

CONSOLE

CONtract Solutions for Effective and lasting delivery of agri-environmental-climate public goods by EU agriculture and forestry
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Short Design Guide for Practitioners (Independent document providing a short version of deliverable 1.4)

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1 What is and how to use this guide

This document is a guide for practitioners to support the design of initiatives for the provision of agri-environmental-climate public goods (AECPGs) by agriculture and forest, focusing on the consideration of four contract characteristics: land tenure prescriptions, result-based payments, collective provisions, and value chain contracts.

The document is intended as an entry point to support contract design. It starts from the whole picture of contract design based on local needs, illustrates simplified model contracts, and then provides simple illustrations of decision trees supporting the decision-making process.

This document is a short and concise version of the report D1.4 that describes the Draft framework for the provision of AECPGs developed in the CONSOLE project and represents the draft version of a complete design guide. References to D1.4 are made through the text of this short guide to indicate where more details can be found for each design topic.

This version of the document is intended as a draft to test its usefulness through task 5.2 activities of CONSOLE. Any feedback and suggestions are welcome, particularly on model contracts and decision trees in sections 3, 4, and 5.

2 The broad picture

The design of contract solutions requires considering the broad picture of needs and design options. Design options are illustrated by the framework below (Fig 1), where decision-making about specific and general contract characteristics (AECPG contract features) is aimed to answer the need of a particular context. Depending on specific mechanisms/processes, they affect that context by determining the impact of the contract implementation.

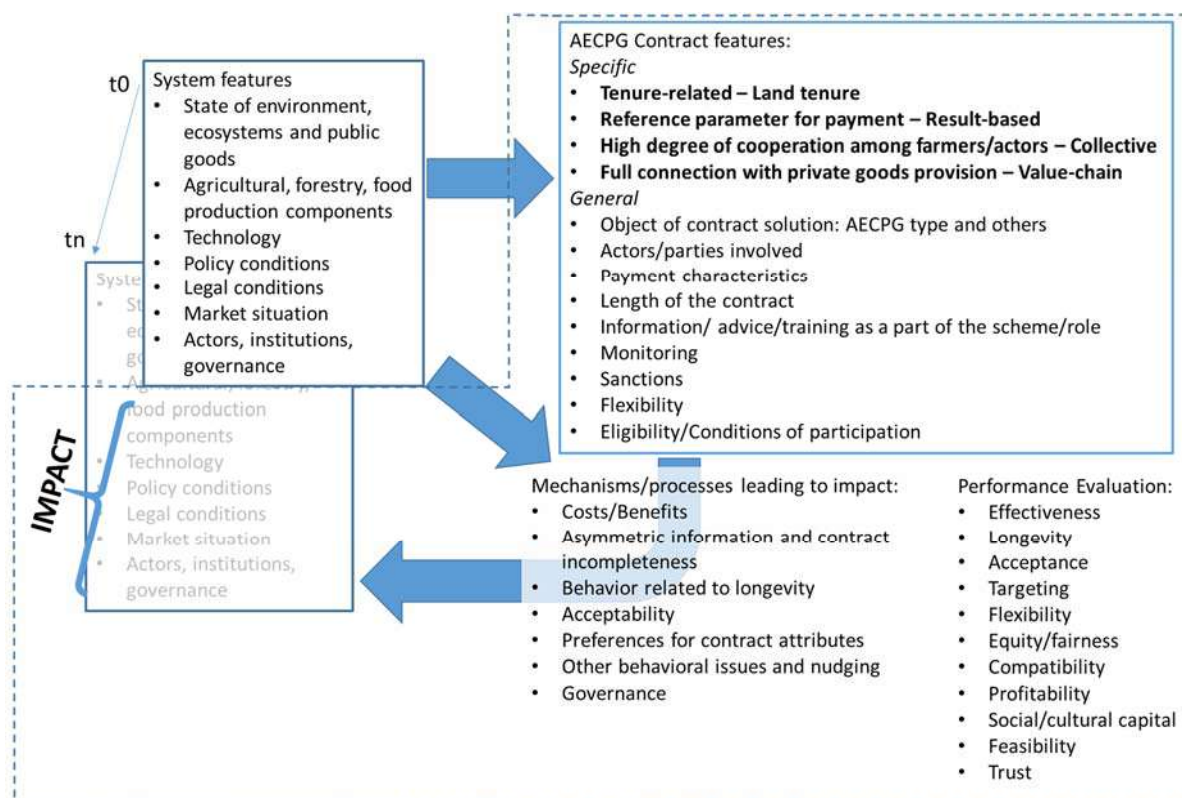


Fig 1: General framework for contract design

3 Contract features, contract types, and model contracts

3.1 Qualifying features for contract classification

We use four specific contract features highlighted in bold in the figure above (Fig 1) to identify contract types in this document. These features are the following:

1. **Tenure-related environmental prescriptions (qualifying land tenure contracts):** Tenure-related environmental prescriptions under CONSOLE refer to those land lease or land contracts that include an environmental dimension (e.g., reduced rent associated with environmental prescriptions)
2. **Reference parameter for payment – Result-based:** Result-based approaches connect payments to environmental effects or the amount of AECPGs provided (environmental outcomes and benefits). In result-oriented contracts, the payment may depend on a simplified measurement based on models or a point system linking a set of practices to expected outcomes. In the latter, the difference between result-based and action-based is more blurred.
3. **Cooperation among farmers/actors (qualifying collective approaches):** In a broad sense, collective approaches are schemes where groups of farmers/foresters/landowners and other actors with a

high degree of cooperation establish a formal entity and apply for an AES collectively. The payment for the activities to meet environmental objectives and enhance AECPGs is then made to the group, not the individual farmer. But different forms are possible, for instance, payments for the individual farmers that adhere to a collective.

