EKLIPSE
Knowledge & Learning Mechanism on Biodiversity & Ecosystem Services

Developing a mechanism for supporting better decisions on our environment based on the best available knowledge.

EKLIPSE Document of work: Agricultural request (CAP and Landscape)

SCOPING Phase ended (06/07/2017)

Content:

GENERAL INFORMATION

This request was initially put to EKLIPSE by IUCN and the Swedish Board of Agriculture. In order to refine the request, scoping activities have been carried out :

a. Call for Knowledge in order to identify already existing work on the request and
b. a stakeholder workshop in Brussels with other participants involved in European policies and biodiversity issues to ensure the policy relevance of the request detailed below and to refine the request.

This document of work describes the results of the scoping activities as well as the background of the request and has been the basis for the call for experts.

Requesters: *Alberto Arroyo Schnell – International Union for Conservation of Nature - IUCN Regional Office for Europe*
Johan Wallander – Swedish Board of Agriculture
Date request received: *30/9/2016// 29/9/2016*
Date of first meeting with requesters and EKLIPSE KCB and methods experts: *02/02/2017*
Expected deadline for deliverables: *End of 2017 - Early 2018 / Before the design-phase of the next rural development programme. Preferably 2018, but 2019 would work as well*

Topic of the request (was refined during the scoping phase, see below): **What are the effects of CAP greening measures on biodiversity and related ecosystem services?**

BACKGROUND OF THE CALL

The greening measures of the CAP and rural development schemes

The current Common Agricultural Policy (CAP) 2014-2020 prioritizes the "sustainable management of natural resources" and this was translated into the introduction of a new green direct payment scheme ('greening'). Since 2014, 30% of the direct payments are linked to respecting three sustainable agricultural practices which are beneficial to environmental and climate change concerns, notably soil quality, biodiversity and carbon sequestration. These agricultural practices include: diversifying crops, maintaining permanent grassland and dedicating 5% of arable land to 'ecologically beneficial elements' ('ecological focus areas - EFAs'). The current CAP also includes, through Rural Development Regulation, other policy measures that can contribute to biodiversity (Natura 2000 measures, agri-environmental and climate (AEC) measures, etc.). Rural Development Programmes are implemented by the Member States (MS) or regions, which have flexibility to select some measures (based on their strategies) which will be then contracted with farmers or other rural managers.

Limited effect of greening on biodiversity and related ES

Recent articles point out that the greening measures may not deliver as many environmental benefits as expected. It appears that the flexibility available to national authorities for implementing such greening measures, although in principle creates opportunities to tailor these measures, might also have created challenges. An IEEP study[1] (2015) concluded that "the general pattern in most of the Member States reviewed has been to offer farmers maximum flexibility in terms of implementation", which might not always guarantee sustainability.

Current policy context

As part of the CAP process, the European Commission published two reports on greening measures: the 2016 review of greening after one year[2] and the 2017 report on the implementation of the EFAs[3]. These reports will feed into a wider evaluation of greening, which will be delivered end of 2017 or beginning of 2018. These evaluations will then contribute to the report on the CAP monitoring and evaluation due in 2018, and more largely to the discussions about **the future of the CAP (2021-2027)** that have already started, focusing on **modernising and simplifying the CAP**. By the end of 2017, a communication from the European Commission (EC) including first policy options for the future CAP, is planned. Other studies have been commissioned by NGOs, etc.[4], which will also try to feed into the debate on the CAP.

Within this policy context and some early feedbacks on the greening measures currently not contributing significantly to halter biodiversity loss, there is a knowledge need to better understand the effects of the CAP greening on biodiversity and related ES, identifying which measures work and which aspects do not work as intended, and to establish options on how measures could be improved to increase their effectiveness for supporting biodiversity and related ES.

The knowledge synthesis carried out as part of EKLIPSE should aim at supporting the decision-making in the future CAP debate. It could also influence the content of Rural Development Programmes, that can be regularly updated by Member States/regions. It should try to avoid duplicating other initiatives and focus on the existing gaps.

Focus on the EFAs

Among the greening requirements, the EFAs are areas established, in particular, in order to safeguard and improve biodiversity on farms. EKLIPSE will provide a final list of EFA options to be

considered in the knowledge synthesis, as well as a summary of evidence that they support biodiversity and related ES. As an *initial* list of EFA options, we suggest the following options:
- Fallow land [5,6,7]
- Buffer strips[7]
- Hedges or wooded strips [5,6,7]
- Field margins [6,7]
- Traditional stone walls [5,6]

Other options that could also be considered, provided that the summary of evidence confirms their potential for supporting biodiversity: forest hedges without production, and among landscape features: ponds and ditches.[7]

Uptake of the measures and identification of barriers
According to the EC report on the implementation of EFAs, landscape features, which provide best results in terms of potential positive impact on ecosystem services, have a low uptake: it is either linked to the choices of MS/regions to include or not certain EFAs in the list proposed to farmers, or to the farmers' choices to implement these types of EFAs. It illustrates how important it is that the drivers for the choices of MS and farmers should be analysed.
Considering fallow land, which has a higher uptake in the EU, it has already been pointed out that positive impacts on biodiversity will depend on the management practices. More generally, the quality (versus the quantity) of the EFA types' (conditions and management requirements) is also important for environmental benefits and it should be taken into account when proposing improvements of the measure.
Another question is that collective approaches at landscape level are seldom considered by MS. Whether it delivers positive outcomes for biodiversity and if this way of delivering EFAs could be encouraged should be looked into.

Recommendations for the future CAP post 2020
As there is no certainty of the design of the future CAP, suggestions of improvements of measures should not be limited to the current CAP framework and its delivery mechanisms.

REFINED REQUEST QUESTION

Based on the results of the stakeholder workshop and the Call for knowledge, it was agreed to refine the request question. Especially the question of uptake of measures seems to be most adequate for the work of an EKLIPSE expert group.
Therefore, EKLIPSE invited via its Call for experts No.2/2017 May 2017 applications for an expert group working and refined the request question from "What are the effects of CAP greening measures on biodiversity and related ecosystem services?" to:

Understanding Farmer Uptake: What measures are most promising to deliver on supporting biodiversity and ecosystem services in the next round of the Common Agricultural Policy (CAP)?

SUGGESTED METHODS

During the scoping process the EKLIPSE methods group and the KCB Agri discussed potential methods of knowledge synthesis which can be applied for this request. Methods were suggested for the different steps of the request.

A) List of EFA options and a summary of evidence that these EFA options contribute to biodiversity and related ES provided by EKLIPSE (cf. above),

- review the summary of evidence that these specific measures work,
- understand which are most effective in terms of biodiversity and ecosystem services

B) Assess the potential measures which are most promising to deliveron supporting biodiversity and ecosystem services to be effective across Europe, i.e. identify the barriers to their uptake:

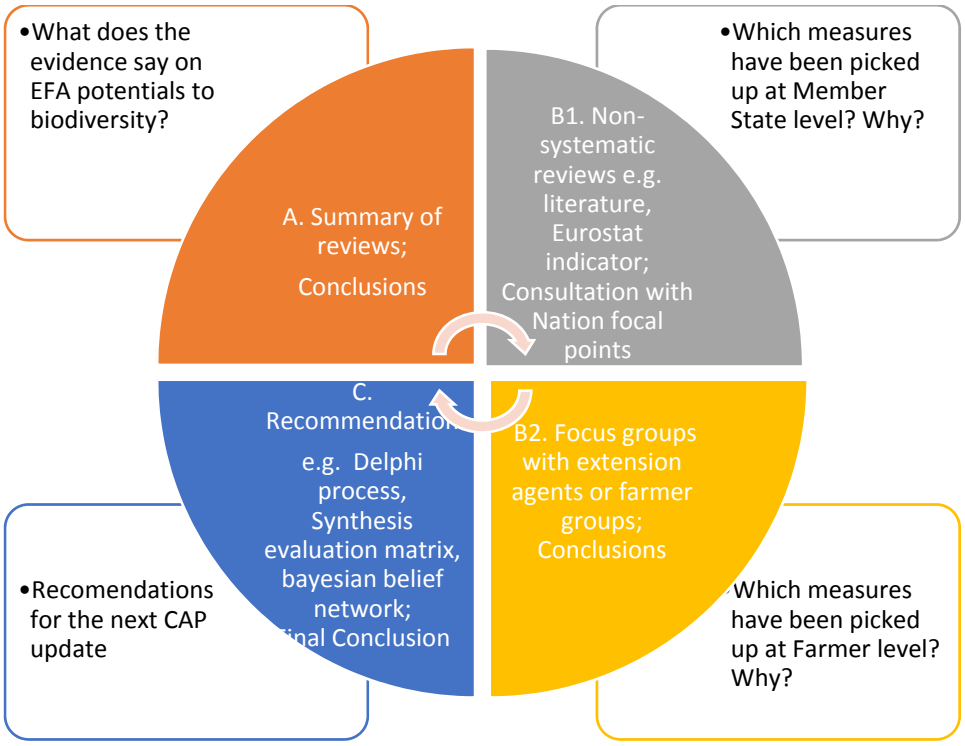
1. at Member State (MS) level
(Suggested methods: non-systematic review synthesis of literature, Eurostat indicators and farmers statistics; ideally covering all MS)

2. at farm level
(Suggested methods: focus groups with extension agents or farmer group representatives, to be conducted by each expert in his/her country of residence, covering up to 10 MS.)
Administrative and socio-economic factors should be analysed.

