



GEF-6 REQUEST FOR ONE-STEP MEDIUM-SIZED PROJECT APPROVAL

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT IDENTIFICATION

Project Title:	Integrated Natural Resources Management in Degraded Landscapes in the Forest-Steppe and Steppe Zones of Ukraine		
Country(ies):	Ukraine	GEF Project ID: ¹	9813
GEF Agency(ies):	FAO (select) (select)	GEF Agency Project ID:	640633
Other Executing Partner(s):	Ministry of Ecology and Natural Resources	Submission Date:	29/03/17
		Resubmission Date:	03/05/17
GEF Focal Area(s):	Multi-focal Areas	Project Duration (Months)	36
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>		
Name of Parent Program:	[if applicable]	Agency Fee (\$)	168,765

A. FOCAL AREA STRATEGY FRAMEWORK AND PROGRAM²:

Focal Area Objectives/programs	Focal Area Outcomes	Trust Fund	(in \$)	
			GEF Project Financing	Co-financing
LD-3 Program 4 (select) (select)	Scaling up SLM through the Landscape Approach	GEFTF	1,332,363	7,742,450
(select) CCM-2 Program 4 (select)	Promote conservation and enhancement of carbon stocks in forest, and other land use, reduce emissions from land degradation, and support climate smart agriculture	GEFTF	444,121	2,580,817
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
(select) (select) (select)		(select)		
Total project costs			1,776,484	10,323,267

B. PROJECT FRAMEWORK

Project Objective: To promote restoration of degraded landscapes in the forest-steppe and steppe zones of Ukraine through upscaling of integrated natural resources management practices						
Project Components/ Programs	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	(in \$)	
					GEF Project Financing	Confirmed Co-financing
1. Enabling environment for Integrated Natural Resource Management (INRM)	TA	1.1 Strengthened institutional, legal and policy enabling conditions for INRM Indicator: INRM principles integrated into environment, agriculture and	1.1.1: Strengthening of the Coordinating Council to combat land degradation and desertification (CC-LDD) to support intersectoral coordination for INRM at	GEFTF	305,500	5,357,344

¹ Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCF](#) and [CBIT programming directions](#).

³ Financing type can be either investment or technical assistance.

		<p>forest sector frameworks</p> <p>1.2 Financial and incentive mechanisms for INRM in place at national and sub-national levels</p> <p>Indicator: Number and types of state and market-led incentive mechanisms supporting INRM</p>	<p>national and sub-national level</p> <p>1.1.2 Improved institutional structures and legislation for sustainable land and shelterbelt management</p> <p>1.1.3 Strengthened national environmental monitoring systems and spatial planning on land and shelterbelt resources and land degradation control</p> <p>1.1.4 Establishment of a Land Degradation Neutrality (LDN) monitoring system.</p> <p>1.1.5 Integrated land-use management plans at administrative region level</p> <p>1.2.1 Ownership rights, procedures of inventory and standards for management and planting of shelterbelts based on types of soils and natural zones defined.</p> <p>1.2.2 Clear criteria and indicators developed for establishment of Payment for Ecosystem Services (PES) schemes for INRM</p> <p>1.2.3 Inclusive and green food and feed value-</p>			
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<p>2. Restoration of productivity and resilience of production landscapes</p>	<p>Inv</p>	<p>2.1 Upscaling of SLM and climate-smart agricultural practices in production landscapes in the forest-steppe zone</p> <p>Indicator: Number of hectares where SLM and CSA practices are applied, with a target of 29,400</p> <p>2.2 Rehabilitation and sustainable management of shelterbelts</p> <p>Indicator: Number of hectares of shelterbelts under sustainable practices, with a target of 3,600</p>	<p>2.1.1: Capacity to implement Conservation Agriculture (CA) in the forest-steppe zone developed</p> <p>2.1.2 CA practices (e.g. minimum tillage), demonstrated and upscaled (for cereals—wheat, barley, rye, corn—oil seeds, sunflowers, canola)</p> <p>2.1.3 Identification and support to the special needs of rural women at project sites to ensure that their important role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture</p> <p>2.2.1 Guidelines and capacity for inventory and management of shelterbelts developed</p> <p>2.2.2 Rehabilitation and multipurpose shelterbelt management demonstrated and improved</p>	<p>GEFTF</p>	<p>1,106,132</p>	<p>3,690,209</p>
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3. Monitoring, Evaluation and adaptive management	TA	3.1. Adaptive management ensured and key lessons shared Indicator: M&E system in place to support adaptive results based management and monitoring of upscaling resulting from the project	3.1.1 Project progress continually monitored, mid-term and final evaluation conducted 3.1.2 Assessment of resilience of tested INRM approaches and feeding back of lessons to field level 3.1.3 Project achievements, results and innovative approaches recorded and disseminated	GEFTF	202,647	695,714
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
	(select)			(select)		
Subtotal					1,614,279	9,743,267
Project Management Cost (PMC) ⁴				GEFTF	162,205	580,000
Total GEF Project Financing					1,776,484	10,323,267

For multi-trust fund projects, provide the total amount of PMC in Table B, and indicate the split of PMC among the different trust funds here: ()

C. SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE

Please include confirmed co-financing letters for the project with this form.

Sources of Co-financing	Name of Co-financier	Type of Co-financing	Amount (\$)
Recipient Government	Ministry of Ecology and Natural Resources (MENR)	In-kind	6,000,000
Recipient Government	Ministry of Agrarian Politics and Food of Ukraine – Leonid Pogorilyy Institute	In-kind	590,000
Private Sector	Agrogeneration	In-kind	2,188,267
Recipient Government	MENR – State Academy of Post-Graduate Education and Management	In-kind	80,000
Recipient Government	State forest Resources Agency of Ukraine	Unknown	0
CSO	Ukrainian Soil Ecology Center	In-kind	400,000
GEF Agency	FAO	In-kind	600,000

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

GEF Agency	FAO	Grants	465,000
Total Co-financing			10,323,267

D. TRUST FUND RESOURCES REQUESTED BY AGENCY(IES), COUNTRY(IES), FOCAL AREA AND PROGRAMMING OF FUNDS

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					GEF Project Financing (a)	Agency Fee ^{a)} (b)	Total (c)=a+b
FAO	GEF TF	Ukraine	Land Degradation	(select as applicable)	1,332,363	126,574	1,458,937
FAO	GEF TF	Ukraine	Climate Change	(select as applicable)	444,121	42,191	486,312
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
(select)	(select)		(select)	(select as applicable)			0
Total Grant Resources					1,776,484	168,765	1,945,249

a) Refer to the Fee Policy for GEF Partner Agencies.

E. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	Under management plans: <i>238,000 hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>365496 metric tons</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>

⁵ Provide those indicator values in this table to the extent applicable to your proposed project. Progress in programming against these targets for the projects per the *Corporate Results Framework* in the *GEF-6 Programming Directions*, will be aggregated and reported during mid-term and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF, SCCF and/or CBIT.

6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

F. DOES THE PROJECT INCLUDE A “NON-GRANT” INSTRUMENT? No

(If non-grant instruments are used, provide an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/CBIT Trust Fund) in Annex B.

G. PROJECT PREPARATION GRANT (PPG)⁶

Is Project Preparation Grant requested? Yes No If no, skip item G.

PPG AMOUNT REQUESTED BY AGENCY(IES), TRUST FUND, COUNTRY(IES) AND THE PROGRAMMING OF FUNDS*

GEF Agency	Trust Fund	Country/ Regional/Global	Focal Area	Programming of Funds	(in \$)		
					PPG (a)	Agency Fee ⁷ (b)	Total c = a + b
FAO	GEF TF	Ukraine	Land Degradation	(select as applicable)	37,500	3,562	41,062
FAO	GEF TF	Ukraine	Climate Change	(select as applicable)	12,500	1,188	13,688
Total PPG Amount					50,000	4,750	54,750

⁶ PPG of up to \$50,000 is reimbursable to the country upon approval of the MSP.

⁷ PPG fee percentage follows the percentage of the Agency fee over the GEF Project Financing amount requested.

PART II: PROJECT JUSTIFICATION

1. *Project Description.* Briefly describe: a) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; b) the baseline scenario or any associated baseline projects, c) the proposed alternative scenario, GEF focal area⁸ strategies, with a brief description of expected outcomes and components of the project, d) incremental/ additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF/SCCF, CBIT and co-financing; e) global environmental benefits (GEFTF), and adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

Please refer to section 1 of the Project Document for a full description of the project rationale and proposed components, including areas of intervention.

Global environmental problem, root cause and barriers that need to be addressed

Socio-economic transformations after the breakup of the Soviet Union together with climate change effects have been widespread in Ukraine and it has accelerated the degradation of natural resources. Land degradation is an extremely urgent issue for Ukraine because it has a direct impact on soil fertility and agricultural production which can lead to significant economic losses (more than 6 billion US dollars annually). The most large-scale degradation processes include soil erosion by water and wind (nearly 57 percent of country's territory), inundation of land (about 12 percent), acidification (almost 18 percent), and salinization and sodification (over 6 percent). According to various criteria, approximately 20 percent of Ukrainian lands are polluted. Almost 23 thousand cases of landslides are registered yearly. Because of land degradation during 1986-2010, the humus content of Ukraine's black soils or chernozems, decreased by 0.22 percent and now is only 3.14 percent. During this period the loss of humus in the topsoil amounted to 5,500 kg per hectare.

