



## "4 per 1000" Initiative, Soils for Food Security and Climate

### **Editorial by Paul Luu**

It is already the 4th edition of our newsletter and you will see that we have a lot of information to share. 2019 is, like each year, punctuated by numerous meetings and events organized by the Initiative (regional meetings, the Scientific and Technical Committee, etc.) or by other actors, but directly related to the same issues. This newsletter is an opportunity to review the events that have taken place since the beginning of the year, including the Symposium "Agriculture is the solution! for Climate Change "organized by the Ministry of Agriculture, Forestry and Fisheries of Japan, with contributions from FAO, IPCC experts and the" 4 per 1000 "Initiative. Thanks to the support of the French Development Agency (AFD) we were able to invite to this conference a dozen regional actors, scientists and farmers from the Philippines, Viet Nam, Nepal, Cambodia, China, India, South Korea, Japan, etc., this has allowed regional exchanges to be expanded.

A Mediterranean meeting is planned, as well as a North American and Latin American one for next year, not to mention the 3rd Day of the Initiative to be held Wednesday, December 11, 2019 in Santiago, Chile at the time of COP 25. It will be preceded by the 8th meeting of the STC. A third of its composition will be modified at the end of the meeting. A call for applications to replace the 3 outgoing members will be published soon on the website <a href="www.4p1000.org">www.4p1000.org</a> to allow the selection of three new members in accordance with the criteria relating to disciplinary skills, geographical origin and gender.

But before this structural change, the STC, with the Executive Secretariat, will have launched a first call for projects for their assessment. This original idea aims to bring out field projects in the spirit and framework of the objectives of the "4 per 1000" Initiative, projects to be submitted to the STC evaluation. Projects that receive a positive appraisal will be offered to major international donors who will be able to grasp them and submit them to their own selection criteria for funding.

So much remains to be done everywhere for the benefit of soils and their health to fight climate change and food insecurity. Increasing awareness and public perception in this regard is also part of the objectives of our Initiative.

As such, we have developed two important actions:

- A communication guide will be sent to all partners and members, to amplify communication around the "4 per 1000" Initiative. This will create emulation between the different actions and relevant information.
- A deployment of the Initiative in social networks with the opening of a Facebook page and a Facebook group on June 17. The Facebook page will be the official showcase of the Initiative, to improve its visibility and the Facebook group will serve as an information exchange forum for all friends of the "4 per 1000" whether or not they belong to partner institutions, organizations or countries and members of the Initiative, in order to capture and channel content around themes "4 per 1000".
- The already active Linkedin page will be revitalised and a Twitter account will relay news from the field of the Initiative in near real time.

Today, the Initiative has 359 partners, including 183 members, not counting those in the process of joining. It is by relying on this vast network and its mobilization that we can move the lines in favor of our objectives. For this, we need you to "like", share, follow, relay and encourage your contacts to join us.

In a hopefully near future, we will open our initiative to the support of individuals. In the meantime we need members and partners to continue the efforts and activities in our roadmap. To date, we have secured only 47% of the necessary budget and the second part of the year will be difficult. Share this information with the people around you: we need institutional financial support for the 4 per 1000 initiative to grow and develop.

Remember also that this newsletter is yours, and that you can, that you are encouraged to send us your news, events and information to let us know what you are realizing under our Initiative.

To your keyboard and mouse, to the Initiative!

Dr. Paul LUU, Exécutive Secretary

# Focus on the 7th meeting of the Scientific and Technical Committee

The Scientific and Technical Committee (STC) of the "4 per 1000" Initiative celebrated the 7th meeting on 22, 24 May, 2019 at CGIAR SO headquarters in Montpellier (France). The STC welcomed Beverly Henry as a new member of the Committee, in place of Professor Pete Smith.

The meeting comprised 4 sessions. **Session 1** related to "writing and review of papers and documents". The STC plans to write several papers combining regional aspects of management strategies with case studies from different zones, and a "4 per 1000" Initiative book.

The STC has reviewed several reports published since the meeting of Katowice to Montpellier, such as:

- · The Technical Manual on SOC Management by GSP,
- · "A Verification System for Carbon Sequestration and Soil Health" by the Soil Carbon Initiative and
- "The Agricultural Transformation Review".

**Second session** was about "assessment of projects and actions". The Executive secretariat is currently establishing relationships with funders/donors with the aim of launching a call for formative assessment of projects.

During **session 3**, "**vision of the 4 per 1000 Initiative**" the past and next Workshops organised by the Initiative were talked about:

- the meeting on "Agriculture is the Solution! for Climate Change", held last 13-16 may 2019, Shiga (Japan);
- · a regional meeting in South East Asia (Vietnam) next October, with CIRCASA;
- a soil carbon MRW workshop with funding agencies and donors in Bali next October 2019 during the Climate Smart Agriculture Conference together with CCAFS and World Bank;
- the international conference on the "4 per 1000" scientific debate in June in Poitiers.

During this session the relationship of the Initiative 4p1000 with other similar initiatives (CIRCASA, IRG-GRA, ESP-FAO, Project Soils4EU, Regeneration International, DNI-CIHEAM, GSP-FAO) were also discussed. The members of the STC and the Executive Secretariat attending the different initiatives informed about them.

