



## The "4 per 1000" International Initiative "Soil for Food Security and Climate"



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Sharm-El-Sheikh (November 16, 2022)

### 8<sup>th</sup> Forum meeting

Thursday, December 6, 2023

in Dubai (United Arab Emirates) & online via Zoom

The High-Level Segment of the Forum meeting was opened by a welcome address from the Chairman of «4 per 1000» Day 2022, Mr **Wolfgang ZORNBACH (Head of the Climate and Water Division at the German Federal Ministry of Agriculture)**.

*"For many years now, I've been following the work of Paul LUU and his team within the «4 per 1000» Initiative, of which Germany has been a member from the outset, alongside many other partners who know that soil is an important issue. I'll come back to you a little later, but we're going to start with a video from the President of the Initiative, Mr. Stéphane LE FOLL. "*

**Mr Stéphane LE FOLL**, Chairman of the «4 per 1000» Initiative

Dear ministers, dear friends, dear members of the «4 per 1000» initiative,

I wanted to be here to tell you how important it is for me, as Chairman of this Initiative, to have a meeting at this COP that enables us to share all the activities and visions of all of us on an international scale in the current extremely difficult global context. The fight against global warming is an issue that must be shared by all, and in particular by putting the role of soils in the fight against global warming in its rightful place.

Dear Ministers, Dear Friends,

Once again this year, I'm delighted to welcome you to the «4 per 1000» Initiative Day on the bangs of the COP of the Climate Convention, in the context of the Covid health crisis. This 27<sup>th</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change is being held under almost normal conditions in Sharm el Sheikh, Egypt. As it has become customary, this hybrid format of our «4 per 1000» Day allows everyone to participate in person for those who were able to make the trip, and online for those who were unable or unwilling to make the trip to Egypt. As it has been the case for many years, the Partner Forum will be opened by a high-level segment during which personalities, representing members, partners and even friends, will be invited to take the floor to present their activities or vision in the context of the Initiative's objectives. The general theme of this «4 per 1000» Day is "Healthy soil for a healthy planet". It's a vast subject on which there's a lot to be said, especially this year in the current geopolitical context. Although I won't be physically present with you in Sharm El-Sheikh, I'd like to open this annual Day, which is so important for our network, the objectives we share and the strategic plan we need to implement now! I wish you all the very best in your work, and hand over to Mr. Wolfgang Zornbach of the German Ministry of Agriculture, who has kindly agreed to chair the Day in person. In this respect, I would like to thank him warmly on behalf of the two vice-presidents, Mrs Gabriel Bastien and Mr Ibrahim

Mayaki, and on my own behalf, as we were unfortunately unable to make the trip to Sharm El-Sheikh to chair this event. So thank you, Mr. Zornbach, and I leave you the chair.

**Mr Wolfgang ZORNBACH**, President

Ladies and Gentlemen,

I'd also like to thank you very much Stephane, as you've heard, the President and Vice-Presidents were unable to come in person, which is why I accepted the request to chair today's meeting. But one person is present here in the Republic of Egypt, and that is the French Ambassador. Mr. Marc BARETY, I'm very pleased that you're here in our room and that you'd like to make a few welcoming remarks in addition to what Stéphane has already done via video. So welcome to the stage.

**Mr Marc BARETY**, French Ambassador to the Republic of Egypt

It's a great pleasure and honor for me to address you and I think we should use the common language which is English rather than French, but I'll try to do my best. As you know, France has supported the «4 per 1000» Initiative since its launch in 2015 and we are very keen to continue this support. France is the leading contributor to the initiative's budget and actively supports the search for new partners. We are spending 150,000 euros and we also have a French civil servant who is there to support the project. We also have additional funding through our research institutes. The reason, as you all know, is that soil health, good soil health, is an essential lever in the fight against climate change. Good soil health is the key to meeting the challenges associated with all the major conventions: climate change, biodiversity erosion and the fight against desertification. The region is particularly hard hit by soil degradation and falling agricultural yields, while at the same time being severely impacted by the drought resulting from global warming, which of course jeopardizes food self-sufficiency. But in addition to declining yields, soil degradation has a number of other large-scale negative consequences that are difficult to assess and measure, but these impacts include poverty, human health, meteorological phenomena such as sand and dust storms costing the region over \$150 billion and, of course, there is an impact on ecosystems. According to the World Bank, a number of studies have shown that the costs of land degradation are linked to significant losses of ecosystems and income, which are much higher in this region than in others. This phenomenon of soil degradation could be estimated at around one percent of GDP. That's why it's so important to have the means to implement solutions that have already proved highly effective, and to put in place a certain number of sustainable practices. Among these practices, agroecology, agroforestry and integrated crop, livestock and forest management practices are truly an approach that has demonstrated its effectiveness for sustainable soil management in arid zones. France naturally supports a number of these agricultural projects, which are based on agroecological practices that require fewer inputs, and we will continue to do so. In the MENA region, France is co-financing a project called SUPMEDS in Egypt and Lebanon via our French Global Environment Facility (FFEM), to which we are contributing 1.7 million euros. This project aims to make efficient use of water and to promote efficient choice of seeds and crops adapted to soil resources. Worldwide, FFEM support for agricultural projects, which of course respect the principles and foundations of agro-ecology, but also projects to combat waste and pollution, energy efficiency and sustainable human development, amounts to some 35 million euros on an annual basis. Two-thirds of these projects are here in Africa, generating real investments of over 100 million euros, since our projects supported by the FFEM are co-financed. All over the world, AFD, the French Development Agency, is implementing a number of projects that incorporate the same principles of sustainable agriculture, low-input agriculture, for a budget of around 800 million

euros on an annual basis for the agricultural sector alone. We must also continue to improve our assessment of soil health, and work together to find solutions to improve soil quality. The «4 per 1000» Initiative contributes to this effort through its Scientific and Technical Committee (STC) and its member research institutes. More than 45 projects have been evaluated by the STC over the past three years. Ladies and Gentlemen, this is a general overview of what France is doing to support sustainable agriculture in Africa and the rest of the world. I know you are all here to discuss this. We share the same values and the same desire to implement sustainable, shared development. You can of course always count on France to support this initiative, and I wish you a very fruitful and successful day of panels and discussions, thank you very much.

**Mr Wolfgang ZORNBACH**, President

A big thank you to you who represent France here in this room and who are here in flesh and blood, a big thank you also to France as founder and, I think, biggest supporter of this Initiative which is really important, not only for France, but also for the whole world.

Ladies and Gentlemen,

Allow me, before I start, to say a few words on my own behalf, thanking of course Stéphane, my good friend, with whom we've already had some good beers, and it's an honour for me to be here and chair this meeting, as I've already done in Madrid and, as I said, prepared the first one in Bonn in a large hall. So it was not only an honour, but also a wonderful thing to do.

Excellencies, distinguished guests, ladies and gentlemen,

On behalf of Germany and myself, welcome to this «4 per 1000» Day meeting. Looking back at the year 2022, I can say that it's a really special year compared to all the other years we've had before. And it's not just because of Covid or these terrible, unjustifiable wars we have around the world and their dramatic impact on global economies. As you mentioned, this is the year of three Conferences of the Parties. So there's the climate COP, the biodiversity COP and the UNCCD COP, and all three COPs have mentioned soils as a very important issue, and I think we have to keep in mind that there's no distinction between these things, they all belong together and they have to be seen together. And also what you can see if you go outside, is the dramatic impact of climate change today. In Germany, the forests are suffering, we had floods last year and if you look around the world, this year too, storms, forest fires, polarized ice melting, or we have extreme temperatures all over the world and if I look at my country, it was the hottest year ever and I have a feeling that this is not the end.

COP 27 is taking place in the light of all these impacts, and this COP is focusing on agriculture and food security as one of the major global issues. And the COP will, let me say, probably decide on the future of the "Koronivia joint work on agriculture", which shows that food and agriculture are now at the heart of the negotiating discussions here in the climate arena under the aegis of the UNFCCC. This has not always been the case. We've had to fight hard to show people and negotiators that this is a very important issue. Everything they talk about, whether it's financing, mitigation or adaptation, has an impact on agriculture and food security. That's why I'm very pleased that the negotiations are taking place at a high level on these issues, and we'll see what happens today. There are still some final discussions on a long text which is proposed to the COP for decision - it's not finalized yet, we debated until last night and now for today we're waiting for high-level meetings. Let's now see what happens if the COP takes a decision on agriculture and food security this year, or if it postpones it until next year. In my opinion, if it is postponed, it will be a bad signal. But let's see what happens.

When I was in Madrid, I said "Soil is a diamond", it has great value, the diamond is made of carbon, we like to see carbon in the soil and soil health is at the heart of this initiative, the «4 per 1000» Initiative, and that's good to see, but knowing that there are also other initiatives around the world dealing with the same issue. As far as the situation in the European Union is concerned, we are on the verge of implementing the Commission's strategies, the green deal, the "farm to table" strategy, and we are eagerly awaiting the final decision on the LULUCF regulation, which was agreed last week between the Parliament, the Council and the European Commission, and which now needs to be finalized technically. The Commission has announced that this regulation will be proposed on the 30th of this month, after which discussions will begin. This is also a very important issue, not only for the EU, but perhaps for the whole world. It's very important, if you look at carbon-based agriculture or carbon sequestration in the soil, that we don't have "green washing", so it's real climate mitigation that we're doing and not just a transfer of money from one side to the other. Similar developments can be observed all over the world, whether in the USA or in other countries.

