



Food and Agriculture
Organization of the
United Nations

Update on RECSOIL Project Implementation and Technical Materials

19-3-2024

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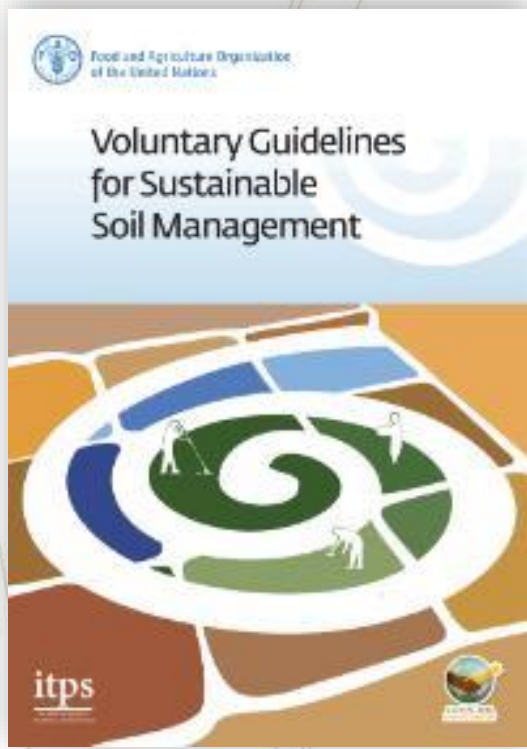


RECISOIL Green Path Projects

...Over 200 experts contributed to the documents

Guiding Documents

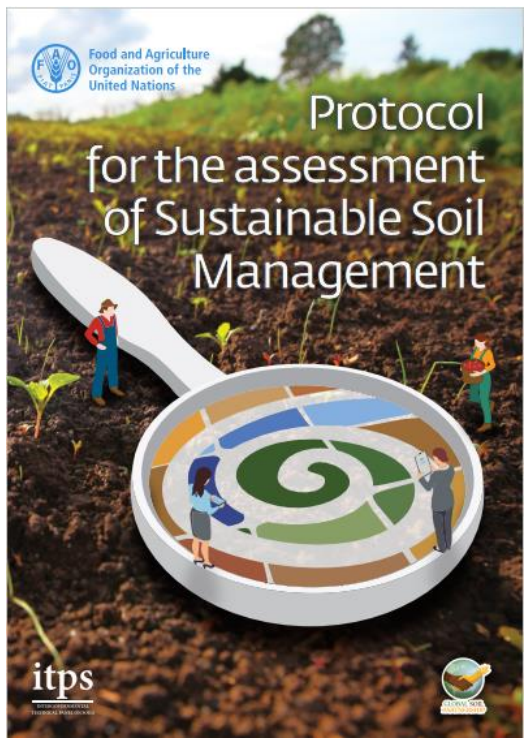
(Mandatory)



2017

<https://www.fao.org/3/a-i6874e.pdf>

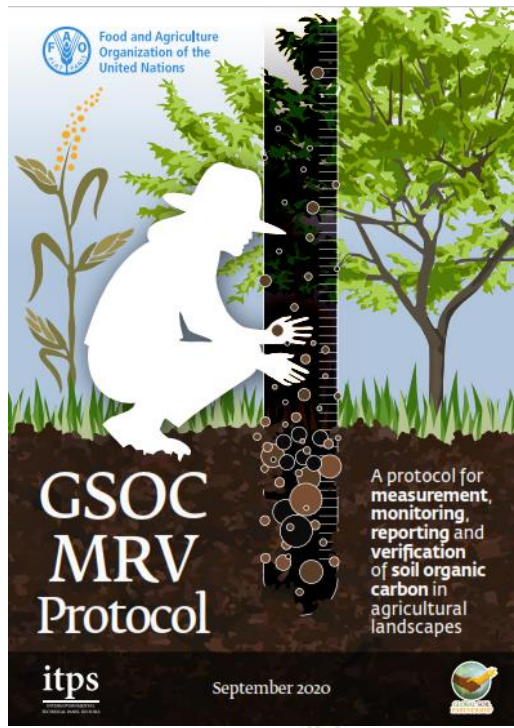
(Mandatory)



2020 – being updated

https://www.fao.org/fileadmin/user_upload//GSP/SSM/SSM_Protocol_EN_006.pdf

(Non- Mandatory; Guide)



