



« 4 per 1000 Initiative: Soils for Food Security and Climate »

Document Forum 6-1: Report of Forum n°5 – On-line (9 December 2020)

6th Forum's Meeting

Wednesday 10 November 2021
Glasgow (Scotland, UK) & online



The High-Level Segment of the Forum meeting was opened with a welcome address by **President Ibrahim MAYAKI**.

"We must refocus on what is essential for our future: the health of the soil and the health of a "one health" concept, but also the indispensable international solidarity .../... The United Nations Convention on Sustainable Development has allowed us to reflect on our development model by respecting the balance between the social, environmental and economic pillars. None of them should, in fact, take precedence over the other. If the change in our software concerning our development has been effective, at least we can hope so, since that period, it is clear today that the notion of linear stability over time, generation after generation, that the adjective "sustainable" implies, no longer makes much sense. All around us, it is now clear that our natural, social and economic environment is continuously deteriorating. We need to change our development model again, from 'sustainable' development to what is called 'regenerative' development. Our century must be "regenerative", or it will not be. This is the meaning we wish to give to our actions within the framework of the "4 per 1000" Initiative: to work on the regeneration of soils to improve our health, thanks to the carbon captured from the atmosphere by plants via photosynthesis and which returns to the soil in the form of plant or animal organic matter. The agroecological movement must be accelerated .../... Our work therefore aims to be the spur that encourages and justifies these profound changes through a scientific approach. But also, to be a catalyst for individual and collective action in this direction. In particular, this is the meaning of the Initiative's Strategic Plan and its implementation that is everyone's business. We still have a long way to go, but I am happy to see that things are changing not only farmers and NGOs are working on regenerative agriculture, but now also international organisations, policy makers and private companies. We are moving in the right direction, but we are only at the beginning of the journey. We have a long way to go, to face all the challenges that this profound change in our agriculture is supposed to address climate change mitigation, climate change adaptation, biodiversity conservation, air, water and soil regeneration and, most importantly, food security for the soon to be 9 billion people on our planet."

Mr Finian MAKEPEACE, Co-Founder, Policy Director and Senior Educator of Kiss the Ground gave an inspiring presentation to the assembly:

He stressed that his mission was to awaken his audience to the possibilities of regeneration, and that the feature film "Kiss the Ground" was only part of the story, of what regenerative agriculture meant to the world. He spoke of the soil health and regenerative agriculture

movement that he had been involved in for just eight years, and that he felt what had happened in that short time was simply extraordinary. For him, this regenerative agriculture movement ensures that the wisdom of indigenous knowledge is seen as necessary and important as books and ideas about global planning and as necessary as the soil science or technology that allows us to see what is happening. Quoting Albert Einstein: "we cannot solve problems using the same kind of thinking we used when we created them", he insisted that "sustainable" development would not be sufficient for the future. He went on to point out that most human civilisations, to create the goods needed to satisfy their needs, have degraded the land over the last ten thousand years. "We are losing 30 million acres a year of arable land, and we are now in a situation where not only in the last 40 years, have we lost a third of our arable land, but we have to deal with 75% of the degraded land in the world. So, recognising this fact, simply thinking about 'sustainability' as an option doesn't really make sense. To illustrate his point, he used the image of a broken cup, originally designed to hold liquid, which it is no longer able to do if broken. He said that sustainability or trying to grow in the conditions where "our soils are now broken" is simply wrong. It is now a matter of changing this through regenerative agriculture. Using the analogy of the broken cup, he says that it can be put back together to regain its functionality, and the same is true of soil health. For the soil to regain its functionality, it needs carbon, especially the carbon that is currently in the atmosphere and that will form the glue. That is the promise of regenerative agriculture, to make something that is broken functional again. Quoting Dr Alan Williams to illustrate the potential and opportunity of regenerative agriculture: "What used to take us 15 to 20 years, we can now do in 3 to 4 years. Finian Makepeace sees this as a tribute to the incredible sharing of collaborative efforts and the fantastic nature of this movement of people who are on the front line, working together, sharing best practice and seeing progress because they are unlocking the potential and possibilities of nature at its best. It's all very simple though, he says: "net carbon loss versus net carbon gain is a very easy way for people who don't know about it to understand. He concluded by saying that "because of the groundswell that is happening with Kiss the Ground, the film, we want to work with all of you to catapult this movement."