The STC was updated about the presentation of a Submission by the 4p1000 Initiative, the Intergovernmental Technical Panel on Soils and the Global Soil Partnership, The Secretariat and the Science-Policy Interface of the United Nations Convention to combat Desertification, Drynet, The World Agroforestry Centre and the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) East Africa to the UNFCC in relation to the Koronivia Joint Work on Agriculture (decision 4/CP.23) on the views of topic 2(c) Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management.

To support increasing ambition on soil carbon in climate change strategies, the 4 per 1000 initiative and CCAFS are conducting a study summarizing current NDC commitments related to soil carbon sequestration and opportunities for enhancing goals, as well as constraints that countries face in setting targets in their NDCs. Preliminary results will be presented during the Bonn Climate Change Conference (SB50) as a side event on June 26th. In comparison with the biophysical potentials for soil carbon sequestration, there is a large gap in NDC commitments. Only two (China and Canada) of the 20 countries with the highest potential for soil carbon sequestration included explicit soil carbon action in their NDCs. Overall, the NDCs of only 10 countries encompass explicit soil carbon Targets.

This <u>side-event "Enhancing NDC ambition through soil organic carbon sequestration: A science-policy dialog"</u> swill be coorganized by INRA, Cirad, IRG, University of Vermont and CCAFS.

The final report will be prepared next September and the final presentation on the COP 25 in December in Chile.

Finally in **session 4** the "**outreach of the 4 per 1000 Initiative**" was discussed. Main points were: the renewal of STC membership by one third in the next meeting of the Initiative in December at COP25 in Chile, the events related with the "4 per 1000" Initiative to be attended in the next period, the Wikipedia site, and the participation in a project related to MOOC on soils for food security and climate change mitigation.

Source: Dr. Paloma MELGAREJO-NARDIZ, member of the Executive Secretary, Sciences Officer in charge of the link with the international research and scientific cooperation program with the STC.

**NEWSLETTER #4** <u>www.4p1000.org</u> **July, 2019** 

## The "4 per 1000" Initiative on social networks

A guide to the various digital communication tools made available by the Executive Secretariat will be sent to all partners and members with some examples of practical actions to implement for each social network of the "4 per 1000".

Social Media of the "4 per 1000" and URL addresses:

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Facebook Page: 4p1000 Initiative <a href="www.facebook.com/4p1000">www.facebook.com/4p1000</a> or <a href="mailto:fb.me/4p1000">fb.me/4p1000</a>

Facebook Group: All 4p1000 www.facebook.com/groups/all4p1000

in

Linkedin: 4p1000 Initiative <a href="https://www.linkedin.com/company/4p1000initiative/">https://www.linkedin.com/company/4p1000initiative/</a>



Twitter: @4per1000 #4p1000 www.twitter.com/4per1000

"Today, the Initiative has 359 partners, including 183 members, not counting those in the process of joining. It is by relying on this vast network and its mobilization that we can move the lines in favor of our objectives. For this, we need you to "like", share, follow, relay and encourage your contacts to join us." Dr Paul Luu, Executive Secretary

# They act!

### Discover of different partners and members' projets

The conference "Food security and climate change: 4 per 1000 Initiative new tangible global challenges" was held from June 18 to 20, 2019 in Poitiers (France).

<u>The event</u> was designed as a multi-stakeholder meeting and was attended by 150 people. The program was very rich and included the contributions from well-known scientists of a multitude of fields. The conference brought together 4p1000 critics as well as supporters.

One day was dedicated to the controversy. Moreover, there were people from NGOs and from farmers organizations and even big companies giving talks about their vision of the "4 per 1000".

The conference was a great success and extremely useful for the community. It was a good demonstration of how to proceed in order to make progress in this multi-stakeholder organization. There were round table discussions about various aspects around 4p1000 (including the controversy).

FAO launches the e-learning course on "Sustainable Land Management and Land Restoration", which has been developed in collaboration with CIHEAM-Bari, WOCAT, ELD and University of Leeds.

The course focuses on Sustainable Land Management (SLM) practices, and their place within the global development agenda, specifically in order to achieve SDG target 15.3, which aims "to achieve a land degradation-neutral world ».

The online course includes five interactive lessons that introduce participants to a variety of tools and methods available for planning, implementation and monitoring of SLM. Policy makers at different levels, extension service agents, practitioners, land and water management technicians and land users are the target audience.

The course was designed for self-paced learning, is flexible and freely accessible online. For more information and to take the course, please click <u>here</u>.



The Executive Secretariat has learned with deep sadness of the passing of Dr. Mohamed Badraoui and sends his deepest condolences to his family and friends.

Dr. Badraoui had been Director General of INRA Morocco, Associate Member of Section 5 of the French Academy of Agriculture. Dr. Mohamed Badroui was a leader in Morocco in soil science and a strong supporter of the Initiative.

#### Save the date!

Fourth Annual Meeting "Soil Health: A Global Imperative" - July 16-18, 2019 - Sacramento, CA

Conference registration: here

# Wageningen Soil Conference 2019: "Understanding soil functions" - August 27-30, 2019 -Wageningen, the Netherlands

This edition features traditional lectures in the morning, followed by a series of thematic and scientific workshops in the afternoon.

