



CASA

Common Agricultural
and wider bioeconomy
reSearch Agenda

D2.8

Overview of studies carried out and outcomes and outputs



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Task 2.3



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The overall objective of CASA, a Coordination and Support Action (CSA), is a **consolidated common agricultural and wider bioeconomy research agenda** within the European Research Area.

CASA will achieve this by bringing the Standing Committee on Agricultural Research (SCAR), which has already contributed significantly to this objective in the past, to the next level of performance as a research policy think tank. CASA will efficiently strengthen the strengths and compensate for the insufficiencies of SCAR and thus help it evolve further into “SCAR plus”.

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Abbreviations

- AKIS **A**gricultural **K**nowledge and **I**nnovation **S**ystems
- ARCH European **A**gricultural **R**esearch towards greater impact on global **C**hallenges
- AU Aarhus University, Denmark
- BLE Federal Office for Agriculture and Food, Germany
- CASA **C**ommon **A**gricultural and wider bioeconomy re**S**earch **A**genda
- CSA Coordination and Support Action
- CWG Collaborative Working Group
- DE Germany
- DoA Description of Action
- JUELICH Forschungszentrum Jülich GmbH
- SCAR Standing Committee on Agricultural Research
- SG Steering Group
- SWG Strategic Working Group
- ToR Terms of Reference
- WP Work Package
- WR Wageningen University & Research, The Netherlands

Summary

Work Package 2 of the CASA CSA project is entitled “*Added Value and Improved quality for greater impact*”.

This deliverable is D2.8 (“Overview of studies carried out and outcomes and outputs”) of the CASA CSA project and presents a brief report about CASA support to the working groups in terms of studies. Reports from studies are available at the SCAR website or from the individual SCAR Working Groups.

Guidelines for External Studies were prepared and revised as needed to ensure that the working groups were appropriately informed about application and reporting processes.

Initial resources allowed up to 15 studies of 25.000 euro, in total 375.000 euro to be financed. Whilst 18 studies were approved, one study could not be implemented due to illness resulting in a total disbursement to 17 studies of about 350.000 euro.

Brief comments about the main outcomes are listed in a table in this report.

Some lessons learned are presented.

Introduction/Rationale

The CASA CSA project started on 1st September 2016 and will close on 31st August 2019.

The overarching aim of CASA will be achieved through the accomplishment of the following four specific objectives:

1. Increased and broadened participation, interaction and collaboration of Member States and Associated Countries
2. Improved quality of outputs and outcomes of the Standing Committee of Agricultural Research creating added value for greater impact
3. Strengthening the production of more strategic policy advice by the Standing Committee of Agricultural Research based on the increased, deepened and broadened participation facilitated by CASA
4. Improve overall organisation, communication and dissemination of SCAR activities, outputs and outcomes for greater impact

One of the driving forces for establishing a CSA supporting SCAR is facilitation and coordination of the working groups. Work Package (WP) 2 has provided added value to SCAR bodies and helps deliver results of improved quality leading to greater impact of SCAR activities.

The expected outcome of task 2.3 was: Improved understanding of specific issues which will be fed into SCAR to provide added value. The task was managed by Consortium partner 5 (Aarhus University, Denmark). Support was provided by the task manager including contributing to: the preparation of studies (Terms of Reference); selection of experts, coordination and overall reporting.

The CASA funding of these studies was through sub-contracting managed by the CASA Coordinator, Consortium Partner 1 (JUELICH, Germany) to ensure relevant and appropriate expertise was made available. In addition, members of staff from consortium partners were also able to provide services for some studies. Initial resources allowed up to 15 studies of 25.000€, in total 375.000€ to be financed.

This deliverable is D2.8 (“Overview of studies carried out and outcomes and outputs”) of the CASA CSA project.

Brief description of process

At a workshop under task 2.1, at which all SCAR groups participated in the first months of the CASA project, initial needs and ideas for relevant studies were expressed by some SCAR working groups. This was reported as deliverable D2.1 of the CASA project.

All 6 SCAR SWGs and 2 SCAR CWGs as well as the SCAR Foresight group were eligible for support.