The following **ministers** then spoke during the High-Level Segment:

- Mr Julien DENORMANDIE, Minister for Agriculture and Food (France)

"I would also like to reiterate France's full support for the "4 per 1000" Initiative. Indeed, we are fighting a common battle based on a conviction that we hold dear: agriculture and agricultural soils are of crucial importance for food security, of course, but also for combating climate change .../... France fully supports this "4 per 1000" initiative because it implements this initiative in a very concrete way. We share this vision of the role of agriculture because soils richer in organic matter are not only necessary to fight climate change but are also a very valuable tool to increase food security with more resilient agricultural systems."

- Mr Hans-Joachim FUCHTEL, Parliamentary State Secretary for Agriculture and Food (Germany)

"We all have a common goal: to protect our soils. To increase carbon storage through sustainable management. The "4 per 1000" Initiative is an important step in this respect. We also congratulate you on the Strategic Plan, which you presented this year. We are proud to be part of this Initiative and to be able to continue supporting it."

- Ms Esperanza ORELLANA MORALEDA, Director General of Agricultural Production and Markets, Ministry of Agriculture, Fisheries and Food (Spain)

"Spain has been part of the "4 per 1000" Initiative since its inception. We also participate in the Executive Secretariat and we want to encourage more active participation in order to enrich its composition and the work it develops, which benefits us all. Laying the foundations for development that will enable future generations to achieve their own goals. The benefits of organic matter in the soil are indisputable.../.... It is a win-win strategy that improves soil structure, increases biodiversity and reduces erosion on the one hand, and on the other hand, allows adaptation to and mitigation of the effects of climate change. In short, it creates resilient agri-food systems, capable of improving the environmental conditions of our planet."

- Ms Maria do CÉU ANTUNES, Minister of Agriculture (Portugal)

"Portugal, Atlantic by nature, Mediterranean by climate, agriculture and culture, has a very low average level of organic carbon in the soil. The challenge for agriculture is immense but we have a clear and defined path to implement actions leading to the increase of soil organic matter. This pathway is well expressed in our agricultural innovation programme 20/30 which we have called Future Land. This programme focuses on soil organic matter and issues related to food and nutrition security, climate change mitigation and adaptation and land sustainability. The future we are building is a challenging one, demanding in terms of knowledge and governance, and it will be met with strong resistance. But it is an imperative. Not only for future generations, but also for our collective well-being as a society."

- Ms Akissa BAHRI, Minister of Agriculture, Hydraulic Resources and Fisheries (Tunisia)

"The "4 per 1000" Initiative is a space for capacity building, dialogue and solidarity between stakeholders that will make it possible to limit land degradation and restore its fertility and productivity. This sustainable land management will enable farmers to perpetuate life on their land, accelerate an inclusive social transformation, reduce resource-related conflicts and cope with the disruptions created by natural and health disasters and socio-political crises. For Tunisia, the climate change dimension remains at the heart of our development challenges. .../... Such an initiative offers us the opportunity to mobilise the knowledge and technological innovations of agroecological engineering to propose and test alternative cropping systems capable of restoring the productivity and fertility of degraded land and preventing future degradation. .../... Finally, I would like to emphasise Tunisia's commitment to the "4 per 1000" Initiative and to support the partners' efforts to make it evolve in an international context that is very mitigated and that has been affected by the Covid pandemic.¹⁹"

- Mr Damien Peter O'CONNOR, Minister for Agriculture and Minister for Biosecurity, Food Safety and Rural Communities (New Zealand)

"In New Zealand, we rely heavily on healthy soils for our primary sector economy.../... To this end, New Zealand supports the guiding principles that our farmers and foresters are the primary managers of their own farming and forestry systems. .../... We work and aim to drive behavioural change by empowering farmers to increase carbon sequestration or prevent carbon loss on their farms, leading to reduced greenhouse gas emissions and increased environmental benefits. New Zealand is committed to healthy, carbon-rich soils to accelerate climate change mitigation and increase agricultural adaptation to climate change. We have a real opportunity to continue working together to encourage farmers to adopt practices that will continue to conserve and increase soil carbon stocks. Congratulations on five years of the "4 per 1000" Initiative and the publication of the Strategic Plan."

