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2023

Euskadiko Lurzorua Babesteko Kongresua
Congreso de Protección del Suelo de Euskadi
Basque Country Soil Protection Congress

CONCLUSIONS

Contributions for the deployment of the
Basque Soil Protection Strategy 2030

SOME HEADLINES

- ✓ **We must be AMBITIOUS as regards soil protection.** Decontaminate, yes, but also regenerate, protect. We are still at the beginning.
- ✓ **Soil, KEY to achieve the majority of the SDGs**
 - ✓ **SDG15** Sustainably manage forests, combat desertification, **halt and reverse land degradation**, and halt biodiversity loss.
- ✓ **60% of biodiversity is in the soil.** The biodiversity in the soil is still a real black box.
- ✓ **60% of Europe's soil undergo degradation processes**
- ✓ **Only sustainable management can slow down degradation** Soil has gone from being seen as a medium to being considered as a fundamental element for life on the planet.
- ✓ **The NON occupancy of land along with the reuse of vacant plots**, key for a small country such as the Basque Country.
- ✓ **Soil will be fundamental in the mitigation processes in the coming decades.** Soil offers us mechanisms to intervene in the carbon cycle (sequestration), but also to adapt to the effects of climate change.
- ✓ **Advance thanks to Europe also moving forward**

SOME HEADLINES

OBSERVE, THINK and ACT DIFFERENTLY to:

- ✓ Design policies based on **data**. Europe will have to define common standard and indicators.
- ✓ Pass **legislation** that bolsters soil protection.
- ✓ Work at **multi-stakeholder level**, improving the **governance** systems. Non sectoral, holistic policies.
- ✓ Share responsibilities and benefits to involve all **stakeholders**. Co-creation. Think in the long term. Replicate, scale.
- ✓ Connect environmental policies and **territorial/spatial planning**.
- ✓ Change of paradigm: **the value** that **soils** offer society and the planet, at the heart. Quantify and highlight not only the economic, but also the social and environmental value.
- ✓ Implement the **One Health** approach (animal, environmental, human, soil health...).
- ✓ Not forget that the earth from **excavations** is not waste, but rather a very valuable material.
- ✓ Bolster **awareness and dissemination** of the value of soil among administrations and citizens.
- ✓ Integrate the **gender perspective** in sustainable soil management.

Panel 1. The Role of Soil in the Farm to Fork Strategy

- *CAP as a soil protection instrument.* Pilar Santamaría. HAZI Foundation
- *Managing water and soil in agriculture.* Iñigo Virto. Public University of Navarre
- *Rationalisation of the use of fertilisers in agriculture.* Ana Aizpurua. NEIKER
- *The challenge of the rational use of pesticides in the framework of sustainable agriculture.* Ane Zabalza. Public University of Navarre



SUMMARY

- Soil plays a fundamental role in the *Farm to Fork Strategy* and in the Common Agricultural Policy (CAP). The primary sector is highly involved.
- In the Basque Country **80% of the territory** is managed by this sector; the health of our land greatly depends on the practices used.
- Direct link and strong link between **soil and water**, as regards their quality and quantity.
- Targets:
 - Cut use of **fertilizers** by 20%
 - Cut **plant protection** products by 50%

KEY IDEAS

- Low carbon agriculture and agroecology
- Protecting **water**: integrated management of the territory
- Drop in the application of **fertilizers**:
 - Precision technology
 - Remote sensing technologies
- Cut use of plant protection products:
 - Integrated pest management
 - Search for new sustainable active materials

Panel 2. Soil Strategy for 2030 and proposed monitoring and resilience directive. How to achieve healthy soils by 2050?



KEY IDEAS

- Harmonisation of criteria among the Member States: one of the great challenges of the *European Soil Strategy*.
- We need to have **health soil**, but...how healthy is healthy?
- Land **occupancy** and **artificialisation**; a major unresolved issue.
- Circularity of the **excavated earth**; how to turn a problem into an opportunity? The proposed directive should seize the opportunity.

Panel 3. Managing soil occupancy by means of spatial planning

- *Zoning of the territory to conserve the natural heritage.*
Marta Rozas. Basque Government
- *Managing soil occupancy by means of spatial planning. Do you want to have a living countryside in EUSKAL HIRIA?*
Asier Arrese. HAZI
- *Soil protection in the Spatial Planning Guidelines (DOT).*
Leire Urcola. Basque Government
- *Managing soil occupancy by means of spatial planning.*
Manuel Borobio. ABT-Taller de Estudios



SUMMARY

- From the **Spatial Planning Guidelines (DOT)**; soil is a basic resource to be protected, controlling its threats and harnessing its potential without degrading it.
- From the **rural development** approach; we need to revitalise rural work that is disappearing
- From the **natural heritage**; soil is a NON renewable resource, its protection is priority.
- From a **systemic approach**; a holistic approach that determines the needs of the citizens (quality of life) and the action of the administration (resource management) is needed for the well-being of people and societies.