Ladies and Gentlemen, over 700 partners and members are fighting for soil health as part of the «4 per 1000» Initiative. Over 700 of them! And I'm delighted that today the consortium has decided to include six more organizations from India, Mexico, Taiwan, France and Pakistan. This shows just how vast the field of action is. The European Commission is also considering becoming a member, from what I hear.

Ladies and gentlemen, I would like to take this opportunity to thank the Egyptian Presidency for all its efforts. Having attended the German COP in 2017, I know how difficult it is to organize such a conference. In my eyes, it's the biggest conference in the world, and I'm really grateful to them for organizing it for all of us. I'd also like to thank the 4 by 1000 secretariat, Paul LUU and all the others for their work, not only in organizing this meeting, but also in organizing all the work of the 4 by 1000 Initiative. I'll say it at the end of the meeting, but I'm saying it now because the ambassador is here, and of course I welcome you all in this room or in front of the screen, and I also thank those who have sent videos that we'll be able to watch in the very near future.

So the first video speaker will be your Minister, also a Marc, but Marc FESNAU, and I hope you'll not only learn a lot from these presentations, but also enjoy them. Thank you very much!

**Mr Marc FESNEAU**, French Minister for Agriculture and Food Sovereignty

Ladies and Gentlemen, Chairmen of the «4 per 1000» Initiative, Dear Stéphane LE FOLL, Dear Gabrielle BASTIEN, Dear Ibrahim MAYAKI, Mr. Executive Secretary, Dear Paul LUU, Ladies and Gentlemen, it gives me great pleasure today to express France's continued support for the «4 per 1000» Initiative, and to reiterate the importance of promoting the role of soils in the fight against climate change, biodiversity erosion and food insecurity. We must seize the opportunity of COP 27 for the Climate to reaffirm the place of soils in relation to the immense challenges we face. In recent years, the key role of soil health has been highlighted once again, and the «4 per 1000» initiative has made a major contribution to this. Fertile soils with good water retention, managed in a sustainable way, are the indispensable basis for guaranteeing our ability to produce healthy, high-quality food in the long term. Soils are the foundation not only of agriculture and livestock farming, but also of food security. They also contribute to our collective capacity to store more carbon and CO<sub>2</sub>. They are indeed part of the solution in the fight against global warming. That's why I'm convinced that we need to put soil health at the heart of our thinking. We need to take care of our soils and regenerate them. It is with this conviction that France has committed itself, within the framework of the European Union's Common Agricultural Policy, to the agro-ecological transition, whose cultivation practices are

based on biological regulation and promote the closure of major cycles, the storage of carbon in soils and biodiversity. This transition is reflected in France's massive investment to increase the area under legumes, nitrogen-fixing crops, with a ten-year national plant protein strategy. Our aim is to double the area cultivated with protein-rich plants by 2030. The major "France 2030" investment plan called for by French President Emmanuel MACRON includes a section on agriculture, agrifood and forestry, providing funding for specific actions to support the agro-ecological and food transition. Today, I would also like to address the impact on agriculture and food security of Russia's war of aggression against Ukraine, which France condemns in the strongest possible terms. Among these impacts, the sharp rise in the price of chemical fertilizers has highlighted the heavy dependence of our food systems on this type of fertilizer. This awareness should lead us to reflect on the best way to manage our soil fertility, by limiting greenhouse gas emissions linked to fertilization and reducing the use of chemical fertilizers. I am convinced that the «4 per 1000» Initiative, with the support of its scientific panel, must contribute to the debate on this issue and offer proposals for best practices. As you know, France is fully committed to finding answers to the multiple crises we are collectively facing. For example, the President of the French Republic, Emmanuel MACRON, has launched the "Food Agriculture Resilience Mission" (FARM) initiative, which aims to support the countries hardest hit by the global food crisis, by stimulating sustainable agricultural production and ensuring that the most vulnerable countries have fair access to food and agricultural products at a fair price. More recently, at the 77<sup>th</sup> session of the United Nations General Assembly, France announced, with numerous partners, the launch of the "Save Crops" Initiative to promote access to fertilizers and other essential inputs for the benefit of the most vulnerable countries, and to consider in this context a better approach to soil fertilization. I would also like to mention the important Great Green Wall initiative led by 11 African countries, which France fully supports through the Great Green Wall Accelerator. Ladies and Gentlemen, we must continue our efforts and relentlessly pursue our efforts to convince decision-makers at all levels, from local to international, to pay greater attention to the soil issue. We need to mobilize society as a whole, players in the field, those who can finance these projects and, of course, political decision-makers. You can count on my determination in this respect. France is fully committed, convinced and determined to support this wonderful «4 per 1000» Initiative, which it has supported since day one. Thank you for your support.

**Mr Wolfgang ZORNBACH**, President

Many thanks to the French Minister of Agriculture, Food and Food Sovereignty, and thanks again for all your support for this initiative, but also for all the other activities that are so important. Our next speaker will be the Minister of Agriculture, Fisheries and Food of the Kingdom of Spain.

**Mr. Luis Planas PUCHADES**, Minister of Agriculture, Fisheries and Food of the Kingdom of Spain

Good morning, and I'd like to thank the «4 per 1000» Initiative for inviting me to speak at this opening session. We are celebrating the sixth day of the international «4 per 1000» Initiative, to which Spain has contributed since its inception against a complex backdrop of economic instability and the celebration of the 27<sup>ème</sup> COP of the Convention on Climate Change. This year, the theme of the Initiative's Day is "Healthy soils for a healthy planet". Let's be clear, the world needs healthy soils to ensure the sustainability of ecosystems and the provision of resources that are crucial to our planet and the future of our global society. According to an assessment by the European Commission's Joint Research Centre and the Soil Mission Board,

60-70% of European soils are in a state of poor health. It's time to act and increase the percentage of healthy soils to levels in line with the Green Deal 2030 objectives, and to achieve the goals of a greener, fairer and more equitable Europe. These increases should be guided by a better understanding of society, the demonstration of best practices and the development of research and innovation on the importance of soil health. The Common Agricultural Policy supports these objectives through its new green architecture and through knowledge, innovation and investment measures. Other EU programs, such as Life, InterReg, smart specialization strategies or digital earth observation and education programs, will complement the objective of activities aimed at achieving healthier soils. The relevance of healthier soils is reflected in their integration into a wide range of European strategies and policy documents, in particular the Farm to Plate strategy, the Biodiversity Strategy 2030 and the Organic Farming Action Plan, among others. In Spain, we are articulating a coherent set of tools that reinforce the transformation of agriculture in line with European strategies towards achieving a climate-neutral economy. Soils will play a key role in this transformation. The development of an innovative regulatory framework to ensure sustainable nutrition of agricultural soils is particularly relevant. The aim is to maintain or increase the productivity of agricultural soils, while reducing the environmental impact of the application of fertilizers and other sources of nutrients or organic matter on soils. The future regulation will fully integrate the objectives of the «4 per 1000» Initiative, which aims to increase the organic matter content of agricultural soils and to preserve and improve their biological properties, reinforcing their management as living soils. This is the basis for resilient agriculture. In addition, the new Common Agricultural Policy continues to implement specific actions in Spain within the framework of the carbon farming model, through eco-schemes, an innovative element of the new CAP. They encourage farming and livestock practices, aiming to improve soil structure, reduce and remedy erosion, increase soil carbon content and reduce emissions. Eco-schemes will enable livestock farmers to increase the carbon sink capacity of soils by encouraging extensive grazing, and farmers to practice conservation agriculture and direct seeding according to the soils they cultivate. As a committed partner of the Initiative, Spain will continue to support it in its role of providing solutions to the challenges we face on a global scale. I wish you a very fruitful session and hope that, following the adoption of the 2050 strategic plan, the «4 per 1000» Initiative will begin to provide tangible objectives for all stakeholders to achieve, so that together we can all continue to work for a better, healthier future. Thank you for your support.

**Mr Wolfgang ZORNBACH**, President

Many thanks to Luis Planas for all the support Spain has given us and, as I said earlier, one of the Forum's major meetings was held directly in his ministry, in front of his office, and I was delighted to meet him in person a few years ago. The next speech will be given by my own Minister, Mr. Cem ÖZDEMİR, Federal Minister for Food and Agriculture in Germany.

**Mr. Cem ÖZDEMİR**, Federal Minister of Food and Agriculture, Germany

Ladies and gentlemen, friends of the «4 per 1000» Initiative, I'd like to extend my warmest greetings to you, even though I can only do so from a distance. I'm sorry about that! I very much appreciate that agriculture and its role in mitigating climate change are such a priority at this COP. In this respect, soil health is an essential lever in our fight against the climate crisis and for food security. "Soil is a diamond" was the title of the panel you organized at this year's World Forum on Food and Agriculture in Berlin. Soils are complex ecosystems that are home to an inconceivable diversity of macro- and micro-organisms. They store water and can help mitigate climate change by storing carbon. Only healthy soils, rich in humus and carbon, can

fully realize their enormous ecological potential. That's why Germany has launched a €25 million project to boost humus formation in agricultural soils. The project is open to both conventional and organic farms, and is one element in our fight against the climate crisis. Another important way of strengthening natural climate action and biological diversity is to protect our peatlands. As peatlands are also important carbon sinks, we need naturalized peatlands that again generate natural flora and fauna. The German federal government is preparing an action program on natural climate change mitigation with this objective in mind. This program has a financial envelope of 4 billion euros and includes the protection of peatlands. Ladies and Gentlemen, the Declaration on Soil Health that you have helped to draft underlines the importance of our soils to the free and interconnected ecological crisis of our time: the biodiversity crisis, the climate crisis and the land degradation crisis. It shows how important it is to use synergies and act in a coordinated way. Together, we can stem the climate crisis, but we need to turn our words into deeds more quickly. The «4 per 1000» Initiative plays a crucial role in this respect. I would like to thank you sincerely for this. I fully support your work and wish you every success for the conference. Thank you all very much.