- Ms Karen ROSS, Secretary of Agriculture, California Department of Food and Agriculture (USA)

"Thank you for the great work you are doing at "4 per 1000". It is so important that we all work together to do something fundamental to being able to feed people and fight climate change, and that is soil health. .../... Soil health has become a real celebration for us. .../... I am proud of the work we are doing. I am more excited than I have ever been about how we can work across states and continents to develop healthy soil practices to ensure that we can meet our climate neutrality goals and continue to feed people better. The work you do is very important. I am proud to be your partner and look forward to the opportunity to meet in person in 2021."

- Mr Chen CHI CHUNG, Minister of the Council of Agriculture (Taiwan)

"In Taiwan, there are thirteen agencies that work together and can help take important steps for soil health and soil carbon sequestration. These include the use of fertilisers, such as green manure, organic farming, biochar, growing grass in orchards and reforestation. However, Taiwan is a very small, wet and tropical island, which makes it very difficult to achieve the "4 per 1000" target. However, our government still has a very strong ambition to achieve this goal. So, we believe that biochar will be the best practice to achieve this goal. We will improve at least 300,000 hectares with biochar in our soil to achieve the "4 per 1000" target."

Also speaking during the High-Level segment were the following personalities:

- **Mr Francisco GUERREIRO**, First Vice-Chair of the Agriculture Commission of the European Parliament (European Union).
- **Mr Giovanni Federigo De SANTI**, Director of the Joint Research Centre (JRC) Directorate D - Sustainable Resources (European Commission)
- **Prof. Rattan LAL**, Professor of Soil Science, Ohio State University (USA)
- **Dr Barron Joseph ORR**, Senior Scientist, Science, Technology and Innovation Unit of the UNCCD [United Nations Convention to Combat Desertification] (Germany)
- **Mr Eduardo MANSUR**, Director of the Climate Change, Biodiversity and Environment Office at FAO [United Nations Food & Agriculture Organization] (Italy)

- **Mr François MANDIN**, farmer & President of APAD « Association pour la Promotion d'une Agriculture Durable / Association for the Promotion of a Sustainable Agriculture » /ACS network (France)
- **Ms Valérie VERDIER**, CEO of IRD [Institut de Recherche pour le Développement / French Research Institute for Development] (France)
- **Mr Jean-François SOUSSANA**, International Vice-President, INRAE [Institut National de Recherche pour l'Agriculture, l'Alimentation et l'Environnement / French National Research Institute for Agriculture, Food and Environment] (France)
- **Mr Santiago GOWLAND**, Executive Vice-president for Latin America and Global Innovation, The Nature Conservancy (USA)
- **Mr Tony SIMONS**, General Director, ICRAF-World Agroforestry Center – CGIAR (Kenya)
- **Mr Alain VIDAL**, Director, Science and Partnerships, Food & Nature, WBCSD [World Business Council for Sustainable Development] (Switzerland)
- **Mr Sébastien TREYER**, Executive Director, IDDRI (France)
- **Mr Pedro Antonio MALDONADO RIOS**, Chairman of the Board of Directors, Presidente del Consejo de Administración, ANAC Asociación Nacional de Agricultura de Conservación / National Association of Conservation Agriculture (Mexico)
- **Mr André LEU**, International Director, Regeneration International (Australia)
- **Mr Salah LAMOUCHE**, President, APAD Tunisie [Association Pour une Agriculture Durable / Association for a Sustainable Agriculture] (Tunisia)
- **Mr Salvatore BASILE**, President, IN.N.E.R. - International Network of Eco Regions (Italy) in the name of IN.N.E.R., of GAOD [Global Alliance for Biological Districts] (Norway) and ALGOA [Asian Local Governments for Organic Agriculture] (Republic of Korea)
- **Mr Wayne HONEYCUTT**, CEO, Soil Health Institute (USA)
- **Mr Guy de CAPDEVILLE**, Director of Research and Development, EMBRAPA [Brazilian Society of Agricultural Research] (Brazil)
- **Mr Martien Van NIEUWKOOP**, Director Agriculture Global Practice of World Bank Group (USA)
- **Mr David ANTONIOLI**, CEO, VERRA (USA)
- **Ms Ana Beatriz WINGEYER**, Coordinator Soil Carbon Sequestration to Mitigate Climate Change, INTA [National Institute of Agricultural Technology] (Argentina).