The root causes of land degradation in Ukraine include intensive chemical-based agriculture, overuse of lands, and unsustainable forestry practices. Degradation of soils leads first to reduced productivity, causing rural incomes to fall and potentially decreasing the quality and availability of foods for rural households. Land degradation and desertification problems aggravate due to rapid climate change, accompanied by the increase of annual average temperatures, recurrence and intensity of extreme weather events including droughts, which occur every two or three years on 10 to 30 percent of country's territory and every 10-12 years on 50 to 70 percent of the total area. Gradually, climatic zones are shifting and rising temperatures are creating conditions for spread of pests and diseases affecting critical crops and tree species.

The consequences of climate change were observed in Ukraine in 1998 and in 2008, when it suffered from intensive floods, and again in 2009 and 2010 when the Ukrainian population witnessed abnormally hot summers. Additionally, land degradation and desertification lead to biodiversity loss, deterioration or disappearance of water bodies, exacerbation of the water supply problems for human consumption and industry and, as a consequence, worsening of people's living conditions. "Ukraine has about 63 thousand small rivers and every 10 years Ukraine loses about 5 thousand small rivers" (personal communication, Rector of State Ecological Academy Dr.O.Bondar). According to scientific

⁸ For biodiversity projects, in addition to explaining the project's consistency with the biodiversity focal area strategy, objectives and programs, please also describe which Aichi Target(s) the project will directly contribute to achieving.

research, Kyiv and surrounded areas held 126 known rare species of vascular plants. Now 42 species of them have likely disappeared. Under the CITES Convention 31 species have been identified (now 17 species have disappeared); 3 species of 13 species listed in the Bern convention have disappeared as well; 35 known species from the Red Book of Ukraine have not been found.

The poverty level of the rural population, which traditionally depends on management of land and other natural resources, has become 2-11 percent higher than the country's average during the last 10 years. This situation has led to a vicious circle of overexploitation and underinvestment in natural resources, and further land degradation. The long-term solution is to ensure effective management of agricultural land and trees in production landscapes so that they can perform expected functions and continue to provide ecosystem services essential for people's livelihoods, local and national development and environmental sustainability. However, there are several barriers that need to be removed to achieve this vision.

The remaining barriers to integrated management of natural resources that need to be overcome to improve the management of Ukraine's agricultural landscapes to safeguard critical ecosystem services such as carbon sequestration and prevention of soil erosion, as well as food production are related to:

- Inadequate policy and institutional structures and legislation for sustainable management of land and forest resources, including insufficient coordination across sectors with responsibility for land and forest management, including environment, agriculture, as well as other departments' and industries' oriented measures related to combating land degradation and desertification; and unclear ownership and tenure rights for certain types of land, such as shelterbelts;
- Inadequate financial resources allocated for solving issues related to conservation and sustainable use of land and forest resource and lack of economic incentives. For example, mobilisation of resources using market-based mechanisms, such as Payment for Ecosystem Services (PES) and value-chains, is hampered by lack of clear rules and criteria;
- Unsatisfactory state of land-use planning, particularly the development of documentation for conservation of lands and implementation of the planned measures, as well as insufficient provision of information for the State Land Cadastre system. Problems include: unjustifiably high levels of economic (mainly agricultural) use of the territory and unbalanced land use; poor location of industrial and residential properties, in particular location of water demanding facilities without taking availability of local water resources into consideration; insufficient area of lands allocated to conservation of the environment, recreation and tourism, and for conservation of cultural heritage;
- Failure to operationalize science-based principles of land use and basics of cropping, including failure to follow rotation plans, recommendations to reduce the applied agrochemicals, for the most part fertilizers, including organic fertilizers. This is partly linked to: the insufficient functional maintenance of the state monitoring system of land and environment, of the drought and early warning monitoring system, as well as of the hydrometeorological observation network; insufficient level of government units' access to the material, technical and human resources as related to management of land and other natural resources; inadequate use of modern technologies, including geoinformation;

technologies and remote sensing as well as innovative scientific findings in the area of making and implementing managerial decisions; and finally, low awareness level among the population, resulting in lack of interest and capacity of the land owners and users in ensuring the sustainable use of land and forests.

Baseline initiatives

Ukraine is signatory to all the major environmental conventions and protocols, and it is an active participant in the “Environment for Europe” process. However, there are few systematic efforts to integrate environment into its agricultural practices. No effective programs to restore soil fertility are in place, nor are there significant efforts to improve nutrient management. Regarding crop protection, the use of biological control techniques has dropped, due to the loss of insectaries and farmers’ lack of training in IPM approaches. Organic farming offers potential for the country and has been adopted on nearly one percent of farm land. However, it is not yet receiving adequate support for scaling up to take place. Some international donors have stepped in with pilot projects. Large areas of degraded farmlands could be reforested and used as green investments to sequester carbon and mitigate climate change. The proposed project will build on these commitments as well as on a number of ongoing projects and baseline investments in integrated management of natural resources. The most relevant initiatives are listed below:

Ecological protection and natural resources: Ukraine’s Ecological Policy and Strategy until 2020 recognizes the need to enhance the integration of environmental policy into integrated environmental governance systems. This will be achieved through institutional development and strengthening of the efficiency of state governance in environment protection, development of partnerships to involve all relevant stakeholders in planning and implementation and introducing incentives for the private sector to ‘green’ agribusinesses and value chains, creating the conditions for adoption of environmentally friendly technologies and organic agriculture. To ensure a balanced utilization of natural resources, payment for ecosystem services is also being promoted. Ukraine’s Ministry of Ecology and Natural Resources is providing baseline support of around \$8.2 million to support the implementation of the policy and strategy.

In addition, Wetland International, in collaboration with the Ministry of Ecology and Natural Resources, has supported projects on wetland biodiversity conservation to mainstream environmental considerations in agricultural landscapes of Ukraine. These projects have resulted in methods and guidelines useful for implementing INRM at the landscape scale. The UNDP/GEF project on Integrating Rio Conventions Provisions into Ukraine’s National Policy Framework has supported the establishment of enabling conditions for INRM in Ukraine.

Sustainable Agriculture: Ukraine has adopted a ‘Single Comprehensive Strategy and Action Plan for Agriculture and Rural Development for Ukraine for 2015-2020’, which provides an inclusive and equitable strategic vision and policy framework for reform in the agricultural sector and rural development. The overall objective is to increase agricultural competitiveness and food security, and to promote sustainable rural development. Priorities also include wider application of organic farming practices, modern and efficient policies in the areas of forestry, fisheries and bioenergy that will contribute to protection of natural resources, as well as improvement of value-chains and the operations of its actors in production, processing and marketing. Baseline support from the Ministry of Agrarian Policy and Food of Ukraine to implement the Strategy and Action Plan amounts to \$4.19

million. In addition, the baseline related to SLM and sustainable agriculture also includes the following:

- The Leonid Pogorilyy Ukrainian Scientific Research Institute on Forecasting and Testing of Machinery and Technologies has an annual budget of close to \$500,000 and is, among other things, supporting transfer of innovations, such as Conservation Agriculture (no-till, minimum tillage, biotechnology) to farms in the fertile black soil/chernozem belt in Ukraine. The institute engages in demonstration activities with farmers, training and other awareness and information dissemination activities as well as international collaboration on CA.
- FAO and EBRD are supporting a series of projects in the agricultural sector that have provided capacity building to grain farmers on post-harvest handling, storage, and value chains; facilitated policy dialogues, access to credit and investments; and supported an agribusiness program. The agribusiness program benefits from transfer of skills and international best practices in sustainable agriculture and has a strong demonstration effect. Total baseline funding amounts to \$3.1 million.
- The Swiss-Ukrainian Project “Organic Market Development in Ukraine” (2012 - 2016) is funded by the Swiss Confederation with \$5.15 million through the State Secretariat for Economic Affairs (SECO) and implemented by the Research Institute of Organic Agriculture (FiBL, Switzerland) in cooperation with Ukrainian organic sector stakeholders and policy makers. Baseline support is being provided to facilitate the integration of Ukrainian small and medium sized enterprises into international trade through certified organic produce. The objective is to strengthen the competitiveness of the country’s organic sector by: 1) increasing the quality and trade volume of selected organic arable crops from small and medium sized farms for export; 2) increasing the quality and trade volume of organic dairy products from small and medium sized farms for the domestic market; 3) developing a trademark for regional food products from the Carpathians; 4) improving commercial organic services, and 5) fostering a conducive environment for the development of the organic sector.
- The USAID funded Agricultural and Rural Development Support Project (2016-2020) supports broad-based, resilient economic growth through a more inclusive, competitive, and better governed agriculture sector that provides attractive livelihoods to rural Ukrainians. It will create a better enabling environment for agricultural small and medium enterprises (SMEs) by strengthening the capacity of the Ministry of Agriculture to implement sector reforms, by developing a transparent legal framework for agricultural land markets, and by implementing reforms that attract irrigation system modernization investments. The Agriculture and Rural Development Support Project will improve agriculture sector competitiveness by supporting agricultural SMEs to introduce international quality and safety standards and take advantage of the trade opportunities available through the EU Deep and Comprehensive Free Trade Agreement. The project will support rural development by expanding employment and income opportunities and supporting target rural communities to develop viable economic strategies that stimulate economic growth. The funding over the four-year period amounts to USD 20 million.

