Funding Proposal

FP322: Climate-resilient Landscapes in Central Asia

Kyrgyzstan, Tajikistan, Uzbekistan | Climate-resilient Landscapes in Central Asia" by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH | Decision B.46/04

Disclosure of funding proposal	*Note: The Information Disclosure Policy (IDP) provides that the GCF will apply a presumption in favour of disclosure for all information and documents relating to the GCF and its funding activities. Under the IDP, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP. Information provided in confidence is one of the exceptions, but this exception should not be applied broadly to an entire document if the document contains specific, segregable portions that can be disclosed without prejudice or harm.* ***For private sector proposals**, indicate below whether or not the funding proposal includes confidential information.* ☒ No confidential information: The accredited entity confirms that the funding proposal, including its annexes, may be disclosed in full by the GCF, as no information is being provided in confidence. ☐ With confidential information: The accredited entity declares that the funding proposal, including its annexes, may not be disclosed in full by the GCF, as certain information is being provided in confidence. Accordingly, the accredited entity is providing to the Secretariat the following two copies of the funding proposal, including all annexes: • full copy for internal use of the GCF in which the confidential portions are marked accordingly, together with an explanatory note regarding the said portions and the corresponding reason for confidentiality under the accredited entity's disclosure policy, and • redacted copy for disclosure on the GCF website. The funding proposal can only be processed upon receipt of the two copies above, if containing confidential information. ***For public sector proposals**, any confidential information should be shared as part of the funding proposal annex to be submitted in confidence.*

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Note to Accredited Entities on the use of the funding proposal template

- Accredited Entities should provide summary information in the proposal with cross-reference to annexes such as feasibility studies, gender action plan, term sheet, etc.
- Accredited Entities should ensure that annexes provided are consistent with the details provided in the funding proposal. Updates to the funding proposal and/or annexes must be reflected in all relevant documents.
- Under the GCF Information Disclosure Policy, project and programme funding proposals will be disclosed on the GCF website, simultaneous with the submission to the Board, subject to the redaction of any information that may not be disclosed pursuant to the IDP.

A. PROPOSAL DATA			
A.1. Project or programme	☐ Project ☒ Programme	**A.2. Sector**	☒ Public ☐ Private
A.3. Funding modality	☒ Proposal Approval Process (PAP) ☐ Simplified Approval Process (SAP)	**A.4. Special Modalities/ Request for Proposals (RFP)**	Not applicable
A.5. Contracting modality	☐ Project specific funded activity agreement incorporating the GCF Standard Conditions (Projects) ☒ Project specific funded activity agreement incorporating the entity's signed accreditation master agreement ☐ Standalone project specific funded activity agreement (for PSAA proposals only)		
A.6. Has Readiness support been used to develop this FP?	☒ Yes ☐ No 2206-17214; 2206-17216. The CN development was partially financed by readiness measures, i.e., Kyrgyzstan (KGZ-RS-004) and Tajikistan (TJK-RS-005)	**A.7. Has PPF support been used to develop this FP?**	☐ Yes ☒ No

A.8. Summary of financing information	Currency (GCF holding)	Amount	USD (converted)[1]	Ratio (%)
Total requested GCF funding	EUR	119,580,500.00	136,261,979.76	44.8%
Total co-financing	EUR	144,794,870.00	167,991,008.09	55.2%
Total financing (GCF + co-financing)			304,252,987.85	

[1] Currency conversion to USD is based on Reuters rate in effect. USD equivalents reflected in the GCF Partner Portal may vary due to exchange rate fluctuations. In all instances, the GCF holding currency shall prevail.

<table>
<tr><td>A.9. Financial instrument(s) requested for the GCF funding</td><td colspan="2">☒ Grants (non-reimbursable) EUR 119,580,500.00
☐ Reimbursable grants
☐ Senior Loans
☐ Subordinated Loans</td><td colspan="2">☐ Equity
☐ Results-based payments
☐ Guarantees</td></tr>
<tr><td rowspan="10">A.10. Result area(s)</td><td colspan="3"></td><td>GCF contribution</td><td>Co-financiers' contribution</td></tr>
<tr><td colspan="3">Mitigation total</td><td>30.0%</td><td>40.0%</td></tr>
<tr><td colspan="3">☐ MRA 1. Energy generation and access</td><td>0.0%</td><td>0.0%</td></tr>
<tr><td colspan="3">☐ MRA 2. Transport</td><td>0.0%</td><td>0.0%</td></tr>
<tr><td colspan="3">☐ MRA 3. Buildings, cities, industries and appliances</td><td>0.0%</td><td>0.0%</td></tr>
<tr><td colspan="3">☒ MRA 4. Forestry and land use</td><td>30.0%</td><td>40.0%</td></tr>
<tr><td colspan="3">Adaptation total</td><td>70.0%</td><td>60.0%</td></tr>
<tr><td colspan="3">☒ ARA 1. Livelihoods of people and communities</td><td>35.0%</td><td>40.0%</td></tr>
<tr><td colspan="3">☐ ARA 2. Health, food and water security</td><td>0.0%</td><td>0.0%</td></tr>
<tr><td colspan="3">☐ ARA 3. Infrastructure and built environment</td><td>0.0%</td><td>0.0%</td></tr>
<tr><td colspan="3">☒ ARA 4. Ecosystems and ecosystem services</td><td>35.0%</td><td>20.0%</td></tr>
<tr><td rowspan="3">A.11. Expected mitigation outcome

CORE Impact 1: Total GHG emissions reduced, avoided or removed/sequestered (tCO₂eq)</td><td rowspan="3">6,953,950 tCO2eq over the total lifespan of the project</td><td rowspan="3">A.12. Expected adaptation outcome

CORE Impact 2: Total number of beneficiaries (direct/indirect) receiving adaptation benefits</td><td>Number of direct beneficiaries</td><td>1,046,062</td></tr>
<tr><td>Number of indirect beneficiaries</td><td>1,480,919</td></tr>
<tr><td>Number of total beneficiaries</td><td>2,526,981</td></tr>
<tr><td>A.13. Implementation period</td><td>7 years</td><td>A.14. Duration of GCF investment</td><td colspan="2">7 years</td></tr>
<tr><td>A.15. Estimated duration of impact</td><td>20 years</td><td>A.16. Expected date of AE internal approval</td><td colspan="2">23 April 2026</td></tr>
<tr><td>A.17. ESS category[2]</td><td>Category B</td><td>A.18. Complementarity and coherence</td><td colspan="2">☒ Yes ☐ No</td></tr>
</table>

[2] According to the GCF Revised Environmental and Social Policy, it is the AE's role and responsibility to ensure that activities proposed for GCF financing are properly screened, assigned appropriate environmental and social risk categories and that the environmental and social risks and impacts are properly and sufficiently assessed.

A.19. Executing Entity information

Full legal name	Country of registration	Entity type
Community Development and Investment Agency of the Kyrgyz Republic (ARIS)	Kyrgyzstan	Public Sector – Government-controlled subnational, national or regional entity
Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic (MoWRAPI)	Kyrgyzstan	Public Sector – Government
Ministry of Finance of the Kyrgyz Republic	Kyrgyzstan	Public Sector – Government
Centre for Implementation of Investment Projects under the Government of the Republic of Tajikistan (CIIP)	Tajikistan	Public Sector – Government
Ministry of Finance of the Republic of Tajikistan	Tajikistan	Public Sector – Government
National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	Uzbekistan	Public Sector – Government
Ministry of Economy and Finance of the Republic of Uzbekistan	Uzbekistan	Public Sector – Government
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	Germany	Public Sector – Government-controlled subnational, national or regional entity

A.20. Co-financier information

Full legal name	Country of registration	Entity type
Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	Kyrgyzstan	Public Sector – Government
Committee of Environmental Protection under the Government of Tajikistan (CEP)	Tajikistan	Public Sector – Government
National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	Uzbekistan	Public Sector – Government
Federal Ministry for Economic Cooperation and Development (BMZ)	Germany	Public Sector – Government
European Investment Bank (EIB)	Luxembourg	Multilateral or other international organization – an entity formed by treaty, agreement or resolution between participating member states

A.21. Alignment with country NDCs & NAPs

Country	Date of NDC/NAP submission	NDC/NAP objective	Brief description of project's alignment with NDC/NAP objectives	Percentage of target met with proposed project
Kyrgyzstan	30 September 2025	The Kyrgyz Republic's Third NDC (3.0) targets economy-wide GHG emission reductions of 18% below the projected 2030 baseline unconditionally and 30% with international support. For 2035, the targets are 16% below baseline unconditionally and 39% below with international support. NDC Link EN	The proposed programme aligns with the Kyrgyz Republic's NDC 3.0 by supporting mitigation in agriculture, forestry, and pasture management, which are identified as priority areas under the NDC. Agriculture accounts for 29.7% of total emissions and is the second-largest emitting sector in the country. The programme will help the country achieve 2.59% of the 2035 unconditional, and 1.06% of the conditional emissions-reduction targets; the envisioned country package would cover circa 0.8% of the financing needs.	3.97
Tajikistan	2 June 2022	Tajikistan's updated NDC commits to limiting greenhouse gas emissions to 60–70% of 1990 levels unconditionally and 50–60% conditionally by 2030. NDC Link EN	The proposed programme aligns with Tajikistan's NDC by supporting action in agriculture and AFOLU, which are central to both mitigation and adaptation priorities. Agriculture is a major source of emissions and AFOLU is identified as a key sector for climate resilience and mitigation co-benefits. The programme would contribute an estimated 0.84–2.19% of the emissions reduction required under conditional 2030 emissions-cap range, relative to the NDC baseline scenario of 23.54 MtCO2e. For the unconditional range, the programme would contribute 2.19% relative to the lower cap of 21.32 MtCO2e; the higher cap of 24.87 MtCO2e exceeds the stated baseline and would not imply a mitigation requirement relative to that scenario; the envisioned country package	2.19

				would cover circa 2.62% of the financing needs.[3]	
	Uzbekistan	6 November 2025	Uzbekistan's Third NDC (3.0) increases its economy-wide mitigation ambition to reduce GHG emissions per unit of GDP by 50% by 2035, compared with 2010 levels, building on the earlier 35% by 2030 target. NDC Link EN	The proposed programme aligns with Uzbekistan's NDC 3.0 by supporting implementation in the AFOLU sector, which is included in the country's economy-wide mitigation framework. Agriculture is the second-largest source of emissions and faces significant climate adaptation needs. The programme will help the country achieve 0.36-0.38% of the estimated emissions reduction potential under the 2035 realistic scenario and 0.25-0.28% under the ambitious scenario); the envisioned country package would cover circa 0.65% of the financing needs for mitigation and adaptation.	0.48

[3] Assuming USD 1 billion per year from 2027-2030 as outlined in the country's NDC

B. PROPOSAL EXECUTIVE SUMMARY (max. 500 words)

1. Climate change is intensifying risks to **agriculture, forestry, and other land use (AFOLU) sectors in the Kyrgyz Republic, Tajikistan, and Uzbekistan**, particularly in the Fergana Valley, Surkhandarya and Khatlon. Rising temperatures, drought, shifting seasonal runoff and heavier rainfall are heightening heat and water stress, erosion and land degradation, reducing the productivity and stability of crops, pastures and forests. These risks cross borders - mountain snow and ecosystems regulate downstream water supplies, while connected river basins, irrigation systems, pastures and forests transmit impacts across administrative boundaries. Coordinated regional action is therefore needed alongside national and local measures. AFOLU emissions have increased since the 1990s, while land-based removals have not kept pace. Relative to continued unsustainable land management, improved cropland and orchard practices will reduce emissions and increase soil carbon, while pasture and forest restoration and afforestation will increase biomass and ecosystem carbon stocks.
2. The programme will catalyse **a systemic shift towards climate-resilient, low-emission (CRLE) AFOLU development**. Component 1 will embed climate information in land-use planning, decision-support systems, public expenditure and investment prioritisation, while strengthening capacities to mobilise climate finance. Component 2 will translate plans into locally-led investments in sustainable agriculture, pasture and forest restoration and value-chains. Tailored extension, business support and financing will enable smallholders, forest and pasture users, and MSMEs, particularly women and youth, to adopt CRLE practices and technologies. Component 3 will establish foresight processes, regional AFOLU development pathways, knowledge exchange and an investment platform for coordinated transboundary action. Together, these interventions move beyond isolated investments, institutionalising climate-informed land-use planning and coordination, strengthening financial frameworks, improving capacities and enabling lasting changes in land-user behaviour.
3. The programme will be implemented by GIZ with national executing entities, i.e., MoWRAPI and ARIS in the Kyrgyz Republic, CIIP in Tajikistan and NCECC in Uzbekistan as well as MoFs of the respective countries. The programme combines GCF financing with co-financing from BMZ and the countries' own contributions. EIB co-financing of EUR 120 million is envisaged, subject to sovereign borrowing decisions, EU budget approval, and final implementation arrangements. This could scale CRLE agriculture investment, strengthen local financial institutions, crowd in private resources and expand access to affordable finance for rural MSMEs. The programme aligns with the countries' NDCs and Land Degradation Neutrality targets and is expected to enhance the **resilience of 1,046,062 direct and 1,480,919 indirect beneficiaries, avoid or sequester 6.95 million tCO2e, and bring 939,354 hectares of land under sustainable management, conservation, or restoration** across 180 municipalities.
4. GCF support is additional because the **required transformation cannot be financed through constrained public budgets or commercial capital alone**. It will fund essential public-good, restoration and investment-preparation activities, de-risk MSME finance and mobilise further public and private investment. Sustainability will be achieved by institutionalising CRLE approaches in land-use planning, production, finance and regional cooperation, while replicable delivery models, investment pipelines, green-bond development, the envisaged EIB credit programme and the regional investment platform will support expansion to new beneficiaries and areas.

C. PROJECT/PROGRAMME INFORMATION

C.1. Climate context (max. 1,000 words for each sub-section, max. 500 words for SAP)

☒ Reduced emissions (mitigation)
☒ Increased resilience (adaptation)

Mitigation climate context

5. **AFOLU is becoming increasingly important to the emissions profile of the Kyrgyz Republic, Tajikistan and Uzbekistan.** The NDCs and BTRs show that energy remains the largest source of GHG emissions across the three countries, but agriculture has become more significant over time. In the Kyrgyz Republic, energy was the dominant source in 2023 (55%) of total emissions, followed by agriculture (29.7%). Agricultural emissions remained broadly unchanged compared to 1990 in absolute terms but became more prominent in the national emissions profile as energy emissions declined; agriculture accounted for 20.6% of total emissions in 1990, compared with 29.7% in 2023. At the same time, the LULUCF sector remained a net sink, with sectoral removals increasing by 6.9% between 1990-2023, although removals have not kept pace with recent emissions growth. In Tajikistan, energy remained the largest source of emissions in 2022 (40.8%), but agriculture increased from 19.0% (1990) to 34.8% (2022). LULUCF also remained a net sink, but at a limited scale, with net removals of 0.72 MtCO2e (2022), insufficient to offset emissions growth in agriculture and other sectors. In Uzbekistan, energy remained the largest source in 2022 (64%) of gross emissions, while agriculture accounted for 17%, up from 8% in 1990. The LULUCF sector remained a net sink, but net removals declined by 47.3% between 1990-2022.
6. **Similar AFOLU mitigation practices exist in the region, but adoption remains limited.** Across the proposed AFOLU mitigation activities, similar practices and technologies have already been undertaken, but their uptake remains limited and, in most cases, well below the threshold used to determine common practice.
7. **Conservation agriculture remains at an early stage of adoption in the Kyrgyz Republic and Tajikistan**. Adoption of conservation agriculture in rainfed cereal production remains limited in both the Kyrgyz Republic and Tajikistan. In the Kyrgyz Republic, no-till wheat is concentrated primarily in Osh and Jalal-Abad. Out of 247,600 ha under wheat, only 4,200 ha are under no-till, equivalent to approximately 1.7% of total wheat area. Relative to the country's 438,000 ha of rainfed land, no-till covers less than 1%. In Tajikistan, field evidence indicates a negligible uptake (~1,200 ha under no-till).
8. **Seed potato production remains a niche activity rather than a mainstream practice**. Seed potato production in highland areas is similarly limited. In the Kyrgyz Republic, the current adoption rate of certified seed potatoes is 0.3%. Out of about 65,000 ha of total potato area, farmers applied for seed certification on only 213 ha. In Tajikistan, seed potato production is underdeveloped, and most seed is imported. In Uzbekistan, seed potato production remains a specialised niche. While the country has roughly 1.8 to 2.2 million dekhan farms, only around 70,000-80,000 regularly grow potatoes, and seed potato production is characterised as a much more specialised activity.
9. **Improved orchard technologies remain concentrated among a minority of producers**. For orchard-related interventions, the adoption of improved technologies is also low. In the Kyrgyz Republic, around 10% of fruit farms nationally use improved orchard practices and technologies, while in the target regions, adoption is estimated at below 5%. Orchards established on unproductive rainfed land are even less widespread: despite legislative changes allowing perennial crops on such land, only a very limited number of orchards have been established, estimated at less than 1% of the available suitable land. In Tajikistan, official data indicate 166,612 ha of fruit orchards, including citrus and berry plantations, in 2023, while only 1,224 ha were reported as intensive orchards, an equivalent of an adoption rate of 0.73%. In Uzbekistan, the sector is large and expanding, with 330,000-350,000 ha under fruit and nut orchards, yet modern orchard systems account for only a relatively small share of the total. Adoption of improved tree cultivation is concentrated in stronger commercial hubs and larger farms or SMEs, with adoption likely to be below 20% amongst the target farmers and an even smaller share adopting the full combination of practices proposed under the programme. Improved orchard establishment and management technologies are not yet common practice across the target regions.
10. **Restoration activities are underway, but not yet at transformative scale.** For afforestation, reforestation and forest restoration, national efforts exist but remain insufficient to qualify as common practice. In Uzbekistan, afforestation and reforestation efforts are still falling short of national needs and scaling is constrained by multiple

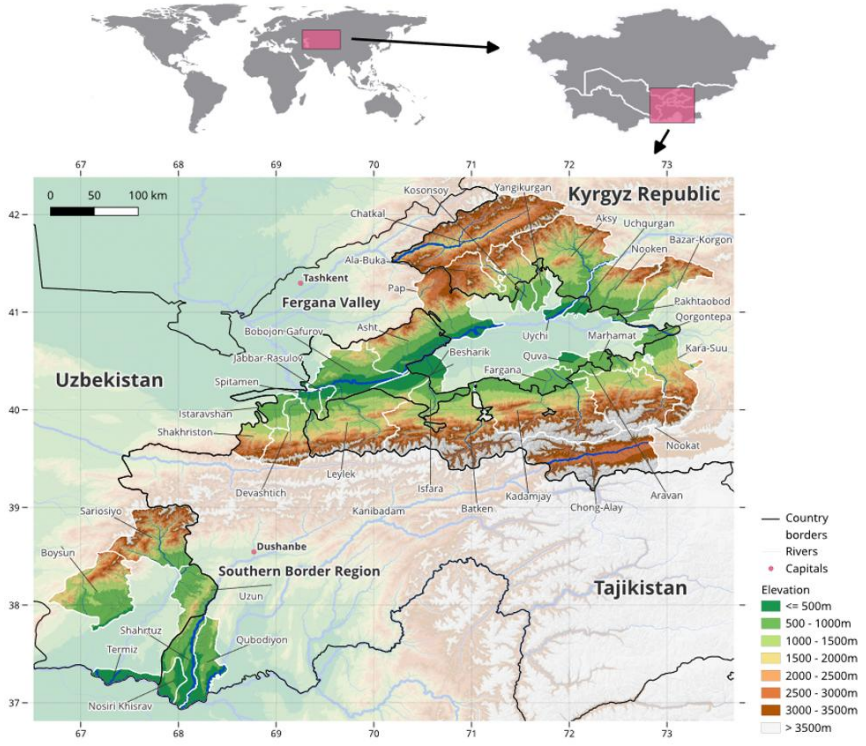
barriers. For forest restoration, current practice does not yet represent sector-wide transformation. In the Kyrgyz Republic, there is substantial national engagement in forest management, including the production of approximately 15 million seedlings annually in 140 ha of nurseries and restoration on more than 1,100 ha each year, supported by national campaigns and community-based approaches. However, the proposed intervention is still differentiated from prevailing practice because it goes beyond tree planting alone and establishes a durable restoration system that integrates community involvement, locally selected climate-adapted species, seedling hardening and appropriate planting design.

