What about soil in the NDCs?

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Top 10 countries with potential to sequester or protect SOC

Mineral soils (Zomer et al., 2017)
Organic Soils (Crump, 2017)

Top 10 countries with:
- Green: Both high SOC sequestration potential and high peat carbon stock
- Orange: High SOC sequestration potential only
- Red: High peat carbon stock only
- White: Not among the top 10
Soil organic carbon in the NDCs (Agriculture / AFOLU)

SOC specified in NDC targets
10 countries

SOC specified in general NDC text
3 countries

<table>
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<tr>
<th>Measures/practices specified</th>
<th># Countries</th>
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<tbody>
<tr>
<td>Agroforestry / silvo-pastoralism</td>
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<td>Grassland / pasture management</td>
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<td>Protecting / rewetting peatlands</td>
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<td>Organic amendments</td>
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<td>Integrated soil fertility management</td>
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</table>
1. SOC target as AFOLU measure
   Namibia: 0.18 Mt CO₂eq

2. Sectoral target
   Japan: 7.9 Mt CO₂eq through crop/grazing management
   Uruguay: % land area for avoided CO₂ emissions

3. Non-sectoral sub-target
   Canada: 44 Mt CO₂eq

4. Sectoral target
   Malawi: 0.4 Mt CO₂eq from CSA pending conditional support

5. National target
   China, Zambia: Measures to implement

Soil organic carbon in the NDCs
NDCs – Platform and opportunity to specify SOC

**Japan**
Agriculture: Remove 7.9 Mt CO₂eq under cropland and grazing (2030)

**USA (INDC)**
Economy-wide (26-28%) emission reduction (2025). No SOC specification

Soil carbon in NDCs

**National**
- Policy
- Technical capacity
- Climate finance

- National soil monitoring (1979)
- IPCC Tier 3 approach
- Agricultural soil C sink: compost, green manure
  - 6.96 to 8.9 Mt CO₂eq

- **USDA Building Blocks for CSA and Forestry** (land users)
- SOC sequestration:
  - 4.0-18.0 Mt CO₂eq yr⁻¹
- Protect wetland areas
  - 0.8 Mt CO₂eq yr⁻¹
Global transparency / tracking

1. Most countries do not explicitly address SOC in NDCs

2. NDCs currently not good indicators of national ambition or action on soil carbon

Country context/ prioritization

3. Country prerogative to address SOC in NDCs
   • Transparency, demonstrate capacity/ leadership, leverage support

4. Next round of NDCs, better reflect national SOC actions
   • Increase sectoral specificity under economy-wide targets (mention SOC and related measures or vice versa)
   • Indicate relative contribution of SOC (i.e. SOC sequestration/ protection could contribute 10-20% to sectoral emission reduction target)

Concluding remarks
Thank you for your attention.

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