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Soil governance webinar

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GSP Webinars



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Introduction

Soil governance concerns policies, strategies, and the processes of decision-making by nation states and local governments on how the soil is utilized. Governing the soil requires international and national collaboration between governments, local authorities, industries and citizens to ensure implementation of coherent policies that encourage practices and methodologies that regulate the usage of the soil resource to avoid degradation and conflict between users.

One of the priorities of the FAO Global Soil Partnership (GSP) for the period 2020/2021 is to improve soil governance at all levels, from the development of specific soil protection, conservation and restoration policies, their implementation, and public awareness and participation in sustainable soil management. The first step to achieve this was to carry out a stocktaking exercise of all legal instruments at national and regional level that have an impact on soil, compiled on the SoiLEX online platform. To mark the launch of the SoiLEX platform, the FAO Global Soil Partnership (GSP) organized a webinar on soil governance on 13 January 2021. The webinar included a high-level opening, presentations on how to improve soil governance, the presentation of the SoiLEX platform and a question and answer session with all panelists.

The webinar - moderated by Mr Ronald Vargas, GSP Secretary - brought together 824 participants from more than 160 countries (additional information on the participants is available in Figure 1 and Figure 2) and was a milestone in the promotion of soil governance around the world. The discussion generated considerable interest in the implementation of legal instruments related to soil protection and soil management in different countries.

Mr Ronald Vargas, GSP Secretary, welcomed all participants to the webinar on soil governance and recalled the objective of the webinar: to highlight the importance of soil governance for achieving sustainable soil management worldwide.

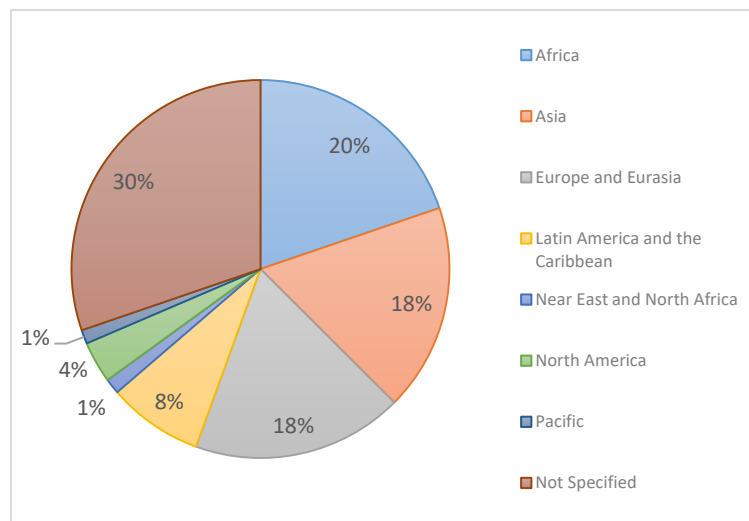


Figure 1. Participation by regions

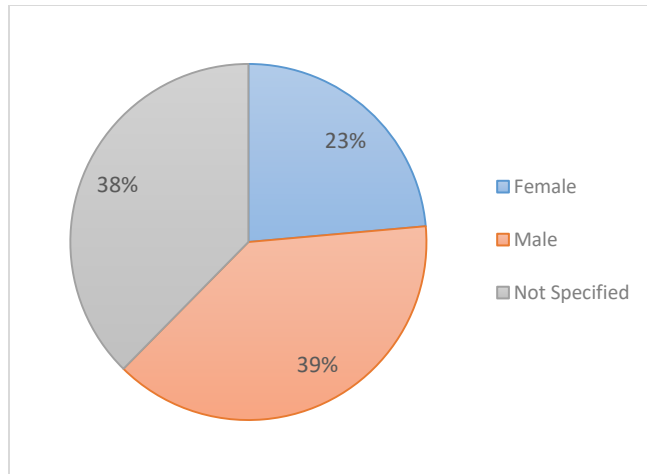


Figure 2. Participation by gender

Opening remarks

Director of Climate Change, Biodiversity and Environment, FAO – Mr Eduardo Mansur

Mr Eduardo Mansur, Director of FAO's Climate Change, Biodiversity and Environment Office, recalled that soil governance determines how soil is used, but stressed that it is often fragmented in different legal areas, such as agriculture, environment, forestry, urban planning, industry or mining, and at different administrative levels, depending on the distribution of competences at the national level. As such, he stressed that soil governance is often forgotten, neglected or integrated into broader policies on environmental governance or land use.

Mr Mansur recalled the launch of the UN Decade for Ecosystem Restoration and expressed the hope that this new year will become the pivotal year for nature and its conservation that 2020 should have been. Finally, Mr Mansur thanked the European Commission and the other donors of the GSP for their continued support in promoting sustainable soil management and advancing soil protection in the global agenda.

Permanent Representative of the European Union to FAO - H.E. Alexandra Valkenburg

H.E. Alexandra Valkenburg, Permanent Representative of the European Union to the FAO, recalled the success of the recent World Soil Day and the launch of the European Soil Observatory, both celebrated on 4th December 2020. She stressed the importance of healthy soils for our daily lives and the need for proper soil management and governance to ensure food security for today and tomorrow. H.E. Valkenburg also mentioned the launch of the European Green Deal and its ambition to achieve the protection of 75 percent of the EU's soil by 2030. She also urged the need to monitor soil quality, pollution and biodiversity in order to assess progress towards policy objectives. She underlined the relevance of global soil governance, as all elements of nature are interconnected, and recalled the close links between the EU and the GSP to promote sustainable soil management. H.E. Valkenburg expressed the hope that the European Green Deal could serve as an example for other countries and regions and welcomed the creation of SoiLEX as a way to continue learning from each other to achieve sustainable soil management.

