

GEF-6 PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: Full-sized Project Type of Trust Fund: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title:	Integrated natural resources management in drought-prone and salt-affected agricultural production landscapes in Central Asia and Turkey ('CACILM2')			
Country(ies):	Kazakhstan, Kyrgyz republic, Tajikistan, Turkmenistan, Uzbekistan and Turkey	9094		
GEF Agency(ies):	FAO (select) (select)	GEF Agency Project ID:	635622	
Other Executing Partner(s):		Submission Date:	27 March 2015	
GEF Focal Area(s):	Multi-focal Areas	Project Duration (Months) 60		
Integrated Approach Pilot	IAP-Cities IAP-Commodities IAP-Foo	od Security Corporate P	rogram: SGP 🔲	
Name of parent program:	[if applicable]	Agency Fee (\$)	988,363	

A. INDICATIVE FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²

		(in \$)		
Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Trust Fund	GEF Project Financing	Co-financing	
LD-1 Program 1	GEFTF	2,000,000	7,823,000	
LD-1 Program 2 (select)	GEFTF	2,000,000	10,707,425	
LD-3 Program 4 (select) (select)	GEFTF	1,672,458	5,170,000	
LD-4 Program 5 (select)	GEFTF	1,801,250	4,720,000	
CCM-2 Program 4 (select)	GEFTF	3,508,107	10,185,575	
(select) (select)	(select)			
Total Project Cost		10,981,815	38,606,000	

B. INDICATIVE PROJECT DESCRIPTION SUMMARY

		1	·		(in	(\$)
Project Components	Financing Type ³	Project Outcomes	Project Outputs	Trust Fund	GEF Project Financing	Co- financing
1. Multi-country collaboration and partnership to foster the implementation of cost-effective INRM, focusing on drought- prone and salt- affected production landscapes	TA	1.1. Enhanced knowledge of the costs of land degradation and benefits of INRM, drought preparedness and biosaline agriculture to national economies and the region as a whole informs policy and investment decisions at all levels, including NAP processes (linked	1.1.1 Harmonized approach across countries for valuation of ecosystem services at various scales 1.1.2 Identification of incentives to scale up INRM (e.g. PES schemes)	GEFTF	1,522,494	5,200,000
		to 2.1) 1.2.Enhanced multi- country collaboration and information sharing	1.2.1 Multi-country platform for knowledge			

Project ID number will be assigned by GEFSEC and to be entered by Agency in subsequent document submissions. When completing Table A, refer to the excerpts on <u>GEF 6 Results Frameworks for GETF, LDCF and SCCF</u>.

Financing type can be either investment or technical assistance.

		to promote investment	consolidation and			
		for INRM scaling up	harmonization on			
			INRM to support	ļ	1	
			national advisory and			
			climate information			
<u> </u>			services, including	'	,	
			early warning systems			
			1.2.2 Multi-scale and			
			§			
			participatory			
-			approaches in place			
		·	for monitoring of			7
			ecosystem services			
	,		1.2.3. Targeted			
	·	•	knowledge and	ļ ·	•	
	,		communication	İ		
		-	products prepared for			
		·	wide dissemination on]		
		•	the multiple benefits			
			of INRM in selected		l .	
			production landscapes			
	lnv	2.1. Resilience	2.1.1 Review of	GEFTF	2,561,991	7,662,856
resilience into policy;		integrated across	national policies, legal		<u> </u>	•
legal and institutional		natural resources	and institutional			·
frameworks for		management (NRM)	frameworks and their			
integrated natural		sectors and production	application with the			
resources		landscapes	view to identify gaps			
management (INRM)			and potential			
1 '1			opportunities for	;		
			managing			
, is			transformations	(A)		
			2.1.2 Formulation,			
		•	review or update of			
			national drought			
,	-		policies, strategies and			
,			guidelines for drought		· , [
					· [
			preparedness planning			
		•	2.1.3 Participatory			
.	ļ		expert natural		(
	***************************************		resources assessment			-
			and mapping (i.e.		-	Arenterdal
1	,		DLDD, SLM,			İ
Table 1		•	vulnerability) for	'	<u>'</u>	
			evidence-based			
			decision-making			
.			2.1.4 Strengthening of			
			inter-sectoral			
	.		coordination			
##			mechanisms at			
			national level,			,
		. *	including			
			mainstreaming of	į		
	.		NAPs into national			
			sector budget		. 1	
			allocations and			
***************************************			investment processes			
The state of the s		2.2 Incentives for	2.2.1 Increase in			
		climate-smart	public and private			1
	. [agriculture in place at	sector (at least 5			***************************************
L		-o	Server (at rouse 2	i	i i	

	-	national and sub-	different types of			,
		national levels	enterprises)			
***			supporting			
			smallholder farmers to			
· ·			scale up best practices		•	
		. '	and adoption of self-			
	·	·	reliant approaches for			
' .		·	managing climate			
			variability and change		٠	
	. *		2.2.2 At least 5	-		
			resource use efficient			
·			and biodiversity			
			friendly food and feed			
			value-chains			
		-	strengthened (type of			
			crop, animal, wildlife,			
		0.1.77	fish,etc.)	CEPE	5 700 524	21.010.040
3.Upscaling of	Inv	3.1. Upscaling of a	3.1.1 At least 2	GEFTF	5,708,534	21,819,048
climate-smart		proactive drought risk	multistakeholder land-			
agricultural practices		management (DRM)	use plans for selected			
in drought-prone		approach and	production landscapes			
and/or salt-affected	·	innovative integrated	per country			
production		natural resources	3.1.2 At least 2		٠,	
landscapes	,	management (INRM)	specialized institutions			
		technologies in selected	/ advisory service			
		production landscapes /	providers per country			
		land use systems (e.g.	with increased			
		pastoral, agro-sylvo-	capacities to enhance			
}		pastoral, tree-based,	skills of stakeholders			
	1049	irrigated, rainfed, home	for wide adoption of		-313 -112	
Į	^	gardens)	proactive risk	>-	,,,	
			management approach			
,			and drought mitigation			•
			technologies	'		` .
			3.1.3 Upscaling of 5-6		-	
			innovative drought			
			mitigation			
			technologies in			
		·	selected production			
			landscapes on 239,500			
,		,	ha of land (at least 15			
	·		,			
		·	drought-tolerant			,
			species and 5 habitats, 2.8 million tCO2e		<u> </u>	
		•				
			captured / avoided, 15			
,	and the same of th		% crop water			
			productivity/			
			irrigation efficiency)			
		3.2. Adaptation and	3.2.1 Guidelines for			
		scaling up of	development of	1		
		technologies and	catchment salinity		, ·	
		approaches for	management plans		,	
		management of salt-	developed and piloted			
		affected production	in each country for			•
	,	landscapes (e.g.	sustainable and			a.
•		irrigated, pastoral, agro-	biodiverse aquatic and		***************************************	
Λ		sylvo-pastoral, tree-	terrestrial ecosystems	}		
•		based, home gardens)	3.2.2 At least 2			

		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
				specialized institutions			
		-		/ advisory service			
	•			providers per country			
				with increased			
				capacities to enhance			
				skills of stakeholders			
				for wide adoption of			
				salinity mitigation			
				approaches and			1
			*	technologies			
			·	3.2.3. Upscaling of 5-6		-	·
				best practices for	,		
		ļ		combating			
				salinization, while		-	
				ensuring biodiversity			
				conservation and			
			·	sustainable use on			
			*	95,500 ha of land (at			
				least 15 salt-tolerant			
ı				species, 1.2 million			
				tCO2e captured /		1	
			· · ·	avoided, 15% crop		•	
				water productivity /			
ı				irrigation efficiency		,	
	4. Monitoring and	TA	4.1. Project	4.1.1 M&E system	GEFTF	665,852	2,085,714
	evaluation		implementation based	established to measure			,
			on adaptive results-	project progress and			
ı	·	'	based management,	impacts in terms of			
			monitoring, and	multiple global	İ		
		,0	reporting for enhanced	environmental		e la	
			impact and visibility	benefits (GEBs),		n *'	
-			, -	social and economic			•
				benefits.			
		٠.		4.1.2 Midterm and			,
		•		terminal evaluations			
***************************************				carried out and reports			i
L				available			
				Subtotal		10,458,871	36,767,618
			Project M	anagement Cost (PMC)4	GEFTF	522,944	1,838,381
				Total Project Cost		10,981,815	38,606,000
=				<u>u</u>			

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. INDICATIVE SOURCES OF CO-FINANCING FOR THE PROJECT BY NAME AND BY TYPE, IF AVAILABLE

Sources of Co- financing	Name of Co-financier	Type of Co- financing	Amount (\$)
Recipient Government	Government of Kazakhstan	In-kind/Grant	To be defined
Recipient Government	Government of Kyrgyzstan	In-kind/Grant	1,450,000
Recipient Government	Government of Tajikistan	In-kind/Grant	1,800,000
Recipient Government	Government of Turkey	In-kind	900,000
Recipient Government	Government of Turkey	Grant	300,000
Recipient Government	Government of Turkmenistan	In-kind/Grant	To be defined
Recipient Government	Government of Uzbekistan	In-kind	5,880,000

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:

Recipient Government	Government of Uzbekistan	Grant	20,000,000
GEF Agency	FAO ,	Grants	5,186,000
Others	ICBA	In-kind	940,000
Others	SIWI	In-kind	100,000
Others	EASP	In-kind	50,000
Others	GIZ	Grants	2,000,000
Total Co-financing	A Charles		38,606,000