A simple and non-bureaucratic process of submission and approval was designed and in order to provide a framework for this task a document “Guidelines for External Studies” was prepared and approved by the CASA Management Group. These were revised in 2017 and 2018 to respond to the experience gained during the process.

In the original Description of Action (DoA) the thinking was that the SCAR working groups would be well positioned to identify a person or persons to carry out the study. Experts for external studies were selected by the SCAR working groups in collaboration with the Task Manager (Consortium partner 5, AU). This required receiving offers from at least three different teams (of one or more people) who could implement the study as required in the ToR. In cases for which a CASA Consortium Partner – especially the larger institutions - had in-house expertise capable of carrying out some of the studies, a sub-contract with the CASA Coordinator JUELICH was not required, Quality demands were equally stringent.

The process was divided into the following stages:

- a. Preparation of a Terms of Reference (ToR) and submission to the Task Manager
- b. The SCAR working group must request offers by three different teams (of one or more people) to carry out the study as required in the ToR
- c. The SCAR working group will prepare a request for funds to CASA
- d. Management of funds

Proposals were submitted to the Task Manager and approval was necessary prior to initiating activities.

When the request for funds had been received and if the request fulfilled the guidelines and any other requirements, the Task Manager coordinated with the CASA Coordinator, Jülich, to ensure either funds were made available to a CASA Consortium partner or a sub-contract prepared.

The output from the study, which was often a report, was submitted to the Chair of the working group and the Task Manager for coordinated approval. Only *after coordinated approval* by the Chair of the working group and the CASA Task Manager could the expert submit an invoice to JUELICH.

The Task Manager provided support to the expert(s) and the working groups to seek ways of improving relevant dissemination of any outputs and possibly identifying an appropriate meeting at which the results may be presented.

The CASA Management Group decided that all studies must be completed by 30th June 2019 with a view to allowing enough time for reporting and accounting by the time the CASA project officially closes on 31st August 2019. The working groups complied with this decision although a number of last minute reminders were necessary.

Overview of studies

All six SWGs and both CWGs, as well as the foresight group, have applied and received approvals for at least one study. Some studies were budgeted at less than the 25.000 euro which was set as a maximum amount.

18 studies were approved. The total value contracted was 377.740.80 euro. In the table below a list of the SCAR groups and the studies for which they have received funds is presented.

The SWG ARCH 2 study (number 7 in the table above) had to be cancelled due to illness of one of the experts involved in the study at the implementing organisation (BLE, Germany).

The final amount disbursed was about 350.000 euro.

Funds for External studies

Amount available		375.000
		Amount €
1	SWG Forest 1	20.000,00
2	SWG Forest 2	18.000,00
3	SWG Forest 3	12.000,00
4	SWG Bioeconomy 1	25.000,00
5	SWG Bioeconomy 2	25.000,00
6	SWG ARCH 1	25.000,00
7	SWG ARCH 2	21.000,00
8	SWG AKIS 1	25.000,00
9	SWG AKIS 2	25.000,00
10	SWG AKIS 3	24.950,00
11	SWG AKIS 4	25.000,00
12	SWG SCARFish 1	7.117,69
13	SWG SCARFish 2	14.749,00
14	SWG Food Systems 1	14.000,00
15	SWG Food Systems 2	25.000,00
16	CWG AHW 1	20.491,80
17	CWG SAP	24.750,00
18	Foresight Group 1	24.000,00
	Total	377.740,80

The following table presents the 18 studies with a small amount of data about the project and the main output – usually a report – and the main outcomes. The outcomes are mainly cut and pasted from the study reports.

