



**Towards a new SCAR Foresight Exercise**  
**Sustainable Agriculture, Forestry and Fisheries**  
**in the Bioeconomy**  
**A Challenge for Europe**

**SCAR Foresight Group**

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**EURAGRI Conference – September, 28th – 30th, 2014**

**Montpellier, France**

# The SCAR Foresight Process Achievements and Future Plans

## Main points

- Main role of SCAR
- The SCAR Foresight Process
- Towards a 4<sup>th</sup> SCAR Foresight Exercise
- SCAR Foresight Experts Group  
First results & Experiences & Next Steps

# Standing Committee on Agricultural Research

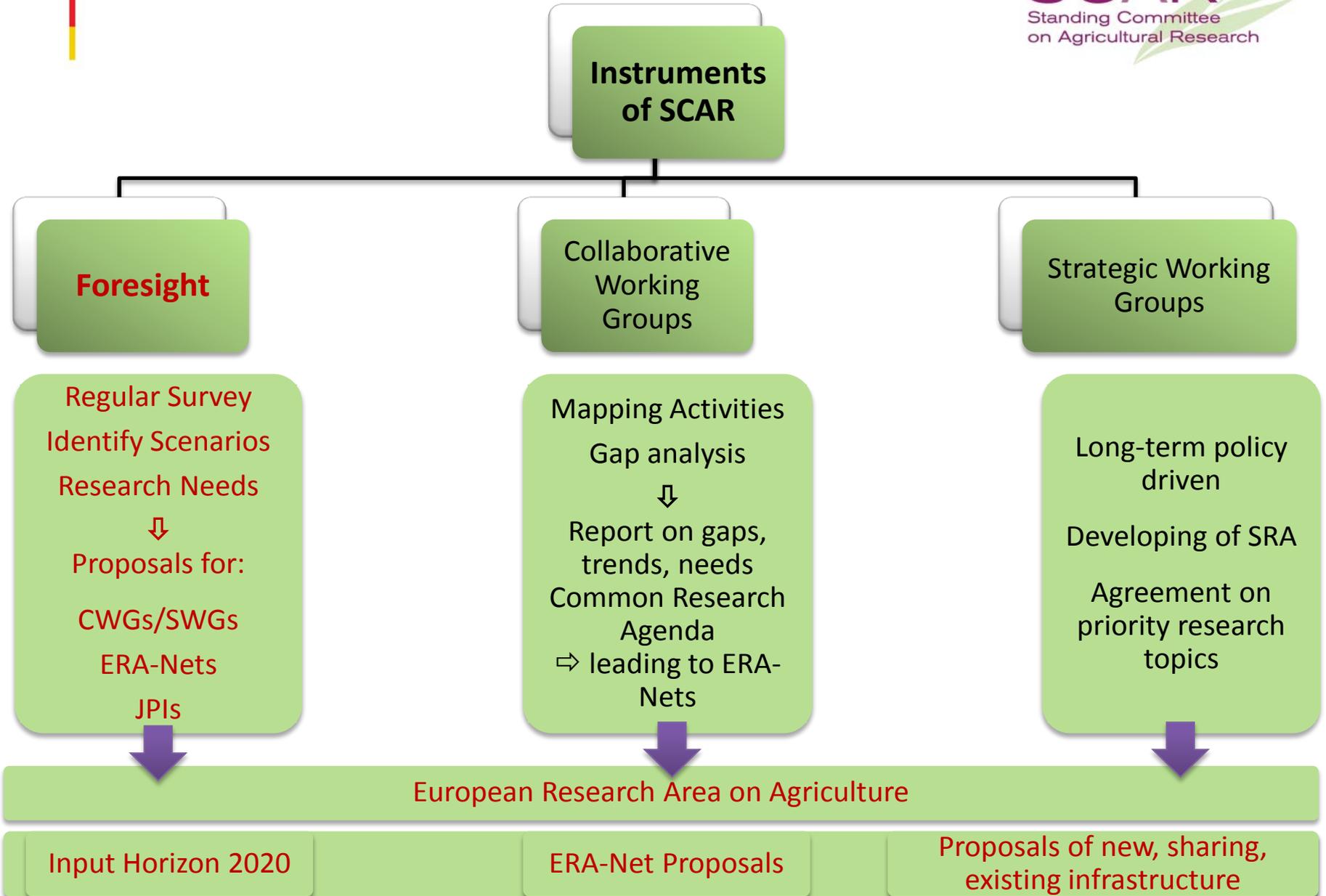
## Main role for SCAR

Support the Member States (MS) and the Commission for better coordination of agricultural research across the ERA