2020

<https://www.fao.org/3/cb0509en/cb0509en.pdf>





REC SOIL-MEXICO

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

REC SOIL-COSTA RICA

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

REC SOIL-TOGO

Agricultural activities: grain and
horticulture; cashew
plantations; agroforestry
Total area: 250 ha
51 farmers
Approximate annual SOC
sequestration: 146 tCO₂e

REC SOIL-GHANA

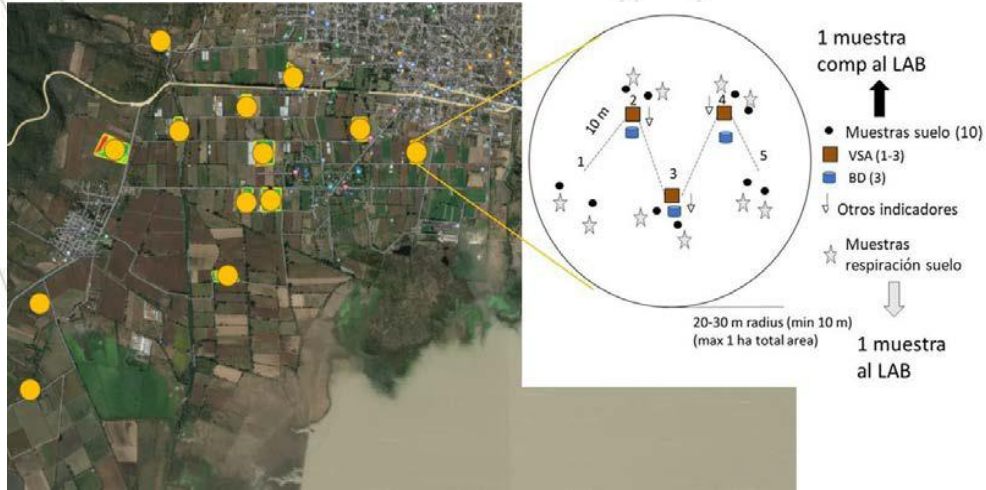
Agricultural activities: Agroforestry
(Cashew, Mango, and Shea)
Project Area and Participating
Farmers TBC

**Other pilot projects
under discussion:**

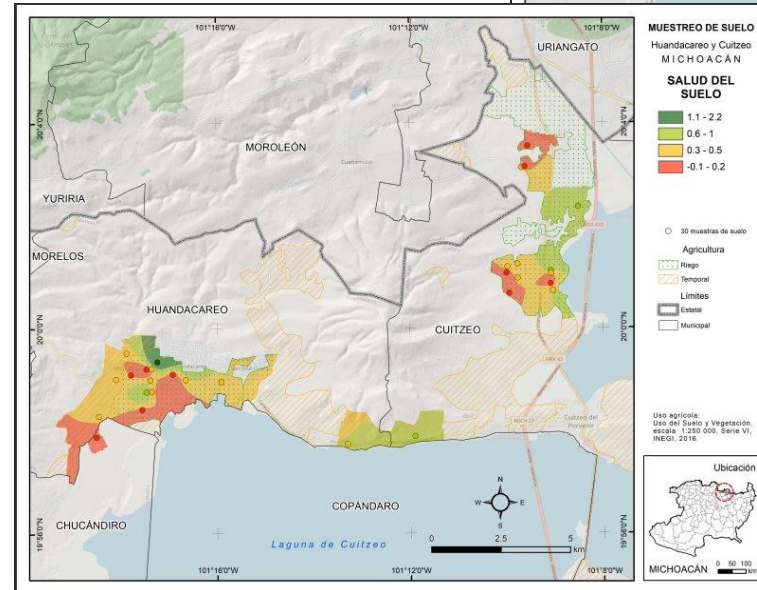
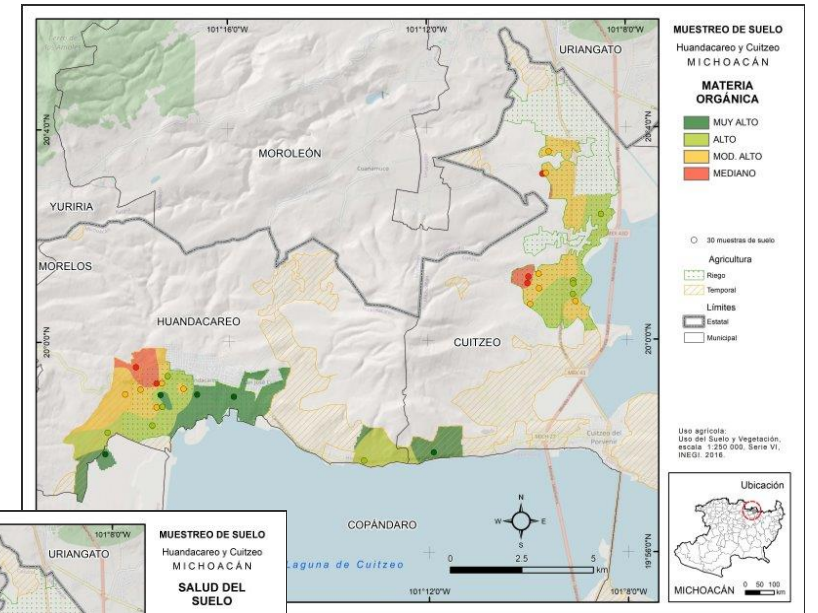
- Armenia
- Kazakhstan
- Uzbekistan
- Kenya
- Morocco
- Tuvalu
- Trinidad