	Start	End	Amount €	Organisation/ experts	Contact person/ request by
SWG Forest 1	04.2017	12.2017	20.000	EFI; /Robert Mavsar + Marko Lovric	SWG Forest Chair
Title	Synthesis on forest bio-economy research and innovation in Europe				
Main output and outcome	<p>A report: “Synthesis on forest bio-economy research and innovation in Europe” (66pp) This study contributes to better synergies and coherence for addressing research needs in the forest-based bioeconomy through synthesis of R&I activities. The main objective of this study was to review and synthesize existing updated information about forest bio-economy research in different EU member states, including (1) mapping the most relevant research capacities and topics where activities are already ongoing at regional/national, transnational and European level using existing data, and (2) analysing gaps and draw conclusions about overlapping and missing activities, and trends and shifts in research focus.</p>				
SWG Forest 2	06.2017	28.02.2018	18.000	FCBA/Andreas Kleinschmit von Lengefeld & ECOFOR/ Jean-Luc Peyron	SWG Forest Chair
Title	Impact assessment on forest-related ERA-NETs and COST Actions				
Main output and outcome	<p>A report: “ASSESSMENT OF ERA-NETs AND COST ACTIONS IN THE EU FOREST-BASED SECTOR”. (32pp) The results provide deeper background and better understanding of the innovation and research activities in the forest-based sector that have been achieved on transnational level. The main outcomes of the study include:</p> <ul style="list-style-type: none"> • Compilation of research and innovation projects resulting from coordinated ERA-NET actions of high relevance for the sustainable growth of the economy in EU forest sector • Identification of main RDTI areas for further joint programming and alignment of research activities based on the state of the art • Assessment of impacts and benefits of COST activities in bringing together consortia in ERA-NETs funded projects and other ERA-relevant outcomes. 				
SWG Forest 3	03.2019	30.06.2019	12.000	InnovaWood/Uwe Keis	SWG Forest Chair
Title	“Research and innovation on digitization and robotization in the forest-based sector”				
Main output and outcome	<p>A report: “Research and innovation on digitalisation and automation in the forest-based sector” (62pp). This study represents a first European survey on the topic, mapping the main challenges and opportunities and taking stock of European and national projects and progressive initiatives related to digitalisation in forestry and forest-based industries. The results portray the high relevance of digital transformation for the sector.</p> <ul style="list-style-type: none"> ➤ The forest-based sector represents a major part of the bioeconomy and is already today a main contributor to climate protection, with large potentials to grow. ➤ Digital transformation is a key competitiveness factor for the future of the EU forest-based sector. 				

SWG Bioeconomy 1	23.10.2017	16.04.2018	25.000	LUKE; /Markus Lier and 4 colleagues	SWG Bioeconomy
Title	Synthesis on bioeconomy monitoring systems in EU Member States (Acronym: MontBioeco)				
Main output and outcome	<p>A report: “Synthesis on bioeconomy monitoring systems in the EU Member States - indicators for monitoring the progress of bioeconomy” (46pp)</p> <p>This report presents an overview of existing bioeconomy strategies, policies or related initiatives and indicators to monitor and assess these at EU MS level, and the importance of existing bioeconomy sectors at national level. Furthermore, it presents the existing or needed most suitable bioeconomy key indicators and related indicators, and their respective data availability, for assessing and monitoring the progress of a bioeconomy at national level. The identified most suitable bioeconomy indicators important and feasible at the national context can contribute to the further discussions when setting the frame for the development of a common EU bioeconomy monitoring system.</p>				
SWG Bioeconomy 2	04.07.2018	30.11.2018	25.000	NOVA/Stephan Piotrowski/	SWG Bioeconomy
Title	BIOEAST Initiative countries' bioeconomies assessment. Identification of key sectors, data and indicators				
Main output and outcome	<p>An interim report as a ppp: “BIOEAST Initiative countries' bioeconomies assessment - Identification of key sectors, data and indicators” (31 slides)</p> <p>A final report: “STATE OF PLAY OF CENTRAL AND EASTERN EUROPE'S BIOECONOMIES” (37pp)</p> <p>The literature review shows that the BIOEAST macro-region is a biomass-rich region, with traditionally high importance of primary sectors agriculture, forestry and fishery. Furthermore, the food industry and bioenergy and biofuels are important bioeconomy sectors in the whole macro-region. However, the unused or underutilised biomass potentials from side streams from the sectors are increasingly recognised. In all three sub-regions (Baltics, CEE and SEE), bio-based pharmaceuticals and chemicals are recognised as key sectors which are still small but highly productive. Biorefineries are under-represented in the macro-region compared to the rest of the EU.</p> <p>Insufficient infrastructure, missing links between industries (e.g. between agriculture and the petro-chemical industry in Romania) and the regional abundance of fossil resources are main hurdles for the further development of a higher value bioeconomy.</p> <p>Identified needs and challenges to further develop regional bioeconomies are to increase productivity in agriculture and forestry, identify regional strengths and potential in different types of biomasses, produce valued-added industrial products from biomass in the region instead of exporting raw materials and start thinking in bioeconomy clusters where regional feedstock supply, existing industrial infrastructure, know-how and innovation potential and public support are combined. Examples of successful Western-European regional bioeconomy clusters show that the focus on regional biomass supply, linkages to existing industries and strong public support are key.</p>				

