

# How to design effective agri-env. schemes for supporting biodiversity in livestock systems

Erling Andersen (UCPH)  
University of Copenhagen



Workshop on livestock and biodiversity in Europe | August 22, 2022  
European Environment Agency | Copenhagen



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 818190.

Question:

How to design effective agri-environmental schemes for supporting biodiversity in livestock systems

Answer:

It depends....

# Contracts2.0 developing innovative agri-environmental-climate measures in Innovation labs



# Contracts2.0 developing innovative agri-environmental-climate measures in Innovation labs

Innovation labs:

Relevant stakeholders jointly develops agri-environmental-climate-schemes

Local and regional/national levels



Pitch: Socio-economic transformation is needed to achieve conservation goals

Safeguarding biodiversity in the Órség is possible if meadows are expanded and restored, which is unimaginable without local farmers. The continuation of grassland management can be secured if farming becomes socially respected and the profitability gap between industrial agriculture and conservation-focused family farming is closed.

How to?

*Result-based premiums paid as top-ups to action-based AECMs* can economically reward farmers; and can create partnership and foster mutual learning between farmers and conservationists. Three crucial conditions must be met: land property rights (re)arranged to favour small scale farmers; coherence increased between CAP Pillar 1 and Pillar 2 payments; and technology modernized both in farming and monitoring. *Combining result-based payments with quality assurance and labelling of local food products*, and distributing certified products through short food supply chains, can help farmers realize market gains and redeem social esteem.

☺ Conservation goals have been jointly defined; indicators are currently being tested. There is a local product label which can be renewed, and there are emerging local initiatives for short food supply chains.

☹ Difficulties with setting the payment level of the result-based scheme (administrative burdens, how to highlight the added value instead of the increased production costs) and to establish the organizational structures

Pitch: Go for a hybrid approach – Farmer approval of results-based contracts is higher where they are (at least initially) offered in combination with action-based measures or a base payment.

Results-based contracts offer significant advantages for land managers, but perceived or actual risks of low payments can undermine those benefits and threaten their wide scale adoption.

A hybrid approach, which combines a base payment linked to action-based measures with a performance related bonus component, addresses this barrier. In some circumstances, it can also support innovation by encouraging farmers to experiment on achieving better results without the risk of losing their payments if this fails.

### How to?

😊 Confidence in the results-based approach grows with experience. A hybrid approach can be used as a first step for new entrants before transitioning to a fully result-based approach in the future.

😞 The balance between the fixed base payment and result-based payment is critical for retaining the incentives in a results-based approach while reducing risk and retaining simplicity. Views on the right balance can

Pitch: A better recognition of existing pastoral collectives and their specificities

Grazing on collective pastoral lands is a significant element of European's high nature value farming. In France, more than 1,000 collective land managers do contract AECM over 200,000 ha to conserve open landscapes and the associated habitats. However, *collective AECMs are a simple transposition of the individual ones. The specificities of pastoral collectives and their territories should be integrated within the whole AECM implementation process.*

### How to?

*In a context of multiple land uses, a global approach is needed considering environmental services trade-offs and mobilizing expert as well local knowledge. Local working groups will be in charge of co-designing management plans, considering flexible grazing practices and experimentations. Participatory monitoring and evaluation of the commitments will serve to enrich a quality approach rather than a single control objective. Extra coordination costs associated to the management of collective lands will be compensated.*

- 😊 Regional actors have validated the principles of this global & co-designed implementation process.
- 😞 CAP calendar and associated time constraints give few opportunities to implement propositions.

Pitch: A better recognition of existing pastoral collectives and their specificities

Grazing on collective pastoral lands is a significant element of European's high nature value farming. In France, more than 1,000 collective land managers do contract AECM over 200,000 ha to conserve open landscapes and the associated habitats. However, *collective AECMs are a simple transposition of the individual ones. The specificities of pastoral collectives and their territories should be integrated within the whole AECM implementation process.*

### How to?

*In a context of multiple land uses, a global approach is needed considering environmental services trade-offs and mobilizing expert as well local knowledge. Local working groups will be in charge of co-designing management plans, considering flexible grazing practices and experimentations. Participatory monitoring and evaluation of the commitments will serve to enrich a quality approach rather than a single control objective. Extra coordination costs associated to the management of collective lands will be compensated.*

- 😊 Regional actors have validated the principles of this global & co-designed implementation process.
- 😞 CAP calendar and associated time constraints give few opportunities to implement propositions.

## Individual management plans, conservation grazing

Pitch: Principles instead of Rules

*Strategic goals safeguarding and enhancing nature and landscape on the contracted grasslands are best achieved if management is guided by principles instead of rules.* At the tactical level, this enables continuous monitoring and adaptation of management to ensure compliance with the principles included in the contract. And, it provides flexibility for the farmer at the operational level to match the daily management to the actual conditions.

