



Madrid, December 11<sup>th</sup> 2019 – 4th FORUM of PARTNERS



# Report by college on the progress and commitments of the Initiative's partners

## Research and Education Institutions College

### Elected members of the College

IRD (France)/Laboratoire Radiolotopes (Madagascar)

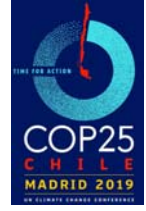
Institut sénégalais Recherches Agricoles (Sénégal)





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**The Bureau of the “4 per 1000” Initiative; its missions**

- *Manage processes with the Executive Secretariat*
- ***Participate in the strategic reflections for the initiative through the preparation of support documents particularly a vision of medium term (5 years) and an operational roadmap for the action plan at 3 years to submit to the Consortium***
- *Contribute to the preparation of the roadmap and the annual work program to be submitted to the Consortium*
- *Facilitate the exchanges within the colleges of partners and members of the Initiative particularly between two meetings of the Consortium and the Forum, in order to serve as a relay for the positions and commitments of the colleges, within the framework and in favor of the Initiative.*
- *Support the Executive Secretariat in the search for partnerships at the level of actions (programs, projects), at the scientific level, and at the financial level for the operation of the initiative and for the actions/projects and scientific activities.*
- *Carry out any action that the Consortium wishes to entrust to the Bureau.*





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*“Participate in the strategic reflections....”*



## Methodology

Electronic consultation

First consultation: Monday October 14<sup>th</sup> 2019

Dead line extension Saturday 16th November 2019

Google form (3 questions) : <https://forms.gle/ex2c3P6KjjcGE6wr8>

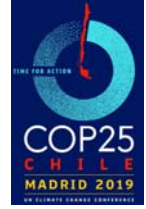
- *What is your current commitments addressing research and education issues?*
- *Priorities of Research and Education*
- *Please provided examples of research programmes you are leading or involved in (Research programmes title, questions addressed, scales of approaches, land use tested.*

13 contributions (20% of the members of the college)



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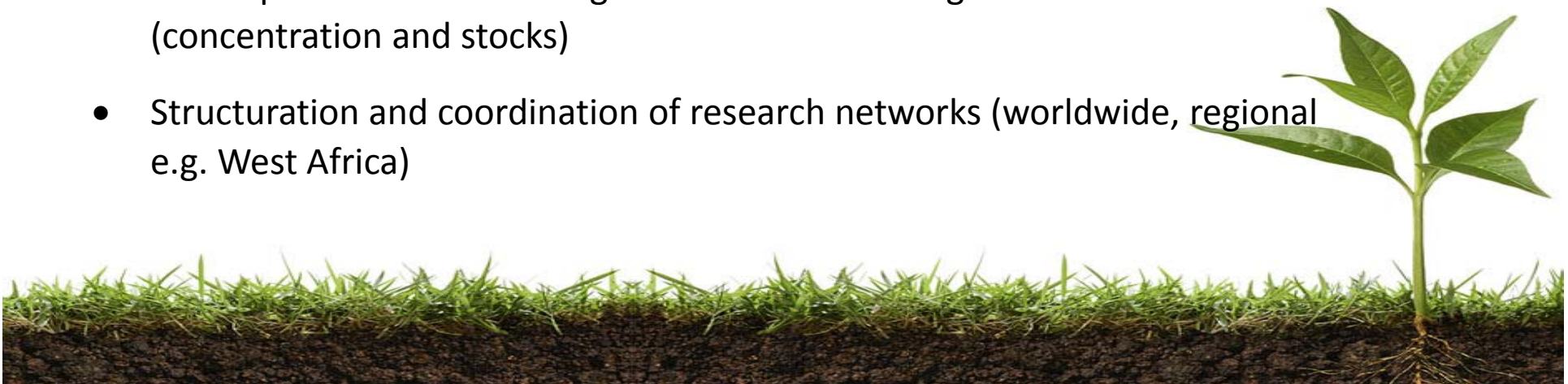
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## Results