SWG ARCH 1	16.10.2017	31.01.2018	25.000	WR; Petra Berkhout, Ruerd Ruben, Thom Achterbosch WR is a CASA Consortium Partner and no sub contract needed.	SWG ARCH
Title	Global implications of the European Food Systems – A food systems approach				
Main output and outcome	<p>A report: “Global implications of the European Food Systems – A food systems approach” (57pp)</p> <p>Fact sheet: “Global implications of the European Food Systems – A food systems approach - Summary” (4pp)</p> <p>The study provides:</p> <ul style="list-style-type: none"> • an analysis of the trade relations between the EU and the rest of the world from several angles (total, by geographical blocs, by income blocs and by trade agreements), with a focus on Low- and Middle-Income Countries (LMIC); • case studies of the effects of EU trade in three products – cocoa, soy and fish - on local food systems, based on social, environmental and economic indicators; • an explorative analysis of possible changes in the EU food system and its impact on the food systems in third countries. 				
SWG ARCH 2	01.2019	30.06.2019	21.000	BLE / Viridiana Cervantes and Gianna Braun	SWG ARCH
Title	“European and Global strategies and initiatives related to food systems, agriculture and land use to address the challenges of climate change mitigation and adaption – advance and gaps”				
Main output and outcome	Study cancelled due to illness				
SWG AKIS 1	October 2018	31.03.2019	25.000	CREA/Patrizia Proietti CREA/Simona Cristiano PL/Anna Augustin, WR/Floor Geirling-Elff	SWG AKIS
Title	Inventory of Research and Innovation Infrastructures improving knowledge flows in the field of Agriculture				
Main output and outcome	<p>A report: “INVENTORY OF RESEARCH & INNOVATION INFRASTRUCTURES (54pp)</p> <p>Research and innovation infrastructures (RIIs) are currently gaining momentum in the debates and approaches to improving knowledge flows in Agricultural Knowledge and Innovation Systems (AKIS). Highlighting the recent trends, this study outlines the main directions on this respect.</p> <p>The study has revealed the opportunity, and the need, to define appropriate arrangements, to capture the experiences of RIIS, to facilitate benchmarking and transfer of good practices and, also, to analyse the types of knowledge flows for each type of RIIs and their effects.</p>				