Keynote presentation

Good Governance for sustainable soil management: How to do it? - Dr Harald Ginzky

Dr Harald Ginzky, Lawyer of the Umweltbundesamt, Germany, articulated his presentation around nine recommendations to improve soil governance and sustainable soil management. Before explaining the "how", Dr Ginzky first stressed the importance of soil governance and recalled the many ecological and social services that soil provides for climate change mitigation and food security, but also the consequences that soil degradation can have on migration, biodiversity loss and political stability. Dr Ginzky recalled the recent momentum in soil since 2012 and the need to use this momentum to establish good governance for sustainable soil management.

He stressed the importance of soil governance at the national level, as soil protection can only be implemented on the ground, and therefore presented nine recommendations to be implemented at the national level, which are:

- 1) the need to improve soil data and information through the establishment of soil scientific institutions,
- 2) the need to recognise the ecological and social functions of soil,
- 3) the need to take soil into account in all sectors related to soil management,
- 4) the need to produce legally binding standards for all threats to soil,
- 5) the need to clarify tenure rights,
- 6) the need to establish effective institutions and mechanisms for the implementation and enforcement of policy and legal instruments,
- 7) the need to involve civil society in monitoring public authorities,
- 8) the need to act now given the high public awareness of soil, and
- 9) the need to build on what already exists in terms of soil documentation.

Dr Ginzky's full presentation is available here: <https://www2.slideshare.net/Soils2012/good-governance-for-sustainable-soil-management-how-to-do-it>

The importance of regional and international soil governance – Dr Irene Heuser

Dr Irene Heuser, Chair of the Specialist Group on Soil, Desertification and Sustainable Agriculture of the IUCN World Commission on Environmental Law, recalled the changes in perspective resulting from the COVID-19 pandemic that revealed the interconnections between society and nature, directed the audience's attention to some of today's global challenges and pushed them to rethink our way of life. She stressed the importance of soils, its various threats and the need to integrate soils into policy and legislation at all levels.

Dr Heuser presented the regional and international instruments, binding and non-binding, related to soil protection and sustainable soil management in chronological order to understand the progress made over the last decades and to highlight the momentum given to soils. Although mentioned in the three Rio Conventions, she pointed out the lack of a binding international legal instrument that currently focuses exclusively on soil protection and which could support the achievement of sustainable soil management. Dr Heuser also questioned which level, national or international, would be more effective in achieving sustainable soil management. Finally, she stressed the importance of awareness raising for the

establishment of soil legislation and the need to push for soil protection in order to encourage decision makers to take concrete measures.

Dr Heuser's full presentation is available here: <https://www2.slideshare.net/Soils2012/the-importance-of-soil-awareness-for-developing-soil-protection-law>

Strengthening institutions and national capacities - Dr Oliver C. Ruppel

Dr Oliver C. Ruppel, Director and Professor of Law, Development and Rule of Law Programme (DROP), University of Stellenbosch, South Africa, welcomed the recognition of the World Food Programme by the Nobel Peace Prize 2020, which reflects the growing importance of the fight against food insecurity and indicated that this can only be achieved through improved soil governance and sustainable soil management.

He also recalled that, although not mentioned in the Paris agreement, soil is linked to several of its articles and reiterated the importance of soil carbon sequestration as a measure to mitigate and adapt to climate change. Dr Ruppel welcomed the growing importance of soil in EU policy actions related to the environment, especially its predominant role in the EU Green Deal and the EU Biodiversity Strategy for 2030 as a mean for updating the European Soil Strategy. He stressed the need to bridge the gap between soil and land management, to identify regulatory gaps resulting from the many sectors related to soil management, to identify good and bad practices and to assess institutional and governance frameworks in order to achieve optimal soil protection. By examining problems of implementation, monitoring, standardisation and enforcement, Dr Ruppel also highlighted some of the main drivers of these issues, often related to lack of funds, lack of capacity, lack of political will and human resources, among others. He stressed the importance of education in soil law and policy, which is currently lacking and which could provide personnel with the necessary expertise to ensure that soil protection is respected and improved, as well as its implementation and monitoring.

Dr Ruppel's full presentation is available here: <https://www2.slideshare.net/Soils2012/strengthening-institutions-and-national-capacities>

FAO's technical assistance on sustainable land management - Ms Margret Vidar

Ms. Margret Vidar, Legal Officer, FAO, presented FAO's technical assistance in sustainable land management. Specifically, she presented how FAO helps its members to improve and strengthen national legislation, as well as to support the development and implementation of hard and soft international laws. Ms Vidar stressed the importance of responsible governance of land tenure and the connection between land tenure and sustainable land and soil management, as well as the need to ensure enforcement of rules without punishing the poor. She also highlighted FAO's technical assistance efforts on agricultural practices related to the use of pesticides, fertilizers and antimicrobials, biodiversity and environmental protection, forestry and shelterbelt management.

Ms Vidar also presented FAOLEX, a database of national legislation, policies and bilateral agreements on food, agriculture and natural resource management. She highlighted the growing number of documents

on the platform and the need to create subset databases that are more accessible and user friendly for specific topics such as soils through the new SoiLEX platform.

Ms Vidar's full presentation is available here: <https://www2.slideshare.net/Soils2012/faos-technical-assistance-on-sustainable-land-management>

Global Soil Partnership efforts to promote soil governance from the global to the national level - Mr Hugo Bourhis

Mr Hugo Bourhis, GSP Secretariat, recalled the efforts of the GSP to support soil governance from the global to the national level through awareness-raising activities on soils in order to increase public interest, as well as the improvement of soil data and information to monitor soil changes and assess progress. He also highlighted the development and global endorsement by FAO members of normative documents such as the Voluntary Guidelines for Sustainable Soil Management, which can be easily translated into effective action at national and local level through the development of regulations and awareness-raising programmes.

