FAO-GEF Project Implementation Report

2021 – Revised Template

Period covered: 1 July 2020 to 30 June 2021

1. Basic Project Data

General Information

Region:	Europe and Central Asia
Country (ies):	Ukraine
Project Title:	Integrated Natural Resources Management in Degraded Landscapes in the Forest-Steppe and Steppe Zones of Ukraine
FAO Project Symbol:	GCP/UKR/004/GFF
GEF ID:	9813
GEF Focal Area(s):	Climate Change Mitigation, Land Degradation, MFA
Project Executing Partners:	Ministry of Environment Protection and Natural Resources in cooperation with Ministry for Development of Economy, Trade and Agriculture
Project Duration:	51 months (04 Oct 2017 - 31 Dec 2021)
Project coordinates: (Ctrl+Click here)	*This section should be completed by:* *-Projects with 1st PIR* *-Projects could re-submit the coordinates if they have changed, or if the PMU now has more updated coordinates* *46.736382, 32.706852 - GCP/UKR/004/GFF project field office* *50.437624, 30.520343 - GCP/UKR/004/GFF project office* *N 48°54'44.7" E 37°00'53.6" - Agricultural farm "Podolivska", v.Barvinkove, Kharkiv oblast* *N 47°25'01.1" E 30°59'19.2" - "Ukraina" agricultural LLC, v. Mostove, Mykolaiv oblast* *N 46°22'01.1" E 33°06'21.8" - SE "Brylivske" farm, v.Pryvitne, Kherson oblast* *N 49°55'20.7" E 30°09'01.5" - L. Pogorilyi UkrNDIVVT, v. Doslidnytske, Kyiv oblast"* *N 46°19'51.7" E 32°36'35.4" - SERS "Velyki Klyny", v. Velyki Klyny, Kherson oblast* *N 50°00'03.6" E 37°20'21.9" - PLAE "Burlutske" Velykyi Burluk city, Kharkiv Oblast* *46.377692, 32.569634 - FE "Tellus-Ug", v.Tavriiske, Kherson Oblast* *49.282429, 37.295097 - Yugran Ltd, v.Fedorivka, Kharkiv Oblast* *47.796710, 31.669942 - "FE ""Arcadia"", v.Ivanivka, Mykolaivska oblast* *46.500130, 33.537649 - LLC "AP Zorya-Yug", v.Kucheryavovolodymyrivka, Kherson Oblast* *49.103155, 35.453192 - PAE named after Frunze, v. Berdyanka, Kharkiv Oblast* *49.698974, 29.821147 - Agrofirma Kolos LLC., v.Pustovarivka, Kyiv Oblast*

	47.415966, 30.987384 - Mostivska amalgamated territorial community, Mykolaiv Oblast *46.363481, 32.922116 - Vynohradivska amalgamated territorial community, Kherson Oblast* *49.696123, 29.810497 - Pustovarivska amalgamated territorial community, Kyiv oblast* *47.429861, 31.180750 - Sukha Balka village, Voznesensky district, Mykolaiv region* *49.725356, 30.098369 - Bila Tserkva Research and Breeding Station of the Institute of Bioenergy Crops and Sugar Beets of NAAS of Ukraine, Kyiv oblast* *49.641161, 34.557283 - Experimental Station of Medicinal Plants, Institute of Agroecology and Environmental Management of NAAS of Ukraine, v. Berezotocha, Poltava oblast* *46.623628, 32.720865 - State enterprise "Steps branch named after Vynohradov of the Ukrainian Research Institute of Forestry and Forest Melioration named after G. M. Vysotsky", v.Oleshky, Kherson Oblast* *50.263571, 29.889945 - Byshivska Amalgamated territorial community, Kyiv Oblast* *50.446704, 29.817243 - Makarivksa Amalgamated territorial community, Kyiv Oblast* *50.465211, 30.160127 - Dmytrivska Amalgamated territorial community, Kyiv Oblast*

Milestone Dates:

GEF CEO Endorsement Date:	5 July 2017
Project Implementation Start Date/EOD :	04/10/2017
Proposed Project Implementation End Date/NTE[1]:	31/12/2021
Revised project implementation end date (if applicable) [2]	31/12/2022
Actual Implementation End Date[3]:	N/A

Funding

GEF Grant Amount (USD):	$ 1,776,481

[1] As per FPMIS

[2] In case of a project extension.

[3] Actual date at which project implementation ends - only for projects that have ended.

Total Co-financing amount as included in GEF CEO Endorsement Request/ProDoc[4]:	$ 10,323,267
Total GEF grant disbursement as of June 30, 2021 (USD m):	$ 1.064.935
Total estimated co-financing materialized as of June 30, 2021[5]	$ 1,275,880

Review and Evaluation

Date of Most Recent Project Steering Committee Meeting:	22 May 2019
Expected Mid-term Review date[6]:	N/A
Actual Mid-term review date:	20-24 January 2020
Mid-term review or evaluation due in coming fiscal year (July 2021 – June 2022)[7]:	**Yes** or **No**
Expected Terminal Evaluation Date:	June 2022
Terminal evaluation due in coming fiscal year (July 2021 – June 2022):	**Yes** or **No**
Tracking tools/ Core indicators required[8]	**Yes** or **No**

Ratings

Overall rating of progress towards achieving objectives/ outcomes (cumulative):	S
Overall implementation progress rating:	S
Overall risk rating:	M

[4] This is the total amount of co-financing as included in the CEO document/Project Document.

[5] Please see last section of this report where you are asked to provide updated co-financing estimates. Use the total from this Section and insert here.

[6] The MTR should take place about halfpoint between EOD and NTE – this is the expected date

[7] Please note that the FAO GEF Coordination Unit should be contacted six months prior to the expected MTR date

[8] Please note that the Tracking Tools are required at mid-term and closure for all GEF-4 and GEF-5 projects. Tracking tools are not mandatory for Medium Sized projects = < 2M USD at mid-term, but only at project completion. The new GEF-7 results indicators (core and sub-indicators) will be applied to all projects and programs approved on or after July 1, 2018. Also projects and programs approved from July 1, 2014 to June 30, 2018 (GEF-6) must apply core indicators and sub-indicators at mid-term and/or completion

Status

Implementation Status *(1st PIR, 2nd PIR, etc. Final PIR):*	***3rd PIR***

Project Contacts

Contact	Name, Title, Division/Institution	E-mail
Project Manager / Coordinator	Oleksandr Zhuravel (GEF project coordinator ai., FAOUA)	Oleksandr.Zhuravel@fao.org
Lead Technical Officer	Tania Santivañez, Agricultural Officer (REUTD)	Tania.Santivanez@fao.org
Budget Holder	Raimund Jehle, Regional Programme Leader (REUTD)	Raimund.Jehle@fao.org
GEF Funding Liaison Officer	Hernan Gonzalez, Technical Officer (CBC)	Hernan.Gonzalez@fao.org

2. Progress Towards Achieving Project Objectives and Outcome (DO)

(*All inputs in this section should be cumulative from project start, not annual)*

Project objective and Outcomes (as indicated at CEO Endorsement)	Description of indicator(s)[9]	Baseline level	Mid-term target[10]	End-of-project target	Level at 30 June 2021	Progress rating [11]
Objective(s):						
Outcome 1.1	**INRM principles integrated into environment, agriculture and forest sector frameworks, policies and programs**	Weak policy and legal framework for INRM and lack of management plans at local level to implement INRM Lack of systematic and long-term monitoring of land resources	INRM principles integrated into key national policy frameworks and productive sectors	Strong enabling environment and monitoring system facilitates integration of INRM into land-use planning covering 230 800 ha of land	1. The strong enabling environment among key national stakeholders involved has been developed based on the regular meetings of working groups of CC-LDD and SC members. The enabling environment was strengthened by: a) CC-LDD was expanded to 25 members (including village representatives and local agencies) b) Ukrainian Soil Partnership (UaSP) established to strengthen national policy for INRM and creation of systematic monitoring platform c) the project has been supporting efforts to improve	HS

[9] This is taken from the approved results framework of the project. Please add cells when required in order to use one cell for each indicator and one rating for each indicator.

[10] Some indicators may not identify mid-term targets at the design stage (refer to approved results framework) therefore this column should only be filled when relevant.

[11] Use GEF Secretariat required six-point scale system: **Highly Satisfactory** (HS), **Satisfactory** (S), **Marginally Satisfactory** (MS), **Marginally Unsatisfactory** (MU), **Unsatisfactory** (U), and **Highly Unsatisfactory** (HU).

					national legislation under the committee of the Verkhovna Rada of Ukraine on Environmental Policy and Nature Management and legislation on Climate Change Adaptation in collaboration with EU4Climate project and MEPNR c) In cooperation with the UaSP created a working group to develop the Strategy for LDN monitoring and hold 3 meetings of WG (November 10th ,2020,December 18th, 2020 and March 11th, 2021) . 2. These efforts have resulted in the development of two national regulations to support INRM and amendments to five laws, the development of a system for environmental monitoring and spatial planning (including LDN monitoring), three incentive mechanisms and two national strategies to support INRM. 3. In cooperation with National Academy of Agrarian Science, Institute of Water Problem and Reclamation the process of establishing Coordination Center of Sustainable Agriculture was launched. The Coordination Center would be developed based on the project testing fields for further Conservation Agriculture scaling up.	

Output 1.1.1 Strengthening of the Coordinating Council to combat land degradation and desertification (CC-LDD) to support intersectoral coordination for INRM at national and sub-national level	**The CC-LDD provides a platform for coordination and information sharing on INRM** **Number of ministries and agencies that become members of the CC-LDD**	The NAP recommends the establishment of the CC-LDD for enhanced coordination and information sharing, but the recommendations have not been operationalized.	The CC-LDD strengthened with participation from all relevant sectors	Enhanced coordination and information sharing on INRM across sectors	1. The CC-LDD has been established and extended with the new 25 members (Ministry of Health; State Forestry Project Agency; One oblast administration; State Institute of the Soil Protection; 17 local village communities; 3 local regional authorities; one NGOs). 2. First Annual Steering Committee Meeting has been carried out in 2019 and the second meeting postponed. 3. Online Information Sharing Platform launched: https://healthy-soils.org.ua/en/. 4. In collaboration with MEEP, the GEF team included on the - working group to improve national legislation under the committee of the Verkhovna Rada of Ukraine on Environmental Policy and Nature Management (5 meetings, 9 entities, 23 participants), - in the Climate Change Adaptation Working Group (CCA WG) to develop the Framework National Adaptation Strategy (FNAS) in cooperation with EU4Climate project and MEPNR. 5. In cooperation with UaSP and with a participation of Ministry of Environmental Protection and Natural Resources, the Ministry of Economic Development, Trade and Agriculture, the State	HS

					Service of Ukraine for Geodesy, Cartography and Cadastre, created a working group to develop the Strategy on LDN monitoring system (9 entities, 16 participants), hold 3 meetings and finalized the Strategy. 6. Since February 2020, the project's team has been monitoring COVID 19 impact on farmers' activities and shared this data with the relevant partners. 7. National Action Plan to Combat Land Degradation and Desertification (NAP) under the UN Convention to Combat Desertification (UNCCD) revise by the National policy and institutional expert following the MEPNR request. 8. The awareness-raising on and cooperation with the International Network on Fertilizers Analysis facilitated 9. 23 representatives of national institutions attended .5-days training on Ex-Ante Carbon Balance Tool and updated their knowledge on GHG calculation. 10. The action plan of shelterbelt reconstruction in Kherson oblast was developed . 11. -Draft Project Proposal Enhanced mitigation measures on droughts, floods, and COVID-19 within the Bessarabia region in Ukraine has been developed.	

Output 1.1.2 Improved institutional structures and legislation for sustainable land and shelterbelt management	**Number of draft laws and regulations in support of INRM principles approved (i.e. on functional land use, economic incentives, monitoring systems, soil quality standards, and ownership of shelterbelts)**	No INRM principles have been agreed at national level and the policy framework is full of loopholes, e.g. unclear ownership rights of shelterbelts	Review of existing laws, regulations and policies related to INRM	Draft laws and regulations in agreed areas approved	1. Two draft laws on Environmental Protection were developed and provided to the Government. 2. Two national legislative regulations developed and approved: - Regulation Measures to address the problem and prevent annual mass fires caused by burning plant residues and burning stubble remains - Maintenance and preservation regulation for field protective shelterbelts located on agricultural lands 3. The amendments to five laws developed and endorsed: -Law of Ukraine “On Land Protection” - Law of Ukraine “About Flora” - Land Code of Ukraine Civil Protection Code of Ukraine -Code of Ukraine on Administrative Offenses 4. Three Legislative models (mechanisms) on shelterbelt management were developed and tested. 5. Draft Law on regulating the incineration of vegetation and responsibility for it developed. 6. Draft Strategy for the LDN monitoring developed and submitted to MDETA. 7. Strategy for Environmental Safety and Adaptation to	HS

					Climate Change developed in cooperation with EU4Climate project and MEPNR. 8. Revised NAP under the UNCCD with performance review submitted to MEPNR. 9. The electronic data interchange and protection Agreements required for filling up the LDN monitoring system developed. 10. Collaboration with State GeoCadastre and Ministry of Agrarian Policy and Food aimed at building a national LDN monitoring system.	
Output 1.1.3 Strengthened national environmental monitoring systems (NEMS) and spatial planning on land and shelterbelt resources and land degradation control	**System in place for environmental monitoring and spatial planning** **Number of persons in key institutions at national and sub-national level using the system**	Tools and methods for environmental monitoring at national level are not up-to-date nor are they harmonized, which makes it difficult to use the generated information for land-use planning	All relevant institutions trained in the use of up-to date tools and methods for environmental monitoring and land-use planning	System in place for environmental monitoring and spatial planning	1. Concept note of land monitoring indicators developed and submitted. 2. Analytical note on the institutional capacity to develop NEMS developed and submitted. 3. 3 persons from 3 relevant institutes trained to develop the system of soil salinity monitoring 4. Correlation tables between soil types in the national classification and the international soil classification systems (WRB, FAO 2014) developed. 5. The digital soil maps are improving and to be tied to the cadastral map of Ukraine referring to the WGS84 standards.	S