Shelterbelt Management: The majority of forest land in Ukraine (73%) is state owned and under the management of the State Forest Resources Agency. The State Forest Resource Agency and its territorial departments implement state policy related to forest management, protection and conservation, sustainable forest management, and regeneration of forest resources, to improve the efficiency of forest management. It supports forest management at the local level through state₁₀

forestry enterprises that are responsible for the full range of activities along the value chain from planting, felling and primary wood processing. State forest enterprises are also involved in afforestation of agricultural lands to improve soil fertility and reduce erosion. During Soviet times, 1.4 million ha of soil protection stands were created, including 440,000 ha of shelterbelts. Over the past three years, the average forest regeneration has been 54,000 ha per year. Tree nurseries have also been created on 3,600 ha of land.

The baseline support to shelterbelt management also includes significant investments from the the Ukraine Railway Company (URC) that manages 84,000 ha of land, including shelterbelts alongside the railways. Over the last 5 years, the URC has spent around USD200 million on environmental projects. In 2015 alone around USD11.5 million were spent on nature protection and environmental management. In addition, AgroGeneration, an agricultural company active in Kharkiv, Lviv, Sumy, Zhytomir and Ternopil oblasts, produces grains and oilseeds adapted to the specific regions of operation. Environmental sustainability is a part of the company's overall management. The company invests in modern agricultural machinery and uses minimum tillage methods to minimize erosion and preserve soil moisture and nutrients. As part of its Corporate Social Responsibility (CSR), AgroGeneration supports underprivileged members of society by creating jobs for local residents. Improved shelterbelt management that generates both environmental and socio-economic benefits could become part of such a strategy.

The Ukrainian Railways are authorized and manages 88,800 ha of railway shelterbelts in the country. Despite the very large area of shelterbelts the company considers its area as not sufficient. 18,200 km of railway roads critically need protection by shelterbelts; however among them only 13,200 km (72.5%) are protected. Shelterbelts along the railway have protective, meliorative, recreation, landscape and ecological purposes. They perform also nature protection, social and economic functions. These additional functions resulted in broadening railway shelterbelts in a 5-10 times (100-200m).

Monitoring of lands and soils. The UNCCD COP 12 endorsed SDG 15, target 15.3 and the concept of Land Degradation Neutrality (LDN) as a strong vehicle for driving the implementation of the Convention, agreed on a definition of LDN and invited country Parties to set LDN national voluntary targets. According to decisions 22/COP11 and 15/COP.12 of the UNCCD, the following indicators are recommended for monitoring of progress towards LDN: land cover; land productivity; and carbon stocks (metric: soil organic carbon (SOC) stock).

FAO and the Global Soil Partnership (GSP) Secretariat were approached by the UNCCD Secretariat to share information about the GSP and the possible pathways to contribute to improving soil carbon knowledge and data. During the 5th Session of the GSP's Intergovernmental Technical Panel on Soils (ITPS) held during March 2016, collaboration between ITPS and the Science Policy Inter-face of the UNCCD, the Intergovernmental Platform on Biodiversity and Ecosystem Services, and the Intergovernmental Panel on Climate Change was discussed. GSP/ITPS were requested to conduct a global SOC assessment based on country-level spatial soil data sets, combined to a new global SOC map. As an action of the GSP and its members, this task would directly relate to SDG 15.3.1, and would also support the endorsed metrics for the assessment of LDN.

Subsequently, the GSP Secretariat informed all the partners, including the National Scientific Centre «Institute for Soil Science and Agrochemistry Research named after O.N. Sokolovsky» of the National Academy of Agrarian Science of Ukraine (NSC) that Global SOC map will be developed¹¹

based on national soil organic carbon (SOC) maps. These maps will provide a basis for monitoring of carbon stocks in soils and impacts of land degradation. The NSC has technical and intellectual capacity to develop such maps and it is located in the Eastern Project area. The project will initiate steps towards development of a national-wide system of soil carbon monitoring, which can be verified in the Project area. This monitoring system is also to be reflected in amendments to relevant resolutions of the Cabinet of Ministers of Ukraine, including “On Approval of the Order of Soil Monitoring at Lands of Agricultural Designation” (26.02.2004 #51); “On Approval of the Order of State Land Monitoring” (20.08.1993 #661); and On Approval of Regulations on the State Environmental Monitoring System” (30.03.1998 # 391).

The GEF alternative

In order to address the challenges related to integrated management of natural resources in Ukraine and to fill the gaps in the baseline, there is a need to strengthen the policy and institutional environment, ensuring inter-sectoral collaboration in order to promote a balanced approach to economic development, land use, and environmental concerns. To support integrated land-use management planning, the state environmental monitoring system needs strengthening for land resources (along with the large-scale soil inspections and creation of agrochemical passports), forests and water resources. Economic incentives for landowners and land users should be identified to encourage ecologically balanced activities, protection of soils and restoration of their fertility. There is also a need to ensure widespread implementation of environmentally balanced land use technologies, such as climate-smart agriculture and agroforestry that protect critical ecosystem services, while also generating more short-term benefits to land users. The project has therefore been designed around three components that will: (i) create an enabling environment for INRM in Ukraine at national and sub-national level; (ii) restore the productivity and resilience of production landscapes through INRM; and (iii) ensure learning and sharing of lessons learned through effective project monitoring and evaluation and adaptive management. The Project theory of change is summarised in Figure 2.

Project objectives, outcomes and outputs. The objective of the project is to promote restoration of degraded landscapes in the forest-steppe and steppe zones of Ukraine through upscaling of integrated natural resources management practices. It will be achieved through three components with related outcomes and outputs:

Component 1: Enabling environment for INRM

Outcome 1.1: Strengthened institutional, legal and policy enabling conditions for INRM

This outcome will be led by the Ministry of Ecology and Natural Resources (MENR) and provides the critical first step for integrating environmental concerns into sector policies and legislation related to agriculture, combating land degradation and shelterbelt management. Institutional structures and legislation will be strengthened, especially for shelterbelts that today have an unclear status with respect to ownership and management responsibility. Monitoring systems and spatial planning will also be strengthened with the help of remote sensing and geospatial data, and improved access to information. The outcome will be achieved through four outputs:

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 Coordinating Council was established based on a decision by the Cabinet of Ministers and is chaired by MENR. Its membership also includes the Ministry of Agrarian Policy and Food (MAPF), Ministry of Regional Development, Construction and Housing, Ministry of Health, Ministry of Social Policy, Ukraine State Service for Geodesy, Cartography and Cadaster, State Forestry Resources Agency (SFRA), State Agency for Exclusion Zone Management, State Space Agency, State Services for Emergency Management, State Geological and Mineral Resources Survey, National Academy of Agrarian Sciences, National Academy of Sciences, as well as other stakeholders, institutions and organizations, including NGOs.

The project will strengthen linkages and synergies among sectors and establish favourable conditions for policy integration and mainstreaming of issues, such as drought management, and establishment of joint monitoring systems using remote sensing. It will also ensure that a government budget is assigned for the CC-LDD operations, and that information is shared across sectors on a regular basis.

1.1.2 Improved institutional structures and legislation for sustainable land and shelterbelt management. No INRM principles have been agreed at national level and the existing policy framework is full of loopholes. The output will directly support priority 1 of Ukraine's UNCCD NAP on strengthening the policy in the sphere of protection and sustainable use of lands and other natural resources, protection of soils and rehabilitation of their fertility, including the regulatory support. This involves support to working out draft laws and regulations on: functional land use; economic incentives for sustainable land use, protection and soil fertility improvement; drought management; environmental monitoring systems; soil quality standards; and ownership and management of shelterbelts.

1.1.3 Strengthened national environmental monitoring system for land and shelterbelt resources and land degradation control. 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. Achieving this output involves conducting land inventory and improving land and soil monitoring at selected project sites, identifying biophysical and socio-economic criteria for land zoning and spatial planning, and creating a unified land information system. All relevant institutions will be trained in the use of up-to date tools and methods for environmental monitoring and land-use planning. This output will also be used to establishing criteria for a Land Degradation Neutrality (LDN) system, Ukraine having committed to set a voluntary LDN target. The NSC and Ukrainian Centre of Soil Ecology will support the delivery of this output using new technology for soil monitoring, archived soil samples and remote sensing that will also be translated into advice to land users.

1.1.4 Integrated land-use management plans at administrative region level. Integrated land-use planning that is also participatory has so far not been applied in Ukraine. The initial focus will be on Barvinkovskyi rayon located in the steppe zone of Ukraine and Velukoburlutskyi rayon located in the forest-steppe zone. Both rayons are within Kharkivska oblast. Two separate INRM plans will be developed taking into account the specifics of the two zones and they will cover lands used for intensive agriculture, pasture and hay fields, shelter belts and forest management for a total of 250,000 ha of land. The plans will be developed, discussed with various stakeholders and submitted to the Barvinkovskyi and Velukoburlutskyi rayon governments for¹³

approval. These plans will serve as model INRM plans for wide use in both zones of Ukraine. The method used will draw on FAO's extensive experience of participatory land-use planning. Synergies and collaboration will be established with the FAO/GEF project on Decision Support for mainstreaming and scaling up SLM (DS-SLM) and the FAO Global Soil Partnership.

