their lost income, but up to 20% on top if the amount of deadwood on the site exceeds 20 m³/ha.

7 Policy implications on collective contract forms for AECPG provision

7.1 Definition/scope

Collective action is an **action undertaken by a group** (either directly or on its behalf through an organisation) in pursuit of members' perceived shared interests. Here, they are acting together in order to tackle local agri-environmental issues. Two or more farmers/landowners/other actors **working together towards the achievement of a common goal constitutes cooperation or collaboration**. Collective contracts have developed to better address the needs of a specific region or ecosystem, where individual contracts have proven unsatisfactory due to spatial configuration, e.g. fragmentation or unsuitable location of the measures.

Collective contracts targeting the delivering of AECPGs form the basis for formalised cooperation among farmers/landowners/other actors, these often being structured through a separate entity operating as an intermediary. But

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there may also exist cooperation between farmers/landowners/other actors without any collective contracting to pursue 'shared interests'.

7.2 Suitable context, acceptance and opportunities for application

Collective contracts are best suitable when spatial aspects matter in AECPG, in particular they are suitable and **potentially effective for landscape or biodiversity-related issues**. But also, to address water protection in water catchments or to avoid soil erosion and landslides in hilly or mountainous areas they have proven effective. When it comes to collective solutions, to be successful a certain share of land needs to be covered by the collective. Furthermore, it should not be overseen that refusal by a farmer whose land is in a strategic position can jeopardise successful delivery, e.g. when rewetting formerly drained areas for climate and/or biodiversity reasons.

The **willingness to embrace collective actions is culturally nuanced** across the EU and affects their concrete design. While the Netherlands have a longstanding tradition of farmers' cooperation in respect of natural resources, e.g. water cooperatives, in other countries collectives have negative connotations due to imposed collaboration on farmers in the past.

Overall, acceptance is quite low. The survey outcomes showed collective solutions being the least acceptable by farmers from the four contracts types assessed. Indeed, from an economic point of view it is reasonable that **private willingness to cooperation is low due to the additional transaction costs** incurred. Hence collective solutions require specific incentives for cooperation, in most cases to be publicly funded.

Issues related to socio-cultural conditions, trust towards institutions or peers, information and knowledge, habit to cooperation may create a completely different environment in view of the implementation of collective contracts.

Collective approaches **can be instigated** from the **bottom up** (the initiative coming from farmers, other local actors or being community-led), **top down** (the initiative coming from public authorities) or a combination of both (where actions are coordinated between practitioners and authorities). Collaboration amongst farmers may also contribute to increase their voice and, thereby, their bargaining power. In addition, they may create **a momentum of common engagement** and this might **not be solely restricted to farmland, but also beyond**. In order to do so, it would be crucial that public funding is not limited to so called "eligible land", but may also encompass field borders etc. But also involvement of other landowners and managers may contribute to successful collaboration at local level. Implementation in marginal and areas with fragmented land ownership may be particularly interesting.

The collective approach implies **coordination costs**. Payments for coordination – either to be born by the participating farmers or a coordinating body - are likely to be higher than in the case of individual payments as cooperation and coordination are time-consuming and costly activities. But even if in absolute

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terms the costs may be higher, there may be good reasons to spend this additional money. Firstly, if on individual basis an environmental goal can't be reached, secondly if there is the need to coordinate several objectives at landscape level to avoid trade-offs or to benefit from synergies. The costs can be mitigated in case coordination is enforced or guided from administration (like in the Dutch case) and with close collaboration in data management, transfer of electronic information is established.

The **choice of the territory eligible for participation** is a challenge as it requires to well balance ecological needs with socio-economic aspects. The exclusion of farmers willing to engage for the only reason that there land lays outside the designed area may jeopardise the success.

Setting up a collective approach requires involvement of a broad range of potential actors (farmers, NGOs, landowners, public administration, private bodies, advisory services), often not yet used to collaborate. **Existence of collective institutions already in place** (e.g. cooperatives, farmers' associations, technical associations) is therefore an important facilitator for the implementation of collective contracts as this can strongly encourage participation.

Opportunities may also come from large **private "clients"**, e.g. water companies, interested in paying for environmental services while limiting the high transaction costs resulting from individual negotiations. When establishing a collective to address larger water catchments or for rewetting of peatland the possibility of blended funding, combining private funding with private money could be an option.