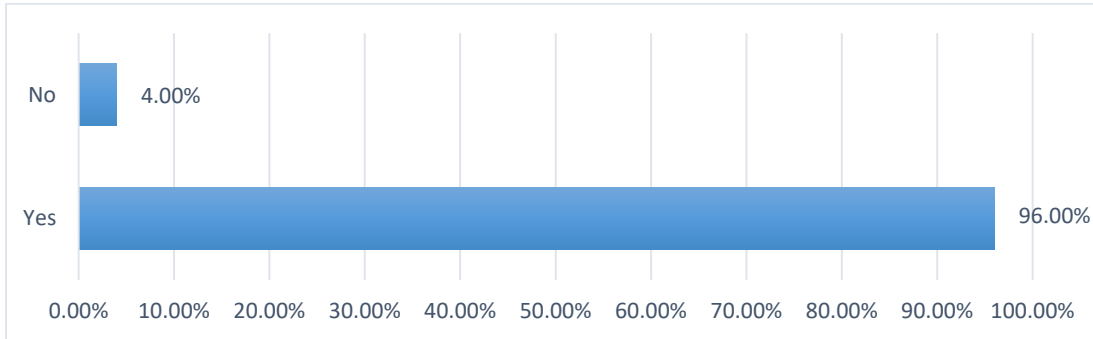
During his presentation, Mr Bourhis launched the SoiLEX platform, the GSP's global database of national legislation on soil protection, conservation and restoration. He explained that this platform is now available on the FAO Soil Portal website (<http://www.fao.org/soils-portal/soilex/en/>) and aims to facilitate the search for national soil-related legal instruments through a keyword search and a search by country profile. Currently, the website has more than 1 700 documents from 175 countries and will be constantly updated thanks to national contributions. He stressed that the platform has been developed through a collaborative approach with GSP focal points and national experts to validate the information collected through FAOLEX and the EU Soil Wiki and ensure that the platform is as accurate and up-to-date as possible to reflect each country's legal framework. On the basis of the information on the website, thematic and country studies on specific aspects of soil legislation will be carried out by the GSP Working Group on Soil Legislation to document good practices and encourage exchanges of experience on soil governance.

Mr Bourhis' full presentation is available here: <https://www2.slideshare.net/Soils2012/global-soil-partnership-efforts-to-promote-soil-governance-from-the-global-to-the-national-level-241292095>

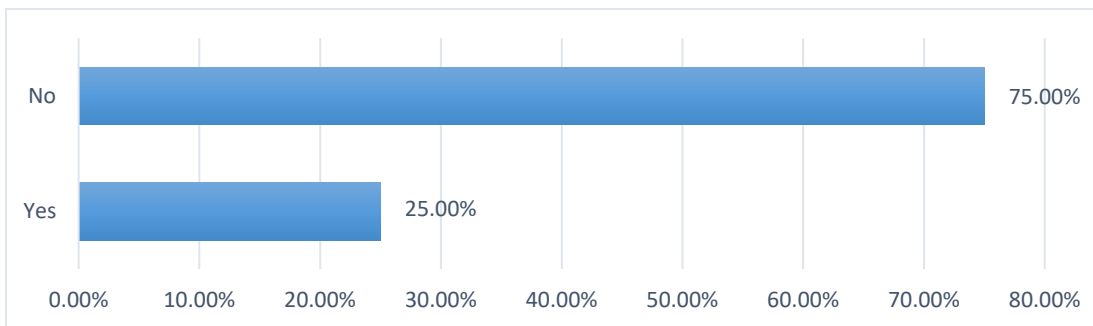
Interactive Session - Poll Questions

During the presentations, an interactive session was launched with three poll questions posed to the participants as follows.

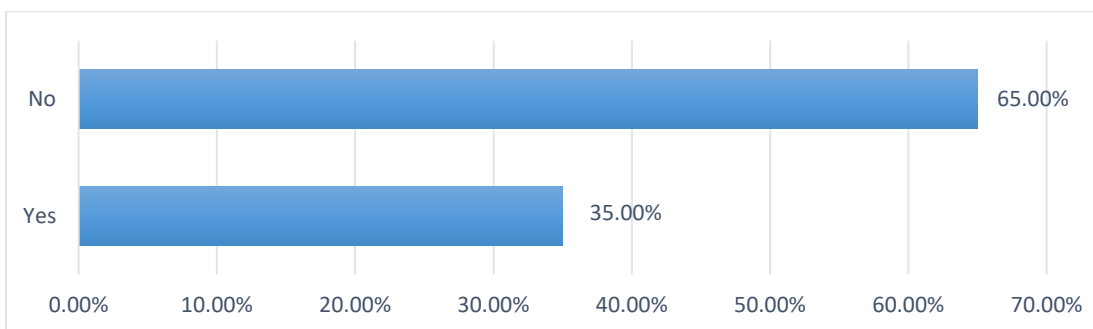
1. At the global level, do you think there is still a gap in terms of soil governance?



2. Do you think that your country is doing a good job on soil governance?



3. Does your country have a specific soil law that provides the framework for developing policies and actions for sustainable soil management?



Question and answer

Mr Vargas selected in the chat some questions that were discussed during the webinar in the question and answer (Q&A) session.

- **Does a soil law guarantee sufficient action to protect soil?**

Dr Irene Heuser stressed the need for tailor-made regulations to protect soil from its many and varied threats.

Dr Harald Ginzky pointed out that the main obstacles to good soil governance are weak implementation and enforcement. He also stressed the way land is considered in many countries as a private good where the state is not allowed to intervene and the need to overcome this obstacle. Finally, Dr Ginzky underlined the need for science-based standards to achieve good soil governance on the ground for all the different soil threats.