11. **Sustainable pasture management and pasture restoration remain limited in practice across the three countries.** In the Kyrgyz Republic, the pasture sector is characterised by high grazing pressure and only partial and inconsistently applied rotational management, with sustainable management remaining limited in practice. In Tajikistan, sustainable pasture management also remains limited, with only 27,718 ha of rehabilitated pasture reported out of 3.8 million ha of total pastureland, indicating that current interventions remain small relative to the scale of degradation. In Uzbekistan, pasture management continues to be dominated by extensive, continuous grazing on accessible areas, with limited rotation and inadequate enabling infrastructure, contributing to widespread degradation; 77.3% of the country's 21 million ha of pastureland is reported as degraded.
12. **Conventional production systems still define the regional baseline.** These include full tillage, removal of crop residues, low or inconsistent use of organic amendments, furrow and flood irrigation, short crop rotations, traditional orchard systems, intensive grazing under conditions of land degradation, and unsustainable forest management. This highlights that, although similar mitigation activities have been introduced in the region, they remain limited to niche, pilot, project-driven, or early-stage implementation rather than representing standard practices.

Adaptation climate context

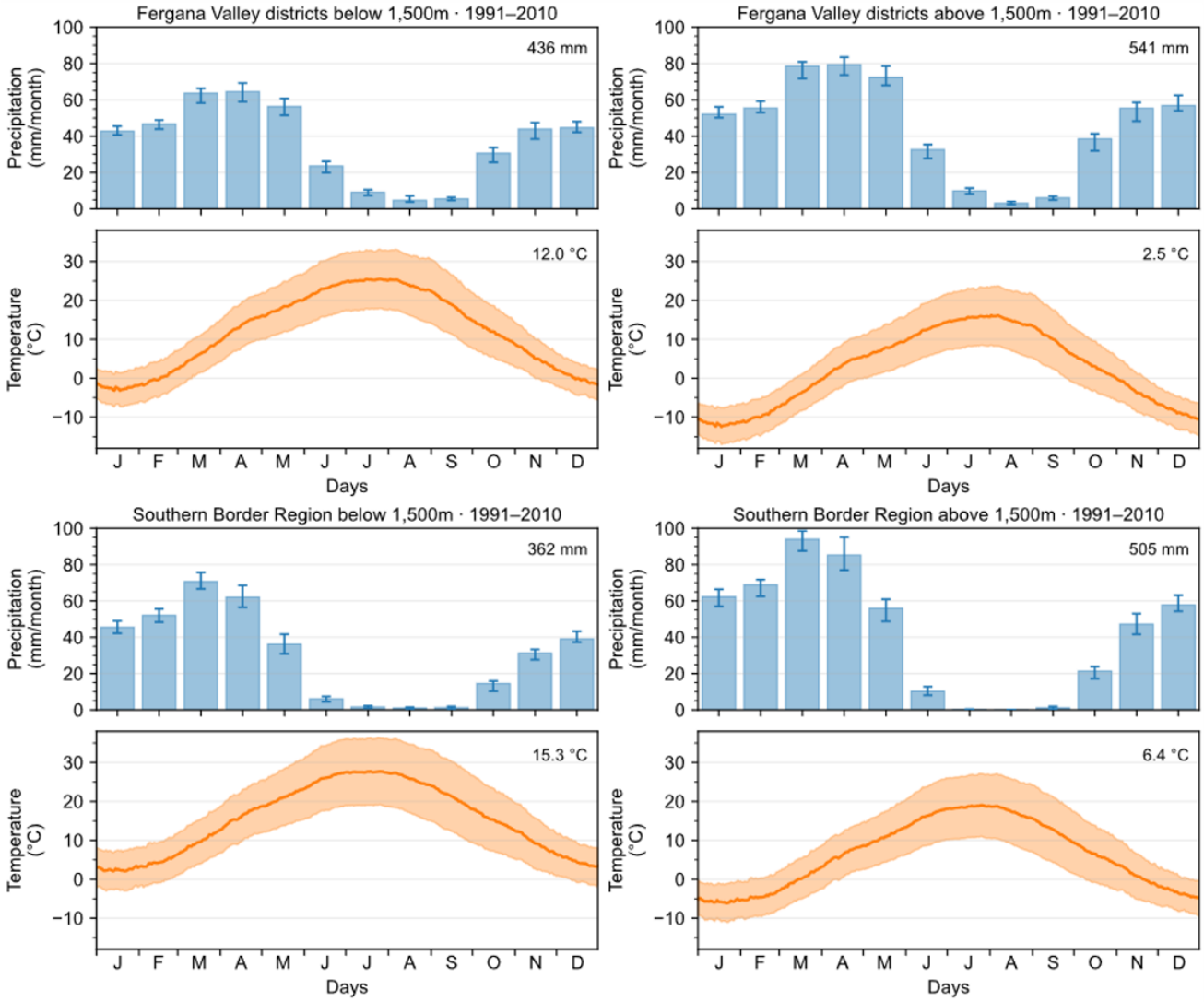
13. The programme covers two transboundary landscapes: the Fergana Valley (Kyrgyz Republic, Tajikistan, Uzbekistan) and the Southern Border Region (between Tajikistan and Uzbekistan). Figure 1 shows the programme areas and elevation gradients, underpinning the climate-risk logic. The selected districts link lowland irrigated zones with foothill, mountain, and upstream water-source areas, allowing higher-elevation climate pressures to propagate downstream through shared water and runoff dynamics.

Figure 1: Programme areas in the Fergana Valley and Southern Border Region between Tajikistan and Uzbekistan; districts shown against elevation gradient.



14. The programme areas are predominantly arid to semi-arid and characterised by strong seasonal contrasts in temperature and precipitation. Lower-lying zones depend heavily on upstream water resources during hot, typically dry summer months, when irrigation and pasture water demand peak. Figure 2 illustrates this seasonal regime for the historical baseline period 1991-2010.

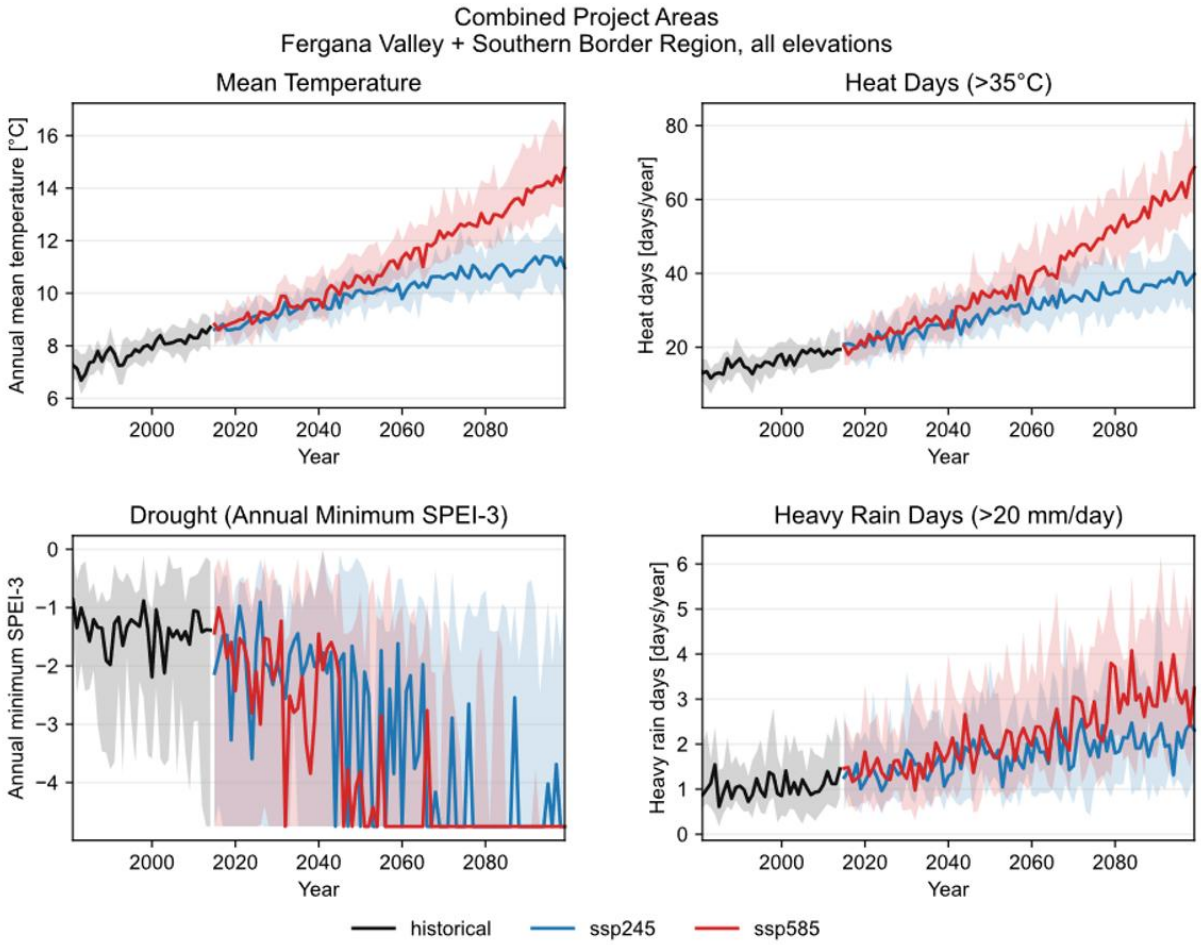
Figure 2: Meteograms for the programme areas in the Fergana Valley (top row) and the Southern Border Region (bottom row), by elevation level (below and above 1,500 m in the left and right column, respectively), for the baseline period 1991–2010 (ensemble median of the 20 selected climate models; whiskers indicate the IPCC "likely range").



Hazards: Changing Climate Conditions

15. Historical climate trends and projected future conditions have been assessed for each programme area. The analysis uses an ensemble of 20 Global Climate Models from the NEX-GDDP-CMIP6 dataset, presented as the ensemble median with uncertainty shown as the IPCC "likely range." The methodology, full analysis, and detailed results are provided in the Climate Rationale (Annex 2b). Selected climate indicators are shown in Figure 3.

Figure 3: Selected indicators of projected climate change in the programme areas, including temperature change, seasonal precipitation patterns, and drought conditions, based on multi-model climate projections (NEX-GDDP-CMIP6; ensemble median and "likely range").



16. Climate conditions have already changed measurably and are projected to evolve as follows:
    - Mean temperature increases across both programme areas and all elevation levels, with the highest temperatures and strongest heat burdens in lower-elevation zones.
    - Precipitation patterns become more uneven over the year, with wetter wet periods and persistently dry, potentially drier summers, especially where irrigated lowland water demand peaks.
    - Drought conditions intensify, especially in summer and autumn, with the most pronounced signal during the warm season.
    - Climate extremes increase in differentiated ways: extreme heat rises strongly in lower elevations, heavy rainfall risks are more pronounced in foothill and upland areas, and hot dry wind remains concentrated in exposed lowland zones, especially western Fergana Valley and parts of the Southern Border Region.
    - Warming in upstream areas reduces snow-based seasonal buffering and shifts runoff timing, further aggravating downstream dry-season water stress.
17. These projected climate trends align increasingly with local land users' experience. Farmers, pastoralists, and local authorities report warmer conditions, more irregular precipitation, increasing water stress, and growing pressure from extreme weather events affecting agricultural production, pasture condition, and forest health.
18. Together, these changes translate into increasing climate risk for transboundary AFOLU systems and dependent rural populations. At programme level, this risk is expressed through:
    - declining agricultural productivity;
    - reduced pasture carrying capacity; and

- degradation of forest and ecosystem functions;

driven by:

- rising temperatures;
- changing precipitation patterns; and
- increasing frequency and intensity of droughts and extreme weather events;

and aggravated by:

- land degradation and weakened ecosystem integrity;
- constrained water availability; and
- limited adaptive capacity, access to information and finance, and institutional support.

19. For a detailed analysis, please refer to chapter 5 of the Climate Rationale (Annex 2b) on exposure, chapter 6 on climate hazards, chapter 7 on climate impacts, and chapter 8 on vulnerabilities.

Exposure

20. Exposure in the programme areas is structured by five interconnected land-use systems:
    - irrigated annual cropland (horticulture and seed potatoes);
    - irrigated perennial cropland (orchard-based fruit production);
    - rainfed cropland (wheat);
    - pasture; and
    - forests (walnut and pistachio production).

    Across the vertically connected mountain–valley landscapes, these systems are exposed both to location-specific climate hazards and to cascading effects transmitted through shared water resources, land degradation processes, and upstream–downstream linkages.

Expected Climate Change Impacts

21. To assess potential climate impacts, the analysis uses four climate impact chains, tracing how climate hazards translate into direct and cascading impacts on production, ecosystem functions, and climate-sensitive livelihoods. Although the programme distinguishes five core land-use systems, pasture and forest are treated jointly as an interconnected socio-ecological system. The full chains are presented in Annex 2b.
22. The identified hazards are expected to reduce productivity and product quality, increase irrigation stress and production instability, weaken pasture biomass and carrying capacity, and degrade forest health and ecosystem functions. Given the hydrological and ecological connectivity of the landscapes, these impacts can propagate across the mountain-foothill-valley landscape through shared water dependencies, land degradation, and shifting pressures between cropland, pasture, and forest systems. The main impact pathways are summarised in Table 1.

Table 1. Climate change hazards and expected impacts on the different land use systems in the programme areas.

Land-use System	Aspect of Land-use System	Summary of aspect
Irrigated Annual Cropland **(Horticulture & Seed Potatoes Value Chains)**	Typical crops	Vegetables, melons, berries
	Programme focus	Onions, Tomatoes (on-field & greenhouse), Garlic, Strawberries (greenhouse); Seed potatoes
	Main geographic expression in the programme areas	• Primarily **lowland and lower-foothill irrigated areas**, especially downstream parts of canal systems • Heat and irrigation stress are strongest in lower elevations • **Hot dry wind exposure** especially relevant in the **western Fergana Valley** and parts of the **Southern Border Region** • Localized heavy-rain impacts are more relevant in **foothill irrigated systems** and exposed canal / drainage locations
	Main climate hazard pattern	• Mean temperature increase • Stronger seasonal water imbalance • Intensifying summer–autumn drought • Extreme heat • Localized hot dry wind • Localized heavy rainfall and flooding (foothill and middle elevations)
	Main cascading impacts	• Reduced upstream water availability and downstream irrigation shortfalls (Sorg et al., 2012) • Higher evapotranspiration and irrigation demand (Hatfield & Prueger, 2015) • Increasing salinity, soil hardening, and declining soil conditions (Corwin, 2021; Munns & Tester, 2008) • Washout, waterlogging, sedimentation, and canal damage in exposed locations (Assouline & Ben-Hur, 2006) • Crop scorching, early ripening, and rising pest and disease pressure (FAO & Uni Bonn, 2021; Ma et al., 2025); potatoes especially heat-sensitive (Bustan et al., 2004) and prone to disease (Van Der Waals et al., 2013)
	Main resulting impacts	• Lower yields and lower market quality of annual crops • Higher irrigation and input costs • Greater production instability • More unequal water access under scarcity
Irrigated Perennial Cropland **(Orchard- based Fruit Value Chain)**	Typical crops	Orchards and vineyards, especially apricot, apple, plum, pear, cherry, almond, pomegranate, and grapes
	Programme focus	Fruit trees
	Main geographic expression in the programme areas	• Mainly **lower-elevation and valley / lower-foothill irrigated systems** • Especially exposed where orchards depend on canal and pump irrigation from upstream sources (lower elevation) • Some spring-instability effects (e.g. early blooming) also extend into cooler foothill zones • Heat burden especially high in Southern Border Region (lower elevation)
	Main climate hazard pattern	• Mean temperature increase • Stronger summer–autumn drought • Extreme heat • Earlier spring onset • Continued frost risk after warm spells • Heavy rainfall during flowering and fruit setting • Localized hot dry wind
	Main cascading impacts	• Reduced upstream water availability and downstream irrigation shortfalls (Sorg et al., 2012) • Higher evapotranspiration and irrigation demand (Hatfield & Prueger, 2015) • Increasing salinity, soil hardening, and declining soil conditions (Corwin, 2021; Munns & Tester, 2008) • Washout, waterlogging, sedimentation, and canal damage in exposed locations (Assouline & Ben-Hur, 2006) • Reduced fruit size and quality (e.g. for apples: Reid & Kalcsits, 2020) • Altered flowering and earlier (Cleland et al., 2007); pollination mismatch (Hegland et al., 2009; Scaven & Rafferty, 2013; Trunschke et al., 2024; Vanbergen, 2013)