C) Provide recommendations to improve the delivery and uptake of the measures, and thus the benefits for biodiversity and related ESS

- The recommendations should address at least European and MS level.
(Suggested methods: Causal Criteria Analysis and Delphi process or focus group with experts (involving the responsibles at MS level for selecting measures)
(Potential method: Synthesis Evaluation Matrix assessing each EFA option against the outcomes of A and B at Member State and farmers decision level Study cases for successful/problematic greening implementation might be useful to illustrate the results, Bayesian belief networks, or formal consent among expert working group)

Suggestion of an integrated knowledge framework which gathers the different parts of the CAP request which can be done by the EWG:



LOGBOOK

The logbook describes the agenda of exchanges with the Requester, KCB Agri and the Methods group and the contents discussed during the meetings.

Date	Participants	Topic	Platform
02/02/2017	KCB-Ch (1) Requesters (2) KCB-Agri EKLIPSE secretariat (1)	Combination of the two requests? Further steps	Visimeet
06/02/2017	KCB-Ch (1)	Draft version of Document of work to requesters	E-Mail
13/02/2017	Requesters (1)	Comment of requester on DoW	E-Mail
16/02/2017	KCB-Ch (1) EKLIPSE secretariat (1) requesters (2)	DoW draft and on the reformulation of the request	Visimeet
16/02/2017	KCB Agri (3)	Comments on DoW draft and on the reformulation of the request	E-Mail
08/03/2017	KCB Agri (1) KCB-Ch (1) EKLIPSE secretariat (2), requesters (1)	Call for knowledge and stakeholder workshop	Visimeet
17/03/2017	EKLIPSE secretariat	Sending out Call for knowledge	E-Mail
21/03/2017	KCB Agri (2) KCB Method (1) KCB-Ch (1) KCB focal point (1) EKLIPSE secretariat (1) requesters (1)	Agenda and organization of the stakeholder workshop	Visimeet
20/04/2017	KCB Agri (2) KCB-Ch (1) KCB focal point (1) EKLIPSE secretariat (1)	Results of the Call for knowledge and preparation stakeholder workshop	Visimeet
20/04/2017	EKLIPSE secretariat (1), requesters (1)	Results of the Call for knowledge and preparation stakeholder workshop	Visimeet
20/04/2017	EKLIPSE secretariat (1), requesters (1)	Results of the Call for knowledge and preparation stakeholder workshop	Visimeet
24/04/2017	KCB Method (2) KCB-Ch (1) EKLIPSE secretariat (1)	Methods	Visimeet
26/04/2017	Requester (2) KCB focal point (1) KCB Agri (1) KCB-Ch (1) KCB Method (2) EKLIPSE secretariat (1) as well as Commission and NGO representatives	Stakeholder workshop	Face-to-face

27/04/2017	KCB	Decision to continue with the request and further steps	Visimeet
11/05/2017	Requester (1)	Comments on Draft of the Call for Experts	E-Mail
16/05/2017	Requester (1) KCB focal point (1) KCB Agri (1) KCB-Ch (1) KCB Method (1) EKLIPSE secretariat (2)	KCB Agri, KCB-Ch, KCB Method, EKLIPSE secretariat, requesters	Visimeet
27/05/2017	EKLIPSE secretariat	Sending out the Call for Experts (Deadline 25th of June 2017)	E-mail

REFERENCES

1 Hart K (2015), Green direct payments: implementation choices of nine Member States and their environmental implications, IEEP London
2 SWD(2016) 218 final
3 European Commission. 2017. Report from the Commission to the European Parliament and the Council on the implementation of the Ecological Focus Area obligation under the green direct payment scheme. Brussels, 29.3.2017 COM(2017) 152 final. [Rapid Evidence Assessment]
4 See for an overview: www http://www.eklipse-mechanism.eu/forum_discussion
5 Sutherland, W.J., D. L.V., N. Ockendon, and Smith R.K. 2017. What Works in Conservation. Open Books Publishers. [Synopsis & summary PLUS multiple expert consultation with Delphi]
6 Pe'er, G., Y. Zinngrebe, J. Hauck, S. Schindler, A. Dittrich, S. Zingg, T. Tscharntke, R. Oppermann, L.M.E. Sutcliffe, C. Sirami, J. Schmidt, C. Hoyer, C. Schleyer, and S. Lakner. (2016). Adding Some Green to the Greening: Improving the EU's Ecological Focus Areas for Biodiversity and Farmers. Conservation Letters DOI 10.1111/conl.12333. [Expert consultation]
7 See Regulation (EU) No 1307/2013 and Regulation (EU) No 639/2014 for the definition and/or criteria for each type of EFA

ANNEX 1: Context and justification (First version of the DoW)

Context and justification:
The current CAP prioritizes the "sustainable management of natural resources". This is translated in measures such as the so-called "greening" of the direct payments, with 30% of these payments linked to respecting three sustainable agricultural practices which are beneficial to environmental and climate change concerns, notably soil quality, biodiversity and carbon sequestration. These agricultural practices include: diversifying crops, maintaining permanent grassland and dedicating 5% of arable land to 'ecologically beneficial elements' ('ecological focus areas'). However, it appears that the flexibility available to national authorities for implementing such greening measures, although in principle creates opportunities to tailor these measures, might also have created challenges. An IEEP study (2015) concluded that "the general pattern in most of the Member States reviewed has been to offer farmers maximum flexibility in terms of implementation", which might not always guarantee sustainability. The rural development pillar of the CAP is implemented through the national and subnational Rural Development Programs. These Programs can include a number of beneficial measures for environment. However, Member States have a strong flexibility on selecting the extent to which they want to take up some measures, including the Natura 2000 payments, agri environmental payments, organic farming and others. Therefore, the situations can be very different in every Member State, as well as the effects on biodiversity of decisions taken at national level. With this situation, environmental NGOs have been strongly arguing against the current sustainability of the CAP, asking also for a "fitness check" of the current policy (see http://www.greenpeace.org/eu-unit/Global/euunit/reports-briefings/2016/NGOs%20letter%20-%20CAP%20Fitness%20Check%20_final_version.pdf). There are some opportunities for the evaluation of the CAP. The Mid-term review/revision of the Multiannual financial framework 2014-2020 now ongoing does not seem to focus on a deep analysis of the CAP, considering other priorities (jobs and growth and social issues such as the migrants' crisis). However, there will be a re-discussion of the overall EU budget for the period 2020-2026, which can be expected to start as early as 2017. This will be a crucial opportunity to ensure an enhanced sustainable future CAP, but there is a need to ensure that the decisions taken are based on the best available sound information, including an analysis of what is working now and what could work better. EKLIPSE –as an EU Horizon 2020 project which role is to facilitate linkages between science, policy and society– is an optimal option to facilitate the provision of the required knowledge and help to ensure that the information is made available to relevant actors to inform adequately the relevant policy debates. This "unusual", reactive, and flexible support mechanism can be the needed catalyzer for the provision of knowledge in the rapidly evolving EU policy context, especially for the complex discussion on agriculture and biodiversity.

The request can be developed into several sub-questions. Which ones that should be included depend on data availability and extent of the study. What mix of land use and land quality of different types of land is needed in order turn the negative trend for Farmland Bird Index and European Grassland Butterflies? E.g. what acreage of semi-natural pastures/more trivial permanent grassland/ley/ land left fallow etc. is needed. How much semi-natural pastures are needed to reach a favorable conservations status for grassland habitats and their species (restricted to habitats and species listed in the Habitat Directive). What land use mix is needed in intensively managed landscapes, in order to secure ecosystem services as pollination, natural enemies etc.

For all EU-member states some portion of the Rural Development Programme (RDP) and CAP as a whole is devoted to environmental issues. To support biodiversity and ecosystem services is a big challenge as monitoring shows mostly negative trends. It would be helpful to get a better idea or a sort of prognosis of what amount of change is actually needed to be able to curve those trends. In

general, this kind of knowledge is useful in discussions of budgetary needs as well as distribution of measures. In the near future this could help in redesigning the next RDP. It is not at all obvious how what methods are suitable for addressing these questions, nor is it obvious what data is available (besides indicator data and land use data for the current Situation). We foresee it will take some knowledge synthesis and possibly modeling, which we find hard to formulate in a consultancy contract.

What is the level of controversy?

- Controversy in perception/values/opinion
- Controversy in the evidence

METHOD / APPROACH
Proposed methods

What sources of knowledge should be included?