D. Indicative Trust Fund Resources Requested by Agency(ies), Country(ies) and the Programming of Funds $^{\rm a)}$

			· ·		(in \$)		
GEF Agency	Trust Fund	Country/ Regional/ Global	Focal Area	Programming of Funds	GEF Project Financing (a)	Agency Fee (b) ^{b)}	Total (c)=a+b
FAO	GEFTF	Kazakhstan	Land Degradation	(select as applicable)	900,624	81,056	981,680
FAO	GEFTF	Kazakhstan	Climate Change	(select as applicable)	900,624	81,056	981,680
FAO	GEFTF	Kyrgyz Republic	Land Degradation	(select as applicable)	180,125	16,211	196,337
FAO	GEFTF	Tajikistan	Land Degradation	(select as applicable)	268,846	24,196	293,042
FAO	GEFTF	Turkey	Land Degradation	(select as applicable)	178,975	16,108	195,083
FAO	GEFTF	Turkmenistan	Land Degradation	(select as applicable)	2,688,464	241,962	2,930,426
FAO	GEFTF	Uzbekistan	Land Degradation	(select as applicable)	1,455,424	130,988	1,586,412
FAO	GEFTF	Uzbekistan	Climate Change	(select as applicable)	2,607,483	234,673	2,842,156
FAO	GEFTF	FA set-aside	Land Degradation	(select as applicable)	1,801,250	162,113	1,963,362
Total GE	Total GEF Resources				10,981,815	988,363	11,970,178

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

E. PROJECT PREPARATION GRANT (PPG)⁵

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

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

	Project	Preparation Grant amou	unt requested: \$210,8	346 P	PG Agency F	ee: 18,979		
GEF	EF Trust	Country/		Drogramming		(in \$)		
Agency	Fund	Regional/Global	Focal Area	Focal Area Programming of Funds	PPG (a)	Agency Fee ⁶ (b)	Total c = a + b	
FAO	GEF TF	Kazakhstan	Land Degradation	(select as applicable)	16,807	1,513	18,320	
FAO	GEF TF	Kazakhstan	Climate Change	(select as applicable)	16,807	1,513	18,320	
FAO	GEF TF	Kyrgyz Republic	Land Degradation	(select as applicable)	3,361	302	3,663	
FAO	GEF TF	Tajikistan	Land Degradation	(select as applicable)	6,383	574	6,957	
FAO	GEF TF	Turkey	Land Degradation	(select as applicable)	4,511	406	4,917	
FAO	GEF TF	Turkmenistan	Land Degradation	(select as applicable)	63,830	5,745	69,575	
FAO	GEF TF	Uzbekistan	Land Degradation	(select as applicable)	23,475	2,113	25,588	
FAO	GEF TF	Uzbekistan	Climate Change	(select as applicable)	42,058	3,785	45,843	
FAO	GEF TF	FA set-aside	Land Degradation	(select as applicable)	33,613	3,025	36,638	
Total PP	otal PPG Amount					18,976	229,821	

F. PROJECT'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁷

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

⁵ PPG requested amount is determined by the size of the GEF Project Financing (PF) as follows: Up to \$50k for PF up to\$2m (for MSP); up to \$100k for PF up to \$3m; \$150k for PF up to \$6m; \$200k for PF up to \$10m; and \$300k for PF above \$10m. On an exceptional basis, PPG amount may differ upon detailed discussion and justification with the GEFSEC.

Provide the expected project targets as appropriate.

Corporate Results	Replenishment Targets	Project Targets
 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	hectares
Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	335,000 hectares
 Promotion of collective management of transboundary water systems and implementation of the full range of policy, 	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	Number of freshwater basins
legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	Percent of fisheries, by volume
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)	4 million metric tons
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS,	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	metric tons
mercury and other chemicals of global	Reduction of 1000 tons of Mercury	metric tons
concern	Phase-out of 303.44 tons of ODP (HCFC)	ODP tons
Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	Number of Countries:
mainstream into national and sub-national policy, planning financial and legal frameworks	Functional environmental information systems are established to support decision-making in at least 10 countries	Number of Countries:

PART II: PROJECT JUSTIFICATION

1. Project Description. Briefly describe: 1) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; 2) the baseline scenario or any associated baseline projects, 3) the proposed alternative scenario, with a brief description of expected outcomes and components of the project, 4) incremental/additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; 5) global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF); and 6) innovation, sustainability and potential for scaling up.

1) Global environemtal and/or adaptation problems, root causes and barriers that need to be addressed Central Asia is a core region of the Eurasian continent which include Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan and Uzbekistan countries (hereinafter referred to as, «CACs», «CA»). Within the region, the Aral Sea Basin is an extensive area of 1-7 – 1.8 million Km² which feed two major river basins, the Amu Darya and the Syr Darya. It is an arid to semi-arid region, where the majority of the area is (68%) is occupied by sparsely vegetated deserts and grass/scrublands. The major agro-ecological regions for crop production include irrigated cropland (11.4 M ha*), rain-fed cropland (22.9 M ha*), rangelands in deserts (72.3 M ha), steppes (213.7 M ha) and mountains (10.3 M ha) (GEF-ADB-ICARDA, 2008).

In the last 50 years, the population of the Central Asian region has tripled. The population is estimated at 66.4 million and more than half (about 60%) of the population is considered rural and dependent on agriculture for their livelihoods (FAOSTAT, 2013). The Central Asian region is facing serious food security challenges with the need to feed larger number of people amongst increasingly limited water resources and highly variable climatic conditions.

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 <u>GEF-6 Programming Directions</u>, will be aggregated and reported during midterm and at the conclusion of the replenishment period. There is no need to complete this table for climate adaptation projects financed solely through LDCF and/or SCCF. *Aquastat 2012.

In several countries, growing urban areas are also taking priority over the scarce freshwater resources, leaving agriculture to use low-quality brackish and salty water with adverse effects on agricultural productivity. Adding to the complexity, climate change projections for the region indicate considerable negative impact on productivity of farm land and pasture land. Grasslands, for example, are at risk of desertification due to higher temperatures and decreasing rainfall, which will directly impact livestock productivity.

Owing to its geographical and climatic characteristics, aggravated by impacts of climate change and anthropogenic pressures, Central Asian countries (CACs) and Turkey are severely affected by desertification, land degradation and drought (DLDD). In Kazakhstan, 66 percent of the land area is affected while, in Turkmenistan and Uzbekistan, this figure is as high as 80 percent. Between 40 - 80 percent of irrigated lands in the region are salt-affected and/or waterlogged (Qadir, et al. 2008, Toderich et al. 2013); most affected countries include Turkmenistan (68%), Uzbekistan (51%), Kazakhstan (20%) and, Turkey (30%) (Aquastat, 2012). Permanent pasture land which occupies 77-95 percent of the agricultural area are not properly managed. Erosion affects over 88 percent of arable land in Kyrgyzstan and 97 percent of agricultural land in Tajikistan. GLADIS reference base (FAO LADA, 2005) confirms that the Central Asian drylands are most prone to land degradation, in particular water and soil erosion, due to low vegetation cover. In Turkey, the majority of country's soils (76.5%) are very susceptible to erosion risk due to dominant steep slopes (>6%), and 72% of the soils are affected to some extent from erosion by water and wind and inadequate land use/management systems. It is estimated that 59% of Turkey's agricultural fields and 64% of pastures are prone to erosion. High land fragmentation also makes it difficult to cultivate agricultural land efficiently.

Over the past thirty years, DLDD have become more severe and concern has grown about the significant economic and social impacts on agriculture and related sectors in CACs and Turkey. Agricultural yields in the five CACs are reported to have declined by 20–30% across region since independence, causing annual losses of agricultural production. Regional losses from salinization alone have been estimated to be at least \$2 billion per year (some 5% of the region's gross domestic product (GDP) (CACILM NPF, 2006). The land and water users most affected by salinisation are concentrated downstream of the Amudarya and Syrdarya River basins where water is unsuitable for agriculture and municipal needs. In these lower parts of the Aral Sea basin, many private farms and vulnerable groups have no choice but to use degraded natural resources with negative impacts on the ecosystem and increased vulnerability to food insecurity. Droughts in Central Asia are also having significant direct economic cost due to loss of agricultural production. For instance, losses caused by the severe drought of 2000-2001 were estimated at US\$800 million and many rural households lost as much as much as 80% of their income (UNDP, 2008). Desertification processes, degradation of natural resources and land use change/ fragmentation have also caused biodiversity loss and rendered extensive areas incapable of fulfilling important ecosystem functions such as carbon sequestration.

The causes of land degradation are multiple, complex, and vary across these countries, but are largely attributed to over-exploitation and deterioration of the natural resource base, particularly through inefficient irrigation and unsustainable agricultural practices (e.g. monocropping of cotton, inappropriate use of fertilizers and pesticides, inadequate soil management, overgrazing of pastoral lands), aggravated by increased frequency and intensity of climate related disasters (e.g. drought, flood and landslides). Poor irrigation practices and degraded infrastructure have largely contributed to the salinisation and/or waterlogging of irrigated lands. In CACs, since the 1970s, the level of salts in both the Syr Darya and Amu Darya has increased steadily. More than 70 percent of the salts carried by the rivers of Central Asia originate from drainage systems, which discharge 10 to 25 percent of the water in the canals back into the river system (the remainder goes into large "sinks" in the desert) (Bucknall, et al. 2003). Fires, deforestation and mining have also severely affected the degradation of natural resources and impacted land uses in CACs. These significant environmental stresses on agricultural lands are leading to declining productivity of agroecosystems and reduced livelihood security in production landscapes.