					6.The methodology on matching Ukrainian soil types with WRB 2014 including the systematized topical dictionary and correlation tables between around 100 soil types in two scales elaborated. 7. Approach to integrated management of land resources for Agriculture land of Ukraine was developed. 8. People virtually trained on drought monitoring and application in agrometeorology by WMO-FAO. 9. Training on land and shelterbelt resource spatial planning to be held as per LoA with ASSOGU (see output 1.1.5). 10. Report on the current status of agriculture droughts and losses of available water in the south region of Ukraine developed.	
Output 1.1.4 Establishment of a Land Degradation Neutrality (LDN) monitoring system.	**System in place for monitoring of LDN indicators at demonstration sites (land cover, land productivity, soil organic carbon)**	Tools and methods for LDN monitoring are not up-to-date and a new monitoring system needs to be established	LDN baseline, including SOC, established at demonstration sites	The LDN monitoring system documented and shared for replication in other locations	1. Strategy for LDN monitoring elaborated. 2. The Concept, Characteristic and General Requirements for the LDN monitoring IT platform developed. 3. Technical Specification of IT platform for LDN monitoring developed. 4. The layouts to harmonise the soil reference data including the metadata for the soil profile and	MS

					soil agrochemistry database developed. 5. The next sets of soil data processed and prepared for the further processing: 1000 soil profiles; 30K of soil agrochemistry samples; 750 land monitoring data profiles. 6. The layouts to collect soil profile data developed. 7. The 1000 soil data profiled harmonized and prepared for the further processing.	
Output 1.1.5 Integrated land-use management plans at administrative region level	**Number of integrated land-use plans**	0	1 land-use plan covering at least 50 000 ha of land	At least 3 integrated land-use plans covering 230 800 ha of land	1. Development of integrated land management plans engaging the abandoned lands in Kyiv oblast is in process. 2. Survey of the amalgamated territorial communities (ATCs) s in Kyiv oblast for defining a feasible pilot was carried out and the pilot ATCs defined.	MS
Outcome 1.2 Financial and incentive mechanisms for INRM in place at national and sub-national levels	**Number and types of state-led and market-led incentive mechanisms supporting INRM**	Incentives mechanisms for INRM are generally weak in Ukraine due to unclear ownership of resources, and lack of knowledge	Ownership rights of shelterbelts clarified and suitable incentive mechanisms, such as Payment for Ecosystem Services (PES) and opportunities for certification of value-chains, identified in the three participating oblasts	At least two incentive mechnisms in place	1. Three models of shelterbelt management developed considering defining the ownership rights of shelterbelts and based on the suitable incentive mechanisms of management. Models tested in 3 pilot oblasts. As a result, shelterbelt inventory was performed for 1030 ha as well as the ownerships right were defined correspondingly. 2. Two PES schemes for agroforestry practices dissemination developed to be further tested.	S

					3. Value-added chains for highly demanded species of non-timber forest products (NTFPs) and medicinal herbs developed.	
Output 1.2.1 Ownership rights, procedures of inventory and standards for management and planting of shelterbelts	**Ownership rights, procedures of inventory and standards for planting shelterbelts defined**	Unclear ownership rights of shelterbelts are the main obstacle to their rehabilitation and sustainable use	Standards for shelterbelt ownership and use established	Standards for shelterbelt ownership and use operationalized	1. Recommendations for improving access and operation of shelterbelts for the end-users developed. 2. Practical guide for the implementation of the effective shelterbelts' management models. 3. The criteria of plant species selection for the shelterbelt planting in different agroclimatic zones developed. 4. Guideline for shelterbelt inventory developed 5. Thee drafts of Guideline for the species selection for shelterbelt planting developed.	HS
Output 1.2.2 Clear criteria and indicators developed for establishment of Payment for Ecosystem Services (PES) schemes for INRM	**Criteria and indicators developed for establishment of PES schemes**	Ukraine has very limited experience with mechanisms for scaling up of INRM, such as PES, and there is a need to etablish clear criteria and indicators	Review of criteria and indicators for establishment of PES schemes with recommendations for Ukraine	Criteria and indicators for establishment of PES schemes in Ukraine developed	1. Criteria and indicators for establishment PES scheme CA and agroforestry developed. 2. Brief description of ecosystem services selected including NTFPs and other environmental services which increase incomes of farmers developed. 3. Recommendation on PES schemes for agroforestry practices dissemination and conservation agriculture scaling focus on the selected project areas developed. 4. The brief stakeholder analysis involved in the recommended	S

					PES scheme development and implementation elaborated.	
Output 1.2.3 Inclusive and green food and feed value-chains strengthened	**Number of inclusive and green food and feed value-chains strengthened**	Value-chains are generally neither sufficiently inclusive or environmentally friendly	At least 4 food and feed value-chains analyses using the Markets for the Poor (M4P) methodology	At least 2 food and feed value-chains made more inclusive and environmentally friendly	1. Market analysis of NTFPs and inclusive medical herbs with market mapping for Kyiv, Kherson and Mykolaiv oblasts developed. 2. Value-added chains assessment for highly demanded species of NTFPs and medicinal herbs developed. 3. The list of criteria and determine areas in the steppe and forest-steppe zones of Ukraine for scaling non-timber goods and medicinal and aromatic herb production developed 4. Concept paper for supporting development of the value-chains of NTFPs and medical-aromatic plant, to improve drought-affected farmers group productivity in Southern Ukraine. 5. Recommendation on shrubs planting and medical herds cropping, and crop rotation schemes with a technological map based on a few local reference examples developed.	S
Outcome 2.1 Upscaling of Sustainable Land Management (SLM) and climate-smart agricultural (CSA) practices in	**SLM and CSA technologies/best practices applied on X ha of land sequestring Y mton CO2**	SLM and CSA technologies are applied in isolated locations in Ukraine promoted by research institutes and agro-	10 000 ha	29 400 ha 277 675 mton CO2eq.	1. The best CA practices scaled up on area 248 220 ha due to FFS training and farm-to-farm visits. In total 354 participants from 15 oblasts participated. 2. The best shelterbelts management practices are being	S

production landscapes in the forest-steppe zone		enterprises that are not connected to higher level planning and decision-making processes			disseminated by the means of FFS (5 theoretical and 3 practical sessions in Kyiv, Kherson and Mykolaiv oblasts). 3. CSA and SLM technologies are being disseminated through research institutes and farmers in the rural areas of Kyiv, Kherson, Kharkiv and Mykolaiv Oblasts.	
Output 2.1.1 Capacity to implement CA in the forest-steppe zone developed and strengthened	**Number of conservation agriculture (CA) training events and workshops support by the project** **Farmers Field Schools (FFS) established** **Number of farmer-to-farmer exchange visits**	Agricultural service providers have limited knowledge and technical skill related to CA	At least two training events each in Kharkiv and Kiev oblasts with around 20 agricultural service providers in total	30 agricultural service providers trained in CA 3 FFS established, and 3 exchange visits organized	1. 9 pieces of training under the field farms schools on CA conducted on 4 pilot oblasts. 2. 354 participants (144 farmers, 98 agriculture service providers, 25 representatives of village communities and others) scaled up their knowledge on CA. 3. 8 farmer-to-farmer visits conducted. Training included representatives from the 15 oblasts: Vinitsa, Kirovograd, Cherkasy, Lugansk, Kharkiv, Kherson, Mykolaiv, Zaporizhya, Kyiv, Khmelnytskyi, Odesa, Zhytomyr, Poltava, Sumy, Ternopil. 4. Curriculum for CA online course developed. 5. CN for the Coordination Center for Sustainable Agriculture developed. 6. Project profile for scaling up the CA practices through establishment of CSA Centers to empower community capacity for stable agricultural	HS

					production within the Dniester River Basin developed.	
Output 2.1.2 CA practices demonstrated and upscaled	**Number of CA practices implemented in selected production landscapes**	It is mainly the steppe area in Ukraine that has adopted CA and only on 2% of soils.	Number of CA best practices implemented on 10 000 ha of land	Number of CA best practices implemented on 29 400 ha of land leading to sequestration of 277 675 mton CO_2eq.	1. 3 CA practices combined with subsurface drip irrigation implemented on the pilot project sites in Kherson oblast (20 ha). 2. One enhanced soil maintenance practice was implemented in Kharkiv oblast, on 110 ha. 3. The 8 best practices of CA were disseminated and scaled up on area 248 220 ha.	HS
Output 2.1.3 Identification and support to the special needs of rural women at project sites	**Number of training events and workshops organized for women's groups, young women entrepreneurs, etc.** **Number of women-to-women exchange visits**	The feminization of agriculture in Ukraine has led to over-representation of women in rural areas and they often shoulder the main responsibility for agricultural activities	At least one training events each in Kharkiv and Kiev oblasts with around 20 agricultural service providers in total	30 agricultural service providers trained in gender issues and the special needs of rural women 2 exchange visits organized	1. Gender oriented desk study was conducted, and results were shared publicly at the conference. 2. 15 female farmers were trained on CA in Kyiv, Kherson, Kharkiv and Mykolaiv oblasts. 3. One-webinar for rural women to discuss their role in the ecosystem services promotion arranged as a part of the FFS on shelterbelts. 4. One article about a rural woman published.	MS
Outcome 2.2 Rehabilitation and sustainable management of shelterbelts	**Best practices for shelterbelt management applied on X ha of land sequestering Y mton CO2**	Shelterbelts have been allowed to degrade since independence due to unclear ownership	1 000 ha	3 600 ha 87 821 mton CO_2eq.	1. Shelterbelt inventory was performed for 1150 ha as well as the ownerships right were defined correspondingly. 2. Maintenance of 8 ha of newly established shelterbelts and reconstruction of 24 ha of	HS

					existing shelterbelt was completed in Kherson oblast.	
Output 2.2.1 Guidelines and capacity for inventory and management of shelterbelts developed	**Number of guidelines for inventory and management of shelterbelts**	No guidelines exists	Guidelines developed and published	Guidelines applied at project demonstration sites	1. The manual of shelterbelt inventory for farmers and other end users developed. 2. The practical guidelines for the implementation of the effective shelterbelts' management models developed and published in Ukrainian. The English version is in process. The guidelines were tested on three pilot sites in Kherson, Mykolaiv and Kyiv oblasts. 3. The recommendation for the establishing, reconstruction and maintenance of the shelterbelts in the steppe and forest-steppe zones was developed and published based on the pilot implementation in the Kherson oblast. 4. The guideline on best agroforestry practices and in the different agroclimatic zones developed. 5. The online workshop and round table on implementation of the effective shelterbelt's management models conducted ("Shelterbelts from A to Z"). 6. Guideline on plant species selection is in process.	HS

Output 2.2.2 Rehabilitation and multipurpose shelterbelt management demonstrated and improved	**Number of shelterbelt best management practices implemented**	No best management practices have been documented and demonstrated in Ukraine since independence	Number of shelterbelt best management practices implemented on 1000 ha of land	Number of shelterbelt best management practices implemented on 3 600 ha of land leading to sequestration of 87 821 mton CO_2eq.	1. Shelterbelt established - **8 ha** (Kherson oblast). 2. Shelterbelt reconstructed - **24 ha** (Kherson oblast). 3. Shelterbelt inventoried - **1150 ha** (2019-2020: 340 ha Kherson oblast; 600 ha – Mykolaiv oblast; 90 ha – Kyiv oblast; 2020 - 2021: Shelterbelt's inventory in 3 village communities of Kyiv oblast started (120 ha in total). 4. Three of the best agroforestry practices (climate resilience agroforestry, nut, and honey production) were applied. 5. Curriculum for FFS on agroforestry developed. 6. 5 webinars and 3 field trips in 3 pilot oblasts under FFS 2 cycle on shelterbelts conducted.	HS
Outcome 3.1 Adaptive management ensured and key lessons shared	**M&E system is in place to support adaptive results-based management and monitoring of upscaling resulting from the project.**	No system in place	Implemented project based on adaptive results-based management	Project delivers expected results and shares best practices	The detailed work plan has been updated. M&E matrix is timely monitored. All M&E activities are conducted as per schedule.	S
Output 3.1.1 Project progress continually monitored, mid-term review/evaluation and final evaluation conducted	**Mid-term and final evaluation reports**	0	Mid-term review recommendations implemented		1.Mid-term evaluation performed, 20-24 January 2020. 2.Mid-term evaluation report submitted. 3.Four PPR submitted and approved.	S

					4. Two PIR submitted and approved.	
Output 3.1.2 Assessment of resilience of tested INRM approaches and feeding back of lessons to field level	**Resilience assessment**	Resilience is generally not taken into consideration in NRM activities	Resilience assessment using the RAPTA approach of tested INRM approaches to identify the most appropriate implementation pathways for further upscaling	Upscaled INRM approaches are resilient to climate change and other external stressors	Planned second semester 2021	N/A
Output 3.1.3 Project achievements, results and innovative approaches recorded and disseminated	**Project website and social media pages** **X number of project newsletters** **X number of awareness/ outreach events organized**	Low awareness of INRM, including SLM, CA and CSA	Project website and social media pages established Outreach event organized in connection with project launch	6 project newsletters 4 outreach events	2 – newsletters published, 402 -web-publication and posts, 3 – international publications (FAO; Asahi Shimbun Globe, Japan; conference thesis Uzbekistan), 1 – national TV broadcasting, 1 – national radio broadcasting, 1 – national monography, 3 - national press conferences; 1 – national briefing, 8 - online webinars, 1 – on-line workshop, 3 - national radio interviews, 2 forums - East Expo 2019 and UN Environmental Forum 2021, 1 – national newspaper interview, 16 – outreached events organized, 1 – animated video produced and translated into English and Spanish in coordination with GSP (40 million visitors)	HS

					5– Publications-including - Recommendations for the creation, restoration, reconstruction and maintenance of shelterbelts in the steppe and forest-steppe zones of Ukraine (in Ukrainian), Overview of soil conditions of arable land, Guideline on Implementation of Efficient Shelterbelt Management Models (in Ukrainian); and 2 success story published: One success story published on FAO.org and one success story shared among national media. Publication on shelterbelt management translated into English. 3 short videos from FFS field visits developed and to be disseminated.	