- Scientific
- Indigenous and Local Knowledge (ILK)
- Technical know-how, practical experience
- Opinions and values

As this is a complex issue, and the scale of it can be far too big, it is not possible to be comprehensive in the analysis. It is therefore suggested to discuss, agree and define a way forward with the Knowledge Coordination Body and experts in order to ensure good results, deciding a specific selection of actions covering as much as possible all regions, countries, relevant policies, but also being realistic on how far it is possible to get. A first action focused on collecting existing scientific evidence at all levels, literature and ongoing experiences (see Call for Knowledge).

What types of information are useful or acceptable?

- Qualitative data
- Quantitative data

This could help to identify gaps, and help define next steps. Subsequently, there are different scales and issues where research would be helpful, including at local level (eg if specific actions are being applied as a consequence of the CAP, which are their effects on the environment including on biodiversity) and subnational / national policy level (eg an analysis of the extent to which voluntary measures have been picked up, on the one hand by Member States and subnational administrations in their planning, and on the other hand by farmers at local levels). The involvement of a range of actors should be considered, starting with the European Commission (DG Env and DG Agri), who will surely be very interested in the results of such project. It would be crucial to ensure scientific credibility and outcomes, avoiding any influence from political views of this sensitive issue. An extra piece of knowledge which would also help would be the development of a common methodology to allow relevant stakeholders in EU countries to evaluate the performance/impact of the CAP spending in rural areas from the environmental, economic and social point of view. Such methodology would allow to monitor the CAP spending's impact on rural areas.

In step one, we should try to quantify the needs of biodiversity; how much of what land use, what quality and what distributions are needed in relation to what is already there. I.e. what is needed in order to reach a favorable conservation status for grassland habitats and their species? Step two would then be to specify to what extent CAP delivers just that and what needs to be changed.

DETAILS OF THE REQUEST
What is the focus of the request?

To support the decision making for the future CAP debate by: -evaluating the impacts on biodiversity of the current CAP measures and their implementation -ensuring the relevant actors –including key decision makers– have access to this information timely.
The objective is to create a better knowledge for future design and needed magnitude of measures that support biodiversity and ecosystem services.
To narrow down the question, the focus should be on the Greening of the CAP (Pilar 1) to evaluate the measures according its performance. Pillar 1 is receiving a big part of the CAP money and is the most controversial.
Identify knowledge of current state of threatened and common species and compile evidence on effectiveness of greening measures with regard to biodiversity. Of course we need to check what is being done in the mid-term review and can hopefully address some of the identified knowledge gaps. Identify what the CAP measures are currently achieving and what can be done to improve the discussion about different policy options for the next round of CAP negotiation. Ideally we are able to identify greening measures that do not go against farm economics and can be in the best interest of farmers.

What is the geographical range? (e.g. all Europe, biogeographical areas, some countries or sites…)
What is the spatial scale of the updated request?
EU policy level. This project would focus on informing the discussion of the future CAP.
But it is likely that it needs to be done on a regionalized level, which will increase the applicability for different stakeholders. It is likely that a biogeographical level or possibly even bigger regions would be suitable.

Which specific interventions are of interest here?Agreement was to focus on greening measures in pillar 1, but we will have to further specify as we move on.

How narrow could the question get before it stops being policy-relevant?

- Intermediate (Broader than a single well-defined response, ecosystem, but not across more than one policy area)
- Very broad (covers many possible responses or more than one policy area)

What are the objectives of the interventions and how can the outcomes of the interventions be measured/ determined?

Over what time horizon does the question recur?·

- Definitely recurs, at predictable time intervals, so far the relevant policy process: 'negotiation of CAP' recurs every 7 years.

EXPECTED OUTPUTS (quantitative, qualitative… means, ratios…)
A number of policy briefs (the exact number would depend on the priorities identified during the initial planning phase, as well as from the resources available), including recommendations, focused on specific issues (e.g. on the impact agri-environment measures, or on separate issues related with the greening of the CAP) -A collection of scientific references and sources of information (list of articles, books, etc.). -Results from specific analysis of some elements of the CAP implementation (e.g. analysis of Operational Programs), or of specific impacts on biodiversity of some measures.
Quantitative predictions on what amount of the different land uses that are needed. Preferably with maps visualizing the needed changes in different regions. We discussed that this might be difficult at European scale and given the state of available knowledge. There is an ongoing project in LUND UNIV that takes such an approach but for knowledge synthesis it might be more promising to try and compile evidence on the effectiveness of certain measures rather than trying to predict "ideal states of habitats for biodiversity".

EXPECTED OUTCOMES (policy, negotiation, management, other)

Informing the decision making process for the re-discussion of the EU CAP beyond 2020. The results from this project would be very relevant for the debate on the future CAP. Ensuring actors such as the mentioned above (EU institutions, NGOs, farmers) have this information timely available will ensure the impact of this project will be valuable – the project design and actors involved in its development should ensure that the information is at the right place at the right time to be relevant for the discussion.

The results can be used as an input in the negotiations considering the future CAP. For Member States it can also be used as a guide on how to prioritize and distribute measures to support biodiversity and ecosystem services in the next RDP.

Deliver useful information to inform policy discussion and provide recommendations in how to improve the influence of the CAP on biodiversity

What are the consequences of getting it wrong, original request?

- Medium (e.g. a wrong policy/decision can be adapted/adjusted later)
- Unacceptable (e.g. large economic/political/environmental costs)

ANNEX 2: Text of the Call for Knowledge

EKLIPSE
Knowledge & Learning Mechanism on Biodiversity & Ecosystem Services

Developing a mechanism for supporting better decisions on our environment based on the best available knowledge.

EKLIPSE is developing a European Mechanism to answer requests from policy makers and other societal actors on biodiversity related issues.

More information on the processes and the EKLIPSE project funded by the EU in H2020 is available at
www.eklipse-mechanism.eu

CALL FOR KNOWLEDGE FOR INITIAL SCOPING, EKLIPSE – FEBRUARY 2017

Responses most useful before: April 18th 2017

TOPIC:

What are the effects of CAP greening measures on biodiversity and related ecosystem services?

1 Invitation to share knowledge for informed decision-making

EKLIPSE is inviting scientists, policy, practitioners and other societal actors to share their knowledge on the following overarching question: **What are the effects of CAP greening measures on biodiversity and related ecosystem services?** The objective is to identify which measures work, and which aspects do not work as intended. The intention is to establish options on how greening measures could be improved to increase their effectiveness for supporting biodiversity and biodiversity-based ecosystem services. Suggestions for improvements should take into account administrative feasibility (ideally they should be simpler), social implications and farm economics. Based on the findings of the Call for Knowledge, EKLIPSE and the requester discuss if and how to proceed with the request.
The final framing of the request is being developed through an interactive dialogue between the EKLIPSE scientists and the requesters, and will be further discussed with stakeholders end of April 2017 to ensure relevance for policy making regarding biodiversity and ecosystem services

We ask for completed or ongoing knowledge generation activities or synthesis on the following aspects:

1) Evidence on the effects of agricultural policies or management practices for **biodiversity** in Europe, please specify the (ideally quantitative) indicators.
2) What are the quantitative indicators for **ecosystem services** (ES) that are known or hypothesized to be strongly related to these indicators for biodiversity? For each ES, please specify the quantitative units and how it was estimated (e.g., statistical analysis based on field data, simulation based on mix of empirical data and expert judgement, raw data – no analysis done yet).
3) What **policy instruments and management actions** have been implemented (and subsequently quantified using a quantitative indicator) to maintain/improve these indices of biodiversity? Please specify
4) What new (i.e. not-yet-implemented) **policy instruments and management actions** are being proposed to maintain/improve these indices of biodiversity? Responses should ideally include quoted text when referring to existing documents.
5) What are the identified **barriers to developing or implementing the instruments/actions** (from Qs 3 & 4)? Responses should include quoted text when referring to existing documents.

For each indicator identified in responding to questions 1-3, please specify:

- Quantitative units and how it was estimated (e.g., statistical analysis based on field data, simulation based on mix of empirical data and expert judgement, raw data – no analysis done yet)
- Supporting document/citation with page number or web link. If available, documentation in English should be provided.

We want to explore the amount of knowledge that exists in this area, who the main knowledge holders are and, if after scoping we decide to answer this request by a dedicated knowledge synthesis process, we want to identify the most suitable methodology(ies) for answering it.

The outcome of this call will thus inform the final framing of the request that is being developed through an interactive dialogue between the EKLIPSE scientists and the requesters (IUCN Regional Office for Europe and the Swedish Board of Agriculture), and will be further discussed with stakeholders to ensure relevance for policy making regarding biodiversity and ecosystem services (see below for more information on the EKLIPSE mechanism and how it conducts knowledge syntheses).

A first literature screening exercise has already been carried out to help us to decide to scope this request. It resulted in a compilation of research papers and reports related to the topic. The compilation can be found here. We would now like your contribution to take this request one step further.

Please contribute your comments and additional knowledge/references on the topic in the online KNOCK forum.