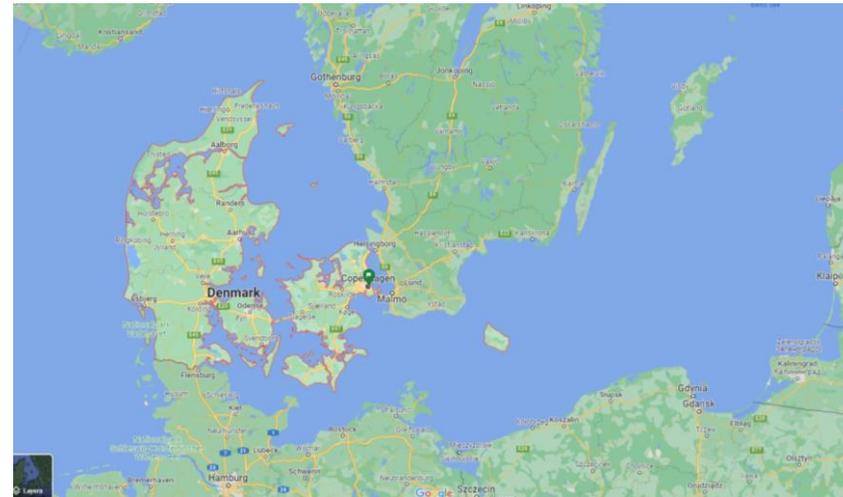
### How to?

*Rigid rules and control must be replaced by more dialog on the management of the contracted grassland.* The dialog could be based on individual management plans integrated in the current action-based contracts under the CAP as an additional voluntary tier with additional payments and where a yearly on-site follow up on the management plan substitutes the current control. This will allow for tailored management of the individual contract areas and for continuous adjustments of the management to meet the objectives of protecting and improving nature and landscape.

😊 Robust cattle breeds, moderate grazing density and a long grazing season are used to ensure a varied vegetation cover with habitats for both plants and animals.

😞 During the period from 1<sup>st</sup> of June to 31<sup>st</sup> of August, at least 0.3 livestock units/ha must be present on the land at all times.

- 40 000 inhabitants
- 589 Sq.Km.
- Farmland 60 %
- Forest 20 %
- Nature 4.4 %
- Built up, roads etc. 11.1 %



- Management of grass- and nature-areas
  - Standard action based scheme
  - 5 year duration
  - Managed nationally
  - Targeted Natura 2000 and areas with high HNV scores
  - Implemented for 30 years with small adjustments

- Local authorities are involved in most management agreements
  - On state owned land the local office of the Nature Agency leases land to the farmers.
  - On land owned by the municipality and selected private land the municipality has an agreement with a farmer on management.
- In both cases the farmer holds the CAP agreement on management.
- In both cases the local authorities have defined management requirements and follow-up continuously.



Bornholm  
J.nr. 21/  
Ref. MEJHO  
Den 9. september 2021

## FORPAGTNINGSKONTRAKT SALENE-ENGEN

### KONTRAKTENS FORMÅL

Formålet med forpagtningen er pleje af naturarealer. Arealerne afgræsses for at sikre og forbedre den biologiske mangfoldighed, så der skabes et varieret landskab med både skov, krat og lysåbne arealer. Græsningen sikrer at arealerne holdes lysåbne, samt at der fjernes næring fra arealerne, så der gives plads til de plantesamfund, som er tilknyttet naturtyperne.

*Der afgræsses med robuste kvægracer, et moderat græsningstryk og en lang græsnings sæson for at sikre en varieret vegetationshøjde med levesteder for både planter og dyr.*

### § 1

#### KONTRAKTENS PARTER

Herved indgås forpagtningskontrakt for arealet beskrevet i § 3 mellem:

<b>Forpagter:</b>	<b>Bortforpagter:</b>
	Naturstyrelsen Bornholm
	Ekkodalsvejen 2, 3720 Aakirkeby
	Skovfoged Mejsø Holm
Mail:	
Tlf:	Tlf. 72 54 30 00
CVR:	

I det følgende betyder "Part" enten Forpagter eller Bortforpagter, samlet benævnt "Parterne".

### § 2

#### KONTRAKTPERIODEN

Areallet Salene-engen bortforpagtes til ekstensiv afgræsning for en 5 årig periode fra d. 1. januar 2022 til d. 31. december 2026, begge dage inklusive. Ved kontraktkontraktperiodens udløb ophører kontrakten uden yderligere varsel, medmindre der er indgået skriftlig kontrakt om forlængelse af kontrakten. Såfremt kontrakten forlænges, ophører kontrakten tilsvarende uden yderligere varsel ved udløbet af den forlængede kontraktperiode. Kontrakten kan, hvis begge parter ønsker det, forlænges én gang for 5 år.