Land-use System	Aspect of Land-use System	Summary of aspect
		• Blossom and young-fruit losses from late frost (Pfleiderer et al., 2019) • Decreased presence of natural enemies (FAO & WFP, 2023) • Fruit rot and disease under wet conditions (e.g. for grapes: (Molitor et al., 2014) • Crop scorching, shrivelling, branch damage, and rising pest pressure (FAO & Uni Bonn, 2021; FAO & WFP, 2023; Ma et al., 2025)
	Main resulting impacts	• Lower and less reliable orchard productivity • Smaller, damaged, or lower-quality fruits • Declining marketability and prices • Higher management costs • Greater long-term risk to orchard assets
Cropland Rainfed **(Wheat Value Chain)**	Typical crops	Mainly wheat, and in some locations barley and fodder crops
	Programme focus	Wheat
	Main geographic expression in the programme areas	• Mainly **foothill and upland rainfed systems** • Drought impacts are widespread across elevations and programme areas • Heavy-rain washout is more localized in **sloping and foothill areas**
	Main climate hazard pattern	• Mean temperature increase • Intensifying drought conditions, especially in summer and autumn • Extreme heat • More erratic rainfall • Heavy rainfall in foothill areas
	Main cascading impacts	• Declining soil moisture and crop water stress (Leal Filho et al., 2023; Qaseem et al., 2019) • Weaker germination and crop establishment • Disrupted sowing windows and cropping calendars (Minoli et al., 2022) • Soil hardening, erosion, and nutrient loss (Leal Filho et al., 2023) • Localized washout from intense rainfall and mudflows • Crop scorching, and rising pest and disease pressure (Ma et al., 2025) • Reduced animal health (e.g. sheep: (Van Der Waals et al., 2013)
	Main resulting impacts	• Lower and more variable cereal yields (Qaseem et al., 2019) • Greater risk of establishment failure and crop (Khah et al., 1989) • Declining soil fertility and moisture retention (Leal Filho et al., 2023) • Reduced reliability of rainfed production (e.g. wheat: Nazari et al., 2021)
Pasture Land	Typical species	• Pasture used for cattle, sheep, goats, and mixed grazing • Grassland
	Main geographic expression in the programme areas	• Across all **elevation levels**, especially at the **interface to other land-use systems (rainfed cropland and forests)** • Heavy-rain, runoff, and slope-instability impacts are strongest in **foothill and upland belts** rather than in valley lowlands
	Main climate hazard pattern	• Mean temperature increase • Stronger summer–autumn drought • Extreme heat • Declining and less reliable water availability • Heavy rainfall
	Main cascading impacts	• Drying vegetation and weaker regeneration (Jiang et al., 2022) • Rising pest and disease risks (FAO & Uni Bonn, 2021) • Lower pasture biomass and fodder quality (L. Liu et al., 2023) • Shorter grazing periods pushing pressure onto forests and cropland (Azarov et al., 2024) • Reduced slope stabilization and water regulation (Straffelini et al., 2024)
	Main resulting impacts	• Declining pasture carrying capacity • Higher erosion, mudflow, and landslide risks • Reduced livestock productivity • Declining protective ecosystem functions (water regulation and soil stabilisation)
Forests **(Non-Timber Forest Products**	Typical species	Juniper, pistachio, and walnut trees
	Programme focus	Walnut and pistachio forests and their non-timber forest products
	Main geographic expression in the programme areas	• Mainly **upper elevations**; mostly around Fergana Valley

Land-use System	Aspect of Land-use System	Summary of aspect
Walnuts & Pistachios)	Main climate hazard pattern	• Mean temperature increase • Stronger summer–autumn drought • Declining and less reliable water availability • Heavy rainfall
	Main cascading impacts	• Reduced slope stabilization and water regulation (Moos et al., 2023) • Increasing pest and disease pressure (e.g. pistachio very sensitive: (Kaiypovich Kenzhebaev et al., 2023) • Forest fire pressure (Zong et al., 2020) • Decreased forest health and decline in biomass (e.g. for juniper: Seim et al., 2016) • Decreased product quality (e.g. for walnuts: (Mahmoudian et al., 2021) • Seedling failure (Pozner et al., 2022)
	Main resulting impacts	• Weaker regeneration and reduced produce yield • Higher erosion, mudflow, and landslide risks (Assouline & Ben-Hur, 2006) • Declining protective ecosystem functions (water regulation and soil stabilisation)
Cross-cutting	Typical system context in the programme area	Connected mountain–foothill–valley landscape linking upper catchments, forests, pasture, rainfed cropland, and irrigated cropland
	Main geographic expression in the programme areas	• **Upper catchments and steep slopes:** reduced snow and glacier buffering and weaker runoff regulation • **Foothill and middle elevation:** stronger erosion, mudflow, and slope-instability risks under heavier rainfall • **Lower valleys and lowlands:** transmitted dry-season water stress and irrigation shortfalls • **Localized hot dry wind exposure** is concentrated mainly in the **southern / southwestern Southern Border Region** and the **western Fergana Valley**
	Main climate hazard pattern	• Mean temperature increase • Stronger seasonal imbalance in water availability • Intensifying summer–autumn drought • Heavy rain in foothill and upland areas • Localized hot dry wind
	Main cascading impacts	• Reduced upper-catchment water regulation (Sorg et al., 2012) • Less reliable downstream water supply (Sorg et al., 2012) • Reinforcing land degradation (Leal Filho et al., 2023) • Loss of vegetation cover and protective ecosystem functions (Straffelini et al., 2024) • Pressure shifts between pasture, forest, rainfed, and irrigated systems (Azarov et al., 2024)
	Main resulting impacts	• More unstable water availability • Higher erosion, mudflow, and landslide risks (in higher areas) • Stronger pressure on cropland, forests, and pasture • Reduced livelihood stability, food security, and resilience

Source: Own elaboration, 2026

Vulnerabilities

23. Climate vulnerability is driven by interactions between biophysical constraints and structural socio-economic and institutional limitations. Key factors include land degradation, constrained water availability, fragile ecosystems, limited access to finance and insurance, weak advisory support, patchy climate information, aging infrastructure, and fragmented governance of water, pasture, and forest resources. Together, these conditions increase sensitivity to climate hazards and constrain adaptive capacity.
24. The vulnerability profile differs across irrigated, rainfed, pasture, and forest systems, but several constraints recur landscape-wide, including limited investment capacity, weak technical support, insufficient climate information, and institutional weaknesses in land, water, and ecosystem management. The main vulnerability factors across land-use systems and cross-cutting dimensions are summarised in Table 2.

Table 2. Major vulnerabilities of each land-use system, as well as cross-cutting issues

Land-use System (Main Value Chain)	Key Targeted Vulnerability Factor(s)
Irrigated Annual Cropland (Seed Potato Value Chain)	• Crop variety selection (crop suitability) • Irrigation schemes outdated for current climate • Insufficient water-saving capacities • Insufficient fertilizer management • Insufficient pesticide management
Irrigated Annual Cropland (Horticulture Value Chain)	• Crop variety selection (crop suitability) • Use of water-intensive crops • Irrigation schemes outdated for current climate • Insufficient water-saving capacities • Insufficient plant protection
Irrigated Perennial Cropland (Orchard-based Fruit Value Chain)	• Use of water-intensive crops • Crop variety selection (crop suitability) • Irrigation schemes outdated for current climate • Insufficient water-saving capacities • Insufficient excess-water management • Limited erosion protection practices • Insufficient drainage practices • Insufficient protection practices (e.g. tree/shrub planting) • Insufficient plant protection
Rainfed Cropland (Wheat Value Chain)	• Insufficient soil protection • Insufficient soil fertility management • Crop selection • Insufficient fertilizer management • Insufficient pesticide management
Across Cropland	• Limited access to finance • Limited investment for climate-resilient land use • Crop variety selection • Limited erosion protection practices • Knowledge gaps (management/practices) • Insufficient excess-water management • Insufficient water-saving capacities • Irrigation schemes outdated for current climate • Insufficient protective storage capacities (harvest vulnerable to high moisture conditions) • Low value-added value chains
Pastures	• Overgrazing and pasture mismanagement • High livestock density • Limited pasture rotation • Insufficient pasture management • Under-resourced and overloaded pasture management • Insufficient pasture restoration and management • Unsustainable forest use • Type of vegetation species
Forests (Non-timber Forest Products Value Chain, Walnut & Pistachio)	• Land degradation and soil erosion • Insufficient protection of seedlings (low survival rates of tree plantations) • Limited enforcement of land-use regulations • Tree species composition (selection of tree species and forest composition) • Insufficient forest restoration and management

Land-use System (Main Value Chain)	Key Targeted Vulnerability Factor(s)
	• Unsustainable forest use • Insufficient protective storage capacities (harvest vulnerable to high moisture conditions) • Limited access to finance • Low value-added value chains
Cross-cutting Vulnerabilities	• Lack of climate information services • Limited use of climate information in decision-making • Insufficient land-use planning capacities and information base (e.g. limited geophysical soil analysis, use of GIS) • Lack of cross-sectoral coordination • Lack of transboundary landscape planning mechanisms • Low adoption of climate-resilient practices • Limited awareness of adaptation options • Limited technical support services • Limited access to finance (including limited and unattractive loans) • Limited investment for climate-resilient land use • Land degradation and soil erosion • Insufficient protection of soil, infrastructure, and vegetation • Limited enforcement of land-use regulations • Inflexible local water allocation disadvantaging downstream users

Source: Own elaboration, 2026

Other baseline interventions

25. Section 5.3 of Annex 2a provides an overview of the main projects and initiatives supported by different development partners, together with an assessment of potential synergies with the proposed programme. Most of these projects are confined to a single country, address only selected aspects of the AFOLU sectors' adaptation needs and are implemented predominantly in regions outside the programme's target areas. During the programme development, several implementing organisations and funding partners involved in these initiatives were consulted to inform and refine the programme design, minimise the risk of duplication, and identify opportunities for complementarity and cooperation during implementation. Relevant lessons learned from these interventions have also been incorporated into the programme design.
26. This programme is complementary and coherent with other GCF interventions in the region. In particular, it will build on lessons from CASP+ (FP233), where CIIP also acts as an EE, especially on national climate-informed planning, community-level climate-responsive plans, successful models in agriculture, forestry and livestock sectors, and approaches for monitoring and evaluating impacts, including mitigation impacts. It is also aligned with ADB's Glaciers to Farm project (FP283); while operating in different locations within the partner countries, coordination during the design phase has helped ensure strategic coherence and avoid overlap.

C.2. Economic context (max. 1,000 words)

Macroeconomic indicators that may impact programme feasibility

27. Macroeconomic conditions are supportive, but poverty, rural vulnerability, exposure to external shocks, and constrained public investment capacity remain important considerations. Across Central Asia, around 60% of the population lives in rural areas, while population growth increases pressure on natural resources. Kyrgyzstan, Tajikistan and Uzbekistan are lower-middle-income economies where agriculture remains important for livelihoods, particularly in programme areas. In Kyrgyzstan, GDP growth reached 6.2% in 2023 after 9% in 2022, while public debt declined from 49.2% of GDP in 2022 to 45.5% in 2023. Poverty remains significant at 33% under

the national definition. Agriculture accounted for 12% of GDP in 2021, underlining the importance of climate-resilient investment in rural livelihoods and production systems. In Kyrgyzstan, GDP grew by 6.2% in 2023, public debt declined to 45.5% of GDP, and poverty remained 33%. Agriculture accounted for 12% of GDP in 2021 and 25% of employment in 2022. Batken, Osh and Jalal-Abad account for around 53% of the population and 45% of employment, but only 22% of GDP, indicating comparatively low productivity and strong reliance of rural population on agropastoralism for subsistence.

28. In Tajikistan, GDP grew by 8.3% in 2023 and public debt fell to 43.8% of GDP, but vulnerability to external shocks and poverty remain significant. Agriculture accounts for around 25% of GDP and 60% of employment, and 74% of the population lives in rural areas. In Khatlon, 64% of workers are employed in agriculture, forestry and fishing and around 35% of the population lived in poverty in 2023, making resilience investment particularly important.
29. In Uzbekistan, GDP grew by 6% in 2023 and public debt remained moderate at 34.3% of GDP in early 2024. Agriculture, forestry and fisheries accounted for 24.3% of GDP, while irrigated agriculture uses 90% of water. Around half of the population lives in rural areas; in 2018, around 79% of the poor were rural. The Fergana Valley provinces of Andijan, Fergana and Namangan contain around one-third of the national population and have very high population densities, increasing pressure on land and water. Agriculture contributes roughly 36-41% of gross regional product in these provinces, while 63.9% of Surkhandarya's population lives in rural areas.

Policy and institutional environment

30. **Policy and institutional frameworks are broadly supportive, but implementation capacity remains uneven.** Climate strategies, sector mandates, and public institutions provide a basis for AFOLU action. However, Kyrgyz extension services are fragmented and integrated forest management planning is not institutionalised nationwide; Tajikistan has weaknesses in extension, forestry and land restoration implementation; and Uzbekistan, despite more advanced green finance reforms and restoration programmes, still faces gaps in data, technical support, disclosure, and practical application.
31. Regional platforms and strategies support cooperation on transboundary environmental and climate issues, but coordination across sectors, institutions and government levels remains limited. The regional rationale is particularly strong in the Fergana Valley, where interconnected border regions depend on climate-sensitive agriculture and natural resources and face shared pressures linked to land degradation, water stress, migration, food insecurity, and climate-related shocks.

Current industry demand and supply dynamics

32. **Climate-resilient investment is required regionally.** Across the countries, agriculture is highly exposed to land degradation, water stress and climate variability, while many rural producers lack investment capacity. In Kyrgyzstan, pasture degradation is intensified by overgrazing and weak governance; in Tajikistan, water stress and low household investment capacity constrain adaptation; and in Uzbekistan, dependence on irrigated agriculture and degradation of rangelands and forests limit resilience.

Status of access to climate finance

33. Overall, access to climate finance for AFOLU remains limited. Agricultural finance is available through banks, MFIs, NBFIs, leasing providers and development-partner credit lines, but products are often poorly suited to long-term climate-resilient investment. Key barriers include collateral and documentation requirements, limited pipeline preparation, high capital costs and insufficient technical support. Forestry and restoration depend heavily on state budgets and international partners, while carbon finance remains nascent.
34. In Kyrgyzstan, commercial banks, NBFIs, leasing providers and partner-supported green facilities finance agriculture, but eligibility, documentation and collateral constrain access. Forest and restoration finance from state resources, SFE revenues and international partners remains insufficient, and carbon finance is emerging.
35. In Tajikistan, banks and MFIs provide agricultural finance, but only 12.6% of USD 1.4 billion in loans was directed to agriculture and the average local-currency interest rate was 22.4%. Climate-relevant products remain limited. Forest and restoration finance relies mainly on government budgets, SFE revenues and international partners, while operationalising carbon finance remains difficult.

36. In Uzbekistan, agricultural finance includes domestic programmes, leasing and development-partner credit lines. A green finance taxonomy and Green Finance Platform strengthen the enabling environment, but collateral, tenor, data, technical support and pipeline constraints persist. Forestry and restoration funding remains inadequate, while carbon market mechanisms are advancing but not yet sufficient to support AFOLU transformation.
37. The programme can build on existing financing mechanisms. Kyrgyzstan has experience with asset-based revolving schemes through producer groups and cooperatives, where repayments replenish funds for further investments, as well as matching grants under donor- and state-supported programmes. Tajikistan has used matching grants to incentivise beneficiary co-financing for sustainable land management, and Uzbekistan has used them to encourage technology adoption. These experiences provide a basis for scaling financing approaches suited to climate-resilient investment.
38. The programme will build on existing financing mechanisms. Kyrgyzstan has experience with asset-based revolving schemes through producer groups and cooperatives, where repayments replenish funds for sustainability of financing cycles, as well as matching grants under donor- and state-supported programmes. Tajikistan has used matching grants to incentivise beneficiary co-financing for sustainable land management, and Uzbekistan has used them to encourage technology adoption. These experiences provide a basis for scaling financing approaches suited to climate-resilient investment.

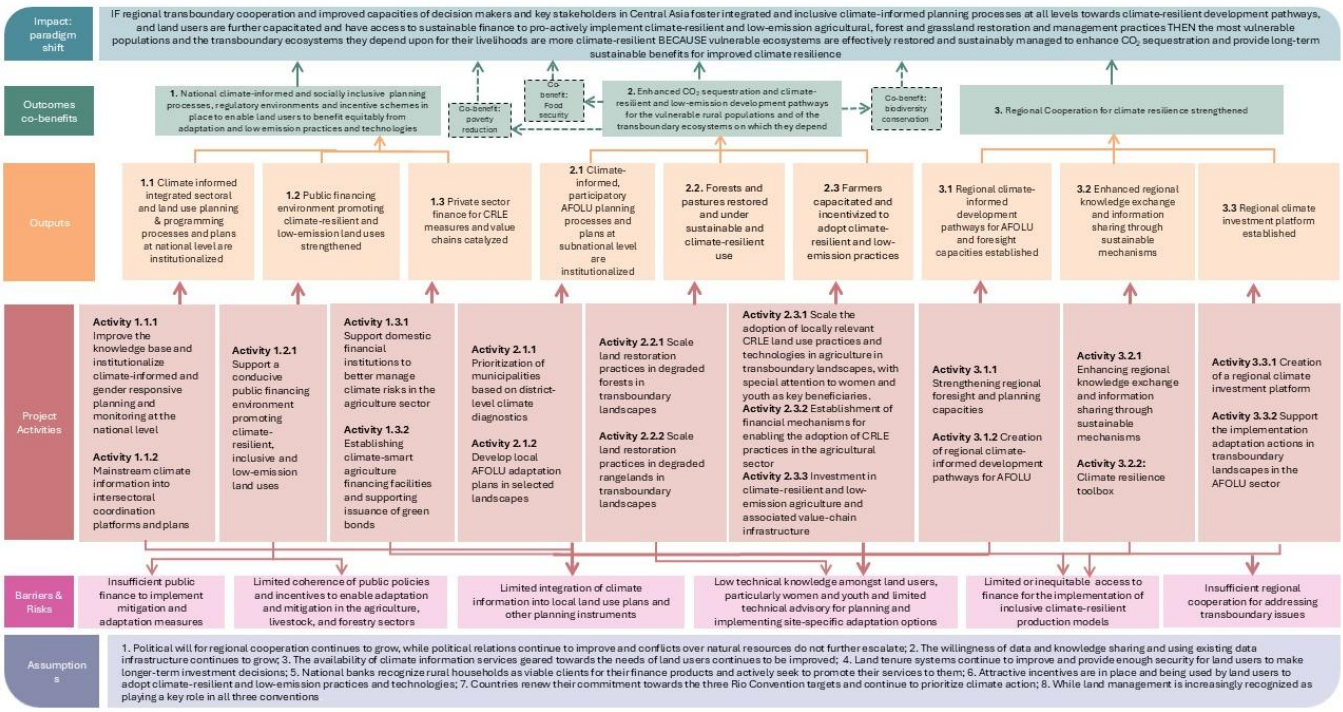
Market failures that justify the use of public financing

39. **Public concessional finance responds to persistent market failures, institutional constraints, and structural financing gaps.** AFOLU investments generate important positive externalities and public goods not fully reflected in private returns, including land restoration, improved water regulation, carbon sequestration, and resilience benefits. Regional economic losses from land and ecosystem degradation are substantial, estimated at around USD 0.4 billion in Kyrgyzstan, USD 0.12 billion in Tajikistan and several billion dollars in Uzbekistan over 2001–2020, with grassland degradation the largest cost. Information failures also reduce investment: weak advisory systems, limited knowledge of CRLE technologies and low capacity to structure and appraise investments constrain adoption. Coordination failures affect pastures, forests and fragmented value chains where outcomes depend on collective action.
40. **Structural financing frictions further limit private investment.** Many AFOLU investments have long payback periods poorly matched to the shorter maturities available in local financial systems. High collateral requirements exclude smallholders and rural enterprises, lending rates often exceed 20%, and foreign-currency lending creates additional risk where farm revenues are in local currency.
41. Institutional failures also remain important. Extension systems and pipeline-development support are weak, LFIs often lack experience in appraising climate-relevant investments, and forestry institutions face underfunding, weak local implementation capacity and limited private-sector participation.
42. Please see Annex 2a for details.