How to contribute to the Call for Knowledge

All knowledge collected through this call for knowledge will be collected and be open for discussing /commenting on the KNOCK Forum. To add documents and participate in the discussion, please register at our quick and easy 'Keep me Posted' page. Then, please click on the relevant thread to add your information. Each thread already contains a list of documents that are potentially relevant to the request. We invite you to add any information that you think is relevant for this request, and justify its inclusion e.g. additional information from countries, scales or disciplinary perspectives not

covered sufficiently etc...). Relevant information should be grouped under the following threads: 1) literature reviews, 2) empirical studies/practical experiences 3) modelling studies and 4) conceptual papers and can include:

- Links to open access papers (in any language).
- Links to published and unpublished grey literature or case studies (in any language).
- Description of on-going research projects, or knowledge compilations, expected to deliver results within the next year.

Please write the information you like to add in the comment box of the respective thread (1: literature reviews, 2: empirical studies/practical experiences, 3: modelling studie, 4: conceptual papers).

2 Objective of the call and request to be addressed by this call

EKLIPSE coordinates innovative and transparent approaches for science, policy and societal actors to jointly provide the best available evidence leading to better informed decision-making and to identify current and future research priorities. A request on "Evaluating CAP greening measures on biodiversity" was proposed by IUCN Regional Office for Europe and the Swedish Board of Agriculture, to the EKLIPSE call for Request (CfR.1/2016). The objective of this call for knowledge is to launch an initial scoping process on the request meant to identify available assessments, existing studies and other resources.

Further information on the request on "Evaluating CAP greening measures on biodiversity" as submitted by the requester can be found on the website.

3 Background on EKLIPSE

EKLIPSE is an EU-funded project that started in February 2016. With support from the European Commission and a high level Strategic Advisory Board (SAB), the project aims to establish a robust and flexible long-term mechanism for policy support on biodiversity and ecosystem services, communicating and engaging a wide set of knowledge holders and ensuring tailor-made outreach of results to knowledge requesters and society more broadly.

The success of EKLIPSE and its resulting mechanism is in everyone's hands:

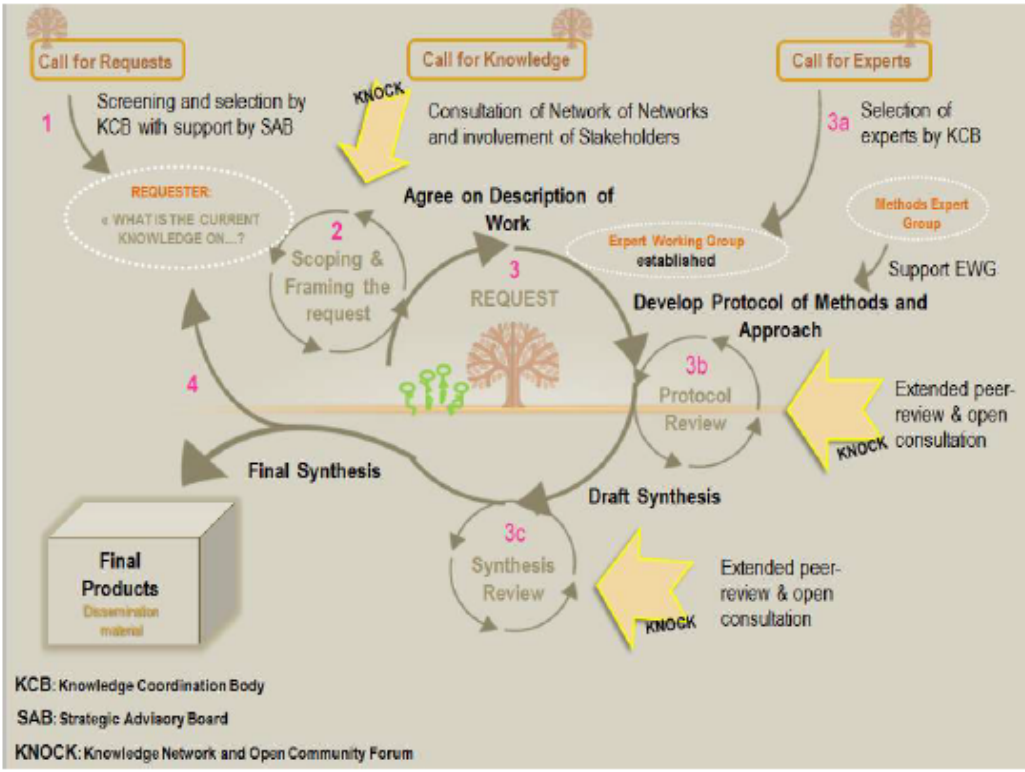
- the 'requesters' from policy and society who need to know what knowledge is out there to answer their policy or societal needs;
- the knowledge holders (be they scientists or other citizens) who want their knowledge to mean something; and
- the extensive networks working on biodiversity and ecosystem services who have the enthusiasm and knowledge to make the mechanism work in the long term.

4 The process: how EKLIPSE answers requests

The EKLIPSE process consists of several steps (see figure below): After the Call for request (step 1), the second step is the Call for Knowledge that supports further Scoping and Framing the request (step2). Based on the findings of the Call for Knowledge, EKLIPSE and the requester discuss how to proceed with

the request (step 3). If already sufficient knowledge on the request is available or other reasons exist for not continuing with the request, the request will not be taken further, and the outcome is the collection of knowledge identified in second step. If EKLIPSE and the requester agree on continuing, the request will be framed and finalised jointly with relevant science, policy and societal actors. EKLIPSE then organizes a Call for Experts inviting experts to form an expert working group on the request (step 3a).

The selected expert group will, together with the Knowledge Coordination Body (KCB) and the requester, agree on the methodological approach to be taken for the knowledge synthesis. This will be compiled in a protocol, made publicly available and peer reviewed (step 3b). During the process of gathering, integrating and synthesizing the best available evidence, communication between all relevant actors will be key. Finally, the results of the co-generated evidence will be peer reviewed before being communicated in targeted ways to the requester (e.g., as a report or brief or other output to be discussed with the requester), as well as relevant decision-makers, the knowledge community and the general public (steps 3 c and step 4).



5 Next steps: How EKLIPSE will answer the request

If EKLIPSE decides to carry out a new knowledge synthesis based on the call, it will invite experts on the topic to express their interest in joining the Expert Working Group. The expert working group will cover diverse and complementary skills (including multidisciplinary skills and a broad geographical coverage)

and will interact with relevant stakeholders to ensure appropriate methodological choices and uptake of outputs.

The Call for Experts will be widely publicized on the EKLIPSE website, on the Forum and other dissemination channels to ensure a broad coverage of disciplines and geography. The selected group will be supported financially by the EKLIPSE project for travel expenses and in certain cases through honorary contracts.

ANNEX 3: Results of the Call for Knowledge

Methods:
Prior to the Call for Knowledge the KCB secretariat did a first scoping activity on existing knowledge on the effects of CAP greening measures on biodiversity and related ecosystem services. 42 articles have been identified (15 conceptual papers, 19 empirical studies/practical experiences, 5 literature reviews and 3 modelling studies). In order to identify additional existing knowledge on the topic of the request a Call for Knowledge has been published on the KNOCK forum and on the EKLIPSE webpage on the 10th of March 2017. In addition this call was send via email to around 150 experts, networks representatives from NGOs, EU projects as well as Government related institution. The Call for Knowledge has been also distributed via Twitter and was published on Research Gate.
There was no deadline for contributing to the Call for Knowledge however it was mentioned in the Call that responses are most useful before April 18th.

Results:
25 additional papers have been added to the initial scoping activity (22 on the KNOCK Forum, 2 were indicated by EKLIPSE colleagues, 1 through Research Gate). In addition, the contributors also indicated why they consider the respective paper relevant for the request. In the course of the Call for Knowledge we cooperated with another project by BirdLife, the European Environmental Bureau and NABU („rapid evidence assessment" for the impacts of the CAP on the economy, society and the environment. This project aims to indicate the available knowledge, and develop recommendations to improve the CAP in the short and longer terms, further information can be found here: https://www.surveymonkey.de/r/RapidCapAssessment)

Existing knowledge:
This paragraph is based on a preliminary analysis of the articles of the initial internal scoping and the results of the Call for knowledge, realized on 19th April)

- **Type of papers:**
  Almost half of the papers are Empirical studies/ practical experiences while only a few literature reviews and modelling studies exist. It needs to be mentioned that in some case the classification to these categories was difficult, as some documents fit in more than one category.

Empirical studies/ practical experiences	32
Literature Reviews	7
Conceptual Papers	21
Modelling Studies	7
Total	**67**

- **Regional focus**
  The regional focus of the papers is widespread: 30 papers address the European level in general, while others focus on specific European countries. Germany, the UK, the Netherlands, Spain and France are mostly frequently presented. Many papers deal with various countries. In addition (not displayed in the table) 6 of the papers highlighted specific sub-national regions (e.g. Andalusia or southern Italy).