I kontraktperioden kan forpagter og bortforpagter opsiges kontrakten med 3 måneders varsel til ophør den 31. december i det pågældende kalenderår.

### § 3

#### FORPAGTNINGSKONTRAKTENS OMFANG

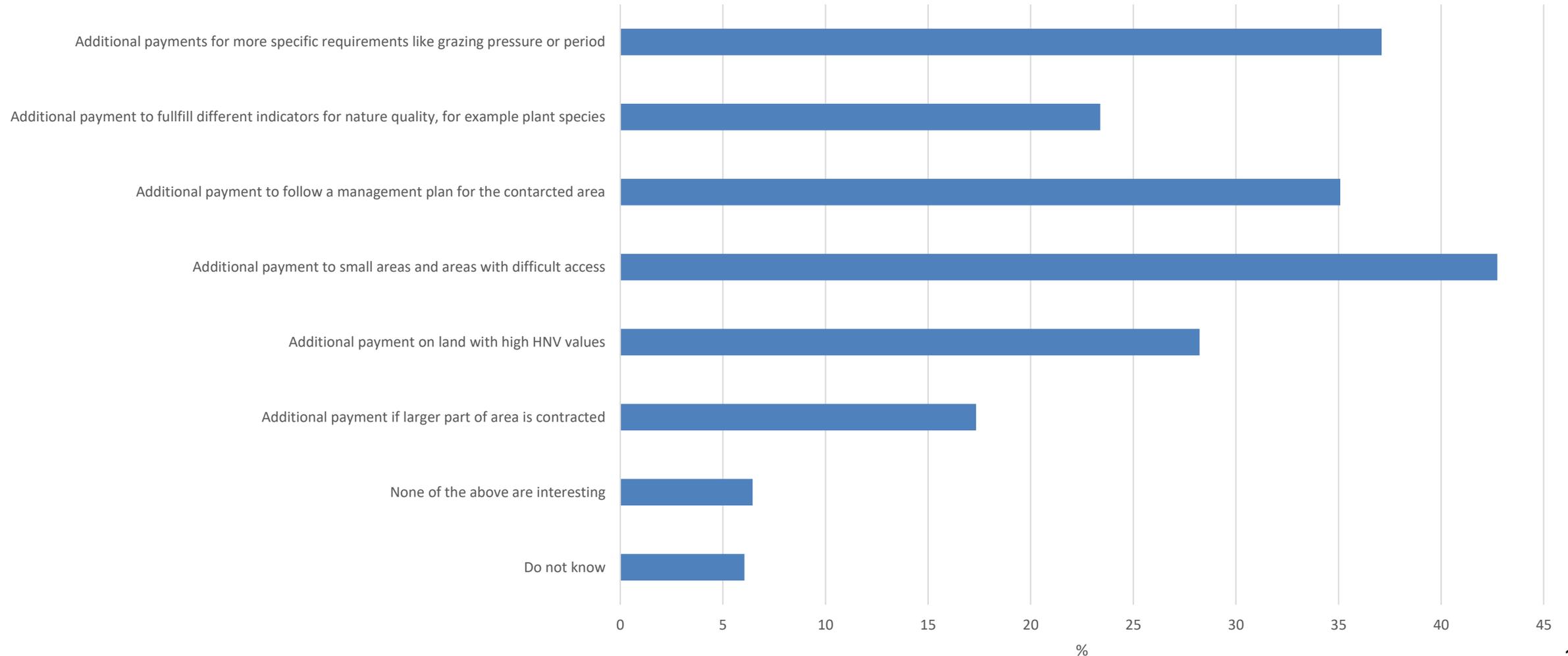
Forpagtningen har et samlet areal på i alt ca. 1,5 ha eng og skovbryn.

Arealerne er indtegnede på vedlagte kort (se bilag). Arealopmålingen er foretaget som ren kortopmåling. Afvigelse i bruttoarealet på under 10 % medfører ikke ret til forholdsmæssigt afslag i afgiften. Afvigelse i bruttoarealet på mere end 10 % kan efter en konkret vurdering udløse et forholdsmæssigt afslag i afgiften. Konstaterede afvigelser i bruttoarealet er ikke en væsentlig misligholdelse af kontrakten, og giver dermed ikke ret til ophævelse.



- Hybrid scheme with voluntary top-up payments for following contract area specific management plan
- Management plan requirements overrule standard requirements
- Management is approved yearly by local authorities
- No further control

Q: Which of the following options would you be interested in to qualify for additional payments?



- The ideal way of implementing innovative contracts:
  - Combining with mainstream contractual elements (e.g. action-based contract with some result-based elements)
  - CAP AECMs as the main policy framework, innovative elements as top-ups
  - huge regional heterogeneity in what is considered „ideal”
- Adaptive approach favored to system-wide changes (path dependency)
- Combining with market-based solutions seem synergistic but mostly remain under the radar

Question:

How to design effective agri-environmental schemes for supporting biodiversity in livestock systems

Answer:

It depends....