C.3. Theory of change (max. 1,000 words, max. 500 words for SAP)

43. The programme seeks to enhance the resilience of 1,046,062 people, to reduce or sequester 6.95 million tCO2e, and to ensure the sustainable management, conservation, or restoration of about 939,354 hectares of land in key transboundary landscapes.
44. Goal statement: **IF** regional transboundary cooperation and improved capacities of decision makers and key stakeholders in Central Asia foster integrated and inclusive climate-informed planning processes at all levels towards climate-resilient development pathways, and land users are further capacitated and have access to sustainable finance to pro-actively implement climate-resilient and low-emission agricultural, forest and grassland restoration and management practices **THEN** the most vulnerable populations and the transboundary ecosystems they depend upon for their livelihoods are more climate-resilient **BECAUSE** vulnerable ecosystems are effectively restored and sustainably managed to enhance CO2 sequestration and provide long-term sustainable benefits for improved climate resilience
45. The ToC diagram is presented below.

Figure 4: Theory of Change



Causal pathway of proposed interventions

46. The three outcomes form an integrated pathway towards climate-resilient and low-emission AFOLU sectors. Outcome 1 strengthens the enabling environment through climate-informed planning, coordination, data systems and climate finance capacities; Outcome 2 drives adoption of CRLE practices and technologies in priority landscapes through subnational planning, extension and targeted investments; and Outcome 3 strengthens regional cooperation through foresight, knowledge exchange and financing for transboundary adaptation actions.
47. Outcome 1 (Outputs 1.1-1.3) institutionalises climate-informed AFOLU planning and strengthens conditions for CRLE investment. It addresses barriers, e.g., fragmented climate, land and soil data, limited institutional capacity for climate-informed planning, and insufficient financial-sector readiness. Output 1.1 strengthens Hydromet data management, develops AFOLU-relevant climate information products and integrates these into national digital land information systems, supported by data-sharing protocols and capacity development. Output 1.2 strengthens public finance readiness through capacities for climate and carbon finance and by informing the repurposing of harmful subsidies towards climate-aligned incentives. Output 1.3 catalyses private finance by strengthening financial sector capacity, climate-smart agriculture (CSA) financing facilities, and green bond readiness.
48. Outcome 2 (Outputs 2.1-2.3) scales the adoption of CRLE practices and technologies in priority transboundary landscapes through a sequenced package of planning, capacity building, and investments. Key barriers addressed include subnational capacity to translate climate risks into implementable AFOLU plans, weak producer support systems, and insufficient access to affordable finance and investible CRLE business models. Output 2.1 supports transparent prioritisation of municipalities using climate diagnostics and the preparation and approval of participatory climate-informed AFOLU adaptation plans. Output 2.2 restores forests and rangelands and strengthens their sustainable, climate-resilient management through plans, technical assistance and restoration investments. Output 2.3 enables farmers and value-chain actors to adopt CRLE measures by operationalising e-PICSA, strengthening climate-informed extension services, and providing technical assistance and investment support for priority practices and technologies. Tailored financing mechanisms, pipeline development and operationalisation of the EIB credit programme strengthen access to finance and value-chain investment.
49. Outcome 3 (Outputs 3.1-3.3) deepens regional cooperation to sustain and scale CRLE transformation across Central Asia. It addresses limited foresight capacity, fragmented regional knowledge exchange, and insufficient coordination of finance for transboundary adaptation. Output 3.1 strengthens foresight and scenario-planning capacities and supports shared regional climate-informed development pathways, institutionalised through

training institutions and curricula. Output 3.2 strengthens regional knowledge exchange through the Central Asia Climate Information Portal, an AFOLU climate-resilience toolbox and regional expert pools. Output 3.3 establishes a regional climate investment platform and funding mechanism for joint adaptation actions, supported by technical assistance and investment grants.

50. The ToC assumes continued regional cooperation, better data management, improved climate services, secure land tenure, greater rural finance access, and sustained national climate commitments. Section F1 presents external risks.
51. Countries will experience the pathway with varying intensity according to their readiness, without altering the programme's overall logic; corresponding activity-level differentiation is described in Annex 2a, Section 7.

Barriers

52. The following barriers are hampering the transition to inclusive CRLE AFOLU sectors in the target regions (see Annex 2a for further details):
    - **Barrier 1. Insufficient public finance for mitigation and adaptation:** Public funding for climate action remains limited, creating large gaps in financing mitigation and adaptation priorities.
    - **Barrier 2. Limited policy coherence and misaligned incentives, in agriculture and forestry:** Policies and incentives in agriculture, forestry, and pasture remain largely productivity-focused and not aligned to countries' climate objectives, which can discourage climate action, and may promote maladaptive practices. Policymakers have limited knowledge of the most suitable options to shift finance flows towards climate objectives.
    - **Barrier 3. Limited integration of climate information into local land use plans, national sector plans and other planning instruments:** Weak processes for integration of climate information into land use planning and management, including a lack of remote sensing / GIS-based data and tools for monitoring land use change and weak data management and sharing systems across sectors and ministries as well as across countries. Limited capacities of regional and national experts from government, civil society and private sector to integrate climate information into decision-making, especially when it comes to land use planning and management.
    - **Barrier 4. Limited technical capacity, and advisory support, for site-specific adaptation:** Land users often lack practical advisory services and affordable, locally relevant information on climate impacts and adaptation options. Nature-based and climate-resilient business models are not widely understood or incentivised.
    - **Barrier 5. Limited access to finance for climate-resilient production models**: Smallholders and rural enterprises face persistent financing constraints, including limited collateral, weak credit histories, and low financial literacy. Financial institutions often lack the products and technical capacity needed to assess climate risks and provide climate-informed finance at scale, while the high cost of capital discourages longer-term investments.
    - **Barrier 6. Insufficient regional cooperation on transboundary environmental risks:** Regional cooperation on land use related climate risks remains limited, including weak coordination across borders, limited multi-stakeholder dialogue, and insufficient regional capacity for long-term planning and natural resource management.

C.4. Proposed project / programme (max. 2,500 words, max. 1,000 words for SAP)

53. The Feasibility Study (Annex 2a) provides a detailed programme description. Annex 13 covers mitigation boundaries, leakage, baselines, additionality and expected outcomes. E.2 provides the budget breakdown by activity and country.

Component 1: Enabling environment for climate-resilient and low-carbon AFOLU sectors at national level

54. Component 1 establishes the enabling environment for CRLE development in AFOLU sectors at national level. It strengthens climate-informed, cross-sectoral and multilevel planning, aligns public finance and incentives with climate commitments, and catalyses private finance through dedicated financing facilities and support to local

financial institutions (LFIs). These measures underpin Component 2 investments and Component 3 regional cooperation.

Output 1.1 Climate-informed integrated sectoral and land use planning & programming processes and plans at national level are institutionalised *(fully co-financed by BMZ)*

Activity 1.1.1: Improve the knowledge base and institutionalise climate-informed and gender-responsive planning and monitoring at the national level (GIZ)

55. This activity will strengthen the generation, integration and use of climate, land and soil information in AFOLU planning and monitoring, including improved data management, climate information products and digital land information systems. AI-enabled scenario functions will support consideration of land-use scenarios and trade-offs in government planning. Implemented early, it will provide the technical and institutional basis for local planning and investment under Component 2 and regional knowledge exchange under Component 3.

Action	Executing Entity
Institutional strengthening and improving Hydromet's data management capacities	GIZ
System-based co-creation of innovative, targeted climate information products for the AFOLU sectors	GIZ
Strengthening of digital land information systems at the national level	GIZ
Supporting a conducive environment for the use of digital tools and climate information in government-driven planning and policy processes	GIZ
Fostering capacities on climate-informed planning within sectoral and subnational institutions	GIZ
Institutionalising capacity-building on climate-informed planning	GIZ

Activity 1.1.2: Mainstream climate information into intersectoral coordination platforms and plans (GIZ) *(fully co-financed by BMZ)*

56. This activity will strengthen multisectoral and multilevel coordination for climate-informed AFOLU decision-making. Building on Activity 1.1.1, coordination mechanisms will link sector ministries, technical agencies and subnational actors to improve the use of climate information in cross-sectoral planning, investment programming and policy dialogue (see Annex 2a, section 7.1.1). Implemented in the early and mid-phases, it will create the institutional conditions for Components 2 and 3.

Action	Executing Entity
Strengthening of multisectoral and multiscale coordination for evidence-based, climate-informed cross-sectoral decision-making in the AFOLU sectors	GIZ

Output 1.2 Public financing environment promoting climate-resilient and low-emission land uses strengthened

Activity 1.2.1: Support a conducive public financing environment promoting climate-resilient, inclusive and low-emission land uses (GIZ)

57. This activity will strengthen the policy and institutional basis for aligning public finance with CRLE land-use objectives. It will strengthen climate finance capacities, including on carbon finance opportunities, improve access to suitable instruments, and support the identification and repurposing of subsidies harmful to climate outcomes, including through financial mechanisms under Output 2.3. Building on previous readiness support and Output 1.1, it will improve incentives and financing conditions for Component 2 investments.

Action	Executing Entity
Consolidate existing country climate investment platforms and strengthen the capacities of public institutions in climate finance	GIZ
Enhancing access to innovative climate finance	GIZ
Identification of subsidies that are harmful to climate adaptation and mitigation in the AFOLU sectors	GIZ
Supporting repurposing of subsidies that are harmful to climate adaptation and mitigation in the AFOLU sectors	GIZ

Output 1.3 Private sector finance for CRLE measures and value chains catalysed

Activity 1.3.1: Support domestic financial institutions to better manage climate risks in the agriculture sector (GIZ)

58. This activity will strengthen the capacity of LFIs to identify, assess and manage climate-related financial risks in AFOLU value chains and finance CRLE investments. Training will cover environmental, social and climate risk screening, client assessment, portfolio monitoring and the financial characteristics of climate-resilient production systems, supporting integration into lending and investment appraisal. Implemented in the early and mid-phases, it will prepare institutions for CSA financing and green bond support under Activity 1.3.2 and strengthen their capacity to originate and scale CRLE finance.

Action	Executing Entity
Development of training module for financial institutions	GIZ
Rollout of training programme	GIZ

Activity 1.3.2: Establish climate-smart agriculture financing facilities and support issuance of green bonds (GIZ)

59. This activity will support selected LFIs to establish climate-smart agriculture financing capabilities and readiness for thematic or green bond issuance. Support will cover partner selection, design and operationalisation of CSA financing facilities, and transaction-oriented green or thematic bond frameworks, including investment screening, eligibility criteria, reporting and monitoring. Implemented in the mid-phase, it will build on Activity 1.3.1, complement Output 1.2 and create financing pathways for CRLE adoption.

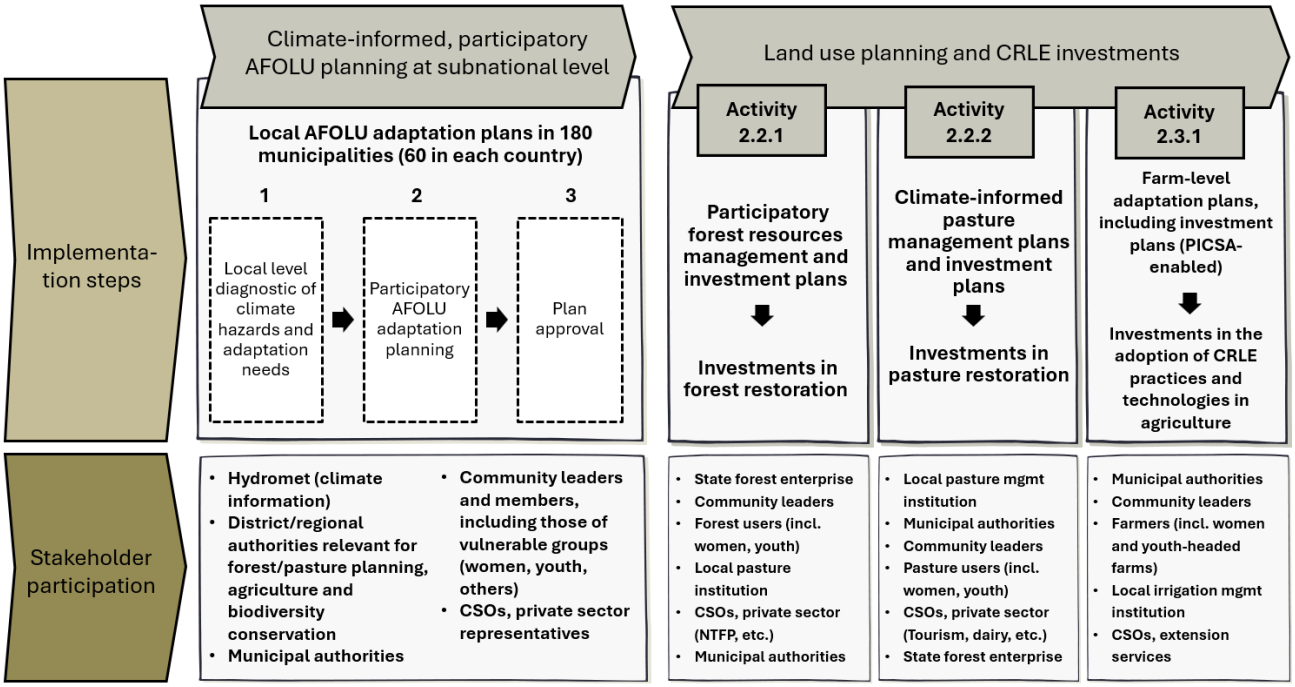
Action	Executing Entity
Financial institution selection	GIZ
Climate-smart agriculture facility design and establishment	GIZ
Green bond transaction support	GIZ

Component 2: Promotion and adoption of climate-resilient and low-emission practices and technologies at local level

60. Component 2 supports behavioural change and local adoption of CRLE practices and technologies through participatory climate-informed planning, capacity development, technical assistance, and investments in forests, pastures, agriculture and related value chains, using financing mechanisms tailored to each land-use system (Figure 5). Building on Component 1, it translates enabling conditions into action in selected landscapes and generates a future finance pipeline. Local stakeholders will identify and validate priorities and participate in implementation and monitoring. The Feasibility Study and SEP provide further detail.
61. Forest and pastures investments will be identified and prioritised through locally prepared and validated management plans and annual investment priorities. Local multi-stakeholder groups or community governance structures, including resource users, women, youth, vulnerable groups and CSOs, will inform decisions on sites, measures, access and resource-use arrangements, sequencing and monitoring. Agricultural investments will use tailored financing mechanisms based on beneficiary demand. Investment plans and financing applications will be assessed against predefined investment categories and technical, environmental and social (E&S) criteria, with differentiated matching contributions for smaller and vulnerable actors. Targeted outreach, technical assistance

and application support will prioritise women, youth and other vulnerable groups. National EEs will ensure consistency with local priorities, budgets and programme requirements.

Figure 5: Sequence of participatory climate-informed planning and investments in CRLE practices and technologies



Output 2.1 Climate-informed, participatory AFOLU planning processes and plans at subnational level are institutionalised

Activity 2.1.1: Prioritisation of municipalities based on district-level climate diagnostics (ARIS, CIIP, NCECC)

62. This activity will select the municipalities within the 39 pre-selected districts in Kyrgyzstan, Tajikistan, and Uzbekistan through a harmonised, transparent, and participatory process using climate risk diagnostics and relevant local information. Implemented at programme onset, it will ensure that subsequent local planning, restoration, and agricultural investment support under Outputs 2.2 and 2.3 targets locations with high climate relevance and implementation readiness. Prioritisation and eligibility criteria are detailed in Annex 2a, Section 7.2.1.

Action	Executing Entities
Screening and scoring of target municipalities	ARIS, CIIP, NCECC
Validation of target municipalities	ARIS, CIIP, NCECC

Activity 2.1.2: Develop local AFOLU adaptation plans in selected landscapes (ARIS, CIIP, NCECC)

63. This activity will support the preparation and approval of climate-informed AFOLU adaptation plans in selected municipalities. Building on Activity 2.1.1, local climate diagnostics and participatory planning will identify priority risks, adaptation measures and investment needs, including coordination with neighbouring and cross-border authorities where relevant (Annex 2a, Section 7.2.1). Implemented at programme onset, plans will be developed in 180 municipalities, providing the framework for Outputs 2.2 and 2.3 and institutionalising locally-led, cross-sectoral adaptation planning through harmonised, country-compliant procedures.