More information here

7<sup>th</sup> International Symposium on Soil Organic Matter - Hilton Adelaïde, South Australia - 6-11 October 2019 More information here

#### 5th Global Science Conference on Climate Smart Agriculture - October 8-10, 2019 - Bali

Organized by CGIAR, ACIAR, the ministries of Agriculture of Indonesia and Netherlands, the conference will have the overarching theme, 'Transforming food systems under a changing climate', and will be held for the first time in Asia. Its objectives:

- To mobilize the knowledge needed for food systems transformation under climate change
- To catalyze the partnerships needed for transformation, bringing together all key stakeholders, from scientists, policy makers, investors and farmers. Conference website here

The 3rd Day of the "4 per 1000" Initiative will be held on Thursday, Wednesday, December 11, during COP25. COP25 will be held in Santiago, Chile from December 2<sup>nd</sup> to 13<sup>th</sup>, 2019. A meeting of the STC will also be held during COP25, December 9th and 10th, 2019.

More events ici

# They Act!

Discover of different partners and members' projets

# "The International Meeting of Living Agriculture", Paris, February, 20-24, 2019

During 5 days, many representatives of a number of countries in favor of agriculture based on living soils, gathered in Paris from February 20th to 24th. High-level presentations by farmers themselves and innovative professionals in their sectors enabled participants to discover the success of this soil-based agriculture, which is at the root of animal and human health.

The videos are available on Ver de terre Production. More informations of this meeting here and on Living Agriculture (in French).



Stéphane Le Foll Vice President of the "4 per 1000"

The third meeting of the Integrative Research Group (IRG) of the Global Research Alliance (GRA) on Agricultural Greenhouse Gases was held in Cali, Colombia at El Centro Internacional de Agricultura Tropica (CIAT) on the 4<sup>th</sup> and 5<sup>th</sup> February 2019. The Alliance meeting was co-chaired by France (Dr. Jean-François Soussana, INRA) and Canada (Pamela Joosse, AACD), noting that apologies were received from the IRG chair, Richard Eckard from Australia.

The meeting was attended by 36 participants, representing 14 Alliance member countries (Australia, Brazil, Canada, Denmark, France, Ghana, New Zealand, Norway, Spain, The Netherlands, United Kingdom, United States of America and Uruguay), and invited experts (ISRIC, CIAT, CIRCASA, CCAFS, 4per1000, CIRAD, and EU).

The meeting achieved the following outcomes:

- Network organization and restructuring including:
  - Greenhouse Gas Inventories Network now appropriated to Inventories and Nationally Determined Contribution (NDC) Support Network
  - Field Integration Network now combined with Farm to Regional Modelling
    Network
- Communications: suggested a series of webinars to raise awareness and understanding of IRG activities beyond the research audience, to include policy makers, as a means of demonstrating impact of the IRG networks and wider GRA activities.
- A short term outcome for the Soil Carbon Sequestration (SCS) Network is a
  collaboration between Professor Pete Smith and the interested network
  scientists on an invited review Pete is leading for Global Change Biology, with
  the target submission date of July 2019. The author list for the review is
  evolving but will likely include 10 20 authors. The review currently has the
  working title of: "How do we measure, report and verify soil carbon change to
  realize the potential of soil carbon sequestration for atmospheric greenhouse
  gas removal?"
- A call for GRA members to submit updates to country profiles on the GRA Website

Country representatives provided the group with an overview of the NDC's of their country to assess any opportunities for collaboration across the Alliance. Representatives also provided and overview of projects, initiatives and activities that each country contributes to the group and any future opportunities.

Source: Dr. Paloma MELGAREJO-NARDIZ, member of the Executive Secretary, Sciences Officer in charge of the link with the international research and scientific cooperation program with the STC

# Discover of different partners and members' projets

Held on 06-08 February at CIAT, Cali, the CIRCASA first annual meeting was an excellent opportunity for all partners to take stock of the results of the first year of international collaboration. Here are some highlights:

- WP1 develops a scientific research agenda based on 14 challenges for XXIst century research on soil carbon sequestration (SCS)
- · WP2 has engaged an extensive stakeholder dialog on 5 continents to understand demands for new knowledge
- · WP3 starts developing a strategic agenda to engage research agencies and funders
- · WP4 has launched an online platform for collaboration across international scientists and stakeholders

The Initiative "4 per 1000" attended the meeting, as a partner of CIRCASA, in order to strengthen synergies between the two initiatives.

On March 6, 2019, a conference on "the agricultural sector facing the environmental and climate challenge » was held at the Spanish Ministry of Agriculture, Fisheries and Food, where the role that agriculture can play in climate change was discussed. The celebration of this day, organized jointly by the Ministry of Agriculture and the Ministry for the Ecological Transition, had as main objective to transmit to the society the coherence between the agrarian policies and of environment and climate, to reach an agrarian activity and sustainable forest in its environmental, economic and social aspects. The day was opened by the Secretary General of Agriculture, Fernando Miranda, being the main issues addressed the agricultural sector in the face of climate change and air quality, plastics and agriculture and soils and their role in climate change. In this last session, the Director of INIA, Esther Esteban, gave a presentation on the "4p1000 Initiative, Soils for Food Security and Climate". Finally, the Minister of Agriculture, Fisheries and Food, Luis Planas, intervened, stressing that agriculture and forestry sectors can effectively contribute to the mitigation of climate change, due to their ability to store carbon and become sinks, both in soil and in land biomass.