Action plan to address MS, MU, U and HU ratings

Outcome	Action(s) to be taken	By whom?	By when?
Outcome 1.1	N/A		
Outcome 1.2	N/A		
Outcome 2.1	N/A		
Outcome 2.2	N/A		
Outcome 3.1	N/A		

3. Progress in Generating Project Outputs (Implementation Progress, IP)

(Please indicate progress achieved during this FY as planned in the Annual Work Plan)

Outputs[12]	Expected completion date [13]	Achievements at each PIR[14]			Implement. status (cumulative)	Comments Describe any variance[15] or any challenge in delivering outputs
		1st PIR	2nd PIR	3rd PIR		
Output 1.1.1 Strengthening of the CC-LDD	Q4 Y4	*-The CC-LDD has been established;* *-Project Steering Committee has been appointed and regular meeting schedule agreed;* *-Online Information sharing platform developed and launched.*	*- The second PSC meeting was appointed.* *- The CC-LDD was extended with the new 25 members* *- In collaboration with MEEP, the GEF team included as a part of the working group to improve national legislation* *- In cooperation with UaSP created a working group to develop the Regulation on LDN monitoring system*	*- The second PSC meeting was postponed.* *- In collaboration with EU4Climate project and MEPNR, the GEF team was included as a part of the working group to improve national legislation on climate change adaptation.* *- In cooperation with UaSP Strategy for LDN monitoring was developed following 3 meetings of the working group.* *- Following the MEPNR request, NAP under the UNCCD was revised by the National policy and institutional expert.* *- Ex-Ante Carbon Balance Tool training was given to national beneficiaries.* *- Journalist visit on the field in Kherson oblast facilitated.* *- Awareness-raising on and cooperation with the*	75%	The key beneficiary - MEPNR has been totally reorganized in June 2020, which affected the activity of the Ministry regarding cooperation with international organizations in the second half of 2020. Besides, the second key beneficiary Ministry of Agrarian Policy was restored in first half of 2021 and slowly taking over some functions of the Ministry of Economic Development, Trade and Agriculture. This situation affected the launch of the PSC meeting.

				International Network on Fertilizers Analysis facilitated *- Draft Project Proposal Enhanced mitigation measures on droughts, floods, and COVID-19 within the Bessarabia region in Ukraine has been developed by international expert.*		
Output 1.1.2 Improved institutional structures and legislation for SLM and shelterbelt management	Q2 Y4	*- National Soil Partnership (NSP) has been established;* *- Drafts of law on national monitoring system was proposed with project support*	*- Two national legislative regulations were developed and approved.* *- The amendments to five laws developed and accepted.* *- Three Legislative models (mechanisms) on shelterbelt management developed and tested.* *- Draft Law on regulating the incineration of vegetation and responsibility for it developed.*	*- The Strategy for the LDN monitoring was developed and submitted to MDETA.* *- Strategy for Environmental Safety and Adaptation to Climate Change developed in cooperation with the EU4Climate project and MEPNR.* *- Revised NAP under the UNCCD with performance review submitted to MEPNR.* *- The electronic data interchange and protection Agreements required for filling up the LDN monitoring system developed.* *- Collaboration with State GeoCadastre and Ministry of Agrarian Policy and Food*	90%	

[12] Outputs as described in the project logframe or in any updated project revision. In case of project revision resulted from a mid-term review please modify the output accordingly or leave the cells in blank and add the new outputs in the table explaining the variance in the comments section.

[13] As per latest work plan (latest project revision); for example: Quarter 1, Year 3 (Q1 y3)

[14] Please use the same unity of measures of the project indicators, as much as possible. Please be extremely synthetic (max one or two short sentence with main achievements)

[15] Variance refers to the difference between the expected and actual progress at the time of reporting.

				aimed at building a national LDN monitoring system.		
Output 1.1.3 Strengthened national environmental monitoring systems and spatial planning on land and shelterbelt resources and land degradation control	Q4 Y4	*Project was included in the process of national environmental monitoring system development.* *-National Soil Partnership (NSP) established by the leading relevant state institutes*	*-The institutional analysis including the assessment of technical capacity to develop NEMS was performed.* *-People trained for the monitoring of soil salinity and mapping the soil organic carbon* *-The national and international standard of soil classification was reconciled with further mapping.*	*- The methodology on matching Ukrainian soil types with WRB 2014 including the systematized topical dictionary and correlation tables between around 100 soil types in two scales elaborated.* *- People virtually trained on drought monitoring and application in agrometeorology by WMO-FAO.* *- Report on the current status of agriculture droughts and losses of available water in the south region of Ukraine developed.* *- Training on Ex-Ante Carbon Balance Tool was held.*	80%	
Output 1.1.4 Establishment of a Land Degradation Neutrality (LDN) monitoring system	Q4 Y4	*- List of LDN monitoring indicators (28) was developed and approved by relevant national experts for further integration into a national system*	*- Draft Regulation on LDN monitoring system is elaborating.* *- Technical Specification of IT platform for LDN monitoring is elaborating*	*- Strategy for LDN monitoring elaborated.* *- The Concept, Characteristic and General Requirements for the LDN monitoring IT platform was developed.* *- Technical Specification of IT platform for LDN monitoring was developed.* *- The layouts to harmonise the soil reference data including the metadata for the soil profile and soil agrochemistry database developed.*	50 %	

				- The next sets of soil data processed and prepared for the further processing: 1000 soil profiles; 30K of soil agrochemistry samples; 750 land monitoring data profiles. *- The layouts to collect soil profile data developed.* *- The 1000 soil data profiled harmonized and prepared for the further processing.*		
Output 1.1.5 Integrated land-use management plans at the administrative region level	Q4 Y4	*Planned at the further stages of the project implementation*	*Planned in fall 2020*	*- Development of integrated land management plans engaging the abandoned lands in Kyiv oblast is in process. The activity was encouraged by the collected request from village communities.* *- A Survey of the ATCs in Kyiv oblast for defining feasible pilot was carried out and the pilot ATCs defined.*	40%	The PSC was requested for developing the practical regulation for ILMP at the administrative region level with pilot implementation. However, the activity was postponed until the ownership rights on the natural resource (including land) caused by the continuous reform of decentralization as well as the opening land market were clarified by project activities.
Output 1.2.1 Ownership rights, procedures of inventory and standards for management and planting of shelterbelts	Q4 Y3	*-Two guidelines for shelterbelt establishment and reconstruction developed and one in a progress*	*- One recommendation and two practical guidelines refer to shelterbelt management were developed.* *- The criteria of plant species selection for the shelterbelt planting in different agroclimatic zones elaborated*	*- The criteria of plant species selection for the shelterbelt planting in different agroclimatic zones elaborated.*	100%	

based on types of soils and natural zones defined						
Output 1.2.2 Clear criteria and indicators developed for establishment of Payment for Ecosystem Services (PES) schemes for INRM	Q4 Y4	*- Planned at the further stages of the project implementation*	*- Criteria and indicators for establishment PES scheme CA and agroforestry are developing* *-Recommendation on PES schemes for agroforestry practices dissemination and conservation agriculture scaling are developing including the brief stakeholder's analysis.*	*- Criteria and indicators for establishment PES scheme CA and agroforestry developed.* *- Brief description of ecosystem services selected including NTFPs and other environmental services which increase incomes of farmers developed.* *- Two PES schemes for shelterbelt management were developed.* *- Recommendation on PES schemes for agroforestry practices dissemination and conservation agriculture scaling developed with a focus on the selected project areas.* *- The brief stakeholder analysis involved in the recommended PES scheme development and implementation elaborated.*	100%	The constraints for activity implementation the lack of awareness among stakeholders regarding payments for ecosystem services and gaps in legislation
Output 1.2.3 Inclusive and green food and feed value-chains strengthened	Q4 Y4	*Planned at the further stages of the project implementation*	*Planned in July 2020*	*- Market analysis of NTFPs and inclusive medical herbs with market mapping for Kyiv, Kherson and Mykolaiv oblasts developed.* *- Value-added chains for highly demanded species of NTFPs and medicinal herbs developed.* *- The list of criteria and determine areas in the steppe*	70%	

				and forest-steppe zones of Ukraine for scaling non-timber goods and medicinal and aromatic herb production development by the international expert. *- Concept paper for supporting to develop the value-chains of NTFPs and medical-aromatic plant, to improve drought-affected farmers group productivity in Southern Ukraine, by strengthening good collection and production practices, to reduce the level of damage affected by natural disasters by an international expert.* *- The recommendation for shrubs planting and medical herds cropping, and crop rotation schemes with a technological map developed based on a few local reference examples.*		
Output 2.1.1 Capacity to implement CA in the forest-steppe zone developed and strengthened	Q1 Y3	*- 4 pieces of training under FFSs established on 4 pilot sites;* *- around 200 agricultural service providers trained;* *- More than 90 farmers participated in 4 farmer-to-farmer visits*	*- 5 pieces of training under FFSs conducted, on 4 pilot oblasts;* *- 354 participants (144 farmers, 98 agriculture service providers, 25 representatives of village communities and others);* *-8 farmer-to-farmer visits;* *- Representatives from the 15 oblasts* *- Curriculum for CA online course developed.*	*- CN for the Coordination Center for Sustainable Agriculture developed.* *- Project profile for scaling up the CA practices through the establishment of Climate Smart Agriculture Centers to empower community capacity for stable agricultural production within the Dniester River Basin (DRB) for Moldova and Ukraine developed by the international expert.*	100%	

Output 2.1.2: CA practices demonstrated and upscaled	Q4 Y3	*- Two field testing of the SLM and CA practices at project sites: 130 ha in Kharkiv; 20 ha in Kherson;* *- 8 SLM and CA practices demonstrated and disseminated on 16K ha*	*- 3 practices CA combined with drip irrigation and one enhanced soil maintain practice were implemented on the pilot project sites in Kherson and Kharkiv oblast, on 20 ha and 130 ha correspondingly;* *- 8 the best practices of CA were disseminated and scaled up on area 248 220 ha*	*- Application of CA practices combined with 3 types of irrigation on the 20-ha pilot site in Kherson oblast finalized.*	100%	
Output 2.1.3: Identification and support to the special needs of rural women at project sites to ensure that they reap the benefits of investments in climate-smart agriculture	Q4 Y4	*-Assessment of gender-related risks for women and men working in agriculture has been developed as a bassline for further training in gender issues and the special needs of rural women.*	*-Gender oriented desk study was conducted, and results were shared publicly in the conference* *-15 female farmers were trained on CA.*	*- One-webinar for rural women to discuss their role in the ecosystem services promotion arranged as a part of the FFS on shelterbelts.* *- One article about a rural woman published.*	50%	
Output 2.2.1: Guidelines and capacity for inventory and management of shelterbelts developed	Q4 Y4	*- Two guidelines for shelterbelt establishment and reconstruction developed.* *- Parameters for the shelterbelt inventory are being developed.*	*- The manual of shelterbelt inventory and the practical guide for the implementation of the effective shelterbelt management models were developed and tested on the three pilot sites in Kherson, Mykolaiv, and Kyiv oblasts.* *- The guidelines for the establishing, reconstruction and maintenance of the*	*- The guideline on best agroforestry practice selection and development in the different agroclimatic zones developed.* *- Guideline on Implementation of Efficient Shelterbelt Management Models (in English) to be published.* *- Guideline on plant species selection is in process.*	95%	

			shelterbelts tested on the pilot implementation in Kherson oblast. *- The online workshop on the implementation of the effective shelterbelt's management models conducted ("Shelterbelts from A to Z").*			
Output 2.2.2: Rehabilitation and multipurpose shelterbelt management demonstrated and improved	Q4Y4	*- Sustainable shelterbelt management practices implemented on 24 ha of Kherson oblast (6 km x 40m plot under the shelterbelt reconstruction; 2km X 40 m plot under newly established shelterbeltб 8 га).* *-Two shelterbelt planting projects were developed and implemented*	*- Three of the best agroforestry practices were applied for* *- Shelterbelt establishment - 8 ha (Kherson oblast);* *- Shelterbelt reconstruction - 24 ha (Kherson oblast);* *- Shelterbelt inventory – 1030 ha (340 ha Kherson oblast; 600 ha - Mykolaiv oblast; 90 ha - Kyiv oblast).*	*- Maintenance of reconstructed and newly established shelterbelts was performed and monitored.* *- Curriculum for FFS on agroforestry developed.* *- 5 webinars and 3 field trips in 3 pilot oblasts under FFS 2 cycle on shelterbelts conducted.* *- Shelterbelts inventory in 3 village communities of Kyiv oblast started (120 ha in total).*	60%	
Output 3.1.1: Project progress continually monitored, mid-term and final evaluation conducted	Q4Y4	*- Mid-term evaluation should take place in the second quarter of 2019*	*- Mid-term evaluation was performed, 20-24 January 2020.* *- Mid-term evaluation report submitted.* *- Three PPR submitted and accepted* *- One PIR submitted and accepted*	*- One PPR submitted and endorsed* *- One PIR submitted and endorsed*	80%	
Output 3.1.2 Assessment of resilience of tested INRM approaches	Q4Y4	*-Planned at the latest stages of the project implementation*	*-Planned in fall 2020*	*-Planned second semester 2021*	N/A	

and feeding back of lessons to field level						
Output 3.1.3 Project achievement, results and innovative approaches recorded and disseminated	Q4 Y4	*One poster published,* *118 web publications and posts,* *3 – international publications,* *1 – national TV broadcasting,* *1 – national radio broadcasting,* *1 – national monography,* *10 – outreach events organized.*	*One newsletter published,* *193 – web-publication,* *2 Publications - Overview of soil conditions of arable land and Recommendations for the creation, restoration, reconstruction and maintenance of shelterbelts in the steppe and forest-steppe zones of Ukraine (in Ukrainian),* *2 – national press conferences,* *1 – national briefing,* *3 – webinars,* *1 – on-line workshop,* *3 -national radio interviews,* *forum East Expo 2019* *One success story published.* *3 – outreached events organized.*	*One newsletter published,* *94 – publications in online media,* *1 – national press conference devoted to WSD,* *1 – UN Environmental Forum 2021,* *5 – online webinars on FFS,* *1 – animated video produced,* *1 Publication – Guideline on Implementation of Efficient Shelterbelt Management Models (in Ukrainian) published and translated into English,* *One success story disseminated among national media.* *3 – outreached events organized,* *1 – national newspaper interview (Kyivpost),* *3 – short videos from FFS field visits developed and to be disseminated.*	90%	

4. Information on Progress, Outcomes and Challenges on Project Implementation

Please briefly summarize main progress achieving the outcomes (cumulative) and outputs (during this fiscal year):

In partnership with UaSP the project has created and facilitated a multi stakeholder technical group to develop the Strategy for the Monitoring of Agricultural Land Degradation Neutrality in Ukraine until 2030. The working group consists of 30 representatives of the top government Ministry of Natural Resources and Environmental Protection, Ministry for Development Economic Trade and Agriculture, AgroComity of Verkhovna Rada, nine leading research institutes, agriculture business, and IFC, and World Bank. The Strategy was approved by the Ministry of Agrarian Policy and Food of Ukraine with the main objective to create institutional mechanisms for organizing measures to achieve land degradation neutrality and restoration of degraded land in the context of sustainable development of the state which is in line with the main goal of the project and outputs 1.1.1, 1.1.2 and 1.1.4.