7.3 Design and strategies for implementation

The degree of formalisation of cooperation / collective action varies considerably affecting the cost of establishment and for keeping it going. Collective action may range from **a joint liability approach**, with a high degree of responsibility on the part of each member for the whole group, to a structure with **no formal hierarchy** where each member is individually responsible toward the paying party. The chosen structure affects the resulting transaction costs. While in the first case transaction costs might be relatively high due to the necessary establishment of formal structures at the beginning, enforcement is easier due to the enhanced mutual responsibility that might **prevent 'free-rider' behaviour**.

An important aspect is either the necessity to **collaborate to achieve the intended environmental outcomes or to achieve possible cost reductions**, e.g. by sharing special machinery or management skills. The two key issues in design are the proper account of the environmental advantages of cooperation (need to be relevant), the assignment of environmental outcomes to the participants (or their efforts as a proxy) and the use of solutions reducing transaction costs. In order to minimize transaction costs, it is important that provisions are simple and

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understandable and the degree of coordination required is not very high. In this respect, it is also important to anticipate the potential composition of participating groups and the potential to make them efficient; for example if they are too heterogenous this can hinder the process of establishing the group. This should be given high importance having in mind that **not involving enough participants or not involving the right participants may lead to a complete failure** of the measure. Building the contract on existing forms of collaboration can facilitate greatly the implementation of this kind of contract.

Some degree of **flexibility in the choice of actions** and their location is important to allow farmers to implement collective actions in the most cost-effective way.

Pre-payments (potentially limited to collective but not to individual measures) would also be useful to encourage farmers if the measure requires or is to be combined with investments, e.g. non-productive ones enabling nature-based solutions.

If an intermediary – either internal or external – is part of the collaborative approach, he may take over the planning of the measures, the paperwork linked to coordination of measures to be implemented as well as distribution of payment, so that individual farmer is relieved from that task. Indeed, the **role of intermediaries is key** for collective contracts.

Among the instruments tested, **agglomeration bonuses** seem to be one effective instrument. In particular for collective approaches with a territorial anchoring, e.g. a watershed, a landscape or an administrative region, such bonus payments may incentivise farmers or forest owners to adopt environment-friendly practices together with neighbours. This could considerably increase the effectiveness of environmental-friendly practices.

The **use of (digital) platforms to support coordination** minimising transaction costs may be an interesting strategy for the future. It can also help coordination with beneficiaries of AECPG provision.

While the **dominant form is the horizontal approach** where land managers join forces, there **also exist a vertical approach** which aims to integrate a group of farmers to promote a 'product' or 'process'. They band together in such a way as to create a collective offer. Vertical collective contracts with contracting parties from various stages of a supply chain are today still an exception and are a special form of value chain contracts and thus addressed in the next chapter.

Preparedness by the administration and a promoting institutional context may be a key aspect for timing of the implementation of the collective approach and its progressive implementation. At the same time, effective implementation of a collective contractual solution requires thinking about how to organize **efficient communication between the different actors** and how to build up **mutual trust**.

Attention should be paid to **potential benefits of hybrid forms**, these might take the form of complementary action-based measures or of value chain or result-

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based contracts. Nevertheless, trade-offs with competing individual payments need to be limited in order to promote collective measures, i.e. avoiding to provide similar payments for individual application.

7.4 Role of the CAP, of other policies and private sector

Collective options are mentioned and promoted in the new CAP, concerning both macroenvironmental measures and collaborative measures.

The **new CAP encourages the use of a collective approach** for the delivery of AECPGs. In Recital 83 of Regulation (EU) 2021/2115 it states that: "*[s]upport should enable the establishment and implementation of cooperation between at least two entities with a view to achieving the objectives of the CAP*" and, in this context, express reference is made to "*collective environmental and climate action*". Furthermore, Article 70(5) provides that: "*Member States may promote and support collective schemes (….) to encourage farmers or other beneficiaries to deliver a significant enhancement of the quality of the environment at a larger scale*"; and Article 77 on "Cooperation" generates another option to provide support to farmers. However, this Article covers a broad range of activities, not just environmental. At the same time, the introduction of the eco-schemes that are designed in a way to address the single farmer, may reduce the scope of activities that can be publicly funded under a collective approach. Furthermore, the option that has been provided under the current CAP to use EU funds for a top up to cover transaction costs for collective approaches does no longer exist.

In order to enable the CAP to evolve in the next period, a more specific framework could be devised, in particular specifying levels of premium (or specific calculation approaches) for collective and conditions under which it is to be promoted.

The collective strength lies in the coordination of individual actions to realise a genuinely collaborative project at an ecologically relevant geographical scale and for a specified duration. Yet, this **standardisation may be difficult to achieve**, especially if the farmers who are entering into the commitments are tenants of agricultural land: the level of their participation is dependent upon the terms of the lease and, in particular, its length.

