



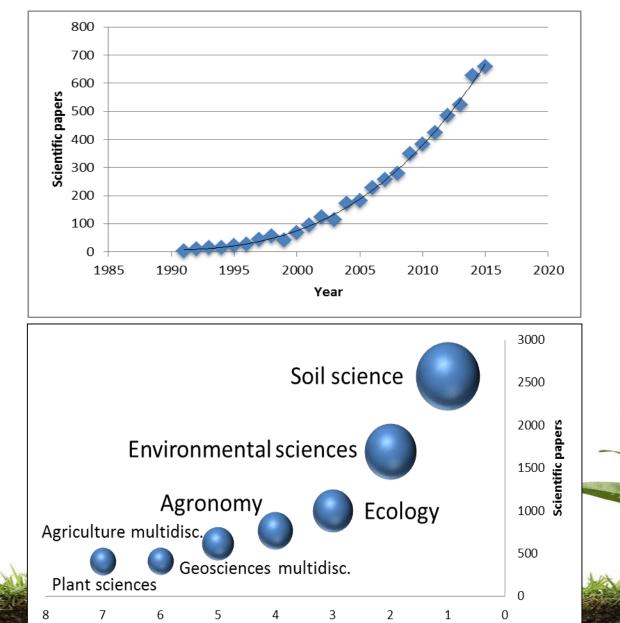
European Commission



Coordination of International Research Cooperation on soil CArbon Sequestration in Agriculture

Exponential growth in annual number of scientific papers on soil carbon sequestration in agriculture over 1991-2015 and distribution by scientific discipline

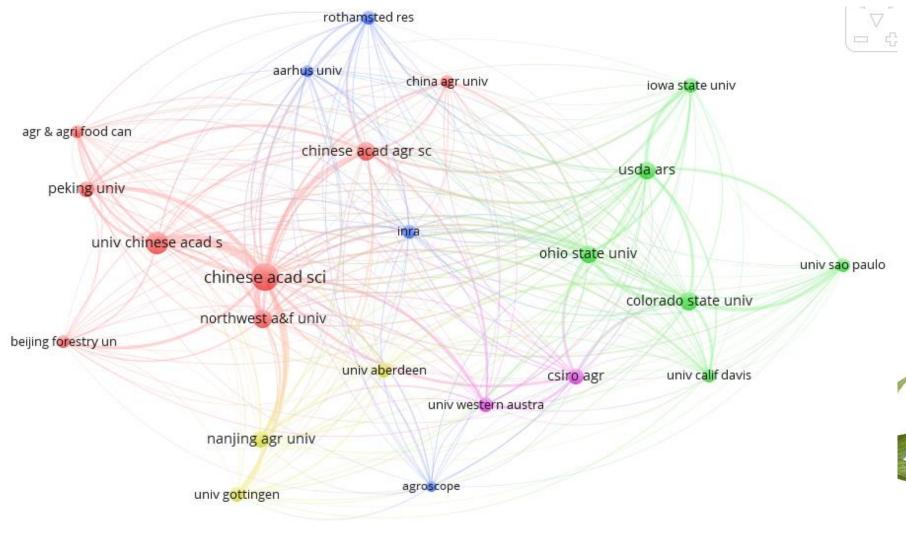
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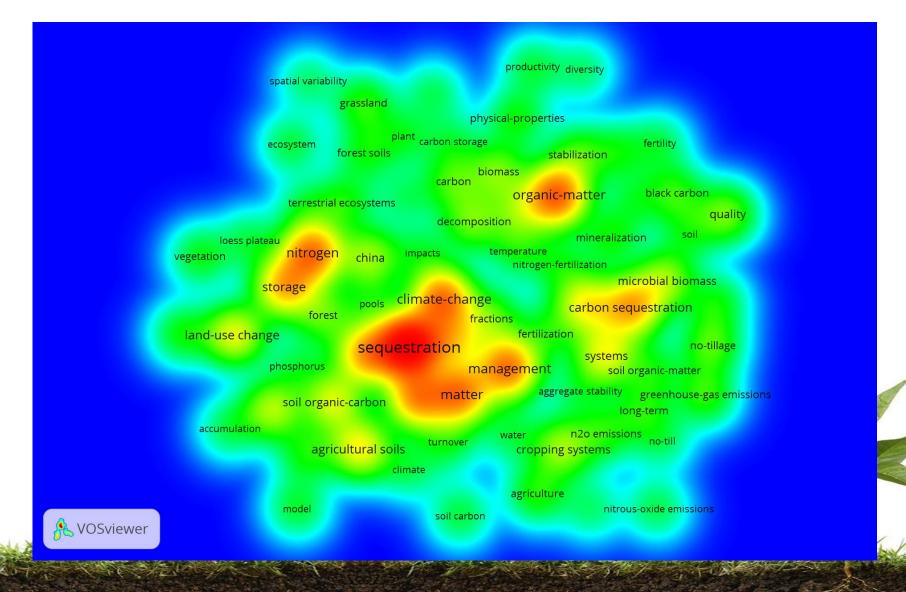


