

# '22<sup>nd</sup> Working Session of the Intergovernmental Technical Panel on Soils

Recarbonization of Global Agricultural Soils (RECSOIL) progress and activities

4-6 March, 2025

FAO HQ Mexico Room (D211)

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INTERGOVERNMENTAL
TECHNICAL PANEL ON SOILS

# RECSOIL pilot and partner projects

#### **Preparatory phase:**

- Kazakhstan
- Morocco

#### Partner projects:

- Argentina
- Cambodia
- Mongolia
- France and Belgium

#### In discussion:

- Trinidad
- Russia

#### **RECSOIL-MEXICO**

Agricultural activities: livestock; annual crop and perennial crop Participating farmers: 30-45
Total area: 250-340 ha
Approximate annual SOC sequestration: 59 tCO2e

#### **RECSOIL-GHANA**

Agricultural activities:
Cashew, soy, and shea
Participating Farmers: 45
Total area: 85 ha
Approximate annual SOC
sequestration potential: 45 tCO2e

#### **RECSOIL-ARMENIA**

Agricultural activities: Forage crop,
pasture
Project Area and Participating
Farmers: 40
Total area: 100 ha

#### **RECSOIL-UZBEKISTAN**

Agricultural activities: Rangeland,
Irrigated cropland
Project Area and Participating
Farmers: 19
Total area: 1 566 ha



#### **RECSOIL-COSTA RICA**

Agricultural activities:
livestock
and coffee plantation
Total area: 500 ha
40 farmers
Approximate annual SOC
sequestration: 872 tCO2e

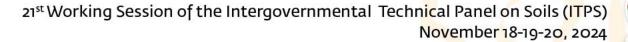


#### **RECSOIL-TOGO**

Agricultural activities: grain and horticulture; cashew plantations; agroforestry
Total area: 250 ha
51 farmers
Approximate annual SOC

sequestration: 146 tCO2e







## Costa Rica

- First payments to farmers made under the
  ecosystem payment service scheme created with the
  Ministry of Agriculture and Livestock of Costa Rica
- Workshops held for the implementation of SSM according to the Sustainable Soil Management Practice monitoring protocols with positive feedback from farmers



#### Mexico

- Identification of additional women farmers to onboard as newly participating cohort
- Ongoing SSM practice implementation
- Creation and planned integration of survey with socioeconomic indicators with the Secretariat of Agriculture and Rural Development of Mexico



# Ghana 7.0pH 0-10 cm **★ ()**H 10-30 cm 6.5-Soil pH 6.0-5.5-5.0 Calcium content (cmol kg-1)

- Analysis of soil results and refinement of SSM practice for implementation for 40 participating farmers
  - Potential need for liming identified
  - Critical lack of N for SOC sequestration
  - Target pH and C:N ratios established for project area
- Integration of RECSOIL tools and protocols by the Soil Research Institute of Ghana in projects in neighboring areas for monitoring and measuring of soil indicators
- Identification of additional farming communities for scaling up the pilot project with newly participating farmers





Figure 1. Calcium and acidity in participating farms

## Uzbekistan

- Recruitment of participating farmers and signed participation agreements
- Gathering of all historical activity
   management data of participating farmers
- Design of target monitoring plan, including indicators, number of samples, depths and other parameters
- Selection and translation of educational materials for farmer trainings

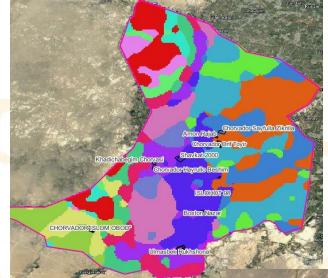


Figure 2. Homogenous strata in the Jondor region

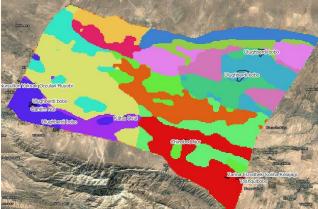


Figure 3. Homogenous strata in the

Nurata region



## Armenia

- Training of technicians on monitoring plan design for measuring and monitoring soil carbon and other indicators
- Draft monitoring plan of target indicators to address soil erosion, soil salinity and soil moisture loss in forage cropping and pature systems
- Preparations for baseline assessment in April