4. **Connection with private goods provision (qualifying value-chain approaches):** Production of public goods is achieved through targeted prescriptions included in contracts for agricultural/forestry products. It implies that consumers have clear information about the connection of the product with the public good and therefore (usually) accept to pay for that attached added value

3.2 Contract types

The four contract features above often occur in combinations generating “hybrid types.” (See D2.3 and D2.4 - case study analysis for more details). Based on the different combinations, sixteen different contract types can be identified in Fig 2 below. Some combinations are particularly common and thus interesting, for example, hybrid forms between result-based and collective. However, the most suitable mix can only be evaluated depending on local needs.

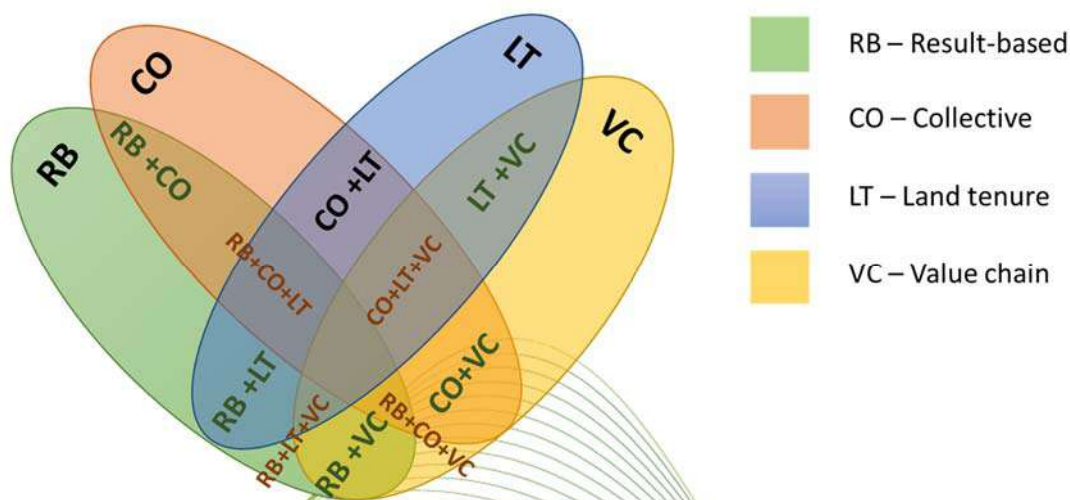


Fig 2 Potential combinations of selected contract features

3.3 Model contracts

We term “Model contracts” the combinations of features that can be considered a prototype (model) for each contract type based on the most frequent combinations of design features observed in practice. The most frequent qualifying features for the contract types above are illustrated in figures below (Fig 3 and Fig 4) for the most common hybrids (details available in D1.4, section 4).

	RB	CO	VC	LT
AECPG Type	Biodiversity, Climate regulation, landscape & scenery	Biodiversity, water-related, resilience to natural hazards, landscape	Environmental benefits, quality and security of products, water-related	Biodiversity & habitats, Landscape & scenery
Actors involved	Farmers, NGOs, market players, gov. bodies, consumers, banks, etc.	Farmers, landowners' association, govt & private bodies	Private companies, citizens or consumers, Non-profit organisations, govt bodies	NGOs, private organizations, Government bodies, Landowner association etc
Payment type and characteristics	emission certifications, Incentive payments, Payment for product	Compensation, incentive & product wise	Payment for brand, product, online donations	paid by rate per area, length, or quantity, Land lease
Length of contract and renewal	Short-term to long term, renewal	Short-term to long term, renewable	Short- to medium-term, renewable	Medium- to long-term
Information, advisory, or training in scheme	free by public body, private experts, NGOs, etc.	available within collectives or cooperatives	provided for free by private actors	By land managers, project stakeholders, etc.
Funding	Public funding (incl. from EU) + private funding	Public funding	Private funding	Private funding
Monitoring	Monitoring by public & private bodies	monitored by government or private experts	Strict monitoring, by processors or private bodies	No controls or only self-monitoring by landowners.
Sanctions	Non-compliance leads to termination or payment reduction	non-compliance can lead to termination of contract	non-compliance can lead to prohibition of the brand use	
Flexibility	High degree of flexibility	High flexibility to collectives, unless it is a hybrid.	Higher flexibility of management practices, Low flexibility for quality of the product	High flexibility, no strict conditions for participation
Conditions of participation	Some do not allow farmers to participate in other AES	A minimum number of farmers need to participate	Conditions for using brand name & exclusivity	Some contracts require farmers to participate for fixed duration