Across scales	1
Worldwide	5
OECD countries	1
European level	30
Mediterranean countries	3
European countries	
Austria	3
Belgium	1
Czech Republic	3

Denmark	3
England	1
Estonia	1
Finland	1
France	5
Germany	11
Greece	2
Hungary	3
Ireland	1
Italy	3
Latvia	1
Norway	1
Poland	2
Portugal	2
Romania	2
Spain	5
Sweden	6
Switzerland	4
The Netherlands	5
UK	9
Non-European countries	
Tanzania	1
Kenya	1
India	1
Ghana	1
Total	119

- **Comments on the forum**
  In the following selected comments on the request and existing knowledge from users of the forum are presented:
  - "Cover crops in tree crops are a key element in the greening of the CAP. For the Mediterranean areas there are several papers indicating that the actual impact of these cover crops on these ecosystems services are related to the ground cover and biomass productivity which in water scarce conditions is quite variable among different farms. The evaluation of the actual impact of CAP (and ideas for its future improvement) could gain if this variability and environmental limits could be evaluated and studied in more detail than now- There are already several projects (e.g. within the JPI-Biodversa, http://www.vinedivers.eu/) in which this is been evaluated, also in relationship to biodiversity."
  - "We are currently reviewing the literature for available evidence on the greening measures. Most studies we find have evaluated the policy design and implementation by farmers, compared to knowledge on what interventions should be most effective."
  - I, together with Guy Beaufoy have looked at the relationship between semi natural grassland management and butterflies . I can send you a link to the oaper. We also have unpublished case studies related to this work. The Reports by the EEA analysing the Article 17 Reports from EU MS , under the EU Habitats Directive also include extensive anaysis of the effect of agro ecosystems on biodiversity . THe EU Mid Term Review of the EU Biodiversity Strategy (and the associated EU Staff Working Ppaer) also contain relevant analysis of the effects of agriculture and farming practices on biodiversity. These analyses are based on field monitoring data.

Some of the papers mentioned by the users of the KNOCK forum were already included in our initial scoping activity, some of the papers were also mentioned by different users. This may lead to the conclusion that the relevant existing literature has been grasped through the Call for Knowledge. The call for Knowledge also revealed that further activities such as the conference "Who will fix the broken CAP?" in march 2017, organized by Birdlife and the European Environmental Bureau or the RISE report "CAP: Thinking out of the Box" published in April 2017" exist. These activities include policy recommendations for the future CAP.

ANNEX 4: Stakeholder Workshop

OUTCOME AND MINUTES OF THE STAKEHOLDER WORKSHOP ON THE EFFECTS OF CAP GREENING MEASURES ON BIODIVERSITY AND RELATED ECOSYSTEM SERVICES

26th of April 2017, at the Helmholtz offices, Rue du Trone 98, Brussels, 13:00 – 16:00

The presentations of the stakeholder workshop are available here

http://www.eklipse-mechanism.eu/owncloud/index.php/s/Bnyi0kyiRs3Pyr4

We first present the outcome, followed by minutes of the entire event including a list of participants.

OUTCOME OF THE STAKEHOLDER WORKSHOP

The general outcome of the stakeholder workshop as well as further discussions of the EKLIPSE KCB (Knowledge Coordination Body) and the EKLIPSE Method group were synthesised in the Call for an EKLIPSE expert working group. In the following, the main objective of the expert working group and the suggested programme of work is presented. The full text for the call can be found here : http://www.eklipse-mechanism.eu/open_calls

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Understanding Farmer Uptake: What measures are most promising to deliver on supporting biodiversity and ecosystem services in the next round of the Common Agricultural Policy (CAP)?

Objectives of the call and suggested programme of work

EKLIPSE is looking for an expert working group to propose improved or new CAP measures that would better contribute to biodiversity and related ESS, through the following tasks:

A) Based on a list of EFA options[1] and a summary of evidence that these EFA options contribute to biodiversity and related ES provided by EKLIPSE,

- review the summary of evidence that these specific measures work,

- understand which are most effective in terms of biodiversity and ecosystem services

[1] As an initial list of EFA options, we suggest the following options: fallow land, buffer strips, hedges or wooded strips, field margins, traditional stone walls. Other options that could also be considered, provided that the summary of evidence confirms their potential for supporting biodiversity: forest hedges without production, and among landscape features: ponds and ditches.

B) Assess the potential measures to be effective across Europe, i.e. identify the barriers to their uptake:

- 1. at Member State (MS) level

(Suggested methods: non-systematic review synthesis of literature, Eurostat indicators and farmers statistics; ideally covering all MS)

- 2. at farm level

(Suggested methods: causal-chain analysis, focus groups with extension agents or farmer group representatives, to be conducted by each expert in his/her country of residence, covering up to 10 MS.)

Administrative and socio-economic factors should be analysed.

C) Provide recommendations to improve the delivery and uptake of the measures, and thus the benefits for biodiversity and related ESS
The recommendations should address at least European and MS level.

(Suggested methods: Causal Criteria Analysis and Delphi process or focus group with experts (involving the responsible policy makers/stakeholders at MS level for selecting measures))

(Potential additional methods: Multi Criteria Analysis or Synthesis Evaluation Matrix assessing each EFA option against the outcomes of A and B at Member State and farmers decision level Study cases for successful/problematic greening implementation might be useful to illustrate the results, Bayesian belief networks, or formal consent among expert working group)

The expert working group is expected to:

- Develop a methodological protocol based on the above suggestions;
- Write a comprehensive report answering the above questions under the quality standards of the methodologies proposed;
- Respond to and integrate the results of extended peer review on the methodological protocol and the final report;
- Integrate the outcomes of the three tasks in a manner understandable and useful to policy makers;
- Present the results at a dissemination event organized by EKLIPSE and/or the requesters.

This process of knowledge synthesis could lead to the establishment of a protocol/framework that could be used periodically to assess the effectiveness of each EFA options.

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MINUTES OF THE STAKEHOLDER WORKSHOP

Participants of the stakeholder workshop:

Lukas Visek	DG Agriculture, C1 Policy perspectives
Vujadin Kovacevic	DG Environment, D2 Biodiversity
Evelyn Underwood	Institute for European Environmental Policy
Jürgen Tack	European Landowners' Organization
Lynn Sundelius	European Parliament - Intergroup Climate Change, Biodiversity & Sustainable Development
Paulo Gouveia & Katerina Tomkova	Copa-Cogeca
Trees Robijns	Living- land NGO
Sophie Condé	Topic Centre Biodiversity
Marie Törnquist	Swedish Board of Agriculture
Guy Pe'er	UFZ/IDiv (by Skype)

Requesters

Alberto Arroyo Schnell	IUCN Europe
Johan Wallander	Swedish Board of Agriculture (by Skype)

EKLIPSE Team

Flore Jeanmart	EKLIPSE Knowledge Coordination Body focal point (UFZ)
Heidi Wittmer	EKLIPSE Knowledge Coordination Body chair (UFZ)
Rania Spyropoulou	EKLIPSE Knowledge Coordination Body
Florian Koch	EKLIPSE secretariat (UFZ)
Nicola Randall	EKLIPSE Methods group
Lynn Dicks	EKLIPSE Methods group (UEA, by Skype)

Welcome and introduction to EKLIPSE (Heidi Wittmer)

There were no further questions following the presentation.

Presentation of the request (Alberto Arroyo Schnell, Johan Wallander)

Discussion:

As the request focuses on the greening measures of the CAP, the meaning of the "greening" was discussed: is it only on the greening measures? as the improvements could be wider (VK); then the cross compliance should also be taken into account (TR); is it only about the 3 greening practices? Or also the equivalent practices? Agri-environment-and-climate measures (AECM)? Investments in favor of biodiversity? (LV)

AAS answered it would be as far as EKLIPSE can go. HW explained that this meeting is to know a bit how far EKLIPSE can go.

(additional comments of EU:

- *Most of the landscape features available as EFA are also protected by cross-compliance, so you cannot avoid the substantial overlap between the policy measures*
- *At present you are only proposing to examine one of the three greening measures, so perhaps you need to clarify why you have chosen not to look at the other two*
- *The EFA measure does not deliver any active management of landscape features or the creation of new permanent landscape features (planting of hedges, trees, creation of ponds etc) – this could only be done by actively encouraging farmers to take up agri-environment-climate funding to take actions to add biodviersity value to their EFA; Same applies to any actions to increase the networking or strategic locating and planning of EFAs at the landscape scale)*

As there are many options about what could be done, HW highlighted an interesting specificity of EKLIPSE, that it offers a broad range of methods/approaches:

Different methods of synthesis (Nicola Randall from EKLIPSE methods group)

Presentation

8 methods that could be used were presented. Some are very similar. Examples were given:

- Rapid evidence assessment, to know what existing evidence say,
- Engaging with stakeholders: joint fact findings, to include groups with different positions to jointly agree on facts, gaps and knowledge needs,
- Analysing/comparing possible outcomes: Baysian Belief Networks, where probabilities are attached to different outcomes, a sort of modelling approach for likelihood of different scenarios,
- Evaluating impacts: structured decision making

Discussion

HW explained that the selection of methods is based on what the type of question is. There has not been an in-depth analysis yet.

