



TempAg

SCIENCE FEEDING
TEMPERATE AGRICULTURE

Temperate Agriculture(TempAg) Foresight Workshop

*Research, shaping policies for sustainable
agricultural food systems in temperate
areas.*

5-7 October 2016, London



TempAg Aims

- Increase **impact** and return on investment of **national research** programmes
- Bring together national competencies to **meet goals** of **transnational interest**
- Enable **communication** and **alignment** of existing and new research and technology
- Identify areas of **research relevant to science and policy** which are currently insufficiently addressed at an international level.

Workshop Aims

- Review **current and emerging priorities** for policy shaping communities in temperate regions.
- Validate and update the TempAg **scientific themes** to match current **science-policy contexts**
- Determine **priority activities** for TempAg's second phase



TEMPAG'S DEVELOPMENT, RELEVANCE WITH OECD PRIORITIES

TempAg Foresight Workshop
5 October 2016

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A FEW WORDS ON THE OECD



The OECD...

- ...is the global organisation that drives **better policies for better lives**
- ...analyses, measures and compares experiences and policies to give advice that helps **raise living standards** globally
- ...aims for a **stronger, cleaner, fairer world**



OECD bodies of relevance to TempAg

- Committees for Agriculture
 - Working Party on Agricultural Policies and Markets
 - Joint Working Party on Agriculture and the Environment
 - Joint Working Party on Agriculture and Trade
- Co-operative Research Programme on Biological Resource Management for Sustainable Agricultural Systems
- Other Committees:
 - Working Group on Pesticides
 - Working Party on Biodiversity, Water and Ecosystems
 - Working Party on Biotechnology



TEMPAG GENESIS



Birth of TempAg: it all started with GSF and UK

2012

- UK proposes an OECD-Global Science Forum *Scoping Exercise* for a Collaborative Research Network on Temperate Agriculture

Rationale:

- Strong national agriculture research and policy development programmes, but weak coordination *between* national programmes
- International cooperation mostly focused on tropical areas



What is the OECD GSF?

- Global Science Forum
 - Venue for **consultations among senior science policy officials** of OECD member countries
 - Produces findings and action recommendations on **high-priority science policy issues requiring international co-operation**
 - Identifies **opportunities for collaboration** on major scientific undertakings
- GSF initiated five international scientific collaborations
 - GBIF (on biodiversity)
 - INCF (on neuroinformatics)
 - GEM (on earthquake risk)
 - SciColl (on the use of scientific collections), and
 - **TempAg**



The Scoping Exercise

- Process
 - 3 surveys
 - 2 teleconferences
 - 1 scoping group meeting (Paris, 20 March 2013)
- Participants
 - 30 experts from 13 countries plus EC and OECD



Outcome of the scoping exercise

- Initial gap analysis
- Agreement to set up an expert group
 - detailed work plan and project
 - MoU + Terms of Reference
- 23 April 2015: Inauguration of TempAg
 - 8 founding countries:
France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, United Kingdom



TempAg today

- 9 member countries (Finland joined)
- OECD as associate member
- Three main themes:
 - *Increasing Total Factor Productivity*
 - *Optimising land use to produce food and other services*
 - *Delivering resilient agricultural systems*



IS TEMPAG ALIGNED WITH OECD MINISTRIES PRIORITIES?



TempAg activities fit with priorities of OECD Agriculture Ministers

- Declaration of OECD Agriculture Ministers (April 2016):
 - Make innovation a priority in order to achieve sustainable productivity growth
 - Foster production systems that use available [...] resources sustainably and promote animal, plant and human health
 - Foster greater resilience of farmers to risk, to enable them to cope with more frequent, unpredictable events [...]



But priorities of OECD Agriculture Ministers go beyond current TempAg focus

- Coherence of policies
- Policies that are transparent, targeted, tailored, flexible, consistent, equitable, and cost-effective
- Better-functioning multilateral trade system



**ARE TEMPAG TOPICS
RELATED TO OECD
ACTIVITIES ON
AGRICULTURE?**



Strong links between TempAg focus and current OECD activities

- Improving productivity growth sustainably
- Ensuring agriculture resilience to environmental and economic shocks
- Land use and ecosystem services



Improving productivity growth sustainably

- Policy analysis framework developed
 - Looking at coherence of policies at all level
 - Applied through in-depth country level analysis
 - 5 countries already, 2 on-going
- Launch of a network on inter-country TFP and EATFP measurement (2017)
- Coherence of policies regarding sustainability and productivity growth objectives
 - On-going for climate change objectives
 - About to start for other sustainability issues