REC SOIL MEX – Baseline results

Sampling design at each sampling station

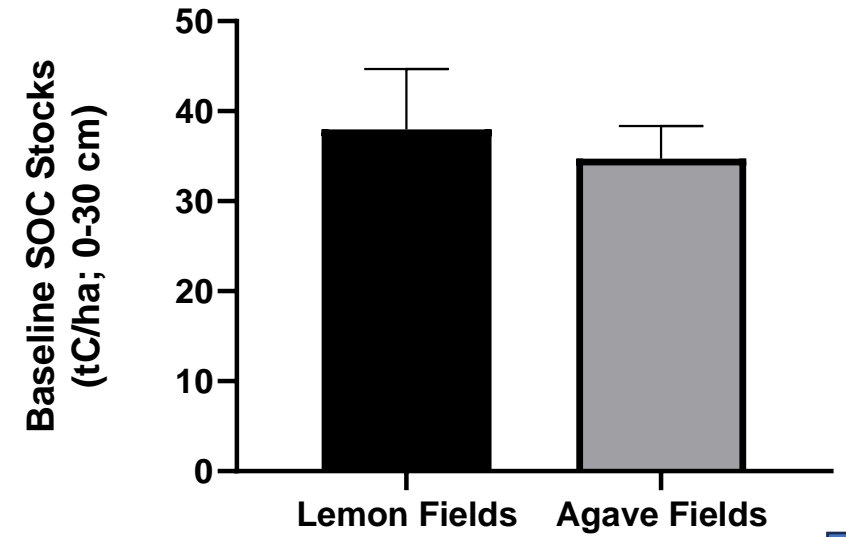


180 soil samples were collected and visual soil assessment was carried out at 108 sampling points.

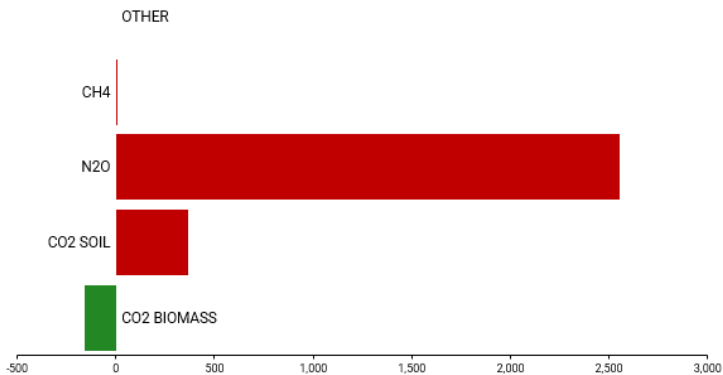


- Due to low hydraulic conductivity in the sites of both municipalities, it is recommended to review plot levelling and adequate slope of the plot.
- Determine possible soil compaction by measuring penetration resistance.
- It is suggested to manage the fertilisation of each site, according to the results of the soil analysis.