The floor was then given to **farmers from around the world** (25 minutes).

A presentation by **Mr Marc BERNARD** of the responses to the online questionnaire open to farmers' organisations highlighted the expectations of the world's farmers vis-à-vis other categories of stakeholders on soil health issues and the adoption of new practices to sequester carbon in agricultural and forest soils.

Through a **video montage**, farmers belonging to different agricultural trends (soil conservation agriculture, organic agriculture, regenerative agriculture, agroforestry, etc.) from around the world (India, Mexico, France, Sierra Leone, Uruguay, Denmark, Argentina, etc.) will present their views on the issue.

Mrs Maria Beatriz PILOU GIRAUDO (GCAN Int.) finally took the floor to defend the interest of changing the modes of agricultural production based on her experience in conservation agriculture in Latin America, and as a representative of the college of producers' organisations within the Bureau of the Initiative.

All the videos of the interventions of the above personalities during the High Level Segment are available on the YouTube channel of the 4 for 1000 Initiative.

(https://www.youtube.com/channel/UCvBmNtaHxi3PcvbUkkl_UQg/videos)

Forum meeting

- Adoption of the Agenda

The Agenda was adopted by the Forum

- Approval of the Forum report n°4 - Madrid, 11 December 2019

The report was adopted by the Forum.

- Annual activity report for 2019 & 2020

The annual activity report for 2020 was presented to the Forum by **Mr Paul LUU, Executive Secretary**. The Forum took note of all the work done over the past year. The main achievements since COP25 in Madrid have been the organisation of statutory meetings (4th Partners Forum, 5th Members Consortium, 8th and 9th Scientific and Technical Committee meetings, 1st North America meeting of the "4 for 1000" (online), 7 Bureau meetings), participation in international meetings, continuation of activities and partnerships with other initiatives. Communication via the Newsletter and social networks was also emphasised and continued, as well as the updating of the database and the map of partners and members. In addition, the initiative signed two new financial support agreements with the French Ministry of Agriculture and the French Institute for Research and Development. A highlight at the end of 2020 was the change of the entity hosting the Executive Secretariat of the Initiative from CGIAR SMO to CIAT - Bioversity International Alliance.

- Annual Activity Report 2020 of the Scientific and Technical Committee

Dr. Cornelia RUMPEL, Chair of the STC, presented the main activities of the Committee in the past year. The STC was able to meet twice in 2020, but virtually due to the context. With the aim of promoting carbon sequestration in soils, the STC was able to work on the Koronivia process under the UNFCCC, particularly on the subjects of livestock management and the socio-economic and food security impacts of climate change on the agricultural sector. The Committee has contributed to the revision of various international reports, including the technical manual on soil organic carbon management and the Global Soil Partnership's MRV (Monitoring - Reporting - Verification) Protocol. The STC contributed to the organisation of

the webinar on MRV protocols in the context of soil carbon storage financing (webinar co-organised with the World Bank and CCAFS). The Committee also participated in the Delphi study related to the 24 objectives of the Initiative's Strategic Plan, in the launch of the second call for projects for formative evaluation, and in the organisation of an online "4 per 1000" scientific workshop for the Latin America and Caribbean region. Through publications in two scientific journals, the STC also contributed to providing answers in the context of the scientific controversy about the "4 per 1000" Initiative by identifying barriers and solutions to its implementation. The Committee also compiled a special issue (to be published in summer 2021) on sustainable agricultural practices to increase soil carbon stocks, organised by major regions of the world. It contributed to scientific discussions on agricultural actions in relation to CoVid 19. Finally, the Committee presented its 10-point action plan for 2021.