**Mr Wolfgang ZORNBACH**, President

Thanks also to my Minister.

And now, I'd like to say that it's an honour for me to announce someone who has agreed to give us an inspirational speech, and this person is not just an inspirational speech, he's an inspiration in his own right. I'm talking about Helmy ABOULEISH. I'm glad you're here and I'm really grateful that his German is perfect. Helmy ABOULEISH is CEO of the SEKEM initiative in Egypt, founded by his father Ibrahim ABOULEISH in 1977. SEKEM promotes sustainable development in the fields of ecology, economy, society and culture, and Helmy ABOULEISH has been deeply involved in SEKEM since its inception. He studied economics and marketing in Cairo and has long campaigned in national and international politics to promote responsible competitiveness, social entrepreneurship and the fight against the biggest challenges of the 21st century, such as climate change and food security. And what I should mention is that in 2017, he received the Future Policy Vision Award from the World Future Council and the UNCCD. So Helmy, the floor is yours, we look forward to your inspiring speech.

**Mr Helmy ABOULEISH**, PSDG of SEKEM

Once again, hello everyone, I'm happy to be here, I'm happy to join you as a member of the «4 per 1000» Initiative since this year and I'm happy to share with you some of our experience over the last 45 years. You kindly mentioned that SEKEM was created in 1977 and it was my dear father, my late father Ibrahim ABOULEISH who created it and he is the visionary behind SEKEM and we in the SEKEM Future Council are trying to follow that path and I will give you some information about that.

Let me start with the beginnings of SEKEM, in 1977, with a mission and a vision! It was my father who founded it in Austria, where I was born, and where my mother, sister and father lived. But he was born in Egypt and in 1977, he felt he wanted to return to his homeland and establish a community in the desert based on living soil because he was sure that living soil is the perfect terrain for living communities. He saw a connection between this and why he wanted to do it by living in the desert with biodynamic agriculture. In 1977, biodynamic agriculture was not yet practiced outside Europe, and everyone told him, the experts said: "no way are you going to do biodynamic agriculture in the desert, forget it". But that's not all, he was stubborn enough, as a pharmacist and not as a biodynamic farmer - he had no idea about farming - to be certain that he would be able to succeed as a biodynamic farmer. He also

wanted to connect that to a different way of doing business along the supply chain, to connect the partners in the supply chain, from farmers to consumers, and he created a movement that today we call "the love economy" and that's in Arabic much nicer to hear. But then again, when someone in the 1970s heard the term "love economy", you can imagine what they were thinking: hugs, kisses and not very competitive farming and business practices! That's why people were more and more convinced that he must have had very severe sunstroke or something, and they thought that biodynamic agriculture wasn't possible and that the love economy wasn't possible either. But it wasn't just the beginning of a visionary journey, and I tell this story because it's easy, 45 years later, to look at a lighthouse in the desert, but you have to imagine the beginning. He said "okay, but we'll be very successful of course, biodynamic agriculture, 'the love economy', how could we do anything else? So we'll have some added value, and we'll have to reinvest that added value in what is really the objective of our initiative." And what is the objective of our initiative? People! We mustn't forget that even farming doesn't matter, and that business doesn't matter, but what really matters is that people learn while they work, and that they can develop their potential. The answer was: "People go to school, then university, and that's where they learn. You have to make the best use of the workforce and get the best return on investment, and you shouldn't worry about people as much as profit." Another refusal, because everyone was sure it wouldn't work and it wouldn't come out that way, so they just said "okay". But he had the courage to add another dimension, and in 1977 he declared that we should not only be concerned with the development of individual potential, but also with community development, because it's the community that carries us, it's the community that counts. The community is what really lives on the land and needs to be nurtured. I mean, the term "corporate social responsibility" didn't exist and it was very clear that it was going to take a few weeks, a few months... Then my father lost his money and everyone told him at least not to sell his house in Austria, so that when he lost everything, he could come back and then start again and everything would be fine. And then he sold the house. So he was immediately obliged to do it, to succeed. So it's a story of a beginning, and all I'm saying is that it takes time, an impossible mission, a vision of what the future really wants from us, and that future doesn't have to be linear: the past, the knowledge and experience you have. Very often, as a visionary, you allow the future to learn. But the future is not the past, and it's not tied to everything you know. Now, moving on to the next slide, you'll see that I'm standing here because, against all odds, it worked and, against all odds, there are now thousands of farmers successfully working biodynamically in Egypt. Two thousand people work at SEKEM, transforming biodynamic raw materials into food, pharmaceuticals and clothing. And guess what, 80% of what we do is sold in Egypt, which is not a particularly important market for Demeter or organic products, so it takes a lot of entrepreneurial spirit to sell endemic organic products on the Egyptian market. But we don't just sell them on the Egyptian market, we compete there with multinationals, small companies: Unilever, Nestlé and so on. They are present in the same segments, and we are still the market leader. It's strange, the "love economy", the market leaders ahead of Unilever... Anyway, I have a lot of respect for Unilever, Lipton and all the rest, and I say that to tell you how crazy things can get. And then, on top of all that, we've really put our visionary founder's dream into action, and every one of those two thousand people has time to develop their potential during working hours. So SEKEM, as he always dreamed, is a big school and not a company, and we have schools for 800 children, we have a University for Sustainable Development, the first University for Sustainable Development in the region with 3,000 students, a hospital, and many projects. So it's a big question that I can explore with you another day as to why all this has happened, but let me move on to «4 per 1000» which is today's topic.



In 2017, when my father passed away at the age of 80 and it was SEKEM's 40th anniversary, we got together in the Future Council and asked ourselves if we had really realized this dream, if we had realized this vision, because the vision ended by saying that this should be a model for Egypt and the world and that it should be scaled up and replicated (you can find this vision on our website). That's when we decided, after a long process with all our friends and networks, to create a new vision for the next 40 years.

So we said that SEKEM doesn't need to keep growing, to have more farms, more tea bags, more schools and more students. What SEKEM really wants is to spread its ideas throughout society, to reach the seven million Egyptian farmers, the 1.6 million teachers, the three million entrepreneurs, the 600,000 academics and so on... So it's a total refocus on what we're going to do over the next 40 years, hence the name "Vision for 2057". So we've defined a vision for Egypt in 2057. It's a humble approach, of course, to have a vision for Egypt in 2057, but we've said that if we succeed, Egypt will be 100% organic, biodynamic and regenerative agriculture. Every Egyptian company will apply the principles of the "love economy" or whatever you want to call it, and every Egyptian institution will understand that learning is a lifelong process and that it's about developing potential, not stuffing heads with knowledge and stuff like that. And many other things that are in the 15 objectives of the SEKEM vision - you're all invited to look them up - I'll focus on just one of them. It's the first one we started in 2017 and that was the vision of 100% organic Egypt. To get there we said "let's see why it's not organic". We did a comparative trial between conventional farming and organic and biodynamic farming and the results are very similar to the studies done in Switzerland and then we did a real cost accounting report. It's interesting because the real cost accounting reports proved for Egypt essentially that like in all other countries like in Germany, and I say Germany now only because Germany is a much more developed country in context and is an example, but in Germany 8% of the German population eats organic and 92% don't. In France, it's less, in many other countries, it's less or more, it doesn't matter, in Egypt, it's 0.8%. And it's always the price that counts, and in our consumer minds, Adam Smith is very strong and we always believe that "cheap" is the end of the game. So we asked ourselves whether it was really more expensive to eat organic or not. Like everywhere else, organic farming is cheaper today if you take into account all the externalized costs, the pollution of water, air, cells, everything, and the future costs for future generations who will have to deal with climate change when the farmer emits carbon instead of sequestering it.

