The Carbon Benefits Project

Improvement of land under arid conditions through the creation of pistachio plantations (CACILM)

6 October 2021

SECTION 1: GENERAL INFORMATION ABOUT PROJECT

Project Name: Improvement of land under arid conditions through the creation of pistachio plantations (CACILM)

GEF co-financed project: YES / NO

Project ID: 28994

Funding Agency: N/A

Focal Area: N/A

Project Status: Proposal / Active / Completed

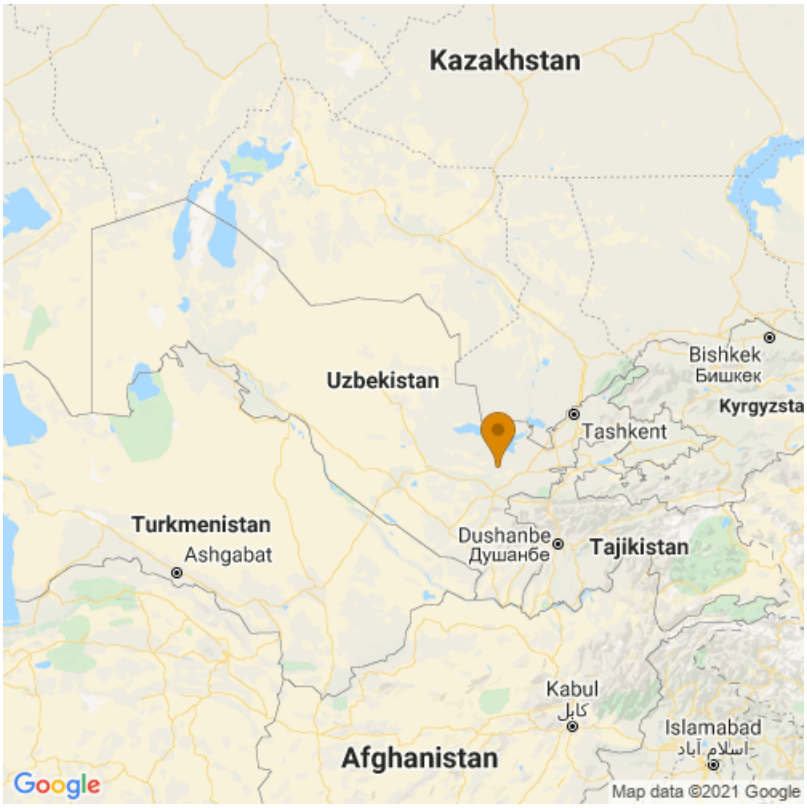
Project Start Date: 01/01/2016

Project Duration: 1 years

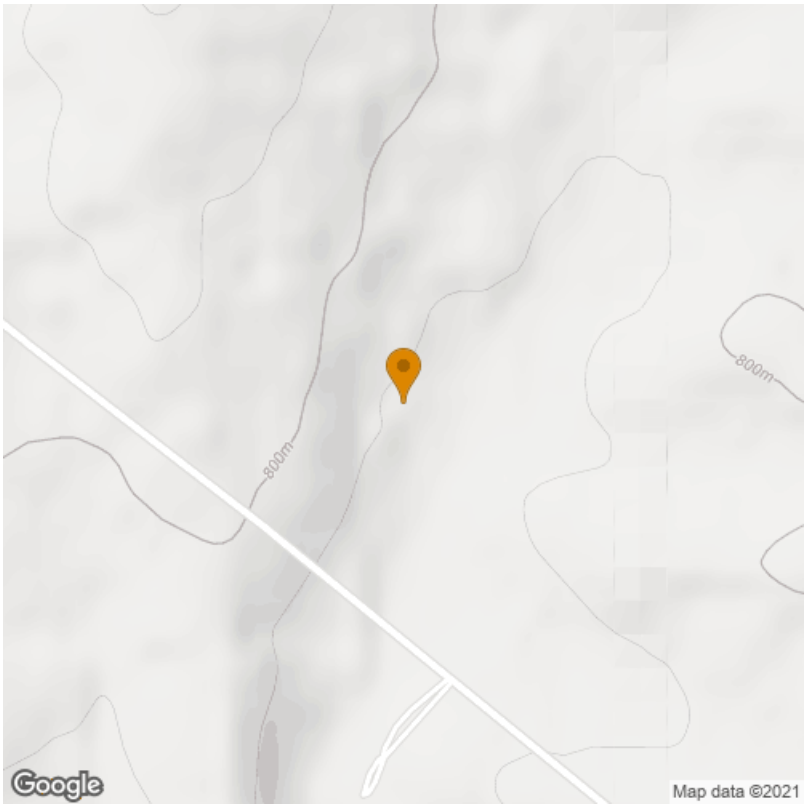
Project Countries: Uzbekistan

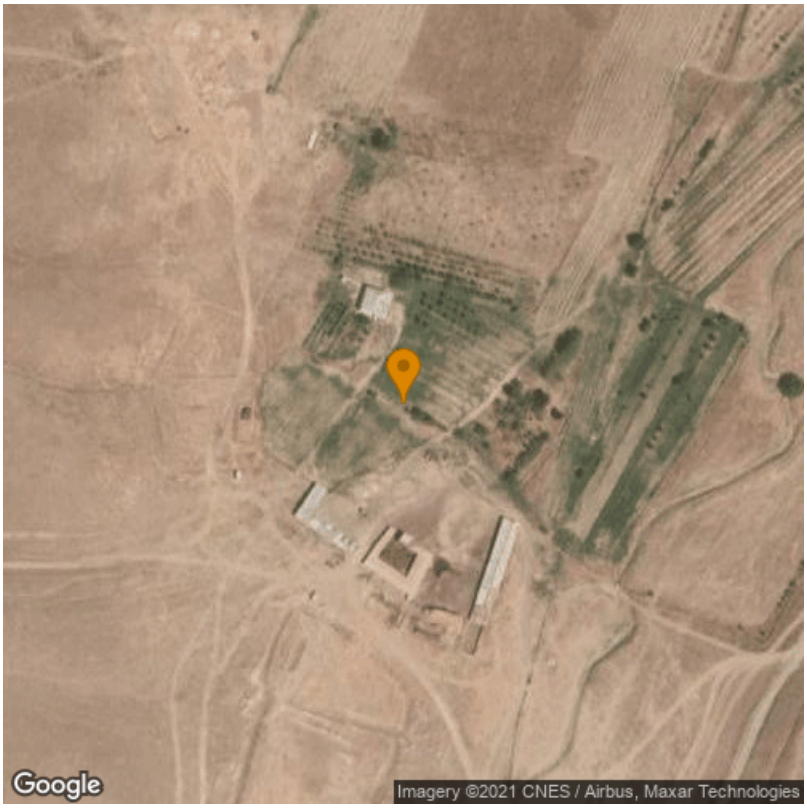
Project Region: Uzbekistan/Djizak oblast

Map 1. Project country: Uzbekistan



Map 2. Project Activity Area Locations





Period for this Report: 2016 - 2036

Project Area (ha): 42

Area reported on: 42 ha

Communities Involved: Farish district

Project Activities: Improvement of land under arid conditions through the creation of pistachio plantations (CACILM)

Brief summary of project goal/aim:

This technology is aimed at the creation of pistachio plantations on gentle slopes to improve the land"s productivity and to rehabilitate the arid land in the hill zone.

Summary of any C benefit goals (optional):

SECTION 2: INFORMATION ABOUT THE REPORT

User Name of Reporter: Eleanor Milne

Component route chosen: A / B

Methodology used:

Description	IPCC Tier level	Route used
Carbon Benefits Project, IPCC Simple Assessment	Tier 1	X
Carbon Benefits Project, IPCC Detailed Assesment	Tier 2	
Carbon Benefits Project, Dynamic Modelling	Tier 3	
Carbon Benefits Project, Modelling and Measurement	Tier 3	

Report Period: 20 years (2016 - 2036)

SECTION 3: C BENEFITS REPORT

Total carbon and greenhouse gas balance for the Report Period

Total carbon and greenhouse gas balance for report period for baseline scenario (without the project): 0 t CO_2e over 20 years