Mr Hugo Bourhis also emphasised the need to implement these soil laws on the ground. He insisted on the need to improve scientific data and information to monitor the impact of these laws and assess whether or not the objectives set are being met.

- **How can the global level help policy-makers to take action on soil protection at the national level?**

Dr Irene Heuser pointed out the need for action at all levels, as there is a clear link between the way soil is protected at national, regional and international level. She also urged the need to call for increased soil protection in order to achieve real change in the decision-making and legal field.

Ms Margret Vidar recalled the growing political will to fight hunger, which has increased by more than 130 million people in 2020 compared to the previous year due to the Covid-19 pandemic. Building on this political will, she suggested that soil could be brought to the forefront of issues related to food security and hunger.

Dr Oliver C. Ruppel encouraged the need to consider soil as a common good. Putting it in the context of soil security, he stressed that much can be achieved by linking it to concepts such as human security, environmental security, economic security.

Dr Harald Ginzky pointed out that there is now a strong political will for soil protection and that sustainable soil management has never been more important and relevant.

Webinar participants raised other questions in the chat which there was not time to answer live but which the panellists answered afterwards and are summarised below.

Set of questions related to soil health and soil threats:

How to maintain healthy soils in countries where intensive cultivation leads to nutrient depletion? Most fertiliser management policies are designed to provide incentives for farmers to change their behaviour, for example by developing nutrient management plans or by using more environmentally friendly fertilisers. What about producers of synthetic inputs who put pressure on policy-makers? Do they still produce a huge amount of fertiliser and offer it to farmers? How can we change the paradigm to focus on soil conditions rather than crop yields? What about legislation regulating synthetic fertilizer producers, not just farmers?

Mr Hugo Bourhis: Fertilizers are subject to various legislation and regulations related to production, trade, distribution, marketing, safety, and use that can vary among, or within, countries. The launch of the International Code of Conduct for the Sustainable Use and Management of Fertilizers in 2019 provides a framework and voluntary set of practices to serve all stakeholders that are directly or indirectly involved with fertilizers, setting out roles, responsibilities, and actions. The full document is available here: <http://www.fao.org/3/ca5253en/ca5253en.pdf>

How to improve soil organic carbon content?

Mr Hugo Bourhis: By sustainably managing soils and rehabilitating degraded land, you can improve soil organic carbon content. RECSOIL and the Voluntary Guidelines for Sustainable Soil Management are tools available to improve the organic carbon content of soils. The full documents are available here: <http://www.fao.org/3/ca6522en/CA6522EN.pdf> (RECSOIL) and here: <http://www.fao.org/3/i6874en/i6874EN.pdf> (Voluntary Guidelines for Sustainable Soil Management).

In order to preserve soil biodiversity as an important component of soil governance, what steps is the FAO taking to stop the overuse of agrochemicals, as many soils in many parts of the world are already polluted by POPs, what steps are planned to stop pollution by other chemicals, including pesticides and, recently, biocides, through COVID-19?

Ms Margret Vidar: Through the pesticide risk reduction team of The Plant Production and Protection Division (NSP), FAO supports different activities aimed at minimizing the risks arising from pesticide use and their impact on soil biodiversity. These include: (i) the implementation of the International Code of Conduct on Pesticide Management (ICoCPM) and the development and implementation of its Guidance (on pesticide registration, legislation, HHPs, etc.) and tools including Module on soil risk assessment; enhancing national capacity of sound management of pesticide through lifecycle, promoting the implementation of Integrated Pest Management (IPM) programs to reduce pesticide use, as well as reducing pesticide risks through programs including the prevention and disposal of obsolete pesticides. You can find more information in the website <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/en/>

How can we solve the problem of soil compaction due to the circulation of tractors or engines? How to manage this problem? Which are the research gaps on this subject to prevent and help farms?

Mr Hugo Bourhis: Soil compaction is one of the ten global threats to soil, as it reduces soil aeration, decreases drainage and water infiltration, and generates more runoff. Compaction limits rooting seed growth and germination through high mechanical impedance, which affects soil biodiversity, and causes the formation of crusts on the surface of the soil. The Voluntary Guidelines for Sustainable Soil Management provide recommendations to prevent soil compaction. The full document is available here: <http://www.fao.org/3/i6874en/i6874EN.pdf>

Today, our ecosystems are under great pressure due to urbanisation and overexploitation of biological resources. What effective local governance must we develop for a reasonable and sustainable use of land in order to continue to ensure food security for populations that are increasingly vulnerable to climate change?

Dr Harald Ginzky: A very complex but timely question. I would recommend that the soil governance need to ensure the maintenance and enhancement of all ecological and social services of soils, in particular a good ecological quality of soils.

Do you think that desertification is also a threat to soils?

Dr Irene Heuser: I would say that desertification is more a result of the soil threats, which I mentioned in my presentation. This is also defined in the legal text of Art. 1 (a) and (f) of the UN Convention to combat desertification (UNCCD): “Desertification” means land degradation in certain areas resulting from various factors, including climatic variations and human activities. “Land degradation” essentially means a reduction or loss in biological or economic productivity, resulting from land uses or from a process or combination of processes, such as soil erosion, deterioration of the physical, chemical and biological or economic properties of soil or long-term loss of natural vegetation. Therefore, all soil threats could contribute to an increase in desertification.

How can the GSP contribute to reclaiming land from the sea, to better use of coastal soils, to soil management by river basins?

Dr Natalia Rodriguez Eugenio: Coastal areas and areas recovered from marine intrusion are very sensitive ecosystems subject to delicate balances, often harbouring high biodiversity and acting as natural barriers to natural disasters. Any human intervention on these lands endangers this balance, and their use as agricultural soils is not recommended.