- Presentation of the Strategic Plan

Mr Paul LUU explained that the development of this plan began in January 2020, following the Madrid Consortium of Members meeting. 5 versions were produced and reviewed by the Bureau, in 4 months. On 15 June, an electronic vote was held to allow the Members' Consortium to approve version 2.0 of the Strategic Plan, validated by the Board. The Strategic Plan is available on the Initiative's website in three languages (the English version is the draft version). The relevance of the Strategic Plan's 2050 vision: "Healthy, carbon-rich soils worldwide to fight climate change and end hunger", was welcomed by the Partners' Forum. The Strategic Plan is based on several overarching principles, the first being that the initiative places soil health at the centre of action and the second that farmers and foresters are at the heart of the system as they are the ones who, through their work, enable the storage of carbon in the soil. The general principles state that the Initiative's actions are based on science, notably by drawing on the guidance of the CST, and that the Executive Secretariat is there to facilitate and organise the work but that it is up to the partners and members to implement the solutions on the ground. The same general principles indicate that the Initiative proposes a multi-stakeholder approach through cooperation and mutual support, which is based on a team spirit to drive an action plan to be developed on the basis of this Plan. The Strategic Plan is organised into 6 major goals (named A to F), each of which is articulated in 3 to 6 objectives, making a total of 24 objectives, characterised by a description, a starting point, and targets to be reached by 2030 and 2050.

In a second complementary presentation, **Mr Marc BERNARD** summarised the work still to be done to implement the Strategic Plan. Thus, the following elements were successively presented

- o the organisation of the Initiative and the place of the Strategic Plan within it
- o the key activities included in the Strategic Plan
- o the collaborative platform and the role of the Task Forces for each objective
- o the Delphi method for capitalising on collective expertise and reaching consensus.

- Presentation of the "Twin Regions" Project

Among the cross-cutting objectives of the Strategic Plan, there is a proposal for an innovative project that **Mr Marc BERNARD** presented to the Forum: the "Twin Regions" Project. Based on the observation that it is necessary to capture the hundreds of millions of tons of carbon emitted into the atmosphere since the beginning of the industrial era, and that national and international efforts have failed to stop this evolution leading to the climate change that threatens humanity, the "4 per 1000" Initiative proposes an original project based on the principle of twinning between regions. In order to answer the question of what the "Twin Regions" project is, **Mr BERNARD** presented this project, which consists of twinning two territories, one in a developed country and one in a developing country, to achieve carbon neutrality together. The two territories pool their resources (cultural, natural, financial, etc.) in order to implement agroecological solutions that make it possible to achieve carbon neutrality for both regions, while taking into account local specificities. Developing countries, particularly in Africa, Asia, and Latin America, have great potential to capture and store carbon in their soils through agriculture and forestry. This solution would bring benefits to both parties (adaptation and resilience to climate change, improved food security, increased biodiversity etc.). The Twin Regions project aims to integrate 20 countries by 2030 and all countries by 2050. Actions will have to be implemented in order to refine the project and assess its feasibility on a large scale.

At the end of the Forum, **President Ibrahim MAYAKI** warmly thanked the organisers of the Forum and the High-Level Segment and all the speakers who shared a lot of interesting information.

All presentations and documents are available via the link:
<https://4p1000day2020.sciencesconf.org/>

and videos are available on the Initiative's YouTube channel:
https://www.youtube.com/channel/UCvBmNtaHxi3PcvbUkkL_UQg.

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