First, the most interesting questions have to be identified. Can there be specific questions that EKLIPSE can answer (gaps identified)? or should it bring different pieces together in a more structured approach?

Different points of view were given: it should complete the knowledge (AAS); what is interesting is the grey literature (for example, there are a lot of studies in different languages) and to gather these small pieces; what is also missing is incorporating information like in the LISA study (LISA: Landscape

Infrastucture and Sustainable Agriculture), e.g. at plot level, differences in the landscape due to greening measures/other management practices) (TR).

Overview of the Policy process (Lukas Visek)

LV coordinates the group on environmental aspects of the modernisation and simplification of the CAP in DG AGRI. He focused on the 2 main and current objectives: Simplify and modernise the CAP. About modernisation, the context has changed, it is considerably larger than 6 years ago: there is the objective of coherent policy across all EU policies; the white paper of the EC has just been published. Another example is that 6 years ago, the crop rotation obligation (initial proposal of the EC as a greening measure) could not be implemented, which is not the case anymore now it can be controlled with COPERNICUS.

About the policy process, there is an evidence part (collection of what is done; where policy failure, behavioral bias, etc. are identified) and opinion-based part (consultations), which will lead to define policy options and then to an assessment of these options.

The results of the current consultation on "modernising and simplifying the CAP" will be presented on the 7th of July. A communication and the impact assessment are planned at the end of 2017.

The meaning of "modernise" was discussed: if it is only a technological matter, or could the modernisation also mean a change towards practices maximizing across bundles of ecosystem services or more biodiversity-friendly practices?

Presentation of the study "who will fix the broken CAP" (Guy Pe'er, iDiv, UFZ)

BirdLife, the European Environmental Bureau and NABU commissioned a project to conduct a „rapid evidence assessment" on the impacts of the CAP on the economy, society and the environment. The project aims to indicate the available knowledge, and develop recommendations to improve the CAP in the short and longer terms. During this activity, 282 papers from 17 countries were collected.

The results will be submitted on 1st of May. Some quick first results were presented: the CAP has a low efficiency, low relevance, the added-value is mixed, internal results are bad, external results are mixed.

The database of articles is part of the report. The process of feeding this database will continue, as Guy Pe'er will work on these issues in a bigger project titled "Towards the next reform of the EU's Common Agricultural Policy: evaluating the new greening measures from Ecological and Socio-economic perspectives » at IDiv for the next 2 years.

TR commented (as Birdlife commissioned this work) that it was a very quick process.

LV added that the impact assessment will have an annex, including a lot of information coming from JRC and the EEA as well as a statistical annex (in the coming months).

Preliminary results of the Call for Knowledge (Florian Koch, Flore Jeanmart, EKLIPSE)

Preliminary results of the Call for Knowledge were presented as well as other current knowledge synthesis initiatives on the same subject.

EU asked about the study commissioned by JRC and led by Lynn Dicks. LD provided more information: it is an additional 1 year of work, following the EFA calculator study; this systematic approach will focus on 16 EFA measures.

Tour de table on main knowledge needs/questions with regard to next round of CAP greening

DG ENV - VK works at the interface between agriculture and biodiversity.

He emphasized the importance and usefulness of EKLIPSE mechanism, but stressed the need to ensure a clear added value of this exercise in regards to other ongoing/finished processes. He suggested limiting the scope to greening measures, considering the available time and resources. Cross compliance is important, because of the issue of additionality: the greening should bring additional effects. It should be made clear what the baseline is, and what all other measures should deliver on top of that.

When commenting the previous presentations, he emphasized that biodiversity is still predominantly deemed as a liability and not as a fundamental pillar of long-term food security. Greening measures inevitably bring the socio-economic dimension into the picture and it is important to acknowledge the role of ecosystem services, underpinned by biodiversity, for a long-term farm's economic viability. About data, DG ENV has supported the continuation and broadening of the LISA study[2]. This work will be finalized in October/November this year and he will keep EKLIPSE up to date.

Topic center - SC works mainly on the EU biodiversity strategy. But she agreed that it should not be too broad and focus on the measures that could be the most effective, to have benefits for farmers and biodiversity. It should not evaluate the practices.

Living Land/Birdlife **-** TR:

There are different types of work assessing the effects of the CAP on agricultural practices:

1. On-the-ground work: Birdlife and the EBB (LISA study) assessed what is happening on the ground. There is most potential to have monitoring,
2. Different policy analysis: work with Guy Pe'er to analyse the effect of the regulation, the effect of the implementation by MS (different options offered) and what are the options picked-up by farmers,
3. Overarching work: fitness check of the CAP.

Ideas for EKLIPSE would be to pull out more grey literature, to have a more robust review (but how much would it add to the debate?), or identify what works better/ what is actually needed.

[2] http://www.eeb.org/index.cfm?LinkServID=0E2EEC07-5056-B741-DBA777455AA46334

ELO (JT) is a lobby group for private landowners, it supports the RISE foundation.

JT suggested some questions: 1) among the recent reports, do we have the evidence that these measures contribute to halter the loss of biodiversity? and 2) what could be expected on this short time period?

IEEP - EU

EU made some suggestions/questions:

- Timing of this work: the time required by DG AGRI to absorb the information may restrict the time for the knowledge synthesis (depending on the policy goal of the EKLIPSE outputs).
- Which kind of scientists does the EKLIPSE project have access to?
  The work would require an expertise base broader than ecology: for example, to investigate Administrative questions, mapping issues, implementation on the farm, communication to the farmers.

Some gaps she identified:

- Crop diversification: How much has crop diversity increased? It could have negative impacts in some places, e.g. by replacing winter fallows with crops or by replacing crops that are more beneficial for biodiversity with other crops that are less beneficial.

- Lack of info on management of permanent grasslands: frequency of practices of refreshing of grasslands, reseeding, and impacts of these practices on soil carbon … is it a net sink of carbon and over what time period?
- EFAs: lots of impacts depend on the implementation of the measure at the farm level; lots of it is in the grey literature: pesticides used; management practices…
- How could the greening be improved? What about landscape impacts? The policy could encourage farmers to work together. This issue is not part of the literature at the moment.

DG AGRI - LV

Lots of work has been done. The evaluation of the greening is due at the end of 2017.

EKLIPSE should avoid doubling the work and find an interesting angle.

At the end of the year, the assessment of different scenarios will be done. But it will not prejudge the MFF which will come later (approx. January 2018).

About EFAs, some questions to be answered are: why farmers make the decision they make? What are the possibilities to convince farmers they could do something interesting for the environment in implementing some EFAs?

How to get more landscape features? How to increase uptake of landscape features by farmers? EKLIPSE should look into the win-win options.

(additional comment of EU: A start (to look into the win-win options) was made by the EIP-AGRi focus group - report "Benefits of landscape features for arable crop production"[3]).

[3] https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_fg_ecological-focus-areas_final-report_en.pdf

Lynn Dicks (UEA): a collection of the different work to identify the gaps could be done. There are seven parallel exercises asking similar questions. These should be used not replicated.

The biodiversity effects of crop diversification are not known.

COPA-COGECA – PG & KT:

PG could not give a position from COPA-COGECA on the EKLIPSE work, as it is difficult to evaluate the effects of greening after 2 years, when we don't know the baseline in 2014. It is critical because the options that the farmers have to use were designed by the co-legislators, and MS have choices how to implement it.

European Parliament Intergroup on Climate Change, Biodiversity & Sustainable Development - Lynn Sundelius

The intergroup of the EP was presented. An event on the Agri-Environment-and-Climate Measures (AECM) is planned (discussion phase).

Swedish Board of Agriculture

MT mentioned a study on the CAP made by the OECD[4] (released on 29 May 2017).

Open discussion on the request with the objective of fine-tuning its framing and agreeing on preferred methods/approaches to be employed by the expert working group

Some further comments were made.

LV explained that greening is a small part of the toolkit of environmental aspects of the CAP, but substantial financially. One effect could be that it prevents environmental damage being done.

NR summarized on the methods point of view: (1) What do we mean by greening? (2) Scale: if it goes too big, we won't be capable of answering (3) Maybe focus on the gaps: why? And link it with people's behaviour.

VK suggested that this EKLIPSE exercise might provide an added value by bringing specific elements to the extreme in order to better understand how potential alternatives could have played out (e.g.: what would happen if the focus would have been put on X% for set-aside land measure). This could be beneficial to inform the discussion on the post-2020 CAP.

TR would like to know what the simplest blankest measures are, that could deliver with the minimum administrative burden? It has to remain feasible (economically).

[4] TAD/CA/APM/WP(2016)22/FINAL - Working Party on Agricultural Policies and Markets - EVALUATION OF THE EU COMMON AGRICULTURAL POLICY (CAP) 2014-20

The discussion was summarized into 3 questions and all participants gave their points of view about them:

- 1st question: What (CAP) measures (individual measures/ greening and cross compliance) have the highest potential to deliver on biodiversity ESS (including socio-economic aspects)?