Fig 3 Model contracts for the four types based on an individual contract feature

	VC + RB	CO + RB	CO + LT	LT + VC	VC+CO	RB + LT+CO
AECPG Type	Biodiversity, landscape & scenery, product quality	Biodiversity, recreation, landscape & scenery soil & water quality	Biodiversity, landscape & scenery, cultural heritage, animal welfare	Landscape & scenery, soil quality, climate regulation	Climate regulation, biodiversity, water quality	Landscape & scenery, recreational, rural viability
Actors involved	local government, local businesses, farmers/ landowners	public bodies, government farmers	Govt, farmer/landowner associations, NGOs	Market actors, forest owners, municipalities, shareholders	landowner association, carbon market, investors	Forest owners, nature-based tourism enterprise
Payment type and characteristics	Incentive + product price	Incentive, fee for label, subsidies,	Incentive, land lease	Emission certificates, carbon credits, etc.	Donations, investments	Profits from tourism
Length of contract and renewal	Usually short contract duration (1 – 5 years)	Can be medium or long (5 years or more)	short-term (1 season, 1 year, etc.)	Fixed or permanent	Permanent	Flexible
Information, advisory, or training in scheme	freely available, farmers may get money for training	Via stakeholders of the collective or hired farm advisors	Contracted NGOs and non-profits provide training			
Funding	Local govt., market actors (retailers, processors, etc.)	Public (national govt)	Local govt, NGOs, etc.	Govt and/or private investments, self-funding	Investments, donations	Self-funding, private investments
Monitoring	Strict monitoring using indicators	By financing bodies, farm advisors or self	Partial monitoring by external actors or self-monitoring	annual third-party audits & internal monitoring	Self-monitoring	No monitoring, contract is based on trust
Sanctions	Suspension or termination of contract on non-compliance	Non-payment for non-compliance				
Flexibility	Farmers can choose their farm management conditions	Farmers cannot enter other contracts		Flexibility to choose management practices		Flexibility of choosing contract duration and renewal
Conditions of participation	High product quality is an important condition	All stakeholders must agree to the contract conditions	Area contract is pre-determined by financing parties	Should already have FSC certificate or another green label	Landowners should collectively agree to contract measures	Limited resources available while entering the contracts

Fig 4 Model contracts for the most revealed hybrid types of contracts

4 Step by step choice of contract types

Deciding upon the appropriate voluntary scheme depends on some essential steps. Each step poses critical questions that need to be answered before selecting the suitable contract type). These are:

A. Targeted public good(s): What are the public goods/ ecosystem services/ environmental and climate objectives being targeted? What are the expected ecological achievements?

B. Decision context: What are the different instruments and contractual solutions available for achieving the objectives?

C. Technical feasibility: Availability of expertise and training and development staff? Scale?

D. Actors involved: Stakeholder involvement and motivations? Farming community reaction?

E. Funding: Sources of funding? Calculation of the payments? Administrative support?

F. Other factors: Cost-effectiveness. Market Preferences.

G. Legal Framework: Factors for implementation (like environmental legislation)? Mandatory requirements?

Below is a flowchart (Fig 5) incorporating the essential steps to evaluate while choosing an instrument. The result of choice can be one of the contract types studied here, mixed, or another type (e.g., individual practice-based) or even none. One of the critical steps in the implementation of innovative contract types is to detect if the new contract type is a better option or not compared with what is in place.

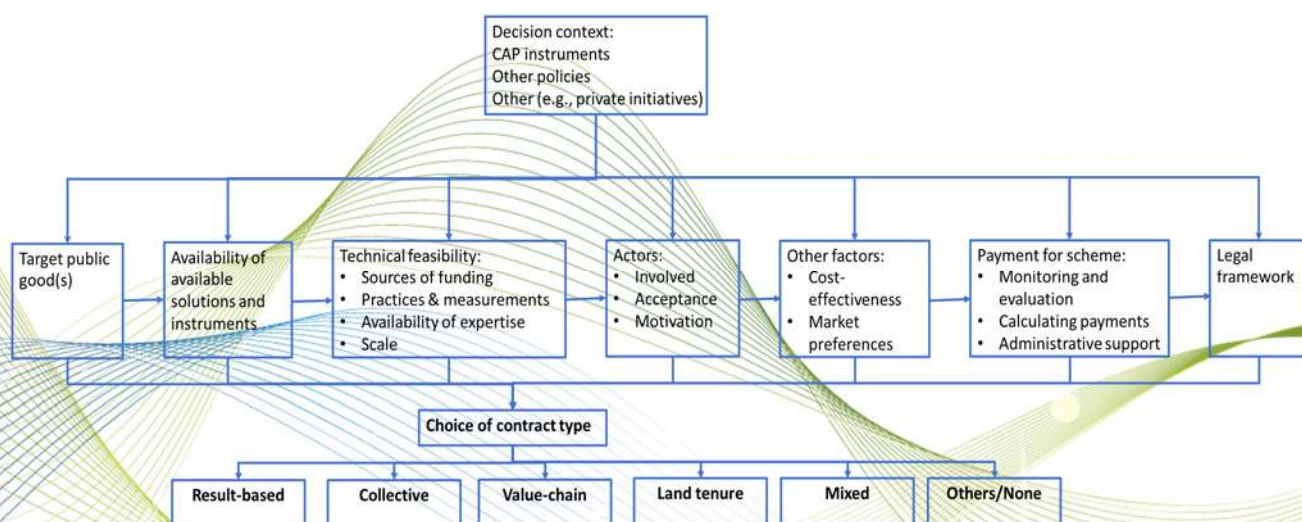


Fig 5 Decision tree for contract types

5 Step by step design of specific contract types

Below we illustrate decision trees for the four main contract types identified above. Typical steps in the decision trees for designing the specific contract types include defining clear objectives for the AES, understanding what contract features best suit the spatial, socio-economic, and political settings of the regions, considering the feasibility of the contract solutions (in terms of legal, technological, and monetary perspectives) and finally, discussing the design with stakeholders. The difference among the four contract types is the type of actors involved, different funding sources that could be present, different mechanisms for payment, etc. These choices could have implications for many other contract design parameters that must be consistently chosen. We designed decision trees that can help practitioners decide step by step about adopting each specific contract solution and a general method for designing it.