Central Asia is a region with a very high pressure on its water resources, mostly due to high water withdrawals for irrigated agriculture, deteriorating water quality, and uneven distribution of water resources, and drought is an increasing threat to the economic water security (FAO, 2015). Demographic trends, rising demand for energy and food, economic development, environmental degradation and climate change are increasing pressure on all the region's finite common property resources (e.g. water, soil and forestry). The absence of multi-country cooperation

for the socio-economic development of the Aral Sea Basin leads to fragmented national and regional policies, with risks of increasing competition over natural resources while worsening their degradation.

Barrier 1: Indequate regional mechanism for evidence-based knowledge. In CACs and Turkey, there are major knowledge gaps related to the costs and benefits of various INRM practices and the values/impacts (direct and indirect) of preventing or mitigating degradation, sustaining or enhancing ecosystem services and adopting drought preparedness planning. Absence of a regional mechanism for generating and sharing evidence-based knowledge on the costs and benefits of innovative technologies accross landscapes and production systems, makes it difficult to make a convincing case to policy makers on the importance of designing efficient policy instruments, investing in preventing land degradation (including soil and water salinisation) and reclaiming degraded land. In addition, lessons learned of CACILM-1 indicate the need to harmonize SLM knowledge dissemination platforms building on the WOCAT database⁸ and to strengthen the capacity of competent regional centres for ensuring knowledge dissemination and supporting advisory / climate information services across CACs and Turkey in the long term.

Barrier 2. Inadequate integration of resilience into policy and decision-making. In Central Asia, one of the challenges is to anticipate, plan and successfully manage transitions (centrally planned economy to market based economy, male headed households to female headed households in the rural areas, to name a few) for building greater resilience in the medium and long term. Policy, legal and institutional framework are currently inadequate for managing these transitions and ensuring that INRM practices are scaled up and applied for increasing resilience of agricultural production landscapes9. . Evaluation of results and lessons learned of CACILM-1 has also revealed that there is a need for further strengthening cross-sectoral coordination mechanisms and, enhancing capability of national institutions for the formulation and implementation of drought preparedness plans and land use plans. Current administrations have little experience in designing and implementing climate smart land-use initiatives, and they have even less experience with the adoption of relevant gender-sensitive approaches and mechanisms to improve women's access to knowledge, resources and services, despite the feminization of agriculture in rural areas due to male out-migration. All tiers of institutions need exposure to international practices of integrated landscape management and resilience planning in which attention to the empirical and technical foundations of proposed interventions is supplemented by an understanding of the social context, gender issues, appreciation of the role of financial and non-financial incentives, capacity to work with multiple partners, and experience of project monitoring and evaluation.

Barrier 3. Absence of strategy for scaling up of INRM. Despite the efforts of national governments and international donors, mobilization of financial resources to scaling up INRM is a priority. Most of the SLM/INRM practices that are already being applied in the CACs and Turkey need to be more widely adopted. Advanced agronomic practices (crop diversification, mixed farming, agroforestry, pasture improvement, water saving, etc.) demonstrated at pilot/experimental farms, confirm their high efficiency and benefits for small farms on salt-affected and degraded soils. However, pilot demonstrations of SLM/INRM approaches and drought and salinity mitigation interventions in arid landscapes are often not replicated outside project areas. Wider dissemination and adoption of these practices and methods, including indigenous knowledge, are restricted by a range of technical, organizational and institutional constraints that are aggravated by the complexity of biophysical and socio-economic attributes of drylands and climate change challenges.

Up to date, the institutional capacity and technical expertise in land degradation assessment, sustainable technologies and climate change resilience are still insufficient. Weak institutional facilities (specialized geospatial software, equipment, methods, etc.), and data exchange between institutions constrain possibilities to assess, plan and implement their activities in support of INRM upscaling. Guidelines and extension products are inadequate for ensuring that INRM practices are scaled up and applied at a wider scale. There are also insufficient knowledge, awareness and skills of private and civil society and vulnerable groups to apply and adapt new and innovative

⁸ The multi-language global WOCAT database is recognized by UNCCD as the primary database of technologies and approaches for landscape restoration.

⁹ Resilience is the ability of a landscape to absorb change, without significantly altering the relationship between the relative importance and numbers of individuals and species that compose the community (D. Johnson and L. Lewis, 2007).

approaches and technologies to salinity an drought risk management, and climate smart agricultural management practices on the ground. Many practitioners in the field of natural resources management have limited access to integrated land use planning, and lack of coordination at the landscape level hampers the integrated management of production systems and the natural resources that underpin the delivery and resilience of ecosystem services needed for all sectors.

2) Baseline scenario and associated baseline projects

CACILM1 baseline activities

Since DLDD are cross-border threats requiring joint action, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan agreed in 2003 to address them at multi-country level. As a result of this agreement, a Sub-Regional Action Programme for the CA countries to Combat Desertification (SRAP/CD, 2003) was developed and a 10-year multi-country and multi-donor programme "Central Asian Countries Initiative on Land Management (CACILM I)" was launched and implemented during the period 2006-2010 within the UNCCD context. Recognizing the importance of integrated processes and approaches developed within CACILM I, the governments of CACs and Turkey agreed to make commitments to support the next phase of this programme.

A significant contribution was made to enhance multi-country collaboration through knowledge sharing. Key knowledge products include the Atlas of Natural Resources of Central Asia, Economic Analysis of SLM Options in Central Asia (IFPRI and ICARDA) and over 25 SLM best practices documented in the WOCAT database (English and Russian). However, additional technical and financial assistance is required to strengthen capacity across the region to address the causes and mitigate the economic losses of land degradation and to monitor and assess regional impacts of INRM and climate-smart agriculture to feed lessons back to policy and decision makers.

An enabling environment for sustainable land management was created, particularly in relation to the legal and economic frameworks. During the four years, 88 environmental legislative documents were elaborated in CACs and key stakeholders contributed to the review of the legislation process such as the Pasture Law (KAZ and KYR). Five National Integrated Financial Strategies were developed for mobilizing resources for SLM interventions and measures while three countries (KYR, TUR and UZB) succeeded to increase the state budget allocation to SLM. National baseline data and base maps (e.g. land cover / use maps, water management maps, soil maps and climate maps) were compiled by national teams but need to be made accessible and used for planning climate-smart agricultural practices and salinity mitigation technologies. In addition, a national coordination council and a national secretariat were established in each country and such coordination mechanisms would need to be revitalized.

Best SLM practices have been demonstrated in various parts of CACs and Turkey, drawing on the global WOCAT database for SLM technologies and approaches, by GEF and non-GEF funded projects. Important efforts have been made for applying and adapting soil and water conservation approaches and technologies in various ecosystems, including 220 000 ha of irrigated lands (TAJ+UZB), 600 000 ha of desert and steppe pastures (UZB+KYR+KAZ), 200 ha of stabilization of moving sands (TUR+UZB) and 226 ha forest (TAJ+TUR). In addition, 300 governmental officials at different levels and 2,850 local land users were trained on various aspects of SLM. Community-based organizations, including WUAs and Public Association of Pasture Users, were established. However, salinity management and drought preparedness have been relatively neglected issues considering their severity and implications in CACs.

FAO baseline activities

FAO's intergovernmental process, its Technical Divisions and Investment Centre based in FAO's Headquarters and the Sub-regional Office for Central Asia (SEC) provide a solid baseline and a unique opportunity to support the implementation of this Project to facilitate the scaling up of INRM, as it brings various key UNCCD and CACILM-2 partners together, and its guidelines, tools and methods (LADA-WOCAT, RIMA, CSA, SFM, sustainable pasture management, watershed management) enable an harmonized and rigorous analysis of the effects and benefits of SLM and INRM best practices and their impacts on livelihoods, ecosystem services and production landscapes at wider scale. The work programme for the partnership includes collecting and harmonizing available FAO/WOCAT SLM best practices and approaches according to the UNCCD 10 year Strategy, priorities and indicators. Under the Global Soil Partnership, the Eurasian Soil Partnership (EASP) forms an important baseline for enhanced multi-

country collaboration and information sharing to scale up INRM. In the context of this project, EASP should facilitate links with regional, national and local soil management institutions, programs and activities with a view to sharing data and information on DLDD and strengthening responses on sustainable soil management (SSM), concentrating collaborative efforts on soil salinization and salinity management issues across sectors at wide scales. The Healthy Soils Facility mobilizes resources for implementing the GSP, including supporting EASP in moving into concrete field action at regional, national and local levels (estimated co-financing to the project is 50,000 USD in grant). Additional baseline activities include FAO's Land and Water Division's (NRL) ongoing and future commitments on decision-support activities related to the management of land resources (e.g. Geonetwork, Global Land Cover Network, Agro-MAPS, LRIMS and GAEZ) (estimated co-financing to the project is 3,686,000 USD in kind).

All five Central Asian countries and Turkey have prepared National Action Programs to Combat Desertification (NAPs). In 2009, NAPs were updated to include climate change, biodiversity and food security. Although most CACs have developed plans, such as the NAPs, and significant progress have been made to integrate drought management issues in some sectoral strategies, 'full-fledged' policies and related drought preparedness plans are insufficient, if not absent, in most countries. Therefore, during the 38th Session of the FAO Commission on Agriculture for Europe and Central Asia in April 2014, government representatives recommended that FAO, together with UNCCD and WMO, supports member countries for developing and implementing action plans on drought risk management at national level. Since 2001, FAO has been developing regional synthesis, guidelines and related training modules to support the drought planning process in the Near East and Central Asia.