- 2nd question: what measures are most promising to actually be implemented? How to increase the uptake? What could be done differently?

+ How to overcome mistrust between natural conservation people and farmers.

- 3rd question: Overview/knowledge collection on effects of potential greening and how it could be improved.

AAS estimated the 1st question (including the socio economic dimension) is important.

LV would be interested in answering the 2 following questions: (1) what are the economic benefits of collective landscape features? (2) what are the obstacles of implementing landscape features? Indeed, the review of the EFAs (March 2017)[5] concluded that landscape features are important for biodiversity but underrepresented in the choices of the farmers.

TR concluded that it would be always useful to have more robust evidence. It should focus on what the simplest things would be in terms of potential and could be on the diversification of the landscape in general or on the crop diversification/rotation measure.

RS added that important evidence on how specific measures have had positive impacts on biodiversity would probably be derived from studies in areas where good local biodiversity plans were developed and implemented through CAP measures.

Lynn Sundelius would be interested in the 1st question and on the mistrust.

According to EU, the timeline is important, and the possibility to use methods that make available information not available in the literature would be very useful, like on landscape features.

About the uptake of greening measures, JT suggested there could be some research on the link between the success in greening measures/biodiversity uptake and the education level of farmers (JT), also the age (one third of farm managers in the EU are over 65[6]) (EU), or the size of the farms (LV).

SC estimates the 2nd question is important, as well as the question of the baseline.

MT would be interested to know how to combine highest potential with lower administration for governments and farmers (cf. AAS).

[5] http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52017DC0152&from=EN

http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1490786442205&uri=CELEX:52017SC0121

[6] http://ec.europa.eu/eurostat/statistics-explained/index.php/Agriculture_statistics_-_family_farming_in_the_EU

NR estimated we must show what has already been done (cf. Lynn) and where the gaps are. There is also a strong focus to get into EFAs, study what has been done and add economic and social benefits from the landscape (cf. LV) (HW)

About data, MT added that MS have to report indicators on the implementation of the greening. It could be given if necessary for the knowledge synthesis.

ANNEX 5: Call for Experts

EKLIPSE
Knowledge & Learning Mechanism on Biodiversity & Ecosystem Services

Developing a mechanism for supporting better decisions on our environment based on the best available knowledge.

CALL FOR EXPERTS No.2/2017 EKLIPSE – May 2017

Understanding Farmer Uptake: What measures are most promising to deliver on supporting biodiversity and ecosystem services in the next round of the Common Agricultural Policy (CAP)?

Deadline for Call: 25th of June, 2017

EKLIPSE is inviting experts to join an expert working group to develop recommendations for CAP measures to improve biodiversity and related ecosystem services, with a focus on Ecological Focus Areas – this is a direct policy request from IUCN and the Swedish Board of Agriculture

- Are you an expert in the Common Agricultural Policy (CAP), rural development, greening measures, biodiversity, impact or programme evaluation?
- Would you like to contribute directly to a policy-relevant process in your field of expertise?
- Would you like to expand your network and learn about methods of knowledge synthesis?
- Are you interested in collaborating in a trans-disciplinary and multi-cultural setting?

Then please apply at www.eklipse-mechanism.eu

Important dates and information:

- Interested experts should apply before midnight on the **25th June, 2017** by following the rules and procedures detailed below.
- The Experts of the working group will be selected by **7th July, 2017** and should start its work immediately thereafter.
- We will aim to have a first expert group meeting on week starting on **24th July, 2017** and a second one early 2018.
- The deadline for reporting is **30th April, 2018**.
- Participation in this expert working group will require approximately 10% of your time – please find more information on expectations of and support to EKLIPSE Expert Working Groups here.

Horizon 2020
European Union Funding
For Research & Innovation
Grant agreement 690474

EKLIPSE is developing a European Mechanism to answer requests from policy makers and other societal actors on issues related to biodiversity and ecosystem services.

EKLIPSE organizes and facilitates knowledge synthesis processes, horizon scanning and societal dialogue on topics that relate to or impact on biodiversity and ecosystem services by making the best knowledge available. It invites experts to contribute their knowledge.

More information on the processes and the EKLIPSE project funded by the EU in H2020 is available at
www.eklipse-mechanism.eu

1 Invitation to join an expert working group

EKLIPSE is inviting **experts to join an expert working group** to develop recommendations for **CAP measures to improve biodiversity and related ecosystem services (ESS), with a focus on Ecological Focus Areas (EFAs).** Suggestions for improvements should take into account administrative feasibility (measures should be simpler), social implications and farm economics.

The expert working group will cover diverse and complementary skills (including multidisciplinary skills and a broad geographical coverage) and will interact with relevant stakeholders to ensure appropriate methodological choices and uptake of outputs.

2 Request to be addressed by this call

Background to this request:

This request was initially put to EKLIPSE by IUCN and the Swedish Board of Agriculture. The scoping of the request was further discussed during a workshop in April 2017 in Brussels with other stakeholders involved in European policies and biodiversity issues (other NGOs, European institutions, etc.) to ensure the policy relevance of the request detailed below. Furthermore, a first scoping activity has been carried out (« Call for Knowledge »). The results of this call can be found in the EKLIPSE KNOCK forum http://www.eklipse-mechanism.eu/forum_discussion.

The greening measures of the CAP and rural development schemes

The current Common Agricultural Policy (CAP) 2014-2020 prioritizes the "sustainable management of natural resources" and this was translated into the introduction of a new green direct payment scheme ('greening'). Since 2014, 30% of the direct payments are linked to respecting three sustainable agricultural practices which are beneficial to environmental and climate change concerns, notably soil quality, biodiversity and carbon sequestration. These agricultural practices include: diversifying crops, maintaining permanent grassland and dedicating 5% of arable land to 'ecologically beneficial elements' ('ecological focus areas - EFAs'). The current CAP also includes, through Rural Development Regulation,

other policy measures that can contribute to biodiversity (Natura 2000 measures, agri-environmental and climate (AEC) measures, etc.). Rural Development Programmes are implemented by the Member States (MS) or regions, which have flexibility to select some measures (based on their strategies) which will be then contracted with farmers or other rural managers.

Limited effect of greening on biodiversity and related ES

Recent articles point out that the greening measures may not deliver as many environmental benefits as expected. It appears that the flexibility available to national authorities for implementing such greening measures, although in principle creates opportunities to tailor these measures, might also have created challenges. An IEEP study[1] (2015) concluded that "the general pattern in most of the Member States reviewed has been to offer farmers maximum flexibility in terms of implementation", which might not always guarantee sustainability.

Current policy context

As part of the CAP process, the European Commission published two reports on greening measures: the 2016 review of greening after one year[2] and the 2017 report on the implementation of the EFAs[3]. These reports will feed into a wider evaluation of greening, which will be delivered end of 2017 or beginning of 2018. These evaluations will then contribute to the report on the CAP monitoring and evaluation due in 2018, and more largely to the discussions about **the future of the CAP (2021-2027)** that have already started, focusing on **modernising and simplifying the CAP**. By the end of 2017, a communication from the European Commission (EC) including first policy options for the future CAP, is planned. Other studies have been commissioned by NGOs, etc.[3], which will also try to feed into the debate on the CAP.

Within this policy context and some early feedbacks on the greening measures currently not contributing significantly to halter biodiversity loss, there is a knowledge need to better understand the effects of the CAP greening on biodiversity and related ES, identifying which measures work and which aspects do not work as intended, and to establish options on how measures could be improved to increase their effectiveness for supporting biodiversity and related ES.

The knowledge synthesis carried out as part of EKLIPSE should aim at supporting the decision-making in the future CAP debate. It could also influence the content of Rural Development Programmes, that can be regularly updated by Member States/regions. It should try to avoid duplicating other initiatives and focus on the existing gaps.

Focus on the EFAs

[1] Hart K (2015), Green direct payments: implementation choices of nine Member States and their environmental implications, IEEP London
[2] SWD(2016) 218 final
[3] See for an overview: www http://www.eklipse-mechanism.eu/forum_discussion

Among the greening requirements, the EFAs are areas established, in particular, in order to safeguard and improve biodiversity on farms. EKLIPSE will provide a final list of EFA options to be considered in the knowledge synthesis, as well as a summary of evidence that they support biodiversity and related ES. As an *initial* list of EFA options (with current evidence in footnote), we suggest the following options:

- Fallow land [4,5,6]
- Buffer strips[6]
- Hedges or wooded strips [4,5,6]
- Field margins [4,5,6]
- Traditional stone walls [4,5]

Other options that could also be considered, provided that the summary of evidence confirms their potential for supporting biodiversity: forest hedges without production, and among landscape features: ponds and ditches.[7]

Uptake of the measures and identification of barriers

According to the EC report on the implementation of EFAs, landscape features, which provide best results in terms of potential positive impact on ecosystem services, have a low uptake: it is either linked to the choices of MS/regions to include or not certain EFAs in the list proposed to farmers, or to the farmers' choices to implement these types of EFAs. It illustrates how important it is that the drivers for the choices of MS and farmers should be analysed.