Outcome 1.2: Financial and incentive mechanisms for INRM in place at national and sub-national levels

Enhanced access to financial resources is crucial for improving the management of natural resources in Ukraine, both through state-led and market-based mechanisms. This requires clarification of ownership rights, especially of shelterbelts, development of criteria for payment for ecosystem services (PES) schemes, and agreement on criteria for making value chains more inclusive and environmentally friendly for selected crops. This will be achieved through the following outputs:

1.2.1 Ownership rights, procedures of inventory and standards for management and planting of shelterbelts based on types of soils and natural zones defined. This output will assist the Ukrainian government to carry out the Plan of Activities on Realisation of the Concept of Agroforestry Development in Ukraine adopted by the Cabinet of of Ukraine on June 18, 2014 #582-p. The uncertainty of ownership rights for shelterbelts is the main obstacle for their rehabilitation and sustainable use in Ukraine. The Project will assist with identification of ownership rights, use of remote sensing and GIS for inventory of shelterbelts, and involve scientists for the development of the above-mentioned standards.

1.2.2 Clear criteria and indicators developed for establishment of PES schemes for INRM. Ukraine has very limited experience with mechanisms for scaling up of INRM, such as PES, and there is a need to establish clear criteria and indicators. The shelterbelts protect soils from erosion, conserve humidity of nearby lands, deliver timber, non-timber forest products (NTFPs) and provide other environment services which increase incomes of farmers. The Project will prepare criteria, indicators and proposals for payments to local communities from farmers for use of shelterbelts' environmental services. The WWF's experience in developing PES schemes will be used with a focus on the selected project areas.

1.2.3 Inclusive and green food and feed value-chains strengthened (e.g. cereals, oil seeds, selected non-timber forest products). Value-chains are generally neither sufficiently inclusive nor environmentally friendly. Entry points for making value chains greener and more inclusive for local communities will therefore be identified together with key project partners, such as the USAID project on Agricultural and Rural Development, UNA and AgroGeneration. For agricultural land, the focus will be on cereals, and for shelterbelts on fruits, such as dried plums, nuts and other NTFPs, such as honey. This involves support to identifying opportunities for certification, branding strategies, etc. in collaboration with agricultural cooperatives in order to develop models on sustainable economic development at the local level.

The value chain selection will adopt a participatory approach based on the "Markets for the Poor (M4P)" methodology. The term M4P, now more commonly known as Market Systems Development, refers to an approach in aid and development known as 'Making Markets Work for the Poor'. It seeks to change the way that markets work, so that poor people are included in the benefits of growth and economic development. The aim is to tackle market failures and strengthen the private sector in a way that creates large-scale, lasting benefits for the poor. The¹⁴

approach utilises systems analysis as a means of diagnosing and addressing the constraints that face poor and disadvantaged people in improving their position within markets. This selection process will have two steps: (i) definition of the selection criteria and (ii) ranking of the selected commodities/products. The identification process will be based on a number of workshops that would include participants that represent all levels of the value chain – producers, processors, distributors – as well as local government and programme staff. Engaging stakeholders from across the agricultural economic sector (along the entire production to final sale chain) into the selection process ensures buy-in both into the pro-poor approach, as well as the selection of commodity value chains most appropriate for sustainable development.

Component 2: Restoration of productivity and resilience of production landscapes

Outcome 2.1: Upscaling of SLM and climate-smart agricultural practices in production landscapes in the forest-steppe and steppe zone (29 400 ha under SLM; sequestration of 277 675tCO₂eq)

SLM and CSA technologies are applied in isolated locations in Ukraine promoted by research institutes and agro-enterprises that are not well connected to higher level planning and decision-making processes. Capacity to scale up conservation agriculture with no-till and minimum tillage, use of green manure and useful micro-flora in the forest-steppe and steppe zones will be developed. This is a sustainable and effective climate-smart agricultural practice, which will reduce soil erosion and enhance carbon stocks in the rich chernozems that cover most of these agro-ecological zones. So far, it is mainly the steppe area that has adopted CA and only on 2% of soils. There is therefore need for demonstrations of CA for the main crops grown in the forest-steppe zone, such as different cereals and oil seeds. Demonstration activities are expected to be upscaled to roughly 140,000 ha of land at the Oblast level with the support of government and private sector co-financing. The following outputs will lead to this outcome:

2.1.1 Capacity to implement Conservation Agriculture in the forest-steppe zone developed and strengthened. Agricultural service providers have limited knowledge and technical skill related to CA. This output therefore involves strengthening the capacity of agricultural service providers from both the public and private sector. The output will be delivered by The Leonid Pogorilyy Ukrainian Scientific Research Institute on Forecasting and Testing of Machinery and Technologies (USRI) and its regional network, including the German-Ukrainian Agricultural Demonstration and Training Centre. It will also involve collaboration with Agrogenation to learn from its experiences with CA in Kharkiv oblast. Farmer Field Schools (FFS) will be established where appropriate and peer-learning will also be supported through farmer-to-farmer exchange visits. The USRI will select names and characteristics of agriculture machinery and equipment used for no-till and minimum-tillage in order to strengthen statistical information on use of such machinery and no-till and minimum-tillage in the country. It will enhance efforts for implementation of CA at the state level. Collection of such statistical information will also facilitate elaboration of draft regulations on CA.

2.1.2. CA practices demonstrated and upscaled (for cereals – wheat, barley, rye, corn - oil seeds, sunflowers, canola) on 29 400 ha and 140 000 ha of land, respectively. It is mainly the steppe area in Ukraine that has adopted CA to a limited extent. USRI will support transfer of innovations in conservation agriculture (no-till, minimum tillage with use of green manure and useful micro-fauna) to farms in the selected oblasts, where demonstration activities with farmers, training through FFS and other awareness and information dissemination activities will be supported. Agrogenation will share its expertise on CA and precision farming in¹⁵

Barvinkovskyi and Velykoburlutskyi rayons and contribute to development of recommendations to farmers and agro-enterprises on wider use of conservation agriculture technologies and practices.

2.1.3 Identification and support to the special needs of rural women at project sites to ensure that their important role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture. The feminsation of agriculture in Ukraine has led to over-representation of women in rural areas and they often shoulder the main responsibility for agricultural activities. Support will be provided to sensitisation on gender of agricultural advisory/extension services linked to agricultural cooperative development, establishment of networks of rural women and “women to women” visits, and training of young women entrepreneurs in computer skills, business management and basic accounting. The project will also support public advocacy for rural women’s rights in the selected oblasts. The NGO Women's Information Consultative Center (WICC) will take the lead in supporting these activities.

Outcome 2.2: Rehabilitation and sustainable management of shelterbelts (3 600 ha of shelterbelts, sequestration of 351 285tCO₂eq)

To improve the management of shelterbelts in the agricultural lands of the forest-steppe and steppe zones that have been allowed to degrade and deteriorate since independence due to unclear ownership, guidelines will be developed and capacity strengthened to undertake inventories using modern information and communication technology, such as satellite images, digitized geospatial information accessible through smartphones and tablets. This will be coupled with demonstrations of rehabilitation and multipurpose shelterbelt management for erosion control, carbon sequestration and income generation through e.g. NTFPs from Robinia pseudoacacia (black locust), fruit trees, linden, bushes, yellow acacia (*Caragana arborescens*), etc.

Demonstration activities are expected to be upscaled to approximately 90,800 ha. Key institutions that will participate in this sub-component are the State Forest Resources Agency of Ukraine, Ukrainian Nut Association (UNA), AgroGeneration and the Ukrainian Railway Company (URC). The UNA has confirmed interest of using shelterbelts for planting all types of nuts once the legal status for these areas is determined. The participation of the UNA will also have significant implications in terms of long term sustainability as it brings their experience in value chain development. The URC will co-finance shelterbelt rehabilitation in the steppe zone to reduce soil erosion and to improve ecological functions. AgroGeneration will rehabilitate shelterbelts and enhance their NTFPs, which will increase income of local populations. Additional benefits include carbon sequestration and improved habitat connectivity. Outputs include:

2.2.1 Guidelines and capacity for inventory and management of shelterbelts developed. The existing government regulations for Land Inventory (23.05.2012, # 513), approved by the Cabinet of Ministry does not take into account specifics of shelterbelts. The procedures for land inventory envisaged by the regulations are very expensive, complicated and time consuming. The regulations will be amended in order to simplify and improve land inventory under shelterbelts. The special recommendations will be developed for sustainable management of shelterbelts taking into account various geographical, soils, climate conditions and ownership of shelterbelts. The government should leave possibility for authorised bodies (to be determined) to supervise the outcomes of the shelterbelts management and improve it (if necessary). This output will therefore be supported not only by government bodies, but also by USRI, Agrogeneration and Ukraine Railways in the respective oblasts where they are active in the project.