2016: main international research networks on agricultural soil carbon sequestration





2016: Main research topics (key-words) concerning soil organic carbon sequestration in agriculture

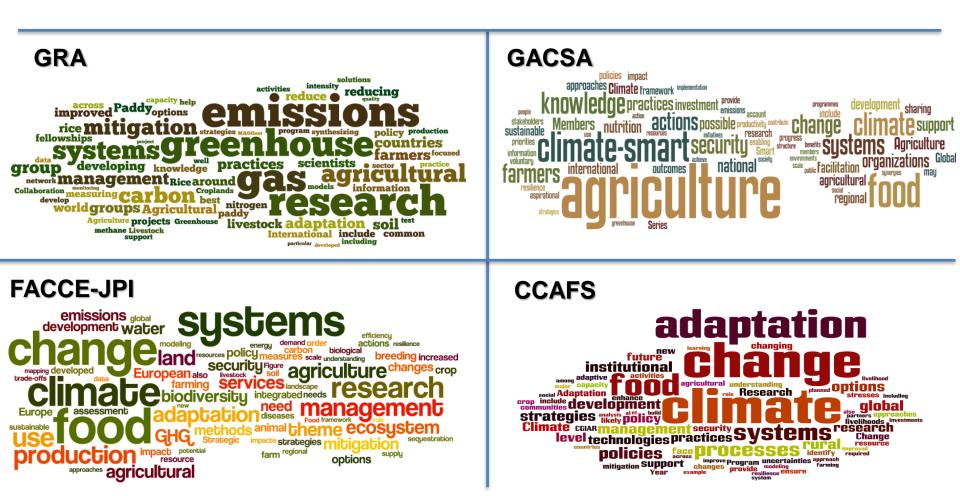


Many ongoing initiatives and research projects dealing (in part) with soils, agriculture and climate change

SMARTSOIL

PeatRestore OLIVE-CLIMA **EIP Agriculture AGMIP Future-Earth UNCCD-SPI ITPSCIRCASA Black Soil** UNFCCC GSBI GSTN IIIAN GLD ISTN CCAFS FAO IEWOCAT W **GRA IUSS IPBES UNEP** 40er1000 ClimateKIC UN-REDD GCP ERA-GAS **Global peatland FACCE-Belmont-Forum Climate-JPI** AnimalChange ERA-NET-CSA

Some contrasts across major initiatives on agriculture and climate change





Collaborate and adapt to an evolving scientific landscape



By flying together geese reduce drag and expand range by +70%

Goals of CIRCASA project

The overarching goal of CIRCASA is to develop **international synergies concerning research and knowledge transfer** on agricultural soil C sequestration at European Union (EU) and global levels.