### Current commitments 1/2

- Processes and drivers of soil organic carbon sequestration, and GHG fluxes
- Interlinkages between land management, land uses, climate and soil properties (soil organic carbon stock and co-benefits)
- Monitoring, reporting and verifications methodologies and tools
- Modelling approaches and tools
- Development of methodologies to measure soil organic carbon (concentration and stocks)
- Structuration and coordination of research networks (worldwide, regional e.g. West Africa)



## Diapositive 4

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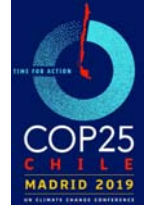
**UMO1**

JL Chotte; 08/12/2019



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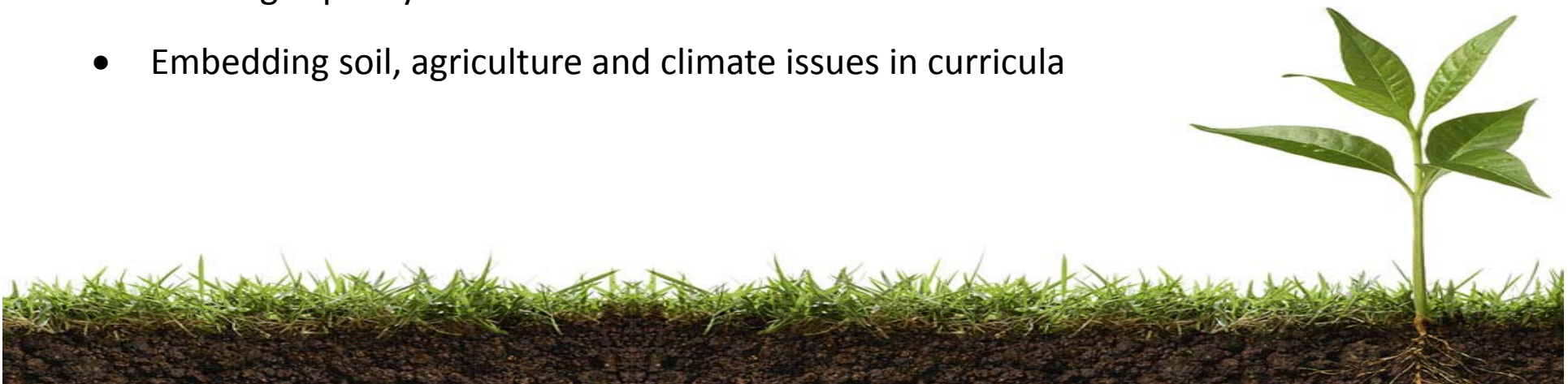
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## Results

### Current commitments 2/2

- Production of science-based evidences
  - For adaptation, mitigation options co-created with others stakeholders (land managers, Farmers, NGOs, ..)
  - For the dialogue Science-Policy dialogue
  - For the enabling environment
- Building capacity
- Embedding soil, agriculture and climate issues in curricula



## Diapositive 5

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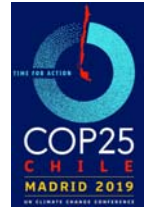
**UMO1**

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### Priorities

Research priorities 1/2

- Document the processes of i) deep soil carbon storage and dynamics and associated determinant of SOC decomposition and CO<sub>2</sub> emission (microbial communities, abiotic constraints) and associated models, ii) lateral transfers of carbon (dissolve, particulate..) (landscape → the watershed) and associated models
- Document the processes for soil inorganic carbon dynamics (SIC is very abundant in drylands)
- Identify co-benefits and trade-offs of soil C sequestration and identify how to maintain, inforce or induce sequestration of carbon in soils
- Encourage research between sectors forestry, agriculture and livestock; between water management, land use management and, organic management
- Improve the monitoring soil carbon budgets by merging several data sources (soil, climate, agricultural activities, carbon cycle data) with support of remote sensing and modeling