- 1974: Council Regulation N° 1728/74 establishing SCAR
- 2005: renewed mandate by the Council (27 MS)
- 2012: Widening of SCAR – Forestry & Fisheries

## Main tasks of SCAR

- Advisory function of SCAR for MS, COM and for innovative research activities on EU level
- SCAR adapts to new challenges continuously, highlighted weak signals as well as future opportunities (provides Foresight Studies , regular survey) – Feeds the strategic planning process of research policy making and gives advise to political decision makers (MS, COM)
- The SCAR work has resulted in a high number of joint activities between MS (CWGs, ERA-Nets, JPIs)
- **SCAR Activities are “Member State driven”**
- **SCAR Foresight – Instrument for public research planning and public policy building**



# The SCAR Foresight process – Achievements

Since 2006 three Foresight studies have been carried out under the SCAR → a continuous process

**1st Foresight** examined prospects for agriculture in a 20 years perspective based on a **challenge approach** allowing the **identification of innovation needs** based on **scenarios**

**2nd Foresight** focused more on **resilience and crisis** → 3 CWGs (basis for JPI FACCE and AKIS)

**3rd Foresight** looked at environmental and resource issues (**resource scarcities**) that might become important in a 30-40 years perspective → to provide enough food, feed, fibre and fuel in our century - two narratives were identified „**Efficiency**“ and **Productivity**“ → 3 SWGs

The results from the Foresight exercises build the basis for the **advisory functions of SCAR** for MS, the EU and for **innovative research activities** on EU level

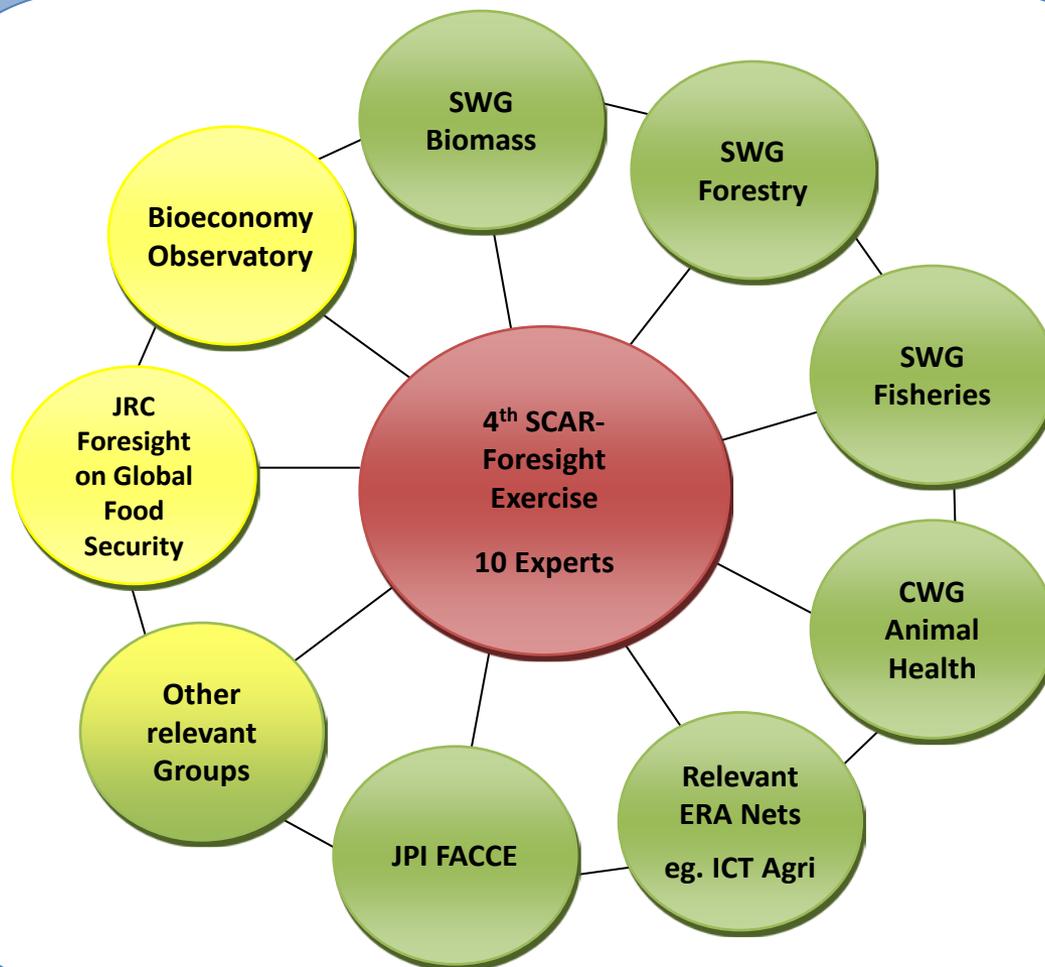
# Towards a New SCAR Foresight Exercise ?