Total carbon and greenhouse gas balance for report period for project scenario (with the project): -11898 t CO_2e over 20 years

Total incremental difference[1] (Expected Carbon and Greenhouse Gas Benefit) for the report period: -11898 t CO_2e over 20 years

Annual C change

Annual C change for the baseline scenario: 0 t CO_2e / year

Annual C change for the project scenario: -595 t CO_2e / year

Annual incremental difference: -595 t CO_2e / year

C benefits report Table and Figures

Table 3.1 Simple Summary Report following UNFCCC Common Reporting Guidelines.
Table 3.2 Expanded Report showing Carbon Emissions by IPCC AFOLU Source Categories.
Projected report period used in calculations is 20 years, from 2016 to 2036.

Table 3.1 Simple Summary Report following UNFCCC Common Reporting Guidelines.

Greenhouse Gas Source and Sink Categories	Baseline Scenario (2016 - 2017) Emissions and Removals				Project Scenario (2016 - 2017) Emissions and Removals				Carbon Benefits		
	CO_2	CH_4	N_2O	GHGs	CO_2	CH_4	N_2O	GHGs			
	tonnes CO_2equivalent				tonnes CO_2equivalent				Total tCO_2e	tCO_2e / ha	tCO_2e / ha / yr
Agriculture											
A. Enteric Methane		0				0			0	0	0
B. Manure Management		0	0			0	0		0	0	0
C. Rice Cultivation		0				0			0	0	0
D. Agricultural Soils	0	0	0		0	0	76		76	1.8	0.09
E. Prescribed Burning of Savannas		0	0	0		0	0	0	0	0	0
F. Field Burning of Agricultural Residues		0	0	0		0	0	0	0	0	0
G. Other	0	0	0	0	0	0	0	0	0	0	0
Land Use Change and Forestry											
A. Forest and other Woody Biomass	0				-11807				-11807	-281	-14
B. Forest and Grassland Conversion	0	0	0	0	0	0	0	0	0	0	0
C. Abandonment of Managed Lands	0				0				0	0	0
D. CO2 Emissions and Removals from Soil	0				-167				-167	-4	-0.2
E. Other	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	-11974	0	76	0	-11898	-283	-14

Notes:

GWP are 100-year time horizon based on estimates from the IPCC Second Assessment Report.

