

Soil carbon, soil health and soil fertility
under grassland and cropland as well
as integrated systems, including water
management

ENGO Views

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The climate & environmental weight of current food systems

- AFOLU = $\frac{1}{4}$ of emissions (FAO) of carbon, methane and nitrous oxide
- Overuse of chemical fertilizers lead to soil degradation :
 - degradation of natural soil carbon,
 - reduce ability to retain water,
 - Biodiversity loss
 - Water pollution
- IPBES:
 - $\frac{1}{3}$ of land surface devoted to agriculture
 - 75% of freshwater resources
 - Biodiversity loss
 - $\frac{3}{4}$ of land is altered by human activities
- 821 millions suffer food insecurity (FAO)
- $\frac{1}{3}$ of food is wasted (FAO)

Key challenges for the transformation of agriculture

- concentration in the hands of agribusinesses and promotion of an agro-industrial model
- too much focus on “soil carbon” and efforts to measure this tenuous, fluctuating resource => MRV challenges (estimates, potential reversals)
- too much focus on reforming the current system (by increasing its efficiency - precision, digitalization, technologies) rather than transforming it to really meet the needs of soils, climate and farmers.

How can the KJWA and UNFCCC constituted bodies or other actors help to address these challenges?

- Soil carbon, health, fertility and water management always go hand in hand and are jointly key for the development of a sustainable agriculture. Should be addressed together
- **Approaches should seek to measure areas of land that are using appropriate methodologies to build up soil health and biodiversity, such as agroecology**
- One alternative indicator could be biodiversity: there cannot be biodiversity if the soil is not healthy, if there is no water in the soil and if the soil is not fertile. Cf. IPBES Set of indicators under ecosystem properties
- **Mitigation policies regarding agriculture should focus primarily on absolute GHG emissions reduction.**
- The KJWA has the opportunity to address these challenges by formulating policy recommendations that would help implementing climate action in the agriculture sector, using existing plans such as the NDCs, NAPs, etc, and provide a framework and safeguards for GCF and other climate finance.
- ENGOs recommend to develop **policy frameworks to encourage the transformation towards agroecology. Agroecology is key to ensuring soil carbon, soil health, soil fertility and water management.**