5.1 Result-based schemes

For result-based payments, it is necessary first to identify the availability, source, and type of funding and, if this is public funding, to check if the scheme can comply with funding requirements. Then the availability of knowledge, skills, and institutional capacity must be considered. It is crucial to assess if the expected response and uptake by the target farmers will be sufficient to achieve the environmental objectives and, if relevant, whether farmers will co-operate with other stakeholders to define and measure the result indicators. It is also important to consider how to pay for the objectives achieved. That is strictly linked to identifying indicators and adding transaction costs to the calculation of payments¹. Result-based schemes can be designed based on the decision tree flowchart (Fig 6).

¹ Section 4.7.4 of DG AGRI Guidance document: technical elements of agri-environment-climate measure in the programming period 2014-20 (version November 2014). Brussels.

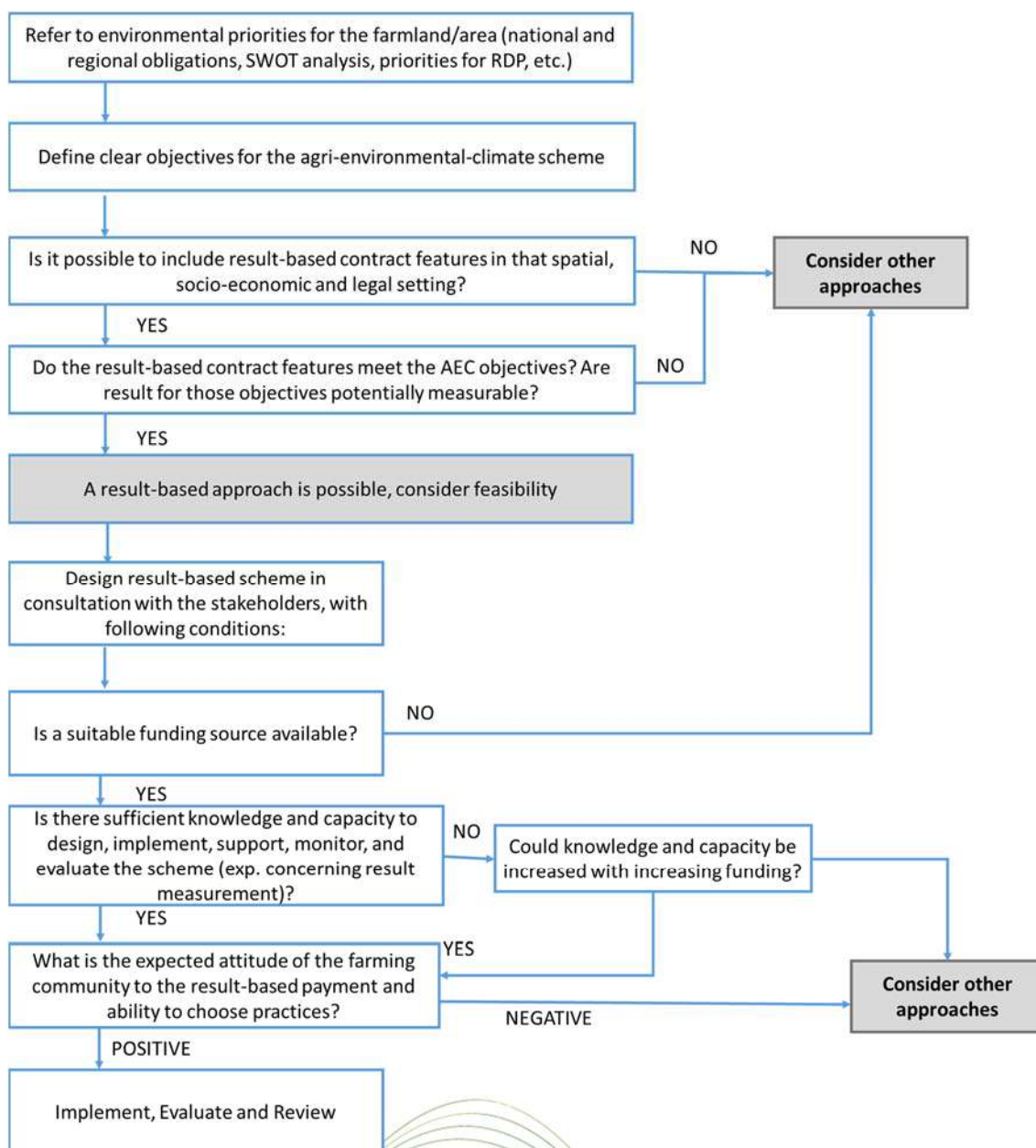


Fig 6 Decision tree for designing results-based schemes

5.2 Collective

A vital design step in collective schemes is the role of specific actors in implementing the scheme, especially collectives and associations of farmers and foresters. Also, studies show that farmers are not always well-disposed towards collective and collaborative features in a scheme like collective payments or collective decision-making. So it is important to consider the feasibility of a collective scheme and provide the practitioners with the flexibility to modify the scheme design. The decision tree mainly includes a loop for decision-making and flexibility before designing a collective scheme. Fig 7 below will help practitioners to choose and design efficient collective schemes.