FAO has also developed several specific knowledge products and tools for mitigating salinity in salt-affected production landscapes, including the MASSCOTE (Mapping System and Services for Canal Operation Techniques) approach to plan the modernization of irrigation and drainage systems and Aquacrop 4.0, a crop water productivity model for simulating soil salinity stress and crop response and guiding farm level management strategies accordingly. In the context of climate change mitigation, a baseline is provided by some of FAO knowledge products such as the Climate smart agriculture (CSA) sourcebook (http://www.fao.org/3/a-i3325e.pdf, FAO 2013) and relevant FAO's projects such as the project on 'Mitigation of Climate Change in Agriculture (MICCA)' which has developed methods and tools for helping countries to monitor and assess greenhouse gas (GHG) emissions, improve knowledge on mitigation potential in agriculture and support countries in developing NAMAs (http://www.fao.org/climatechange/micca/en/) and the 'Save and Grow' project which contributes to more sustainable, productive and climate resilient agricultural practices in Southern Africa and Central Asia.

In addition, through its technical cooperation program, FAO has been promoting crop diversification (e.g. access of small-scale farmers to drought-tolerant seed varieties) and good agronomic techniques (e.g. conservation agriculture and integrated pest management), the sustainable management of pastures, the modernization of irrigation systems and water saving technologies for sustainably increasing agricultural productivity and incomes, enhancing resilience of smallholders to climate change and reducing and/or removing greenhouse gas emissions in selected land use systems (e.g. pastoral, agro-sylvo-pastoral, tree-based, irrigated, rainfed, home gardens). Currently, the Organization supports the Central Asia Desert Initiative funded under the International Climate Initiative (IKI) which aims to improve desert landscape management through evidence based knowledge on valuation of ecosystem services of cold winter deserts in CACs, national capacities to support desert landscape management & conservation and multistakeholder based SLM in desert landscapes (estimated co-financing to the project is 1,500,000 USD).

CGIAR baseline activities

Partnerships at various levels with scientific and research bodies, including the Centres of the Consultative Group for International Agricultural Research (CGIAR) help to increase the scientific knowledge—content and strengthen outreach to smallholders through development of customized tools by national research and training institutions. The baseline will build on the CGIAR Research Program on Dryland Systems, focusing on both improving and sustaining the productivity of marginal water / lands in irrigated farming and pastoral systems in the Aral Sea Basin (Uzbekistan, Turkmenistan and Kazakhstan). The International Center for Biosaline Agriculture (ICBA), which has been working towards promoting innovative biosaline agriculture for improving agricultural and pastoral practices at household and community level, provides important baseline data for the proposed project. Through collaboration

with local institutions, it supported seed multiplication and agro-food value chain for 8 potential salt tolerant crops. Currently, ICBA supports the "Cross-regional Partnerships for improving Food and Nutritional Security in Marginal Environments of Central Asia" project (2015-2017) in Uzbekistan, Kyrgyzstan and Tajikistan, to sustain agricultural production amidst the growing threat of salinity by promoting adoption of stress-tolerant cultivars of quinoa with high yield potential (Estimated co-financing to the project is 640,000 USD in grant). The project will also be designed to build on the experience and products of the Knowledge Management project of CACILM - KM, led by ICARDA and supported by GIZ (Germany) and IFAD. ICBA will provide an estimated in-kind co-financing for the proposed project through its programme activities on crop, livestock, rangeland and agroforestry systems for rural poor in dry areas affected by salinity and overgrazing in Central Asia, complemented by substantial in-kind inputs (e.g. field demonstrations, training, farm-fair) at national and regional levels, in collaboration with partners (Estimated co-financing to the project is 300,000 USD in kind). ICBA 's work with CACs will contribute in grant and in-kind support for a total amount of 940,000 USD.

In addition to the above baseline activities, the proposed project will benefit from a close collaboration with the ongoing project "ELD in Central Asia: A regional assessment of the Economics of Land Degradation' led by the Global Economics of Land Degradation Initiative Secretariat and supported by GIZ and the work of the Stockholm International Waters Institute (SIWI) on the food-water-climate nexus and integrated water resources management in CA (estimated co-financing to the project is 100,000 USD in kind).

The proposed project will also be closely linked with other ongoing activities supported by WB, Islamic Development Bank, GIZ, ICARDA, EC, IFAD, WFP, JICA, USAID, Mountain Partnership, TIKA and the WMO. Significant co-financing is expected from these sources, particularly the World Bank and IFAD, but this will be explored during project preparation.

Country baseline activities

Turkey has been very active in combating DLDD and mitigating climate change, through both national and international projects. The Government of Turkey prepared the National Action Program for Combating Desertification (UNCCD NAP) and the "National Strategy Document for Combating Desertification", initiated the "National Climate Change Strategy Document", "National Action Plan on Climate Change", and other related plans, programmes and strategies. Turkey has already gained significant experience on drought risk management with the establishment of the "Flood and Drought Management Planning Department" for the coordination of drought preparedness and response operations by relevant institutions, drafting of the national drought action plan, initiation of drought management plans for each watershed in the country. Turkey is also actively engaged in the implementation of another regional initiative designed to manage drought risks in South-East Europe in collaboration with the Drought Management Centre for South East Europe. In addition, Turkey has completed salinity maps and applied modern technologies for effective salinity monitoring and management in irrigation systems.

The Government of Central Asian countries have always been very active in combating land degradation and desertification. Uzbekistan has already played a leading role within CACILM 1 for the preparation of national programmatic frameworks on SLM and the consolidation of national land use maps at sub-regional level. Since 2011, Uzbekistan is leading the development of a drought early warning system (DEWS) that could become a pilot model for Central Asia. Tajikistan has gained its own relevant SLM experience within the first phase of the Pilot Program for Climate Resilience (PPCR), supported by the World Bank, which has documented 46 technologies and 24 approaches in the WOCAT online database. Turkmenistan brings its own research experience on the cultivation of halophytes on saline soils and the use of marginal quality water for agriculture in the drylands.

The Government of Turkey will contribute 1,200,000 USD as indicative in-kind and grant co-financing for enhancing multi-country collaboration and partnership with CACs through sharing its relevant knowledge and field experience and supporting capacity development of participating countries for scaling up INRM in drought-prone and salt-affected agricultural production systems.

In Uzbekistan, the co-financing will include an in-kind co-financing of 5 880 000 USD and cash co-financing of an annual USD 5,000,000 over the duration of the project (i.e. 20 000 000 USD) from the State funds of 'Rehabilitation

of arable land' under the Ministry of Finance of Uzbekistan. The project 'Ecosystem-based land management in the lower Amy Darya region in Uzbekistan and Turkmenistan' will contribute in grant for an estimated total amount of 2,000,000 USD. The Kyrgyz Republic will contribute \$1,400,000 in co-financing. Finally, the co-financing from the Governments of Tajikistan, Kazakhstan and Turkmenistan for the upscaling of INRM in both salt-affected and drought-prone agricultural production systems will be defined thorugh active consultation with partners during the PPG phase.

3) The proposed alternative scenario, with a brief description of expected outcomes and components of the project

The overall objective of the Project is to scale up integrated natural resources management (INRM)¹⁰ in drought prone and salt affected agricultural production landscapes in the Central Asian countries and Turkey. This will be done, through mechanisms for overcoming the above-mentioned barriers to scale up sustainable management practices that (i) minimize pressures and negative impacts on natural resources, (ii) reduce risks and vulnerability, and (iii) enhance capacity to cope with or adapt to drought and salinity. In particular, adoption of integrated landscape management approaches and INRM practices should help stabilize and even reverse trends of soil salinization, reduce erosion, improve water capture and retention, increase the sequestration of carbon, and reduce loss of agrobiodiversity, thereby reducing the desertification trend in terms of extent and severity.

The project objective will be achieved during a 5 year period through four project components. It is structured as a program with one multi-country component addressing shared priorities at multi-county level (component 1), two components at national level ensuring national implementation in selected production landscapes / land use systems (component 2 and component 3), and one M&E component (component 4). Country STAR allocation specifically distributed to component 2 and component 3 will directly support national activities in the respective country.

Component 1: Multi-country collaboration and partnership to foster the effective delivery of INRM. This multi-country component will bring together all target groups of the CA region and Turkey and provide support to: (i) generate evidence-based knowledge on the costs of land degradation and benefits of INRM, drought preparedness and biosaline agriculture to the people, the national economies and the region as a whole for informed investment decisions by high-level government officials and, (ii) ensure multi-country collaboration, information sharing and investment for INRM scaling up, with a focus on drought and salinity management.

The component will promote the adaptation and mainstreaming of Economics of Land Degradation (ELD) approaches and best practices into national strategies. The ELD methodologies will be harmonized across countries for valuation of ecosystem services at various scales. Total economic valuation will consider the externalities associated with DLDD (such as loss of productive land and productivity, loss of biodiversity and reduced tCO₂e mitigated and increased vulnerability to drought), exacerbating the direct negative effects of land degradation. Awareness among national planners and decision-makers in CACs and Turkey and identification of incentives to scale up INRM, such as insurance schemes to reduce risk of change and Payment for Ecosystem Services (PES) schemes and carbon markets are essential for reversing the trend of land degradation and achieving global, national and local benefits.