Taking all this into account, I'll show you an example, very quickly because I don't have much time left. If you go to a supermarket here in Egypt, you'll find SEKEM products in almost every supermarket, even in Sharm El Sheikh and Cairo. You'll take a look and you'll see that our SEKEM Demeter anise tea is the best in the world, but it costs 20 pounds a box, okay? and you'll see another box of conventional anise tea, also very good, but it costs only 16 pounds. So the question is, is this the real cost you're seeing, and if you do some simple cost accounting using FAO methodology, you'll find that there's an additional cost of five pounds for water pollution from each can of conventional anise in Egypt. The additional cost of each box is almost one pound for greenhouse gas emissions for one conventional aniseed. And the 16 pounds is actually 22 pounds. That's the real cost, that's the reality, which unfortunately doesn't suit either German or Egyptian consumers. You can tell this story until you die and no one will care, but it's good to know. We said to ourselves, because we don't want to die, we want to change the world, "let's see how we can monetize some of these externalized costs". We started with CO<sub>2</sub> and now comes the connection with «4 per 1000». Because we said "okay, let's see what's happening in our soils as far as carbon is concerned." We did a prototype in 2019 or something like that on our farm, on our wonderful farm open to visitors in Egypt, in

the desert, and guess what: we were able to prove that we sequester in the trees and the soil up to 35-40 tons of CO<sub>2</sub> equivalent per year and per hectare. And this is obviously a game-changer when you consider that average emissions from Egyptian agriculture are 5 tonnes per year for each acre, 10 tonnes for each hectare. The average emissions of conventional agriculture are therefore 10 tonnes, whereas we sequester 30 to 40 tonnes. This is the potential of «4 per 1000», exactly, what is the mission of «4 per 1000», to win this difference between "-10" and "+30-40". We've done it, and it's provided us with an appreciable additional income that has enabled us to improve our work. But we wondered what it would be like to scale up. So over the last two years, we've gone up to 2,000 small farms (1 to 3 acres or ha) along the Nile, not in the Delta, not in the desert, from Aswan to Alexandria. We wondered what was going to happen to these farms, and it's obvious that in the delta, they don't need as much compost as we do, there are fewer trees and so on. So they only sequestered, as you can see here, about 20 tonnes per hectare. But guess what, and now comes the interesting part of this story that gives us hope for a change of system in Egypt. These 20 tonnes per hectare are sold on the voluntary carbon market for 25 euros. Every Egyptian farmer here - there aren't many Egyptian farmers here - but every farmer in the world knows that these days, a farmer doesn't easily earn that amount of money per acre or per hectare. Having an extra income that's higher than growing cotton, potatoes or camomile is a game-changer, because we could now say to our farmer in Aswan or Alexandria: "You practice biodynamics, you sell at the conventional price and you no longer have a problem selling, you get your carbon credits and your income doubles, while sequestering 20, 30 or 40 tonnes of CO<sub>2</sub> in your hectare or in your land".

I hope you've heard it. We think that with this example, you can prove that a change of system is possible, that we can help farmers move from conventional agriculture to regenerative biodynamic organic agriculture to improve their livelihoods, which is important for every farmer in Egypt because they all live on the edge of poverty and have a fantastic impact on the climate. That's why we've come here to COP27, as ordinary farmers, to tell the world, the negotiators, Koronivia and everyone else, that next year we're going to go to 40,000 pounds, which will sequester one and a half million tonnes, and in three years' time we'll go to 250,000 pounds, which will equate to 10 million tonnes of CO<sub>2</sub> per year. This is a farmers' initiative. And farmers are the air conditioners. I was in the blue zone and the green zone, every zone you can imagine, even the red zone and... yes, believe it or not, I was there. And, and it's so fantastic for me to be there as a farmer because everyone's talking about net zero, net zero, net zero.... As if it were possible for anyone in the world to reach net zero. No human being, no industry in the world can achieve net zero, of course. I mean, you can improve, but at the end, there are emissions and, to get to net zero, you have to commit suicide and companies have to close down. So that's not going to happen. Who's going to balance out the remaining CO<sub>2</sub> emissions from all the industries in the world you're talking about? It's agriculture, forests and oceans, and we'll play a big part in that. If, in 2030, we need three and a half gigatons of carbon sinks, who will be the carbon sink? It won't be my electric car, or the other means I use to improve my energy efficiency, or even renewable energies; it will be agriculture. So we hope that through this initiative and the ambition to honour farmers for their ecosystem services and to make farmers happy and rich again and to make life pleasant again, which is the social impact of this because instead of fleeing the slums of Cairo, you could stay, you could have a good livelihood and you could have services and you could send your children to school and university and so on. When we simply honour the farmer for his services and that's what we're asking, we're calling the government, we're calling the society, we're calling our friends, the businessmen in Egypt and outside: just include the farmers in the solution and, in

doing so, we'll automatically move to more regenerative agricultural practices, we'll use the soils as carbon sinks and I'm very optimistic, I believe that, in the end, the farmers who are the big losers of the last 200 years will be the big winners of the next one. There are still people who don't believe this is possible, but we don't know anything called "Mission Impossible". At SEKEM, we're die-hard optimists, and we believe in having the courage to take the next step. To do this, we follow a well-known German poet. He put it nicely: "It's not enough to know, you have to apply. And it's not enough to want, you have to act." And that's what I'm calling for all over the world! Thank you very much!

**Mr Wolfgang ZORNBACH**, President

Thank you so much Helmy for this inspiration. It was a really good inspirational speech and it shows me that we don't need policy makers, negotiators, experts, we need people who have a vision and who act and don't just talk. I think that's the fundamental message I'm leaving here in my mind, and I'll come back in 2057 here in Egypt and look at what's happening. I'll be almost 100 then, but that's okay, and Paul will join me. I think we need more people like you in the world to tell policy makers how to act and how to get things done, thank you.

The next speaker should have been Mr Terhi LEHTONEN, State Secretary to the Finnish Minister for the Environment, but unfortunately he was unable to attend, so we have Ms Hanna MATILLA who will speak on behalf of the Ministry.

**Ms Hanna MATILLA**, Senior Specialist, Finnish Ministry of the Environment

Dear friends of «4 per 1000» and healthy soils, today is Biodiversity Day. Healthy soils are a crucial element of our biodiverse planet. Finland joined the «4 per 1000» initiative at COP21 in Paris. As a representative of Finland, I took part in the launch event, and I well remember the very enthusiastic and hopeful atmosphere that prevailed. Something very essential had been launched. This initiative has put soil more and more at the center of policy. And now, together, we can turn policy into action. Finland promotes and supports «4 per 1000» in its national policy, within the EU framework and at global level. Finland has set itself the goal of achieving carbon neutrality by 2035, and as part of the land use sector, soils are also included. This goal of climate neutrality is now also the key objective of Finland's new Climate Change Act. The new Climate Change Act came into force in July this year. The scope of the law is extended to the land use sector, and the objective of strengthening carbon sinks is added. Today, the European Commission is also preparing the implementation of the soil strategy. The proposed European law on soil health will be presented next year. As part of the Finnish government program, a vast research and development program called "Catch the Carbon" is currently underway. Through dozens of projects, we are improving climate-resilient agriculture and soil health. Cooperation and knowledge-sharing between researchers, policy-makers, farmers and other stakeholders are very important. One example of this kind of cooperation is the Carbon Action Network in Finland, which brings together farmers, researchers and a wide range of stakeholders; Laura Höjer will say more about this network later today. Next year, in June, we'll be holding the first «4 per 1000» regional meeting in Northern Europe in Finland. We are delighted to invite you to this event. It will also take place online, so it will be easy to participate from anywhere in the world. Together, we're making a difference. The previous speaker talked about miracles in the desert, and perhaps this could be a call to us all: Let's make miracles in deserts, even though in Finland we don't have deserts, but you know that's what it is, it can be a metaphor for all of us. I wish you an interesting day for healthy soils! Thank you very much!

**Mr Wolfgang ZORNBACH**, President

Yes, thank you very much Hannah for standing in for your Secretary of State and thank you also for the invitation to Finland, it's a wonderful country and I'm looking forward to this meeting. We now have a series of video messages. The next one is from Mrs Maria do CEU ANZUNES, Portugal's Minister of Agriculture and Food.

Ms **Maria do CEU ANZUNES**, Minister of Agriculture and Food, Portugal

Mr. Stéphane le Foll, President of the 4 for 1000 initiative, dear participants of this forum. A warm welcome to you all! I'm delighted to be taking part in this panel on "Healthy soils for a healthy planet". This is a fundamental issue for our society, and one where real progress can only be made with more science and innovation. We all need to play an active part in defining new ways of making the most of resources, optimizing production processes and adopting more responsible consumption. I'd like to draw attention to a few revealing and worrying facts. 33% of the planet's soil is already degraded. Soil is home to over 25% of the planet's biodiversity. Healthy soils are the planet's largest terrestrial carbon reservoir, essential for mitigating climate change. Every year, erosion washes away around 1 billion tonnes of soil in Europe. Faced with this scenario, it's essential to take action! Soil is a non-renewable natural resource that produces goods and services essential to ecosystems and human life, in particular agricultural production and food security! Portugal remains committed to various initiatives, such as the United Nations Global Soil Partnership and the European Soil Partnership. Portugal, along with the European Union, is committed to ensuring that the balance sheet of soil degradation is neutral. We need to invest in resilient agricultural practices to improve soil quality and minimize soil contamination. It's important to emphasize the broader agro-ecological principles at the heart of the "farm to table" strategy and the "biodiversity strategy". By way of example, I'd like to highlight some of the objectives. To convert at least 10% of agricultural land into diversified landscape features. Reduce nutrient losses, risks and the use of chemical pesticides. Increase the proportion of farmland cultivated organically and increase soil organic matter. The European Union's Soil Strategy 2030 sets a clear objective: "By 2050, all EU soil ecosystems will be in a healthy state". As this regulation is important for Portugal, it is necessary to carry out a broad and participative reflection at a global level, where we intend to listen to several stakeholders in the sector. It is important to stress that there is no single recipe applicable to all soil types and climatic conditions, nor to all types of land use. There is a growing body of knowledge that can be applied to agriculture, and there is a major international effort to evaluate these practices and disseminate them responsibly. The new strategic plan for the Common Agricultural Policy also includes soil and ecosystem biodiversity in specific areas, and in specific objectives, the promotion of efficient soil management. The chapter on eco-regimes is distinguished by the objective of increasing the soil's carbon sink capacity and protecting the soil against erosion. Resource efficiency will be promoted, with a transition to a low-carbon, climate-resilient economy in the agricultural sector. I would like to conclude by emphasizing that agriculture is not just a follower of technological innovation, but also an agent of change. We need to guarantee safe, high-quality food, without compromising the planet's resources or the well-being of future generations. Now that we have reached 8 billion citizens worldwide, we have this dual responsibility.