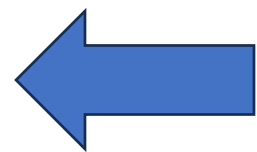
Ex-Ante Carbon Balance Tool in RECISOILMEX



Share of the balance per GHG, in tCO₂-e



Estimated Baseline Emissions



3.2.2.2. Changes in agroforestry systems (with or without changes in management options)

User notes	Agroforestry systems	Tillage management	Input of organic material	Residue/Biomass burning
Lemon high inputs with manure	Orchard	No tillage	High C input, with manure	NO
Lemon medium inputs	Orchard	No tillage	Medium C input	NO
Agave Low inputs	Agroforestry - default	Full tillage	Low C input	NO
Agave High inputs	Agroforestry - default	Reduced tillage	High C input, no manure	NO

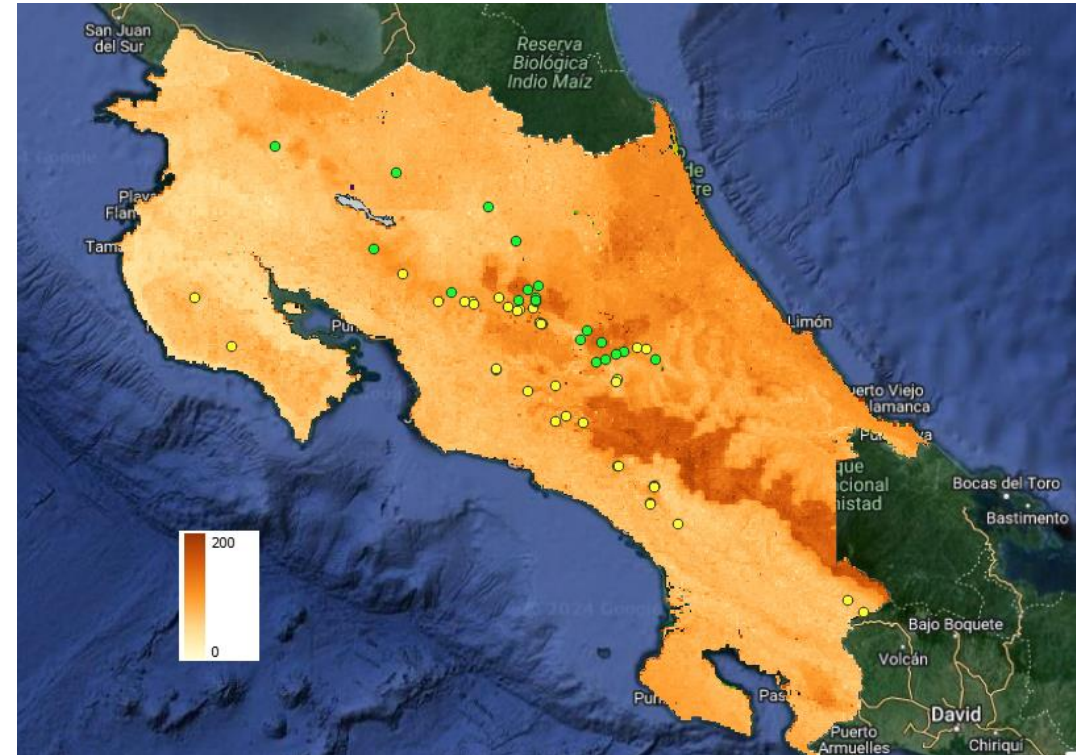
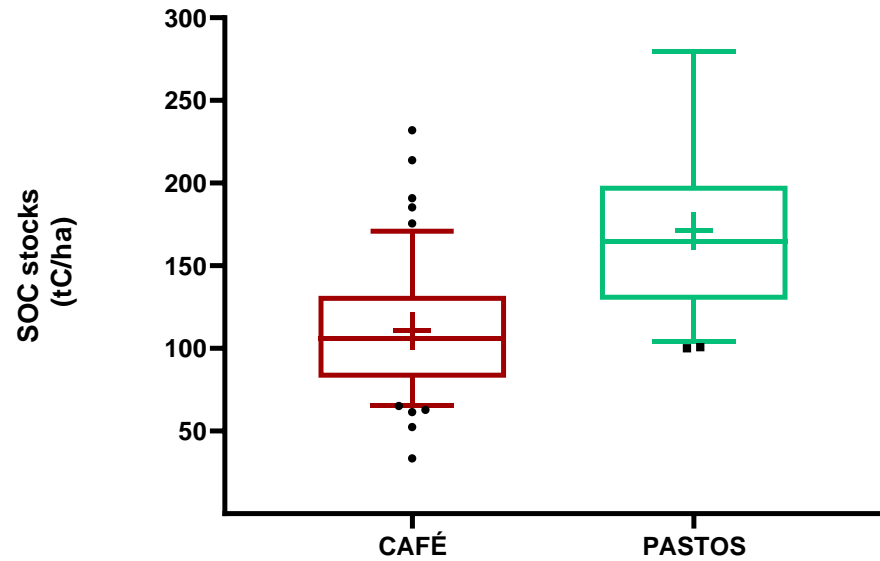
Above-ground		Below-ground		Max AGB in IPCC		Soil carbon	
tC/ha/yr		tC/ha/yr		tC/ha		tC/ha	
Default	Tier 2	Default	Tier 2	Default	Tier 2	Default	Tier 2
0.43		0.00		8.50		24.00	44.60
0.43		0.00		8.50		24.00	31.00
1.37						24.00	29.13
1.37						24.00	40.30
0.00						0.00	
0.00						0.00	
0.00						0.00	
0.00						0.00	