## Kazakhstan

- Recruitment of participating farmers and signed participation agreements
- Training of technicians on monitoring plan design for measuring and monitoring soil carbon and other indicators
- Selection of target educational materials for farmer training with a focus on soil pollution management
- Preparations for baseline assessment in June





## Partner project pathway

## Areas of Engagement

- Australia
- Argentina
- Belgium/ France
- Cambodia

- India
- Mongolia
- The Philippines
- Uruguay

## Objectives

- Gather feedback on implementation of GSOC-MRV and RECSOIL tools
- Alignment with partner objectives (e.g. Science Based Targets)
- Identification of potential further implementation partners

## Tool Development

- Updates of the RECSOIL Technical Manual based on feedback from private sector partners
- Survey developed for the assessment of MRV in ongoing soil carbon projects





## Additional Tools for Review

## **Economic Impact Assessment**

- Assessment for the socioeconomic impacts of RECSOIL projects – general, to be adapted for each project
- Survey for the socioeconomic impact of RECSOIL pilot project in Mexico – developed with RECSOIMEX partners for conducting interviews with participating farmers in Mexico

## NG: RECSOIL MONITORING PROTOCOL - IMPLEMENTATION OF SUSTAINABLE SOIL MANAGEMENT (SSM) PRACTICES — GENERAL SOCIO ECONOMIC INDICATORS

	Indicator	Verification Method	Assessment			Score
	Participation in community organizations, farmer groups, or cooperatives	Field consultation	0 = No participation.	1 = Participation. Participates in a farmer organization or group.	2 = High Participation. Participates in two or more farmer groups.	
Socio-economic Indicators	Access and participation in Training and Technical assistance	Field consultation     Certificates	0 = Null or very sporadic  Does not have access to technical  training programs; Has not participated in technical trainings in the last 3 years.	Occasional training. Has participated in at least one training in the last 3 years. Receive occasional technical assistance.	Regular training. Has participated in at least one training per year in the last 3 years. Gets regular technical assistance or advice.	
	Income from the activity	Field consultation	Subsistence - Low     Subsistence Agriculture. Income is     insufficient to cover basic     expenses, relying mainly on     assistance or other non-     agricultural sources.	= Moderate Sells part of the production. The income allows to cover basic needs and some additional expenses or minor investments. 30-70% of total income comes from agriculture	z = Sufficient     Most or all of the production is     commercialized. 70% or more of     the income comes from     agriculture.	
	Market access	Field consultation     Contracts	0 = No access The products are mostly consumed at the family or community level.	Partial access The production is sold at local     stalls or markets or to     intermediaries, but without formal     contracts.	2 = Full Access The products are sold in formal markets or in cooperatives, on a regular basis, with marketing or export contracts.	
	Income diversification	Field consultation	0 = High Risk/ Low Diversification. Dependent on a single crop or product.	3 = Moderate diversification Income dependent on 2-3 crops, but within the same activity (e.g. 100% agriculture)	4 = High diversification. Multiple crops or products and combines different activities (e.g. crops, livestock, manufacturing)	
Socio-ec	Access to agricultural inputs (seeds, organic or inorganic fertilizers, pest control products, diseases, vaccines, etc.).	Field consultation     Field verification	0 = No access.	1 = Limited access.  Sporadic access (not every year).	2 = Regular access. No restrictions on annual access to agricultural inputs.	
	Access to machinery for labors	Field consultation     Field verification	0 = No access.	1 = Limited access.  Sporadic access (not every year) to machinery for main agricultural labors.	2 = Regular access.  No limitations to regularly access the use of machinery for labors.	
	Access to financing or credit (if needed)	Field consultation     Documentation	0: No access to financing.	1: Limited access. Occasional access to financing, with very limited conditions or high costs.	2 = Full access Access to personal loans or through cooperatives, with favorable conditions.	
	Generation of employment for the community	Field consultation	0 = Does not generate employment (beyond their direct family)	1 = Generates temporary or seasonal employment (beyond your direct family)	1 = Generates stable and paid employment (beyond his direct family)	





## Additional Tools for Review

#### SSM Practice List

- Streamlined list of SSM practices
  - Easy to use list/ database
  - Harmonized terminology
  - Supported by case studies





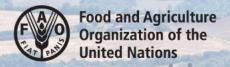


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# itps

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# Thank you

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