In May 2019, the international Symposium "Agriculture is the solution! For climate change", organized of the Ministry of Agriculture, Forestry and Fisheries (MAFF) of Japan and co-organized with "4 per 1000" Initiative, was held in Otsu-Shiga City, Japan. The overall aim of this symposium was to raise awareness to this important topic and provide the opportunity to connect different stakeholders.

On the first day, the Symposium was open to the public and about 700 participants were informed on the global situation of agriculture and climate change, on the outline of the UN Framework Convention on Climate Change (UNFCCC) including the role of agriculture and the current status of the "Koronivia joint work on agriculture". Good agricultural practices were shared from different parts of the world to adapt and contribute to climate change mitigation.

On the second day, around 150 participants had the chance to learn more about how Japanese farmers started to implement climate friendly practices by a field trip to local farms.

The third day focused on the role of soil for climate change adaptation and mitigation, and provided the opportunity to connect scientists and farmers.

The "4 per 1000" Initiative invited speakers, like Andre Leu (Regeneration International), Victoriano Tagupa (League of Organic Agriculture Municipalities & Cities in the Philippines), Xiaobo Qin (Institute of Environment and Sustainable Department in Agriculture, Chinese Academy of Agricultural Sciences) and Sundeep Srinivas (Biodynamic Association of India), present elements of their work.

See the video made by Regeneration International: <u>Agriculture is the Solution to Climate Change: We Must Invest in</u> Soil Health

To support and donate to the "4 per 1000" Initiative, please contact Ms. Béatrice Breton-Askar, our Resource Mobilization Senior Officer: <a href="mailto:beatrice.breton-askar@4p1000.org">beatrice.breton-askar@4p1000.org</a> We thank you in advance for your support.

# Discover of different partners and members' projets

4th World Congress on Agroforestry - May 20 - 22, 2019 - Montpellier, France

Organized by Cirad and INRA, the 4th congress follows earlier World Congresses on Agroforestry in Orlando in 2004, Nairobi in 2009 and New Delhi in 2014. The congress theme was "Agroforestry - Strengthening links between science, society and policy" 1200 scientists, farmers, policy makers and diverse agroforestry practitioners made of the world congress of agroforestry joined for an intense, lively and stimulating event.

Claire Chenu, a STC member, presented a communication on "High organic inputs explain shallow and deep SOC storage in a long-term agroforestry system" at the session "Mitigating climate change with agroforestry". Other sessions covered topics meaningful for the "4p1000" initiative: agroforestry and adaptation to climate change, agroforestry adoption... Several meta-analyses of the carbon sequestration in soils in agroforestry systems were presented and new



coefficients accounting for this sequestration that have been adopted by IPCC. A conference truly strengthening links between science, society and policy.



The Annual General Meeting of the Global Soil Partnership was held in Rome from June 5 to 7, 2019. For the first time, the "4 per 1000" Initiative was participating as a partner, status achieved in August 2018. This meeting was an opportunity to review all the activities of the GSP and ITPS, its scientific council. The "4 per 1000" Initiative was invited to present its activities during the plenary, and the Executive Secretary of the GSP, Mr. Ronald VARGAS and the President of the ITPS, Dr. Rosa POCH, reported on the relations and Collaborations with the "4 per 1000" Initiative on the importance of soil organic carbon.

The "4 per 1000" Initiative reaffirmed its desire to develop these relations both in terms of the exchange of contributions between scientific committees (ITPS and STC), and at the level of participation in various activities of the GSP such as the organization of meetings and conferences (meetings of the black soil network, GSOC, etc ...).

May, 10th, 2019 - Sri Lanka

Good attendance yesterday to the conference on "4 per 1000" organized by the French Embassy in Sri Lanka and the agricultural attaché of New Delhi in India (responsible for Sri Lanka). Nearly 70 persons from various parts of Sri Lanka and from a variety of administrations, NGOs and private business, were present. The opening speech was pronounced by Hon. P. Harrison, Minister of Agriculture, Rural Economic Affairs, Livestock Development, Irrigation and Fisheries and Aquatic Resources Development of Sri Lanka. Prof. Leelamani Jayasighe from University of Ruhuna presented the situation of Sri Lanka concerning the "4 per 1000" Initiative. "

In the afternoon, Françoise MOREAU-LALANNE, French Agricultural Attaché in New Delhi competent for Sri Lanka, and Paul Luu, Executive Secretary of the "4 per 1000" Initiative, met

Ms. Hasanthi Urugodawatte Dissanayake, Director General of Ocean Affairs, Environment and Climate Change of Ministry of Foreign Affairs who will help to enable Sri Lanka to join the "4 per 1000" Initiative *(photo)*.



In 2019, three major events supported by the UNCCD for the Land Agenda
The United Nations Convention to Combat Desertification (UNCCD) will hold its 14th Conference of the
Parties this year. The year 2019 is also an opportunity for the Convention to celebrate its twenty-fifth year since its
adoption in Paris in 1994, in line with the other two Rio Conventions: the Framework Convention on Climate Change
(UNFCCC) and the Convention on Biological Diversity (CBD).