- Strengthen the international research community on soil carbon sequestration in relation to climate change and food security;
- Improve our understanding of agricultural soil carbon sequestration and its potential for climate change mitigation and adaptation and for increasing food production;
- Co-design a strategic research agenda with stakeholders on soil carbon sequestration in agriculture;
- Create an International Research Consortium



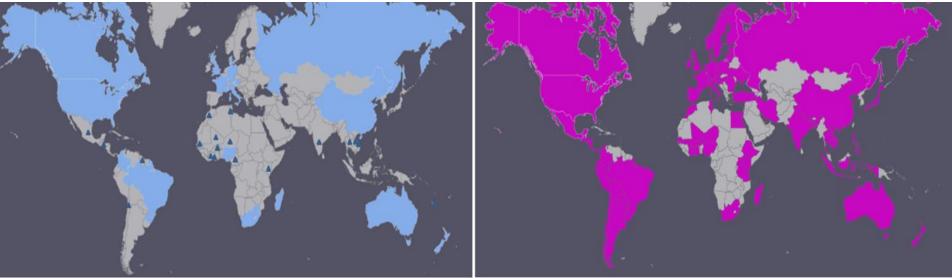
CIRCASA partnership

CIRCASA benefits from the participation of:

- The 4 per 1000 Soils for Food Security and Climate initiative (33 member countries).
- The **Global Research Alliance** on agricultural greenhouse gases (GRA, 47 member countries),
- The Joint Programming Initiative on Sustainable Agriculture, Food Security and Climate Change (FACCE-JPI, 22 member countries),
- In addition, CIRCASA will also benefit from the contribution of the Climate Change Agriculture and Food Security program (CCAFS) and the Water, Land and Ecosystems (WLE) programs of the CGIAR,
- And collaborate with the Intergovernmental Technical Panel on Soils (ITPS) of the Global Soil Partnership (GSP)



CIRCASA has 24 partners including the research secretariats of 4 per 1000, GRA and FACCE JPI Together with these initiatives and with CCAFS - CGIAR, it has direct outreach to a total of 82 countries accounting for 85% of the world's total research on soil C sequestration in agriculture



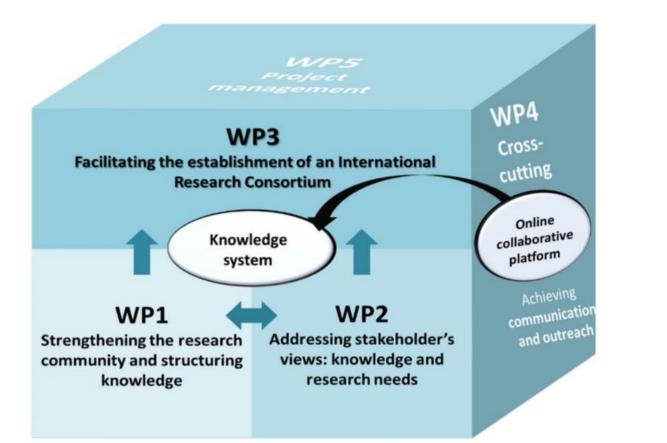
Countries of the 24 CIRCASA partners IRD and CIRAD research sites



Countries partners of: CIRCASA, 4 per 1000, GRA, FACCE JPI, CCAFS



CIRCASA project structure



Work packages interactions within CIRCASA showing the integrated project structure



Online collaborative platform



Knowledge system

- Geo-referenced metadata
- Soil carbon, land use, maps
- Geo-referenced ag. practices, for soil carbon, co-benefits, trade-offs, etc..
- Handbooks, guidelines

Matchmaking

- My user profile
- Identify researchers and stakeholders
- Map collaborative networks
- Search by theme
- Search by geographical area
- Search by sequestration/ag. practice



Communication & Outreach

- Tools: newsletters, videos, etc
- Discussion forum
- · Peer to peer
- Events calendar
- Links
- Webinars