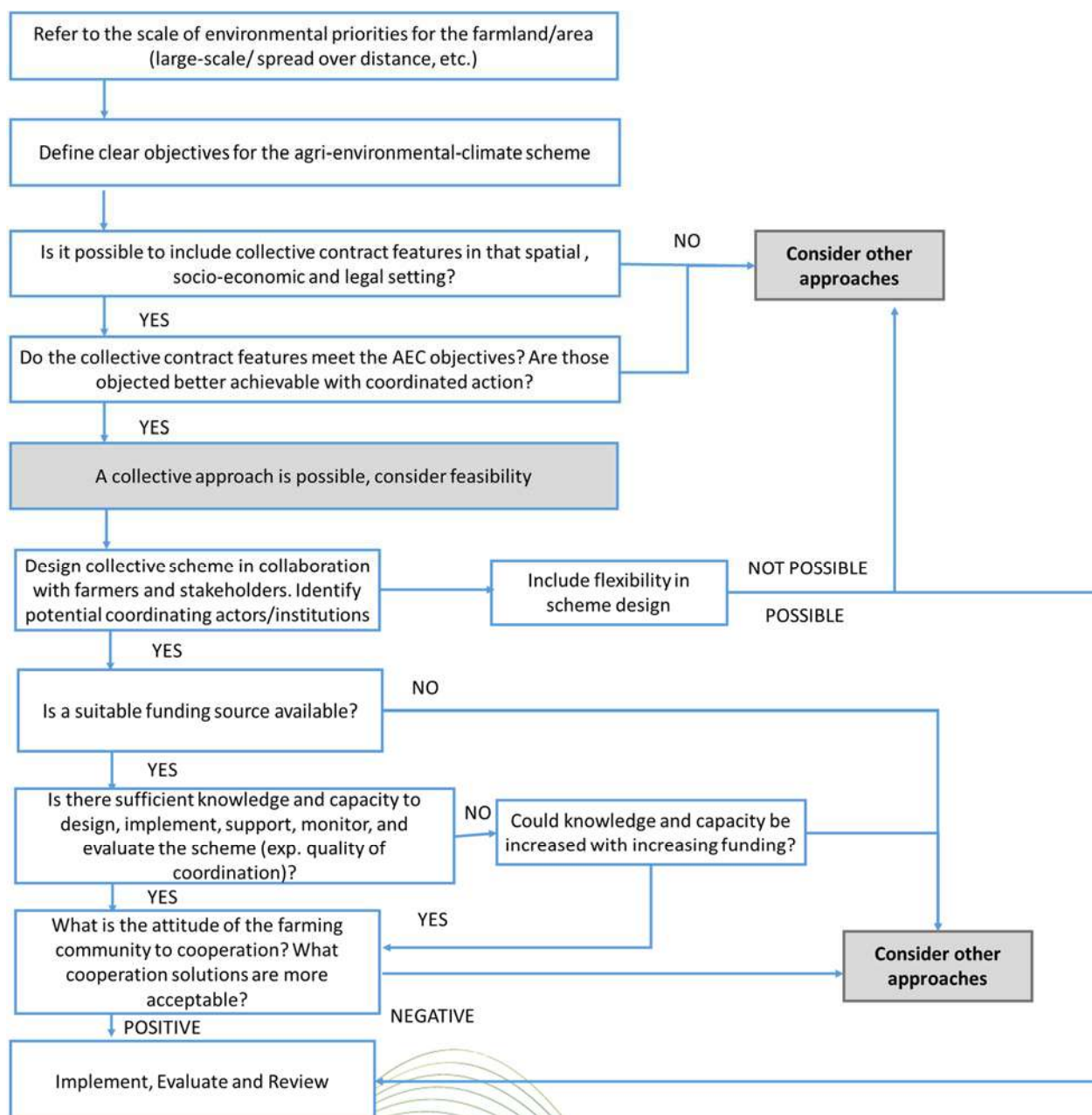


Fig 7 Decision tree for designing collective schemes

5.3 Value chain

Value chain contract types usually pay the farmers in exchange for a particular product derived by environmental prescriptions attached to a contract for the provision of a private good, assuming consumers are willing to pay for the public good when purchasing the private good. So, the role of the market, market players, and buyers/consumers are important in designing a value-chain contract type. Thus, before choosing to design and engage in a value chain contract, it is critical to check the market conditions and product requirements and then match them to the environmental objectives they intend to meet with the product. If the market conditions are unsuitable, practitioners should consider

using other contract solutions. To design efficient value chain schemes, practitioners can refer to the decision tree in Fig 8 below.