## Why?

# Towards a 4th SCAR Foresight Exercise with oversight function

Grand Challenges of 21<sup>th</sup> century

EU-Bioeconomy Strategy



Food security

Horizon 2020

EU-Strategy 2020

Climate Change

CAP Reform

Resource Scarcities

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## Sustainable Agriculture, Fisheries and Forestry in the Bioeconomy - A Challenge for Europe

### Terms of Reference - ToR

The 4<sup>th</sup> SCAR Foresight will **gather and link** the foresight activities under SCAR and from previous and ongoing foresight activities, including strategic visions and research agendas of relevant groups (ETP, JRC Foresight on Global Food Security, Bioeconomy Observatory), and vision documents of ERA-Nets/JPIs and relevant European research projects **in the Bioeconomy** as well as relevant projects at international level having an impact on Europe or on European interests.

**The goal is to prepare an analytical document with oversight function**

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## ToR - Questions

- How far is the **primary sector** (agriculture, forestry and the marine sector) affected by the implementation of the Bioeconomy strategy (evolution of land use, ecosystem services, farming structures...) and CAP reform?
- How the **primary sector** can actively contribute to the implementation of the **Bioeconomy Strategy** ?
- How the **Bioeconomy** can contribute to **sustainable agriculture**?
- How the **Bioeconomy** can contribute to a better **use of scarce resources**?
- How the **Bioeconomy** can improve **food security, environmental quality and food safety**
- How to implement **innovation** in the **Bioeconomy**?
- What are the opportunities and risks for **different sectors**, social groups and regions?

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## The three step approach

- 1. Defining the scope and structure of the Foresight exercise:** defining the field, identifying the main components and variables of the system; defining trade-offs and links between challenges (sustainability, competitiveness, jobs, innovation); developing a detailed workplan (meetings, workshops)
- 2. Accessing the knowledge reservoir** (e.g. With sectorial/ regional workshops) through interactions with SCAR SWGs/CWGs; JPIs, ERA-Nets assessing opportunities, risks, gaps.
- 3. Developing scenarios with a visionary outlook and long term perspective on changes induced by,** and the potential impact of innovation; identifying the consequences on research and innovation systems; recommending actions

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## Composition of Expert Group

- **“Long-term experts”** (approx. 5) with an expertise in foresight exercises who will be involved in all three steps and will be responsible for the management of the process and for the delivery of the final report
- **“Short term experts”** (approx 5) will support the “core” group in its interaction with the Working Groups (SCAR / other relevant groups) – understanding specific aspects of sectors and produce their own reports (parts) – step in in the 2. step
- **Advisors from CWGs / SWGs / ERA-Nets / JPIs – Representative members are invited as required**
- **The Foresight Group** - Overview function on behalf of the SCAR with respect to process and progress – reporting to SCAR plenary/WG

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## ToR- Timeframe – duration 18 month