The objective of the Convention is to combat desertification, drought and land degradation with its 197 parties. Over the last 25 years, and especially over the past decade, the strategic role of soils in maintaining ecosystems and human societies has become increasingly apparent. As the second largest carbon reservoir after the oceans, soils help fight climate change. Their protection is essential for the maintenance of habitats hosting terrestrial biodiversity and for the development and resilience of human economies, because of their role as providers of resources for the agri-food sector, but also for the energy, pharmaceutical and some service sectors. Today, nearly 2 billion hectares of land - twice the size of China - will be degraded, representing an economic loss of 1.3 billion dollars a day. The restoration of these lands could, however, contribute to the creation of millions of jobs.

The Convention helps states to exchange and establish policies to halt land degradation and restore land: today, more than 120 countries are engaged in setting land-degradation neutrality targets (SDG 15.3). Through the structure of the Global Mechanism (a unique institution compared to the other two Rio conventions), the Convention also supports its member states in developing appropriate programs: providing technical support for development programs and for the search for funding, implementation being done by the states themselves, NGOs, institutions and local authorities, or through international assistance.

The year 2019 will see three major events, illustrating the action of the Convention in support of the achievement of the Sustainable Development Goals:

- World Day to Combat Desertification, June 17: The international celebration of this day will be organized by the Turkish Government in Ankara, while States Parties and other key actors in the fight against desertification will organize events all around the world around the slogan "Let's build the future together". In this way, it will be possible to take note of the progress made during the last 25 years, but also and especially to build real plans of action for the next 25 years, beyond the deadline of the Sustainable Development Goals;
- <u>The Desertif'Actions International Civil Society Summit</u> will be held from June 19 to 22 in Ouagadougou, Burkina Faso. It will be an opportunity for several hundred actors to express themselves and share solutions on the themes of land, climate and biodiversity;
- The Fourteenth Conference of the Parties (COP14) will be held from September 2 to 13 in New Delhi, India: this COP will be an opportunity to take stock of the progress made in the implementation of the Convention on the basis of the significant body of data provided by States Parties and the latest scientific reports, and to adopt new decisions. Discussions will also focus on new topics of importance for the fight against land degradation, such as climate, rural-urban linkages, value chains, the health of human populations, the global movement of restoration land and the role of religious communities.



The Agro Salon 2019 in Kiev (Ukraine), provided the Executive Secretary of the "4 per 1000" Initiative, Mr. Paul LUU an opportunity to meet the Ukrainian partners:

- · Ukraine, represented by its Ministry of Agriculture
- · The Bioenergy Crops and Sugar Beet Institute
- The National Scientific Center «Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky» (NSC ISSAR)
- The Research Institute of Agroecology and Environmental (NAAS)

Ukraine, with its useful agricultural area of 42 million hectares and its farms varying in size from family farms of a few hectares to farms of several thousand hectares, is also the richest country in black soils, high in organic matter.

The purpose of this visit was to highlight the particularities of Ukrainian agriculture and to discuss with the authorities, including Mrs. Olga Trofimtseva, Acting Minister of Agrarian Policy and Food, and Mrs. Olena Kovalova, Vice -Minister of Agrarian Policy and Food, of the importance of legal and regulatory texts under discussion in Parliament in the field of land, highlighting soil organic carbon (decreasing for years on the scale of country). Conversion pathways to soil conservation agriculture were also discussed with key players in Ukrainian agriculture.





# Planet A, the International Forum of Agriculture was held on June 27 and 28, 2019 in Châlons-en-Champagne (France).

Under the patronage of Emmanuel Macron, President of the French Republic, this 2nd edition "Earth, matter, planet: the quality of soils for the health of the living" opened exchanges across disciplines, issues and solutions, from different perspectives: scientists; agricultural practices and innovations; geopolitics; public and land policies; social, societal, economic and financial issues; environmental issues, of biodiversity, of health, of food...

This forum offered workshop sessions and presentations including:

- "4 per 1000 Initiative The Agriculture, Major Climate Actor" by Paul Luu, Executive Secretary of the "4 per 1000" Initiative
- "Agriculture, remediation and soil protection solution" by Pierre-Marie Aubert, Researcher, coordinator of the European Agriculture Initiative, IDDRI; Claire Chenu, Professor of Soil Science, Co-Chair of the "4 for 1000" Initiative, Special Ambassador for the International Year of Soils (2015); Erick Fernandes, Global lead Technology, innovation & climate, smart agriculture, World Bank; Christian Huyghe, Agricultural Scientific Director, INRA; and François Mandin, Farmer, president of the APAD network
- "Measuring the efficiency of carbon storage" by Jean-François Soussana, Vice-President in charge of International Policy at INRA, Co-President of the Global Research Alliance on Agricultural Greenhouse Gases (GRA).

Finally, the speakers launched a Solemn Appeal of the speakers to the European decision-makers for the next Common Agricultural Policy to make regulatory provisions conditioning European aid to a soil protection obligation.



#### **UNFCCC Process and Soil Carbon**

The big picture on UNFCCC process and land use, including Koronivia process, including Koronivia process.