The Ministry of Agrarian Policy and Food authorized UaSP to develop an LDN monitoring system for agricultural land in cooperation with SateGeo CadasterThe LDN monitoring system will be setting up in the coming months in collaboration with UaSP and SateGeo Cadaster. Along with this, the draft of ToR to develop the irrigated and drainage land maps was developed.

The project together with the National Scientific Centre "Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky" has undertaken the following scientific work regarding soils:
- methodology of the soil units comparison and correlation in the national classification and the international soil classification systems (WRB, FAO 2014), and
- correlation tables between soil types respectively developed (Outputs 1.1.3 and 1.1.4).

With an aim to support rehabilitation and sustainable management of shelterbelts and developing integrated land-use management plans at the administrative region level the project has been partnering with the All-Ukrainian Association village councils and amalgamated communities. The survey of the amalgamated territorial communities (ATCs) in Kyiv oblast for defining a feasible pilot has already been carried out, the pilot ATCs defined and consultations with local land management departments is ongoing (Output 1.1.5).

The project aims at developing financial and incentive mechanisms for integrated natural resource management at the national and sub-national levels through the strengthening of the inclusive and "green" food and feed value-chains (Output 1.2.3). Therefore, market analysis of NTFPs and inclusive medical herbs with market mapping for Kyiv, Kherson and Mykolaiv oblasts and value-added chains for highly demanded species of NTFPs and medicinal herbs has been developed in partnership with the Institute of Agroecology and Environmental Management of NAAS.

In order to develop and disseminate sustainable agriculture practices among farmers, shelterbelts management and awareness-raising, the project implemented activities in cooperation with the Institute of Water Problems and Land Reclamation of NAAS. Hence, the corn harvest and cover crops sowing were performed on the 20 ha pilot site in Velykyi Klyn village where 3 types of irrigation were applied (Output 2.1.2). As a result, subsurface drip irrigation and drip irrigation was the

most effective with an average harvest amount of 8.00 and 7.67 t/ha respectively, while sprinkler irrigation was proved to be ineffective with 4.04 t/ha while harvest amount of not irrigated 2 ha testing plot was 3.17 t/ha. A mixture of cereals and legumes was used as a cover crop. Additionally, maintenance of reconstructed (7.3 ha) and newly established shelterbelts (1,49 ha) was performed and monitored (Output 2.2.2).

With regards to improving shelterbelt management, criteria of plant species selection for the shelterbelt planting in different agroclimatic zones was elaborated (Outputs 1.2.1), guidelines on implementation of efficient shelterbelt management models published in Ukrainian and to be published in English (Output 2.2.1), the Farmer field school on shelterbelts launched with 5 webinars and 3 field trips in 3 pilot oblasts currently been held (Output 2.1.3), and shelterbelts inventory of 120 hectares in 3 village communities of Kyiv oblast started (Output 2.2.2).

Moreover, an animated video on soil degradation was developed and presented to a wide audience on World Soil Day in English and in Ukrainian (Output 3.1.3). The video quality and concept were highly rated by project partners and general public and has more than 26 500 views on FAO and UN social media pages. The video was translated into French, Spanish and Russian languages thanks to the support from the Global Soil Partnership (GSP). More information on the progress of the Output 3.1.3 can be found in Knowledge Management Activities section.

What are the major challenges the project has experienced during this reporting period?

Due to the restructuring of the project key beneficiary - Ministry of Environmental Protection and Natural Resources that happened in June 2020, affecting the activity of the Ministry regarding cooperation with international organizations in the second half of 2020, and due to quarantine restrictions caused by the COVID-19 pandemic the project steering committee (PSC) meeting in 2020 was impossible to conduct. Besides, the second key beneficiary Ministry of Agrarian Policy and Food was restored in the first half of 2021 and slowly taking over some functions of the Ministry of Economic Development, Trade and Agriculture. This situation has affected the launch of the PSC meeting on time.

Additionally, due to the cross-cutting complexity of the project that includes several fields of expertise (agriculture, forestry, legislation) and to ensure that all documents and contracts issued are technically compliant, the implementation of some activities was delayed or postponed to 2021 in consequence of COVID-19 pandemic.

Therefore, due to the challenges mentioned above, a one year No Cost Extension from 1 January to 31 December 2022 is extremely important and vital for successful completion of project activities.

Furthermore, the major constraint to the effective involvement of CA through the enhancing agriculture policy is the remaining uncertainty with the establishment of the land market. With regards to shelterbelts inventory, the constrain is a lack of clear understanding by local authorities of shelterbelts inventory procedures and economic benefits due to the complexity of existing regulations.

Development Objective (DO) Ratings, Implementation Progress (IP) Ratings and Overall Assessment

Please note that the overall DO and IP ratings should be substantiated by evidence and progress reported in the Section 2 and Section 3 of the PIR.

For DO, the ratings and comments should reflect the overall progress of project results.

	FY2021 Development Objective rating[16]	FY2021 Implementation Progress rating[17]	Comments/reasons[18] justifying the ratings for FY2021 and any changes (positive or negative) in the ratings since the previous reporting period
Project Manager / Coordinator	**Satisfactory (S)**	**Satisfactory (S)**	The average rating of the project can be recognized as satisfactory. Around 74% of the final project's targets were covered. Activities that project team was not able to implement during the reporting period was adjusted or postponed.
Budget Holder	**Satisfactory (S)**	**Satisfactory (S)**	The project has good achievement during the reporting period, however some activities were not completely achieved due to the fact that COVID-19 restriction, internal and external factors affected project momentum and funds delivery, therefore a one year No Cost Extension is strongly recommended to complete the remaining activities.
GEF Operational Focal Point			Optional Ratings/comments

[16] **Development/Global Environment Objectives Rating** – Assess how well the project is meeting its development objective/s or the global environment objective/s it set out to meet.

For more information on ratings, definitions please refer to Annex 1.

[17] **Implementation Progress Rating** – Assess the progress of project implementation. For more information on ratings definitions please refer to Annex 1.

[18] Please ensure that the ratings are based on evidence

Lead Technical Officer[19]	**Satisfactory (S)**	**Satisfactory (S)**	In this period the project has a good achievements and progress in outputs which has some delays in last period. It is highlighted the approval of the Strategy for the Monitoring of Agricultural Land Degradation Neutrality facilitated by the project; the development of market analysis of NTFPs and inclusive medical herbs with market mapping for Kyiv, Kherson and Mykolaiv oblasts and recommendations provided for shrubs planting and medical herds cropping, and crop rotation scheme. In order to implement remain activities it is suggested no cost extension of the project at least for 12 months.
FAO-GEF Funding Liaison Officer	**Satisfactory (S)**	**Satisfactory (S)**	Despite of the reorganization of major national beneficiaries and the current COVID situation that has affected the project activities throughout 2020 and 2021, the overall progress of the project is satisfactory. The project achieved many important milestones. The most important are the development of a Strategy on LDN monitoring system to be shared with the UNCCD, the rehabilitation and sustainable management of shelterbelts and the development of a Practical guide for the implementation of effective shelterbelts and the achievement of strengthened inclusive and "green" food and feed value-chains. Finally, the project is expecting an non-cost extension of co-funding until end-2022 to finalize the establishment of the LDN monitoring platform and to consolidate results from shelterbelt management and CA practices.

[19] The LTO will consult the HQ technical officer and all other supporting technical Units.

5. Environmental and Social Safeguards (ESS)

Under the responsibility of the LTO (PMU to draft)

This section of the PIR describes the progress made towards complying with the approved ESM plan, when appropriate. Note that only projects with **moderate** or **high** Environmental and Social Risk, approved from June 2015 should have submitted an ESM plan/table at CEO endorsement. This does not apply to **low** risk projects. Please add recommendations to improve the implementation of the ESM plan, when needed.

Social & Environmental Risk Impacts identified at CEO Endorsement	Expected mitigation measures	Actions taken during this FY	Remaining measures to be taken	Responsibility
ESS 1: Natural Resource Management				
ESS 2: Biodiversity, Ecosystems and Natural Habitats				
ESS 3: Plant Genetic Resources for Food and Agriculture				
ESS 4: Animal - Livestock and Aquatic - Genetic Resources for Food and Agriculture				
ESS 5: Pest and Pesticide Management				
ESS 6: Involuntary Resettlement and Displacement				
ESS 7: Decent Work				
ESS 8: Gender Equality				
ESS 9: Indigenous Peoples and Cultural Heritage				
New ESS risks that have emerged during this FY				

In case the project did not include an ESM Plan **at CEO endorsement stage, please indicate if the initial Environmental and Social Risk classification is still valid; if not, what is the new classification and explain**.

Overall Project Risk classification (at project submission)	**Please indicate if the Environmental and Social Risk classification is still valid[20].** If not, what is the new classification and explain.
Low risk	The classification risk ratio has maintained at the low level. There was no significant deviation from the previous year.

Please report if any grievance was received as per FAO and GEF ESS policies. If yes, please indicate how it is being/has been addressed.
N/A

6. Risks

Risk ratings

RISK TABLE
*The following table summarizes risks identified in the **Project Document** and reflects also **any new risks** identified in the course of project implementation. Please make sure that the table also includes the Environmental and Social Management Risks captured by the Environmental and social Management Risk Mitigations plans. The Notes column should be used to provide additional details concerning manifestation of the risk in your specific project, **as relevant**.*

[20] **Important:** please note that if the Environmental and Social Risk classification is changing, the ESM Unit should be contacted and an updated Social and Environmental Management Plan addressing new risks should be prepared.

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
1	The unpredictability in the project implementation caused by the reorganization of major national beneficiaries	High	This risk will be mitigated under Component 1 of the project that will strengthen the intersectoral coordination mechanism to enhance cooperation. In this regard, the project team ensures adequate dissemination of the project information, keeps working focusing on the technical project tasks, ensuring close collaboration with the middle-level management of the Ministers involved, and continued involvement of the key stakeholders.	- Strengthen cooperation with the middle-level management of the top governmental organizations. - Engaging more members on the government level into the CC-LDD. - Increasing project partnerships and stakeholder involvement considering the degree of ownership of project results by stakeholders.	
2	Unclear responsibilities of institutions at national and local level	Low	This will also be addressed under component 1 of the project that will provide support to improve institutional structures and legislation for INRM, including roles and responsibilities at national and sub-national levels.	- The mechanism for the establishment of land degradation monitoring system for agricultural land is being developed and the responsibility of the national stakeholders/governmental entities are defined. - Lack of regulation on the PES schemes investigated and recommendation on improvement provided.	

[21] GEF Risk ratings: Low, Moderate, Substantial or High

[22] If a risk mitigation plan had been presented as part of the Environmental and Social management Plan or in previous PIR please report here on progress or results of its implementation. For moderate and high risk projects, please Include a description of the ESMP monitoring activities undertaken in the relevant period".

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
3	Low technical capacity at national and local level halting the project's progress	Low	Capacity development in conservation agriculture and shelterbelt management will be provided under Component 2, which will mitigate this risk	-- Curriculum for FFS on agroforestry developed. - 5 webinars and 3 field trips in 3 pilot oblasts under FFS 2 cycle on shelterbelts conducted. - Curriculum for CA online course developed. - CN for the Coordination Center for Sustainable Agriculture developed. - Project profile for scaling up the CA practices through the establishment of Climate Smart Agriculture Centers within the Dniester River Basin developed. - Animated video «Mission: Keep Soil Alive» developed and published. - CN for the mobile application for farmers was developed. - The number of guidelines aimed at shelterbelt management and inventory developed and published. - Training on Ex-Ante Carbon Balance Tool to strengthen the capacity of national actors in estimating carbon stock changes provided.	

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
4	Lack of political support to the integration of environmental considerations into agriculture and shelterbelt management	Low	Political support is high in Ukraine to shift to environmentally sustainable natural resources management practices, which is demonstrated by policy reform processes initiated both in the agriculture and forest sector with support from the EU, FAO, etc. The project strategy is to develop the specific and technical solutions (as much as possible) per each project outputs with engaging wide expert support. Then in cooperation with national experts and executive organizations integrate this solution into the national policy.	- The Strategy for the LDN monitoring was developed and submitted to MDETA. - Strategy for Environmental Safety and Adaptation to Climate Change developed in cooperation with the EU4Climate project and MEPNR. - Revised NAP under the UNCCD with performance review submitted to MEPNR. - The electronic data interchange and protection Agreements required for filling up the LDN monitoring system developed. - Collaboration with State GeoCadastre and Ministry of Agrarian Policy and Food aimed at building a national LDN monitoring system.	
5	Environmental risk referring to gradual climate changes and extreme weather events	Low	The next mitigation actions applied during project implementation are: - Selection of the best practices considering local vulnerability to extreme weather events, existent agro climate conditions and predictable weather changes, - Developing climate change resilient technologies, - Adjustment plans terms and activities implementation foreseeing on the project following the climate conditions.	- All the guidelines and practical recommendations on agroforestry and CA developed provide inputs on increasing resilience to climate change. - Report on the current status of agriculture droughts and losses of available water in the south region of Ukraine developed. - Concept paper for supporting the development of the value-chains of NTFPs and medical-aromatic plant, to improve drought-affected farmers group productivity in Southern Ukraine. - The 20 exerts (including the representatives from top government entities, national research institutes and NGO) trained to calculate CO2 balance using the EX-ACT tool developed by FAO.	