The component will establish an efficient multi-country knowledge platform, supporting advisory and climate services with consolidated guidelines, extension and knowledge products for harmonized planning and scaling up of INRM for a wider range of land users. It will also support links and collaboration with the global decision-support platform on SLM (LADA-WOCAT), the Eurasia Soil Partnership, the global ELD initiative and other international partners, forums and processes, with a view to developing a multi-country process and program, with the

¹⁰ Integrated Natural Resources Management can be defined as "the responsible and broad-based management of the land, water, forest and biological resources base (including genes) needed to sustain agricultural productivity and avert degradation of potential productivity" (Technical Advisory Committee / Science Council Secretariat, FAO, September 2003) - http://www.fao.org/wairdocs/tac/y5313e/y5313e02.htm#fn3

participation of the Central Asia Regional Environmental Centre (e.g. CAREC), international research centers and development agencies, aimed at the restoration of degraded lands in Central Asia and Turkey. International expertise on salinity control and drought risk management, particularly from the Near East and Australia, which has remained relatively inaccessible by CA countries until now, will be mobilized. Strong partnerships will be built with other international processes and CA regional programs (e.g. Aral Sea Basin program-3 and Central Asian Initiative on Sustainable Development) on combating desertification and climate change, as well as on food and water security, biodiversity conservation and sustainable rural livelihoods. The component includes two outcomes with associated outputs:

- 1.1. Enhanced knowledge of the costs of land degradation and benefits of INRM, drought preparedness and biosaline agriculture to national economies and the region as a whole informs policy and investment decisions at all levels, including NAP processes (linked to 2.1)
 - 1.1.1 Harmonized approach across countries for valuation of ecosystem services at various scales
 - 1.1.2 Identification of incentives to scale up INRM (e.g. PES schemes, insurance, etc.)
- 1.2. Enhanced multi-country collaboration and information sharing to promote investment for INRM scaling up, focusing on drought prone and/or salinity affected production landscapes
 - 1.2.1 Multi-country platform for knowledge consolidation and harmonization on INRM (link to the global Knowledge platform on Decision Support for SLM scaling up and mainstreaming (DS-SLM), Eurasia Soil Partnership (EASP), global Economics of Land Degradation Initiative (ELD) and CAREC supported initiatives) to support national advisory and climate information services, including early warning systems and drought preparedeness
 - 1.2.2 Multi-scale and participatory approaches in place for assessing land degradation and SLM trends and for assessing/monitoring of impacts of management practices on ecosystem services, biodiversity, and livelihoods (vulnerability)
 - 1.2.3. Targeted knowledge and communication products prepared for wide dissemination on the required costs and multiple benefits of INRM in selected production landscapes

Component 2: Integration of resilience into policy, legal and institutional frameworks for INRM. This component will support Government of CACs and Turkey to integrate resilience into policy, legal and institutional framework for INRM, leading to the scaling up and adoption of climate-smart agriculture management practices, and managing transitions more successfully in terms of building greater resilience in production systems and landscapes in the medium term and long term. GEF/STAP Resilience-Adaptation-Transformation-Assessment (RATA) tool¹¹ will provide an overarching framework to integrate resilience into INRM and will help with identifying controlling variables and thresholds in drought prone and salinity affected production systems, and with identifying possible interventions and policy options to adapt or transform depending on the circumstances. This will be combined with support to adoption of drought planning processes that will include (i) formulation, review or update of national drought policies, strategies and guidelines for preparedness plans, and (ii) participatory expert assessment and mapping of natural resources and land use systems (i.e. DLDD, SLM, livelihoods and vulnerability).

This component will also strengthen inter-sectoral coordination mechanisms on SLM/INRM at national level, including mainstreaming of NAPs into national budget sector allocation and investment processes, to enable the incorporation of climate change and variability considerations and align existing financial contributions in the land management and agricultural sectors to support uptake of INRM practices. Based on the guidelines on ELD developed through the multi-county component, the assessment of the economic losses caused by DLDD will be tested for the various agricultural production landscapes / land use systems in the pilot areas and valuation of economic benefits of INRM, drought risk management and biosaline agriculture will be carried out. Results of the assessment will be communicated to high-level decision makers, land and natural resources users and other stakeholders and used to support an investment framework to be financed by international financial institutions and other funding sources. All countries will be supported to target investment for coping with water scarcity as a means

O'Connell D. Walker B. Abel N. Grigg N. Cowie A. & Duron G. 2015. An introduction to the Resilience Adaptation Transformation Assessment (RATA) Framework. STAP, Washington DC.

of building resilience to drought through the selection of a wide range of policy and management options (e.g. demand management, supply enhancement, waste reduction in the food chain and shifts in diets) adapted to local conditions. Support will be provided in the development of incentives for climate-smart agriculture at national and sub-national levels and increased involvement of public sector, including community based organizations (CBOs), and private sectors (e.g. Coco-Cola Cie, Turkey) for the integration and harmonization of food and feed value chain approaches with landscape-based management approaches to INRM. Financial incentives could be provided for various types of activities including: the selection of drought resistant crop species and salt tolerant crop species (e.g. pearl millet, safflower, quinoa, sorghum) for drought prone and salt affected production landscapes, adoption of water saving technologies for high-value crops (e.g. drip irrigation systems) as well as the establishment of related supply chains (from seed multiplication to distribution, from manufacturers to suppliers to retailers of water saving technologies). The component includes two outcomes with associated outputs:

2.1. Resilience integrated across NRM sectors and production landscapes

- 2.1.1 Review of national policies, legal and institutional frameworks and their application with the view to identifying gaps and potential opportunities for managing sustainable and productive transformations
- 2.1.2 Formulation, review or update of national drought policies, strategies and guidelines for drought preparedness planning
- 2.1.3 Participatory natural resources assessment and mapping and livelihood diagnostics (i.e. DLDD, SLM, vulnerability) for evidence-based decision-making
- 2.1.4 Strengthening of inter-sectoral coordination mechanisms at national level, including mainstreaming of NAPs into national sector budget allocations and investment processes for INRM scaling up (informed by Component 1)

2.2 Incentives for climate-smart agriculture in place at national and and sub-national levels

- 2.2.1 Increase in public and private sector at least 5 different types of enterprise) supporting smallholder farmers to scale up best practices and adoption of self-reliant approaches for managing climate variability and change
- 2.2.2 At least 5 resource use efficient and biodiversity friendly food and feed value-chains strengthened (type of crop, animal, wildlife, fish, etc.)

Component 3: Upscaling of climate-smart agricultural practices in drought prone and/or salt affected production landscapes. This component will focus on scaling up INRM and SLM practices that generate both socio-economic benefits to local communities and global environmental benefits. The scaling up will be based on multi-stakeholder land-use plans with targeted investment for selected agricultural production landscapes / land use systems (e.g. pastoral, agro-sylvo-pastoral, tree-based, irrigated / small oases production, rainfed land and home gardens), as well as guidelines for the development / piloting of watershed/catchment salinity management plans including inter alia hydrological regulations and identification of promising species/habitats for sustainable and biodiverse aquatic and terrestrial ecosystems. Enhancing coordination at the landscape level will facilitate the integrated management of production systems and the natural resources and ecosystem functions that underpin the delivery and resilience of ecosystem services needed for all sectors.

Scaling up will be based on effective extension /advisory services for enhancing skills of a wide range of stakeholders at all levels for wide adoption of innovative approaches for drought and salinity mitigation and INRM technologies that contribute to food and nutritional security. The component will not only consider increasing technical capacities of extension/advisory service providers of institutions but also the functional capacities (e.g. knowledge, partnership, communication, and implementation capacities, including resource mobilization) of the related institutions to promote sustainable transformations in the agriculture sector.

The component will contribute to increased area under sustainable land management in drought —prone and /or salt-affected production landscapes. It will nerease irrigation efficiency and reverse the salinization trends in irrigated areas while increase the value of marginal water and soils for alternative livelihood systems. It will support diversification of crops (e.g. drought tolerant crops, salt-tolerant crops and halophytes) for providing the necessary adaptability and resilience, promote conservation of habitats (e.g. for harbouring beneficial predators for integrated

pest management and pollinator species) in agricultural production landscapes and INRM technologies. It will ensure adoption of climate smart agricultural practices that simultaneously enhance mitigation, adaptation and productivity through increasing carbon sequestration below and above ground (e.g. conservation agriculture, integration of fodder crops in crop rotation), reducing methane emissions (e.g. improved livestock management, balanced feeding for better waste management in intensive livestock systems) and enhancing reliability of production and productivity per unit of land, as well as in terms of water, labour and energy (e.g. through resource use efficient integrated farming systems such as crop- pasture- livestock integration, agroforestry, rotations, intercropping and sustainable use of agrobiodiversity). The component includes two outcomes with associated outputs:

- 3.1 Up-scaling of a proactive drought risk management (DRM) approach and innovative INRM technologies in selected production landscapes/land use systems (e.g. pastoral, agro-sylvo-pastoral, tree-based, irrigated, rainfed land and home gardens)
 - 3.1.1 At least two multi-stakeholder land-use plans for selected production landscapes per country
 - 3.1.2 At least two specialized institutions/ advisory service providers per country having increased their capacities to enhance skills of a wide range of stakeholders at all levels for wide adoption of a proactive drought risk management (DRM) approach and drought mitigation technologies
 - 3.1.3 Upscaling of 5-6 innovative drought mitigation and INRM technologies in selected production landscapes on some 240,000 ha of land (at least 15 drought-tolerant species and 5 habitats harbouring beneficial species such as pollinators and predators, 10-15 % increase in tCO₂e captured/avoided, 15% increase in crop water productivity / irrigation efficiency)
- 3.2. Adaptation and scaling up of technologies and approaches for management of salt-affected production landscapes (e.g. irrigated, pastoral and home gardens)
 - 3.2.1 Guidelines for watershed/catchment salinity management plans developed and piloted in each country, including inter alia, hydrological regulations and identification of promising species/habitats for sustainable and biodiverse aquatic and terrestrial ecosystems
 - 3.2.2 At least two specialized institutions/ advisory service providers per country having increased their capacities to enhance skills of a wide range of stakeholders at all levels for wide adoption of salinity mitigation approaches and technologies
 - 3.2.3 Upscaling of 5-6 best practices for combating salinization, while ensuring biodiversity conservation and sustainable use on 100,000 ha of land (at least 15 salt-tolerant species, 10-15% increase in tCO2e captured/avoided, 15% increase in crop water productivity / irrigation efficiency).