2.2.2 Rehabilitation and multipurpose shelterbelt management demonstrated and improved (for erosion control and income generation through e.g. NTFPs) on 3 600 ha and 90 800 ha of land respectively. Shelterbelts are important for mitigation of climate change, keeping soil moisture, increasing crop production, and generation of additional incomes from forest and NTFPs and for protection of biodiversity. The protection of biodiversity by shelterbelts is one of the government priorities. Ukraine develops the National Ecological Network and according to the Law of Ukraine “On Forming National Ecological Network of Ukraine for 2000-2015” (21.09.2000, #1989-III) and the shelterbelts are components of the network. Shelterbelts cover 1.07% of country's area and are key landscapes providing migration routs and refugia for wildlife.

The Project will demonstrate how to rehabilitate shelterbelts and the application of sustainable agroforestry practices. For example, planting Robinia pseudoacaci and yellow acacia (Caragana arborescens) will generate production of honey and timber. Location of bees in shelterbelts increases sunflower yield and fruits. Fruit and nut trees generate income for local population and landusers, etc.

Component 3: Monitoring, evaluation and adaptive management

Outcome 3.1: Adaptive management and key lessons shared (M&E system ensuring timely delivery of project benefits)

This component will ensure that project's progress is tracked and periodic evaluations are conducted for learning and adaptive management. The STAP Guidelines on Resilience, Adaptation and Transformation Assessment (RAPTA) will be applied during project inception and at mid-term to see whether project implementation strategies and pathways need to be adapted to integrate resilience to climate change and other external stressors into INRM approaches. Project results, innovative approaches and achievements will be disseminated for replication and scaling up. It will be delivered through the following outputs:

3.1.1. Project progress continually monitored, mid-term and final evaluation conducted. A project M&E system will be established to measure project progress and impacts in terms of multiple global environmental benefits (GEBs), social and economic benefits. Baseline and targets for project indicators will be refined and used for monitoring project progress and impacts and reporting through three annual project reports (PIRS) submitted to GEF Secretariat and 6 half-yearly project progress reports submitted by the PMU to LTU and the FAO/GEF unit. A mid-term evaluation will be carried out with field visits to project sites and consultation with project partners at national and sub-national level. A final evaluation will also be conducted and will include review of project reports, web-based information, and field visits to selected sites, with recommendations for ensuring sustainability of project outcomes.

3.1.2 Assessment of resilience of tested INRM approaches and feeding back of lessons to field level. Resilience is generally not taken into consideration in NRM activities in Ukraine. The project will therefore apply the GEF/STAP RAPTA Guidelines during project inception and at mid-term to ensure that the project follows the most appropriate implementation pathway. The RAPTA involves development of a multi-stakeholder engagement plan; detailed description of the key socio-ecological systems in project areas; assessment of the systems, including general resilience and specified resilience, and identification of needs for adaptation and/or transformation.

3.1.3 Project achievements, results, and innovative approaches recorded and disseminated. The awareness of INRM, including SLM, CA and CSA is generally low in Ukraine. The output focuses on synthesizing best practices and lessons learnt from the project and dissemination of results. It will support development of a communication and dissemination plan with clearly identified target audiences, and establishment of a project website and social media pages. It will support development of outreach material and publications that will be published and also disseminated through modern ICT, including mobile phones and tablets. The project will produce information materials as well as public awareness publications for the annual celebration of World Day to Combat Desertification (17 June).

Expected global environmental and adaptation benefits

As a result of implementation of the project, the following global environmental and socio-economic benefits will be generated:

- Improved provision of ecosystem services from 33 000 ha degraded agricultural land and shelterbelts, such as enhancement of productivity (%) and reduction of soil erosion, with scaling up on a total of 230 800 ha;
- Sequestration of carbon in black soils/chernozem soils and shelterbelts amounting to a total of 365 496 tCO₂eq ; and
- Improved living conditions of local communities in the targeted areas, including increase in incomes and creation of new job opportunities along selected value chains benefitting around 75,700 people with upscaling potential to 363 300 people of which around 52% are women.
- The carbon benefits of the project were calculated using the FAO EX-ACT GHG appraisal tool, using default IPCC coefficients (HAC soil, cool temperate moist climate, 3 years project with 16 years capitalization), as follows:

Table 1. Carbon benefits of project.

Project Name	Ukraine GEF - CA and SLM		Climate	Cool Temperate (Moist)			Duration of the Project (Years)		19		
Location	Eastern Europe Dominant Regional Soil Type			HAC Soils			Total area (ha)		33000		
Components of the project	Gross fluxes			Share per GHG of the Balance					Result per year		
	Without	With	Balance	All GHG in tCO ₂ eq			N ₂ O	CH ₄	Without	With	Balance
	Positive = source / negative = sink			Biomass	Soil	Other					
Land use changes											
Deforestation	0	0	0	0	0	0	0	0	0	0	0
Afforestation	0	0	0	0	0	0	0	0	0	0	0
Other LUC	0	0	0	0	0	0	0	0	0	0	0
Agriculture											
Annual	-307,230	-684,905	-277,675	0	-303,555	0	25,880	0	-16,170	-30,784	-14,614
Perennial	0	0	0	0	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0	0	0	0	0
Grassland & Livestocks											
Grassland	0	0	0	0	0	0	0	0	0	0	0
Livestocks	0	0	0	0	0	0	0	0	0	0	0
Degradation & Management											
Coastal wetlands	0	-87,821	-87,821	-60,390	-27,431	0	0	0	0	-4,622	-4,622
Inputs & Investments	0	0	0	0	0	0	0	0	0	0	0
Fishery & Aquaculture	0	0	0	0	0	0	0	0	0	0	0
Total	-307,230	-672,726	-365,496	-60,390	-330,986	0	25,880	0	-16,170	-35,407	-19,237
Per hectare	-9	-20	-11	-1.8	-10.0	0.0	0.8	0.0			
Per hectare per year	-0.5	-1.1	-0.6	-0.1	-0.5	0.0	0.0	0.0	-0.5	-1.1	-0.6

2. *Child Project?* If this is a child project under a program, describe how the components contribute to the overall program impact.

Not applicable

3. *Stakeholders.* Will project design include the participation of relevant stakeholders from civil society organizations (yes /no) and indigenous peoples (yes /no)? If yes, elaborate on how the key stakeholders engagement is incorporated in the preparation and implementation of the project.

Please refer to section 1.3.3 of the PRODOC for a list of project stakeholders (pg. 27-29). Participation of civil society organizations and the private sector is expected throughout the project as follows:

Under component 1, the project will design integrated land use plans for two rayons in Ukraine (Barvinkovskyi and Velukoburlutski). These plans will take into consideration the specific characteristics of each zone, therefore local knowledge will be the basis for their development. While the approval of these plans corresponds to the rayon governments, CSOs and the private sector will be invited to participate in its design. Similarly, the analysis of PES and the strengthening of food and feed value chains will be analyzed and implemented at the local level following a "Markets for the poor" approach. Under this approach, local CSOs and the private sector will have a voice in the definition of selection criteria as well as the selection of commodities and products to be supported. Engaging stakeholders from across the agricultural economic sector (along the entire production to final sale chain) into the selection process ensures by-in both into the pro-poor approach, as well as the selection of commodity value chains most appropriate for sustainable development.

Under component 2, the project will work with the Leonid Pogorilyy Institute and its regional network (including CSOs and the private sector) to establish Farmer Field Schools to support farmer-to-farmer learning and development. USRI will support transfer of innovations in conservation agriculture (no-till, minimum tillage with use of green manure and useful micro-fauna) to farms in the selected oblasts, where demonstration activities with farmers, training through FFS and other awareness and information dissemination activities will be supported. Agrogenation will share its expertise on CA and precision farming in Barvinkovskyi and Velykoburlutskyi rayons and contribute to development of recommendations to farmers and agro-enterprises on wider use of conservation agriculture technologies and practices. Similarly, organizations such as the Ukrainian Nut Association and the Ukrainian Railway Company will support activities related to shelterbelt management and upscaling of best practices. The protection of biodiversity by shelterbelts is one of the government priorities, and this will be supported via the National Ecological Network.

4. *Gender Equality and Women's Empowerment.* Are gender equality and women's empowerment taken into account (yes /no)? If yes, elaborate how it will be mainstreamed into project implementation and monitoring, taking into account the differences, needs, roles and priorities of women and men.

Women represent more than 53% of Ukraine's rural population and reportedly own 60% of land. However, the needs of rural women in Ukraine are not fully recognized at national level. Challenges that need to be addressed include income inequality, and inadequate participation in decision-making processes. The average monthly salary of women working in the agricultural sector is only 89% of that of men and over a third of rural women do not participate in decision-making. The age gap between rural women and men are higher than that in the cities – women over 60 years old constitute one third of rural population compared to one quarter in urban areas. Most single-parent households in rural areas are headed by women and face challenges related to weak economic security, underdeveloped infrastructure and poor access to social services.