**Mr Wolfgang ZORNBACH**, President

Many thanks to Portugal! Next up is a speech by Dr. Nagy ISTVAN, Hungary's Minister of Agriculture.

**Dr. Nagy ISTVAN**, Hungarian Minister of Agriculture.

Ladies and Gentlemen, it is an honour for me to take part in the high-level segment of the «4 per 1000» Initiative Day once again, after 2021. First of all, I would like to state that the Hungarian government strongly supports the implementation of the strategic plan for healthy soils. At the same time, I am pleased to inform you that Hungary joined the Soil Health Action Coalition (CA4SH) in February 2022. By achieving the goals of the «4 per 1000» Initiative, we are securing our future. Too few people yet know that the thin layer of soil beneath our feet is at the service of our lives. Soil and the multitude of organisms that live in it provide us with food, biomass and fibre, and regulate the cycles of water, carbon and nutrients. Maintaining soil health and improving degraded soils is an important part of the Hungarian government's agricultural policy. It is in this spirit that we have adopted, for example, the law on the protection of agricultural land, the provisions on good agricultural practice and the regulations on the safety of the food chain, following a "farm to table" approach. The energy crisis affecting Europe is also having a serious impact on Hungarian agriculture, but this is no reason to neglect aspects relating to environmental and soil protection, food safety and food security. We are looking for alternative fertilizing materials to replace artificial fertilizers, and working on the possibilities of using them in agriculture. Drawing on our practical experience and using recyclable by-products, we hope to achieve significant results within just a few years. Our aim is to ensure the restoration of degraded soils and their sustainable use. To achieve this, we have access to national and European resources. Thanks to our soil information and monitoring system, operational since 1992, we can provide specific data on the health of a given soil. We are constantly training farmers in sustainable soil management methods, and will shortly be launching a soil conservation program for farmers, which we plan to implement in five-year cycles. Even in these difficult times, we strive to pay particular attention to the sustainability of healthy soil, as it is a prerequisite for our future. Only healthy soil can give us a healthy life.

**Mr Wolfgang ZORNBACH**, President

Many thanks to Mr Nagy ISTVAN, Hungarian Minister of Agriculture. The next speaker is Bulgaria's Deputy Minister of Agriculture, Mr Georgie SABEV.

**Mr Georgie SABEV**, Deputy Minister of Agriculture, Republic of Bulgaria

Mr. President, Ladies and Gentlemen, the Republic of Bulgaria welcomes the holding of the sixth meeting of the «4 per 1000» Initiative and its focus on soil health and the mobilization of large-scale players for the implementation of its strategic action plan for 2050. Soil is a limited, irreplaceable and virtually non-renewable natural resource which fulfils a number of functions that play an important role in maintaining the balance of nature and the existence of human society. Healthy soils are the foundation of a healthy food system. We need to recognize their ability to produce sustainable, nutritious crops and mitigate climate change through carbon storage. We note with concern that such an important resource is subject to a number of threats such as soil degradation, reduced organic matter, severe erosion, floods and droughts. Halting and reversing current soil degradation trends must become our top priority, and we must work together to bring degraded soils back to life. Healthy soils are the planet's largest terrestrial carbon reservoir, which means that if we don't use their carbon storage potential, we won't be able to meet the targets of the European Green Deal and become climate neutral by 2050. Depending on how soils are used and managed, they can actively contribute to promoting human health and achieving the UN's Sustainable Development Goals, such as SDG1 (no poverty) and SDG2 (no hunger). Increased crop productivity and improved yield stability over time are the long-term benefits of healthy soils

that contribute positively to food security and income generation. The EU's Soil Strategy 2030, which aims to achieve healthy soils by 2050 and to move towards sustainable soil management, is an example of the concern of EU member states to take decisive action and implement appropriate policies to ensure healthy soils. Sharing experiences, exchanging information and best practices to prevent soil damage can contribute both to more effective solutions to soil protection problems at national level and to the achievement of objectives at international level. Finally, I would like to stress once again that caring for soil is caring for life, because life on Earth depends on healthy soil. Joint action is needed to improve the functioning of food value chains, biodiversity conditions, and the ability to mitigate and adapt to climate change, because healthy, sustainably managed soils provide essential environmental, economic and social benefits to people. Thank you for your attention!

**Mr Wolfgang ZORNBACH**, President

Many thanks to Bulgaria's Deputy Minister of Agriculture. Our next speaker is Mary GOUGEON, Cabinet Secretary for Rural Affairs and the Scottish Isles.

**Ms Mary GOUGEON**, Cabinet Secretary for Rural Affairs and the Scottish Isles.

Thank you for inviting me to speak to you today. Although I am unfortunately unable to attend COP27 in person, I am delighted to be able to join you, albeit virtually, to discuss climate change and the importance of protecting and improving our agricultural soils. We know that our climatic environment and biodiversity are in great danger. We all need to act, and improving the carbon storage and health of our soils is an essential part of that action. Last year, we welcomed you to COP26 in Glasgow and I announced that Scotland would join the «4 per 1000» Initiative. Since then, we have set out our vision for agriculture. In this vision, we set out our aim to make Scotland a world leader in sustainable and regenerative agriculture. We are developing a new support system for agriculture that will enable us to realise our vision and adapt to future social, economic and environmental challenges and opportunities. We are working with our industry to understand how we can best achieve our climate and environmental goals, in line with our commitment to a just transition to Net Zero by 2045. Last year, we launched a national testing program backed by £51 million of funding to help and encourage farmers and craftsmen to learn more about the impact of their work on climate and nature. Soil health is a key element of this program. We provide financial support for Scottish farmers to carry out soil analysis, carbon assessments and nutrient management plans. We also encourage farming practices that optimize soil health and carbon storage, for example by providing advice and support to farmers and funding a wide range of research, including on soil health indicators. We have a soil regeneration group of farmers who work together to determine how best to sustain, improve and protect the soils on their farms. We support the restoration of peatlands, an important soil in Scotland, with a funding program of over £250 million over 10 years. We also aim to restore 250,000 hectares of degraded peatland by 2030. This includes restoring and improving farmland management. Our soils are vital and we must all strive to protect and improve them. Healthy soils store carbon and help us fight climate change. They are rich in biodiversity and, above all, they enable our farmers and craftsmen to continue producing high-quality food. It's by working together, sharing our experiences and learning from each other through fantastic initiatives such as «4 per 1000» that we can make a real difference and ensure healthy soils now and for the future.

**Mr Wolfgang ZORNBACH**, President

Many thanks to Scotland for supporting this initiative. The next speaker on the agenda is Mr. Drissa TRAORE, it's a pleasure to see you and the floor is open to you. You are the official representative and technical advisor to the Côte d'Ivoire Minister of Agriculture and Rural Development.

**Mr Drissa TRAORE**, Technical Advisor to the Minister of Agriculture and Rural Development, Republic of Côte d'Ivoire

Hello, ladies and gentlemen, I'm Drissa from Côte d'Ivoire, your leading cocoa bean producing country. We are therefore here to seize this exceptional opportunity to talk about soils. The international day of the «4 per 1000» Initiative is a wonderful opportunity for the world's climate decision-makers to highlight the critical role that soils can play in food security, nutrition and mitigating the negative effects of climate change. My country, Côte d'Ivoire, joined the international «4 per 1000» initiative in 2016, just one year after its launch. Côte d'Ivoire is the world's leading cocoa producer, with around 2.2 million tonnes a year. But today, my country faces many challenges linked to soil erosion. That's why the country has launched numerous projects on regenerative, productive and resilient agriculture. For example, we have a major project we call "Cocoa for Future". We also have another project called "Terri4Soil". These projects aim to find a way to help small farmers engage in comprehensive soil management. But small farmers are voluntarily involved in this project. We urge climate decision-makers and big business to encourage small farmers to participate in the «4 per 1000» Initiative by putting in place incentives, because without these incentives, these farmers are voluntarily committing themselves and are not in a position to do so. So it's urgent that climate leaders get together, make decisions with all stakeholders to put in place incentives so that farmers can really participate in this initiative because, at the end of the day, they're the ones on the ground. They're the ones who implement all these strategies, all these results obtained by the researchers. If they're not really involved, our initiative won't achieve its objectives. So it's a plea to all decision-makers, as I was saying, to take action to get all farmers to reach the "4 per 1000" rate. That's why, in my country, we're going to organize an international seminar on «4 per 1000» next year, in May 2023. This seminar will be organized to try and bring together all stakeholders interested in soil and its sustainable management. What we want is for other people to come and help us, because my country and CIRAD can't do everything together. We need everyone's help to achieve our goals. So, I was saying that we can reach the «4 per 1000» goal without doing anything to build a bridge between climate leaders and small-scale farmers who are out in the field, implementing practices and our scientific findings. It's good to continue the dialogue between researchers and farmers. Thank you very much!