The participating countries' allocation of STAR funding to the different Project components and interventions are summarized below (to be further developed through the PPG):

Country	Total STAR (USD)	Proposed use of STAR allocation				
Kazakhstan	900,624 (LD) 900,624 (CC)	Upscaling of climate-smart agriculture, with special focus on management of salinization of irrigated lands in the southern part of the country				
Kyrgyzstan	180,125	Integration of resilience into policy, legal and institutional frameworks for INRM Upscaling of climate-smart agriculture				
Tajikistan	268,846	 Integration of resilience into policy, legal and institutional frameworks for INRM Upscaling of climate-smart agriculture 				
Turkey	178,975	Multi-country collaboration and partnerships				
Turkmenistan	2,688,464	 Integration of resilience into policy, legal and institutional frameworks for INRM Upscaling of climate-smart agriculture 				
Uzbekistan	1,455,424 (LD) 2,607,483 (CC)	 Integration of resilience into policy, legal and institutional frameworks for INRM Upscaling of climate-smart agriculture with special focus on management of salt-affected production landscapes 				

Component 4: Monitoring and evaluation. To determine whether integrated approaches to natural resources management have a positive impact on ecosystem services and resilience, and livelihoods and food security, they

need to be monitored, assessed and evaluated for their socio-economic and environmental impacts. The Project will therefore undertake monitoring and evaluation of both implementation progress and Project impacts. The component includes one outcome with associated outputs:

- 4.1. Project implementation based on adaptive results-based management, monitoring, and reporting for enhanced visibility
 - 4.1.1 M&E system established to measure project progress and impact
 - 4.1.2 Midterm and terminal evaluations carried out and reports available

4) <u>Incremental/additional cost reasoning</u> and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and <u>co-financing</u>

Component 1: Multi-country colaboration and partnerships to foster the implementation of cost-effective INRM in drought- and salt-affected production landscapes. GEF support to this component under LD-4, Program 5 and CCM-2, Program 4 will ensure that that knowledge is enhanced of the costs of land degradation and the benefits of INRM, including drought preparedness and biosaline agriculture, as well as of incentive mechanisms for scaling up, such as Payment for Ecosystem Services (PES). LD-4 funding will also provide catalytic support to strengthening multi-country collaboration and information sharing to promote scaling up across countries. CCM-2 funding will support development of tools to improve the accuracy of GHG emissions estimates from agriculture. This information is expected to feed back into Component 2 to ensure that valuation of ecosystem services is linked with development policy and finance planning in the agricultural and natural resources management sectors. Valuation of ecosystem services should also inform the mainstreaming of NAPs into national sector budgets and investment processing for INRM scaling up (2.1.4) to provide positive incentives for conservation of ecosystem services, with a focus on carbon stocks, and for enhancing resilience to climate change and salinization. Total GEF financing to this component is expected to be USD1.75 million with co-financing from the baseline amounting to USD 3 million.

Component 2: Integration of resilience into policy, legal and institutional frameworks for INRM. Policy, institutional and governance reforms are a prerequisite for cross-sector engagement and up-scaling of INRM in CACs and Turkey. Under its objective LD-4: Maximize transformational impact through mainstreaming of SLM for agro-ecosystem services, Program 5: Mainstreaming SLM in Development, GEF will support the strengthening of intersectoral coordination mechanisms at national level to foster broad participation and investments in SLM from governments, development partners and the private sector, which includes support to development of decision-support tools and participatory processes. GEF funding from LD-4 will also be used to ensure that a supportive policies and incentives are in place for integrated management of land, water and associated resources in smallholder agriculture, and b. that the public sector as well as the private sector, linked to the establishment/ strengthening of resource—use efficient food and feed value-chains across CACs and Turkey, support farmers to scale up best practices by adopting self reliant approaches for managing climate variability and change as well as salinity in degraded production landscapes, not only to increase productivity and maintain a minimum level of income despite extreme weather events and resource degradation but also to generate a wide range of ecosystem services. Total GEF financing to this component is expected to be USD 3.9 million with co-financing from the baseline amounting to USD 17 million.

Component 3: Upscaling of climate-smart agricultural practices in drought-prone and/or salt-affected production landscapes. This component builds on planned and existing baseline initiatives in sustainable management of drought prone and/or salt-affected agroecosystems described above. GEF will support scaling up of integrated approaches that generate multiple environmental benefits from agro-ecosystems and rangelands through improved land and soil health and improved vegetation cover. This approach is fully in line with the objective of LD-1: Maintain and improve flow of agro-ecosystem services to sustain food production and livelihoods and its programs on 1: Agro-ecological Intensification, and 2: SLM for Climate-Smart Agriculture. Incremental GEF funding will support upscaling of proactive drought management approaches and innovative INRM technologies, such as conservation agriculture, agroforestry, improved rangeland management, and integrated approaches to soil fertility and agricultural water management. GEF funding will also be used to enhance agroecosystem resilience and

management of risks through, for example, diversification of crops and livestock, introduction of salt tolerant crops and species, and integration of tree-based practices. Under LD-3: Reduce pressures on natural resources by managing competing land uses in broader landscapes and its Program 4: Scaling up sustainable land management through the landscape approach, GEF support will be used to scale up policies, practices and incentives for improving production landscapes in CACs and Turkey that generate environmental benefits. It will encourage a a cross-sectoral drought planning process and a multi-stakeholder land use planning for scaling up innovative practices and approaches contributing to increase efficiency and value of resource use, ensure downstream hydrological functions and maintain long-term agroecosystem services.

Under the GEF-6 objective CCM-2: Demonstrate systemic impacts of mitigation options, Program 4: Promote conservation and enhancement of carbon stocks in forest, and other land use, reduce emissions from land degradation (forest degradation, deforestration, degradation of rangelands and agricultural lands, etc.), and support climate smart agriculture, GEF will support scaling up of INRM practices, focising on management practices in agriculture that reduce methane emissions, including livestock management, and promote carbon sequestration above and below ground to protect and enhance carbon pools in production landscapes in CACs and Turkey. Climat-smart agricultural practices that will receive support for up-scaling include: conservation agriculture, such as minimum tillage and crop rotation (e.g. integration of fodder crops), improved water-use efficiency in irrigation schemes, agroforestry, and improved livestock and grazing management. Total GEF financing to this component is expected to be USD 3.8 million with co-financing from the baseline amounting to USD 27 million.

Component 4: Monitoring and Evaluation. This component will draw on GEF funding across LD-1, LD-3, LD-4 and CC-4 to put in place an adaptive and results-based management, monitoring and reporting system to maximize the impact of the Project and its visibility in CACs and Turkey. Total GEF financing to this component is expected to be USD 0.7 million with co-financing from the baseline amounting to USD 1.6 million.

5) Global environmental benefits (GEFTF) and/or adaptation benefits (LDCF/SCCF)

The Project will generate global environmental benefits in the Eand Degradation as well as Climate Change focal areas, which will be underpinned by socio-economic benefits to local communities at the selected Project sites. Key benefits are summarized in the table below:

Global Environmental Indicator	Target
Land under integrated management (ha)	335,000 ha
GHG emissions avoided or reduced (tons CO ₂ e)	4 million
Area with improved irrigation efficiency (ha)	100,000 ha
	nefits
Indicator	Target
Beneficiary households (number) in pastoral, agro-sylvo-pastoral, tro	ce-based, irrigated and, 30,000,
rainfed systems	
Beneficiary households (number) for home gardens	10,000
Improvement in incomes from INRM (disaggregated by gender)	25%

Preliminary GHG emission reduction estimates have been obtained using the FAO EX-Ante Carbon balance Tool. The foreseen project intervention, which focuses mainly on the improvement of annual cropping systems and pastoral systems, may also have clear cobenefits for soil carbon sequestration. While the specific assessment of likely project benefits requires improved input data, a first rough estimate for the direct concerned 335,000 ha could foresee a net carbon balance of -0.6 t CO₂-eq per hectare per year that are sequestered as opposed to the status quo. Over 20 years—when a new equilibrium in terms of soil and biomass carbon stocks will likely be reached—total benefits may account for 4.0 million tonnes of CO₂-equivalent. Thereby the main contribution comes from improved carbon stocks on agricultural cropland (2.1 million t CO₂-eq) and the second largest contribution from improved grasslands (1.1 million t CO₂-eq). Estimates will be revised during project preparation

The table below briefly summarizes main project impacts obtained using EX-ACT.