	Risk	Risk rating[21]	Mitigation Actions	Progress on mitigation actions[22]	Notes from the Project Task Force
6	Delay or changes in the project implementation caused by COVID-19	Substantial	The project final targets could be adjusted with developing the corresponding annual working plan based on the request provided by the primary beneficiary and approved by the Steering Committee. Moreover, due to the COVID-19 pandemic, lots of activities were postponed or went online.	- The annual working plan was adjusted accordingly. - Most of the training events held online and filed visits was adjusted following quarantine measures. - LoA's amendment applied in cases where activities were somehow halted by COVID-19 outbreak.	

Project overall risk rating (Low, Moderate, Substantial or High):

FY2020 rating	FY2021 rating	Comments/reason for the rating for FY2021 and any changes (positive or negative) in the rating since the previous reporting period
Medium	Medium	Despite the overall risk rating has remained the same comparing to the previous period, some changes might be admitted: - the risk of unpredictability in the project implementation caused by the reorganization of major national beneficiaries remains still high as the ministries are continuing permanently reorganizing and the top governmental officials changing. - the risk of the low technical capacity has decreased to a low level due to capacity building on national actors' by the means of the project. - the rating of the environmental risk referring to gradual climate changes and extreme weather events has decreased due to finalization of the most field activities and only remaining of the desk studies. - the risk refers to COVID 19 has increased, and number of the activities was adjusted accordingly.

7. Adjustments to Project Strategy – Only for projects that had the Mid-term review (or supervision mission)

If the project had a MTR review or a supervision mission, please report on how the MTR recommendations were implemented as indicated in the Management Response or in the supervision mission report.

MTR or supervision mission recommendations	Measures implemented
Recommendation 1: Awareness raising campaign should be conducted to draw public attention to the importance of soil monitoring and land management, CA and shelterbelts.	The Animated video «Mission: Keep Soil Alive» was developed by the project team and made it public on World Soil Day 2020 to raise awareness on the necessity to save soil. In six months, the video was viewed 14,000 times on the FAO YouTube channel (in Ukrainian and English) and 12,000 times (in Ukrainian) on the UN Facebook page in Ukraine. Besides, the video was translated to Russian, French and Spanish and to be published on the official FAO platforms. Additionally, CN for the mobile application for farmers was developed. The mobile application will be integrated and developed in the same style as the video animation "Mission: Keep Soil Alive"
Recommendation 2: State cadastral service should be considered as one of the stakeholders for the establishment of the national soil monitoring system. Technical specifications for the system should consider compatibility with other elements of national spatial data infrastructure, such as digital land cadaster, and with the international standards.	In the process of the project implementation, it was agreed with the Ministry of Agrarian Policy and Food of Ukraine, State Geo Cadastre, and the Association Ukrainian Soil Partnership (UaSP) to develop capacity and create the IT platform for LDN monitoring on agricultural land. UaSP was authorized by the Ministry of Agrarian Policy and Food of Ukraine as the national operator for the creation of the LDN monitoring platform in cooperation with the State Geo Cadaster. Therefore, several LOAs to facilitate harmonizing the data processing and data exchange between all relevant national stakeholders needed for LDN monitoring system establishment were signed and few are in process. The existent software will be improved, and national beneficiaries will strengthen their technical capacity.
Recommendation 3: To define the perspectives for young women agronomists' possibilities in consultancy, especially in new innovative agro practices. So, it is recommended to add to the University courses or separate workshops for girls	In the course of 5 training of the Farmer Field School study program, one of the training is devoted to ***The role of rural women in promoting ecosystem services.*** The training cover next topics: 1. Educational and financial business support opportunities for rural women.

and boys on economic efficiency of soil friendly, conservation agriculture, climate-smart practices.	2. Agronomic and technological solutions to reduce the share of unskilled low-paid manual labor in agriculture, in particular in shelterbelt treatment. 3. Planning of sustainable agricultural systems and shelterbelts to increase their role in providing ecosystem services. 4. Women's farming projects and community projects with women leaders, aimed at promoting soil and resource-saving technologies, creating and restoring shelterbelts, and promoting ecosystem services in agriculture.
Recommendation 4: - An abstract on the project achievements on CA could be developed and submitted to the Scientific Committee of the 8th World Congress on Conservation Agriculture (www.8WCCA.org) to be held during 29 June – 2 July 2020 in Bern, Switzerland and the participation of the project beneficiaries to the Congress with the project support and the AGPM could be planned. - Assist to organize a study tour to Spain, Belgium, Germany or Switzerland (maybe in combination with the 8WCCA). Consider organization of the regional or international conference on CA to demonstrate the project achievements.	Both of the recommendations were considered, negotiated, and included in the workplan, but, unfortunately, were supposed to be postponed due to the COVID-19 outbreak.

Adjustments to the project strategy.

Pleases note that changes to outputs, baselines, indicators or targets cannot be made without official approval from PSC and PTF members, including the FLO. These changes will follow the recommendations of the MTR or the supervision mission.

Change Made to	Yes/No	Describe the Change and Reason for Change

Project Outputs	No	
Project Indicators/Targets	No	

Adjustments to Project Time Frame

If the duration of the project, the project work schedule, or the timing of any key events such as project start up, mid-term review, final evaluation or closing date, have been adjusted since project approval, please explain the changes and the reasons for these changes. The Budget Holder may decide, in consultation with the PTF, to request the adjustment of the EOD-NTE in FPMIS to the actual start of operations providing a sound justification.

Change	Describe the Change and Reason for Change
Project extension	Original NTE: 31/07/2020 Revised NTE: 31/12/2021 Justification: There were some delays with the implementation of the project activities at the initial stage. There were delays also with the recruitment of the team of International Consultants. Later, the project has been making good progress on achieving the expected outputs. However, the institutional reorganizations and changes on the national beneficiaries and their senior decision-makers directly working with the project significantly interrupted the smooth implementation of the activities. Moreover, due to the changes in the Government Ministries and agencies, there are no co-financing confirmation letters that were received up to date. Though during the meetings between experts of mid-term evaluation and the Ministry of Economy, Trade, and Agriculture and the Ministry of Energy and Ecology, it was confirmed that the issue will be solved, and the letters of co-financing will be provided as soon as possible after reorganization. In this regard, one of the recommendations of the mid-term evaluation was to extend the project at least for another 18 months (with NTE 31 December 2021) to achieve the expected outputs and fulfill the obligations taken by the partners and the Government of Ukraine. ***Currently, the mutual decision has been made to initiate another no-cost project extension till the end of June 2022.***

8. Stakeholders Engagement

Please report on progress, challenges, and outcomes on stakeholder engagement (based on the description of the Stakeholder engagement plan included at CEO Endorsement/Approval (when applicable)

If your project had a stakeholder engagement plan, specify whether any new stakeholders have been identified/engaged:

If a stakeholder engagement plan was not requested for your project at CEO endorsement stage, please

- list all stakeholders engaged in the project
- please indicate if the project works with Civil Society Organizations and/or NGOs
- briefly describe stakeholders' engagement events, specifying time, date stakeholders engaged, purpose (information, consultation, participation in decision making, etc.) and outcomes.

Please also indicate if the private sector has been involved in your project and provide the nature of the private sector actors, their role in the project and the way they were involved

List of stakeholders actively involved in the implementation:

1. Top government
   - Ministry for Development of Economy, Trade and Agriculture of Ukraine
   - Ministry of Environment Protection and Natural Resources of Ukraine
   - Ministry of Agrarian Policy and Food of Ukraine
2. Governmental authorities
   - State Forest Planning Agency
   - State Forest Resources Agency of Ukraine
   - State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre)
   - National provider of education methodology - center "Agro-education"
3. Local government
   - Kherson regional state administration
   - Kyiv regional state administration
   - Kharkiv regional state administration
   - Mykolaiv Regional State Administration
4. Local communities
   - Mostivska amalgamated territorial community, Mykolaiv Oblast
   - Pustovarivska amalgamated territorial community, Kyiv Oblast
   - Gladkivska amalgamated territorial community, Kherson Oblast (v. Velyki Klyny and v.Tavriiske included)
   - Byshivska Amalgamated territorial community, Kyiv Oblast
   - Makarivksa Amalgamated territorial community, Kyiv Oblast
   - Dmytrivska Amalgamated territorial community, Kyiv Oblast
   - Oleshki City Council, Kherson Oblast
5. Academia

- National Academy of Agriculture Sciences
- National Academy of Science of Ukraine
- Institute of Water Problem and Reclamation, Kyiv
- Institute of irrigated agriculture, Kherson
- G.M Vysotsky Ukrainian Research Institute of Forestry and Agroforestry, Kharkiv
- State Institution "Soil Protection Institute" of Ukraine, Kyiv
- National Scientific Center “Institute of Agriculture of NAAS”, Kyiv
- Institute of Agricultural Microbiology and Agro Industrial Production of NAAS, Chernihiv
- National Scientific Center «Institute for Soil Science and Agrochemistry Research Named After O.N. Sokolovsky», Kharkiv
- Institute of agroecology and environmental management of NAAS, Kyiv
- Institute of Ecohygiene and Toxicology named after L.I. Medvedev, Kyiv
- Experimental Station of Medicinal Plants of the Institute of Agroecology and Environmental Management of NAAS of Ukraine
- State enterprise "Steps branch named after Vynohradov of the Ukrainian Research Institute of Forestry and Forest Melioration named after G. M. Vysotsky"
- Bila Tserkva Research and Breeding Station of the Institute of Bioenergy Crops and Sugar Beets of NAAS of Ukraine

6. Agribusiness and agricultural providers
   - PLAE "Burlutske" Velykyi Burluk city, Kharkiv Oblast
   - SERS "Velyki Klyny", v. Velyki Klyny, Kherson oblast
   - Agrofirma Kolos LLC., v.Pustovarivka, Kyiv Oblast
   - Phoenix 2019 farm, v.Hladivka, Kherson oblast
7. NGOs
   - Association "Ukrainian Soil Partnership"
   - All-Ukrainian association village councils and amalgamated communities

Over the reporting period, the level of the stakeholder’s engagement can be estimated as highly satisfactory.

Core stakeholders and beneficiaries of the project are the Ministry for Development of Economy, Trade and Agriculture of Ukraine, Ministry of Ecology and Natural Resources of Ukraine and Ministry of Agrarian Policy and Food of Ukraine. Besides, State Geo Cadaster, State Forest Resources Agency of Ukraine, National Academy of Agriculture Sciences, and Kherson oblast state administration has been actively involved in the project implementation.

In general, 9 meetings were held with the top leaders of these organizations. Also, representatives of these organizations participated in 5 public events within the project. The project team was included in 2 national working groups and presented the project at 12 national-level events at the invitation of top governmental organization.

Four key stakeholders, including association National Scientific Center «Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky», State Institution “Soils Protection Institute of

Ukraine", Institute of Agroecology and Environmental Management of National Academy of Agrarian Sciences of Ukraine and All-Ukrainian Association village councils and amalgamated communities have ongoing LoAs with FAO supporting the development of ALDN monitoring system, data exchange, reconciliation the national system of soil classifiers with international and improving legislation regarding transfer the ownership rights on abandoned land. Additionally, two LoAs with 2 purposeful stakeholders, namely Institute of Water Problems and Land Reclamation of NAAS and Association "Ukrainian Soil Partnership" were finalized during the reporting period.

More than 270 participants have been involved in the process of shelterbelts management practices dissemination under the 5 pieces of online and 3 pieces of offline Farmer Field School training events, as per Component 2, including representatives of Academia; farmers and suppliers; NGOs, and media. Among 24 beneficiaries participating in live streaming of the 1st webinar via Zoom, 8 were men and 16 were women, and in those 18 people taking part in the field trip 16 were men and 2 were women. The second training hosted 46 participants in the webinar among which 20 men and 26 women, and 17 participants, 13 men, and 4 women who took part in the field trip. 45 participants have participated in the live streaming of the 3rd webinar, in particular 21 women and 25 men, and 23 people visited field training, namely 5 women and 18 men. 81 participants have joined the fourth webinar. The fifth webinar has joined 20 participants, among them 17 women and 3 men.

Besides, five webinars have in total more than 1000 views on YouTube. Animated video on soil degradation has been viewed at FAO and UN social media pages more than 26 000 times.

9. Gender Mainstreaming

Information on Progress on gender-responsive measures as documented at CEO Endorsement/Approval in the gender action plan or equivalent (when applicable)

Was a gender analysis undertaken or an equivalent socio-economic assessment made at formulation or during execution stages? Please briefly indicate the gender differences here.

Does the M&E system have gender-disaggregated data? How is the project tracking gender results and impacts?

Does the project staff have gender expertise?

If possible, indicate in which results area(s) the project is expected to contribute to gender equality:

- closing gender gaps in access to and control over natural resources.
- improving women's participation and decision making; and or
- generating socio-economic benefits or services for women

A national Gender Consultant conducted a desk study on Gender risks related to integrated natural resource management and agriculture on degraded steppe areas of Kharkiv, Kherson, Mykolaiv and Kyiv oblasts and results were shared publicly in a national conference. The assessment identified

problems with the statistical database and challenges in the professional employment sector. In addition, 2 questionnaires were developed for this purpose, one targeting male and female farmers, and the other targeting national experts and FAO field officers. None of those surveys were yet conducted in the Project. National Gender Consultant recommended sharing the gender results and statistics with sectorial Ministries, as she defined a big lack of information at the national level.

Gender snapshot analysis has been enabled on all levels of project implementation. Data from the field training are disaggregated by gender and reports are prepared for each activity. Women and men's representation in the first steering committee were balanced with regards to decision-making. During the first 3 years, the implementation of the project was managed by women, field officers are men, the project assistant is a woman, experts from engaged institutions are women and men.

