



Madrid, December 11th 2019 – 4th FORUM of PARTNERS



What about soil in the NDCs?

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Top 10 countries with potential to sequester or

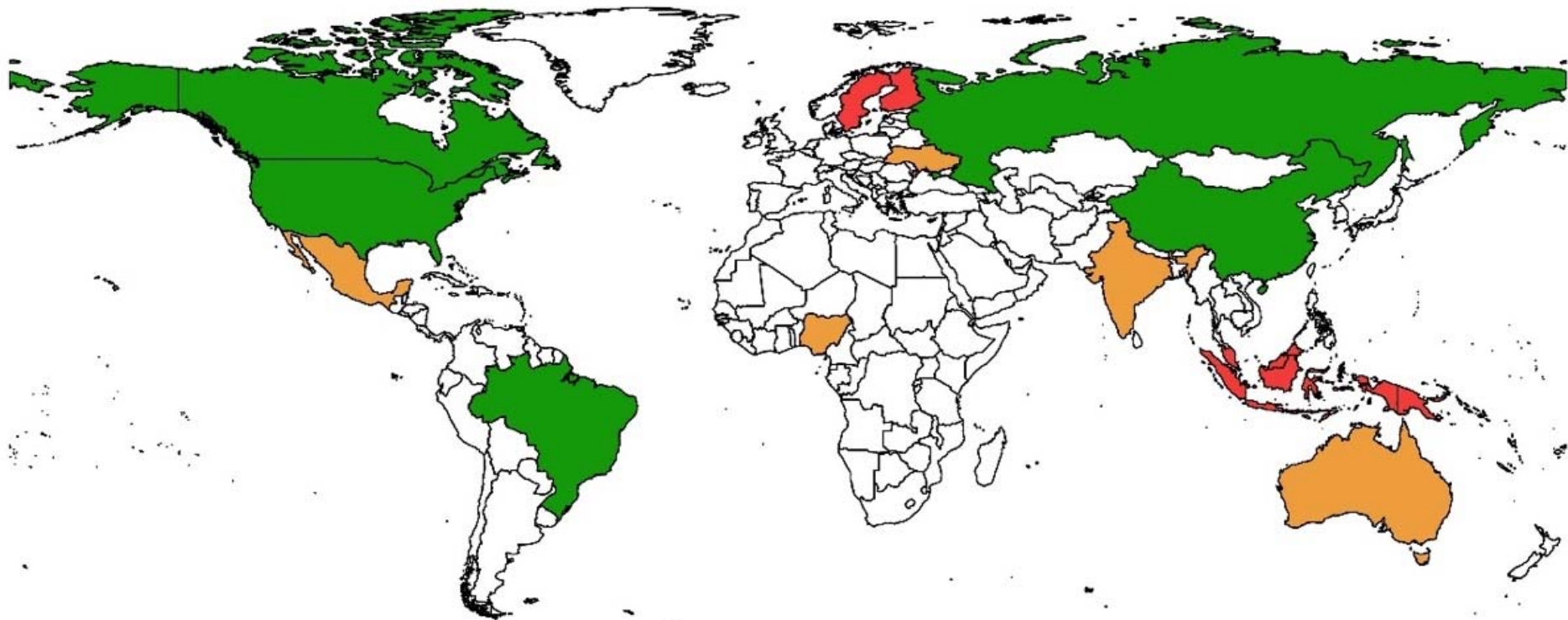
Mineral soils

(Zomer et al., 2017)

Organic Soils

(Crump, 2017)

Mineral + Organic Soils



Top 10 countries with:

- Both high SOC sequestration potential and high peat carbon stock
- High SOC sequestration potential only
- High peat carbon stock only
- Not among the top 10