On the other hand, integrated watershed-based soil management is essential to achieve sustainable soil management. Soil degradation processes, such as erosion, pollution and nutrient movements, and their relationship with water, vegetation cover and human intervention need to be analysed and managed at the catchment level to be truly effective, as many of these degradation processes and dependencies are not perceptible at the plot level and could be underestimated without a broader view of the landscape.

Set of questions related to soil governance:

What is the difference between governance and policy in terms of soil use? How to develop a good soil use policy and strategy?

Mr Hugo Bourhis: Governance is defined by the FAO as the processes by which public and private actors articulate their interests, define and prioritise issues, and make, implement, monitor and enforce decisions. This definition recognises the wide range of institutions and actors involved in decision-making, including policy makers, and the importance of power dynamics between these different actors. The core principles of good governance, as set out in the Millennium Declaration in 2000, include concepts such as participation, equity, non-discrimination and inclusion, gender equality, regulation, transparency, accountability and responsiveness. While some may seem far removed from the ground, all these principles are interlinked and mutually reinforcing in achieving good soil governance.

What would be (concretely) a legally binding standard (see recommendation 4 of Dr Harald's presentation)? How can legally binding standards be combined with extreme weather events that farmers cannot control?

Dr Harald Ginzky: In Germany the ordinance for soil protection entails specific numbers for certain parameter (e.g. lead, cadmium) which must not be exceeded. Standards could probably not consider extreme events. For extreme weather events particular management measures need to be established. To do so, could be a legal obligation.?

Would the soil law proposed be differentiated between continents? Although African land is managed more by the people than by the government?

Dr Harald Ginzky: The legal provision must address the major soil threats in a country. In Australia, soil management in urban areas and de-sealing is a major topic due to the extreme temperatures. In Africa, the most relevant service which could be provided by soils is food security to avoid hunger and malnutrition. It is not only Africa that land is mainly managed by the people. This is true for all continents. Public entities should ensure that this management comply with the requirements of sustainable soil management.

Why do you propose to limit the number of foreign investors? Are you proposing that the price of land should be lowered by limiting access to land? Land appropriation and soil sealing fall into a legal "grey zone". Environmental laws protect natural habitats and agricultural laws limit soil management, but conversion of agricultural land is a victim of land-use planning laws, which generally do not take soil into account.

Dr Oliver C. Ruppel: Put a price tag on soil (which is actually priceless).

Dr Harald Ginzky: A control system is necessary that foreign investors comply with all legal provisions concerning tenure rights and sustainable soil management. There is no reason to limit

the number of foreign investors per se. At the same time, it needs to be avoided that foreign investors just acquire bigger portions of land, without using it, and thereby restricting in fact the access to land of local people.

Is there a gap between developing countries and developed countries regarding the enforcement of soil protection laws? Is it possible to create a law on soil protection and restoration in developing countries in a short time? Are there any relevant regional instruments for Latin America and the Caribbean?

Dr Oliver C. Ruppel: Yes and no. Soil protection has largely been neglected, even in the developed world. In the developing world, this is of course exacerbated by weak regulatory frameworks, weak governance systems, corruption and deficient rule of law. When there is political will, this will be possible in a relatively short period of time, also depending on the existing legal framework structures on the ground.

Dr Irene Heuser: In the limited amount of time in the webinar (which was intended to give an overview), I just gave examples for regional instruments for the protection and sustainable use of soils (Africa, ASEAN, EU). Latin America and the Caribbean is an interesting region, because they have the world's largest reserves of arable land and almost 50 % of the soil is still covered with forests. Unfortunately, my Spanish language skills are too limited to provide the information about specific legal instruments on soil, but maybe the promising SoILEX database will help.

Mr Hugo Bourhis: Although Latin America and the Caribbean does not have specific soil legislation covering the whole region, some regional agreements support soil protection by addressing certain threats to soil, such as pollution. Indeed, some agreements aim to control the transboundary movement of hazardous waste and seek to prevent illegal trafficking and disposal of waste in the region, which can have a beneficial impact on the prevention of soil pollution.

Dr. Ginzky's recommendations 4 (binding laws) and 6 (effective implementation) are essential, especially land reclassification and soil sealing. Many countries have strict laws that are ignored or violated. We need global targets and sanctions. When Valkenburg says the EU has set a target of 75% healthy soil by 2030, does that include sealed soil or just 75% of the rest? The loss of quality farmland is a global crisis.

Dr Irene Heuser: I totally agree with your statement – it is not only about effective legislation on all levels, but also about implementation of (currently only rarely) existing legislation on soil protection and sustainable use of soils. Of course, I do not want to speak on behalf of Ms. Valkenburg concerning your quote of her statement. But according to the proposed European Union mission 'Caring for soil is caring for life', this contains the general goal of ensuring that 75% of soils are healthy by 2030 and are able to provide essential ecosystem services. This goal must be specified in detail for each specific soil threat (what the EU has not quite done yet). For soil sealing, the EU currently discusses the target of no net land take by 2050, which is, from my personal point of view, unlikely to be met – unless annual rates of soil sealing are massively reduced and land recycling is increased. In the EU, land take and soil sealing continue predominantly at the expense of agricultural land at an annual net land take estimated at 440 km²/year in the period 2012-2018. The new EU Soil Strategy is intended to provide the framework

and the concrete pathway towards achieving these objectives and I hope that the 75 % will – although not likely from my experience – also include sealed soils.

I would like to ask the speakers to comment on the new European agricultural policy and its weakening by agricultural stakeholders. What needs to be done in policy terms to realign agricultural subsidies that are vital for farmers, in a more sustainable direction as has been discovered in the literature?

