



Food and Agriculture
Organization of the
United Nations

National updates on soil of Palestine

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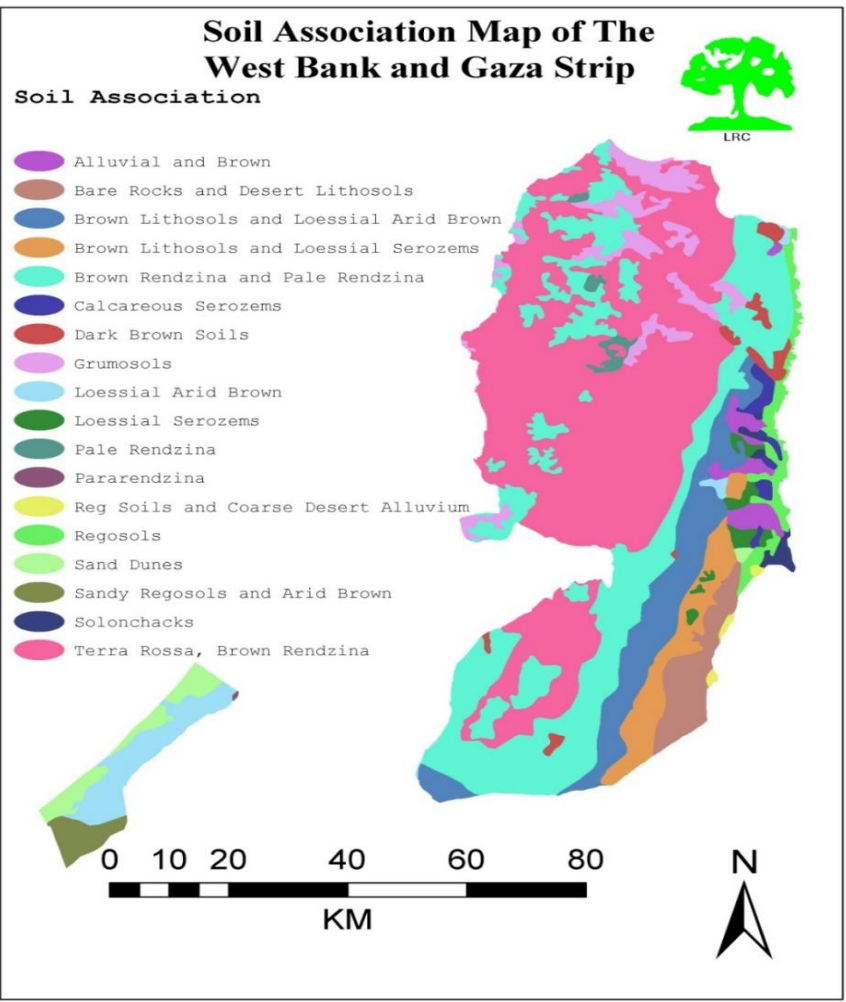
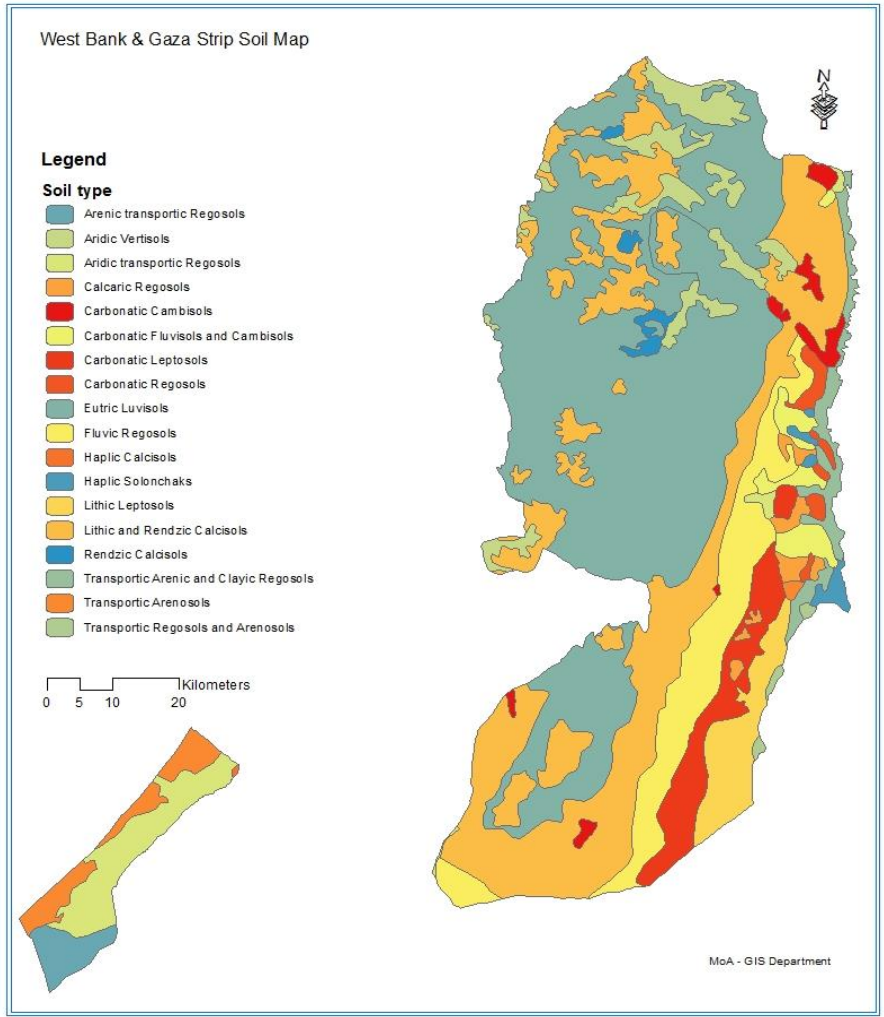
G.D of agricultural land