Action	Executing Entities
Local-level diagnostic of climate hazards and adaptation needs	ARIS, CIIP, NCECC
Participatory AFOLU adaptation planning	ARIS, CIIP, NCECC
Approve climate-informed AFOLU adaptation plans at local level	ARIS, CIIP, NCECC

Output 2.2 Forests and pastures restored and under sustainable and climate-resilient use

Activity 2.2.1: Scale land restoration practices in degraded forests in transboundary landscapes (MoWRAPI, CIIP, NCECC)

64. This activity will support climate-informed restoration and management of degraded forests through landscape approaches linking livelihoods, productive land use, inclusive governance and local implementation. Building on Output 2.1, it will combine participatory forest management planning, community implementation, technical assistance and investment grants for restoration and reforestation. Indicative support includes fencing, seedlings and tree seeds, nursery equipment, small watering infrastructure, monitoring equipment and related services. Implemented in the mid-phase, it is expected to bring 58,000 hectares under CRLE management and 542,000 hectares under restoration and improved ecosystems, linking forest restoration with adjacent pasture and agricultural measures.

Action	Executing Entities
Development of training materials for intermediary partners	MoWRAPI, CIIP, NCECC
Training of intermediary partners	MoWRAPI, CIIP, NCECC
Development of climate-informed participatory forest resources management plans including investments	MoWRAPI, CIIP, NCECC
Formalisation of community investments	MoWRAPI, CIIP, NCECC
Technical assistance in forest restoration	MoWRAPI, CIIP, NCECC
Investments in forest restoration	MoWRAPI, CIIP, NCECC

Activity 2.2.2: Scale land restoration practices in degraded rangelands in transboundary landscapes (ARIS, CIIP, NCECC)

65. This activity will support climate-informed restoration and sustainable management of degraded rangelands in transboundary landscapes. Building on Output 2.1, it will support pasture management planning, technical assistance and investment grants. Indicative support includes climate-resilient forage seeds, fencing, water points and related works, small machinery and access improvements, and monitoring and reporting equipment. Country-adapted approaches will remain participatory and transparent. Implemented in the early and mid-phases, the activity is expected to bring 800,000 hectares under CRLE management and 1.81 million hectares under restoration and improved ecosystems, supporting integrated management across forests, pastures and agricultural land.

Figure 6. Process for the development of climate-informed pasture management plans



Action	Executing Entities
Development of training material for technical advisory partners and intermediary partners	ARIS, CIIP, NCECC
Training of the technical advisory partners and intermediary partners	ARIS, CIIP, NCECC
Development of climate-informed pasture management plans including investments	ARIS, CIIP, NCECC
Technical assistance in pasture restoration	ARIS, CIIP, NCECC
Investments in pasture restoration	ARIS, CIIP, NCECC

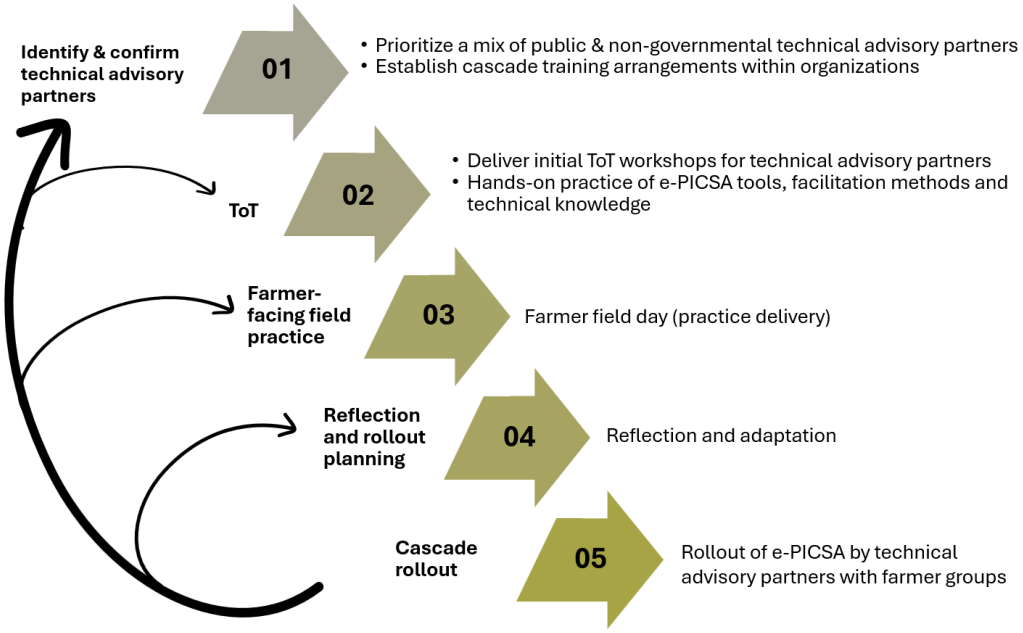
Output 2.3 Farmers capacitated and incentivised to adopt climate-resilient and low-emission practices

Activity 2.3.1: Scale the adoption of locally relevant CRLE land use practices and technologies in agriculture in transboundary landscapes, with special attention to women and youth as key beneficiaries (GIZ, MoWRAPI, CIIP, NCECC)

66. This activity will support adoption of CRLE agricultural practices and technologies in selected transboundary landscapes. Building on Output 2.1, it will combine PICSA and e-PICSA-based extension, technical assistance, and support to identify and cost priority investments. e-PICSA will deliver climate-informed advisory services at scale through trained national organisations. The activity is expected to support 71,813 producers across the three countries and cover over 69,000 hectares. Eligible measures include no-till seeding, crop rotation and soil cover, climate-resilient seeds and seedlings, improved orchard and greenhouse management, irrigation efficiency, protective nets and post-harvest practices. Implemented in the mid- and later-phases, it will translate climate information and local plans into viable farm and value-chain investments and create a pipeline under Activities 2.3.2 and 2.3.3.

Action	Executing Entities
Adjustment of PICSA to regional conditions	GIZ
Operationalisation of e-PICSA	GIZ
Development of training material for climate-informed extension services and training of extension services	GIZ
Implementation of PICSA in the selected municipalities	MoWRAPI, CIIP, NCECC
Technical assistance for adoption of climate-resilient and low-emission land use practices and technologies in agriculture	MoWRAPI, CIIP, NCECC
Investments in the adoption of CRLE practices and technologies in agriculture	MoWRAPI, CIIP, NCECC

Figure 7: e-PICSA cascading delivery model



Activity 2.3.2: Establishment of financial mechanism for enabling the adoption of CRLE practices in the agricultural sector (GIZ, MoWRAPI, CIIP, NCECC)

67. This activity will establish an agricultural finance mechanism across the programme countries to support CRLE practices and technologies in priority agricultural value chains, planned under sub-activities 2.3.1.6 and 2.3.3.3. It will cover eligible rainfed and irrigated agriculture investments, with particularly strong demand anticipated from irrigated systems. Indicative investments include no-till seeding, climate-resilient seeds and seedlings, water-efficient irrigation, orchard improvements, protective nets, and post-harvest technologies. A Matching Grant Mechanism in each country will target the most vulnerable smallholders, including producer groups, cooperatives and community-based organisations, with contributions differentiated by beneficiary type and financial capacity. An EIB credit programme will provide MSMEs concessional loan financing under Activity 2.3.3. In Kyrgyzstan, No-Till Adoption Accelerators will complement these instruments through asset-based revolving support for smallholders adopting no-till wheat production in rainfed systems. Eligible regulated microcredit organisations will facilitate access to inputs, machinery and tailored extension services.
68. The agricultural finance mechanism, i.e., matching grants, EIB credit programme, and Kyrgyz No-Till Adoption Accelerators, will operate through standard procedures, which define target groups, eligibility and selection criteria, beneficiary contributions and financing ratios, eligible uses of funds, application and appraisal processes, approval arrangements, environmental and social requirements, disbursement conditions, and monitoring and verification. Matching grant applications will undergo eligibility verification, investment appraisal, confirmation of beneficiary contributions and E&S risk categorisation. Separate Accelerator procedures will cover microcredit organisation selection and capitalisation, aggregation of farmer demand, repayable inputs, equipment leasing, post-harvest repayment, extension, monitoring and reinvestment. The EIB credit programme will follow arrangements and requirements under Activity 2.3.3. Annex 2a provides details.

Action	Executing entities
Replicating and scaling No-Till Adoption Accelerators in the Kyrgyz Republic	GIZ
Establishing matching grant mechanism for CRLE technology adoption and value chain development	MoWRAPI, CIIP, NCECC

Figure 8: Indicative steps for matching grants



Activity 2.3.3: Investment in climate-resilient and low-emission agriculture and associated value-chain infrastructure (GIZ, MoWRAPI, CIIP, NCECC, MoFs)

69. This activity will support investment-readiness and targeted investments in CRLE agricultural production and associated value chains. Building on Activities 2.3.1 and 2.3.2, it will combine business development support for producer groups, cooperatives, and MSMEs with post-harvest, processing, storage, and value addition investments. Indicative investments include small-scale processing and storage equipment, cold storage where justified, packaging and quality improvement equipment, and related technical services. It will also develop bankable proposals for financing through the EIB credit programme. Participating LFIs will screen, appraise and approve MSME applications under their lending procedures and EIB requirements for eligibility, safeguards, monitoring and reporting. Eligibility will require operation in eligible value chains and programme areas, technical and financial readiness, applicable E&S compliance, and agreement to monitoring and verification. Implemented in the mid- and later phases, it will improve the viability and scalability of CRLE investments by linking production changes to value-chain opportunities.

Action	Executing entities
Development of investible business models and support for producers, producer groups, co-operatives and MSMEs	GIZ
Operationalisation of EIB credit programme in the Kyrgyz Republic, Tajikistan and Uzbekistan	MoFs
Value chain investments	MoWRAPI, CIIP, NCECC

Component 3: Regional cooperation

70. Component 3 strengthens regional cooperation on CRLE development in AFOLU sectors across Central Asia through strategic foresight, shared development pathways, knowledge exchange, and a regional climate investment platform that translates common priorities into transboundary action and future climate finance. Kazakhstan and Turkmenistan will benefit from technical advisory through BMZ co-financing.

Output 3.1 Regional climate-informed development pathways for AFOLU and foresight capacities established *(fully co-financed by BMZ)*

Activity 3.1.1: Strengthening regional foresight and planning capacities (GIZ)

71. This activity will strengthen strategic foresight and scenario-planning capacities for climate-informed AFOLU decision-making across Central Asia. It will support partner selection, stocktaking and megatrend analysis, institutionalisation of a regional training package, and capacity building for decision-makers and young leaders. Implemented in the early and mid-phases, it will underpin regional pathways under Activity 3.1.2 and links with national planning and investment under Components 1 and 2.

Action	Executing Entity
Selection of national and regional partner institutions	GIZ
Stocktaking and megatrend analysis	GIZ
Development of a training package on strategic foresight capacity	GIZ
Institutionalisation of the training package	GIZ
Development of foresight capacities	GIZ
Foresight capacity development of young leaders	GIZ

Activity 3.1.2: Creation of regional climate-informed development pathways for AFOLU (GIZ) *(fully co-financed by BMZ)*

72. This activity will support the participatory development of regional climate-informed AFOLU pathways, based on strategic foresight and scenario planning. National and regional stakeholders will develop plausible scenarios and identify CRLE development pathways. Implemented in the early phase, it will build on Activity 3.1.1 and provide a

shared regional reference for national planning, knowledge exchange and future investment prioritisation under Output 3.3.

Action	Executing Enity
Scenario-based pathways development	GIZ

Output 3.2 Enhanced regional knowledge exchange and information sharing through sustainable mechanisms

Activity 3.2.1: Enhancing regional knowledge exchange and information sharing through sustainable mechanisms (GIZ)

73. This activity will strengthen regional and bilateral exchange, peer learning and dialogue among programme stakeholders through demand-driven knowledge and exchange events and support to regional partners' institutional and financial sustainability. Implemented throughout the programme, it will complement Output 3.1 and Activity 3.2.2, promote uptake of programme lessons, tools and approaches across Central Asia, and reinforce links to national implementation and future financing.

Action	Executing Entity
Knowledge and exchange events	GIZ
Enhance sustainability of knowledge exchange	GIZ

Activity 3.2.2: Development of a climate resilience toolbox (GIZ)

74. This activity will strengthen the Central Asia Climate Information Portal (CACIP), hosted by CAREC, by expanding AFOLU climate resilience content and access to relevant tools, data and guidance. It will support a climate resilience toolbox, improved portal interface and search functions, and regional expert capacity. Implemented in the mid-phase, it will complement Component 1 and Activity 3.2.1 as a sustainable regional entry point for climate information, planning tools and adaptation resources.

Action	Executing Entity
Strengthen content and user interface of the Central Asia Climate Information Portal	GIZ
Strengthen regional expert pools on CACIP resources	GIZ

Output 3.3 Regional climate investment platform established

Activity 3.3.1: Creation of a regional climate investment platform (GIZ)

75. This activity will establish a permanent regional climate investment platform to translate shared transboundary priorities into investible actions and strengthen the region's ability to attract and coordinate climate finance. It will define the platform's mandate, governance, institutional role and resource base through consultations with country representatives, regional institutions and CSOs, including vulnerable-group representatives; establish it within a suitable regionally mandated institution; develop institutional capacity; and prepare an investment roadmap. Implemented in the early and mid-phases, it will build on Output 3.1 and complement Output 3.2 as a permanent vehicle for prioritising and mobilising regional AFOLU climate finance. Sustainability will rest on robust governance, country ownership, resource mobilisation capacity and institutional anchoring.

Action	Executing Entity
Definition of the platform's structure and role	GIZ
Formal establishment of the regional climate investment platform	GIZ
Institutional and staff capacity building	GIZ
Creation of an investment roadmap	GIZ

Activity 3.3.2: Support the implementation of adaptation actions in transboundary landscapes in the AFOLU sectors (GIZ)

76. This activity will establish a dedicated funding mechanism with EUR 3 million in seed funding for a grant window. It will support climate adaptation action plans by interested national and devolved public institutions, private sector

and CSOs, provide implementation technical assistance, and finance selected actions through investment grants alongside beneficiary co-investments. Investments will be climate-justified, gender-sensitive, additional to Component 2 and demonstrate clear adaptation benefits. Indicative support includes transboundary restoration, improved protected area management, climate-related monitoring and capacity development. Implemented in the mid-and later phases, it will operationalise the Activity 3.3.1 platform and demonstrate how shared priorities translate into cross-border investments and learning.

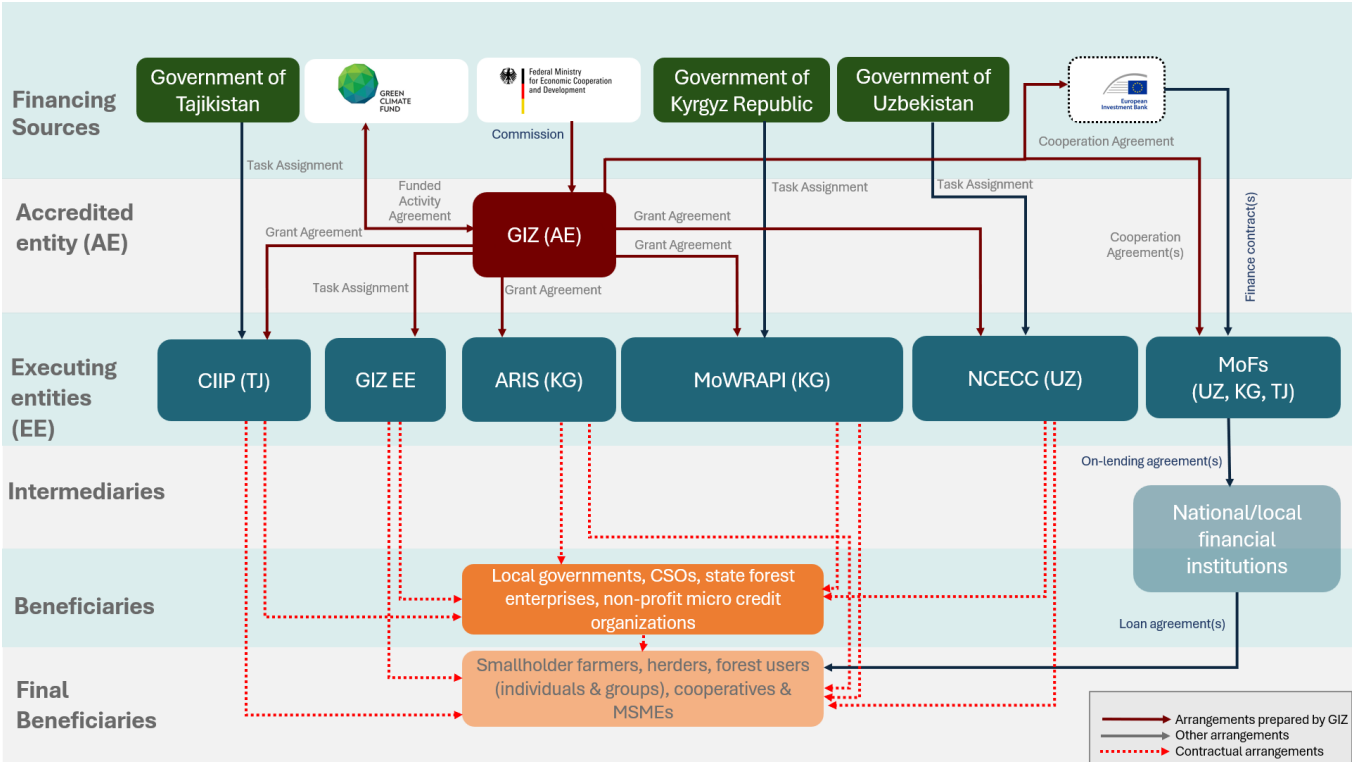
Action	Executing Entity
Establishment of a funding mechanism under the regional investment platform	GIZ
Development of climate adaptation action plans in transboundary landscapes	GIZ
Technical assistance for climate adaptation in transboundary landscapes	GIZ
Investments in adaptation actions in transboundary landscapes	GIZ
Monitoring and regional learning	GIZ

C.5. Implementation arrangements (max. 1,500 words, plus diagrams, max. 750 words, plus diagrams for SAP)

Role of GIZ as Accredited Entity (AE)

77. GIZ will assume oversight responsibility of the programme, as defined in the Accreditation Master Agreement (AMA) between the GCF and GIZ. GIZ will administer programme proceeds on behalf of the GCF and will provide oversight, guidance, and quality assurance of the involved Executing Entities (EE) through its relevant head office units, as well as accompanying monitoring, and ensure regular reporting.
78. GIZ will enter the following legal arrangements (see Figure 9):

Figure 9: Legal arrangements



- The commission by the German Federal Ministry for Economic Cooperation and Development (BMZ) to implement the GCF programme.
- The Funded Activity Agreement (FAA) between GCF and GIZ as the basis for the transfer of GCF proceeds to GIZ.