During this High-Level Segment, the following personalities also took the floor (all the speeches are available on video by following the link: [https://www.youtube.com/watch?v= o4UnxWgCaQ&t=3625s](https://www.youtube.com/watch?v=o4UnxWgCaQ&t=3625s)):

- **Mr. Stephen QUEST**, Director General, JRC [Joint Research Centre] (European Commission)
- **Dr Juan Lucas RESTREPO IBIZA**, Director General, The Alliance of Bioversity International & CIAT [International Center for Tropical Agriculture].
- **Mr. Pau ROCA**, Director General, OIV (Organisation Internationale de la Vigne et du Vin / *International Organization of Vine and Wine*)

- **Mr. Plácido Plaza**, Secretary General, CIHEAM [Centre International de Hautes Études Agronomiques Méditerranéennes / *International Centre for Advanced Mediterranean Agronomic Studies*] (France)
- **Dr Patrick CARON**, President of Agropolis international, International Director of the Montpellier University of Excellence (MUSE), Member of the CGIAR Board of Directors (France)
- **Ms. Elisabeth Claverie de Saint-Martin, CEO, CIRAD Elisabeth CLAVERIE DE SAINT-MARTIN**, CEO, CIRAD [*French Agricultural Research and Cooperation Organization*] (France)
- **Ms. Valérie Verdier, CEO, IRD Valérie VERDIER**, CEO, IRD [Institut de Recherche pour le Développement / *Research Institute for Development*] (France)
- **Mr. Philippe MAUGUIN**, CEO, INRAE [Institut National de Recherche sur l'Agriculture, l'Alimentation et l'Environnement / *French National Research Institute for Agriculture, Food and Environment*] (France)
- **Ms. Ana Beatriz Wingeyer Ana Beatriz WINGEYER**, National Project Coordinator, Strategies to increase Soil Carbon Sequestration, INTA - EEA Paraná [Instituto Nacional de Tecnología Agropecuaria / *National Institute of Agricultural Technology*] (Argentina)
- **Mr. Philippe BIRKER**, Co-Founder, Climate Farmers (Germany)
- **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. Precious Phiri Precious PHIRI**, Coordinator, Regeneration International (Zimbabwe)
- **Ms. Alana Lea Alana LEA**, Founding Director, IGiveTrees (Non-profit USA-Brazil)
- **Pr. Ricardo RALISCH**, Official Representative, FEBRAPDP (the Brazilian Federation of the No-Tillage System) (Brazil)
- **Ms. Jing Meng Jing MENG**, Associate Professor & Delegate of CBCGDF (China Biodiversity Conservation and Green Development Foundation) (China)
- **Ms. Catherine Migault, Director General, FARM Foundation (France) Catherine MIGAULT**, Director General, FARM Foundation (France)
- **Mr. SADHGURU**, Founder of the Isha Foundation and of the Movement "Conscious Planet" Save Soil (India)
- **Ms. Laura Höijer, Managing Director, BSAG Baltic Sea Action Group (Finland) Laura HÖIJER**, Managing Director, BSAG Baltic Sea Action Group (Finland)
- **Mr. Bharat KAKADE**, President and Managing Trustee, BAIF Development Research Foundation (India)
- **Dr Ananya S RAO**, Senior Scientist, Forests by Heartfulness, Heartfulness Institute (India)
- **Mr. Norbert LINS**, Chair of the Committee on Agriculture and Rural Development (European Parliament)



- **Ms. Delphine Smagghe Delphine SMAGGHE**, Senior Vice President Purchasing, Quality, Sustainable Development and Communication at Mc Donald's France (France)
- **Ms. Sandrine Sommer Sandrine SOMMER**, Chief Sustainability Officer, Moët Hennessy, LVMH group (Louis Vuitton Moët Hennessy) (France)
- **Mr. Alain DESVIGNE**, CEO, Amarengo Group (Ireland)
- **Ms. de Malleray Adrienne de MALLERAY**, co-Founder, Genesis (France)
- **Ms. Sarah Vidal, Partnership Relation Manager, MEZAGRI (France) Sarah VIDAL**, Partnership Relation Manager, MEZAGRI (France)
- **Ms. Carine Kraus Carine KRAUS**, Executive Director for Engagement, Member of the Executive Committee, Carrefour (France)
- **Mr. Olivier REINAUD**, Co-founder & Managing Director, NetZero (France)
- **Ms. Diane Holdorf, Executive Vice President, WBCSD Diane HOLDORF**, Executive Vice President, WBCSD World Business Council for Sustainable Development (Switzerland)
- **Ms. Stefania Avanzini, OP2B Director Stefania AVANZINI**, OP2B Director [One Planet Business for Biodiversity, hosted by WBCSD (World Business Council for Sustainable Development)] (Switzerland)

Before opening the floor to the various Forum panels to express their views on how to achieve the goal of "Healthy soils for a healthy planet", three presentations were made to kick-start the discussion.

**Session 1: Presentation of Moët Hennessy's World Living Soils Forum held in June 2022 in Arles (France) by Ms Sandrine SOMMER**, Chief Sustainability Officer, Moët Hennessy (France)

At Moët Hennessy, our top priority is to regenerate the soil, and as part of this strategy, we really want to involve key people and stakeholders. That's why we decided to create this event, the World Forum for Living Soils. The aim of this event is really to connect people on soil regeneration, of course, to share concrete actions for sustainable and regenerative agriculture, to create or strengthen links between scientists and farmers and businesses, and to try and find a way to bring together science-based key performance indicators to measure everything to do with soils in the same way. During the forum, we made a point of having a good gender balance, and I know that's very important for Paul and for us too. We had a pleasant sharing between French and non-French people, international people and sharing between influencers, institutions, scientists and companies. We had around 100 speakers and a thousand people online and offline. For us, it was very important to have all the stakeholders, and when we say all the stakeholders, we mean scientific experts from the best universities and institutions, such as INRAe, Wageningen University, the Rodale Institute and many others. We also heard from a number of NGOs, such as WWF and Pour une Agriculture du Vivant. We also had some institutions like the OIV, but also the «4 per 1000» as well as OP2B and the European Commission. We had a lot of trade organizations, because it was very important for us to have our competitors on the same boat, but also, the food industry like Danone, as well as some banks and some investors. There was, of course, our ecosystem, i.e. the Moët-Hennessy ecosystem, our Houses, our brands, but also our winemakers, our retailers and our customers. We also had the younger generation on board with students, startups, as well as what we call opinion leaders, i.e. media, public relations, but also influencers like Change Now and Kiss the Ground. And to make sure that the World Living Soil Forum had a wide range of

content, we set up a steering committee with some of the scientists you know, and I'd like to salute Lydie-Stella KOUTIKA in particular, who's in the room. And we had a few NGO representatives with us, as I mentioned, of course Paul LUU, thank you Paul for being part of the committee, but also some speakers. We also have Yann Gael RIO who works for Danone, which is very useful for linking agriculture and viticulture. Over the two days, we decided to cover a range of topics around soil and soil regeneration, firstly to explain where we are in terms of knowledge and where we are in the world. We also touched on biodiversity, water and how water and soil are linked, which is very important. We also discussed different practices in terms of regenerative agriculture, the very clear link between soils and climate change and how we can absorb CO<sub>2</sub> and sequester carbon in soils. How we can accelerate the transition was also discussed. Two dense days with plenary sessions and numerous parallel sessions running concurrently, so that people could choose to delve deeper into the various topics covered. And as has already been said, it was in Arles, a very beautiful town in the south of France offering a good compromise with the arts, with the city, and with nature in a rather warm setting that we organized and furnished with lots of wood. We were like in an agora to have really useful discussions during these two days, lots of presentations with great speakers like H  l  ne VALADE our Environment Director but also Prince Albert II of Monaco and St  phane Le FOLL. As I mentioned, it was very important for us to explain that in this field, we are not competing with each other. We organized two round tables with our competitors, and we had the CEOs on board, because this is such a strategic subject that the CEOs have to be on board. We explained that we have exactly the same values and objectives, and we clearly want to work more closely together in the field of living soil. Finally, as I explained, start-ups played a very important role in this forum. So, we invited a large number of start-ups and young people in the fields of water, biodiversity and measurement, and they played a crucial and very important role in this meeting. Finally, we also organized sessions, what we call living soil sessions, to make sure that we continue to train people who can explain everything about soils, different solutions and so on. Finally, perhaps a very short film. This is what I wanted to tell you about the World Forum on Living Soils. The next edition will take place in two years' time. We really want to continue with this type of event, but between two events we really want to accelerate the transition and push soil health everywhere.