9.1 INPUTS (liming, fertilizers, pesticides)

	Amount applied per year (in tonne)			
	Start	Without	With	
Fertilizers				
Lime application				
Limestone (tonnes per year)	0.00	0.00	0.00	0.00
Dolomite (tonne per year)	0.00	0.00	0.00	0.00
Not-specified (tonnes per year)	0.00	0.00	0.00	0.00
Synthetic fertilizers				
Urea (tonnes of Urea per year)	0.00	0.00	0.00	0.00
Synthetic N-fertilizers other than Urea (tonnes of N per year)	44.75	0.00	44.75	44.75
Phosphorus (tonnes of P2O5 per year)	83.26	0.00	83.26	83.26
Potassium (tonnes of K2O per year)	34.42	0.00	34.42	34.42

GLOBAL SOIL PARTNERSHIP

RECSOIL Costa Rica – Baseline results



- Levels: 15-30% higher than those indicated on the GSOC Map
- Information generated: useful for updating the map (especially in areas with low density points)
- Strengthen NAMA Database and other initiatives



REC SOIL Launch Missions

Kazakhstan



- Gained support of Ministry of Agriculture and identified priority regions
- Identified potential partners in data collection, field sampling, and REC SOIL activities, with an emphasis of analyzing and addressing soil pollution

Uzbekistan



- Aligned with Ministry of Agriculture on national priorities for further progress with REC SOIL
- Identified potential partners in data collection, field sampling, and REC SOIL activities
- Developed plan for integrating REC SOIL tools into Land Degradation Neutrality objectives

Farmers are duly recognized and compensated

Individual payment schemes

Working with national governments to create ecosystem payment service schemes for individual farmer compensation

In the case of Costa Rica:

Existing ecosystem payment services for forestry

Practice-based point system for farmer compensation

Community- based incentives

Provision of equipment and communal resources for the longevity of SSM practice implementation

In the case of Togo:

- RECSOIL implemented primarily through producers' organisation
- Preference expressed for processing equipment for cashew nuts and other communal resources

REC SOIL Guidelines and Templates

- Internal use, available upon request
- Incorporating feedback from pilot projects' stakeholders and external reviewers

Implementation Manual



REC SOIL – RECARBONIZATION OF GLOBAL SOILS

Green Path

Implementation manual

Phase I Implementation Tasks:

Tasks / Steps	Responsible	Support	Available tools	Expected Outcome	Expected duration
PI.1. Expression of interest: <ul style="list-style-type: none"> • Contact/letter of interest • Project application 	FAOCO Representative from leading national institution	GSP	Online application form (Link)	Completed application form with all data requirements	15 days

Reporting Templates



REC SOIL Baseline Report *Green Path*

Instructions to the authors: Please replace information in italics with project specific details and ensure all directions in italics are deleted before submission.