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To take into consideration the above concerns, the proposed project, in compliance with the GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012) and FAO Gender Equality Policy will aim to contributing to the following objectives:

- Promote equal participation of rural women in decision-making by providing support to rural women's groups and associations, identifying, supporting and strengthening the role of women-leaders in rural communities and rural institutions as village councils, and actively engaging them in the project activities as participants and beneficiaries;
- Promote rural women's equal access to and control over decent employment and income, land, forestry and other productive resources, by taking into account their status, responsibilities and daily practices which will be assessed with respect to the SLM and SFM practices addressed by the Project;
- Encourage rural women's equal access to goods and services for agricultural development and to markets by actively engaging women in the value-chains for selected agricultural and forest products;
- Contribute to the reduction of rural women's work burden, by facilitating their improved access to new technologies, services and infrastructure, as well as knowledge and information.

The project will benefit from FAO's gender experts in the region and will engage national gender experts in order to build their capacity. All project implementation staff will be provided gender sensitization training at the inception stage. FAO check-lists for gender mainstreaming will be reviewed, adjusted to the relevant context and applied by the project management throughout the entire project cycle. The project design includes a specific output to address gender disparities in agriculture: 'Identification and support to the special needs of rural women at project sites to ensure that their important role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture', which will ensure that women's needs are taken into consideration by the project. Gender considerations and participatory approaches will also be specifically taken into account at monitoring and evaluation, through the specific assessment.

Furthermore, as highlighted in Component 2, Output 2.1.3 (pag. 24 of the Project Document), the project will identify and support the special needs of rural women at project sites to ensure that their role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture. The project will support gender-sensitive activities within agricultural advisory/extension services that are linked to (i) agricultural cooperative development, (ii) the establishment of networks of rural women and "women to women" visits, and (iii) training of young women entrepreneurs in computer skills, business management and basic accounting. The project will also support public advocacy for rural women's rights in the selected oblasts. The NGO Women's Information Consultative Center (WICC) will take the lead in supporting these activities. The Center started as a non-governmental, non-profit organization in 1995. Its mission is to strengthen the voice, impact and influence of women's rights advocates, organizations and movements internationally to effectively advance gender equality. Within the project the center will support gender specific activities to support climate-smart agriculture.

5. *Benefits.* Describe the socioeconomic benefits to be delivered by the project at the national and local levels. Do any of these benefits support the achievement of global environment benefits (GEF Trust Fund) and/or adaptation to climate change?

The project is expected to improved living conditions of local communities in the targeted areas, including increase in incomes and creation of new job opportunities along selected value chains benefitting around 75,700 people, with upscaling potential to 363 300 people, of which around 52% are women. Key benefits are summarized by project site in the table below (further information including capitalization phase in each project site and upscaling area is provided in section 3.1.3 of the PRODOC, pg. 26):

Oblast	Name of demo site	Size of demo area (ha)/ # of people	Upscaling area (ha)/ # of people	Land use	INRM interventions by the project
Kyiv	Doslidnytske	1000/ 1911	20 000/ 5 300	Arable lands and shelterbelts	CA/CSA technologies – developed and disseminated , trainings held, shelterbelts rehabilitated
Kharkiv	Barvinkovskyi	25 000/ 18 800 (9 937)	122 800/ 58 000	Arable lands and shelterbelts	Shelterbelts/ agroforestry & CA, soil monitoring for land degradation developed
	Velykobur-lutskyi	4 000/ 6 359 (1 954)			
Myko-layiv	Mykolaiv-skyi	3 000/ 48 000	88 000/ 300 000	Shelterbelts	Shelterbelts/ agroforestry
TOTAL		33 000 ha/ 75 707 people (51-54% women)	230 800 ha/ 363 300 people (51-54% women)		

At the local level, this Project will contribute to socio-economic sustainability at demonstration sites for CA, CSA and shelterbelt management in Ukraine's forest-steppe and steppe zone through new income-generation activities for local communities. The project will pay special attention to identifying and supporting the special needs of rural women at pilot sites to ensure that their important role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture. A long-term impact of the project also includes improved food security and nutrition in demonstration areas, with a particular focus on provision of ecosystem services supporting agricultural production.

In addition, the project will help identify financial and incentive mechanisms for INRM at national and sub-national levels that will contribute significantly to financial and economic sustainability of the project. This includes the clarification of ownership rights in shelterbelts, clear criteria for establishment of Payment for Ecosystem Services (PES) schemes, and support to establishment of inclusive and green food and feed value-chains for e.g. cereals, oil seeds, and selected non-timber forest products (NTFPs)

6. *Risks*. Indicate risks, including climate change, potential social and environmental future risks that might prevent the project objectives from being achieved, and if possible, propose measures that address these risks:

Project Risks are discussed in section 2.2. of the PRODOC (pg. 34). A full risk analysis following FAO guidance with identification of mitigation actions is found in Appendix 4 (pg. 67-68).

<i>Risk</i>	<i>Rating</i>	<i>Mitigation Measure</i>
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Lack of close and collaborative cooperation between key institutional stakeholders	Moderate	This risk will be mitigated under Component 1 of the project that will strengthen the intersectoral coordination mechanism/Coordinating Council for Land Degradation and Desertification to enhance cooperation.
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.
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.
Lack of political support to 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 EU, FAO, etc. This project will provide an opportunity to further integrate global environmental considerations and to demonstrate good practices in the field.
Natural changes in agro-ecological zones due to gradual changes in climate and extreme weather events	Low	INRM practices to be demonstrated and scaled up by the project are proven to enhance resilience to climate change, such as CA, and multi-purpose agroforestry/shelterbelt management.

7. *Cost Effectiveness*. Explain how cost-effectiveness is reflected in the project design:

The selection of the INRM best practices for demonstration and upscaling on e.g., CA, CSA, and agroforestry/shelterbelt management will be based on management practices already pilot-tested by USRI, Agrogenation, etc. for their environmental impact and economic feasibility. The project will also undertake assessment of resilience of tested INRM approaches and feedback lessons to the field level. The final fine-tuning of INRM interventions will be undertaken in close consultation with local communities and agro-enterprises participating in the project.

8. *Coordination*. Outline the coordination with other relevant GEF-financed projects and other initiatives [not mentioned in 1]:

The project will coordinate with or build on the achievements of the following projects:

- UNEP/GEF Project Conserving, Enhancing and Managing Carbon Stocks and Biodiversity while Promoting Sustainable Development in The Chernobyl Exclusion Zone through the Establishment of a Research and Environmental Protection Centre and Protected Area (2011-2015) – lessons will be exchanged on carbon stocks management and biodiversity conservation in the forest-steppe zone of Ukraine;
- EU Project “Integrating Climate Change into Vulnerable Ecosystems Management: natural parks in wetlands and forest areas (Ukraine)” (2011-2013) – experiences will be shared related to integration of climate change considerations into local-level land-use planning;

- UNEP/GEF Project Development and Alignment of National Action Programme to the UNCCD 10 Years Strategy and Preparation of the Fifth Reporting and Review process;
- UNDP/GEF Project Capacity Development: Integrating Rio Convention Provisions into Ukraine's National Environmental Policy Framework;
- EU Project "Protection of Steppe Biodiversity" (2010-2015). The project aims at restoring exhausted or abandoned steppe lands in an environmentally and economically sustainable manner, maintaining and enhancing steppe biodiversity through careful management of land;
- EU/UNDP Clima East Pilot Project "Conservation & Sustainable Use of Peatlands" (2013 - 2016);
- Swiss-Ukrainian Project "Organic Market Development in Ukraine" (2012 - 2016) is funded by the Swiss Confederation with \$5.15 million;
- USAID "Agriculture and Rural Development Support Project" (2016-2020) is \$20 million project designed to support broad-based, resilient economic growth through a more inclusive, competitive, and better-governed agriculture that provides attractive livelihoods in rural areas of Ukraine.

The proposed project will build on the baselines established by these initiatives and also ensure that it incorporates key lessons learnt. The coordination mechanism that will be strengthened under Component 1 of the project will ensure continuous coordination and sharing of experiences.