Dr Irene Heuser: Processes like soil erosion, decline of soil organic matter, soil contamination (e.g. by heavy metals), soil compaction and salinization can reduce the ecological state and the productive capacity of soils. The current legislative proposals on the Common Agricultural Policy (CAP) for the period 2021-27 (from June 2018) might contribute to preventing and mitigating soil degradation processes, in particular through agri-environmental measures and the provisions of cross-compliance (EU mandatory standards for minimum soil cover and further practices that limit soil erosion and maintain organic matter etc.). Farmers who do not respect the EU rules can see the agri-environmental and the direct payments reduced under the cross-compliance system. The CAP could also be a key tool in the fight against climate change: 25% of the last CAP period (2014-20) funding was dedicated to increasing carbon sequestration and storage through measures including soil protection. Due to the ongoing negotiations between the European Parliament and the Council of the EU, the provisional start date of the proposed CAP reform has been moved to 1 January 2023. I hope that the “farm to fork“-strategy and the biodiversity strategy as part of the European Green Deal will really achieve higher ambitions for environmental measures and provide for a real shift in the Common Agricultural Policy towards a better and more sustainable soil management.

Are binding or non-binding instruments being evaluated to see how compliance/enforcement contributes to good soil governance around the world? Is there a framework to monitor this application?

Dr Irene Heuser: There is no comprehensive systematic evaluation of compliance/enforcement of binding and non-binding soil protection instruments yet, but some jurisprudential authors have examined certain aspects of this huge spectrum. An early (“preliminary“) report on “Legal and institutional frameworks for sustainable soils“ has been written by my IUCN WCEL colleagues, Prof Ian Hannam and Prof Ben Boer, in the year 2002 (published at <https://www.iucn.org/es/node/20088>). I would especially recommend reading the various chapters in the publications of International Yearbook on Soil Law and Policy (IYSLP) (see <https://www.umweltbundesamt.de/en/topics/international-yearbook-of-soil-law-policy>) which also deal with compliance and implementation. In addition, maybe the FAO SoILEX will provide this information in the long run.

How is it that at the international level, soil seems to be separated from land and climate, rather than integrated into those existing protocols and instruments that are already binding at the national level. This will highlight soils, especially in SIDS (Caribbean), where soil governance is non-existent.

Dr Irene Heuser: On international level, soils are integrated to a certain degree into the United Nations Convention to Combat Desertification, but it does not contain specific legal instruments to address soil threats; an own protocol on the protection and sustainable use of soils is still missing. The United Nations Framework Convention on Climate Change also deals with the important role of soils as major global carbon sinks and with soil organic matter decline, but mainly focuses on other goals. The reason for this situation is – to put it simple – the lack of political will! A draft for a soil protection protocol has been proposed by the IUCN World Commission on Environmental Law's Specialist Group on "Soil, Desertification and Sustainable Agriculture" in several versions... We recommend a combination of legal instruments for the protection and sustainable use of soils on every level (international, regional, national, local), especially for those regions where an effective legal regime for soils is missing.

How can local NGOs (and anyone from civil society) engage in soil governance when local institutions are not engaged in soil protection (e.g. by creating biased regulatory frameworks for impact assessments) and when there are both local and international obstacles (even exclusive FAO training offers for a selected circle of professionals! What are the opportunities to participate in soil governance?

Dr Irene Heuser: There are many opportunities to contribute to building further awareness for the scientific contexts and protection needs of soils, e.g. through awareness raising (even through gardening and growing food at home) or education and information measures up to getting involved in environmental impact assessments on local level with focus on the effects of a certain project on sealing, compaction and other soil threats. In the context of the implementation of SDG 15, there is a huge amount of options to engage in soil governance.

What strategy for equitable access to global soil resources?

Mr Hugo Bourhis: In order to achieve equitable access to the world's soil resources, it is essential to ensure equitable access to land and clear and secure land tenure, especially for women, indigenous peoples and other vulnerable groups. Indeed, improved land governance and secure land tenure are crucial to prevent and reduce land conflicts.

Could the panel members share their thoughts on a smart regulation system for soils (including voluntary incentives)?

Dr Harald Ginzky: Smart soil regulation must entail a price tag for the long-term ecological and social services of soils.

Dr Oliver C. Ruppel: New standards; corporate incentives; shifting property regimes; limiting acquisition and ownership of private property.

Dr Irene Heuser: The smartness of soil protection provisions depends on the specific circumstances of the concrete soils, like the soil type, the climate, the level of pollution so far etc. and the framework conditions of the respective environmental law system. These regulations should be developed appropriately and should contain measures for protection against all locally existing soil threats. There is a range of legal instruments conceivable.

How can soil governance be proactive rather than reactive? For example, how can we make the stripping of agricultural soils a globally banned practice?

Dr Oliver C. Ruppel: Again, by putting a price tag on soil (which is actually priceless); by means of an international law agreement; by incorporating soil more effectively in the climate regimes; by means of effective incentive and penal structures that need to be elaborated.

How can international organisations (such as IUCN, FAO, NGOs, etc.) raise awareness among national authorities of the need to update policies and strengthen good soil practices? How can they be held accountable for the mismanagement of this resource? We all know the dangers of irresponsibility but change is more bureaucratic than we are willing to admit?

Ms Margret Vidar: FAO and other relevant organizations, including through the Global Soil Partnerships, are constantly raising awareness of technical and policy measures that need to be taken. However, enforcement is generally done at national level, through national legislation. FAO provides development law assistance to members upon their request and subject to available resources. Interested countries are advised to contact the FAO Representative in their country. Guidance is also available from the Convention to Combat Desertification, see for instance on Land Degradation Neutrality <https://knowledge.unccd.int/knowledge-products-and-pillars/guide-scientific-conceptual-framework-ldn/key-elements-scientific> Furthermore, SDG 15 requires countries to report on and track a number of indicators related to land degradation, which also can strengthen accountability at national and international levels.

