

# WP 7: Common Strategic Research and Innovation Agenda

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### **WP7: General objective**

- Ensure the coherence of SusAn with other existing actions (mapping),
- Create a coherent whole vision of the scope (T 7.1),
- Specify knowledge gap, scientific challenges, innovation bottlenecks and impediment of innovation adoption (T 7.1),
- Built a Common Strategic Research and Innovation Agenda (CSRIA) (T 7.2)
  - Guidance and strategic perspectives for the coordination of Eu research,
  - Ranked list of short/long-term priorities in research and innovation areas,
  - Critical research capacity that need to be maintained or established,
  - Follow-up actions financed by EC and/or MS to fulfil the research needs
- Promote (with WP5) the CSRIA to partners, Eu institutions and stakeholders and to the general public,
- Explore options and establish a durable and focussed network beyond the lifetime of the ERA-NET SusAn, (T 7.3)



### Three tasks

Task 7.1. Research gap analysis and mapping (INRA)

Task 7.2. Elaboration of the common Strategic Research and Innovation Agenda (CSRIA) (INRA)

Task 7.3. Self Sustainable networking (BMLFUW)



### Create a coherent whole vision of the scope

### What is Sustainability = multiperformance of LPS and food chains

- For global challenges
  - Prevention of antimicrobial resistance,
  - Animal health and high standard of animal welfare,
  - Low emission to air (GHG),
  - More efficient use of resources (land, water, energy, feeds, fertilisers).
- For the livestock sector and local challenges
  - Competitiveness / added value,
  - Adaptability to global changes (climate, price volatility, new diseases...)
  - Low emission to water and soil,
  - Food quality: sanitary, nutritional, extrinsic quality,
  - Provision of ecosystems services,
  - Taking into account farmers diversity and skill.



# Create a coherent whole vision of the scope

an analytical framework to explore innovations

#### **Social organisation** Context Society, Public policies, coordination Wide range of production between actors (food chain, territory) systems / local situations **Driving forces** Agro-ecology: societal demands, sustainable biological regulations international trade, Intensifi--**Multiperformance** local market cation **Economy, Productivity,** CAP, Robustness, Resilience, climate change, **Circular bio economy:** Alternative Resources, Environment, Social Resources use, systems resource efficiency consumption, Cascading, circularity, refinery Farmer demography big players **Exogenous innovations** Digital technologies, robotics, big data, **Biotechnologies & predictive biology**



### Create a coherent whole vision of the scope

# Agroecology

- Animal: Genetic improvement of animals and stimulation of their aptitudes (vaccinations, microbiota, epigenetics), G x E interactions
- Systems:
  - Biodiversity use and enhancement of functional biodiversity (animal, plant),
  - Metabolic Functioning of Systems: Innovative Therapeutic Approaches, Animal welfare, Food and Protein Autonomy, Effluent Management,
- Landscape management: spatial organisation of activities,

# Circular bioeconomy

- Novel (protein rich) feeds, innovative feed/biocontrol additives
- Manure refinement: extraction of ingredients (cascading approach), production of energy, Bio-refinery of animal by-products,
- Non food application of animal products: antimicrobial, immuno-modulating...
- Territorial metabolism



# **Analysis of research gaps (1)**

# From existing (scientific) documents

- Gathering and analysis of all relevant documents / objectives of SusAn,
- Existing document at Eu level : foresights, Focus Groups, EU strategy, TPs, ERANets, JPIs, NGO's...., Past and present Eu project
- Existing documents from international initiatives: FAO, GRA,...
- Ask to all Susan members to collect national (or research centres) SRA

# From Expert analysis (a group of national relevant experts, stakeholders, funders?)

- Analyse, validation and ranking of priorities (outputs of the first step)
- Suggestion of new priorities
- Production of a gap analysis using on line questionnaire

#### From international literature

Not yet planned : for some specific topics?



# Analysis of research gaps from existing document (1)

- Work is under progress: Recruitment of a temporary workforce asap
  - Existing SRA (with Marina team)
  - A data basis of 260 EU funded projects

SuSan call objectives	DG AGRI - Agricultural	European Biofuels Technology	ЕТРСАН	C-IPM SRA	FABRE-TP	EMIDA ERA - NET	EUPHRESCO	FACCE-JPI	FORE-MED	ARIMNet2	PRIMA	BIO-BASED INDUSTRIES for	ICT-AGRI ERA-Net	TPorganics	STAR-IDAZ	Cork 2.0 Declaration	EIP-AGRI	ENRD (European Network for Rural	Bio-based Industry Consortium	Common Agricultural Policy	EU Industrial Policy	Promotion of EU Farm Products
Competitiveness and resilience of the entire animal production chain			Х	?	Х	Х		Х	Х				Х		Х	Х	Х	Х	Х		Х	Х
More efficient utilisation of feed														X					Х			
Converting non-edible feedstuffs into valuable human edible protein sources												х							x			
Produce animal products which are of high quality														Χ								
Minimise emissions to soils and water	Х				Χ			Χ		Χ	Х	Х		Χ	Χ			Χ	Χ			
Biodiversity and ecosystems					Χ			Χ						Χ	Χ	Χ		Χ				
Societal needs and values, for example high standards of animal health and welfare			X		Х				Х				?	X					X			
Worthy livelihoods for current and future generations of animal farmers	Х	Х											?			X		х			Х	
Areas of interest under Management of animal production systems for improved sustainability																						
Management of animal health	Х		Х			Х		X	Х	Х	Х				Χ					X		
Management of animal Welfare	?				Х									Х						Х		
Management of Animal Breeding					Х								?	X								
Management of Animal Feed and Nutrition	?												?	Х								
Choice and management of Animal Housing													Х									
System effects on product quality		Х			Х				Х							41-						