9. *Institutional Arrangement.* Describe the institutional arrangement for project implementation:

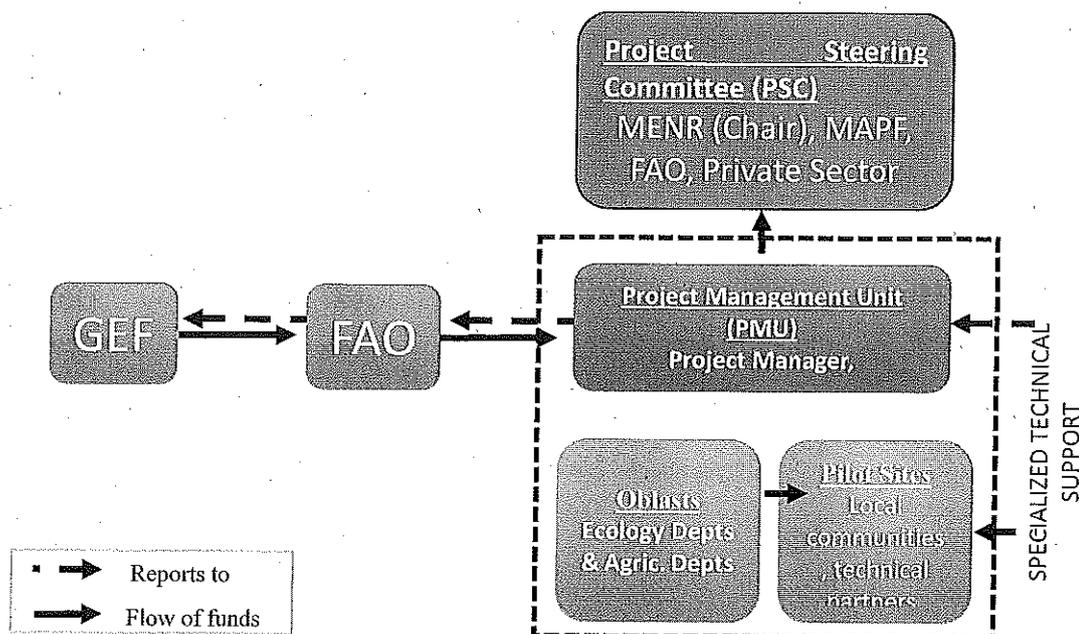
Please refer to section 3.2 in the PRODOC (pg. 36-40)

The Food and Agriculture Organization of the United Nations (FAO) will be the GEF Agency responsible for supervision and provision of technical guidance during project implementation. In addition, FAO will act as financial and operational Executing Agency, and will deliver procurement and contracting services to the project using FAO rules and procedures, as well as financial services to manage GEF resources through an agreement with the government.

The lead government agencies in the Project are:

- Ministry of Ecology and Natural Resources: The MENR will play a major role in the project and host the Project Steering Committee and coordinate participation of other Ministries, state agencies and other stakeholders in project implementation. It will play a key role in coordination of activities under first and third Project components and contribute to national, regional and local level of the INRM and development planning processes and underlying government staff and infrastructure, including relevant legal expertise.
- Ministry of Agrarian Policy and Food: The MAP will lead the development of minimum agricultural standards, conservation agriculture, and other activities under Project component 2, which should contribute to the integration of environmental and climate change concerns into agriculture and rural development, as well as will take part in other relevant project activities.
- State Forest Resources Agency of Ukraine: The SPIU will be responsible for improvement of ownership and strengthened management systems of shelterbelts and agroforestry. It will also be involved in policy related work under component 1.

Figure 1. Decision making mechanism of the project



10. *Knowledge Management.* Outline the knowledge management approach for the project, including, if any, plans for the project to learn from other relevant projects and initiatives, to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

Project Component 1 and 3 contributes to the Knowledge Management system of the project. The project will strengthen linkages and synergies among sectors and establish favourable conditions for policy integration and mainstreaming of issues, such as drought management, and establishment of joint monitoring systems using remote sensing. A key role will be assumed by the “Coordinating Council to combat land degradation and desertification (CC-LDD) to support intersectoral coordination for INRM”. The Council was established based on a decision by the Cabinet of Ministers and is chaired by MENR. Its membership also includes the Ministry of Agrarian Policy and Food (MAPF), Ministry of Regional Development, Construction and Housing, Ministry of Health, Ministry of Social Policy, Ukraine State Service for Geodesy, Cartography and Cadaster, State Forestry Resources Agency (SFRA), State Agency for Exclusion Zone Management, State Space Agency, State Services for Emergency Management, State Geological and Mineral Resources Survey, National Academy of Agrarian Sciences, National Academy of Sciences, as well as other stakeholders, institutions and organizations, including NGOs.

The Coordinating Council to combat land degradation and desertification will be informed by the national environmental monitoring system for land and shelterbelt resources and land degradation control. All relevant institutions will be trained in the use of up-to date tools and methods for environmental monitoring and land-use planning. This output will also be used to establishing criteria for a Land Degradation Neutrality (LDN) system, Ukraine having committed to set a voluntary LDN target. The NSC and Ukrainian Centre of Soil Ecology will support the delivery of the monitoring system using new technology for soil monitoring, archived soil samples and remote sensing that will also be translated into advice to land users.

The project will therefore apply the GEF/STAP RAPTA Guidelines⁹ during project inception and at mid-term to ensure that the project follows the most appropriate implementation pathway in order to assess the resilience of the INRM approaches tested and to feed back the lesson learned to the field level. The RAPTA involves development of a multi-stakeholder engagement plan; detailed description of the key socio-ecological systems in project areas; assessment of the systems, including general resilience and specified resilience, and identification of needs for adaptation and/or transformation.

Project output 3.1.3 is aimed at increasing the awareness of INRM, including SLM, Conservation Agriculture and Climate Smart Agriculture which is generally low in Ukraine. The output focuses on synthesizing best practices and lessons learnt from the project and dissemination of results. It will support development of a communication and dissemination plan with clearly identified target audiences, and establishment of a project website and social media pages. It will support development of outreach material and publications that will be published and also disseminated through modern ICT, including mobile phones and tablets. The project will produce information materials as well as public awareness publications for the annual celebration of World Day to Combat Desertification (17 June).

11. Consistency with National Priorities. Is the project consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAPs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, INDCs, etc.

Please see Section 1.E (pg. 29-33) for full details on how the project aligns with national priorities, with FAO's strategic framework (including Central Asia Regional priorities), and Central Asia Country Programming Framework.

The project fits in the framework of the:

- "Strategy for Sustainable Development "Ukraine-2020" (Decree of the President of Ukraine dated 12.01.2015, #5/2015);
- Goal 15 of the SDGs "Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss" (implementation of SDGs goals was supported by the President of Ukraine and the Government);
- The Main Principles (Strategy) of National Ecological Policy of Ukraine until 2020 (Law of Ukraine #2818-VI dated 21.12.2010);
- Ukraine's Land Protection Law (Закон України від 19.06.2003 # 962-ІУ "Про охорону земель");
- Law on State Control of Land Use and Protection (Закон України від 19.06.2003 # 963-ІУ "Про державний контроль за використанням та охороною земель").

Ukraine is a signatory to all three main relevant conventions pertaining to the activities envisaged in this project: CBD (1997), UNCCD (2002) and UNFCCC (1997). The objectives of this project are fully consistent with the country's obligations under the above conventions. The project will also contribute to meeting Sustainable Development Goal (SDG) 15 and its target 15.3 on combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.

⁹ O'Connell, D., Abel, N., Grigg, N., Maru, Y., Butler, J., Cowie, A., Stone-Jovicich, S., Walker, B., Wise, R., Ruhweza, A., Pearson, L., Ryan, P., Stafford Smith, M. (2016). "Designing projects in a rapidly changing world: Guidelines for embedding resilience, adaptation and transformation into sustainable development projects. (Version 1.0)". Global Environment Facility, Washington, D.C.

The project is aligned with the provisions of the Concept to combat land degradation and desertification (approved by the decree of the Cabinet of Ministers of Ukraine dated October 22, 2013 No.1024-p) and Ukraine's National Action Plan to Combat Land Degradation and Desertification (approved in 2016) as well as regional programs of economic and social development, sectoral and branch programs and strategies. The project corresponds to the first priority of the NAP to strengthen the policy environment for SLM, strengthen the institutional capacity of competent authorities and provide conditions for financial resource mobilisation. In addition, following COP12 of the UNCCD, Ukraine has committed to adopt a national Land Degradation Neutrality (LDN) goal, LDN being a state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems.

The project is also fully aligned with Ukraine's climate change commitments and its Nationally Determined Contribution (NDC) that includes a target of reducing GHG emissions, including land use, land use change and forestry (LULUCF) by at least 40% below 1990 levels by 2030. However, Ukraine has not yet defined which LULUCF accounting method it will adopt.

12. M & E Plan. Describe the budgeted monitoring and evaluation plan.

Please see section 3.5 of the PRODOC for full details on monitoring and reporting. The project's M&E plan is summarized below:

M&E Activity	Responsible parties	Time frame/ Periodicity	Budget
Inception workshop	NPC; FAO-Ukraine (with support from the LTO, and FAO-GEF Coordination Unit)	Within two months of project start up	USD 3,000
Project Inception report	NPC, Expert M&E and FAO-Ukraine with clearance by the LTO, BH and FAO-GEF Coordination Unit	Immediately after the workshop	-
Field-based impact monitoring	NPC; project partners, local organizations	Continuous	USD 10,000
Supervision visits and rating of progress in PPRs and PIRs	PC; FAO (FAO-Ukraine, LTO). FAO-GEF Coordination Unit may participate in the visits if needed.	Annual, or as needed	FAO visits will be borne by GEF agency fees Project Coordination visits shall be borne by the project's travel budget
Project Progress Reports (PPRs)	PC, with stakeholder contributions and other participating institutions	Six-monthly	USD 3,000
Project Implementation Review (PIR)	Drafted by the NPC, with the supervision of the LTO and BH. Approved and submitted to GEF by the FAO-GEF Coordination Unit	Annual	FAO staff time financed though GEF agency fees. PCU time covered by the project budget.
Co-financing reports	PC with input from other co-financiers	Annual	USD 500
Technical reports	PC, FAO (LTO, FAOMX)	As needed	TBD
Mid-term review	FAO-Ukraine, NPC, FAO-GEF Coordination Unit and others	Midway through the project implementation period	USD 15,000

M&E Activity	Responsible parties	Time frame/ Periodicity	Budget
Final evaluation	FAO Independent Evaluation Unit in consultation with the project team, including the FAO-GEF Coordination Unit and others	At the end of the project	USD 35,000 Organized by FAO's OED. FAO staff time and travel costs will be financed by GEF agency fees.
Terminal Report	PC; FAO (FAO-Ukraine, LTO, FAO-GEF Coordination Unit, TCS Reporting Unit)	Two months prior to the end of the project.	USD 5000
Total budget			USD 71,500

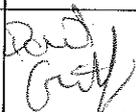
PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. Record of Endorsement¹⁰ of GEF Operational Focal Point (S) on Behalf of the Government(S): (Please attach the *Operational Focal Point endorsement letter(s)* with this template. For SGP, use this SGP OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Oleksandr Tarasenko	Head of Department of International Cooperation GEF Operational Focal Point	MINISTRY OF ECOLOGY AND NATURAL RESOURCES	02/29/2016

B. GEF Agency(ies) Certification

This request has been prepared in accordance with GEF policies¹¹ and procedures and meets the GEF criteria for a medium-sized project approval under GEF-6.