Under output 2.1.3 aimed at identification and support to the special needs of rural women at project sites to ensure that their important role in agriculture is recognized one-webinar for rural women to discuss their role in the ecosystem services promotion arranged as a part of the FFS on shelterbelts was arranged and one field visit to be carried out.

The project assistant participated in a 2-day online training on gender mainstreaming for the RPP staff (UN Women, UNDP, UNFPA and FAO) and a training from FAO ESP Gender Team.

The project already established contacts with the younger generation through the farmer field training and webinars and will follow up with online courses on CSA and CA for the students (curriculum developed). The interview was conducted with a female specialist from the National Experimental Station of the Medicinal Herbs of the Institute of Agroecology (Berezotocha village, Poltava oblast) who is working with the medicinal herbs and dissemination among national media.

10. Knowledge Management Activities

Knowledge activities / products (when applicable), as outlined in knowledge management approved at CEO Endorsement / Approval

- Does the project have a knowledge management strategy? If not, how does the project collect and document good practices? Please list relevant good practices that can be learned and shared from the project thus far.
- Does the project have a communication strategy? Please provide a brief overview of the communications successes and challenges this year.
- Please share a human-interest story from your project, focusing on how the project has helped to improve people's livelihoods while contributing to achieving the expected global environmental benefits. Include at least one beneficiary quote and perspective, and please also include related photos and photo credits.
- Please provide links to publications, leaflets, video materials, related website, newsletters, or other communications assets published on the web.
- Does the project have a communication and/or knowledge management focal point? If yes, please provide their names and email addresses

The project knowledge strategy consists of three stages:
1. Collecting the best existing practices.
2. Developing and adopting the new approaches with further pilot testing.
3. Technology/practice transfer and knowledge dissemination.

In the first stage project's experts provides the criteria for technology/best practice selection considering the best international and FAO experience. Following the requirements, the field officers, together with project experts, are looking for the best practice in the place. Once practice identified, the field officers connect to the owners (farmers, service providers, or local communities) asking to share their experience. Describing technologies/practice remains for experts.

The second stage is developing practice/technology in cooperation with the project's partners, mainly research institutes or relevant leading organizations. In these terms, the partner develops a working methodology with detailed descriptions, methods, equipment, and approaches that will be applied and submitted for the FAO technical expertise. Finally, partners provide the pilot testing of the proposed methodology on the site preliminary agreed with the project team. The implementation process leads and supervised by the technical FAO experts and controlled by the field officers.

List of the best practices identified and collected

CA practices:
1. Application of CA on arid land with minimum seeding rates and early sowing in a wide row (grain crops).
2. Sprinkler irrigation in combination with CA and high seeding rates (technical crops).
3. Surface minimum tillage with disc implements and steam cultivators under crop rotation consisting of feeding crops.
4. Sowing into the green covering crop under the CA approach.
5. Application of composting.
6. Growing medical herbs on the hilled fields.

Agroforestry practices:
1. Growing fruit trees and shrubs in the shelterbelts
2. Cultivation of nut crops
3. Growing valuable/fine wood species
4. Cultivation of bioenergy crops

5. Birch cultivation for birch sap collecting
6. Growing maple for juice harvesting
7. Growing honey plants
8. Mushroom cultivation
9. Cultivation of medicinal plants in space between rows
10. Cultivation of spice plants/potherbs in space between rows
11. Combination of trees and windmills for the shelterbelt reconstruction
12. Agro-eco tourism
13. Shrubs planting and medical herds cropping

List of the best practices developed under the project

Agroforestry practices:
1. Shelterbelt reconstruction in dry conditions with valuable wood species.
2. Newly shelterbelt establishing in the dry conditions (annual level of precipitation is lower than 150 mm) of Kherson oblast.
3. Sustainable value-chains analysis and development of non-timber forest products and inclusive medical herbs in Kyiv, Kherson and Mykolaiv oblasts.
4. Plant species selection for shelterbelts reconstruction.

CA practices:
5. Subsurface drip irrigation in combination with CA for mixed crop rotation.
6. Soil protection conventional crop cultivation with application of destructors and increasing amount of crop residue on the field.

Institutional practices:
7. Three models for shelterbelt management:
- Establishing the public company by the village communities to manage shelterbelts and forest plantation,
- Shelterbelt managed by the farmer,
- Shelterbelt managed by the state organization.
8. Development of integrated land management plans to engage the abandoned lands, including shelterbelts inventory and registration.

Methodological practice:
9. Converting the national soil types classification into the international classifiers.
10. Strengthening capacity on the agrochemical soil data collection and harmonization for further automatic processing.
11. PES schemes for agroforestry practices dissemination and conservation agriculture scaling.

Technology/practice transfer provided through the Farmer field school webinars and field visits, developing online study courses, awareness-raising events and relevant publication (practical guidelines).

The project has a communication plan and due to COVID-19 pandemic, in 2020-2021 most of communication activities went online. Online tools were found very useful and helped to reach the audience. Hence, during the reporting period the Farmer Field school was held partially online.

During the covered period (July 2020 – June 2021), communication support was provided on the following events:

- 5 theoretical sessions of the Field Farmer School:
  - in September 2020: https://youtu.be/eWbX5syInEM (258 views);
  - in October 2020: https://youtu.be/M4frBiF8DRw (347 views);
  - in December 2020: https://youtu.be/4dBFZxxG1Fg (224 views);
  - in February 2021: https://youtu.be/ySOhSpNA-D0 (146 views);
  - in May 2021: https://youtu.be/1pwsGsU3dQc (60 views).
- 3 practical sessions of the Field Farmer School: in September, November 2020 and March 2021;
- Press conference on the World Soil Day with the Ministry for Development of Economy, Trade, and Agriculture (December 2020) - https://fb.watch/5zc7K6mbTb/
- UN Environmental Forum 2021 (June 2021) – ENG https://www.youtube.com/watch?v=G5tzxNnQBGI, UKR Part 1: https://www.facebook.com/232482103442658/videos/303386521265301, UKR Part 2: https://www.youtube.com/watch?v=2PmBuLCOBb0.

All webinars from the FFS on shelterbelts were broadcasted by the national news Agency UKRINFORM and placed on YouTube, and practical sessions were recorded and to be placed on the same YouTube channel. Five webinars have in total more than 1 000 views on YouTube.

The Press Conference dedicated to World Soil Day (December 5, 2020) "The establishment of soil information systems for sustainable food production" was held on December 3, 2020, with the participation of UN System Resident Coordinator, Deputy Minister of MDETA, First Deputy Head State GeoCadastre, representatives from Global Soil Partnership, science, NGOs and business.

On the occasion of WSD, the project developed a video animation Mission: Keep soil alive! to raise awareness of the important role soil plays in daily life and of the consequences of land degradation processes in a simple visual and understandable form. The video was published on FAO Youtube channel and UN Ukraine Facebook page, and widely disseminated all around the world. As of 1 June, the video has 26 595 views. The animation was also translated into Russian, French and Spanish and will be published online.

- FAO YouTube (English): https://youtu.be/M-ZlrNg0BjI (7 848 views)
- FAO YouTube (Ukrainian): https://youtu.be/-DD2tb4gsZg (6 383 views)
- UN Ukraine Facebook (Ukrainian): https://bit.ly/3uHiVls (12 364 views, 321 shares, 133 likes)

Moreover, on the occasion of the World Environment Day (5 June) the UN Environment Forum 2021 has been held. Project experts and stakeholders participated in panel discussions and presented project achievements. Participation of the project experts was aimed at raising awareness to such issues as disaster risk reduction and climate change adaptation and water resources management shortly before the World Day to Combat Desertification and Drought (17 June).

Besides, the project facilitated the liaison between CA farmers from the South of Ukraine and a journalist from the United States for increasing awareness-raising on the usage of the best Conservation Agriculture practices in Ukraine.

On the occasion of International Rural Women's Day, celebrated on 15 October 2020 the story about plant selection breeder and scientist of the Research station of medicinal plants under the Institute of Agroecology and Nature Management of NAAS of Ukraine has been disseminated among national media. The full text is below.

Breeding as a lifestyle: the story of Natalia Kutsenko

International Day of Rural Women 2020

For almost 30 years Ms. Natalia Kutsenko has engaged in selection, i.e creation of varieties of medicinal and essential oil plants. Such occupation has long been not just a job for her. 48 hectares of land at work and 2 hectares near the house are a place of strength, inspiration and peace for a woman.

"Crossing of different varieties of plants happens at different times. Some need to be pollinated at dawn, at 4-5 am. That's why I wake up and do everything right next to the house as I don't want to go to the field so early," says Natalia. "In my free time, when I want to relax, I like to breed daylilies. These varieties are not registered, and I distribute the developed seeds to colleagues and friends."

The woman started her career as a worker and today she is the head of the department of selection and seed production of the Research station of medicinal plants under the Institute of Agroecology and Nature Management of NAAS of Ukraine. During the whole period of work under her leadership or with her participation, 11 varieties of plants were created and entered into the state register, including Helichrysum arenarium L, variety "Golden"; Pyrethrum cinerariifolium, variety "Jubilee"; garden sage, variety "Chance"; pot marigold, variety "Struminka"; Calendula officinalis, variety "Berezotitska Solar"; Silybum marianum, variety "Poltavka"; hyssop, variety "National"; Marrubium vulgare, variety "Medunychka"; Desmodium canadense, variety "Perseus".

1) On the right side in the picture - Mrs. Natalia Kutsenko. 2) Fields of institute for selection. Photos: © FAO / Yulia Kisilova

The name of each variety means something, and it is invented by the author of a new variety. "Jubilee" was named in honor of the 60th anniversary of the work with the Pyrethrum cinerariifolium species, "Berezotitska Solar" – as a tribute to the place of research (the village of Berezotocha) and the

appearance of a flower (reminding sun), "Strumynka" (stream) - because of pot marigold being widely used in urology, belladonna "Hecate" - in honor of the goddess of magic and sorcery. A curious case has occurred with the name of the Canadian desmodium "Perseus" – this name was unintentionally given to a variety by a chemist who determined the content of biologically active substances.

"The first variety of medicinal plants that was created with my participation was Helichrysum arenarium L variety “Golden”. My favorite one is Pyrethrum cinerariifolium variety “Jubilee” – reveals Natalia Kutsenko, “On the one hand, I really like how this plant looks, and on the other hand - this species can take the biological defense system to a radically new level, as the plant contains natural pyrethroids which can be used, for example, in beekeeping to control ticks”.

According to the Head of the selection department, the “Jubilee” variety was a true discovery for her colleagues in the breeding field and proved to be used in many vectors - in pharmaceuticals, for landscaping, decoration as well as to perform insecticidal or food functions.

“Another such interesting species is the Marrubium vulgare "Medunychka", the raw material of which is used for the manufacture of medicines. This plant is very popular among beekeepers because after the bees pollinate plants, the quality of honey improves, and if honey contains some harmful elements they are neutralized” - says the expert.

Before being widely used, each plant undergoes a long trial period. On average, it takes 6-7 years, sometimes even 15 or more. For example, Natalia Kutsenko has been working on the breeding of one of the varieties of oregano for already 16 years. The testing and chemical research takes another three years. At this time, the variety is tested in different climatic zones of the country to understand how widely it can be cultivated and to determine where it is better to grow the plant as a medicinal raw material, and where - for seed production. Only after that the variety is registered with the state authority.

Essential oils and medicinal herbs are one of the promising niches for the development of agribusiness, because every third drug used in modern medicine is derived from plant raw materials or with its application. That is why FAO, within the project "Integrated management of natural resources of degraded landscapes of forest-steppe and steppe zones of Ukraine" and the Institute are developing value chains for products derived from medicinal plants that are recommended for cultivation in forest belts.
Translated by: Olena Zolotar

Viktoriia Mykhalchuk is project’s communication focal point. Her contact: Viktoriia.Mykhalchuk@fao.org

List of relevant links:

Publications:

- Guidelines on Implementation of Efficient Shelterbelt Management Models published (Ukrainian) http://www.fao.org/documents/card/en/c/ca9554uk
- Healthy soils in Ukraine: 2020. Integrated Natural Resources Management in Degraded Landscapes in the Forest-Steppe and Steppe Zones of Ukraine: Overview of project activities http://www.fao.org/documents/card/en/c/cb4914en

Also these publications can be found in the list of publications on healthy-soils.org.ua website through the link: https://healthy-soils.org.ua/en/publications/publications/

Video materials:

- FFS in September 2020: https://youtu.be/eWbX5syInEM
- FFS in October 2020: https://youtu.be/M4frBiF8DRw
- FFS in December 2020: https://youtu.be/4dBFZxxG1Fg
- FFS in February 2021: https://youtu.be/ySOhSpNA-D0
- FFS in May 2021: https://youtu.be/1pwsGsU3dQc
- Video animation "Mission: Keep Soil Alive":
    - FAO YouTube (English): https://youtu.be/M-ZlrNg0BjI
    - FAO YouTube (Ukrainian): https://youtu.be/-DD2tb4gsZg
    - UN Ukraine Facebook (Ukrainian): https://bit.ly/3uHiVls

The information about FFS event is published on the project website through the link: https://healthy-soils.org.ua/en/farmer-field-school-on-shelterbelts-management-and-reconstruction/