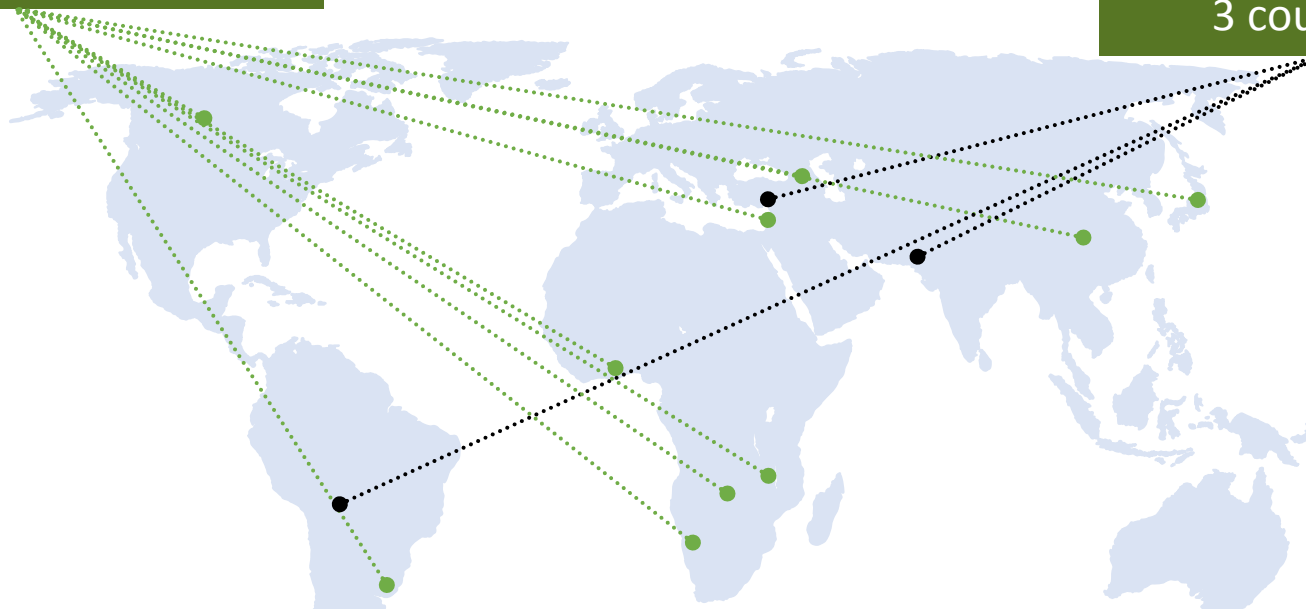
Soil organic carbon in the NDCs (Agriculture /

APOLO
SOC specified in NDC targets

10 countries

SOC specified in
general NDC text

3 countries



Measures/ practices specified: # Countries

Agroforestry / silvo-pastoralism	31
Grassland / pasture management	13
Protecting / rewetting peatlands	11
Organic amendments	12
Integrated soil fertility management	6