Private sector activities can be relevant when suitable structures are available or could be developed to encourage management of collective actions. For example, the presence of cooperatives may help. Collective implementation offers opportunities for **blended finance** - combining public and private expenditure. In that case the issue of 'additionality' becomes significant in that it is neither environmentally nor economically efficient to make private payment for actions that are already publicly funded. Furthermore, blended finance requires more robust and formalised structures, in particular when going beyond pilot schemes.

The **collective management of common lands is an exceptional case**, broadly distinct from collective actions which are specifically designed to generate

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environmental goods and services. Extensive grazing on common lands has a long tradition in some parts of the EU, even if they have been losing momentum in recent years. This type of collective action is closely linked to a particular type of land tenure where land is in local public ownership and is often based on special legal rules for land use.

Netherland: So far 40 collectives for agricultural nature and landscape conservation exist nationwide, from 2023 onwards it is foreseen to also collectively address water and climate protection. Furthermore, an expansion of the area coverage is foreseen in view of an enforced Dutch cooperative green-blue architecture that shall also include non-productive investments.

Ireland: 8 regions have been identified for the AEC cooperation measure. Farmers with land in those regions will get support from intermediaries – organisations that have been selected through a tender. This new measure has benefited from positive experiences from Burren Life and the Bride project.

Germany: Brandenburg has programmed a cooperative biodiversity measure with EU co-funding to be implemented in selected regions on a pilot basis.

8 Policy implications on value chain contracts for AECPG provision

8.1 Definition/scope

In the value chain contract type, the production of environmental public goods is achieved through **specific obligations included in contracts for agricultural or forestry commodities** between primary producers and processors or retailers. Primary producers are **rewarded by the market**, with payments being usually operationalised via premium price for the product, sometimes complemented by sales guarantees for the producers. The contract requires that consumers have clear information about the connection of the product with the environmental public good. Therefore, these products have **labels** to identify the environmental added value.

8.2 Suitable context, acceptance and opportunities for application

In the **vast majority of cases** value chain contracts are **purely private** and rely on business-to-business contractual relationships. But there are examples where they have been stimulated by players from the public sector or civil society, in order to improve the **provision of a specific AECPG**, often alongside protected area branding.

The main opportunity for implementation is connected to the **growing awareness for environmental issues by consumers** and private companies' Corporate Social

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Responsibility and the growing use of related attributes in marketing. This awareness has been boosted by the climate crisis. However, consumers and business ambitions, in a private utility framework, do not usually allow to reach a public optimum. In addition, it is not totally widespread, it can **work much better for some public goods than for others** and not necessarily translates in higher willingness to pay. So, the characteristics of commodities are key to the success of this contract solution. The **interest** for the contract also **changes with the general economic contingency**, i.e it can be expected to be of higher interest in growing economies, rich areas and under low food prices, while economic instability wold not favour attention to this topic by consumers. Furthermore, proliferation of labels might saturate the cognitive capacity of consumers and impede progress.

Value chain contracts are more likely to be accepted by farmers if they feel they are highly aligned with their production objectives. Price premiums and labels for environmentally friendly products contribute to the positive opinion by famers. However, the degree of familiarity of farmers with private contracts is very different across countries and sectors and the concept may not be well understood by farmers with no experience in product contracts.

The fact of being **independent from pubic money and rules** make these contracts quite flexible. However, in some case some connection with public schemes is indeed in place.

8.3 Design and strategies for implementation

Being purely private, there is a great flexibility as regards the content of the contracts. The complexity of the value chain contracts increases with the number of operators involved, making the required relationships of trust more difficult. Therefore, most instances can be found in the relatively **short value chains** that characterise the fresh fruit and vegetable sector, often combined with quality aspects and regionality. Likewise, in the livestock sector, in particular for unprocessed fresh meat, there is an increasing number of initiatives targeting animal welfare.

Also, **attention by consumers for health characteristics** is usually higher than for environmental-related ones and drives the purchase choices. But quality and regionality are also decisive factors in consumers' choices. So, using this kind of marketing attributes to leverage willingness to pay may be the best strategy, when they are correlated to environmental outcomes.

One issue is that of the balance between the role of the markets and public policies for the provision of AECPG. In particular, market channels for public goods are imperfect substitutes of policies, so it is expected that the role of policies will remain and the problem would rather be that of finding the best combination of market instruments and public policies rather than substituting one with the other.