Author Information

Please add rows as necessary to include additional authors

Name of Author	Institution of Author
<i>[Name of author 1]</i>	<i>[Institution of author 1]</i>
<i>[Name of author 2]</i>	<i>[Institution of author 2]</i>
<i>[Name of author 3]</i>	<i>[Institution of author 3]</i>
Email address of contact author:	<i>[Email address of primary contact]</i>

Project Information

Country name	<i>[Name of country]</i>
Total number of farmers	<i>[Number of farmers enrolled]</i>
Total hectares	<i>[Number of hectares enrolled]</i>

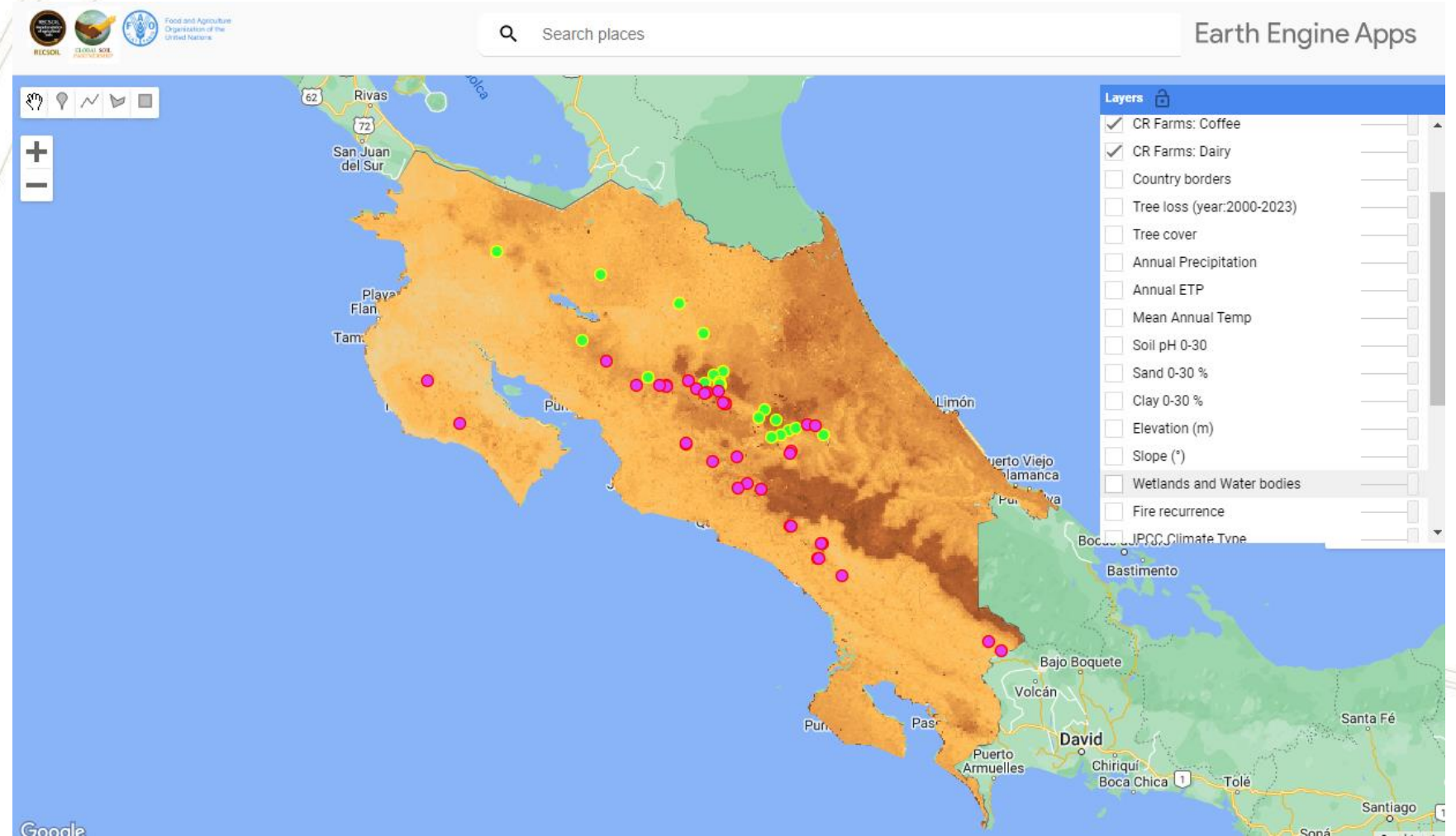
Other templates include:

- Concept note
- Letter of agreement
- Annual and midterm reports
- Budget
- Project closure gap analysis



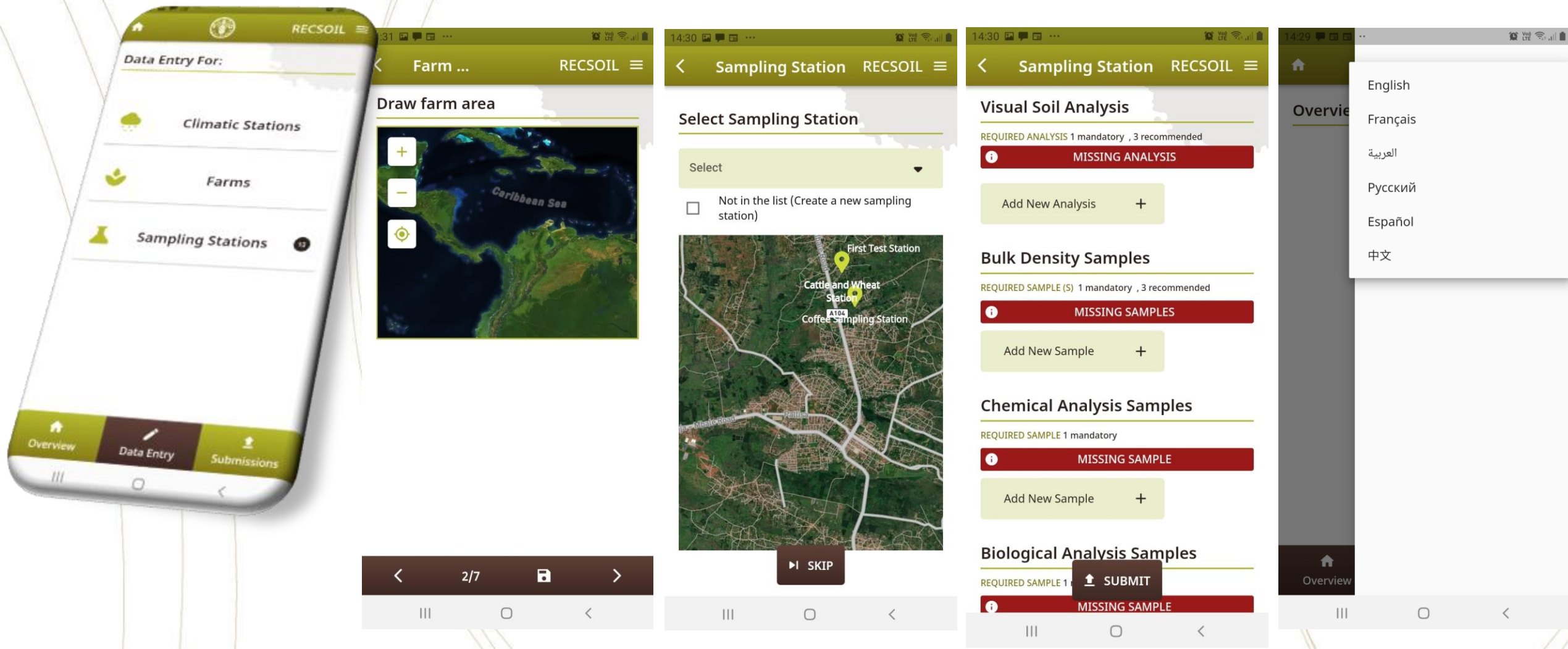
RECISOIL "Toolbox"

Tools: RECISOIL
Google Earth
Engine App –
Spatial Data
viewer +
Scripts
for Spatial data
generation



RECSOIL “Toolbox”

- Tool: Mobile and Desktop **app** for farm and soil data collection and storage



NEXT STEPS:

- Continue supporting the **RECSOIL implementation** through development and adjustment of protocols, manuals and training modules (“living documents”)
- Finalize the use of EX-ACT in RECSOIL projects
- Incorporate ITPS and expert reviewer's feedback
- Test, adjustment and launch of RECSOIL App
- Advance in New Pilot Projects
- Expansion of current projects (COSTA RICA: Dairy, Coffee...Beef production farms)





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Thank you for your
attention