Soil organic carbon in the NDCs

5. National target

China, Zambia: Measures to implement

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

1. SOC target as AFOLU measure

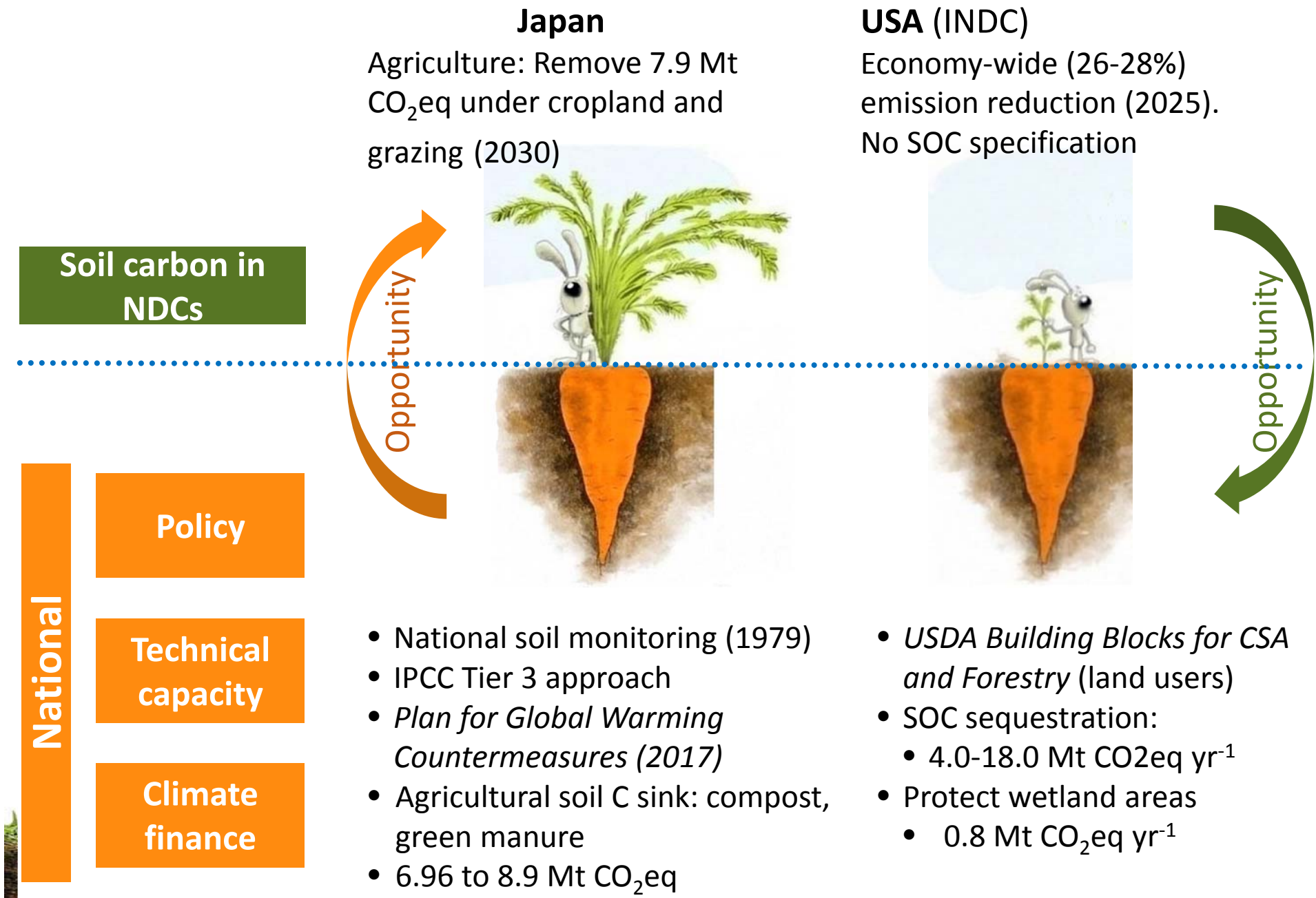
Namibia: 0.18 Mt CO₂eq

4. Sectoral target

Malawi: 0.4 Mt CO₂eq from CSA pending conditional support



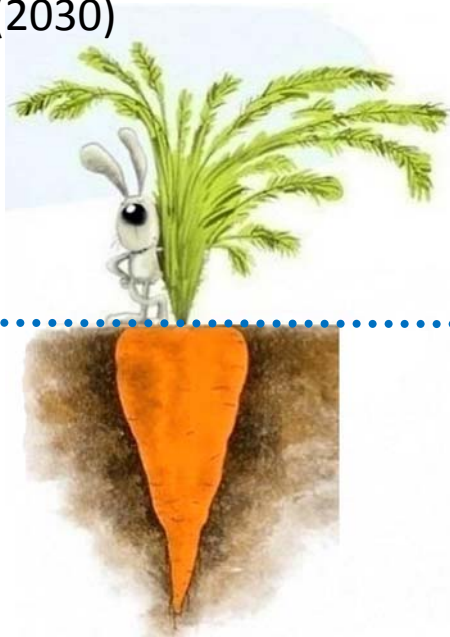
NDCs – Platform and opportunity to specify SOC



Soil carbon in NDCs

Japan

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



Opportunity

USA (INDC)

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



Opportunity

National

Policy

Technical capacity

Climate finance

- National soil monitoring (1979)
- IPCC Tier 3 approach
- *Plan for Global Warming Countermeasures (2017)*
- 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



Concluding remarks



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

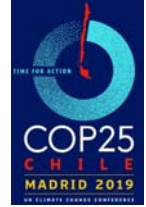
Country context/ prioritization

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)





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Thank you for your attention.

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