Signs for uptake are (-) and for emissions (+).

Other GHGs include NOx, CO, VOC, SO2.

Values not identified as 'stocks' are emissions.

A. Forest and other Woody Biomass includes biomass growth and losses from timber harvest and fuelwood gathering.

B. Forest and Grassland Conversion includes emissions from deforestation and shifting cultivation.

D. The change in mineral soil carbon is shown under the 'Project Emissions CO2' column as Baseline minus Project.

F. Other includes emissions from fire, wind, pest, and other natural disturbances.

Table 3.2 Expanded Report showing Carbon Emissions by IPCC AFOLU Source Categories. Projected report period used in calculations is 20 years, from 2016 to 2036.

		Without Project (Baseline scenario)			**With Project (Project scenario)**			**Incremental difference (Project scenario minus baseline scenario)**		
		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr	
Source category	Source sub-category	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)
Total Enteric Methane		0	0	0	0	0	0	0	0	0
Total Manure Methane		0	0	0	0	0	0	0	0	0
Total Manure Nitrous Oxide		0	0	0	0	0	0	0	0	0
Total Rice Methane		0	0	0	0	0	0	0	0	0
Soil Nitrous Oxide	Crop Residue N	0	0	0	22	1.1	154	22	1.1	154
	Manure N in Pasture/Range/Paddock	0	0	0	0	0	0	0	0	0
	Manure N Amendments	0	0	0	0	0	0	0	0	0
	Mineralization of Cultivated Organic Soils	0	0	0	0	0	0	0	0	0
	Synthetic N Fertilizer	0	0	0	54	2.7	102	54	2.7	102
Total Soil Nitrous Oxide		0	0	0	76	3.8	85	76	3.8	85

Table 3.2 Expanded Report showing Carbon Emissions by IPCC AFOLU Source Categories. Continued. Projected report period used in calculations is 20 years, from 2016 to 2036.

		Without Project (Baseline scenario)			**With Project (Project scenario)**			**Incremental difference (Project scenario minus baseline scenario)**		
		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr	
Source category	Source sub-category	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)
Biomass Carbon Stocks	Forest Land	0	0	0	0	0	0	0	0	0
	Grassland/Savanna	0	0	0	0	0	0	0	0	0
	Annual Cropland	0	0	0	0	0	0	0	0	0
	Perennial Cropland	0	0	0	0	0	0	0	0	0
	Agroforestry	0	0	0	-11807	-590	50	-11807	-590	50
	Settlements	0	0	0	0	0	0	0	0	0
	Deforestation	0	0	0	0	0	0	0	0	0
	Shifting Cultivation	0	0	0	0	0	0	0	0	0
Total Biomass Carbon Stocks		0	0	0	-11807	-590	50	-11807	-590	50
Biomass Burning non-CO2	Cropland Residue	0	0	0	0	0	0	0	0	0
	Forest Land	0	0	0	0	0	0	0	0	0
	Grassland/Savanna	0	0	0	0	0	0	0	0	0
	Perennial Crops	0	0	0	0	0	0	0	0	0
	Agroforestry	0	0	0	0	0	0	0	0	0
	Settlements	0	0	0	0	0	0	0	0	0
	Deforestation	0	0	0	0	0	0	0	0	0
	Shifting Cultivation	0	0	0	0	0	0	0	0	0
Total Biomass Burning non-CO2		0	0	0	0	0	0	0	0	0

Table 3.2 Expanded Report showing Carbon Emissions by IPCC AFOLU Source Categories. Continued. Projected report period used in calculations is 20 years, from 2016 to 2036.

		Without Project (Baseline scenario)			**With Project (Project scenario)**			**Incremental difference (Project scenario minus baseline scenario)**		
		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr		tCO_2e	tCO_2e/yr	
Source category	Source sub-category	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)	Total	Annual	Uncertainty (%)
Soil Carbon Stocks	Mineral Soils*	0	0	0	-167	-8.4	49	-167	-8.4	49
	Organic Soils	0	0	0	0	0	0	0	0	0
Total Soil Carbon Stocks		0	0	0	-167	-8.4	49	-167	-8.4	49
Total Greenhouse Gas Emissions		0	0	52	-11898	-595	41	-11898	-595	41

Notes:

GWP are 100-year time horizon based on estimates from the IPCC Second Assessment Report.

Signs for uptake are (-) and for emissions (+); for greenhouse gas flux, emissions reductions are (-) and emissions increases are (+)

*The change in mineral soil carbon is shown under the 'With Project' column as Baseline minus Project.

*Estimates for Mineral soil carbon stocks are not shown as this feature is still under development.

*Estimates for Perennial Crop woody biomass carbon stocks are not shown as this feature is still under development.

*Totals for each year are calculated as the annual value times the number of years in the report period.