Better structuration of international cooperation

- Strategic Research Agenda
- Research programs
- Funding and alignment opportunities
- Research policy views



WP1. Strengthening the research community and structuring knowledge

1. Stocktaking and linking research networks and projects

2. Collaborating with networks and projects identified, review scientific and technical evidence and draft the science base of the project

3. Research synthesis activities will provide harmonized georeferenced data sets coming from a range of different sources

4. Create a pilot knowledge information system from these data, linking soil, climate and agricultural practices



WP2. Addressing stakeholder's views. Knowledge and research needs

- 1. Gather stakeholders' perspectives on the potential for soil carbon management to contribute to climate change mitigation and adaptation and SDGs
- Identify with stakeholders the challenges to and solutions for – the implementation of soil C sequestration options via regional workshops
- 3. Review knowledge gaps and research needs emerging from stakeholders' perspectives

WP3. Facilitating the establishment of an International Research Consortium (IRC)

Building on the outcomes of WP1 and WP2,

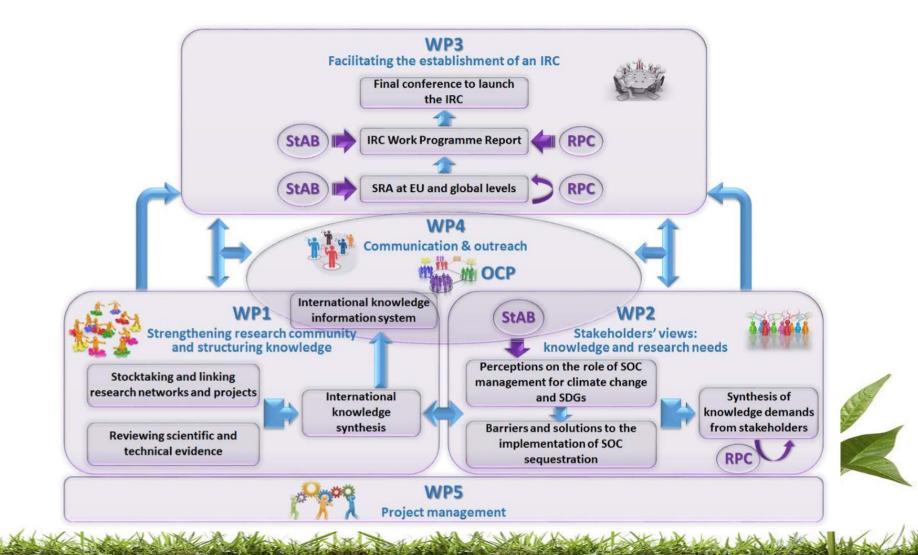
1. Co-design a 2020-2025 Strategic Research Agenda with support of the Stakeholder Advisory Board and Research Policy Committee,

2. Explore activities, resources and governance for an IRC on agricultural soil carbon and draft a work plan

3. Organize preparatory meetings for this IRC, prepare the implementation plan and, if possible, the launch.



Detailed structure of the project





CIRCASA overview

- 3 yrs project
- 2.5 M€ European Commission contribution
- 20 Full time equivalent across the 24 partners
- 60 support letters received
- Executive Committee
 - Dr. Jean-François Soussana, INRA, project coordinator and WP5 leader
 - Prof. Pete Smith, University of Aberdeen, WP1 leader
 - Dr. Ana Frelih Larsen, Ecologic Institute, WP2 leader
 - Dr. Luca Montanarella, EC JRC, WP3 leader
 - Dr. Peter Kuikman, Wageningen Research, WP4 leader
- Permanent guests:
 - Dr. Maurice Heral, Vice-Chair of the Governing Board of FACCE-JPI, ANR
 - Mr. Hayden Montgomery, Special Representative of the GRA
 - Dr. Paul Luu, Executive Secretary of the 4 per 1000 initiative



Thank you for your attention!