At FAO level, are there soil governance instruments for island states where there is a shortage of agricultural soils and strong competition with urbanisation?

Ms Margret Vidar: Neither the revised Soil Charter nor the Voluntary Guidelines on Sustainable Soil Management make specific reference to islands per se. However, they do have a number of relevant provisions for sustainable soil management.

Have you experienced a case where soil governance laws are in line with or inspired by the country's planning document/scheme?

Ms Margret Vidar: See table marked FAOLEX. A number of countries do include references to land use planning in soil legislation. Even if there are no explicit provisions, it is clear that land use planning is one of the tools to support sustainable soil management.

How effective is advocacy for soil governance with government agencies, especially extension service delivery units?

Mr Hugo Bourhis: Extension services assist farmers by providing information and new ideas to support their agricultural production. This technical advice can encourage the implementation of

sustainable agricultural practices that take into account sustainable soil management. By encouraging certain practices, the Voluntary Guidelines for Sustainable Soil Management (<http://www.fao.org/3/a-bl813e.pdf>) can support that goal on the ground.

In December 2020 the International Law Association approved the 2020 ILA Guidelines on the Role of International Law in Sustainable Natural Resources Management for Development (<https://ila.vettoreweb.com/Storage/Download.aspx?DbStorageId=24668&StorageFileGuid=29a37910-46d2-4829-9197-e17080592f7b>). The Guidelines acknowledge the importance of soils, and their connection to many important issues at the global, regional and national level. How can these Guidelines contribute to improving soil governance?

Mr Hugo Bourhis: Guidelines and non-binding documents support soil governance as they can be easily translated into effective action and serve as a backbone for regulations and strategies. The highlighted document is a comprehensive guideline that links soil protection with economic, social and environmental issues, which is fully in line with the GSP's efforts to highlight the contribution of soil in our daily lives and how soil is essential for addressing global challenges such as food security, climate change mitigation and adaptation, clean water and poverty reduction.

It is clear that soil is a very important resource for the life of the heart, how can citizens help each other and the government to protect the soil? How can we change the considerations that the soil is only a substrate, as posed by many agricultural practices promoted by a large number of technicians in agricultural projects? What should be the steps to be taken by people who are not soil specialists or who are not part of the government to see changes in soil governance? What should be the most important steps to be taken? Are we just waiting for the government to change legislation to see changes in soil governance? What else can be done?

Mr Hugo Bourhis: In order to change considerations and perceptions about soil, awareness raising is fundamental for linking soil to our daily lives and highlighting the many ecosystem services it provides. In this way, soils will no longer be considered only as linked to agricultural and rural projects, but will be truly valued and protected.

Advertising for soil protection is within everyone's reach: despite successful efforts to raise public awareness of the importance of soil for our daily lives, soil remains less known by the general public compared to other natural resources such as water. Therefore, by raising public awareness of soil, more people will understand why soil is important and will push for its sustainable protection. Indeed, soil governance includes many stakeholders outside decision-makers. Soil scientists, by improving soil data and information, can support soil monitoring and improve the way in which soils are effectively preserved. The general public can also advance the soil agenda by raising awareness of the importance of soils. As such, everyone can contribute to changing the way soil is used and ensuring the sustainable protection of this limited natural resource.

How can universities and research centres contribute to soil governance? What is our main role? And how is soil governance linked to soil security?

Dr Oliver C. Ruppel: Intensify more cross-cutting research and function as networking platforms that engage in academic diplomacy, which can influence the global / regional / local soil protection agendas. Soil security is part of human security, which needs to be of highest governance consideration. In fact, soil should be increasingly seen through a securitised lens, which emphasises the necessary level of protection for human survival.

How important are the reactions of small farmers in influencing and determining soil governance? What efforts have been made to obtain and adjust governance to each local need?

Mr Hugo Bourhis: Farmers are key players in achieving sustainable soil management. Through awareness raising programmes and training on the benefits of sustainable soil management practices, farmers can change their practices and improve soil management. This can have consequences on consumption patterns, mentalities and thus influence the political sphere and the private sector. For example, through reduced or more sustainable use of fertilisers, farmers can send clear messages to stakeholders in the sector and thus influence soil governance.

How can a local organisation partner with the FAO to raise awareness of the importance of appropriate soil governance for food security?

Mr Hugo Bourhis: A local organisation can become a FAO Global Soil Partnership (GSP) partner by completing the GSP Partnership form available here: <http://www.fao.org/global-soil-partnership/partners/en/>

Are there prospects for the construction of a specific legal framework for soil data (in particular access and sharing of soil data)?

Mr Hugo Bourhis: There is currently no specific legal framework for soil data. However, the Global Soil Information System (GLOSIS) aims to develop a spatial data infrastructure that brings together soil information collected by national institutions. Such efforts facilitate the exchange of standardized soil data at national, institutional, regional and international scales. Additional information on GLOSIS are available here: <http://www.fao.org/global-soil-partnership/areas-of-work/soil-information-and-data/en/>

Does this database include regulatory frameworks on how soils should be treated in environmental impact assessments or are they more general laws?