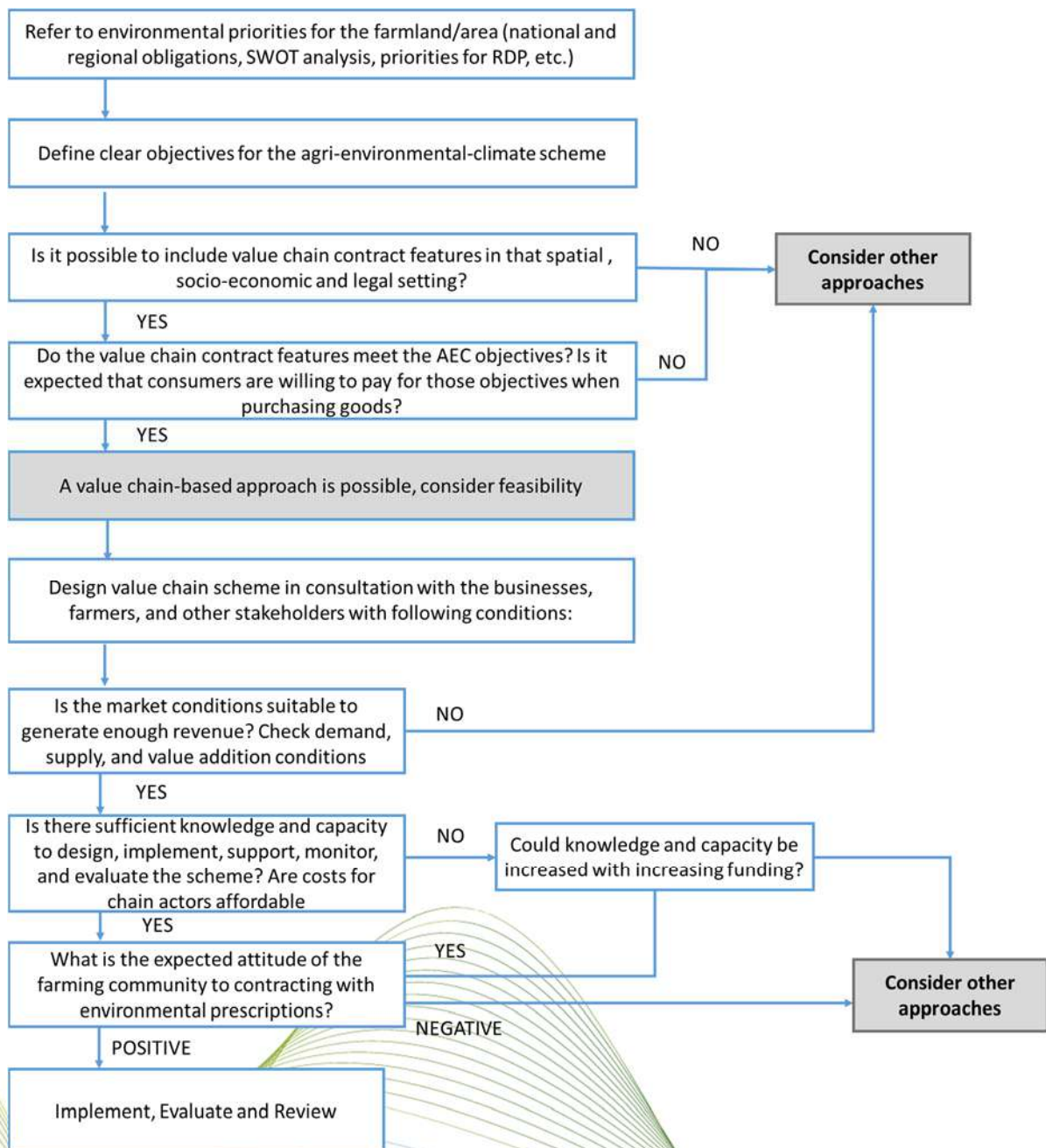


Fig 8 Decision tree for designing value chain schemes

5.4 Land-tenure schemes

An important step in designing the land tenure contract solutions is engaging with landowners as primary stakeholders; in particular, it is important to detect landowners interested in promoting tenure solutions that provide public goods

(e.g., public owners, etc.). Land tenure-related contracts are also strongly determined by the legal framework. The decision tree is illustrated below (Fig 9).