For information, the "4 per 1000" Initiative with UNCCD, Global Soil Partnership, ITPS, Drynet, World Agroforestry, CGIAR - CCAFS, has submitted, as part of the Koronivia Process (KJWA), the following proposals.

Overview of submissions from governments and NGOs - soil carbon, agriculture and climate

United States government submission on soil carbon and agriculture - Koronivia Process

North America Climate Smart Agriculture Alliance Submission

#### **Policy Developments**

The new Government programme of Finland promotes the "4 per 1000" Initiative. Read BSAG Blog

Climate change, policy and carbon sequestration in China - a special feature

Nebraska passes Healthy Soils legislation

Soil Health Policy Resources in the United States

Karen Ross is Secretary of the California Department of Food and Agriculture. Karen grew up on the family farm in Western Nebraska where she was an active "4-H" member. Her brother is now the fourth-generation to farm this ground in Western Nebraska. During her time spent in California, Karen advocated for farmer-owned cooperatives, served as president of CA Winegrape Growers of America and was chief of staff to U.S. Ag Secretary Tom Vilsack.

CDFA Blog: On Planting Seeds today, California agriculture ready to scale-up climate solutions

New Zealand commits to zero carbon by 2050 but excludes methane from animal herds

# The "4 per 1000" Initiative in a few figures... 359 Partners including 183 Members (December, 2018)

All countries or organizations that wish join the Initiative (see <a href="here">here</a> how to join) send their application to the Executive Secretary who controls the completeness.

If the application is complete, the Executive Secretary submits the list of new partners and members to be approved to the Consortium of Members, at the beginning of each meeting.

After this formal approval, the new partners and members are included in the official list.

Listing of the Consortium of Members and Forum of Partners of the Initiative (December 13rd, 2018)



#### INRA - Feasibility study of "4 per 1000" in France: preserving and increasing carbon stocks in the soil

At the request of ADEME and the Ministry of Agriculture and Food, INRA conducted a study on the carbon storage potential of French soils (except oversea territories) and unveiled the results of this study, on June 13, 2019. This work is based on the 4 per 1000 initiative launched at COP 21 in Paris in 2015, which aims to increase the organic carbon content of global soils by at least 4‰ per year. This level of storage is equivalent to current greenhouse gas emissions in the atmosphere, but should not suggest that emission reductions have become optional. It remains the main objective.

Read the press release (in French)

Read the summary of the study (in French)

The Scientific and Technical Committee of the "4 per 1000" Initiative published in Ambio this following paper: The "4 per 1000" Initiative: Opportunities, limitations and challenges for implementing soil organic carbon sequestration as a sustainable development strategy

#### **USDA Opens Signup for New On-Farm Trials Effort**

USDA is investing up to \$25 million per year over the next five years to help support the adoption and evaluation of innovative conservation approaches on agricultural lands.

**USDA's Natural Resources Conservation Service (NRCS) is accepting proposals through July 15, 2019**, for On-Farm Conservation Innovation Trials (On-Farm Trials), a new, additional sub-program created by the 2018 Farm Bill for the USDA's Conservation Innovation Grants (CIG) program.

Read News Release

The On-Farm Trials funding announcement, including the 2019 funding priorities, is available here

#### **The Nature Conservancy Soil Science Program**

A <u>Nature4Climate blog</u> sheds light on a <u>new website launched by George Monbiot</u>, editorialist of The Guardian. The website raises awareness about Natural Climate Solutions and calls on governments and other bodies to give attention to those solutions as tools to prevent climate breakdown. The blog also links to a new op-ed written by George that was recently published in the Guardian, The natural world can help save us from climate catastrophe.

In addition, The Nature Conservancy's Soil Science Program team just published a <u>new Cool Green Science blog focused</u> on our current work in the <u>Upper-Tana Nairobi Water Fund</u> where we are working with local farmers to increase soil fertility as well as scoping the potential to build revenue from increased carbon.

#### Livelihoods - Mount Elgon Projet - Land restoration, food security and climate action

Building up the resilience of 30,000 family farms with sustainable farming practices & efficient market connection. Discover Livelihoods - Mount Elgon projet

The Ex-Ante Carbon-balance Tool (EX-ACT) is an appraisal system developed by FAO providing estimates of the impact of agriculture and forestry development projects, programmes and policies on the carbon-balance.

More information here

The <u>2nd Sustainable Food Meetings</u>, organized by the <u>Daniel and Nina Carasso Foundation</u> on January 29 in Paris, brought together more than 600 actors involved in the transition of food systems. See <u>the acts of this day</u> (in French)

### Discover of different partners and members' projets

**SOILS4EU** is a 3 year project providing support to DG Environment of the European Commission for the implementation of the EU Soil Thematic Strategy. The project is coordinated by Deltares (the Netherlands), with four partners from Germany (Helmholtz Centre for Environmental Research Germany – UFZ), Poland (Institute of Soil Science and Plant Cultivation – IUNG) and Spain (Mediterranean Agronomic Institute of Zaragoza – IAMZ CIHEAM, and Spanish National Research Council-Estación Experimental de Aula Dei – CSIC-EEAD).