Ministry of Agriculture

**7th NENA Soil
Partnership
Meeting**

22-23 March 2022





Main activities implemented under Pillar 1



Promote sustainable management of soil resources for soil protection, conservation and sustainable productivity

- On going projects and programs funded by several donors (IFAD, GIZ, MOF)
- Land development program aims to improve the land productivity by conducting several interventions inside the agricultural land such as removing small rocks, building terraces in the sloping area, cleaning soil from stones, fencing, increase plant density and provide cisterns for supplementary irr.
- More than (420 Ha) were rehabilitated during the last year by MoA and other NGOs.



Main activities implemented under Pillar 1



- **Land reclamation program aims to increase the agricultural area by removing the rocks and rock outcrops from the hilly areas and prepare these land for plantation (168.5 Ha).**



Main activities implemented under Pillar 1



- **Conservation agriculture program (200 Ha). Aims to introduce minimum tillage and agricultural conservation principles to the farmers By supporting the farmers with sowing machine and seeds according to their needs taking the crop rotation into consideration.**



Main activities implemented under Pillar 2

Encourage investment, technical cooperation, policy, education awareness and extension in soil

1. Participating in INSSI annual meeting and other events held virtually under GSP.
2. Under on going TCP project, Capacity development for the sustainable management of soil resources in the NENA region,
 - Online meeting with MoA, NGOs and soil experts was conducted last year introducing the project objectives and main outputs.
 - Participating in SAS mapping and SOCseq mapping training courses held in Feb-22.
 - Assessment of Nablus central lab was started last month by conducting two online meeting between FAO consultant and the Lab staff.
 - The training of the technical staff will start soon with the regional FAO expert.





Main activities implemented under Pillar 2

Encourage investment, technical cooperation, policy, education awareness and extension in soil

3. Regular meetings with main stakeholders in land and soil management held during last year aimed to increase the coordination's and to avoid duplications of work on the ground.
4. Several meetings with the farmers aimed to improve there skills in soil and land management focused on land rehabilitation, reclamation and conservation in the locations of previous activities.



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Main activities implemented under Pillar 3

Promote targeted soil research and development focusing on identified gaps and priorities and synergies with related productive, environmental and social development actions



1. Under this pillar and as a part of conservation agriculture, Abstract titled 'Conservation Agriculture practices and changes of Soil Organic carbon - Jenin Case Study'

The abstract will be presented in an international conference 'Zero Greenhouse Gas Emission in High Productive Agriculture' from 3 – 5 May 2022. in Denmark.

- Member of technical committees for several projects working in the field of water productivity, in situ water harvesting, livelihood projects ...etc following SSM and SLM.
- Participating in water harvesting and conservation agriculture policy briefs.



Main activities implemented under Pillar 4

[Enhance the quantity and quality of soil data and information: data collection \(generation\), analysis, validation, reporting, monitoring and integration with other disciplines](#)