KEY IDEAS

- From the Spatial Planning Guidelines (DOT):
 - Prioritise urban renewal
 - Avoid new occupancies
 - Preserve agricultural land
 - Drive the green infrastructure, as a new means of territorial planning to host and harmonise different perspectives.
- From **rural development**; comprehensive policies of positive discrimination in those environment, “conservation means using” .
- From **natural heritage**; zoning processes are key for soil conservation
- From a **systemic approach**:

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Panel 4. Soil, an ally in climate change mitigation and adaptation

- *SoilSkin.*
Nagore García. Autonomous University of Madrid
- *Urban Klima 2050.* Malake Muñoz. Ihobe.
- *NAdapta.* Rodrigo Antón Sobejano. Public University of Navarre
- *Smart city Valladolid.*
Alicia Villazan Cabero. Valladolid City Council
- *Life eCOadapt50. Co-creation of strategic action to adapt to the climate change of the territories and local economies.*
Núria Parpal. Barcelona Provincial Council
- *European Commission.* Ion Codescu



SUMMARY

- Soils (main carbon sinks and contributors to mitigation) are also an essential ally in adaptation.
- Soil biodiversity plays an important role globally, but is very vulnerable to climate change.
- Better soil quality is one of the co-benefits of the adaptation actions.
- The Basque Country shows the convergence with climate and soil protection targets by means of initiatives such as Urban Klima 2050.
- Europe expanding experience in climate change and soil; rewilding of urban space, agriculture adaptation strategies, etc.
- Soil is a lever for decarbonisation and decarbonisation is also one for soil protection.

KEY IDEAS

- **Soil management strategies** are essential to optimise the **agri-ecosystem** to climate change.
- The **soil of the cities** as a substrate is key to implement nature-based solution and urban adaptation to climate change.
- **Citizens and the economic sectors** need to be convinced of the importance of soil biodiversity to adapt to climate change. Interesting avenues to be explored:
 - Living labs
 - Citizen science programmes

Panel 5. Reusing vacant plots. Successful instruments

- *Reuse of vacant plots; a key line of action of the soil protection strategy of the Basque Country.* Ana Alzola. Ihobe
- *Reuse of land for economic activities. An example from the administration.* Iker Bergaretxe. SPRILUR
- *Strategies to reuse vacant plots in Scotland.* David Stewart. Scottish Land Commission
- *Strategies to reuse vacant plots in Austria-Brownfield Dialogue.* Gundula Prokop. Austrian Environment Agency
- *Natural restoration and conservation of the territory.* Javier Vázquez. Ekologistak Martxan



SUMMARY

- The Basque Country is developing its soil protection policies and also the reuse of vacant plots in tandem with Europe.
- The average percentage of artificialised land is 4.2 in Europe and 6.8 in the Basque Country (not fully comparable due to the different calculation methods).
- Even though the data show that land occupancy is stabilising, it is not sufficient. Great efficiency in land use is necessary, by curbing the artificialisation processes even further.
- Historic opportunity for soil restoration and subsequent use of the land.
- Main difficulty for using vacant plots; the lengthy formalities.
- The solution involves inter-institutional alliances and cooperation between all the entities involved.

KEY IDEAS

Occupancy of the territory must take place in an order according to the degree the soil is affected:

1. Avoid occupying new land.
2. Reusing the already occupied land.
3. Occupy land of poorer quality.
4. Minimise and offset the effects of the inevitable occupancy.

Possible keys for success in the land reuse policy.

- Better use of data.
- Alignment of all the policies involved.
- Specific financing system.
- Use optimisation.
- Involvement of private entities.

**Panel 6. Sustainable forestry management
An opportunity to improve soil health**

- *Sustainable forest and soil management in the Basque Country: BASONET network.* Alejandro Cantero Amiano (HAZI)
- *Carbon storage in forestry soils in France.* Roland de Lary (CDPF, National Forest Ownership Centre)
- *Carbon accumulated in the litter systems.* Ricardo Ruiz Peinado (DCIFOR-INIA)
- *Proposed soil monitoring directive of the European Commission.* Guillermo Fernández Centeno (Sub-directorate General for Forestry Policy and Combating Desertification, MITECO)
- *Map of the carbon content of Spanish forestry soil.* Rosa Calvo de Anta (Santiago de Compostela University)



SUMMARY

- Regularly measuring the organic content of forest soils may be a good indicator of the management effectiveness.
- The estimates conducted in the papers presented (Basque Country, all of Spain, France) point to a balance between the total carbon stored in the living biomass and in the forest soil.
- On a smaller scale, the total carbon stored in the dead biomass and in the litter of the forest soil may also be similar.
- The Basque Country has the Basonet network to regularly measure different parameters in Basque forests, including soil quality parameters.