- Four grant agreements (i.e., subsidiary agreements) with the respective Executing Entities based on GIZ's standard operating procedures for grant agreements; also, to contractually secure government co-financing contributions.
    - In order to implement the subsidiary agreements, MoWRAPI, ARIS, NCECC, CIIP will conclude cooperation agreements with the final beneficiaries to implement the grant mechanisms for pasture and forest investments. For the matching grants, MoWRAPI, NCECC and CIIP will conclude cooperation agreements with the final beneficiaries.
- Cooperation agreement with EIB to contractually secure the envisioned co-financing contribution.
- Three cooperation agreements with the respective Ministries of Finance in Kyrgyzstan, Tajikistan, and Uzbekistan, acting as Executing Entities to contractually ensure the implementation of the EIB co-finance. Downstream agreements between MoFs and LFIs will include provisions for loan agreements between LFIs and final beneficiaries.

79. Additionally, there will be an internal task assignment from GIZ AE to GIZ EE for the implementation of the programme. GIZ EE will conclude cooperation agreements with MCOs for the roll-out of the Accelerators.

Role of GIZ as Executing Entity (EE)

80. GIZ has been operating in Central Asia since the early 1990s based on Development Cooperation Framework Agreements and currently employs around 400 staff members, with approximately 350 being national staff. GIZ's technical assistance in the green sector encompasses ecosystem management, land management, sustainable agriculture, transboundary climate risk management, and support for the green economy and private sector development.
81. GIZ will lead and provide overall management of the Technical Assistance (TA) to the programme at regional, national and subnational levels. It will be responsible for:
    - Managing the programme budget assigned to GIZ as EE.
    - Monitoring and evaluation implementation.
    - Liaising with the GIZ Country Offices in Uzbekistan, Kyrgyz Republic and Tajikistan regarding budget and finances, monitoring and reporting, staff and contracts, and procurement.
    - Reporting to the German Embassy and BMZ regarding Germany's financial contributions and overall progress of the programme implementation.
    - Coordinating implementation with the other EEs, co-financing partners, counterparts, and other relevant donors, and projects operating in the same technical and/or geographical area, as applicable.
    - Coordinating with, and reporting to, the NDAs and relevant line ministries.
    - Liaising with and reporting to the Programme Steering Committees (PSCs).
    - Supporting the establishment and management of the Programme Management Units (PMUs).
    - Concluding further grants as required (e.g. with CAREC, GGGI, University of Reading).

National Executing Entities

82. Besides GIZ, the following EEs have been identified for the programme implementation:
    - In the Kyrgyz Republic, the EE will be the Community Development and Investment Agency of the Kyrgyz Republic (ARIS) and the Ministry of Water Resources, Agriculture and Processing Industry of the Kyrgyz Republic (MoWRAPI).
    - ARIS was established by presidential Decree to attract investments to overcome poverty, develop and support private entrepreneurship, strengthen the activities of local self-government bodies and strengthen local communities and community organisations. ARIS works with rural populations, supporting projects aimed at improving infrastructure and social services to the population, supporting rural and urban businesses, and improving interaction between local communities and government agencies. It is a DAE to the GCF since March 2024. MoWRAPI through its agricultural project implementation unit (APIU) is responsible for the management of investments from multilateral banks in the agricultural, and broadly in the land-use, sector. This unit holds extensive experience in managing investments from the World Bank (WB) and IFAD, among others.
    - In Tajikistan, the Centre for Implementation of Investment Projects under the Government of the Republic of Tajikistan (CIIP) will be the EE. The CIIP is responsible for the development and implementation of climate

investment and environmental programmes in Tajikistan. It implements projects financed by the WB, GEF and the Adaptation Fund, among others. The CIIP is accredited as a DAE since July 2024.

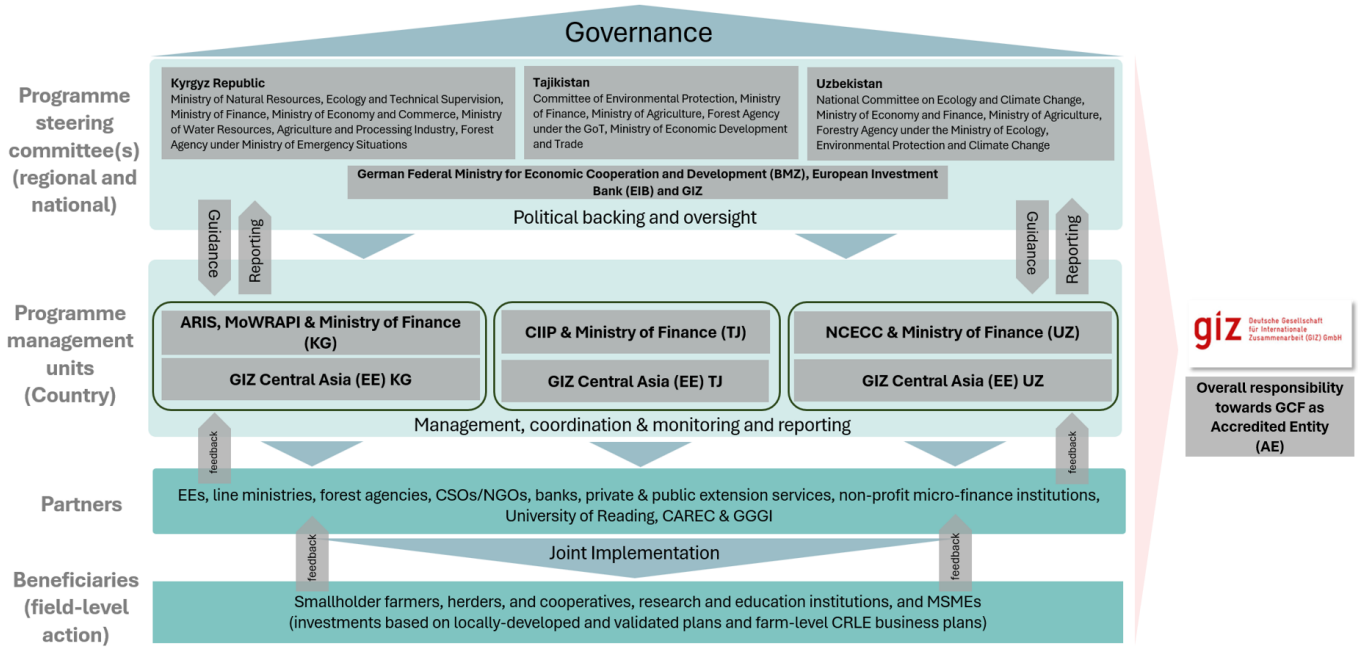
- In Uzbekistan, the National Committee on Environment and Climate Change of the Republic of Uzbekistan (NCECC) will be the EE. The NCECC is a government institution responsible for environmental protection, climate action, and sustainable natural resource management. It oversees the implementation of projects in the environmental sector, funded by donors and multilateral banks, including the GCF, the WB, and ADB.
- The Ministries of Finance in the Kyrgyz Republic, Tajikistan and Uzbekistan will serve as EEs to provide concessional loan finance from the EIB co-financing to local financial institutions.

83. The above-mentioned national EEs have successfully passed the AE's enhanced due diligence. The outcomes of the capacity assessment can be found in Annex 2a (section 8).

Governance and Management

84. Figure 10 presents the programme's steering structure, which is managed through three complementary bodies: regional Programme Steering Committee, national Programme Steering Committees and national Programme Management Units.
85. The regional Steering Committee will serve as the programme's overarching governance body, comprising representatives of the same core institutions participating in the National Steering Committees of each participating country. The regional Steering Committee will provide strategic guidance and oversight for the overall programme, take joint decisions on regional priorities, and play a central role in guiding the implementation of all regional relevant measures, especially under Component 3 (Regional Cooperation).
86. Each participating country will establish a national Steering Committee to provide strategic guidance and oversight for the country-specific measures. The national Steering Committee will oversee national planning, implementation, and country-level resource allocation, ensuring alignment with national priorities and effective coordination among national and sub-national stakeholders.
87. Its members include the NCECC, the Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic, the Committee of Environmental Protection of the Republic of Tajikistan, the three key national ministries/institutions overseeing the programme, other relevant ministries including the Ministries of Finance, BMZ, EIB and GIZ in its capacity as the AE.

Figure 10: Programme governance and management



88. Decisions of the PSCs will be taken by consensus. Key responsibilities of the PSCs will be to:
    - Provide overall guidance for programme implementation.

- Provide feedback and validation of annual work plans, in consideration of annual reports and programme evaluations.
- Ensure programme progress and coherence with the (evolving) international and national policy context.
- Stay informed of programme adherence with the Environmental and Social Management Plan (ESMP), the Gender Action Plan (GAP) and the Stakeholder Engagement Plan (SEP).
- Support the coordination of programme activities across different line ministries and between the private and public sectors, and civil society.

89. Based on the guidance and decisions of the PSCs, the Programme Management Units (PMUs) will serve as the main body for management and implementation of the programme in each country. The PMUs will focus on programme coordination, operational planning, and adaptive and financial management. The PMUs include the national EE(s), and the respective GIZ Central Asia country team. Finally, programme implementation will be carried out by the technical teams of the respective EEs, along with their implementation partners. If needed, thematic working groups may be established to facilitate in-depth coordination of cross-cutting activities, such as those related to safeguards, gender or interventions at municipality level.
90. Additionally, the PMUs will have the following responsibilities:
    - Implementing the decisions and recommendations of the PSCs.
    - Coordinating and ensuring timely execution of activities by each EE as outlined in the Annual Operating Plan, regularly updating the PSC and fostering a common understanding between the EE regarding the theory of change and its integration across all programme activities.
    - Supervising technical and budgetary programme progress, and aligning with approved plans, budgets and indicators.
    - Promptly mobilising technical expertise from EE and other stakeholders upon identification of programme implementation issues.
    - Facilitating harmonious collaboration with stakeholders for each of the programme components and identifying the tasks and additional requirements that must be addressed in relation to the programme.
    - Facilitating information flow from the programme beneficiaries to the PSCs.
    - Implementing and monitoring the ESMP, GAP and SEP.
    - Overseeing the progress of indicators managed by each EE in the monitoring system.
    - Assessing and consolidating insights and experiences from the programme.
91. Member institutions of the PMUs will include:
    - GIZ, MoWRAPI, ARIS, CIIP, NCECC, Ministries of Finance (Executing Entities).
92. As and when necessary or desirable, extended PMU meetings can also be organised, involving PMU members and additional invitees - from local stakeholders and civil society - to address specific technical, geographical, or sectoral issues.
93. The PMUs will consist of a dedicated team of professionals from each EE including finance managers, gender, ESS and M&E specialists, and technical advisors.
94. Supporting documents to this section include Annex 3, Annex 4, Annex 5, and Annex 6a.

C.6. Environmental and social risk assessment (max. 750 words)

95. **ESS category and rationale:** the programme is classified as Category B, with risks of "potential limited adverse environmental and/or social risks and impacts that individually or cumulatively, are few, site-specific, reversible, and manageable through established mitigation measures." The ESIA confirms the classification, given that the programme supports planning, capacity building, technical assistance, and small to medium-scale CRLE investments. It excludes major infrastructure, irreversible land conversion, physical displacement, and significant, cumulative, or unprecedented impacts. Most ESS risks are medium or low, with ESS 7 rated negligible.
96. **ESS instruments:** the programme is guided by a set of safeguards documents, including ESIA (Annex 7a) and ESMP (Annex 7b), complemented by SEP (Annex 9b), GA/GAP (Annex 10), programme-level Grievance Redress Mechanism (GRM), and exclusion list. The ESIA assesses environmental, social, labour, biodiversity, cultural heritage, SEAH, stakeholder engagement, institutional, and sub-project risks in the Kyrgyz Republic, Tajikistan, and Uzbekistan. The ESMP translates these findings into an operational system, covering staffing, responsibilities,

monitoring, reporting, capacity building, the GRM, SEAH-specific procedures, and sub-project mitigation measures. These elements are integrated into the programme ESS management and monitoring system.

97. **Risk management by programme stage:** during preparation, activities and financial mechanisms were screened against GCF ESS requirements, national regulations, and GIZ requirements. Stakeholders were consulted and safeguards staffing, budgets, the SEP, GAP, GRM, and ESMP were built into the programme design. During implementation, each activity and sub-project will be screened through an E&S screening tool, with locally appropriate mitigation measures where needed. EEs, implementation partners, contractors, and beneficiaries will follow applicable safeguards, codes of conduct, labour and operational health and safety (OHS) requirements, stakeholder engagement obligations, SEAH measures, and monitoring. The programme will track mitigation, grievances, stakeholder feedback, and emerging risks and take course correction where necessary.
98. **Financial mechanisms (sub-projects) and oversight:** The programme includes several financial mechanisms supporting CRLE forest, pasture restoration, and agriculture, and associated value-chain investments, and transboundary adaptation actions. GCF proceeds will be administered by GIZ and national EEs, primarily for goods and services, e.g., equipment, inputs, and technical support, to eligible beneficiaries rather than unrestricted cash transfers. ESIA, ESMP and FS (Annex 2a) provides an overview of the roles and responsibilities for GIZ, ARIS, MoWRAPI, CIIP, and NCECC, and their ESS specialists, M&E staff, contractors, and partners across screening, preparation, approval, implementation, monitoring, reporting, and corrective action. Applications will be assessed against the exclusion list, eligibility criteria, and E&S screening tool. Sub-projects inconsistent with GCF Category B/C, e.g., involuntary resettlement and critical habitat conversion, will be excluded. Residual risks will be managed through planned mitigation, monitoring, consultation, and reporting.
99. **EE capacity, monitoring, reporting:** national EEs have relevant sectoral expertise and donor-project experience, but gaps remain in systematic screening, social risk management, grievance follow-up, and international ESS practice. The ESMP addresses these through regional and national ESS/M&E advisors, environmental and social/gender specialists, and ad-hoc expertise. Country PMUs will implement and monitor the ESMP, GAP, SEP, and GRM. GIZ, as AE, will retain oversight responsibility, annual ESS and APR reporting to the GCF.
100. **Stakeholder engagement, GRM, and disclosure:** preparation consultations with national and local partners, technical specialists, and beneficiaries informed the ESS-related plans and design. During implementation, the SEP will guide continuous and gender-responsive engagement, e.g., local-language information, women and youth consultations, transparent beneficiary selection, and arrangements for vulnerable groups. A programme-level GRM will accept multiple submission types, including anonymous complaints, and include registration, case processing, resolution, escalation, monitoring, and referral of severe or unresolved cases to GIZ HQ and the GCF IRM. Safeguards instruments will be disclosed online and locally made available before programme activities begin.
101. **SEAH risk assessment and survivor-centred response:** GCF SEAH risk assessment tool was applied to integrate mitigation, reporting, and response measures into programme arrangements. Risks may arise during staff, partner, extension-provider, community, and beneficiary interactions, e.g., training, beneficiary selection, and field-level support. Measures include GIZ's zero-tolerance approach, codes of conduct, awareness raising, training, GAP implementation, gender-responsive engagement, and a dedicated SEAH protocol within the GRM. SEAH grievances will be handled confidentially and separately from other complaints, with survivor-centred response planning, referrals, and escalation options through GIZ.
102. **Indigenous Peoples and culturally appropriate engagement:** ESIA and stakeholder engagement confirm that IPs are not present in the programme area. Nevertheless, the programme will apply culturally sensitive and inclusive engagement measures for pastoralists, highland communities, minority language groups, women, youth, and other vulnerable groups.
103. Table 3 presents the summary of E&S risk assessment and mitigation. Details are in Annexes 7a and 7b.

Table 3: E&S risk assessment & mitigation

ESS	E&S Risks	Broad mitigation measures
ESS 1: Assessment and management of environmental and social risks and impacts	Medium Risk category. Environmental and social risks may occur mostly in relation to labour rights and SEAH, pollution generation, biodiversity loss, ineffective stakeholder engagement, and grievance resolution. However, these risks are localised and temporary, and they can be managed by adequate mitigation measures. Potential risks may occur due to insufficient institutional capacities and inter-agency coordination to monitor, report, and manage E&S risks.	• Operationalise, implement, and monitor the ESMP, SEP, GAP, GRM, as well as the application of the exclusion list, including through annual safeguards monitoring, stakeholder consultations, GRM tracking, ESMP updates, supervision missions, and APR reporting. • Allocate budget to recruit and maintain dedicated ESS/gender/M&E staff in GIZ and EEs. Train project staff and launch awareness campaigns on SEAH avoidance. • Require contractual safeguards and codes of conduct and risk-based compliance monitoring.
ESS2: Labor and working conditions	Medium Risk category. Risks relate to variable labour law enforcement and OHS practice in rural/agricultural work, including unsafe working conditions, informal or seasonal labour, unfair wages, working hours, non-discrimination, worker representation, PPE use, prevention of child labour, and forced labour, and SEAH during training, extension, contracted, or community activities.	• Apply national law, ILO principles, GIZ contractual requirements and codes of conduct to staff and partners. • Provide OHS training, including PPE and safe machinery/transport procedures. • Raise awareness of forced and child labour prohibitions; maintain worker/community grievance channels, including SEAH-specific channels. • Monitor contractors and partners through PMU and EE ESS staff. • Implement a Gender Action Plan (GAP) by training staff, conducting SEAH prevention campaigns and adopting a Code of Conduct that prohibits SEAH.
ESS3: Resource efficiency and pollution prevention	Medium Risk category. Risks include inefficient resource use, pressure on water supplies, outdated water, energy, and waste infrastructure, agricultural pollution, waste infrastructure, agricultural pollution, waste from small-scale works or equipment, and misuse or indirect promotion of agrochemicals under irrigated agriculture and climate variability.	• Build capacity on CRLE land use and safe, sustainable farming practices, including reducing chemical inputs through adapted planting, soil cover, mulching, composting and soil-conservation measures. • The project will not support the direct procurement of agrochemicals. • Strengthen resource efficiency and pollution prevention by training partners and authorities, ensuring professional technical design and construction, promoting efficient irrigation and energy use and avoiding hazardous materials through proper waste segregation and safe disposal.
ESS4: Community health, safety and security	Medium Risk category. Restrictions on civil freedoms may limit people's ability to raise concerns. Community health and safety risks could arise from the improper handling of agricultural chemicals. However, given the small scale of activities and with mitigation measures in place, overall community health, safety and security risks are expected to remain low.	• Prohibit the direct procurement and provision of chemicals and prevent pollution and accidents through training farmers and extension staff in safe, climate-resilient and low-chemical practices. • Ensure health and safety through personal protective equipment (PPE), signage, safe water system design and reduced reliance on agrochemicals. • Maintain transparent communication through inclusive consultations, clear eligibility criteria and a widely publicised, locally GRM. • Establish and enforce a grazing schedule in coordination with local pasture authorities and consultations with communities.
ESS5: Land acquisition and involuntary resettlement	Low Risk category. No physical displacement is anticipated, and changes to project land use will be voluntary. Only minor, temporary land-use changes may occur. The risk of minor economic displacement will be mitigated.	• Prohibit involuntary land acquisition and any activities involving physical displacement. Mitigate minor economic impacts through fair procedures as per national laws. • Provide tailored financial literacy training and targeted outreach to women managing smaller plots to ensure equitable access. Provide accessible GRM.