	Gross fluxes			Share per GHG of the Balance					Results per year		
Component of the project	Without	With	Balance	P	esult per GHG			80 88 65		9 9 9	
	All GHG in tCO₂eq Positive = source / negative = sink			CO₂		N₂O	CH₄	without	with	Balance	
				Biomass	Soil	Other					
Land Use Changes											
Deforestation	0	0	0	0	0	521 530 110 111 112 113 113 113 113 113 113 113 113	0	- 0	0	Ó	Ō
Afforestation	0	0	0	0	0	<u>2</u> 8-ai (1)	0	0	0	0	0
. Other	0	-65,267	-65,267	53,167	-118,433		- 0	0	0	-3,263	-3,263
Agriculture											
Annual	0	-2,106,300	-2,106,300	0	-2,106,300	Mark II	0	6 6 6 O	0.0	-105,315	-105,315
Perennial	. 0	-663,300	-663,300	-635,250	-28,050	dr.	0	Ō	0	-33,165	-33,165
Rice	0	0	0	0`	0		- 0	0.	0	0	0
Grassland & Livestocks	3-3-3					va sa dibera.	90.08.0				
Grassland	0	-1,184,333	-1,184,333	0	-1,184,333		0	0	0	-59,217	-59,217
Livestock	0	0	0		5507 11 15 15		- 0	0	0	9 0	0
Degradation	0	0	0	0	. 0	Color of the Color	0	0	0	0	0
Inputs & Investments	0	0	0	73. (1)		0	0 0	6 6 6 6	0	0	⊹0
Total	0	-4,019,200	-4,019,200	-582,083	-3,437,117	0	0	0	0	-200,960	-200,960
Per hectare	0	-12	-12	-1,7	-10.3	0.0	0.0	0.0	de agleris es et a		
Per hectare per year	0.0	-0.6	-0,6	-0.1	-0.5	0.0	0.0	0.0	0.0	-0.6	-0.6

6) Innovation, sustainability and potential for scaling up

The multi-country approach linking the experiences of CACs with the expertise of Turkey and beyond (e.g. Australia) in SLM and INRM mainstreaming and up-scaling in similar types of agro-ecosystems is innovative. It will ensure that best practices on salinity control and drought risk management are more widely adopted across drylands and semi-arid lands and will ensure that practices for INRM that generate multiple global environmental and socioeconomic benefits will be taken to scale.

Another innovative element is the integration of resilience into policy, legal and institutional frameworks to enhance the capacity of individuals, organizations and the society as a whole to plan and manage the threats of drought and salinization successfully, including the involvement of the public and private sectors in the establishment/strengthening of both food and feed value chains for more productive and profitable varieties of crops and production systems adapted to salt-affected lands and drought prone areas. Lessons and experiences in designing well targeted interventions to mitigate drought and salinization with multiple environmental benefits (e.g. increasing area under sustainable land management while reducing pressure on water resources, conserving agrobiodiversity and mitigating climate change) will be widely disseminated and shared through the multicountry platform for knowledge sharing that will be established by the Project using standard reporting templates, such as WOCAT best practices summaries. Outreach and knowledge sharing will also be established with other programs and platforms on SLM/INRM in drylands.

Capacity development is at the core of the upscaling strategy of climate smart-agricultural practices and will ensure its sustainability. The project management arrangements strengthen existing institutional capacities within countries and support the establishment of a knowledge hub hosted by a competent regional center (e.g. Central Asia Regional Environmental Centre) for ensuring knowledge management and dissemination across CAC and Turkey in the long term. Partnership with representatives of UNCCD and other relevant conventions strengthen the science-policy interface on sustainable land management for guiding policy reforms and evidence based investments.

2. Stakeholders. Will project design include the participation of relevant stakeholders from <u>civil society</u> and <u>indigenous people</u>? (yes ⋈ /no□) If yes, identify key stakeholders and briefly describe how they will be engaged in project design/preparation.

The proposed Project will be implemented under the guidance of GEF/FAOSEC, in close cooperation with national and international institutes/partners, strengthening the institutional arrangements put in place under CACILM1. The project is based on partnerships between multiple stakeholders at international, regional, national and local level. It will be guided by a revitalized multi-country Steering Committee with representation of Strategic Partnership Agreement (SPA) members and country-partners, and key responsible agencies and public community:

CACILM Steering Committee (SC), revitalized by GEFSEC and FAO, will bring together representatives from UNCCD, at least five country representatives from government agencies (responsible for the relevant Focal Areas) and representatives of the Strategic Partnership Agreement (including CAREC, EC-IFAS, relevant GEF agencies and main donors). The SC will meet once a year. Its responsibilities will be to review and report project achievements to governments and members of SPA, advise on problems and issues and provide overall strategic guidance.

Multi-Country Secretariat (MCS). This Project Coordination Unit (PCU), supported and coordinated by the subregional FAO SEC office based in Ankara, will provide the administrative services for the SC. It will operate the project monitoring and evaluation system, which includes a) financial administration b) progress reporting, c) environmental and social safeguards and d) performance indicators under CACILM Focal Areas. It will report to donors and country SC members on the implementation of each project component, outcome and outputs. The execution of the multicountry component will be conducted with support of CAREC and ICBA (Remark: Detailed arrangements and partnerships with other actors such as the World Meteorological Organization (WMO), ICARDA and ELD are to be elaborated during the PPG).

National Advisory and Coordination Group (ACG)

The Advisory and Coordination Group, chaired by the National Coordinator of the UNCCD is an existing or newly established government-constituted body responsible for integrating into national policy the cross-cutting priorities of Rio conventions (UNFCCC, UNCCD, UNCBD) and identifying opportunities for synergistic and cost-effective response in investment and technical assistance activities in the countries. ACG will meet normally two or three times a year. ACG is composed of the focal points of UNFCCC, UNCCD and UNCBD, representatives of the key Ministries / Agencies related to Agriculture, Water, Environment, Land use, Meteorology, science representatives and, the Ministry of Finance. The ACG may also include the designated Global Soil Partnership Focal Point (GSP FP). The ACG is responsible for aligning action with country's policy and strategic priorities and providing strategic guidance to NSEC. The ACG is always represented on the CACILM-2 Steering Committee.

National Secretariats (NSEC)

The NSEC is a national authority providing support to the UNCCD Focal points in the execution of the national components (component 2 and 3) which will be done by the national ministerial partner-institutions responsible for land reclamation and salinity mitigation management issues in water and agricultural sectors, in collaboration with local governance structures and water basin authorities when appropriate. It will also serve as coordination and information hubs, provide inputs to M&E system of the MSEC, develop and update UNCCD NAP, ...

The key stakeholder groups at country level are summarised below.

<u>Lead National Ministries/Institutions</u> (project implementation, coordination, M&E and reporting). The lead national institutions are the ministries/institutions of Agriculture and/or Water Resources (Kyrgyz Republic, Uzbekistan and Kazakhstan); the Ministries of the Environment and/or Natural Resources (Tajikistan, Turkmenistan) and the Ministry of Forestry and Water Affairs (Turkey).

Other National ministries /Institutions (contribution in consultation, dialogue, advice, adaptation and scaling up support). These groups involved in the project are: basin water authorities, agricultural departments, irrigation and water management divisions, soils divisions or soil science societies, scientific research, monitoring, finance and economics and nature protection, etc. They have diverse roles in their respective ministerial and departmental bodies and in different countries.

Public sector, including Civil Society Organizations (CSOs) (awareness raising, training and publicity media; education and participation in assessment, adaptation and scaling up). The number and areas of interest of the public sector is diverse. They include a host of community based organizations (CBOs) such as water users associations, pasture users associations, forestry community, watershed /catchment committees, community-based seed enterprises and small machinery entrepreneurs (SMEs), women initiative groups, etc.

<u>Local Land User / Indigenous Organizations.</u> There is a diversity of land user organizations in the participating countries. These include agriculturalists, forests owners/users, private farmers, livestock farmers, fishing and hunting

farms, local self-governing structures, households and resource-poor small farm-holder communities in the harsh agro-climatic environments of the targeted countries.

<u>Provinces</u>, <u>District</u> and <u>Local Governances in each country</u>. Sub-national administrative regions and rural citizens assemblies/councils will support the implementation of the project in their respective local government areas. They are expected to provide an enabling framework for project implementation and monitoring to be successful at the local level and sustain local results after the end of the project.

<u>National Academic and educational institutions</u>. Research, universities, training centres and other institutions that train in agriculture, INRM approach, SLM policy, regulation and innovative practices and technologies, and conduct research, in particular participatory research and transfer and dissemination of technologies with local communities, women and other local stakeholders.

Stakeholder consultation meetings will be held throughout the project preparation. A first stakeholder consultation meeting took place in Antalya, Turkey, on February 26 2015, as back-to-back event of the 'ELD – ICARDA Inception and training workshop on Assessment of the Economics of Land Degradation for Improved Land Management in Central Asia' to validate the project framework with relevant partner countries and key development partners. Final management arrangements and full roles and responsibilities of the key stakeholder groups, including civil society and indigenous people, will be identified during next consultations.

3. Gender Considerations. Are gender considerations taken into account? (yes 🖾 /no 🗀). If yes, briefly describe how gender considerations will be mainstreamed into project preparation, taken into account the differences, needs, roles and priorities of men and women.

The proposed project is consistent with the GEF Policy on Gender Mainstreaming (PL/SD/02. May 1, 2012) and fully aligned with the FAO's gender policy.

A gender analysis will be carried out during project preparation to reveal gender disparity in access to critical resources, knowledge, opportunities and markets and make specific recommendations in adequately mainstreaming the perspective of gender equality in planned interventions. Selected agricultural production landscapes / land use systems include home gardens to ensure potential impacts of the project on household food security/nutrition and increase women's access to knowledge. In addition, gender will be mainstreamed in the management arrangements of the project to advance women's and women's equal voice in relevant institutions engaged with project preparation. During the development of the full project, gender sensitive indicators will be chosen for each project outcome/outputs and be fully incorporated into the M&E system.

4 Risks. Indicate risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and, if possible, propose measures that address these risks to be further developed during the project design (table format acceptable).