SWG AKIS 2	2017	2018	25.000	University of Strathclyde/Stefan Kah & Markus Gruber	SWG AKIS
Title	Synergies among EU funds in the field of research and Innovation in Agriculture				
Main output and outcome	<p>A report: "Synergies among EU funds in the field of Research and Innovation in Agriculture" (33pp)</p> <p>The research showed that there is a broad variety of support instruments available for innovation in agriculture, covering all stages of the innovation process. However, they are not necessarily linked to each other and operate independently, making the creation of synergies challenging. Also, a high complexity and different sets of rules, particularly between direct and shared management instruments, deter policy-makers from pursuing synergies.</p> <p>Synergies do not easily develop automatically, but have to be supported proactively. In order to identify in what policy intervention is best suited, the research started from the assumption of a series of preconditions. These were then narrowed down to 4 success factors:</p> <ul style="list-style-type: none"> • Enablers that can provide guidance and coordination in agricultural innovation systems • Strategies that define objectives and priorities • Incentives that make synergies worth the additional effort and associated risk • Harmonisation of rules between different instruments and associated simplification <p>In addition to these, transparency, trust and culture play the role of supporting factors.</p>				
SWG AKIS 3	04.2019	30.06.2019	24.950	ES/Andres Montero Aparico & CREA/Simona Cristiano and others	SWG AKIS
Title	Study on Member States (MS) AKIS implementing tools to bridge the gap between research and practice				
Main output and outcome	<p>A report: "Member States (MS) AKIS implementing tools to bridge the gap between research and practice" (74pp)</p> <p>For a better structuring of AKIS there are already different on-going or proposed initiatives in different EU member states and regions that allow a continuous exchange between the different actors and also their participation in programming and assessment (monitoring and evaluation) of the different interventions towards a more interactive and participatory approach.</p> <p>From the study we have learned that there is a need for strengthening AKIS policies in EU member states and regions because insufficient connections between advisors, researchers and end-users still exist, although there is increased focus on actions to stimulate interactive innovation in particular since the introduction of EIP-AGRI.</p>				
SWG AKIS 4	04.2019	30.06.2019	25.000	WR/Floor Geerling-Eiff, Marc-Jeroen Bogaardt, ILVO/ Sylvia Burssens, IAE, HU Katalin Kujáni & CH. Of Agric., Hu/Timea Reszkető	SWG AKIS
Title	Study on Exploring digital aspects for AKIS 5 th mandate				
Main output and outcome	<p>A report: "Exploring digitalisation to enhance knowledge flows in EU AKIS" (63pp)</p> <p>The study provided examples of digital infrastructures which are merely used as</p>				

	<p>repositories. Therefore, possibilities for interactions and exchange should be stimulated in the digitalisation strategies for agriculture to enhance knowledge flows in AKIS. Interoperability and connections between digital tools and platforms are still lagging. Hence, based on the results of this study, a further mapping of the status quo, gaps and blind spots of existing and developing platforms, tools and how they affect knowledge flows and knowledge uptake by end-users in the national/regional AKIS, should be provided.</p> <p>Digitalisation strategies at national and/or regional level should not only cover digital tools and field data but should also cover digital infrastructures to stimulate knowledge flows (e.g. innovative information and project results) between all actors of the AKIS.</p>				
SWG SCARFish 1	February 2018	September 2018	7.117,69	IZSv/Amedeo Manfrin + Giuseppe Arcangeli, CWG Sec./Stefano Messori,	SWG FISH
Title	Strengthening Fish Welfare Research through a Gap analysis study				
Main output and outcome	<p>A report: "Strengthening fish welfare research through a gap analysis study" (29pp)</p> <p>The results of this report support the SCAR and the Member States in the definition of their fish welfare research policies. In addition, it will help national research funders prioritising areas for investments and collaboration, and will assist researchers and research managers in focussing their research activities on this topic.</p>				
SWG SCARFish 2	02.2019	30.06.2019	14.749	Hellenic Centre for Marine Research/ Pantelis Katharios	Chair of SCAR FISH
Title	"Disease prevention in farmed fish: new developments and research needs"				
Main output and outcome	<p>A report: "Disease prevention in farmed fish – New developments and research needs". (45pp)</p> <p>The study aimed at the identification and prioritization of the research needs in the area of disease prevention of farmed fish.</p> <p>Identified priorities together with the priorities discussed by the focus group of experts like the economics of fish diseases, intracellular pathogens, the issue of co-infections and the need for a holistic approach using modern analytical tools to study fish diseases outline the current state of the research needs in the area of disease prevention in farmed fish.</p>				
SWG Food Systems 1	February 2018	31.05.2018	14.000	INRA/; Various experts	SWG Food Systems
Title	Assessment of Food Systems Research and Innovation by European Member States – Quantitative mapping				
Main output and outcome	<p>A report: "Assessment of Research and Innovation on Food Systems by European Member States – Policy and Funding Analysis" (35pp)</p> <p>This mapping provides information on:</p> <ul style="list-style-type: none"> • Existing policies and strategies linked to food and nutrition security • Public R&I funding at national and regional level related to food systems and their alignment to the FOOD 2030. 				