- Hungarian case and EU Delphi: Boldizsar Megyesi, [megebold@gmail.com](mailto:megebold@gmail.com)
- French case: Celine Dutilly, CIRAD, [celine.dutilly@cirad.fr](mailto:celine.dutilly@cirad.fr)
- United Kingdom case: Annabelle LePage, [Annabelle.LePage@naturalengland.org.uk](mailto:Annabelle.LePage@naturalengland.org.uk)
- Danish case: Erling Andersen, University of Copenhagen, [eran@ign.ku.dk](mailto:eran@ign.ku.dk)

# Thank you!

Erling Andersen

University of Copenhagen

✉ [eran@ign.ku.dk](mailto:eran@ign.ku.dk)

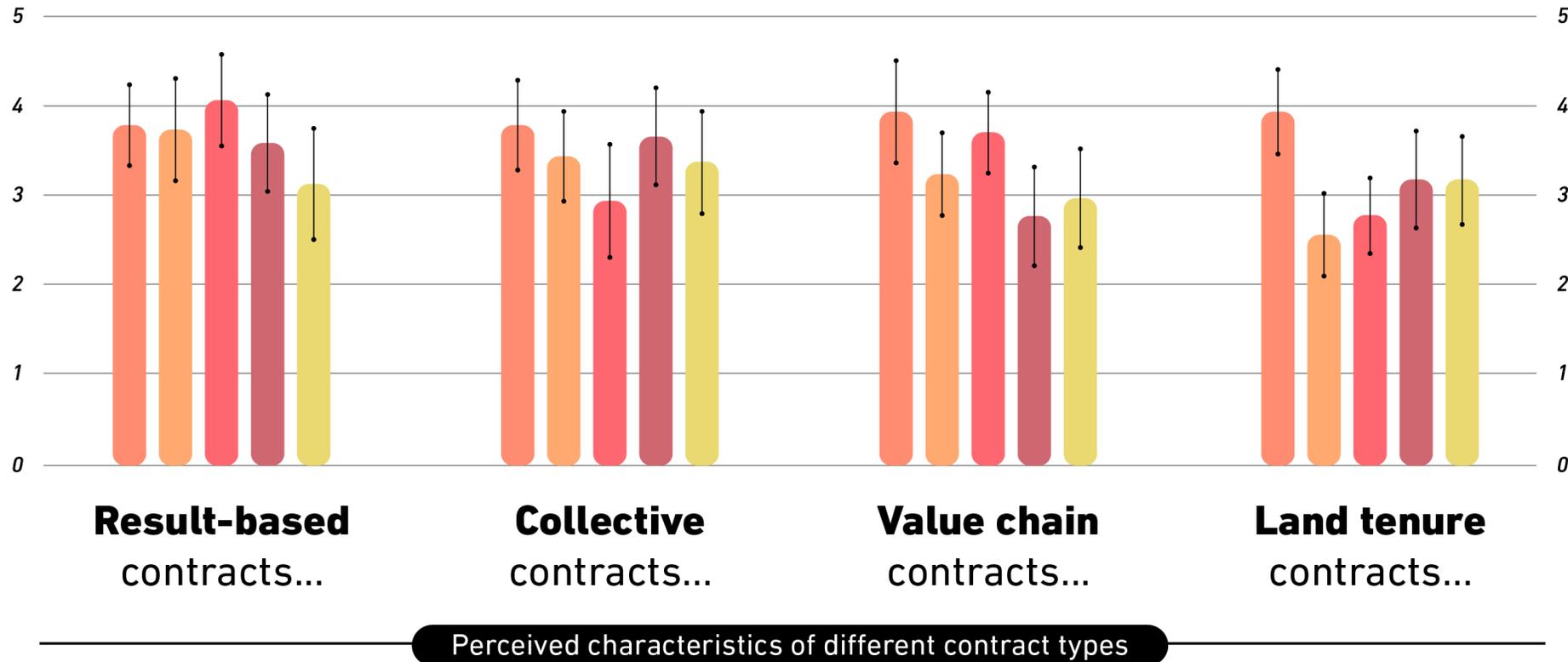
[www.project-contracts20.eu](http://www.project-contracts20.eu)

[contact@project-contracts20.eu](mailto:contact@project-contracts20.eu)



# contracts2.0





- ...are more effective than mainstream contracts
- ...are more costly to implement than mainstream contracts
- ...require a broader knowledge base and a more developed infrastructure than mainstream contracts.
- ...are less suited to existing institutions than mainstream contracts.
- ...are less suited to the social and cultural context than mainstream contracts.