Media links:

https://agronews.ua/news/na-pivdni-ukrainy-zapustyly-proiekt-z-vidnovlennia-lisosmuh/
https://nk.org.ua/obshchestvo/v-ukrayini-zapustili-proiekt-z-vidnovlennia-lisosmug-240802
https://www.openforest.org.ua/143859/
https://www.facebook.com/openforest.org.ua/posts/2623944514585856?__xts__%5B0%5D=68.ARBixtal6uMSSs-fZJfwCaKYxn2r3YH3Zipnbuxds1f1gHTa1yt5EGcUOONuLwd9P-PydfA6T60Kq2udDMlWBu2E3PyAgTwZ-ibLpDWu7CRSt9AI5LKoQAIbMRWBwyK2GjdHwCfsMzSdQx4wfVIv0tAdmllaxkDhoQ-u94_ZOi-JJhYbmMbVLJDOSEDLsDWBCqjLt8hNOKexoNxRB2QSlg8KZviBmNz302pCpCPUkSw7O9FRT6MTmb3HVZp8PDPkXWTAirhxUb6W6BpZlHkWUQYZzJBj4PFm4KT-gHoK8VYdgSYutUVdu91u1Md-LkfaNB-2qDDgAhrab7Z6ZfAgSAkUe2Le&__tn__=-R
https://www.openforest.org.ua/143471/
http://www.nrcu.gov.ua/schedule/play-archive.html?periodItemID=2544018
https://uriffm.org.ua/content/chy-mozhut-polezahysni-lisovi-smugy-staty-prybutkovymy
https://khoda.gov.ua/%D1%96nventarizac%D1%96ja-l%D1%96sosmug-%E2%80%93-odne-z-pershochergovih-zavdan-na-hersonshhin%D1%96
http://agro-yug.com.ua/archives/39557
http://www.nrcu.gov.ua/schedule/play-archive.html?periodItemID=2568040
https://www.youtube.com/watch?v=eWbX5syInEM
https://www.ukrinform.ru/rubric-presshall/3096156-skola-fermera-fao-sistemy-polezasitnyh-lesnyh-polos-i-kriterii-ih-optimizacii.html
https://kurkul.com/news/22579-zbilshiti-vrojaynist-zernovih-na-20-dopomojut-lisosmugi--eksperti
https://www.ukrinform.ua/rubric-economy/3099797-stvorenna-lisosmug-spriatime-zbilsennu-vrozajnosti-zernovih-na-20-eksperti.html
http://igim.org.ua/?p=7239
http://naas.gov.ua/newsukraine/?ELEMENT_ID=6390
http://naas.gov.ua/newsall/newsukraine/?ELEMENT_ID=6390
https://youtu.be/M4frBiF8DRw
https://agrarii-razom.com.ua/events/shkola-fermera-fao-stvorennya-polezahisnih-lisovih-smug

https://www.openforest.org.ua/150867/
https://gurt.org.ua/news/trainings/63974/
https://www.prostir.ua/event/shkola-fermera-fao-stvorennya-polezahysnyh-lisovyh-smuh/
https://uriffm.org.ua/uk/content/fao-provede-shkolu-fermera-shchodo-stvorennya-polezahysnyh-lisovyh-smug
https://www.ukrinform.ua/rubric-presshall/3121879-skola-fermera-fao-stvorenna-polezahisnih-lisovih-smug.html
http://www.agroperspectiva.com/ru/press_release/34157
http://igim.org.ua/?p=7360
https://mepr.gov.ua/news/36230.html
http://agro-yug.com.ua/archives/42418
https://propozitsiya.com/ua/za-pidtrymky-fao-v-ukrayini-sformuyut-strategiyu-shchodo-dosyagnennya-neytralnogo-rivnya-degradaciyi
https://agrotimes.ua/agromarket/v-ukrayini-za-pidtrymky-fao-sformuyut-strategiyu-shhodo-dosyagnennya-nejtralnogo-rivnya-degradacziyi-gruntiv/
https://agrarii-razom.com.ua/news-agro/za-pidtrimki-fao-v-ukraini-sformuyut-strategiyu-shodo-dosyagnennya-neytralnogo-rivnya
https://agrarna-pravda.com/tag/degradovani-grunty/
http://naas.gov.ua/newsall/newsnaan/6468/
https://koblivska-gromada.gov.ua/news/1607601794/
https://agrarii-razom.com.ua/events/day/2020-12-14
https://newsvideo.su/stream/336319
https://ecolog-ua.com/news/krashchi-agrolisomelioratyvni-praktyky-dlya-zahystu-lisosmug-fao-provede-shkolu-fermera
https://www.openforest.org.ua/153851/
https://gurt.org.ua/news/trainings/65229/
https://www.youtube.com/watch?v=4dBFZxxG1Fg
https://www.ukrinform.ua/rubric-presshall/3150730-skola-fermera-fao-krasi-agrolisomeliorativni-praktiki.html
https://www.ukrinform.ru/rubric-presshall/3150731-skola-fermera-fao-lucsie-agrolesomeliorativnye-praktiki.html
https://www.facebook.com/permalink.php?story_fbid=3574822025917399&id=109080801765215 8&__cft__[0]=AZX2_WFl1tGMl2ZCBgkC8q05Uwy9mrH19LbXzEQoZvPuFvkO7q5LSm5DMiyiRuCcCYMaCGyhl6OGh4juRnIGLGNkZfO2bzk6dx3bT09-xHtfNX6EPrpHS91N8f08zm-po3GrJls4b3wcKPe9S8W1YH3u379LTKIe3B3f7F6J0ST_AMpU1OD-U5bhXdewFsRoOhg&__tn__=%2CO%2CP-R
https://www.facebook.com/groups/202357333649179/permalink/782788425606064/?__cft__[0]=AZX2_WFl1tGMl2ZCBgkC8q05Uwy9mrH19LbXzEQoZvPuFvkO7q5LSm5DMiyiRuCcCYMaCGyhl6OGh4juRnIGLGNkZfO2bzk6dx3bT09-xHtfNX6EPrpHS91N8f08zm-po3GrJls4b3wcKPe9S8W1YH3u379LTKIe3B3f7F6J0ST_AMpU1OD-U5bhXdewFsRoOhg&__tn__=%2CO%2CP-y-R
https://propozitsiya.com/ua/v-ukrayini-brakuye-rozuminnya-neobhidnosti-zberezhennya-yakosti-gruntiv-minekonomiky
https://agroportal.ua/publishing/lichnyi-vzglyad/degradatsiya-pochv-ukraina-opredelila-shagi-dlya-dostizheniya-nulevogo-urovnya/
https://agroday.com.ua/2020/12/06/vysotskyj-odnym-z-klyuchovyh-pytan-agrarnoyi-polityky-ye-zberezhennya-yakosti-gruntiv/
https://agropolit.com/news/18895-v-ukrayini-hochut-stvoriti-sistemi-monitoringu-stanu-gruntiv

https://agrarii-razom.com.ua/news-agro/v-ukraini-hochut-stvoriti-sistemi-monitoringu-stanu-gruntiv
https://superagronom.com/news/12132-v-ukrayini-sformuyut-komunikatsiynu-agrarnu-mereju--ekspert
https://www.ukrinform.ua/rubric-economy/3148584-v-ukraini-brakue-rozuminna-neobhidnosti-zberezenna-akosti-gruntiv-minekonomiki.html
http://igim.org.ua/?p=7476
http://www.issar.com.ua/uk/news/globalna-ceremoniya-svyatkuvannya-vsesvitnogo-dnya-gruntu-2020
http://www.issar.com.ua/uk/news/vsesvitniy-den-gruntu-2020-world-soil-day
http://issar.com.ua/uk/news/globalna-ceremoniya-svyatkuvannya-vsesvitnogo-dnya-gruntu-2020
https://zemlerobstvo.com/news/mizhnarodnij-kruglij-stil-prisvyachenij-vsesvitnomu-dnyu-gruntu-2020-worldsoilday/
http://www.golos.com.ua/article/339653
http://naas.gov.ua/news/?ELEMENT_ID=6499
http://bckolegium.com.ua/news/3424-5-grudnya-vsesvtny-den-runtv.html
https://kurs.com.ua/ua/novost/250617-5-dekabrja-kakoi-prazdnik-i-den-angela
https://teren.in.ua/2020/12/05/5-grudnya-v-istoriyi-ternopilshhyny-3/
https://www.meteoprog.ua/ua/news/587876-tretina-vsix-gruntiv-v-sviti-postrazdala-vid-eroziyi-ta-insix-negativnix-procesiv.html
https://nubip.edu.ua/node/84553
http://khntusg.com.ua/do-vsesvitnogo-dnja-gruntu-2020-world-soil-day/
https://www.facebook.com/imvfongd/posts/10158203994897054?__cft__[0]=AZUaqX87a5U4HuclhEn5DIAai0H9UX47hvNJJrSxzzP5_wnHURBwP33x-y0u3uFtPKnuXKUmC7FV7M1jHjRgNhx6tDjY3MqQGW6AF-RN4TwhmVCHbw60_Nr4ehVPl1hcOoIKnT2RMDzHuVkouqucWk17Y5G2fFJVZauard544_dZo_U2qkwMRF0jTlEAhbbNz2k&__tn__=%2CO%2CP-R
http://bit.ly/2MToM7b
https://www.facebook.com/permalink.php?story_fbid=3565672416832360&id=109080801765215 8&__cft__[0]=AZV26eiQYK3qTiLBmkWfQZf5rzSvyfKVVsU38ypmOyHmQVF9ayJan31hYQkIzJflY7Y7JjKs8eQSE1pHugqMX7v7rJi7ZbhSh-gdUWS484f2JMpmhUh4f3UX5FllgKAQm1aXQkYsKHq9NY-Tmnix2RFN&__tn__=%2CO%2CP-R
https://www.facebook.com/570306376402834/videos/153193516551755/?__cft__[0]=AZWSBZwbn_qTYif9dpMUoEQV44lY9g51xIJLdJQGW86lpZY1bhtLFlLVRi9NgMCpZrkgXVaJixcXu1TcrLrsHoJkKMjOOS755EHcwhX10PsXy6JuEq0_Wuq6Cv6y2HHC-RTQIWb4EpEfC1oIYZ6S6WRD
https://agroeco.org.ua/novini/misija-zberezhi-grunt-zhivim/
https://www.facebook.com/typovaslavuta/videos/746115882780649/?__cft__[0]=AZVNJS-Oarzc6gKG7TmjjskL6sjOdGkTf6JoN5RAsJR2eWRnUw-BTUvG6TiHUCKCaQwDhDulpVETtTOHTIJNR3V84fyrBOfDAAbNFu_D1emw0vtYVSH6JGRAngOLshmrbkMLss9m7mHPHu2fWqI-ZU3a&__tn__=%2CO-R
http://www.issar.com.ua/uk/news/vebinar-globalnogo-gruntovogo-partnerstva-fao-z-pravovyh-aspektiv-upravlinnya-gruntamy
https://agroday.com.ua/2021/01/22/laboratoriyu-doslidzhennya-gruntiv-naan-zareyestruvaly-v-mizhnarodnij-merezhi-z-analizu-dobryv/
https://agrotimes.ua/agronomiya/ukrayinsku-laboratoriyu-doslidzhennya-gruntiv-zareyestruvaly-v-mizhnarodnij-merezhi-z-analizu-dobryv/
https://ecoindustry.pro/novyny/fao-provede-shkolu-fermera-shchodo-vidnovlennya-ta-utrymannya-polezahysnyh-lisovyh-smug

http://yu.mk.ua/news/show/do_uvagi_agronomiv_fermeriv_bdzholyariv-?
https://agronews.ua/event/treninh-polovoi-shkoly-fermera-na-temu-stvorennia-rekonstruktsiia-i-upravlinnia-polezakhysnymy-lisovymy-smuhamy/
http://www.issar.com.ua/uk/news/laboratoriyi-nacionalnogo-naukovogo-centru-instytut-gruntoznavstva-ta-agrohimiyi-imeni
http://xn----ktbex9eie.com.ua/archives/96660/%D0%B4%D0%BE-%D1%83%D0%B2%D0%B0%D0%B3%D0%B8-%D0%B0%D0%B3%D1%80%D0%BE%D0%BD%D0%BE%D0%BC%D1%96%D0%B2-%D1%84%D0%B5%D1%80%D0%BC%D0%B5%D1%80%D1%96%D0%B2-%D0%B1%D0%B4%D0%B6%D0%BE%D0%BB%D1%8F%D1%80%D1%96
https://tydyvy.com/video/Dyk2QT0
http://www.ksau.kherson.ua/news/5858-2021-02-02-3.html
https://www.ukrinform.ua/rubric-presshall/3180067-stvorenna-rekonstrukcia-ta-upravlinna-polezahisnimi-lisovimi-smugami.html
https://ismav.com.ua/%D1%83%D1%87%D0%B0%D1%81%D1%82%D1%8C-%D0%B2-%D1%80%D0%BE%D0%B1%D0%BE%D1%82%D1%96-%D0%B7%D0%B0%D0%B3%D0%B0%D0%BB%D1%8C%D0%BD%D0%B8%D1%85-%D0%B7%D0%B1%D0%BE%D1%80%D1%96%D0%B2-%D0%B0%D1%81%D0%BE%D1%86/
https://berezanska-gromada.gov.ua/news/1616424893/
https://www.openforest.org.ua/160496/
https://uriffm.org.ua/uk/news/194
https://biz.censor.net/columns/3260964/chomu_ukranskiyi_runt_degradu_scho_z_tsim_robiti
https://irkliiv-rada.gov.ua/publichna-informatsiia/sluzhba-zakhystu-ditei/11-novyny/749-shkola-fermera-fao-rol-zhinok-u-populiaryzatsii-ekosystemnykh-posluh
https://www.ukrinform.ua/rubric-presshall/3252126-skola-fermera-fao-rol-zinok-u-popularizacii-ekosistemnih-poslug.html
https://uriffm.org.ua/uk/news/214
https://eventsnew.ukrinform.com/event/%D1%82%D1%80%D0%B5%D0%BD%D1%96%D0%BD%D0%B3-%D0%BF%D0%BE%D0%BB%D1%8C%D0%BE%D0%B2%D0%BE%D1%97-%D1%88%D0%BA%D0%BE%D0%BB%D0%B8-%D1%84%D0%B5%D1%80%D0%BC%D0%B5%D1%80%D0%B0-%D1%84%D0%B0%D0%BE-%D0%B7%D0%B0/
http://smyzka.gromada.org.ua/news/1621928245/
https://www.facebook.com/pokrovska.gromada/posts/1047164719148190?__cft__[0]=AZWxf9ZPryjlG9Oq_lT4NtiVXKfDxmlY_nR736Wu291vb62-s-uROier7P9XHRioYgtzuHKpXy2HkKXMT2Wd0ASDf8ijwsf3PWLLoOsqV8voJlPjcRlwH9ImLbOnHUaAWDJBQR03YJXlSRVRh1N6EJbb&__tn__=%2CO%2CP-R