ESS	E&S Risks	Broad mitigation measures
ESS6: Biodiversity conservation and sustainable management of living natural resources	Medium Risk category. Although the project does not fund major infrastructure or land conversion, biodiversity screening indicates the presence of threatened species, including the critically endangered Fergana Even-toed Gecko near Shorsu village in Uzbekistan, and protected areas in the wider project zones, creating a risk of indirect impacts if activities are not properly managed. These risks are considered manageable through strong screening, clear exclusion criteria and mitigation.	• Strengthen capacity and awareness on biodiversity-friendly CRLE agriculture practices and peer learning. • Roll out the project exclusion list and require all supported practices to use locally adapted, native, or non-invasive species. • Assess biodiversity risks during E&S screening for any field-level interventions.
ESS7: Indigenous peoples	N/A	N/A
ESS8: Cultural heritage	Low Risk category. Given the small scale of physical interventions, the absence of activities in known heritage sites, and the application of screening and chance finds procedures, potential impacts on cultural heritage in all three target countries are expected to be very limited.	• Screened proposed sites for cultural heritage risks, in consultation with local authorities and elders. • Exclude known cultural or religious sites from intervention areas. • Develop and apply A Chance Finds Procedure. • Train contractors, local partners and community workers on cultural heritage sensitivity and chance finds before works begin.

Source: Own elaboration, 2026

C.7. Gender assessment and action plan (max. 500 words)

104. **Gender instrument:** to ensure that this programme is designed, financed, implemented and monitored in a gender-responsive and socially inclusive manner, a comprehensive Gender Assessment and Gender and Inclusion Action Plan has been developed (Annex 10). These outputs comply with the GCF's Gender Policy, as well as GIZ's Gender Strategy (2025–2029).

105. **Gender Assessment approach:** the Gender Assessment considers the multiple, and often interrelated, factors that influence the status of gender inequality and social exclusion in each of the three target countries, within the context of specific land-use practices and climate change. This analysis combines desk-based research with extensive feedback from stakeholder consultations (comprising multipurpose national workshops, Focus Group Discussions with women-only, men-only, and youth representatives, and Key Informant Interviews with women activists and representatives from relevant Women and Family Affairs Departments) conducted in February 2026. Gender relations, delineation of roles and responsibilities as they pertain to land use and climate change responses, challenges, and potential gender-responsive programme measures are discussed and recommended – culminating in a programme-wide Gender and Inclusion Action Plan (GAP). Because gender dynamics vary slightly across the countries, with some likely to exceed certain targets and others requiring more context-appropriate milestones, the GAP sets firm programme-wide commitments to be achieved over the 7-year duration, while indicating nuanced differences per country.

106. **Key findings:** underlying these targets are several common gendered challenges observed across the three countries. Widespread male migration has significantly increased women's responsibilities for farm operations and household food security in many districts of Uzbekistan, Tajikistan and the Kyrgyz Republic. This has resulted in women performing both traditionally male and female roles. Despite this, socio-cultural norms persist in many areas, where women still lack authority, formal labour recognition, land rights, and access to the technical skills and technology to perform their duties effectively and with fair remuneration and recognition. These challenges are being exacerbated by climate change impacts, ranging from drought and excessively high temperatures to water scarcity all of which affect local land use productivity and broader natural resource management.

107. The programme design addresses the identified gender gaps, amongst others, through:

Table 4: Overview of gender gaps and key measures

Gender gap or barrier to inclusion	Potential measures to address gaps and barriers
Women **lack access to sufficient agricultural extension support** and **technical knowledge** on **climate resilient and sustainable practices**. In instances where such support is offered, it is often unsuitable for women (due to mobility, time or societal constraints).	• **Gender-sensitive consultation** and training processes, including separate women-only spaces and trusted local intermediaries. • **Technical capacity development support to female farmers** to bridge the knowledge gap between women and men – **offered at times and locations that are suitable for women** (i.e. compatible with the timing of their domestic responsibilities, with minimal travel requirements). • **Improved access** to irrigation technologies, quality seeds, and agricultural inputs **for women and youth.**
Women are **underrepresented in decision-making bodies** relating to land use planning and natural resource management – typically due to deep-rooted patriarchal norms, lack of confidence and/or workload demands. Women also have **limited access to land ownership, machinery, and larger plots**, with men typically controlling decisions related to land use and benefiting from patriarchal inheritance norms.	• **Awareness-raising among male community members** to promote inclusive decision-making. • **Capacity development support for women** to empower and encourage them to participate in land and water management discussions • **Community-wide engagement** on the relevance of national laws on equal rights and opportunities for men and women within the context of the AFOLU sector, discussing, for example, topics such as equitable land tenure, inheritance and asset ownership legislature, and gender-sensitive land use planning processes
Women's **role in land-use value chains is largely informal** and field-based, with the majority of post-harvest, marketing and sales decisions taken by male family members.	• **Strengthen women and youth-led cooperatives and producer groups** (replicating/scaling up the numerous successful examples in each country) for better risk management and market access.
Women have **lower access to suitable finance** than men, due to a lack of collateral, limited awareness of available financial instruments, high interest rates, or ineligibility due to the informal nature of their work. Where state grants and international programmes provide support, often this is insufficient for purchasing modern technologies.	• Expand **successful financial schemes** already offered through certain government and banks and **facilitate access to affordable and appropriate financial mechanisms** such as small grants, revolving funds, or savings groups. • Provide **financial literacy training** to female farmers, and women- and youth- led enterprises. • Provide **training to banking institutions** on how best to engage with, and support, women and youth customers.
Lack of trust in external activities – and potential gendered challenges that transpire as a result of these – some preferring not to participate at all.	• **Ensure non-discriminatory hiring** and programme practices, establish quotas for women and youth representation in committees and programme structures. • In keeping with the programme's commitment to adopting a **gender-responsive and survivor-centered GRM**, a **trusted female representative** (for example, from the local Mahalla) will act as an intermediary to support female complainants in with submitting cases
Youth migration is generally high, limiting local labour availability. There is a need to incentivise and offer greater opportunities in local land use practice value chains to retain and upskill youth.	• Youth engagement must include **targeted programme orientation, demonstrations, and inclusive opportunities** to participate through upskilling and exposure. This includes utilising their unique skills (such as agricultural marketing through social media platforms, logistics management and accessing online agricultural and climate information).

Source: Own elaboration, 2026

108. **Implementation arrangements:** The GAP is embedded in programme implementation rather than treated as an add-on. It is overseen by and implemented by dedicated staff, including regional ESS specialist, regional M&E specialist, national ESS & gender specialists as well as M&E specialists. In addition, GIZ gender focal points will support the implementation of the GAP. The GIZ specialists will closely collaborate with ESS & gender experts of the EEs responsible for activity delivery. Monitoring will use sex- and youth-disaggregated indicators, participation targets, as well as gender-responsive planning requirements. A gender-sensitive, survivor-centred grievance redress mechanism, safeguarding approach and SEAH risk management system will support safe reporting, confidentiality, referrals and adaptive management throughout implementation.

109. **Key-gender related results:** table 5 summarizes the programme's key gender-related results (see further details in Annex 10):

Table 5: Gender targets

Area	Indicator	Target
Core beneficiary outcome	**Female beneficiaries with improved access** to livelihoods, food security and land-use based economic opportunities	**Direct:** KG: 143,055 TJ: 215,184 UZ: 169,676 **Indirect:** KG: 217,342 TJ: 169,018 UZ: 358,156
Ensure meaningful female participation in project workshops and trainings	% **of participants** in workshops, trainings and relevant regional events that are female	30%
Climate assessments, AFOLU action plans, land-use management plans and investments incorporate gender-responsive actions	% **of gender-sensitive and -responsive climate assessments**, AFOLU action plans, land-use management plans and investments	100%
Inclusive finance to support increased access to, or establishment of, affordable finance mechanisms for women and youth	**Technical assistance provided to domestic FIs** to identify, scale-up or replicate successful finance products for women and youth	100% of selected FIs
Targeted business development and investment-readiness support to identified women and youth-led smallholders, producer groups, cooperatives, and MSMEs	% **of farms or farming enterprises** receiving support under activity 2.3.3 that are **women or youth-led** or comprise majority women and youth	15%

Source: Own elaboration, 2026

C.8. Country ownership and engagement with stakeholders (max. 500 words)

110. The programme has been developed in close coordination with the NDAs as well as with line ministries and institutions responsible for climate policy, AFOLU sectors and climate finance, and with CAREC for regional activities. It is aligned with the regional adaptation strategy, national climate commitments, NDC priorities and relevant national adaptation planning frameworks.

Alignment with national strategies, NDCs, and national adaptation planning:

111. Across the three countries, the programme institutionalises climate-informed planning, strengthens incentives, and scales CRLE practices in line with national adaptation priorities. It supports reversing land degradation, strengthening forestry and ecosystem resilience, improving cropland productivity through diversification, climate-resilient varieties, agroforestry and conservation agriculture, restoring degraded pastures,

improving sustainable grazing, and increasing water-use efficiency. It also supports countries' commitments on land degradation neutrality, climate-resilient agriculture, rangeland management, and forestry.

112. In the Kyrgyz Republic, the programme supports NDC 3.0 adaptation objectives for agriculture, forests, biodiversity, soil restoration, water-saving technologies, adaptive farming, pasture rehabilitation, and sustainable forest management. In Tajikistan, it contributes to NDC measures on green technologies, agroforestry, conservation agriculture, soil protection, improved pasture and forest management, climate information access, afforestation, reforestation, assisted regeneration, and pasture productivity. In Uzbekistan, the programme aligns with NDC 3.0 objectives to expand forest cover, improve agricultural resource efficiency, apply modern water-saving technologies, increase yields through drought-resistant varieties, rehabilitate degraded pastures, and restore vegetation. It also strengthens LFI readiness to mobilise climate finance through green bonds.

113. The programme is also aligned with national strategies and sectoral plans. In the Kyrgyz Republic, the updated NDC provides a basis for planning, climate finance mobilisation and alignment with national development and sectoral priorities. In Tajikistan, adaptation is anchored in the National Strategy for Adaptation to Climate Change to 2030 and related development and sector strategies, which provide entry points for climate-informed AFOLU planning and implementation. In Uzbekistan, the programme contributes to national priorities on green economy transition and climate-resilient land and water management. A full assessment of alignment with country priorities is provided in Feasibility Study (Annex 2a).

114. **Role of NDA:** NDAs played a central role in ensuring alignment with national priorities and coordinating with relevant line ministries and stakeholders during programme design, including identification of EEs and implementing partners.

115. **Engagement process:** to enhance country ownership and country-driven programming, GIZ carried out extensive multi-stakeholder consultations during funding proposal development, which began in July 2025. From October 2025 to April 2026, GIZ and national partners consulted 1,323 individuals from more than 273 institutions across government, international and regional organisations, civil society, and private and financial sectors. Building on consultations during the concept note stage from February 2024 to March 2025, engagement included bilateral and group exchanges, interviews, focus group discussions, and national and regional workshops in the three countries. The process concluded with a regional validation workshop in Tashkent on 1 April 2026 to confirm the programme design, intervention logic, financial mechanisms, and implementation arrangements.

116. The programme will continue to engage all relevant stakeholders as outlined in the SEP (Annex 9b).

C.9. Project/programme closure and sustainability of impacts (max. 500 words)

117. The programme is designed to sustain climate impacts and co-benefits through local, financial, institutional, and regional mechanisms. At national level, climate-informed AFOLU planning, multisectoral platforms and the alignment and repurposing of public incentives with national and regional climate commitments will integrate climate considerations into routine planning, investment prioritisation and policy implementation.

118. At local level, participatory planning, strengthened extension services and enhanced capacities of producers and land users will support continued adoption of CRLE practices. Financial sustainability will be promoted by institutionalising CRLE agricultural finance within participating LFIs. Activities 1.3.1 and 1.3.2 will establish the systems, safeguards, climate-risk screening, and reporting needed to manage CRLE portfolios. Dedicated products, procedures and responsibilities developed under the CSAFF, together thematic and green bond support, will enable LFIs to continue expanding lending through their own resources or capital-market funding.

119. Matching grants will be time-bound instruments addressing upfront costs and affordability constraints. Benefits will continue through the productive use of supported assets and practices, including higher productivity, resource efficiency, resilience and income stability. In Kyrgyzstan, No-Till Adoption Accelerators will continue through repayment and reinvestment cycles managed by the selected MCOs, with repayments financing subsequent procurement cycles and fees covering operational costs.

120. At regional level, sustainability will be reinforced through knowledge management, foresight, regional exchange, CACIP resources and the regional climate investment platform. Embedded in a suitable regional institution and supported by a cross-country steering committee and secretariat, the platform will develop a pipeline of multi-country initiatives and mobilise finance. Programme-financed seed capital will demonstrate the model, while management, future capitalisation and partnership development will gradually transfer to the host institution.

121. The programme is expected to reduce or sequester 6,953,950 tCO_2e over its lifespan and support the sustainable management, conservation and/or restoration of 939,354 hectares. Institutional and policy benefits are expected to continue beyond programme closure, while Component 2 investments will generate resilience benefits over their operational life through improved ecosystem condition, water retention, soil health, diversified livelihoods and stronger adaptive capacity.

122. Economic and financial sustainability is detailed in Annex 11b. Components 1 and 3 primarily generate public goods through improved investment targeting, public expenditure, regional coordination and reduced climate-related losses. Component 2 can generate beneficiary-level financial returns, although concessional support is required to overcome barriers faced by smallholders, cooperatives and rural MSMEs. The programme has an ENPV of EUR 372.7 million, ERR of 14.6% and is expected to mitigate 6.95 million tCO2eq over its lifespan at EUR 5.16/tCO2eq for GCF finance and EUR 13.49/tCO2eq including co-finance. Around EUR 15.5 million will be leveraged through beneficiary matching contributions.

123. Ownership and maintenance of durable assets will rest with recipient institutions or beneficiaries with adequate capacity. Beneficiaries will maintain matching-grant equipment; the relevant MCO will maintain Accelerator equipment; SFEs will maintain forestry investments; and pasture management institutions will maintain pasture-related assets. Knowledge products, training materials, planning tools and information and monitoring systems will be integrated into existing institutional mandates.

124. A detailed handover plan will define ownership, operation, maintenance and funding responsibilities.

D. RESULTS AND IMPACT				
D.1. GCF Impact level: Paradigm shift potential (max 600 words)				
Assessment Dimension	**Current state (baseline)**		**Potential target scenario (Description)**	**How the project/programme will contribute (Description)**
	Description	**Rating**		
Scale	Climate risks are not systematically considered in AFOLU planning, prioritisation and investment programming across administrative levels. Climate, land use/cadastral, soil, pasture and vulnerability information is fragmented and not routinely embedded in standard planning procedures; digital planning tools (including satellite data and AI-enabled modules) are not consistently available or used. At local level, participatory adaptation planning and climate-informed advisory services are not scaled, and adoption of CRLE practices and restoration actions is hampered by limited capacities, and limited access to finance.	Low	Climate-informed AFOLU planning and implementation is institutionalised across the three countries: national and subnational institutions routinely apply integrated climate/land/soil information and digital tools to drive prioritisation, investment packages and monitoring; LAPA-based local adaptation planning and PICSA/e PICSA enabled extension services are implemented at scale; and financing mechanisms support widespread adoption of CRLE practices/technologies and forest/pasture restoration. This contributes to increasing the resilience of 1,046,062 people, the sustainable management/ restoration of 939,354 ha, and a mitigation impact of 1.68 million tCO_2e.)	Output 1.1 strengthens Hydromets and line agencies to institutionalise climate-informed planning by integrating climate information, vulnerability indicators, land use/cadastral and soil/pasture data into standardised procedures and national digital platforms, including climate layers, satellite monitoring and AI-enabled scenario modules, supported by legal/procedural foundations for data exchange and routine use. Output 2.1–2.3 scale action locally by institutionalising climate-informed subnational planning (LAPA-based diagnostics and participatory plans), linking plans to restoration and CRLE investment packages, and scaling PICSA/e PICSA-enabled extension services and adoption support for producers, producer organisations, and MSMEs. Financing mechanisms support implementation at scale: No-Till Adoption Accelerators (Kyrgyz Republic), matching grants (three countries), investment grants for restoration, climate-smart agriculture facilities and EIB-linked credit further increase financing available for CRLE adoption and value-chain investments. The Accelerators in the Kyrgyz Republic support repeated financing cycles based on repayment and reinvestment, while matching grants and concessional loan programmes support co-financed investments in CRLE practices and technologies by producers, producer groups, cooperatives and MSMEs alongside the EIB credit programme. Support to climate-smart agriculture facilities, thematic bond issuance will strengthen the capacity of financial institutions to identify, structure and finance CRLE investments over time.