**Session 2:** One year after the United Nations Food Security Summit (UNFSS), situation of the two coalitions of interest to the «4 per 1000» community:

- **Coalition of Action for Soil Health (CA4SH)** presented by **Ms Leigh-Ann WINOWIECKI**, Global Research Leader on Soil and Land Health at CIFOR-ICRAF; Co-lead of the Coalition of Action for Soil Health (CA4SH) (Kenya)

Since 2015, on the sidelines of the COP every year, an entire day is devoted to the «4 per 1000» Initiative. This year, we have two whole days dedicated to soils. The Soil Health Action Coalition (CA4SH) co-hosted the Food Systems Pavilion on November 11. On Twitter, #COP27soil goes viral. Rockefeller is tweeting, our partners are tweeting, it's very exciting! We're all here because we're committed to implementing healthy soil practices on a global scale. We're here because, as the «4 per 1000» Initiative sign says, soil provides so many ecosystem services! We need to let the UNFCCC COP know that it's not just about mitigation, but also about food and nutrition security, ecosystem restoration, climate change adaptation and mitigation, and biodiversity. Last year in Glasgow, there were no pavilions on food systems. How many are there this year? Four! Four pavilions are dedicated to food systems, which means that we

can be heard, that our voice counts, that we are making a difference. I'm now going to focus on the resolution on soil health. We have come together with the «4 per 1000» Initiative to recognize that we must defend soil health. We need to be involved in climate negotiations because soil is that connector. On this slide, we can see a super-degraded system in northern Kenya, where I took this photo. The next slide highlights what soil health is and what CA4SH, the Soil Health Action Coalition, is all about. Paul and I have a long history together, hours of zooming in on the UN Food System Summit, Action Track 3, bringing together all the game-changing soil solutions and forming the Soil Health Action Coalition to make sure that soil health is recognized in the Food System Summit. Essentially, it's about improving soil health on a global scale by filling the gaps in implementation, policy monitoring and funding that currently hinder farmers. Here are the four objectives: integrate soil health into policies (we're already working on NDCs in Africa), multiply funding by five or ten, increase the number of hectares and fill the gaps in research and development, as there are still gaps on the impact of different land uses on soil health. We need to integrate soils into climate negotiations, recognizing that soils are the basis of life and the foundation of sustainable, regenerative systems. Affirm that agricultural systems can be part of the solution! We can already see this in the number of pavilions devoted to food systems. We also need to stress the importance of aligning the three real conventions that came out of the Rio summit, consider that soil is at the heart of ecosystem restoration - we've just launched the United Nations Decade for Ecosystem Restoration - and reaffirm that international action is necessary. On that note, I encourage you all to reach out to member states, to talk to Paul, Beatrice, me, Julia, anyone, to see how we can move things forward! France must be part of it! Ethiopia is on board, the European Commission is on board, and let's keep raising awareness of the role of soil health!

- **Coalition on Agroecology** presented by Mr. **Emile FRISON**, member of the International Panel of Experts on Sustainable Food Systems (IPES-Food); Coordinator of the Coalition on Agroecology (Italy)

First of all, I'd like to thank the organizers for giving me the opportunity to present the Coalition for Agroecology or the Coalition for the Transformation of the Food System through Agroecology, of which «4 per 1000» is a member. We know the current challenges facing our food systems today, and most of the problems associated with them, which generate a third of greenhouse gases and are responsible for biodiversity loss, soil, air and water pollution. They're vulnerable to climate change, and we're not tackling the triple burden of malnutrition, with ever-increasing numbers of people going hungry since 2015, problems of obesity and non-communicable diseases, as well as social inequity and loss of cultural values, all of which are associated with our current food system based on a model of industrial agriculture that destroys the environment and soil. So what we really need is transformational change and since 2016 we've had an impressive number of major reports by IPES, by IPES-Food, by the IPCC, the High Level Panel of the Committee on World Food Security and others who are all calling for transformational change, not just to make our current system more efficient or less polluting but really to rethink it completely and they all mention agroecology. Whether we start from an unsustainable industrial agriculture or an underperforming subsistence agriculture, we need to converge towards a diversified, high-performance agroecological agriculture. It's a different paradigm, one that simultaneously achieves economic, environmental, climate mitigation and adaptation, health, social and cultural objectives, and not one at the expense of the others. It's a

paradigm based on the 13 principles of agroecology developed by the Committee on World Food Security's High-Level Panel of Experts in 2019, and includes objectives relating to our principles, strengthening the resilience of our system, improving resource efficiency, but also - and this comes in addition to focusing on social health or regenerative agriculture - ensuring social equity. It's about participation, connectivity, co-creative knowledge, social values and equity in the system. These social dimensions therefore need to be addressed ambitiously and simultaneously. Agroecology has a different paradigm: it's not just about a set of agricultural practices, but the whole food system, from production to consumption, and it takes the best of all innovations compatible with the 13 principles and combines modern science with farmers' traditional knowledge. It's about changing social relations by empowering farmers, adding value locally, favouring short value chains and linking consumers to producers. It's a holistic, integrated approach to achieving economic, environmental, climatic, health, social and cultural objectives. It aims to achieve sustainable development objectives in an integrated way. This transformational change in our approach to the food system requires, to implement these 13 principles, changes in production practices, in social and economic relations, in the generation and transmission of knowledge and in the institutional framework. There are large-scale examples of agroecology at work. We've already heard of the example of Andhra Pradesh, where nearly a million farmers are now practicing what they call natural agriculture, which is the local name for large-scale agroecology, showing an increase in productivity, but above all a net, significant increase in net income. The Coalition for Agroecology, which came into being at last year's Food System Summit, now brings together 42 countries, regional commissions and 82 organizations, including UN organizations, research bodies, farmers' organizations, indigenous peoples' organizations, civil society organizations and philanthropic foundations, with the aim of accelerating the much-needed transformation of our food systems based on the 13 principles of agroecology. As I said, «4 per 1000» has been a member of the coalition since its inception. The coalition is supported by five working groups: the first deals with policy, the second with research and innovation, the third with financing and investment, the fourth with communication and advocacy, and the last with the implementation of agroecological initiatives on the ground. I would simply like to invite countries that are not yet members and organizations that share these values to join the coalition. You can find more information on our website, and thank you for giving me the opportunity to speak to you here today.

**Session 3: «4 per 1000» Perspectives in overseas departments and regions** presented by CIRAD (France), IRD (France) and INRAE (France), presented by **Mr Vincent BLANFORT**, Climate Change Project Manager, CIRAD.

Thank you for giving me the opportunity to present this study. I'm Vincent Blanfort from CIRAD, an agro-ecology researcher working on carbon sequestration and carbon balance in agriculture and grazing systems. I'm going to present the "4 for 1000 Overseas" study. This is a study on carbon storage in agriculture and forest soils in the French overseas territories in order to mitigate and adapt to climate change. This study is being carried out in cooperation between CIRAD, with my colleague Julien DEMENOIS and Ellie DAGUET, INRAE, with Jean-Marc BLAZY, and IRD, with Alain ALBRECHT. It's the product of an agreement between the French Ministry for Overseas France, with the «4 per 1000» Initiative, and ADEME, the French Energy Agency. This project is an attempt to match the 5.0 trajectory for overseas France. This is a national initiative that promotes the challenge of sustainable development in overseas

France, and there are five objectives, with the study focusing on two in particular: zero carbon and zero vulnerability. This study follows on from the study carried out by INRAE in mainland France on the best practices for storing carbon in agricultural soils, but this study did not take overseas France into account. The aim is to identify agricultural and forestry practices that can store more carbon, quantify the additional storage potential, map it and quantify the cost of implementation. And it's also an international reference, because in fact we can imagine replicating these expectations in other countries, like the European EJP Soil partnership, and as Elizabeth de CLAVERIE DE SAINT MARTIN from CIRAD said, it's very important to envisage sharing and cooperation with countries in the South. France's tropical overseas territories have their own specific characteristics, and we need to take these into account when considering the extension of the «4 per 1000» France study carried out by INRAE, because France is located in a tropical zone, with its own specific soil and climate conditions, etc. The aim of the study was to identify the most effective ways of improving soil fertility and soil fertility. The aim of the study was to take stock of the situation. I heard a lot of things at COP27, and concerning science, I understand that it's very important to produce references, new references, but it's also very important to disseminate these references and share knowledge with different stakeholders, and this also concerns soil carbon sequestration. The ambition is to contribute to the implementation by stakeholders in agriculture and forestry of these new practices to contribute to climate change mitigation and adaptation, therefore through carbon storage within the «4 per 1000» Initiative. The study is nearing completion and we are in the process of drawing up a summary. For example, in terms of carbon stock, it's very significant, for example in relation to France. In France, there are 3-500,000 tonnes of millions of tonnes of carbon, and if you look at French Guiana, 25% of the stock is located in this overseas department. You can also see the average soil organic carbon stock per hectare, which represents great potential in this territory. It is important to preserve and protect this carbon stock in different systems, and in these territories, forests cover a large part of the surface area. But the trend is towards deforestation, and the conversion of forest to annual or perennial crops is leading to a reduction in soil carbon stock. The conversion of perennial crops such as bananas or sugar cane to annual crops also leads to a decrease in the stock, but the conversion, for example, of annual crops or forest to pasture leads to an increase in the soil carbon stock. Thus, soil carbon stocks in this area are declining due to land use change, from forests to crops for example, and there is also a low carbon input in conventional practices. These studies therefore show that new practices are possible: agroecology, agroforestry and that they are capable of co-constructing land use scenarios with a view to this 5.0 trajectory for example, and for this we need more data and research to fill in the gaps. In fact, there's a lot of data coming from CIRAD and INRAE, and it mainly concerns the biological process, but there's often a gap between the biological process and the practices, and there's another gap between the practices and the implementation of those practices at different scales. So we need to do more research. What are the challenges? On a national level, in terms of national carbon accounting, French Guiana represents over 50% of our carbon, of France's forest stock, which is very significant. On a territorial level, there's another challenge. Our research can support the endogenous development of this territory, because agriculture is a fundamental sector that is also compatible with NetZero. And at the farm level, we need to be able to test our knowledge to give effective practices. The final point is to share this knowledge and practice cooperation with countries in the South. I know we're in Africa, but there are other territories with very significant challenges in terms of climate change, and in the Amazon, CIRAD, IRD and INRAE have many cooperative projects in this area, and we've been able to see that this zone can produce ecosystem services integrating forest, pasture, agriculture and landscape. Instead of considering forest protection and agricultural production in one place,

we can combine the two in a new landscape model. So, we're cooperating between French Guiana and Brazil to achieve these goals. You can find out more on our website. Thank you for your attention.