KEY IDEAS

- Proper forestry management must taken the carbon balance into account to be sustainable.
- Reference values cannot be provided for the minimum organic matter content of forest soil, as it usually varies according to climate, physiographic, lithological and plant sectors
- Forest owners and managers must continue to ensure the necessary protection of the forest soil, by means of voluntary forestry certification, the applicable legislation and future carbon markets.

Panel 7. How can technology be applied to clean up contaminated soils be applied

- *Institutional framework around soil decontamination and public-private partnership.* Javier Agirre Orcajo (Basque Government)
- *Flanders (Belgium). Policies, strategies and instruments to incentivise soil decontamination and the use of in situ and on-site technologies.* Johan Ceenaeme (OVAM)
- *Soil bank: towards the circularity of a valid resource.* Germán Monge (IDOM)
- *How to drive innovation in soil decontamination through public procurement. POSIDON Project.* Mikel González Vara (Bilbao City Council)
- *Multi-functionality of the restored soils: Feasible or misleading aspiration?.* Eduardo Alzola Echazarra (AFESA)



SUMMARY

- Excavation materials are one of the priority waste streams in the BAC.
- At present, the lack of legislation and general criteria for the recovery and reuse of excavation materials from current or past sites of potentially soil-contaminating activities or facilities implies that a high percentage of that waste ends up in landfill.
- The possible initiatives to install treatment plants and technologies are conditional on a legal framework that makes that possible.
- The Basque Government is actively working on drafting the decree that will regulate the recovery and reuse of excavate materials.
- Some European countries/regions such as the Netherlands and Flanders are an example of good management of this problem.

KEY IDEAS

- Need in the BAC for an administrative and legal framework that regulates and allows the recovery and reuse of non-naturals excavated materials from potentially polluted sites.
- Administrative and legal mechanisms are required to overcome social resistance to the setting up of any treatment facility.
- The example of other countries and regions may be enlightening to define the Basque model.
- Public-private partnership could be one of the keys for success.

Panel 8. Best soil protection practices at municipal level

- *Soil inventory and municipal planning. Mari José Imaz (Orduña-Urduna Local Council)*
- *Soil quality and best soil protection practices at municipal level. Jon Ruiz de Infante (CEA/Vitoria-Gasteiz City Council)*
- *Municipal management of the former industrial site of a paper mill. Iratxe Arriola (Ez Local Council)*
- *Actions on municipal land and climate change (Amets Jareguizar (Bakio Local Council)*
- *Preparing the Astigarraga land-use plan (PGOU) using soil protection criteria. Raoul Servet (ARAUDI)*
- *Preparing the Peñacerrada land-use plan (PGOU) using soil protection criteria. Unai Fernández de Mendia (EGITU)*
- *Restoration of forest soils affected by fire. Cristina Fernández (Autonomous Government of Galicia)*
- *Best practices to improve the permeability of the soil and biodiversity in the municipality of Durango. Aitor Larrucea and Igor Zorrakin (Durango Local Council)*
- *Turning urban barren soil into fertile grazing land by means of regenerative livestock farming (Luis Carlos Delgado (Sestaoberri, Sestao Local Council)*



SUMMARY

- **Orduña** is setting in motion a Soil Health Observatory.
- **Vitoria-Gasteiz** has taken advantage of the revisions of its urban planning rules to introduce a new layer (overlapping conditioning factor) to implement the agrifood strategy and in turn carbon sinks in land that cannot be developed.
- **Ea** has managed to restore a contaminated site requiring a financial outlay and working with other administrations.
- **Bakio** is working intensely on citizen governance for decision-making and is open to environmental experimentation both at local and regional level.
- **Astigarraga** is planning to deploy tools that allow its non-developable land to be protected and conserved in all its environmental variables.
- **Peñacerrada** has based the revision of its urban planning rules on a detailed analysis that has identified the best ways of acting regarding each non-developable land to classify it and properly conserve it.
- The **Durango** subsidiary regulations are being used to comply with the goals of the so-called Green Mesh: for example, not to use new land and to bring coherence to the different green spaces.
- **Sestao** harnessed its creativity to use the carbon sequestration potential of meadows, creating such environments in degraded and abandoned urban spaces..

KEY IDEAS

- Municipalities are encouraged to conduct their own soil inventories: they are a key tool to protect the soil.
- A higher policy framework is required to allow municipalities to link livestock farming practices on non-developable land to boost carbon sinks.
- Urban planning needs to include the perspectives of agrifood strategies.
- The financial capacity and avenues need to be increased so that small municipalities can embark on soil protection projects.
- Soil protection at municipal level requires initiative, reflection and leadership.
- Municipalities must use their capacity to act from organisation, analysis, planning and action.

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