

# Developing the SRIA of the candidate European partnership 'Accelerating farming systems transition: Agroecology living labs and research infrastructures'

### Benjamin Sánchez (SCAR AE co-chair) and the SRIA Core Team

Workshop to launch the process to develop the SRIA



# Compulsory elements of a SRIA partnership (EC)

- Design: 4 blocks (in line with guidelines of RTD and ERA-LEARN):
  - 1. Intervention Logic
  - 2. Monitoring framework with SMART KPIs (Specific, Measurable, Attainable, Relevant and Time-bound)
  - 3. Selection of Core Themes and Identification of synergies (European partnerships and EU, national or regional initiatives -including Missions)
  - 4. Plan for updating the SRIA, including future possible involvement and consultations of the stakeholders
- Broad consultation: It is a must Today is just the first day to interact!



# SCAR-AE Process to develop the partnership's SRIA

- Core SRIA Core Team within the Drafting Group: 3 co-chairs (Nicolas Tinois, Torsten Rodel and Benjamin Sanchez), 2 EC DG AGRI officers (Susana Gaona and Paola Eulalio), and FACCE-JPI (Heather Mckhann), and ALLREADY CSA (Muriel Mambrini et al.) as key advisors.
- Interactions with the larger group of the Drafting Group to which the SRIA Core Team belongs: Co-leaders of the six Task Forces (TFs) of SCAR Strategic Group on Agroecology (SCAR AE) and Agroecology for Europe (AE4EU) & Soil Mission Support CSAs as key advisors.

#### Main inputs (SCAR AE work during 2021)

on Agricultural Research

- Previous work from SCAR AE TFs identifying barriers and opportunities for AE transition, mainly research needs (TF2; annex 5 of the partnership's dossier) and instruments and capacity building activities (TF3), with comments from other TFs.
- Relevant projects and initiatives have been identified and contacted, with support of the CSAs
- Relevant topics from Horizon Europe Working Program 21-22 (not only cluster 6) have also been identified to avoid overlaps.

# SCAR-AE Process to develop the partnership's SRIA

### What have we done during 2022?

- Defining the Core Themes and categorizing the identified research needs and activities (from SCAR AE TF2) and ensuring their alignment with the partnership's General, Specific, and Operational objectives
- Identifying relevant activities to be performed in the AE Living Labs & RIs (from SCAR AE TF3) as they are central to partnership's performance
- Structuring the research needs/activities that could be addressed by the partnership.





#### Vision



Team-up and unlock the **transition to agroecology** so that farming systems are resilient, productive and prosperous, place-sensitive, climate, environmentecosystem, biodiversity- and people-friendly by 2050

Links with other

Links with other

Links with other

And Missions

Partnerships and Missions

And Missions

Partnerships and Missions

And Missions

Partnerships and Missions

Partnerships and Missions

With the SRIA

With the SRIA

#### General Objectives

**GO1**. **Mainstream the principles** of AE to redesign farming systems across a diverse Europe

GO2. Build-up and expand collaborations to co-create and share knowledge and solutions that empower all actors (producers, consumers, policy makers, civil society) to engage in the AE transition

GO3. Contribute to fulfilling the Sustainable
Development Goals and the Green Deal targets by 2030 and climate neutrality in Europe by 2050 by supporting the implementation of key EU strategies and policies

#### Specific Objectives

**SO1**. Increase **research-based knowledge** on the benefits and challenges of AE and its potential for farming, food, climate, ecosystem services and environmental footprint reduction as well as resource use and societal impacts

**SO2**. **Develop and co-create innovations** to reduce and share the risks of transition for both individuals and collectives

**SO3**. Improve the **sharing and access to knowledge** on AE as well as reinforce the **agricultural knowledge and innovation systems** for AE across Europe, considering culture, gender, and youth aspects

**SO4**. Build a **monitoring and data framework** to measure progress of the AE transition and improve data valorisation and sharing

**SO5. Exchange with policy makers** (research and sectoral) and stakeholders on AE transition and mainstreaming of AE practices to contribute to improved governance, policies, and institutions

### Operational Objectives (incl. activities & KPIs)

- OO1 Support transnational research and innovation activities on the challenges and potential of AE in addressing biophysical, environmental, climate, social and economic dimensions of sustainability, at farming, local environment and broader societal levels.
- OO2. Support research in and on LLs across Europe to support AE transition.
- OO3. Build and organise a European network of new and existing LLs and RIs for knowledge sharing and co-creation on AE innovations at various scales.
- OO4. Build capacities of various actors at the levels of networking, AE and LLs to foster AE transition.
- OO5. Improve access to and use of services provided by RIs and other relevant initiatives for long-term measurement, observation and experimentation in support of AE.
- OO6. Setup a framework, data management, indicators, and tools to monitor the AE transition, its impacts and social, economic, environmental and climate performance, for a variety of actors, contexts and scales.
- OO7. Design and implement communication and dissemination activities to support AE transition through increased uptake by practitioners and to improve stakeholder engagement, including the wider public.
- OO8. Put in place mechanisms for science-policy dialogue in support of the establishment and implementation of evidence-based policies (research and sectoral), that supports AE transition, including long-term funding for AE R&I.

# ESS and benefits of AE transition

CC and biodiversity, diversification and cycles, economics/livelihoods

#### Cross-cutting:

- **LLs** and **RIs** as instruments for AE transition
- Monitoring and metrics within AE system for transition

#### Levers for integrative R&I endorsing AE transition

Tools for integration of social, economic, technological, environmental dimensions...