SWG Food Systems 2	February 2018	15.08.2018	25.000	Wageningen Economic Research / Thom Achterbosch + Urban Planeat/Arthur Getz Escudero	SWG Food Systems
Title	Overview and synthesis of existing Food Systems studies and research projects in Europe				
Main output and outcome	<p>A report: "Synthesis of existing food systems studies and research projects in Europe" (65pp)</p> <p>This review paper identifies the value added of a food systems approach in relation to the roles for R&I in the process of food systems transformation: (1) Understanding food system complexities and challenges; (2) Exploring and designing innovation and policy options for overcoming food system challenges; (3) Implementing interventions and evaluation of the evidence on impact; (4) Anchoring and scaling of food systems change.</p> <p>The review shows the merits of a systems-based approach to R&I in the combined domains of agriculture, fisheries, environment, food and nutrition to effectively address the challenges for European food systems. The review illustrates that the literature on food systems is yet still in its early stages.</p>				
CWG AHW 1	28.06.2017	31.03.2018	20.491,80	PANGEA /Various	CWG AHW
Title	Updating of Strategical Research Agenda on animal health Research Needs				
Main output and outcome	<p>A synthesis report: "EU Animal Health Strategic Research Agenda:2017 update" (65pp)</p> <p>The results of this study support the set of key priorities identified in the document "An updated SRA covering animal health and welfare" which contains a 15 to 20-year outlook (ANIHWA, 2015) on priority topics in animal health and welfare research.</p>				
CWG SAP	25.01.2019	30.06.2019	24.750	BLE, De	CWG SAP
Title	"Drivers of change and development in the EU livestock sector"				
Main output and outcome	<p>A REPORT: "DRIVERS OF CHANGE AND DEVELOPMENT IN THE EU LIVESTOCK SECTOR – META ANALYSIS AS BASIS FOR FUTURE SCENARIO BUILDING (70PP)</p> <p>The study made an analysis of the past (what were the relevant drivers?) to better understand the dynamics which led to the present situation (how did today's status quo come about?), to link the past and the present to a prospective future in mind (which future projections are thinkable and which pathways could lead there?).</p> <p>The present study serves as a base to fulfil the targeted future scenario, enabling to work out constructive future projections, realistic pathways and solutions to initiate necessary changes to strengthen the aspects of sustainability in the European livestock sector</p>				
Foresight 1	June 2018	30.06.2019	24.000	Consulotant/ Stefan Bisoffi	Foresight Group
Title	Meta-Analysis of Recent Foresight and Horizon Scanning Documents				
Main output and outcome	<p>Two reports:</p> <p>"A meta-analysis of recent foresight documents in support of the 5th SCAR Foresight Exercise" (124pp) and a brief synthesis paper of the first report (5pp)</p> <p>Providing a survey of recent relevant documents that may provide factual inputs for the FE</p>				

	<p>on aspects of general relevance and specific on agriculture and food systems.</p> <p>The first report is dedicated to global trends and drivers of change that will likely affect the future of mankind and to the place agriculture and food production have in it. The focus is on its role in the production of food and as an agent and victim of climate changes.</p> <p>In a second analysis of documents specific to different sectors: livestock, fisheries and aquaculture, forestry was made including a synthesis</p> <p>“A meta-analysis of recent foresight documents in support of the 5th SCAR Foresight Exercise Second report: Livestock; Fisheries and aquaculture and Forestry” (133pp).</p>
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Lessons learned

In general there has been very positive feedback about the availability of funds for studies. Indeed in a survey carried out by CASA in WP3 and reported in CASA deliverable D3.10, a very large majority of respondents think such funds are important or very important for future work.

It is imperative to ensure fairness and transparency, but at the same time limit the administrative burden both on the experts carrying out the task and the SCAR working group. Guidelines for applying for funds and implementing the studies should be improved. This could be supported by a small unit working part time to support the SCAR Secretariat.

Support to project processes such as formulating Terms of Reference is needed in many cases.

Targeted dissemination of results is needed to improve visibility of the studies and increase the value of results and ultimately the impact of studies. Obviously various websites should be used but also direct communication to organisations and persons is absolutely essential for more efficient dissemination.

There is a need for a small fund facility for SCAR working groups to cover costs of small studies which support the implementation and dissemination of the activities which the groups carry out in their support to SCAR and for which there are no or very limited resources within the groups and the members' home ministry or organisation.