Agency Coordinator, Agency name	Signature	DATE (MM/dd/yyyy)	Project Contact Person	Telephone	Email Address
Mr Daniel Gustafson, Deputy Director-General (Programmes) and Officer-in-Charge, TCI and TC		03/05/2017	Avetik Nersisyan	(+36-1) 8141-240	Avetik.nersisyan@fao.org
Jeffrey Griffin Senior Coordinator GEF Unit Investment Center FAO					

C. ADDITIONAL GEF PROJECT AGENCY CERTIFICATION (*Applicable only to newly accredited GEF Project Agencies*)

¹⁰ For regional and/or global projects in which participating countries are identified, OFP endorsement letters from these countries are required even though there may not be a STAR allocation associated with the project.

¹¹ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, SCCF, and CBIT

For newly accredited GEF Project Agencies, please download and fill up the required **GEF Project Agency Certification of Ceiling Information Template** to be attached as an annex to this project template.

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Objective: To promote restoration of degraded landscapes in the forest-steppe and steppe zones of Ukraine through upscaling of integrated natural resources management practices							
Component 1: Enabling environment for Integrated Natural Resource Management (INRM)							
Outcome 1.1 Strengthened institutional, legal and policy enabling conditions for INRM	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	Minutes from the Coordinating Council to combat land degradation and desertification Documented policy revisions in 3 sectors PIRs, PPRs	Line ministries and productive sectors committed to policy reform and INRM	MENR, MAPF and FAO

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
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 operationalised.	The CC-LDD strengthened with participation from all relevant sectors	Enhanced coordination and information sharing on INRM across sectors	CC-LDD meeting minutes, budget assigned for CC-LDD operations, annual implementation progress reports; minutes of meetings; PPR PIRs, PPRs	Policy-makers and planners use the information shared to integrate INRM priorities into strategies, plans, and programmes targeting management of environmental risk	MENR in collaboration with line ministries
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	Documents with draft laws and regulations, minutes from CC-LDD meetings PIRs, PPRs	High-level political support is maintained throughout the project, and the CC-LDD provides a platform for coordination and information sharing	MENR, MAPF

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Output 1.1.3: Strengthened national environmental monitoring systems 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	Reports from training events and participants lists Environmental monitoring and land-use planning system available on line PIRs, PPRs	Key stakeholders have the interest and capacity to internalise new knowledge on environmental monitoring and land-use planning Policy makers committed to operationalise the system	NSC, Ukrainian Centre of Soil Ecology
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	Baseline report on LDN indicators at demonstration sites Reports from training events and participants lists PIRs, PPRs	Key stakeholders have the interest and capacity to internalise new knowledge on environmental monitoring and land-use planning Policy makers committed to operationalise the system	NSC and Ukrainian Centre of Soil Ecology

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
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	Land-use plans National monitoring reports PIRs, PPRs	Participating oblasts and rayons, and local land users are interested in supporting land-use planning processes	Participating oblasts and rayons
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 PES and opportunities for certification of value-chains, identified in the three participating oblasts	At least two incentive mechanisms in place	Project reports PIRs, PPRs	The public sector, NGOs, private sector and research institutions are capable and willing to participate in establishment of INRM incentive mechanisms	MENR, MAPF, Agrogenation, Ukraine Railways
Output 1.2.1: Ownership rights, procedures of inventory and standards for management and planting of shelterbelts based on types of soils and natural zones defined.	Ownership rights, procedures of inventory and standards for planting shelterbelts defined	Unclear ownership rights of shelterbelts is the main obstacle to their rehabilitation and sustainable use	Standards for shelterbelt ownership and use established	Standards for shelterbelt ownership and use operationalised	Project reports PIRs, PPRs	Relevant government sectors cooperate to agree on ownership and standards for shelterbelts	MENR, MAPF

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
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 establish 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	Project reports PIRs, PPRs	The public sector, NGOs, private sector and research institutions are capable and willing to agree on PES criteria	MENR, MAPF, Ukraine Railway, USRI
Output 1.2.3: Inclusive and green food and feed value-chains strengthened (e.g. cereals, oil seeds, selected non-timber forest products (NTFPs))	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 analysed using the Markets for the Poor (M4P) methodology	At least 2 food and feed value-chains made more inclusive and environmentally friendly	Project reports PIRs, PPRs	NGOs, private sector and research institutes have the capacity to support agricultural cooperatives and agro-enterprises with greening of value chains	MENR, MAPF, UNA

Component 2: Restoration of productivity and resilience of production landscapes

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
Outcome 2.1 Upscaling of SLM and climate-smart agricultural practices in production landscapes in the forest-steppe zone	SLM and CSA technologies/best practices applied on X ha of land sequestering Y mton CO2	SLM and CSA technologies are applied in isolated locations in Ukraine promoted by research institutes and agro-enterprises that are not connected to higher level planning and decision-making processes	10 000 ha	29 400 ha 277 675 mton CO2eq.	Land use management plans PIRs/PPRs Mid-term and final evaluations	Land users with support of rural advisory services have capacity and incentives to adopt improved SLM and CSA practices	MAPF, FAO, Agrogeneration, USRI, Ukraine Railways, UNA
Output 2.1.1: Capacity to implement Conservation Agriculture (CA) in the forest-steppe zone developed	Number of CA training events and workshops support by the project 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 organised	Training manuals and material and training participation lists	Agricultural advisory service providers are interested in strengthening their knowledge and skills on CA and in reaching out to land users	USRI, Agrogeneration MAPF
Output 2.1.2: CA practices (e.g. minimum tillage), demonstrated and upscaled (for cereals—wheat, barley, rye, corn—oil seeds, sunflowers, canola)	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 CO2eq.	National monitoring reports PIRs, PPRs	Agricultural service providers have the capacity to support farmers in CA to upscale best practices	USRI, Agrogeneration MAPF

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
2.1.3: Identification and support to the special needs of rural women at project sites to ensure that their important role in agriculture is recognized and that they reap the benefits of investments in climate-smart agriculture	Number of training events and workshops organized for women's groups, young women entrepreneurs, etc. Number of women-to-women exchange visits	The feminisation 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 event 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 organised	National monitoring reports PIRs, PPRs	Agricultural service providers have the interest to support women in CA	Women's Information Consultative Centre
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 CO2eq.	PIRs/PPRs Mid-term and final evaluations	Local communities with support of rural advisory services have the capacity and incentives to adopt improved shelterbelt management practices	MAPE, FAO, Agrogeneration, USRI, URC
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 exist	Guidelines developed and published	Guidelines applied at project demonstration sites	Published guidelines PIRs, PPRs	Project partners have the skills, knowledge and resources to support the development of guidelines for shelterbelt management	MAPE, FAO, USRI, Agrogeneration, URC

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
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 ₂ eq.	National monitoring reports PIRs, PPRs	Agricultural service providers have the capacity to support rural communities to upscale best practices	USRI, URC, Agrogeneration MAPF
Component 3: Monitoring, evaluation and adaptive management							
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	GEF LD and CC Tracking Tools, PIRs, PPRs Midterm Review and Final Evaluation	National lead agencies and other stakeholders support M&E processes, and are committed to continuous learning and exchange of knowledge on INRM	FAO
Output 3.1.1: Project progress continually monitored, mid-term and final evaluation conducted	Mid-term and final evaluation reports	0	Mid-project review recommendations implemented		Evaluation reports (FAO evaluation office)	Adequate funding allocated to evaluations	FAO

Results chain	Indicators	Baseline	Mid-term target	Final target	Means of verification	Assumptions	Responsible for data collection
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	Resilience assessment MTR PIRs, PPRs	Project partners committed to integration of resilience into INRM activities	MENR, FAO
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 organised in connection with project launch	6 project newsletters 4 outreach events	Awareness/outreach events & materials Statistics of website visitors, Facebook likes, number of Tweets	The PMU is functioning and has adequate capacity in KM and communication	MENR, FAO

ANNEX B: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used)

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/CBIT Trust Funds or to your Agency (and/or revolving fund that will be set up)

Not applicable