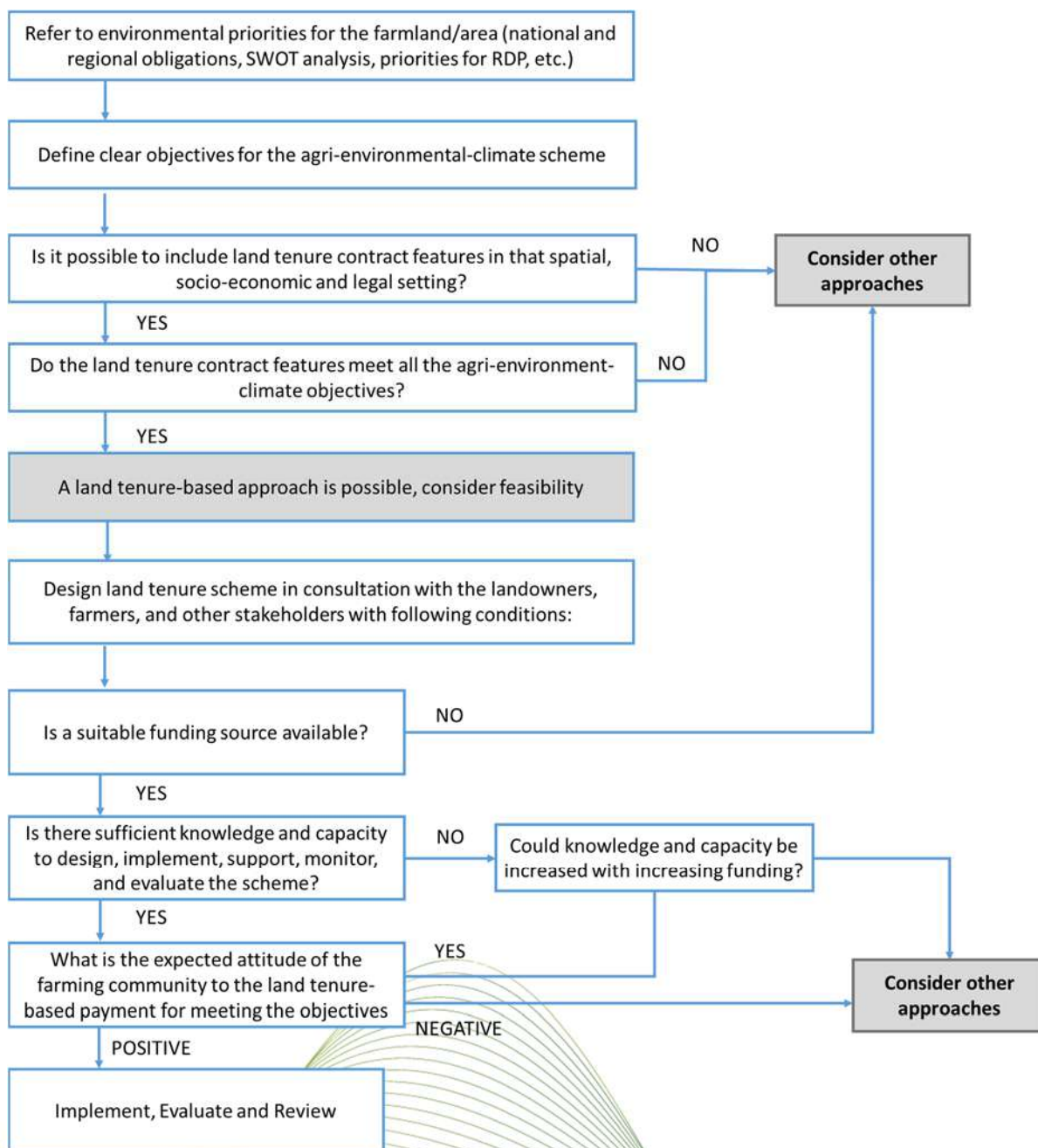


Fig 9 Decision tree for designing land tenure schemes

6 Further readings

1. [D1.1 – Preliminary framework](#)
2. [D2.1 – Catalogue of descriptive factsheets of all European case studies](#)
3. [D2.2 - Draft report on experiences from outside the EU](#)
4. [D2.3 – Report on European in-depth case studies](#)
5. [D2.4 – Report on WP2 lessons learned](#)

7 Annex - List of potential options for key contract features

1. Actors/parties involved
 - Farmers
 - Farmers Association(s)
 - Landowners' organization(s)
 - Civil society - Non-profit organization
 - Civil society - non-governmental organization
 - Civil society – Community organizations
 - Civil society – Cooperatives
 - Government (Centre/ state/ municipalities)
 - Private companies/ Market Players (Buyers, Processors, Retailers, etc.)
 - Private Associations
 - Animal Welfare Organizations/ Veterinarians
 - Research Project teams
 - Academicians/ Universities/ Research institutes/ Students
 - Ecologists/ Researchers
 - Citizens/ Consumers
 - Shareholders
 - Banks (Private or Public)

2. Payment characteristic
 - Compensation payments/ incentives paid by rate per area, length, or quantity
 - Subsidies and tax benefits
 - Non-tradable emission certifications
 - Tradable emission certificates
 - Payment for Label or Brand
 - Conditional bonus payments (like vouchers/ one-time bonus/ etc.)
 - Payment for product/ Private contracts
 - Land lease/ Land tenure contracts
 - Online donations for conservation/ Crowdsourcing
 - Combination of incentive payments and product price

3. Object of contract solution: AECPG type and others
 - Biodiversity
 - Climate regulation (carbon sequestration and/or GHG emission regulation)
 - Resilience to natural hazards
 - Quality and security of products
 - Landscape & scenery