SOILS4EU has prepared a **Report** on the topic "**Review of economic, social and environmental impacts of and implementation barriers for soil protection and sustainable management measures for arable land across the <b>EU**". This report, coordinated by UFZ, has been presented and discussed in a **Workshop at FAO headquarters in Rome on March 29**th, as a side event of the 6th Plenary Meeting of the European Soil Partnership. The Initiative 4p1000 was invited to this workshop to give expert opinions and feedback on the topic, and the conclusions of the workshop will be streamed into the report and submitted to the DG ENV as one outcome of the project.

You can see the description of the workshop, including its agenda, as well as a summary of the mentioned report **here** 

#### Main conclusions of the workshop:

- Farmers should be supported in their transition to adopt Sustainable Soil Management practices, and they should be at the center of all promotion initiatives. They also need Farmer networks to work together with advisory services on the field to demonstrate the effectiveness of innovations that improve soils.
- Farms are businesses and economic sustainability is crucial. Farmers have to perceive clearly the benefits of adopting SSM (Sustainable Soil Management), since their profitability is continuously under pressure.
- Remuneration systems for farmers for the provision of ecosystem services and carbon sequestration should be
  developed or scaled up. Public policies should facilitate payments for ecosystem services. The CAP should be
  adapted accordingly. Also, food companies and consumers are important actors (food labels, policies for
  suppliers, support to farming practices). Other economic instruments such as environmental taxes can also
  support the transition towards SSM.
- Policies and legislation should be flexible and adapted to diversity. There are many farming systems under different circumstances (climatic/environmental/socioeconomic). They all have an impact on soil sustainability and can integrate adapted measures to achieve SSM. Administrative simplification and monitoring are crucial to implementing policies effectively and efficiently.
- Science and knowledge dissemination are key. SSM has to be clearly defined to establish indicators and thresholds, and to monitor and assess the effects of different agricultural practices on soil sustainability. The effectiveness of the different measures and policies must be evaluated. Applied research and demonstration or collaborative projects can help the farmers with the adoption of SSM and the change in agricultural practices.
- Awareness is needed at all levels to drive change. Farmers' awareness on the functioning and importance of soils, and on the positive impact of SSM on their long-term profitability are crucial factors. But also food companies, consumers and policy makers have a responsibility to make more sustainable choices. A dialogue between all actors is needed: farmers, policy makers, researchers, consumers, industry and NGOs.

#### "Healthy Soils to Cool The Planet" - A Philanthropic Action Guide

This guide focuses on philanthropic and investment opportunities to promote healthy soils and soil carbon sequestration (SCS) primarily through changes in agricultural practices in the United States and globally. It was produced by Breakthrough Strategies & Solutions, a consulting firm under the lead of Betsy Taylor. Focus topics and strategic systems are featured as "game-changers" with a: waste to compost, geographic hotspots, peatlands, ecological restoration & green infrastructure as well as irrigated rice. Ce guide fournit une feuille de route initiale pour investir dans des sols sains afin de contribuer au refroidissement de la planète et à l'amélioration de la résilience. This guide provides an initial roadmap for investing in healthy soils to help cool the planet and enhance resilience.



#### Perennial Farming Initiative in California

**USA - Governor Jay Inslee**, Presidential Candidate <u>calls for Climate Conservation Corps with land restoration</u> component calls for Climate Conservation Corps with land restoration component

#### **Carbon Farming Innovation Network - Soil Superheroes Campaign**

Carbon Farming Innovation Network Participants are thrilled to announce Phase 1 of the <u>Soil SuperHeroes Campaign!</u>! The Soil SuperHeroes campaign mission is to change the public narrative from "soil as dirt" to *soil health asessential to reverse the climate crisis*. The campaign will shine the light on Soil Superheroes with the goals of:

- · Making a human connection between consumers and the farmers and companies that are leading the way
- Increasing broad knowledge about the role that soil health plays in climate solutions, healthy food, water quality, biodiversity, global food security, and farmer/rural community well-being
- · Encouraging consumers to demand food that is grown in healthy soil
- · Inspiring other farmers and companies to follow in the footsteps of Soil SuperHeroes
- Moving soil health awareness from 14% to 70% in five years.

#### **World Agroforestry Centre - Zero Budget Natural Farming**

In India, World Agroforestry Centre delves into agroforestry and soil carbon monitoring

#### **Coalition for Private Investment in Conservation (CPIC)**

There are landscapes and agriculture working groups at Coalition for Private Investment in Conservation (CPIC) exploring financing models for Soil Organic Carbon drawdown

Baltic Sea Action Group - Farmers and scientists in Finland team up for field trials

The Foundation for Food and Agricultural Research (<u>FFAR</u>) and the Organic Farming Research Foundation (<u>Organic Farming Research Foundation</u>) promote soil health and profits for organic farmers

SDSN is launching the Nature Map Earth project which will develop a global map of biodiversity, carbon storage, and other dimensions of nature by consolidating and crowdsourcing data from a variety of sources. This Initiative is jointly developed by IIASA (International Institute for Applied Systems Analysis), SDSN (UN Development Solutions Network) and the UNEP-WCMC (UN Environment World Conservation Monitoring Center), and funded by NICFI (Norway's International Climate Initiative).

They will not collect new data but will complete existing datasets about biodiversity, as well as carbon contained in soils and biomass, with the objective to generate new information on areas of greatest restoration potential.