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Information for consumers and awareness raising may be a specific complement to the value chain contracts, needed in particular when consumer awareness is low. An appropriate labelling strategy could bring more transparency for the consumers, and the upcoming proposal for a sustainable food labelling framework is to be seen in this context. Even though labelling alone is usually not sufficient to ensure that the solution will work.

Commitments by **major food industry players** and entities derived from horizontal integration and highly vertically integrated industries (e.g. in the dairy sector in some countries) are key in promoting this contract solution. The role of **retailers**, in particular in awareness raising, is also important. Here, connection with existing well-known **brands** is an advantage.

On the farmers side, economic incentives through an **appropriate reward by product pricing** is important. In most cases, however, the impression is that best strategy is to have soft prescriptions, not much impacting on the farm. The appropriate price may be connected to **power balance between farmers and retailers** or food industries, which is a key issue to success. Also building and maintaining trust is key in engaging in value chain contract solutions. It would be advisable to start with softer prescriptions in the contracts and then step-up towards more ambitious environmental contracts as they become more familiar. But this has to go along with a fair payment level.

Public initiatives such as framework contracts or collective contract negotiations may be key factors to allow these solutions to develop smoothly.

Controls are important to ensure trust by consumers, but not so much as in those cases where to ensure the proper use of public money. On the other side, if there are too "weak" controls, this may translate in low environmental effect.

In order to be successful, **gradual implementation** would need to consider addressing different market segments over time and could **follow the marketing steps of new products**. The possibility to expand the use of value chain contracts depends on the relationship between willingness to pay by consumers and costs of provision by farmers.

8.4 Role of the CAP, of other policies and private sector

A policy of relevance when it comes to value chain contracts, is the EU wide implementation of the so-called **Unfair Trading Practices Directive** (UTP; EU Directive 2019/633). The EU has decided to improve the protection of farmers and to amend competition rules as a reaction to the decline in farmers' share of value added in the food sector and the observed asymmetry of bargaining power in the food chain. Therefore, mandatory rules that outlaw certain unfair trading practices in the agricultural and food supply chain have been defined. This UTP Directive has set for the first time a clear legal basis that defines unfair trading practices. The Directive sets up a minimum baseline for Member States with a clear focus on **fair payment conditions**, while also giving them the possibility to go beyond that minimum baseline to reflect their specific national

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circumstances. Besides the EU framework, country law may be relevant to set a framework for value chain contracts including environmental clauses.

There are two ongoing initiatives that are likely to have an influence on food value chain contracts. A **proposal for a Directive on corporate sustainability due diligence**, to accelerate and make the transition to sustainable value chains easier in the EU and beyond, including for food systems, has been presented as a follow-up initiative from the Farm-to-Fork Strategy in February 2022. It is envisaged that companies which exceed certain thresholds (such as a net annual worldwide turnover of more than 150 million euros) must align their internal policies with the Paris Agreement's goal of limiting the planet's warming to 1.5 degrees Celsius. As a further initiative flowing from the F2F Strategy, a **proposal for a sustainable food labelling framework** is foreseen to be presented by 2024.

Also, the CAP for the period 2023-2027 supports efforts to increase sustainability in the production and supply of agricultural products through amended support mechanisms and market rules. Collective initiatives, either designed as vertical contractual agreements between operators at different levels along the food chain or as horizontal agreements between different operators at the same level, have the potential to make a significant contribution to a sustainable food system. In order to ensure that these actors can collaborate effectively to deliver agreed outcomes and ultimately contribute to the achievement of the desired goals, the **new CAP foresees possibilities to extend the competition derogation for sustainability purposes**.

A specific case is the **organic sector** where production, distribution and marketing of organic products are governed by a number of rules and regulations at EU level. Only products that have been certified as organic by an authorised control agency or body can be labelled with the organic logo. In addition, there are examples for value chain solutions where on top of the requirements for organic products additional specific environmental/climate aspects are targeted.

Coordination between land-based AECPG measures and value chain provisions could be improved in the next programming period of the CAP. Here, **public certification schemes** may be a way forward to better connect production requirements with sustainable product chrematistics.

France: French farmers will be able to participate in the eco-schemes through engagement in environmental certification (one of three options). To do so, they have either to join the state led environmental certification (level 1), the HVE (high nature value) certification (level 2) or organic certification (level 3).

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Promoting private solutions could also be a way to deal with market instability and growing or volatile prices of food, allowing the market itself to find a balance rather than leaving it to the competition between public funding and the market.

Other policy fields, e.g. protected areas or biodiversity actions, can help giving visibility and identity to value chain provision of public goods, as well as third party certification.