Under this pillar,

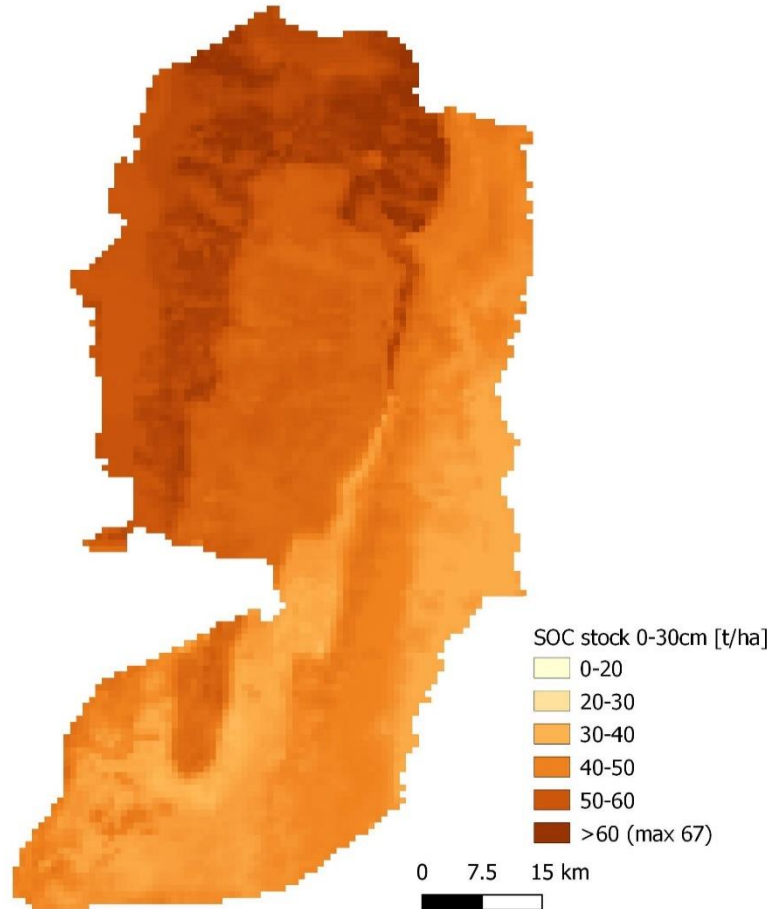
- In cooperation with FAO, SOC seq of Palestine was produced.
- Representative soil samples covered 65 Ha were collected and analyzed to monitor soil fertility status and build of SOC under conservation agricultural practices in three locations.

As a Part of Water productivity project (FAO)

- Representative soil samples to study soil characteristics and soil fertility in Palm trees groves covered 20 Ha in Jordan valley.
- Representative soil samples to study soil characteristics and soil fertility in olive trees orchard covered 5 Ha in Ramallah area.

Main activities implemented under Pillar 4

Enhance the quantity and quality of soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines





Main activities implemented under Pillar 4

Enhance the quantity and quality of soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines

Soil Characteristics	Code Dpth Cm	JEFA1		JEFA2		JEFA3		JEFA5		JEFA9	
		0-20	20-60	0-20	20-60	0-20	20-60	0-20	20-60	0-20	20-60
Sand	%	22.82		43.48		36.80		33.51		18.57	
Silt	%	60.64		34.99		49.46		42.31		48.86	
Clay	%	16.54		21.53		13.74		24.18		32.57	
Texture	Class	Silty Loam		Loam		Loam		Loam		Silty Clay Loam	
O.M.	%	0.92	1.16	1.53	3.83	2.45	1.38	0.61	2.76	1.84	2.45
EC	mm/cm	30.8	7.6	10.6	6.2	37.2	3.6	26.2	4.25	13.4	2
Gravel	%	1	1	1	1	1	1	1	1	1	1
Compactness		Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Moisture Calculator	%	25		25		25		25		25	
Wilting point	% Vol	12.1		14.8		10.4		15.9		20	
Fiel Capacity	% Vol	30.5		28.2		26.1		30.8		36.3	
Saturation	% Vol	47.7		45.6		46.3		46.7		49.5	
Available water	Cm/Cm	0.18		0.13		0.16		0.15		0.16	
Sat. Hydraulic Cond.	mm/hr	15.14		13.53		23.28		10.7		6.11	
Matric Bulk Density	g/cm3	1.39		1.44		1.42		1.41		1.34	
Matric Potential	kPa	75		68		40		110		362	
Matric + Osomtic	kPa	75		68		40		110		362	
Hydraulic Cond.	mm/hr	0.00109		0.00187		0.00224		0.00126		0.00124	

Main activities implemented under Pillar 4

Enhance the quantity and quality of soil data and information: data collection (generation), analysis, validation, reporting, monitoring and integration with other disciplines



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Main activities implemented under Pillar 5

Harmonization of methods, measurements and indicators for the sustainable management and protection of soil resources



Palestine is a member of GLOSOLAN and NENA soil Labs Network with 4 soil laboratories,

- One governmental soil lab followed to MoA (Nablus central lab).
- Soil Laboratory of Birziet university.
- Soil laboratory of Al Najah university
- Soil laboratory of Al Quds university(waiting for their official confirmation)



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*Thanks for your
attention*

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