(LLs, LHs, models, serious games, deliberation ...)

# Agroecosystem redesign

<u>resilience</u>, input reduction, closing nutrient

Signal Si



#### Supporting activities:

Capacity building Communication and dissemination Science-policy interface Data and knowledge management



# 1.- AGROECOSYSTEM REDESIGN AND INNOVATIONS: ECOSYSTEM SERVICES AND OTHER BENEFITS OF AGROECOLOGY TRANSITIONS

#### 1.1. RESILIENT, BIODIVERSE, CIRCULAR AND SUSTAINABLE AGROECOSYSTEMS

- Farm-level (soil recovery, integrative designs of AE farming systems)
- <u>Landscape agroecology and territorial planning</u> (integration of land and livestock uses, water, nutrient and pesticide use reduction, diversifying agroecosystems, environmental impacts)
- <u>Global level (GHG, C sequestering, C footprint, circular biomass chains, biomass and biobased products replacing fossil-based ones)</u>

#### 1.2. SOCIOECONOMIC IMPACTS

Valuing agroecology services and externalities, environmental and economic benefits and trade-offs, economic feasibility of agroecological approaches, scaling-up of agroecological practices, social implications.

# 2.- INTEGRATION IN AND IMPLICATIONS FOR THE AGRIFOOD VALUE CHAIN

#### 2.1. UPSTREAM

Adapted and participatory breeding programs, decision support systems adapted to different scale and actors, adaptation and incorporation of traditional knowledge, adapted digital tools and machinery.

#### 2.2. DOWNSTREAM

Quality of AE products, on-farm preservation technologies, traceability of AE products, consumer acceptance, business models associated to shorter value chains connected to territories.

#### 2.3. COUPLED INNOVATION FOR AE TRANSITION

Coordinating innovation processes from agricultural practices and food perspectives contributing to a systemic agroecology transition.

#### 3.- LEVERS FOR INTEGRATIVE R&I SUPPORTING AE TRANSITION:

Tools for integration of social, economic, technological, and environmental dimensions (LLs, LHs, models, serious games, deliberation, etc.)

#### 3.1 INSTRUMENTS ENHANCING MULTIACTOR INVOLVEMENT, INCLUDING LLs and RIs

Structures, mechanisms, and tools facilitating co-creation of innovative solutions.

Exploring and improving features of LLs and LHs and their connection to RIs with the potential to accelerate the agroecological transition through diversified local innovative solutions targeting multiple objectives and science-policy interactions.

#### 3.2 SYSTEMIC TOOLS FOR ADDRESSING MULTIDIMENSIONAL CHALLENGES

Innovative design methods to address multidimensional challenges overcoming cognitive and organizational barriers.
Building models and serious games to analyze the benefits and trade-offs of AE transitions

Building models and serious games to analyze the benefits and trade-offs of AE transitions from a multiactor perspective.

#### 4.- MEASURES ADDRESSING BARRIERS AND SUPPORTING TRANSITION

#### 4.1 INTEGRATED RESOURCE MANAGEMENT: TERRITORIAL PLANNING

Explore options for landscape planning that speed up the agroecological transition and maximize the provision of ecosystem services.

#### 4.2 CONNECTION WITH AGRICULTURAL AND ENVIRONMENTAL POLICIES

Methodologies and tools to improve the coherence of policies to facilitate the development of AE and adapt legislation to unlock AE transitions.

#### 4.3 ADAPTATION AND TRANSFORMATION OF INSTITUTIONAL SETTINGS

Explore new institutional designs that facilitate multi-actor involvement in a wide range of sectorial governance and policy decision-making domains through co-creation, and the sharing of best practices

#### 4.4 FINANCIAL INCENTIVES FOR AGROECOLOGICAL TRANSITIONS

Assess the impact of policy instruments in promoting the agroecological transition (eco-schemes, public payment for agroecosystem services, taxation instruments, transaction costs on the labor market, public procurement, new labelling, applications of the polluter-pays principle, regulations) and long-term initiatives.

#### 5.- CROSS-CUTTING ISSUES

#### 5.1 SUPPORTING AGROECOLOGICAL LLs and RIs AS INSTRUMENTS FOR AE TRANSITION

Undertake research on incentives (not only financial) needed to maintain and support co-creation activities in LLs.

Methods for the assessment of AE LLs performance regarding the enhancement of socio-technical innovation and adoption of AE schemes

# 5.2 METRICS AND MONITORING FRAMEWORKS FOR THE ASSESSMENT OF AGROECOLOGICAL TRANSITIONS

Define, select, and assess key ecological principles and indicators for the integrated monitoring and evaluation of the advancement of agroecological transitions, considering both ecosystem services and socioeconomic considerations.

Co-create and validate, with the involvement of relevant actors, tools for the evaluation of agroecological performance (e.g. economic, environmental, social) at various scales, contexts and pedo-climatic conditions.

# **Next Steps**

- Core themes finalized early June
- Planning a series of workshops and surveys to get further inputs from stakeholders and initiatives at the European and National Level (two stages: June-July, and September-October)
- Public consultation starting in July
- Revision of SRIA to ensure its alignment with HE WP 23-24 July
- Final draft of the SRIA November and December





# Thank you for your attention