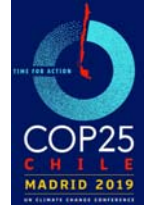






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Priorities

Research priorities 2/2

- Develop climate services, climate smart food systems, climate resilient cities, nature-based climate solutions, and spatial energy research.
- Develop a portfolio of documented and scientifically assessed actions leading to an increase of soil C stocks and food security in a wide range of climatic and socio-economic contexts.
  - For upscaling soil carbon sequestration in various climatic zones and soil conditions
- Much more needs to be done for understanding socio-economics of transition, including integration into novel value chains and landscapes and understanding the necessary enabling environment (participatory design, inclusive governance, education) not only to accompany transitions but to design and maintain relevant policies and practices over the long term.
- Strengthen, develop long term observatories (not only on biophysical parameters) for observations and experimentations
- Encourage and support by specific financial incentives multi-stakeholders research and development mid-term programmes



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Priorities

Education priorities 1/1

- Develop training – programs in order to change the main stream perceptions about the only goal in farming – intensification based on scales economies
- Reinforce multidisciplinary curricula addressing all dimensions of the 4P1000 initiative
- Technical training (producing data).





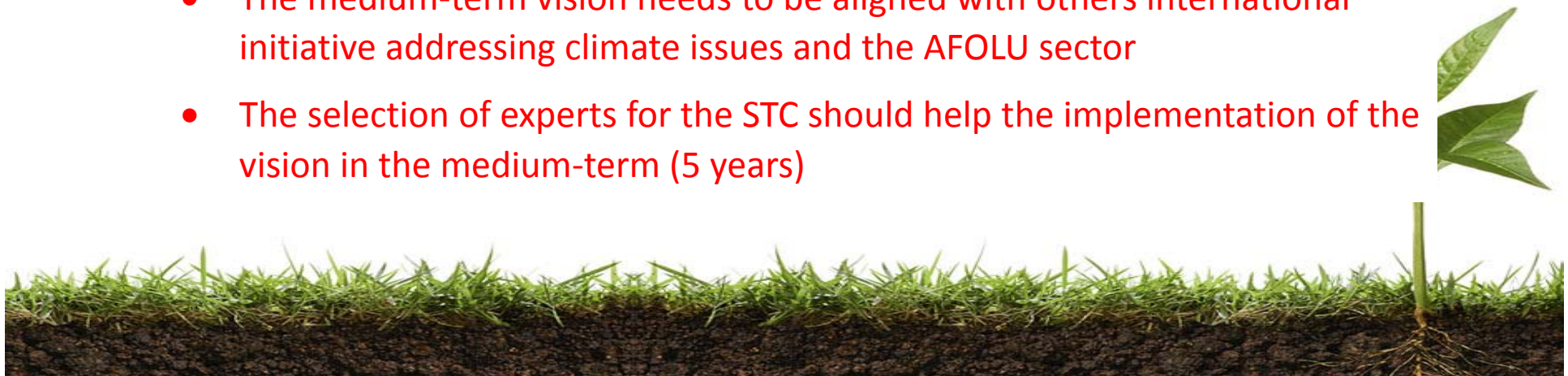
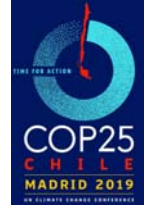
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**Where do we want to see the initiative 4 per 1000 in 5 years?"**

**This last paragraph has not been discussed in the survey, it is meant to open the debate if the members of our college validate the need of a such discussion**

- A lively interface between, i) the different colleges of the Bureau, and ii) the STC and the Research and Education college, would benefit the functioning (4P1000 Roadmad) and the contribution of the Initiative to the global agenda
  - A working agenda needs to be scheduled
- The medium-term vision needs to be aligned with others international initiative addressing climate issues and the AFOLU sector
- The selection of experts for the STC should help the implementation of the vision in the medium-term (5 years)





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**Thank you for your attention**

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