



وزارة الزراعة والغابات
الإدارة العامة للموارد الطبيعية الزراعية
Ministry of Agriculture & Forests
Natural Resources General Directorate (NRGD)

Email: nrmofa@gmail.com



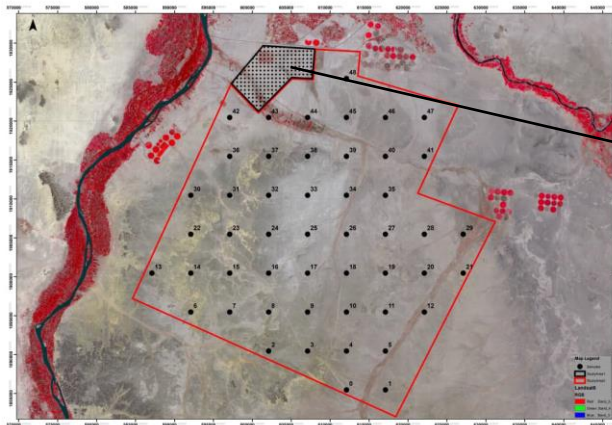
Soil erosion valuation using advanced laboratory measurement methods to support climate resilient agriculture and food security

Soil Based Sampling

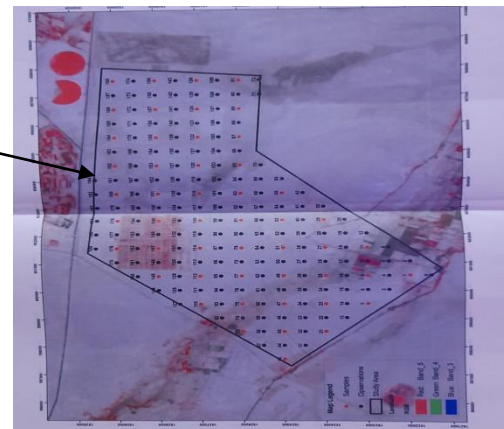
Implementation for field activities, and responsible persons/organizations was based directly on the Response Plan. Kick-off: started with Institutional arrangements (Communication, meetings sites visits etc.) and implement of Soil Based Sampling

Field Work Survey

Earth observation dealt with the map interpretation focusing in area affected by water and wind erosion. Two type soil survey has been done: semi detail soil survey in 5000 ha include Acacia project (Jandea), and free soil survey in 125000 ha around east and south. the project according to coordinates about 48 sampling points (figures below and the annex)



Free soil survey covered 125000ha



Semi details soil survey covered 5000ha

Semi details soil survey started in Acacia project (Jandea) grid system every 500m point observation and every 1000 m sample, this selected point coordination mark by GPS to make Auger description and sampling to create soil units then the second step soil profile have been determined 9 profiles and 4 soil unit. Soil profile described and soil sampling to determine soil elements and micronutrients. Auger sample was 73 while profile sample 184

Free soil survey was based on satellite image interpretation free survey covered 125000ha, extend more than 30 km east Eldamer state and south extend 49Km which covered ELMukabrab Agricultural project. Grid pattern have been applied every 1km soil auger observation.

Field Soil sample analysis covered

Soil sample analysis conducted to determine below nutrients in depth 0 -30cm, 30 -60cm:

Sample type	#	Element
	200	SP
		pH

Auger sample		ECe
		SAR
Profile sample	60	SP
		pH
		ECe
		SAR
		ESP(Exchangeable sodium percentage
		texture
		Soluble Cation and anions.
		CEC
		Available Phosphorus
		Total Nitrogen
		O.M
		CaCo3

Soil analysis conducted to determined micronutrients by using Atomic Adsorption Spectrophotometer in depth 0-30 cm:

#of sample	Symbol
15	Fe
	Mn
	CU
	Zn

Photos



Acacia project (Jandea),





For more photos link below
<https://we.tl/t-EkEXXRwCx0>