Mr Hugo Bourhis: The SoiLEX database reflects the cross-cutting nature of soils. As such, the database includes a wide range of legal instruments ranging from urban, environmental, industrial, mining and agricultural legislation to name a few. As such, environmental impact assessment is also present in some countries where the instrument specifically covers soil. To browse the wide variety of documents presented, the SoiLEX platform is available here: <http://www.fao.org/soils-portal/soilex/en/>

Annex 1 | Agenda, presentations and recording

Agenda

15:00-15:10 | OPENING REMARKS

- Mr Eduardo Mansur, Director Office of Climate Change, Biodiversity and Environment, FAO
- H.E. Alexandra Valkenburg, Permanent Representative of the European Union to FAO

15:10–15:20 | [Good Governance for sustainable soil management: How to do it?](#) Dr Harald Ginzky, Lawyer of Umweltbundesamt, Germany

15:20–15:35 | [The importance of regional and international soil governance](#), Dr Irene Heuser, Chair, Specialist Group on Soil, Desertification and Sustainable Agriculture, IUCN World Commission on Environmental Law

15:35–15:50 | [Strengthening institutions and national capacities](#), Dr Oliver C. Ruppel, Director and Professor of Law, Development and Rule of Law Programme (DROP), Stellenbosch University, South Africa

15:50–16:00 | [FAO's technical assistance on sustainable land management](#), Ms Margret Vidar, Legal Officer, FAO

16:00–16:10 | [Global Soil Partnership efforts to promote soil governance from the global to the national level](#), Mr Hugo Bourhis, International Consultant, FAO GSP

16:10–16:25 | Panel discussion and Q&A

16:25–16:30 | CONCLUSION, Mr Ronald Vargas, FAO GSP

Moderator: Mr Ronald Vargas, FAO GSP

Related links:

[Meeting recording](#)

[SoiLEX website](#)


[Additional information on SoiLEX and the GSP Working Group on Soil Legislation](#)

Annex 2 | Digital Communication Material

Facebook

The Global Soil Partnership
2d · 🌐

Have you ever wondered what soil governance is?
#DYK how many legal instruments related to soil management and protection there are in your country?
If you want answers to these questions,
👉 Join our webinar today at 3 PM and have a look at our new !! SoileX tool !!
REGISTER HERE 👉 <https://tinyurl.com/yare3slh>
DISCOVER SoileX 👉 <http://www.fao.org/soils-portal/soilex/en/>



3,578
People Reached

275
Engagements

The Global Soil Partnership
1d · 🌐

👉 The SoileX programme is officially launched 🎉
SoileX is the result of a collaborative approach with national experts from around the world. It reflects each country's legal framework for soil protection and currently contains more than 1700 documents from 175 countries.
For more 👉 <https://bit.ly/2Lvh4zB>



3,201
People Reached

279
Engagements

Twitter

FAO Land and Water @FAOLandWater · Jan 13

"With the 🌍's population expected to increase by 2 billion persons over the next 30 years, the issue of protecting our soils and strengthening #soil governance is more topical than ever." - @Eduardo52664121 @FAOclimate



Mr Eduardo Mansur
Director Office of Climate Change,
Biodiversity and Environment, FAO

Food and Agriculture Organization of the United Nations

FAO Land and Water @FAOLandWater · Jan 13

"The effects of #soil degradation do not know borders. Today's launch of SoileX is relevant and important. The European Green Deal and its future Soil Strategy, together with the newly launched EU Soil Observatory, can provide inspiration and good examples." - @avalkenburg



H.E. Alexandra Valkenburg
Permanent Representative
of the European Union to FAO

Food and Agriculture Organization of the United Nations

FAO Land and Water
@FAOLandWater

"How to design effective soil governance at the national level? Here are 9 recommendations to achieve that goal."
bit.ly/3bF0acZ
 - @HGinzky

Soil governance webinar
13 January 2021

Dr Harald Ginzky
Lawyer of Umweltbundesamt, Germany

Food and Agriculture Organization of the United Nations

FAO Land and Water
@FAOLandWater

"Given the state of soil resources, 2021 is the year to step up and join efforts!"

To protect soils and secure their multiple functions, including carbon cycle and food security, specific legal instruments are urgently needed at national, regional, and levels." - @IreneHeuser

Soil governance webinar
13 January 2021

Dr Irene Heuser
Chair, Specialist Group on Soil, Desertification and Sustainable Agriculture, IUCN World Commission on Environmental Law

Food and Agriculture Organization of the United Nations

FAO Land and Water
@FAOLandWater

To me, this is the best quote that explains what soil is. 🌱
 "Here is my secret. It's quite simple: One sees clearly only with the ❤️. Anything essential is invisible to the eyes." - Antoine de Saint-Exupéry, Le Petit Prince" -
 @OliverRuppel

Soil governance webinar
13 January 2021

Dr Oliver C. Ruppel
Director and Professor of Law, Development and Rule of Law Programme (DROP), Stellenbosch University, South Africa

Food and Agriculture Organization of the United Nations

4:24 PM · Jan 13, 2021 · Twitter Web App

FAO Land and Water
@FAOLandWater

"FAO assists member countries in improving and strengthening their national legislation to promote sustainable land and soil management. 🌱" - Margret Vidar

Soil governance webinar
13 January 2021

Ms Margret Vidar
Legal Officer, FAO

Food and Agriculture Organization of the United Nations

4:38 PM · Jan 13, 2021 · Twitter Web App

FAO Land and Water
@FAOLandWater

"SoiLEX is the result of a collaborative approach with national experts from around the 🌍 to make the platform as accurate as possible to reflect each country's legal framework for #soil protection." - Hugo Bourhis

Soil governance webinar
13 January 2021

Mr Hugo Bourhis
International Consultant, FAO GSP

Food and Agriculture Organization of the United Nations

4:58 PM · Jan 13, 2021 · Twitter Web App

FAO Land and Water
@FAOLandWater

"We hope that through SoiLEX we will gain a better understanding of how #soil is currently legally protected in order to document good practice and encourage the exchange of experience between countries." -
 @vargasfao

Soil governance webinar
13 January 2021

Mr Ronald Vargas
FAO Global Soil Partnership

Food and Agriculture Organization of the United Nations

5:07 PM · Jan 13, 2021 · Twitter Web App