Risk	Level	Mitigation measure
1.No alignment of views and priorities between institutions and the main beneficiaries of current land and water resource use systems, with limited political support to advance women's and men's equal voice and access to resources and services in rural areas	Low	The establishment of mechanisms for integrated NRM planning and SLM scaling up that incorporate the full range of land-use trade-offs will inevitably reveal some initial divergence of views. FAO will act as a neutral platform for multistakeholder and cross-sectoral dialogue with project partners, e.g. FAOSEC, ICBA and CACILM-II, to reach consensus on key issues, and provide an enabling environment to promote joint decisions. It will facilitate cooperation between national institutions and local communities, and strengthen the relevance, efficiency and effectiveness of institutions to adopt relevant gender-sensitive approaches and promote gender-sensitive technologies.
2.Building of sufficient capacity and capability of existing national and regional institutions and local authorities for project	Low/ Medium	Need for strengthening cross-sectoral coordination and institutional capacity has been revealed in CACILM1 and other projects in Central Asia for the last ten years. Since reforming existing institutions and mindsets can be a lengthy process, the project development phase will set a realistic timeframe for the systematic implementation of the various project activities and expected outputs

sustainability will take too		will realistically reflect what past experience has proven feasible.
3. The catalytic effect of the project on SLM upscaling and investments at regional and national level is slowly implemented	Low	Partnership at regional and national levels and mainstreaming of climate-smart agricultural practices into relevant policies, programes and investment frameworks can catalyze investments from multiple sources, including local communities, national governments, NGOs, and international institutions.

5. Coordination. Outline the coordination with other relevant GEF-financed and other initiatives.

The project will establish collaboration and synergies with several programs and projects, many of which are GEF funded:

a. Global GEF/FAO/WOCAT Decision Support for Mainstreaming and Scaling up of Sustainable Land Management Project (DS – SLM) project. This global project will provide harmonized tools for land degradation assessment, land-use systems diagnostics and best SLM practices assessments across 15 countries, and monitoring and evaluation systems, to support programmatic processes for SLM upscaling. In this framework, Turkey and Uzbekistan will receive technical assistance on land use, LD and SLM mapping in support of SLM planning and decision making and, improve their capacities for mainstreaming of SLM best practices to combat land degradation and increase resilience to CC impacts.

b. Eurasia Soil Partnership (EASP) was launched in November 2013 in Eastern Europe, Caucasus and Central Asia with soil salinity management as a shared priority. The EASP Implementation Plan is expected to provide guidance to this GEF project and allow mutual collaboration a) to support the restoration of degraded soils and promotion of Sustainable Soil Management (SSM) practices as part of a wider SLM scaling up approach, b) to coordinate work among competent institutions to encourage investment, technical cooperation, policy, education awareness and extension in soil and, c) to harmonize information system, methods, measurements and indicators for the sustainable management and protection of soil resources. This GEF project could facilitate integration of data on soil salinization and degradation status and trends into national LD and SLM assessments and relevant global processes under UNCCD and to sister Conventions' efforts on soil biodiversity and soil carbon fluxes.

c. The global Economics of Land Degradation (ELD) initiative — The UNCCD together with the Government of Germany recently launched an initiative on economic valuation of DLDD with the view to adapt and mainstream ELD best practices into national strategies for SLM. LADA and its different databases were identified as key sources of information and close cooperation on generating evidence-based knowledge on the full economic valuation of land degradation and benefits of INRM (including SLM technologies) will be established between the proposed project and the global ELD initiative. The proposal for sub-regional ELD case studies in CA was endorsed at the International Conference on "Economics of Land Degradation" (1-2 August 2014, Turkmenistan).

d. The UNDP/GEF-5/ICBA project "Reducing pressures on natural resources from competing land use in non-irrigated arid mountain, semi-desert and desert landscapes of Uzbekistan" (2014-2018) is designed to support the improved, more sustainable and more resilient land use management of non-irrigated arid desert, steppe and mountain landscapes of Uzbekistan, and reduce competitive pressures between different land uses, particularly pasture use and forestry.

e. CAREC supported initiatives – 'The Aral Sea Basin Program – 3' (endorsed at the IFAS summit in of April 28 2009) reflects the priorities of the countries and offers an opportunity to IFAS member states to more effectively combine national and regional efforts to improve the environmental and socio-economic situation and achieve environmental sustainability in the Basin, through strengthening multi-country cooperation and supporting joint programs and projects on integrated natural resources management.

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

The project has been developed through joint efforts and participation of all beneficiary countries on the basis of the comprehensive concept note submitted by the UNCCD Focal Points in November 2014, which highlight key national and multi-country priorities. The Project is in full accordance with key priorities that were articulated in the UNCCD NAPs (1999-2002) and Sub-regional Action Programme for Combating Desertification (SRAP-CD, 2003), and the objectives of the Central Asia Countries Initiative for Land Management (CACILM I). CACILM is a long-term program aimed at restoring, maintaining and enhancing productive functions of land in CACs. In each participating country, National Programming Framework (NPF-2006, 2009) on Sustainable Land Management (SLM) forms its strategic basis. In addition, the Project supports alignment of NAPs to combat DLDD with the UNCCD 10-year Strategy (2008-2018).

The priority areas of sub-regional cooperation in the SRAP/CD include: (i) monitoring and evaluation of desertification processes and drought mitigation; (ii) improvement of water use in agriculture; combating erosion, salinization, and swamp formation; (iii) agroforestry and management of forest resources and watersheds; (iv) pasture management; (v) conservation of biodiversity and nature protection; development of eco-and ethnotourism, and (vi) economic capacity building of local communities.

This Project will address the targets, defined in renewed NPF-2009 CACILM 1:

- Capacity building strengthening enabling environment, coordination and multisectoral interactions, adaptation and mitigation of climate change consequences; integration of SLM into land use planning, management and budgeting in conditions of climate change;
- Sustainable pasture and forest management and carbon sequestration;
- Integrated resource management; adaptation of agriculture to climate change (climate resilience management)
- Environmental rehabilitation of vulnerable ecosystems in the disaster risk region of the former Aral Sea

The Project is in full accordance with key national strategies that were articulated in the Second National Communication on Climate Change submitted by countries under the United Nations Framework Convention on Climate Change and the National Action Plans on Climate Change. The proposed Project also builds on and supports the key priority identified by the global and National Biodiversity Strategy and Action Plans (NBSAP) of the CACs and Turkey, which emphasizes the protection of all biological resources, including arable lands, pastures and forests, as well as the restoration of structures and functions of degraded and salt-sensitive ecosystems.

In addition, the project takes into account the national priories for collaboration on natural resources management agreed upon in the Country Programming Frameworks (CPFs) between FAO and the Government of each participating country, that are aligned with national plans and programmes, in support of national agriculture, rural development and food security development objectives. It is also addressing the specific recommendations of the Member Countries of the 29th FAO European Regional Conference on drought risk management and the subregional priority on soil salinity management defined under the EASP.

7. 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.

Knowledge generated during the first phase of CACILM will be widely used for upscaling. Institutional capacities will be enhanced to adapt and disseminate the knowledge within countries at a wider scale for the various land use systems, mostly in drough-prone lands and salt-afected areas. Knowledge sharing is fully addressed under component 1 and its outcome on Enhanced multi-country collaboration and information sharing. The Project will also learn from other ongoing GEF and non-GEF supported initiatives, such as the FAO/GEF Decision Support for Mainstreaming and Scaling up Sustainable Land Management project that builds on the LADA/WOCAT approach. WOCAT offers a suite of tools that can be used for assessment, documentation and dissemination of best practices in

natural resources management that have already been used by CACILM Phase I, and these tools have recently been adopted by the UNCCD. In addition, the project will build upon the Knowledge Management project of CACILM, led by ICARDA and supported by GIZ (Germany) and IFAD.

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

A. RECORD OF ENDORSEMENT 12 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).

POSITION	MINISTRY	DATE (MM/dd/yyyy)
Head of Environment	MINISTRY OF	03/13/2015
Protection Department	NATURE	
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Chairman	COMMITTEE ON	03/05/2015
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	REPUBLIC OF	
	TAJIKISTAN	1
Director	STATE AGENCY ON	03/06/2015
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	PROTECTION AND	
	FORESTRY,	
	KYRGYZ	
·	REPUBLIC	7.9
Deputy Director	CENTRE OF	03/06/2015
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	Head of Environment Protection Department Chairman	Head of Environment Protection Department Protection Department RATURE PROTECTION OF TURKMENISTAN Chairman Committee on Environmental PROTECTION, REPUBLIC OF TAJIKISTAN Director STATE AGENCY ON ENVIRONMENT PROTECTION AND FORESTRY, KYRGYZ REPUBLIC CENTRE OF HYDRO- METEOROLOGICAL SERVICE UNDER THE CABINET OF MINISTERS, REPUBLIC OF UZBEKISTAN Undersecretary MINISTRY OF FORESTRY AND WATER AFFAIRS, TURKEY Political Focal Point Ministry OF ENVIRONMENT

¹² 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.

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies¹³ and procedures and meets the GEF criteria for project identification and preparation under GEF-6.

Agency Coordinator, Agency name	Signature	Date (MM/dd/yyyy)	Project Contact Person	Telephone	Email
Gustavo Merino Director		27/13/2015	Ines Beernaerts	+905305550065	Ines.beernaerts@fao.org
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Division FAO	1				
Via delle Terme di	,				
Caracalla, Rome, Italy					
Jeffrey Griffin				+390657055680	Jeffrey.Griffin@fao.org
Senior GEF				0,000,000,000	Joiney. Griffing Jao. Org
Coordinator	·		i	ļ	
Investment Center	`				•
Division					
FAO					

C. Additional GEF Project Agency Certification (Applicable Only to newly accredited GEF Project Agencies)

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 the PIF.

 $^{^{\}rm 13}$ GEF policies encompass all managed trust funds, namely: GEFTF, LDCF, and SCCF