11.Indigenous Peoples Involvement

Are Indigenous Peoples involved in the project? How? Please briefly explain.
N/A

12. Innovative Approaches

Please provide a brief description of an innovative[23] approach in the project / programme, describe the type (e.g. technological, financial, institutional, policy, business model) and explain why it stands out as an innovation.
Technological model: Mixed agroforestry practices with non-timber goods and medicinal herbs perennials (MAP) Incorporation of the MAP into the farming and agroforestry systems in Ukraine could allow: to diversify the markets access for small local farming; to create additional economic opportunities for beekeepers and shelterbelt owners; to facilitate the agriculture and eco-tourism development; to increase the local labour market capacity and to increase the supply of raw materials for the medical purpose. Multifunctionality and diversification of farming systems are recognized as a part of sustainable agriculture towards improving soil quality, protect biodiversity, improve conditions of rural life, and increase the farmer's resilience to climate change. However, considering the recent COVID 19 events, multifunctional farming might be used to facilitate the medical production capacity in terms of combating worldwide pandemics. The cultivation of medicinal herbs and essential oil crops are examples of multifunctional farming. The main criteria for scaling non-timber goods and medical-aromatic herb production: - Market Demand (access to the market of MAP adding value to the product, to the niche product market, positioning and sales initiatives) - Innovation (innovative technologies that will bring high value, being eco-friendly, and sustainable practices and will support enhancing technological process to meet the market demand) - Motivation (success stories, tangible result and trust-based incentives may promote high-value agriculture production that is the future of rural smallholders' income generation activities). ***Business model: Abandoned land identification and improving land tenure for rural communites*** Following the provision of law "On amendments of some pieces of legislation of Ukraine in order to settle the issue of collective land ownership, improve agricultural land management, prevent from

[23] Innovation is defined as *doing something new or different in a specific context that adds value*

land raids and promote cultivations in Ukraine" #2498-VIII and in the course of decentralization reform, former collective farms' (kolgosps') lands with uncertain ownership rights and abandoned lands beyond the limits of residential areas are being taken over on books of amalgamated territorial communities (ATC).
Uncertainty with ownership rights brought to the situation while lots of the land frequently turned into household, industrial, and agricultural waste landfills, weed plantations, and pest and disease distribution spots.

The defined model consists of the next steps:

1. Abandoned land identification. It starts with a survey of the village authorities, collecting data and identification of existing lands with uncertain ownership rights in the structure of community land tenure. In this case, the data was not available in ATC, so it was requested from Kyiv Regional Council. Then, the performance of in-house surveys with further field verification to identify and distinguish abandoned land in ATC's land tenure is needed. In-house surveys provide the application of a public cadastral map of Ukraine. After field verification, abandoned plots, including shelterbelts, field roads, dried ponds, self-planting, and abandoned forests can be mapped.
2. Ownership rights identification. This step includes consultations with local land management departments (on ATC and oblast levels) to identify the status and right of ownership of abandoned lands.
3. Recommendation on the improvement of abandoned lands land tenure. Based on the results received from surveying, consultation with local authorities and governments, field and in-home inspection of abandoned lands, the recommendations for the elaboration of integrated land management plans engaging the abandoned lands can be developed.

Communication model: Video animation as a method to disseminate technical information on soil degradation process to the community.
The animation video is aimed to attract the attention of a wide auditorium to the soil's important role in daily life and the consequences of the land degradation processes in a simple visual and understandable form.
The main target auditorium is ordinary people age 3 to 90 who do not professionally involve in soil science research or land management. One of the key expectations is that the video would interest the female auditorium that are the women owners of households in rural areas and users of social networks.

The technology consists of three main stages:

1. Preparation. During this stage, the scriptwriter is preparing a script (synopsis) on a given topic. The script should be written on the basis of meetings with specialists in this field. According to the script, the Storyboarder draws a storyboard, breaks the film by the size of the frames, and the overall action. The artist designs color sketches of characters and backgrounds. The director works on the animatic, editing the film according to rhythm, panoramas, camera movement. The animator makes a rough animation, the scenes are substituted into the animatic.
2. Video development. During this stage, it is required to trace the lines' clarity of the video to trace the image. By this, the final black and white animations to be created. Then, all the frames to be filled with color and the background to be drawn. The next steps include video cropping and assembling, and the creation of colored backgrounds (environments). The last step of production is the imposition of special effects, adding logos, titles.

3. Finalization. During this stage the musician picks up sounds and arranges them out according to timekeeping, creating a music track and conclude with the composition of video and audio materials in the final video.

This approach would allow raising public awareness with regards to soil degradation, making soil fertility loss personal, and providing insights into possible behavioral changes that can prevent soil depletion and accordingly food shortages and environmental disaster and improve soil productivity.

Besides, it establishes the basis for a multilateral knowledge-sharing process, involving a large number of different end-users in building a robust, evidence-based scientific understanding of soil degradation and the associated impacts on human well-being.

The animation can be distributed in Ukraine via:
- web-resources of FAO, Global Soil Partnership,
- the project web-information platform,
- Ukrainian National Soil Partnership Platform,
- key institutional stakeholders web-information platforms,
- YouTube,
- national mass-media,
- as a part of an education course on the local education platforms,
- as a part of the training conducting for women and local village authorities during the next project implementation stages,
- private and public stakeholders web and social media platforms.

To increase the video's reach to broader audiences, it might be broadcasted via the other relevant web platforms of the United Nations in the countries implementing the development project aimed at combat land degradation.

13. Possible impact of the Covid-19 pandemic on the project

Please indicate any implication of the Covid-19 pandemic on the activities and progress of the project. Highlight the adaptative measures taken to continue with the project implementation.

- Are the outcomes/outputs still achievable within the project period.
- Will the timing of the project MTR or TE be affected/delayed?
- What is the impact of COVID-19 on project beneficiaries, personnel, etc.
- Are there good practices and lessons learned to be shared?

Most of the activities implemented in July 2020-June 2021 were affected by the Covid-19 pandemic. To adjust to the quarantine restriction, most of the events were carried out online. For example, under the FFS training, theoretical part was given as a webinar, and the practical part in the field had a limited number of participants (around 20). Some activities defined in the work plan such as exchange visits to support sustainable agriculture dissemination have been postponed.

Besides, the partnering institutions, beneficiaries and SPs have also been affected by COVID-19. During the implementation of the LoA with UASP, the composition of the advisory board on the governmental level was much time-consuming due to COVID-19 restrictions. With regards to LoA with the Institute of Sokolovskoho there was an overall reduction in project intensity due to quarantine restrictions. The working group of the project was forced to use mainly remote methods, which created some communication difficulties, especially by working with cartographic materials. Based on that, both agreements with beforementioned SPs was extended to achieved set project targets.

On the other hand, the COVID-19 pandemic forced the project stakeholder to increasingly use online tools and triggered new ways of meeting and learning to a great number of population.

Therefore, a no-cost project extension till the end of December 2022 is strongly needed to successfully finalize all the activities foreseen by the project.

14. Co-Financing Table

Sources of Co-financing[24]	Name of Co-financer	Type of Co-financing	Amount Confirmed at CEO endorsement / approval	Actual Amount Materialized at 30 June 2021	Actual Amount Materialized at Midterm or closure (confirmed by the review/evaluation team)	Expected total disbursement by the end of the project
National Government	Ministry of Environmental protection and Natural Resources	Cash/in kind	$ 6 000 000	N/A	N/A	$ 6 000 000
National Government	Ministry for Development of Economy, Trade and Agriculture of Ukraine; Ministry of Agriculture	Cash/in kind	$ 590 000	$ 365 500	$ 607 000	$ 607 000
State Organization	State Ecological Academy of Post-Graduate Education	In kind	$ 80 000	$ 0	$ 0	$ 0
Private Sector	LLC “Agrogeneration”	Cash/In kind	$ 2 188 267	$ 327 207	$ 451 074	$ 451 074
Private Sector	Center of Soil Ecology	Cash/In kind	$ 400 000	$ 7 200	$ 14 400	$ 14 400
UN Agency	FAO	Cash/In kind	$1 065 000	$421 561	$805 522	$1 065 000
State Organization	Institute of Water Problems and Land Reclamation	In kind	$ 0	$63 020	$ 18147	$ 81168

[24] Sources of Co-financing may include: Bilateral Aid Agency(ies), Foundation, GEF Agency, Local Government, National Government, Civil Society Organization, Other Multi-lateral Agency(ies), Private Sector, Beneficiaries, Other.

	National Academy of Agriculture Sciences	In kind	$ 0	$ 3 400	$ 3 400	$ 3 400
	Institute of irrigated agriculture, Kherson	In kind	$ 0	$ 9 800	$ 9 800	$ 20 000
	Ukrainian Research Institute of Forestry and Agroforestry	In kind	$ 0	$ 5 670	$ 5 670	$ 5 670
	Institute of Soil Protection	In kind	$ 0		N/A	
	Institute of Agroecology	In kind	$ 0		N/A	
	Institute of Soil Science and Agrochemistry	In kind	$ 0		N/A	
Governmental authorities	StateGeoCadastre	In kind	$ 0	$ 7 430	$ 7 430	$ 7 430
	State Forest Planning Agency	In kind	$ 0	$ 2 250	$ 2 250	$ 2 250
Local government	Kherson oblast state administration	Cash/In kind	$ 0	$ 4 900	$ 4 900	$ 300 000
Local communities	Mostivska amalgamated territorial community, Mykolaiv Oblast	Cash/In kind	$ 0	$9500	$9500	$15000
	Vynohradivska amalgamated territorial community, Kherson Oblast	Cash/In kind	$ 0	$9500	$9500	$15000
	Pustovarivska amalgamated territorial community, Kyiv oblast	Cash/In kind	$ 0	$4355	$4355	$10000
	Byshivska Amalgamated territorial community, Kyiv Oblast	Cash	$ 0	$570	N/A	$570

	Makarivksa Amalgamated territorial community, Kyiv Oblast	Cash	$ 0	$1263	N/A	$1263
	Dmytrivska Amalgamated territorial community, Kyiv Oblast	Cash	$ 0	$754	N/A	$754
NGO	UaSP	Cash/In kind	$ 0	$6000	N/A	$61000
Private Sector	PLAE "Burlutske" Velykyi Burluk city, Kharkiv Oblast	Cash/In kind	$ 0	$4000	$4000	$15000
	FE "Tellus-Ug", v.Tavriiske, Kherson Oblast	Cash/In kind	$ 0	$ 2500	$ 2500	$2500
	Yugran Ltd, v.Fedorivka, Kharkiv Oblast	Cash/In kind	$ 0	$4000	$4000	$4000
	"FE ""Arcadia"", v.Ivanivka, Mykolaiv oblast	Cash/In kind	$ 0	$5700	$5700	$5700
	LLC "AP Zorya-Yug", v.Kucheryavovolodymyrivka, Kherson Oblast	Cash/In kind	$ 0	$5000	$5000	$5000
	PAE named after Frunze, v. Berdyanka, Kharkiv Oblast	Cash/In kind	$ 0	$3 500	$3 500	$3 500
	Agro-survivor, LLC, c. Cherkasy,Cherkaska oblast	Cash/In kind	$ 0	$1 500	$1 500	$2 500
	Agrofirma Kolos LLC., v.Pustovarivka, Kyiv Oblast	Cash/In kind	$ 0	$8000	$8000	$15000
	AF "Dodola", v, Novoraisk, Kherson Oblast	Cash/In kind	$ 0	$1300	$1300	$1300
	To add all private organisations which has					

	supported project over the last year					
		TOTAL	$ 10 323 267	$ 1,275,880	$	$

Please explain any significant changes in project co-financing since Project Document signature, or differences between the anticipated and actual rates of disbursement

At the current stage, the total amount of co-funding has been reduced by $1 897 327. This amount has been calculated as the result of summarizing co-funding reduction by $2 357 727 and co-funding extension by $451 400

Source of co-funding reduction:
The major private stakeholders AgroGeneration and Center of Soil Ecology are no longer engaged in the activity of the project due to AgroGeneration reorganization and the Center of Soil Ecology has left the project.

Source of co-funding extension:
Additional co-funding was received from the private sector as a contribution to FFS launching. Also, the Institute of irrigated agriculture is hosting the GEF project field office in Kherson on a volunteer basis as well as supporting with office and transport if required. Additional sources of co-funding extension this reporting period including the establishment of LDN monitoring platform, expected extension of co-funding from the Ministry of Agriculture, UaSP, and State Institutes as well as from the National Academy of Agriculture Sciences.

Annex 1. – GEF Performance Ratings Definitions

Development/Global Environment Objectives Rating – Assess how well the project is meeting its development objective/s or the global environment objective/s it set out to meet. DO **Ratings definitions: Highly Satisfactory (HS -** Project is expected to achieve or exceed **all** its major

global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as "good practice"); **Satisfactory (S -** Project is expected to achieve **most** of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings); **Moderately Satisfactory (MS -** Project is expected to achieve **most** of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve **some** of its major global environmental objectives or yield some of the expected global environment benefits); **Moderately Unsatisfactory (MU -** Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only **some** of its major global environmental objectives); **Unsatisfactory (U -** Project is expected **not** to achieve **most** of its major global environment objectives or to yield any satisfactory global environmental benefits); **Highly Unsatisfactory (HU -** The project has failed to achieve, and is not expected to achieve, **any** of its major global environment objectives with no worthwhile benefits.)

Implementation Progress Rating – Assess the progress of project implementation. **IP Ratings definitions**: **Highly Satisfactory (HS):** Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be resented as "good practice". **Satisfactory (S):** Implementation of most components is in substantial compliance with the original/formally revised plan except for only a few that are subject to remedial action. **Moderately Satisfactory (MS):** Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action. **Moderately Unsatisfactory (MU):** Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action. **Unsatisfactory (U):** Implementation of most components is not in substantial compliance with the original/formally revised plan. **Highly Unsatisfactory (HU):** Implementation of none of the components is in substantial compliance with the original/formally revised plan.