All the videos of the personalities' speeches during the High-Level Segment are available on the YouTube channel of the «4 per 1000» Initiative: (<https://www.youtube.com/watch?v=o4UnxWgCaQ&t=14074s>)

## **Forum meeting**

*(All documents are available on the website dedicated to the «4 per 1000» day in 2022: <https://4p1000day2022.sciencesconf.org/myspace/index>)*

- Adoption of Forum agenda n°7

The Agenda was adopted by the Forum

- Approval of the report of Forum n°6 - Glasgow and online of November 10, 2021

The report was adopted by the Forum.

- Annual activity report for 2021-2022

The annual activity report for 2021-2022 was presented to the Forum by Mr **Paul LUU**, Executive Secretary. The Forum took note of all the work accomplished over the past year. The main achievements since the Glasgow meeting and online at the end of 2021 have been the organization of statutory meetings: 6<sup>th</sup> Partner Forum, 7<sup>th</sup> Member Consortium, 13<sup>th</sup> (Montpellier) & 14<sup>th</sup> (hybrid in Sharm-El-Sheikh) Scientific and Technical Committee meetings, 6 Bureau meetings, participation in international meetings, continuation of activities and partnerships with other initiatives, notably the CA4SH coalition and the coalition on agroecology. The Consortium adopted, by electronic vote, the Implementation Plan for the 2050 Strategic Plan. Communication via the Newsletter (4 issues in 2022 and a special issue on winegrowing with the OIV) and social networks was also pursued, as was the updating of the database and map of partners (739) and members. The Initiative's website has evolved to correspond more closely to current expectations. The Initiative held its 2<sup>nd</sup> virtual fair on its collaborative platform, launched during the European Union's Green Week. In July 2022, the Initiative published a book entitled "Les agricultures ont la Terre entre leurs mains" (Farmers have the Earth in their hands) to extend the scope of its proposals, particularly in terms of agroecology. It also signed a new financial support agreement with the French Ministry of Agriculture, and a partnership agreement with the NGO AFRIS for the development and operation of the collaborative platform.

- Annual activity report for the first 6 years (2016-2022) of the Scientific and Technical Committee

**Ms Beverley HENRY**, Co-Chair of the CST, presented the main activities of the committee since its creation. The STC is made up of 14 members from 5 continents, with gender parity and complementary scientific skills. The STC has been able to meet 14 times since 2016, in person but also sometimes virtually or in hybrid conditions. Over the years, the STC has worked on drawing up the broad outlines of an international research and scientific

cooperation program on soil carbon, consolidating the Initiative's knowledge base (responding to controversies, publishing articles and books), developed a repository of indicators and criteria for project evaluation, and used this repository to evaluate 52 projects in 4 calls for projects (from 2019 to 2022), and contributed to high-level initiatives (Koronivia Joint Work in Agriculture, article on NDCs, review for the FAO PMS, publication of Carbon info notes, etc.).

- The «4 per 1000» Implementation Plan and Operational Framework - Validation and now, Action

**Ms. Béatrice BRETON-ASKAR**, in charge of Strategic Partnerships & Global Awareness (Executive Secretariat), recalls the various stages since 2020, with the adoption of the 2050 Strategic Plan in June 2020, the revision of the Strategic Plan and the development of the Implementation Plan thanks to the Delphi study in 2021 and the presentation made in Glasgow, the consolidation of the 2050 Strategic Plan (Version 2) and the Implementation Plan (Version 1) also validated electronically by the Consortium in 2022. In parallel with this work, the 24 objectives of the Strategic Plan have been divided into two categories: Core Facilities, which will be managed and financed by the Executive Secretariat mainly through partnerships, and Global Facilities, which will be managed and financed through dedicated funding by alliances with the support of the Executive Secretariat. Core and Global Facilities are an integral part of the Operational Framework for the benefit of beneficiaries.

Discussion:

**Mr. Jean-François SOUSSANA** of INRAe points out that many tasks will have to be carried out through alliances, and would like to know how many alliances are already operational and how many have yet to be created.

*The Executive Secretariat (Ms. Béatrice BRETON-ASKAR) points out that a list of partnerships will be circulated during the Members' Consortium, and (Paul LUU) that work on Global Facilities is just getting underway, that embryonic alliances already exist, and that the Implementation Cycle to be presented next will enable new alliances to take shape. We are reminded of the considerable amount of work that has gone into making all this possible since we drew up the Strategic Plan, the Implementation Plan and now the Implementation Cycle, and that we must now move on to the next step, more "operational" stage. On this occasion, the Executive Secretariat is calling on all partners to volunteer to act within the framework of new alliances and partnerships.*

**Mr. Jean-Luc CHOTTE** of Ird thanked the speaker for her clear and comprehensive presentation, which showed the scope of the work carried out in a very short timeframe. He also congratulated the CST on the diversity and quality of the work carried out by the group, which is helping to raise collective awareness on a solid scientific basis. Echoing the previous speaker, he asked the Executive Secretariat about the minimum size of an alliance, for example a bi-partner alliance.

*The Executive Secretariat (Paul LUU) clarifies that at least two people are needed to create an alliance, which answers the question.*

- The strategy implementation cycle (SIC) or how to implement the «4 per 1000» Initiative's 2050 strategic plan?

**Mrs Claudia SCHEPP** points out that her speech follows on from the previous one, at the very point raised by the questions asked. To this end, a specific instrument, the implementation

cycle (SIC), has been developed to operationalize the responses to the objectives, and encourage the emergence of alliances. Those familiar with the Strategy will have noticed Objective A2 on project development. The problems identified that led to the formulation of this objective can be summarized as follows: "Few national and international mechanisms support the emergence of innovative projects focused on soil health and carbon sequestration. The effects of the few projects implemented in the field are not well documented or communicated". With this in mind, what is the aim of the Implementation Cycle: to promote exchanges on relevant ongoing projects and identify gaps, to help partners build interdisciplinary alliances and develop projects that contribute to the Initiative's objectives, and to support project leaders in raising funds for their implementation. The various stages of the Implementation Cycle are as follows:

- Consolidation of the Task Forces resulting from the Delphi study, assigning them the task of implementation, and appointment of Task Force Leaders.
- Taking stock and planning, so as not to duplicate what already exists. The Secretariat can help facilitate the work of the Task Forces.
- Ideation and team building. Within a single task force, several project teams can co-exist, each in charge of one or more projects.
- Project design
- Search for funding, by building concrete cases to convince donors
- Securing financing, for which the link with the «4 per 1000» Initiative may be favourable
- Project implementation.

We encourage those who are interested to visit our collaborative platform to find the existing Tasks Forces and possibly join them. The first Task Force meetings will be held in early 2023, if possible before Easter.

#### Discussion:

**Mr. Jean-François SOUSSANA** of INRAe points out that he has noted some fifty participants in the Task Forces, which he feels does not live up to the expectations of an initiative like «4 per 1000». There should be 10 times as many Task Force members, or even more. That's why he stresses the need to reflect on the added value of being a Member of the Initiative, and the benefits expected from this situation. In real life, players in the field don't necessarily need a platform to contact each other, or perhaps have difficulty connecting to platforms, as is his case. He asks the Secretariat if face-to-face meetings are organized to get people interacting rather than online or platform-based meetings?

**Mr. Jean-Luc CHOTTE** from Ird, following on from the previous speaker, points out that this is a fine piece of conceptual work, but that if two people wish to work together, it is not necessarily necessary to use the platform for this, as it does not really add value to the relationship. As an example, he mentions the fact that Ird worked with other partners to organize a workshop in Niger, and that this was not shared on the platform. He suggests that the two ways of working could coexist: direct collaboration (with results posted on the platform) and more complex work following the stages of the cycle via the platform (Bottom-Up approach and Top-Down approach).

*The Executive Secretariat (Claudia SCHEPP) clarifies that not all projects have to go through the platform, but that it is a collaborative tool available to all players, where all useful information is gathered. The Implementation Cycle is there to facilitate future work, not to*



*communicate on current actions. The Chairman confirmed that in his opinion the Bottom-Up approach was preferable to the Top-Down approach, and that the Initiative now had a tool enabling this approach to be put into practice.*

- Conclusion of the Forum

At the end of the Forum, Dr Wolfgang ZORNBACH warmly thanked the Executive Secretariat for all its work, and the Scientific and Technical Committee for its important contribution. He extended his thanks to the Members and Partners, pointing out that there would be no need for an Executive Secretariat, or a STC, if there were no Members and Partners. Clearly, the Initiative can only function if Members and Partners work together and support the work carried out by the Executive Secretariat and the STC. It's not just about money, because we need that, but about involvement and contributions, particularly through new ideas.

The Chairman also thanked all the speakers from different sectors (politicians, scientists, farmers and companies), for joining their voices to underline the importance of carbon sequestration, but above all how crucial it is for global policies against climate change.

All presentations and documents are available at:  
<https://4p1000day2022.sciencesconf.org/myspace/index>

and videos are available on the Initiative's YouTube channel:  
<https://www.youtube.com/@plinitiative/videos>

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