March 2014: Experts of “Core” group selected

June 2014: Kick Off Meeting – Long Term Experts

June 2014: Broad consultation on key issues

Sep. 2014: Definition of scope & structure (1<sup>st</sup> step)

**Oct. 2014: “Short Term experts” selected (n=5)**

**Sep. 2014 – March 2015: Workshops & consultations ; WS in Nov., Dec. 2014 and Feb. 2015)**

**March 2015: Analysis of specific sectors (2<sup>nd</sup> step)**

**May 2015: Draft report available to SCAR WG**

**June 2015: Final report delivered to SCAR Plenary**

**Sep . – Dec. 2015: National Events (organized by MS)**

**Jan. 2016: Stakeholders´ conference and dissemination**

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## The SCAR Foresight Expert Group (FEG4) Long Term Experts

Erik Mathijs, Belgium - **Chair**

Gianluca Brunori, Italy

Luisa Last, Switzerland

Michael Carus, Germany

Michel Griffon, France

# SCAR Foresight Expert Group

## First results & experiences

# Towards the 4<sup>th</sup> SCAR Foresight Exercise

## The Kick Off Meeting – Main Results

- **Agreement on direction and objective** of the 4<sup>th</sup> SCAR Foresight Study (ToR) – Agreement on a common vision
- **SCAR Foresight** should take an “**Oversight Function**” - Contribution from other SCAR Groups (with own Foresight activities) and/or relevant groups on EU-level are needed /offered
- Foresight Study should explore the **linkages among sectors** – it should explore not only what will happen, but also what might happen by implementation the Bioeconomy Strategy (Interactions, possible conflicts)
- Identification of **main drivers** in the sectors: Food stock, food flows, Biofuels, energy and materials

# Role of Foresight

## DOs

- Address complexity
- Address uncertainty
- Address change

→ Systems thinking

→ Future-open thinking

→ Strategic thinking

## DON'Ts

- Ignore complexity
- Ignore uncertainties
- Ignore change

# Role of Foresight

- **NOT:** to explore interlinkages between old and new Bioeconomy
- **BUT:** to provide a framework for joint dialogue/ reflection/learning about the interlinkages in the Bioeconomy

# Approach / Phases

- **Step 1:** Purpose, definition, questions & criteria
- **Step 2:** Inventory (using fiches), Scoping, surveying and scanning, involvement of other groups
  - Scoping paper
  - Preparing fact sheets of variables
  - Definition of dilemmas
- **Step 3:** Analyze interactions & **generate dilemmas**
- **Step 4:** Produce scenarios

# Next Steps

## Involvement of short term experts

- **Forestry** , with an emphasis on new applications (eg nanocellulose)
- **Fisheries and aquaculture**
- Energy scenarios (expert knowledge on technologies & systems + on scenario development)
- **Ecology and biodiversity** (with ref to soils)
- **Developing countries**
- **Life science research**
- **Business**
- **Proteins**

# Next Steps

## 3 Workshops



October 2015 - March 2015

## Involvement of Stakeholder Groups

- Workshop 1: Dilemmas and stakes – **18.11.2014**
- Workshop 2: Validate the knowledge base - **9.12.2014**
- Workshop 3: Scenarios – **17.02.2015**

# Next Steps

## First Workshop - Dilemmas and stakes

### Actions in advance of the 1st Workshop Asking for dilemmas

- Survey / questionnaire – involvement of stakeholders
- Involvement of stakeholders: Bioeconomy community, Horizon 2020, SCAR groups

# First ideas

## Cross-cutting dilemmas

- **Centralised**/large/global vs. **decentralised**/small/local
- **Primary** vs. **secondary** streams/food waste/food vs fuel/C for soil or energy – what is the best use of biomass
- **Efficiency** vs. **diversity** - Quality/quantity/biodiversity (feedstock composition) – use vs. nonuse of biomass
- **Food** vs. **feed**
- **Economy** vs. **ecology**

# Invitation to the 4<sup>th</sup> Foresight Exercise

**„Sustainable Agriculture, Fisheries and Forestry in the  
Bioeconomy - A Challenge for Europe**

**Please provide your input to the Stakeholder Consultation**