Considering fallow land, which has a higher uptake in the EU, it has already been pointed out that positive impacts on biodiversity will depend on the management practices. More generally, the quality (versus the quantity) of the EFA types' (conditions and management requirements) is also important for environmental benefits and it should be taken into account when proposing improvements of the measure.

Another question is that collective approaches at landscape level are seldom considered by MS. Whether it delivers positive outcomes for biodiversity and if this way of delivering EFAs could be encouraged should be looked into.

Recommendations for the future CAP post 2020

As there is no certainty of the design of the future CAP, suggestions of improvements of measures should not be limited to the current CAP framework and its delivery mechanisms.

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[4] Sutherland, W.J., D. L.V., N. Ockendon, and Smith R.K. 2017. What Works in Conservation. Open Books Publishers. [Synopsis & summary PLUS multiple expert consultation with Delphi]

[5] European Commission. 2017. Report from the Commission to the European Parliament and the Council on the implementation of the Ecological Focus Area obligation under the green direct payment scheme. Brussels, 29.3.2017 COM(2017) 152 final. [Rapid Evidence Assessment]

[6] Pe'er, G., Y. Zinngrebe, J. Hauck, S. Schindler, A. Dittrich, S. Zingg, T. Tscharntke, R. Oppermann, L.M.E. Sutcliffe, C. Sirami, J. Schmidt, C. Hoyer, C. Schleyer, and S. Lakner. (2016). Adding Some Green to the Greening: Improving the EU's Ecological Focus Areas for Biodiversity and Farmers. *Conservation Letters* DOI 10.1111/conl.12333. [Expert consultation]

[7] See Regulation (EU) No 1307/2013 and Regulation (EU) No 639/2014 for the definition and/or criteria for each type of EFA

There might be good experiences with rural development measures that deliver good results for biodiversity and ESS and can be implemented in a simple way. But the implementation of AEC measures or Natura 2000 measures has also its disadvantages (deadweight, administrative burden, limited scale, etc.) which should be taken into account.

3 Objectives of the call and suggested programme of work

EKLIPSE is looking for an expert working group to propose improved or new CAP measures that would better contribute to biodiversity and related ESS, through the following tasks:

A) Based on a list of EFA options and a summary of evidence that these EFA options contribute to biodiversity and related ES provided by EKLIPSE (cf. above),

- review the summary of evidence that these specific measures work,

- understand which are most effective in terms of biodiversity and ecosystem services

B) Assess the potential measures to be effective across Europe, i.e. identify the barriers to their uptake:

- 1. at Member State (MS) level

(Suggested methods: non-systematic review synthesis of literature, Eurostat indicators and farmers statistics; ideally covering all MS)

- 2. at farm level

(Suggested methods: causal-chain analysis, focus groups with extension agents or farmer group representatives, to be conducted by each expert in his/her country of residence, covering up to 10 MS.)

Administrative and socio-economic factors should be analysed.

C) Provide recommendations to improve the delivery and uptake of the measures, and thus the benefits for biodiversity and related ESS
The recommendations should address at least European and MS level.

(Suggested methods: Causal Criteria Analysis and Delphi process or focus group with experts (involving the responsible policy makers/stakeholders at MS level for selecting measures))

(Potential additional methods: Multi Criteria Analysis or Synthesis Evaluation Matrix assessing each EFA option against the outcomes of A and B at Member State and farmers decision level Study cases for successful/problematic greening implementation might be useful to illustrate the results, Bayesian belief networks, or formal consent among expert working group)

The expert working group is expected to:

- Develop a methodological protocol based on the above suggestions;

- Write a comprehensive report answering the above questions under the quality standards of the methodologies proposed;
- Respond to and integrate the results of extended peer review on the methodological protocol and the final report;
- Integrate the outcomes of the three tasks in a manner understandable and useful to policy makers;
- Present the results at a dissemination event organized by EKLIPSE and/or the requesters.

This process of knowledge synthesis could lead to the establishment of a protocol/framework that could be used periodically to assess the effectiveness of each EFA options.

4 Implementation steps and timeline

The work is expected to follow the EKLIPSE knowledge synthesis process, i.e. it will include the following steps:

- **Kick-off dialogue meeting with EKLIPSE** Knowledge Coordination Body (KCB) to ensure common understanding of the request among experts (within 3 weeks of nomination of expert group).
- **Preparation of the work** (to be concluded within 12 weeks of nomination)
  - Scanning of literature and other sources
  - Development of methodological protocol (with support of the EKLIPSE expert group for knowledge synthesis methods)
  - Agreement of methodological protocol with KCB and requesters
  - Review of protocol through open consultation (organized by EKLIPSE)
- **Programme of work**
  - Analysis of determinants of uptake
  - Recommendations for measures with potential to be effective across Europe
  - Early draft (to be discussed with KCB and possibly requesters)
  - Full draft completed for review.
- **Finalisation including review***
  - Extended peer review (via open consultation, organised by EKLIPSE)
  - Presentation of process and results to requesters and stakeholders: March 2018
  - Revision
  - Final product for requester by 30th April 2018.

*Exact order e.g. first revision then presentation or vice versa tbd

5 Support provided by EKLIPSE

EKLIPSE team: The expert working group will be supported in all steps by the EKLIPSE Secretariat in communication, documentation (via the EKLIPSE website), and dissemination of products as required for this request. The working group will be supported thematically and strategically by the KCB.

Financial support: EKLIPSE activities rely on in-kind contributions as in similar science-policy processes. The benefits for experts and institutions arise from the networking in the group and the visibility of expertise to policy and society via the products. EKLIPSE will actively support this visibility of experts and their institution's contributions. In addition:

- kick-off meeting, focus group meeting and final meeting will be hosted by and travel costs covered via EKLIPSE funds as needed
- upon specific request, individual experts from Eastern and Southern European countries might be supported via a honorary contract by an EKLIPSE partner institution.
- a maximum budget of € 8.000 can be granted for tasks such as the literature review and synthesis (for this a separate contract is required see section 6).

Technical support: Access to literature databases will be facilitated if needed. EKLIPSE will cover the layout, printing, and dissemination of interim and final products, i.e. using the OPPLA Platform[8].

6 Eligibility and applicant information

6.1 Selection criteria for the composition of the Expert Group

Selection of the expert working group will be done by the KCB according to selection process and criteria outlined below (6.2) and on the EKLIPSE website.

The expert working group should cover all relevant disciplines including natural, social, economic and planning sciences.

Gender balance and geographical diversity of EU countries will be considered in the selection. If teams are applying, this will also apply, and the KCB may decide to complement a team selected with additional individual experts.

The working group is expected to have up to 10 experts.

6.2 Selection criteria for individual experts

- Demonstrated expertise in relation to the call covering one or more of the following: Common Agricultural Policy (CAP), greening measures, biodiversity, farming, rural development, farm economics, impact or programme evaluation, methods for knowledge synthesis.
- Experience with biodiversity and ecosystem services and/or sustainable development as well as with European policy processes.
- Experiences in inter- and transdisciplinary work on topics related to (Common) Agricultural Policy and in science-policy interface processes
- Experts will have to comply with the principles and rules of EKLIPSE (e.g. conflicts of interest policy (see http://www.eklipse-mechanism.eu/our_ethical_framework for more detail).
- Project partners of EKLIPSE and KCB members are excluded.

See Guidance note on Preparing and managing calls for experts for more information.

[8] See www.oppla.eu

6.3 Process and eligibility criteria for supporting contracts

Based on the needs identified by the expert working group in its kick-off meeting, EKLIPSE can support the work of the group by sub-contracting some tasks to individual experts (or institutions, from and beyond the Expert working Group) via working contracts up to a total amount of 25,000€.

The aim of these would be to carry out dedicated work supporting the Group, e.g., a literature search and/or review based on the protocols decided by the Group. An EKLIPSE partner would prepare and issue a (restricted) call for tender for this purpose.

Honorary contracts will be given upon request to experts chosen for the expert groups on an individual basis, if they could not contribute otherwise. We expect this to apply to experts especially from eastern, central and southern European countries that might not able to join the activities otherwise. In case your require such support please contact the EKLIPSE secretariat (secretariat@eklipse-mechanism.eu) .

6.4 Data and information policy

All results will be made publicly available through the EKLIPSE website and transparent procedures will apply, following Creative Commons Agreement 4.0[9], which includes the reference of authorship and involvement[9].

6.5 Information to provide

The EKLIPSE form should be completed, including a list of relevant publications and outlining relevant experience on the topic and details of experience in previous assessments or knowledge synthesis processes.

7 Application and notification of results

7.1 How to apply

The EKLIPSE expert form can be found on the EKLIPSE website under 'Open calls'. The completed form should be handed in **by midnight on June 25th, 2017**.

Should you require any further information do not hesitate to contact us: secretariat@eklipsemechanism.eu.

7.2 Announcement of the results

Successful applicants will be notified directly by EKLIPSE KCB by **July 7th 2017**. As soon as they accept the nomination, names of selected experts will be made public on the EKLIPSE website.

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