The private sector has a key role for value chain contracts. In particular downstream industries can be promoter of these contract solutions. In any case, it is **crucial to avoid "green washing"**. The number of such business-to-business contracts is steadily increasing as consumer demand for environmentally friendly products rises and food and retail companies realise their corporate social responsibility. Often such approaches are part of the food companies'/retailers' marketing strategies. Only if traceability from primary producer through to the final product is guaranteed a real added-value from environmental perspective can be ensured.

9 Policy implications on hybrid contract forms for AECPG provision

9.1 Definition/scope

Though there is no shared definition of the term "hybrid", here it means contracts based on a mix of features. This could be either combinations of the four presented contract solutions with features typical for the action- or practice-based measures that are today dominating or combinations of elements from the four novel contract solutions. International recognition is emerging, e.g. by OECD, that hybrid practice-based with a result-based payment component might be indeed the best option from the private and public perspective. Real-life case studies show that hybrid forms are indeed very popular. While these solutions can be seen as variants of the previous ones, the point of dedicating a section is to highlight that any contract is in practice a unique combination of features and practitioners should look at contract design as a set of infinite set of options, searching for the best combination.

9.2 Suitable context, acceptance and opportunities for application

Hybrid forms are suitable when one characteristic may solve a drawback of another one, and the combination may be more effective or acceptable. Specific motivations may be different depending on the type of contract.

Value chain + result-based contract may be a suitable solution as long as result-based provision may be more practicable for private actors than when using public money.

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Result based + collective can be a good solution when the impact of practices have effects beyond the specific plot so a collective remuneration better fits with a group compared with individual remuneration.

9.3 Design and strategies for implementation

In order to overcome some of the difficulties encountered with result-based contracts, a possible way forward may be to implement a hybrid approach combining action-based payments with a top-up result-based element to reward higher-level achievement. This option is currently discussed in the case of result-based carbon farming mechanisms in the EU.

A hybrid lease based on both environmental actions and environmental outcomes, thus introducing result-based elements in the land tenure approach may be beneficial in cases where specific habitats or species are to be addressed and where particular efforts are required to protect them or in cases of mobile species to allow for a targeted management.

A hybrid solution may facilitate collective commitment through respecting individual environmental efforts by guarantee of payment and offering a financial bonus to reward collective effects. Such a scheme would increase the interest of the contracting parties in committing themselves collectively, while limiting the contractual risk. Hybrid solutions with collective are advocated both in the direction of result-based and value chain contracts (or even a combination of the three).

Besides contract combinations designed to overcome immanent problems of the four contract types looked at, there are also some that are likely to lead to further discouragement. One example is the awarding of result-based payments in collective approaches unless they are designed as a top-up payment. The AECM for the European Hamster revival is quite illustrative how a hybrid approach brings success.

France: The European Hamster (Cricetus cricetus) is an umbrella indicator species. In France, its presence is limited to a few municipalities in Alsace. Threatened by intensive cultivation and its reputation as an agricultural pest, it is classified in the list of endangered species and protected by the Habitats Directive since the early 1990s. Operations aiming at maintaining European Hamster populations were carried out since the late 1990s but failed to meet the objectives. Following a complaint submitted in 2006, the Court of Justice of the European Union decided in 2011 to convict France for its lack of effective protection. Two individual agri-environmental measures supporting the implementation of crops and agricultural practices in favour of the European Hamster were introduced during the CAP 2007-2013. However, the lack of spatial coordination of the operations limited their environmental impact. Therefore, the National Hunting and Wildlife Bureau (today part of the French Agency for Biodiversity) and the Chamber of Agricultural of Alsace took the initiative of proposing a collective agri-environment-climate measure (AECM) in the

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territorial project of the 2014-2020 CAP programming period. So far, the environmental effects of this collective measure are significant and promising. In order to encourage even more farmers to get involved in this approach, an individual bonus designed as a "burrow premium" was introduced in 2018 and rewards the land managers of the plots on which at least one European Hamster burrow was identified.

9.4 Role of the CAP, of other policies and private sector

In the new CAP there is no specific provision for hybrid options; however there is also no provision against them. Hybrid solutions that either contain (a set of) management prescriptions or (at least some) flat rate payments, both elements that characterise the dominant classical contract type would probably be a suitable way to introduce, in particular, result-based solutions as an intermediate step towards a wider use of these options.

Combinations of different contract types could be explicitly added among design options in order to encourage local authorities to consider a wider set of potential design options.

Local water and biodiversity policies could provide a basis for zoning and providing suitable indicators in particular for hybrid result-based and collective contracts.

Hybrid type may fit very well for private sector initiatives, out the rigid limitations of public expenditure.

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