4. Contract length
 - Long-term- above 10 years

- Medium-term- 5 to 10 years
 - Short-term- 1 to 5 years
 - Flexible
 - Fixed
5. Monitoring & enforcement
- Private bodies hired by the market actors or by market actors themselves
 - Private bodies hired by the govt.
 - Public bodies
 - Certification organizations
 - NGOs and non-profits
 - Private experts
 - Self-monitoring
 - No controls
 - Monitoring using special indicators
 - Monitoring for product category regulation
 - Monitoring farm performance (annually)
 - Models
 - Point system
6. Sanctions
- Termination or reduction of payments
 - Termination of contract
 - Non-renewal of contract in case of non-compliance
 - Sanctioning of control criteria and their indicators in case of non-compliance
7. Flexibility
- High flexibility for management practices
 - Flexibility to choose contract duration or leave program
 - Flexibility over areas to enrol
 - Flexibility to enter other contracts
8. Information as a part of the scheme/role
- Advice & training by public body
 - Advice & training by private bodies
 - Advice and training by experts
 - Advice and training by NGOs/ non-profits
 - Free advice by participating stakeholders
 - Grant money for advice and training
9. Eligibility/ Conditions for participation
- No special conditions
 - Limitations to using the brand name/ labelling
 - Farmers/ stakeholders should have consensus over measures
 - Agreement on environmental targets and action plan beforehand

- Not be participating in other AES
- A fixed duration of participation
- Minimum number of farmers need to participate
- Organic certification of enrolled farms

8 Glossary

The glossary provides definitions of terms and concepts included in the CONSOLE Project and, in particular, for the conceptual framework. Given below is the non-academic version of the glossary and is meant to communicate the core concepts and definitions of the project in more straightforward language among practitioners. The academic version of the glossary is available with the complete version of the draft framework (Deliverable D1.4), which is available on the CONSOLE website and is open access.

Tenure-related -> Tenure-related contracts involve environmental clauses affecting the property and land-use rights on the land. For instance, grazing rights on communal lands are granted to farmers conditional to specific herd/flock management or landowners that rent at reduced fees to achieve an environmental target (e.g., Forest bank case study F11).

Reference-parameter for payment -> a variable (e.g., number of birds, hectares under a prescribed practice, etc.) on which the payment of an agri-environmental scheme is linked. Result-based schemes are characterized by a payment calibrated to a result parameter like higher species density, higher soil organic matter, etc. The parameter for the calculation of the payment can also originate from models or calculated in a point-system: In that case, the farmer can select across a range of practices, and on that base, the farmer's environmental performance is assessed.

Role of cooperation among farmers/actors -> two or more farmers/actors working together towards the achievement of a common goal identifies cooperation or collaboration. Cooperation is usually structured as a single entity represented by an intermediary that acts as the liaison with the paying agency to manage controversies and the distribution of the payment to the community. Collaboration features a group of members that agree to a plan of activities related to specific practices to achieve an environmental goal. However, no formal hierarchical structure is present, and each member is individually responsible toward the paying agency. Such forms of collaboration can also be defined as "networks."

Contract and length of contract -> a contract is a formal agreement signed between two or more parties. Contracts are defined/qualified by a set of different features arranged in different combinations that outline several alternatives. The length of a contract is an important feature for the achievement of environmental goals. Indeed, longer contracts are usually required to reach a range of environmental and climate targets.

Actors/parties involved -> the parties involved in a contract can be classified according to the institution involved. For instance, a typical form of the agri-environmental scheme involves a public institution (payer) and an individual (the farmer receiving the payment). Other forms of contracts where only private parties are involved are attracting a relevant interest, as in the case of many value-chain contracts. Intermediaries can also be part of a contract that can facilitate the development of more articulated forms of contracts.

Monitoring and enforcement -> Monitoring and enforcement activities are necessary to ensure that farmers carry out the conservation measures for which they receive payments. Monitoring refers to checking the compliance with the clauses in a contract. Monitoring can also refer to programs aimed at studying/assessing the environmental impact of a specific agri-environmental scheme. Enforcement refers to procedures and sanctions that are applied in case of non-compliance.

Flexibility -> in general, flexibility concerns the possibility to customize to local/individual cases a contract; for instance, the possibility for a farmer to adapt a contract to his farm. Flexibility increases the acceptability of contracts but adds bargaining processes and potential trade-offs. Flexibility is also a core aspect of result-based contracts. Indeed, the philosophy of such contracts is based on leaving the farmers complete freedom of choice to reach the result of interest.

Public good -> in economics, a public good is non-rivalrous and non-excludable. Non-rivalrous means that a good can be "used" by multiple individuals. Non-excludable means that it is not possible to exclude someone from "using" that good. An example is a natural landscape: it can be enjoyed by multiple individuals that cannot be excluded from enjoying it. Nonetheless, *pure* environmental public goods responding exactly to those conditions are not common. For instance, a seascape is a public good where the non-rivalrous condition might be affected by overcrowding. Access to a natural park can be regulated so that it is not non-excludable. Thus, different possible cases do exist that are classified as club goods (non-rivalrous but excludable) and common goods (non-excludable but rivalrous).

Externality -> An economical process generating a secondary (and usually unintended) impact affecting a third party is an externality. Externalities can be positive (benefits) or negative (costs). The concept of environmental externality is particularly important for the design of agri-environmental schemes as these are usually focused on reducing negative environmental externalities typically related to agricultural activities such as water pollution, biodiversity depletion, etc.

Value-chain contract approach -> the feature of this solution concerns the valorization of a specific food supply chain according to the public good(s) that is delivered by its components. Typically, information on public goods delivered by supplier farms is transferred all along with the value chain up to the final consumers of the food product by means, for instance, of a brand. The rationale

of the approach is based on the competitive advantage attributed to the product and to the firms (e.g., consumer trust) involved in the value chain.

Acknowledgments