Ensuring agriculture resilience to environmental and economic shocks

- Numerous report on risk management in agriculture
- Specific reports on adaptation to climate change and events:
 - Impact of climate change
 - Policies for adaptation
 - Floods and droughts management
 - Groundwater management
 - Water risks hotspots



Land use; ecosystem services

- Report to be finalised soon on *Land use and ecosystem services*
- OECD Compendium of Agri-environmental Indicators
- Past reports on the subject also include:
 - *Alternative Payment Approaches for Biodiversity Conservation in Agriculture*
 - *Environmental Co-benefits and Stacking in Environmental Markets*



Other OECD activities with potential links with TempAg

- Farm Management Practices to Foster Green Growth
- Fostering Green Growth in Agriculture: The Role of Training, Advisory Services and Extension Initiatives
- The environmental impacts of agricultural policies
- The economic consequences of potential agricultural contributions to climate change mitigation
- Reforming water policies: from solutions to implementation



Strong links between TempAg and OECD CRP

- Co-operative Research Programme on biological resources in agriculture (CRP)
- 3 themes well aligned with TempAg's
 - Managing natural capital for the future
 - Managing risks in a connected world
 - Transformational technologies and innovation
- Provide support for:
 - Conferences
 - Fellowships



Questions

- What balance TempAg has between policy design questions and technical farm-level questions?
- Do you have a strategy to take into account the local specificities and diversity of situations in agriculture without ending up by responding “it depends” to most questions?

Thank you!

We look forward to hearing from you!



Visit our website:

www.oecd.org/agriculture/sustainable-agriculture/

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Agriculture and Environment - Recent Publications

Green Growth

- Farm Management Practices to Foster Green Growth
- Fostering Green Growth in Agriculture: The Role of Training, Advisory Services and Extension Initiatives
- Alternative Payment Approaches for Biodiversity Conservation in Agriculture



Water & Climate change

- Drying Wells, Rising Stakes: Towards Sustainable Agricultural Groundwater Use
- Mitigating Droughts and Floods in Agriculture: Policy Lessons and Approaches
- Adapting Agriculture to Climate Change: A Role for Public Policies
- Cost-Effectiveness of Greenhouse Gas Mitigation Measures for Agriculture: A Literature Review





“GREEN” FARM PRACTICES?



Farm Management Practices to Foster Green Growth - Conclusions

Practices	Profitability	Yield	Natural resources	Innovation	Pressure on land	Labour demand	Employment
Soil conservation	?	?	+	+	↗	↗	↗
Water conservation	?	?	+	+	↗	↗	
Organic	?	?	+	+	↗	↗	↗
IPM	↗	↗	+		↘	?	?
Biotech	↗	↗	+?		↘		
Precision	↗	↗	+			?	↗



CO-OPERATIVE RESEARCH PROGRAMME ON BIOLOGICAL RESOURCE MANAGEMENT FOR SUSTAINABLE AGRICULTURAL SYSTEMS (CRP)



Co-operative Research Programme

- Founded in 1978
- By a group of countries who saw the needs for a body which would:
 - Provide a sound scientific knowledge base to agricultural policy-making
 - Contribute to an informed public debate on current and emerging agri-food issues
 - Promote scientific understanding and standards between major regions of OECD
- Part II Programme



CRP – WHAT WE DO



CRP sponsored Conferences/Workshops

- International conferences, workshops, symposia, congresses, etc.
- On an issue related to one of the CRP Research Themes
- Of relevance to the OECD's policy priorities
- Current and future research, scientific developments and opportunities
- Informing policy makers, industry and academia (organised by, for example, research institutions, international associations)
- To be held in a CRP member country



Examples of Conferences

- The Role of Forest Biodiversity in the Sustainable Use of Ecosystem Goods and Services in Agro-forestry, Fisheries and Forestry
- Harmonisation of International Quality Assurance Standards for Trichinella Testing in Pork
- Advancing risk assessment models for invasive alien species in the food chain: contending with climate change, economics and uncertainty
- Plant-made Vaccines as an Alternative to Antibiotics: Countering antimicrobial resistance to veterinary bacterial diseases and ensuring human food safety
- Soil Science in a Changing World



CRP Fellowships

- Individual researchers:
 - To undertake their own research project
 - In collaboration with a host researchers and laboratory
 - In different CRP member country
- To strengthen the international exchange of ideas and increasing international mobility and co-operation
- To foster long term collaboration between the institute of the Fellow and of the Host



Examples of Fellowships

- Food production, food security and greenhouse gas emissions
- Economics of Sustainable Food Production
- The spread and reproductive abilities of the honeybee mite *Varroa destructor* in Hawaii and how this is changing the viral landscape of the islands
- Future of omega-3s in fish - defining their needs to underpin our supplies