A 1st version will be presented around the UN September Climate Summit in NYC on 23rd Sept. 2019. For more information, visit the Nature Map website.

#### **Soil Carbon Coalition - Land and Leadership Initiative**

Soil Carbon Coalition launched in May, a <u>Soil Health Policy Writing and Analysis Course</u> with the <u>Land and Leadership initiative</u>, taught by Jeff Goebel of the Soil Carbon Coalition and the Community Consensus Institute. Jeff was instrumental in building a landslide of bipartisan support around a sensibly written Soil Health Act that his team got started, and that passed last April in New Mexico, USA, in record time (just six months of work).

Read the <u>latest Soil Carbon Coalition Newsletter</u> for more details on how the course came into being, as well as lots of other good soil health policy news or you can sign up directly <u>here</u>

## Discover of different partners and members' projets

The social & environmental impacts of the Livelihoods Carbon Fund's largest mangrove restoration project in Senegal, 10 years after its launch.

In 2009, more than 100,000 Senegalese villagers were involved in a major project to restore the mangroves that provide fish and many other food resources and that had been largely destroyed over the years. In 3 years, they succeeded in planting 80 million mangroves between the estuaries of the Casamance and Siné Saloum rivers. This initiative, led by the Senegalese NGO Océanium with the support of the Livelihoods Carbone Fund, is the largest mangrove restoration program in the world.

But, 10 years later, what about the villagers who participated in these replantings? Have they seen an improvement in their living conditions with more food security through a renewal of the stock of fish, shrimp and oysters? Have they been able to replant rice on their lands previously degraded by salt water as a result of deforestation? What do they keep from this extraordinary adventure? To answer these questions, the Carbon Livelihoods Fund, in partnership with Ramsar, IUCN and FFEM, commissioned La Tour du Valat, an independent research institute for the conservation of Mediterranean wetlands, and Océanium, to conduct a study in the villages that participated in the project to assess its social impact.

The results of this study, conducted in 2018 are both surprising and impressive. Learn more about project here

The Agricultural Training and Production Group (GFPA) is a non-profit Guinean NGO that promotes the training of young people in the following fields: agricultural machinery, new techniques of agricultural production, sewing, auto mechanics, boilermaking, electricity with the dual system. It is based in Kissidougou, Kérédou Area.

In the 2018-2022 action plan, the main objective of the GFPA is to promote organic farming with machines by training young people who will be supported to sustain these agro-ecological actions. To do this, the GFPA has set up an area of 25 hectares which serves as a **"training project"** where it practices:



**Conservation Agriculture:** GFPA teaches students to avoid using herbicides using single or tractor-based clearers.



No tillage areas: with machines, the GFPA minimizes plowing by milling directly without first plowing or herbicides.

#### Thermal composting:

A technique that GFPA has all the elements in quantity on site throughout Guinea Conakry, and the GFPA teaches students to use compost instead of chemical fertilizer



**Crop rotation:** for better yield and food self-sufficiency, it is important to cultivate twice a year on soil prepared for the cause. Right now we need to enrich the soil by growing legumes and changing crops on the surfaces.

The intensive Rice System, transplanting and sowing online are also main methods that GFPA teaches students.





In conclusion, The majority of Guinean farmers have been used to using chemicals (herbicides and fertilizers) to facilitate their work. To help reverse this trend, the GFPA is showing concrete examples through training on its school site.



## Discover of different partners and members' projets

#### Important reflections from John Wilson after the cyclone Idai last March

John Wilson is a Zimbabwean working as a freerange facilitator in East and Southern Africa with community based organizations, national NGOs, groups and also at times with regional or continental networks. This note to some of his partners and farmers in the region reflects on the horrors in the aftermath of Cyclone Idai, lessons learned about agroecology, forest cover, and nature-based water management, and the role of "evidence based practices". In this context, John raises very important questions and concerns.

<u>Livelihoods Funds</u> doubles its investment in an energy efficiency project in Kenya and accelerates its plans to build resilient communities in Africa. More information <u>here</u>

A comparative look on food and land from Emmanuel Faber, Chairman & CEO of Danone, and Bernard Giraud, President & Cofounder of Livelihoods Venture. Read the interview

First a gardener, then a researcher and director of the laboratory of soil zoo-ecology at INRA, Marcel Bouché, world specialist in earthworms, devoted most of his life to the study of these animals and ecology. Marcel Bouché graciously donated 400 of his scientific publications to Ver de Terre Production, in order to scan them and share them with as many people as possible. They are downloadable for free here.



Anton Sidler is a happy breeder because his farm is self-sufficient in protein. He cultivates on living soil all the food for his animals! He co-founded the network of breeders and mutual support: "La Vache Heureuse" ("The Happy Cow"), partner of "Pour une Agriculture du Vivant" "For a Living Agriculture"). Video (in French)



#### We are all concerned!

Every single one of us can take action to get things moving forward. Together we can make a difference. Our actions, individual or collective, can make things happen.

#### Join the Initiative!

The Executive Secretariat needs stronger means to implement its annual roadmap and organize statutory meetings in particular of the STC or regional meetings. If you wish to contribute to our common effort, please contact the Executive Secretariat:

secretariat@4p1000.org



### Any ideas, any suggestions...

Please send an email to the Executive Secretariat: secretariat@4p1000.org