# Analysis of research gaps from experts and stakeholders consultations and validation (1)

# Expert and stakeholders consultations

- List of relevant experts and stakeholders and funders?
  - Different countries-regions / systems;
  - Ask to all Susan members to send candidatures (CV)
- Selection of the most relevant experts
- Gap analysis
  - On line submitted questionnaire: Experts should validate outcome of the first step and may propose new priorities
  - Analysis of the response
  - Provision of a list of recommendation ensure feedback with experts
  - Organisation of a final workshop



# Analysis of research gaps from experts and stakeholders consultations and validation (2)

### Creation of a Working group

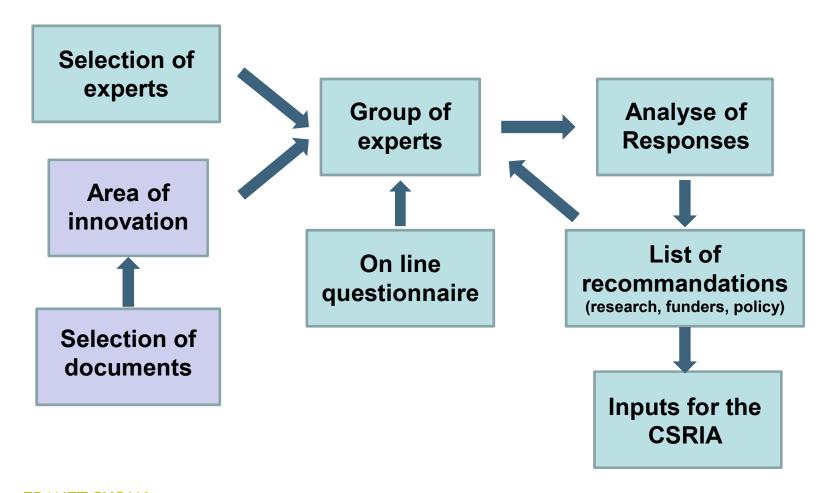
- Define criteria for expert profile
- Select the final list of expert and will ensure the availability of selected experts
- Prepare the questionnaire
- Analyse the responses
- Organise the workshop

#### First actions

- Define the composition of the working group
- Define criteria for expert and send to each partners
- Each partners will send candidatures (CV)



# Analysis of research gaps from experts and stakeholders consultations (2)





# Analysis of research gaps from experts and stakeholders consultations (2)

#### A first exercise :

- What are the main research gaps to improve animal welfare,
- What are the most important research gaps to better use / reduce antimicrobials?
- What are the research gaps for improving environmental sustainability?



# Task 7.3. Self Sustainable networking

### Objectives

- Establish a durable and focused network beyond the lifetime of this ERA-NET,
- Provide a forum leading to improve collaboration on research priorisation and procurement, creating the necessary critical mass,
- Focus to deliver sustainable research needs for policy makers (MS view).

#### Actions

- Explore options and built a durable network of partners,
- share information on national activities and strategies,
- coordinate research activities in a flexible and demand driven way,
- develop a strategic outlook,
- offer knowledge transfer as a consulting body within the NC, to national research funding organisations to public and private stakeholders.

### Instrument for networking of partners involved

- Need of legal framework/structures and associated business models
- New instrument for the animal sector: CWG SAP and AHW, ATF, ...



# **Deliverables and Milestones**

### Delivrables

48	Proposals for a durable and focused network in the area of sustainable animal production (beyond the lifetime of this ERA-NET)
60	Common Strategic Research and Innovation Agenda : research and innovation needs, research funding collaboration

### Milestones

23	Draft CSRIA research report (too early)
33	International Expert workshop, validation and analysis of research and innovation needs (link with WP5)
35	Revised draft CSRIA (not possible)
60	Final communication on ERA-NET Susan (WP1, 4, 5, 6, 7)



# **Main contributors**

	7.1	7.2	7.3
BLE – Ge	X	X	X
INIA – SP			X
BMLFUW - Aut	X	X	X
DEFRA – UK	X	X	
GDAR – Tu		X	
EV-ILVO – Be	X	X	X
INRA – Fr	X	X	X
MoH – It	X	X	
Teagasc – Ir	X	X	