Replicability	Planning and advisory tools are often project-based rather than embedded in government systems; decision-support tools are not standardised or widely accessible; and financial institutions have limited capacity and internal systems to originate and finance CRLE projects. Regional learning and coordination are limited, hampering cross-country replication in transboundary contexts.	Medium	Standardised planning procedures, training packages, digital tools and financing approaches are replicated beyond initial target municipalities and across additional landscapes within the three countries, and adapted by other Central Asian countries through regional cooperation platforms. Replication extends across geographies, institutions and financing approaches (public, private and regional mechanisms), supporting broader adoption of CRLE land use and resilient value chains.	Training materials and methodologies for climate-informed planning and advisory are institutionalised through training-of-trainers. Digital platforms, climate layers and toolkits developed under Output 1.1 are designed for extension to additional geographies and users. LAPA-based participatory adaptation planning (Output 2.1) and PICSA/e PICSA packages (Output 2.3) provide repeatable methodologies for new municipalities. On finance, domestic FIs can replicate CSA facility design elements supported under Output 1.3, while No-Till Adoption Accelerators, matching grants and investible pipeline development (Output 2.3) provide scalable approaches. Regional replication is accelerated (Output 3.2), and by shared regional AFOLU development pathways and foresight capacity building (Output 3.1) that countries can downscale into national contexts. With regard to the financing mechanisms under output 2.3, the Accelerator in the Kyrgyz Republic provides a tested mechanism that can continue through further repayment and reinvestment cycles and can be adapted in similar local contexts. Matching grants and EIB-credit programmes support demonstration and uptake of CRLE technologies, practices and business models that can be replicated by other producers and can help build a pipeline for future investment. Support to domestic financial institutions under Output 1.3 is intended to strengthen internal systems, procedures and reporting approaches that can be applied to future CRLE and CSA portfolios beyond the initially supported transactions.
Sustainability	Planning and advisory tools are often project-based rather than embedded in government and training systems; decision-support tools are not standardised or widely accessible; and financial institutions have limited	Low	Programme results persist beyond the programme period through durable institutions, routines and financing mechanisms: climate-informed planning and monitoring are embedded in government systems; training and advisory systems continue	Sustainability is built through institutionalisation of key processes and enabling access to finance in the medium term. Outputs 1.1 and 2.1 embed climate-informed planning as routine practice through standard procedures, strengthened coordination platforms, and procedures for data exchange and the responsible use of satellite data and AI tools in planning and policy processes. Outputs 2.2 and 2.3 sustain change at the local level through enhanced capacities, technical assistance, and locally owned management/investment plans for forests and pastures, complemented by extension systems that support translating

	capacity and internal systems to originate, assess and report CRLE/CSA pipelines. Regional learning and coordination are intermittent, limiting cross-country replication in transboundary contexts.		delivering LAPA/PICSA-based approaches; restoration and CRLE investments are maintained through local capacities and agreements; programme-supported financing approaches leave behind lasting institutional capability, operational models, and financed assets that continue to support CRLE investment and replication beyond the programme period. In particular, the operations of the No-Till Adoption Accelerators in the Kyrgyz Republic continue through repayment and reinvestment cycles, while matching grant-supported assets and technologies remain in productive use by beneficiaries after programme completion. Regional cooperation and investment coordination mechanisms remain operational to support transboundary landscapes and shared risks.	climate information into operational decisions for producers. The programme's financing mechanisms under Output 2.3, contribute to transformational change through differentiated sustainability pathways. The No-Till Adoption Accelerators in the Kyrgyz Republic are designed to continue operating beyond the programme through beneficiary repayments and reinvestment of principal by the MCO, with operating costs covered through minimal fees and management arrangements and linked local service-provider networks. The sustainability of matching grant-financed interventions lies in the continued use and maintenance of assets by the beneficiaries contributing to the persistence of mitigation and adaptation and on the demonstration effects they have that can support wider adoption and potentially future investment. Support to local financial institutions under Output 1.3 is intended to embed internal capacity for climate risk management, pipeline origination, eligibility screening, safeguards application, and portfolio-level reporting, thereby improving the ability of participating institutions to develop and finance future CRLE investments beyond the programme-supported transactions. In addition, bond-related support is designed to embed thematic issuance processes within internal bank systems, thereby reducing transaction costs for future issuances and supporting longer-term market development contributing to the programme's exit strategy. Regionally, sustainability is expected to derive primarily from strengthened cooperation mechanisms, shared knowledge resources, and institutionalised capacity. The long-established Regional Environmental Centre for Central Asia (CAREC), with its regional mandate, provides a strong foundation for sustainability by fostering long-term regional cooperation through recurring platforms such as the annual Central Asia Climate Change Conference (CACCC) and maintaining regional knowledge infrastructure, including the Central Asia Climate Information Portal (CACIP), which supports shared data access and continuous knowledge exchange.

D.2. GCF Outcome and Co-benefit level

D.2.1. Standardized Indicators (Quantitative Indicators)

(IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered

Provide the total GHG emissions reduced, avoided or removed/sequestered (tCO2eq) as a result of GCF support.

Unit					Tonnes of CO_2-equivalent
Means of Verification (MoV)	**Baseline**	**Target**			**Assumptions / Note**
		Mid-term	**Final target**	**Lifetime**	
• GHG monitoring database platform • Survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	277,642	1,271,826	6,953,950	Beneficiaries, communities, and SFEs adopt the technologies and practices promoted by the programme leading to emissions reductions and removals. See annex 13a for details.

(IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered

Provide the total GHG emissions reduced, avoided or removed/sequestered (tCO2eq) as a result of GCF support, disaggregated by result area.

Unit					Tonnes of CO_2-equivalent
Means of Verification (MoV)	**Baseline**	**Target**			**Assumptions / Note**
		Mid-term	**Final target**	**Lifetime**	
• GHG monitoring database platform • Survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	277,642	1,271,826	6,953,950	Beneficiaries, communities, and SFEs adopt the technologies and practices promoted by the programme leading to emissions reductions and removals. See annex 13a for details.
Disaggregation by: Result Areas (Mitigation)	**Baseline**	**Mid-term**	**Final target**	**Lifetime**	**Assumptions / Note**
Forestry and land use	0	277,642	1,271,826	6,953,950	See above.

(IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered

Provide the total GHG emissions reduced, avoided or removed/sequestered (tCO2eq), disaggregated by Country.

Unit					Tonnes of CO_2-equivalent
Means of Verification (MoV)	**Baseline**	**Target**			**Assumptions / Note**
		Mid-term	**Final target**	**Lifetime**	
• GHG monitoring database platform • Survey/questionnaire	0	277,641	1,271,826	6,953,950	Beneficiaries, communities, and SFEs adopt the technologies and practices promoted by the

• Programme M&E • Annual Performance Reports • Evaluation reports					programme leading to emissions reductions and removals. See annex 13a for details.
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Lifetime**	**Assumptions / Note**
Kyrgyzstan	0	154,217	695,844	4,015,852	See above.
Tajikistan	0	72,802	339,744	1,955,157	See above.
Uzbekistan	0	50,622	236,238	982,941	See above.

Forestry and land use

(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices				
Provide the total degraded or converted ecosystems under restoration (ha).				
Unit				**Hectares**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	281,806	939,354	Beneficiaries, communities, and state forest enterprises adopt the technologies and practices promoted by the programme leading to increased resilience. Numbers are obtained by multiplying the total area of forest and pasture in the selected districts by (1) the expected area of these land use systems in the to-be selected municipalities within these districts and (2) by an adoption rate of climate-resilient and low-emission management practice. Average farm size of EIB loan supported MSMEs.

(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices				
Provide the total degraded or converted ecosystems under restoration (ha), disaggregated by country.				
Unit				**Hectares**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	281,806	939,354	Beneficiaries, communities, and state forest enterprises adopt the technologies and practices promoted by the programme leading to increased resilience. Numbers are obtained by multiplying the total area of forest and pasture in the selected districts by (1) the expected area of these land use systems in the to-be selected municipalities within these districts and (2) by an adoption rate of climate-resilient and low-emission management practice.

Disaggregation by: Project Countries	Baseline	Mid-term	Final target	Assumptions / Note
Kyrgyzstan	0	143,914	479,712	Mid-term: forest restoration: 10,934; afforestation: 150; reforestation: 150; pasture: 126,262; agriculture: 6,417 Final: forest restoration: 36,448; afforestation: 500; reforestation: 500; pasture: 420,874; agriculture: 21,391
Tajikistan	0	88,611	295,371	Mid-term: forest restoration: 390; afforestation: 165; reforestation: 165; pasture: 77,355; agriculture: 10,537 Final: forest restoration: 1,300; afforestation: 550; reforestation: 550; pasture: 257,849; agriculture: 35,122
Uzbekistan	0	49,281	164,271	Mid-term: forest restoration: 5,412; afforestation: 42; reforestation: 42; pasture: 37,059; agriculture: 6,727 Final: forest restoration: 18,039; afforestation: 140; reforestation: 140; pasture: 123,530; agriculture: 22,423

(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices

Provide the total degraded or converted ecosystems under restoration (ha), disaggregated by land type.

Unit			Hectares
Means of Verification (MoV)	**Baseline**	**Target**	**Assumptions / Note**
		Mid-term / **Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	281,806 / 939,354	Beneficiaries, communities, and state forest enterprises adopt the technologies and practices promoted by the programme leading to increased resilience. Numbers are obtained by multiplying the total area of forest and pasture in the selected districts by (1) the expected area of these land use systems in the to-be selected municipalities within these districts and (2) by an adoption rate of climate-resilient and low-emission management practice.

Disaggregation by: Land Type	Baseline	Mid-term	Final target	Assumptions / Note
Forest Land (reforestation)	0	357	1,190	See above.
Forest Land (afforestation)	0	357	1,190	See above.
Cropland	0	23,680	78,936	See above.
Grassland	0	240,676	802,252	See above.
Other	0	16,736	55,786	See above.

(IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems

Provide the total land areas under sustainable management practices (ha).

Unit				Hectares
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	2,963,656	2,963,656	Local AFOLU adaptation plans are approved by relevant local authorities. Pasture numbers are obtained by summing up (1) the total area of pasture in the selected districts multiplied by the expected area of pasture in the to-be selected municipalities within these districts, which will be covered under a climate-informed pasture management plan and (2) the area of pasture in SFE land and in protected areas which will be covered under a climate-informed management plan. Forest numbers are obtained by summing up the forested area in the selected SFEs and in protected areas which will be under a climate-informed management plan.

(IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems

Provide the total land areas under sustainable management practices (ha), disaggregated by type.

Unit				Hectares
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	2,963,656	2,963,656	Local AFOLU adaptation plans are approved by relevant local authorities. Pasture numbers are obtained by summing up (1) the total area of pasture in the selected districts multiplied by the expected area of pasture in the to-be selected municipalities within these districts, which will be covered under a climate-informed pasture management plan and (2) the area of pasture in SFE land and in protected areas which will be covered under a climate-informed management plan. Forest numbers are obtained by summing up the forested area in the selected SFEs and in protected areas which will be under a climate-informed management plan.
Disaggregation by: Land Type	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Grassland	0	2,336,526	2,336,526	See above.
Other	0	627,130	627,130	See above.

(IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems

Provide the total land areas under sustainable management practices (ha), disaggregated by country.

Unit				Hectares
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Baseline survey • Government data/ official records • GIS data • Programme M&E • Annual Performance Reports • Evaluation reports	0	2,963,656	2,963,656	Local AFOLU adaptation plans are approved by relevant local authorities. Pasture numbers are obtained by summing up (1) the total area of pasture in the selected districts multiplied by the expected area of pasture in the to-be selected municipalities within these districts, which will be covered under a climate-informed pasture management plan and (2) the area of pasture in SFE land and in protected areas which will be covered under a climate-informed management plan. Forest numbers are obtained by summing up the forested area in the selected SFEs and in protected areas which will be under a climate-informed management plan.
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	1,709,800	1,709,800	See above.
Tajikistan	0	660,802	660,802	See above.
Uzbekistan	0	593,054	593,054	See above.

(IRMF) Core 2 Direct and indirect beneficiaries reached				
Provide the total number of direct beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by result area.				
Unit				**No. of Beneficiaries**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Household survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	261,515	1,046,062	Programme adherence to implementation plan. Numbers of direct beneficiaries are obtained by multiplying the expected area of different land use systems which will be brought under improved low-emission and/or climate-resilient management practice by (1.a - for agriculture) the average smallholder farm size in that specific land use system or (1.b – for pasture) the estimated average number of pasture users per municipality or (1.c – for forests) the number of forest users per SFE, and by (2) the average household size in rural areas (KG 4.5, TJ 5.9 and UZ 5.0) as well as average number of employees of MSMEs supported by EIB credit programme.
Disaggregation by: Result Areas (Adaptation)	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Livelihoods of people and communities	0	130,757	523,031	See above.
Ecosystem and ecosystem services	0	130,758	523,031	See above.

(IRMF) Core 2 Direct and indirect beneficiaries reached				
Provide the total number of direct beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Gender.				
Unit				**No. of Beneficiaries**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Household survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	261,515	1,046,062	Numbers of direct beneficiaries are obtained by multiplying the expected area of different land use systems which will be brought under improved low-emission and/or climate-resilient management practice by (1.a - for agriculture) the average smallholder farm size in that specific land use system or (1.b – for pasture) the estimated average number of pasture users per municipality or (1.c – for forests) the number of forest users per SFE, and by (2) the average household size in rural areas (KG 4.5, TJ 5.9 and UZ 5.0)
Disaggregation by: Gender	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Female	0	131,978	527,915	Numbers for male/female beneficiaries are obtained by multiplying the total beneficiary number by the national sex ratio (# males per 100 females: KG 96, TJ 96.7, UZ 101.8)
Male	0	129,537	518,147	National gender ratios

(IRMF) Core 2 Direct and indirect beneficiaries reached				
Provide the total number of direct beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Country.				
Unit				**No. of Beneficiaries**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Household survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	261,515	1,046,062	Numbers of direct beneficiaries are obtained by multiplying the expected area of different land use systems which will be brought under improved low-emission and/or climate-resilient management practice by (1.a - for agriculture) the average smallholder farm size in that specific land use system or (1.b – for pasture) the estimated average number of pasture users per municipality or (1.c – for forests) the number of forest users per SFE, and by (2) the average household size in rural areas (KG 4.5, TJ 5.9 and UZ 5.0)
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	70,097	280,389	See above.
Tajikistan	0	105,816	423,266	See above.
Uzbekistan	0	85,602	342,407	See above.

(IRMF) Core 2 Direct and indirect beneficiaries reached
Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by result area.

Unit				No. of Beneficiaries
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Programme M&E • Annual Performance Reports • Evaluation reports	0	370,229	1,480,919	Indirect beneficiaries are all other land users in the target regions who benefit from strengthened enabling conditions, policy improvements, shared technical knowledge, and demonstration effects of supported projects. This includes improvements in local market systems, knowledge dissemination, and adoption of best practices beyond directly supported households. In all cases, indirect beneficiaries are calculated to avoid double counting with direct beneficiaries. The approach ensures a realistic reflection of the broader population affected by programme interventions, capturing benefits that flow through knowledge, ecosystem improvements, enabling conditions, and market or institutional effects. Overlaps between interventions are subtracted to avoid double counting.
Disaggregation by: Result Areas (Adaptation)	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Livelihoods of people and communities	0	185,115	740,460	See above.
Ecosystem and ecosystem services	0	185,114	740,459	See above.

(IRMF) Core 2 Direct and indirect beneficiaries reached

Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Gender.

Unit				No. of Beneficiaries
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Programme M&E • Annual Performance Reports • Evaluation reports	0	370,229	1,480,919	Indirect beneficiaries are all other land users in the target regions who benefit from strengthened enabling conditions, policy improvements, shared technical knowledge, and demonstration effects of supported projects. This includes improvements in local market systems, knowledge dissemination, and adoption of best practices beyond directly supported households. In all cases, indirect beneficiaries are calculated to avoid double counting with direct beneficiaries. The approach ensures a realistic reflection of the broader population affected by programme interventions, capturing benefits that flow through knowledge, ecosystem improvements, enabling conditions, and market or institutional effects. Overlaps between interventions are subtracted to avoid double counting.

Disaggregation by: Gender	Baseline	Mid-term	Final target	Assumptions / Note
Female	0	186,129	744,516	National gender ratios.
Male	0	184,100	736,403	National gender ratios.

(IRMF) Core 2 Direct and indirect beneficiaries reached

Provide the total number of indirect beneficiaries (female/male) cumulatively receiving adaptation benefits from GCF-supported interventions, disaggregated by Country.

Unit				No. of Beneficiaries
Means of Verification (MoV)	Baseline	Target		Assumptions / Note
		Mid-term	Final target	
• Programme M&E • Annual Performance Reports • Evaluation reports	0	370,229	1,480,919	Indirect beneficiaries are all other land users in the target regions who benefit from strengthened enabling conditions, policy improvements, shared technical knowledge, and demonstration effects of supported projects. This includes improvements in local market systems, knowledge dissemination, and adoption of best practices beyond directly supported households. In all cases, indirect beneficiaries are calculated to avoid double counting with direct beneficiaries. The approach ensures a realistic reflection of the broader population affected by programme interventions, capturing benefits that flow through knowledge, ecosystem improvements, enabling conditions, and market or institutional effects. Overlaps between interventions are subtracted to avoid double counting.
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	106,445	425,782	See above.
Tajikistan	0	83,045	332,183	See above.
Uzbekistan	0	180,739	722,954	See above.

Livelihoods of people and communities

(IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options

Provide the total number of direct beneficiaries (female/male) adopting diversified or strengthened climate-resilient livelihood strategies (including agriculture, fisheries, natural resource–based, and informal livelihoods), disaggregated by gender.

Unit				No. of Beneficiaries
Means of Verification (MoV)	Baseline	Target		Assumptions / Note
		Mid-term	Final target	
• Household survey/questionnaire • Programme M&E • Annual Performance Reports	0	48,049	192,197	Numbers are obtained by multiplying the expected area of different land use systems which will be brought under improved low-emission and/or climate-resilient management practice by (for agriculture) the average smallholder farm size in that specific land use system or (for pasture) the

• Evaluation reports				estimated average number of pasture users per municipality or (for forests) the number of forest users per SFE. Numbers for male/female beneficiaries are obtained by multiplying the total beneficiary number by an estimated ratio for land user households where males are more active (75%) and those where women are more active (25%).
Disaggregation by: Gender	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Female	0	12,012	48,049	See above.
Male	0	36,037	144,148	See above.

(IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options				
Provide the total number of direct beneficiaries (female/male) adopting diversified or strengthened climate-resilient livelihood strategies (including agriculture, fisheries, natural resource–based, and informal livelihoods), disaggregated by country.				
Unit				**Enter unit**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Household survey/questionnaire • Programme M&E • Annual Performance Reports • Evaluation reports	0	48,049	192,197	Numbers are obtained by multiplying the expected area of different land use systems which will be brought under improved low-emission and/or climate-resilient management practice by (for agriculture) the average smallholder farm size in that specific land use system or (for pasture) the estimated average number of pasture users per municipality or (for forests) the number of forest users per SFE. Numbers for male/female beneficiaries are obtained by multiplying the total beneficiary number by an estimated ratio for land user households where males are more active (75%) and those where women are more active (25%).
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	14,864	59,455	See above.
Tajikistan	0	17,229	68,918	See above.
Uzbekistan	0	15,956	63,824	See above.

Optional Co-Benefit Indicators

Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development				
Provide the total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms.				
Unit				**No. of Items**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	

• Government data/ official records • Programme M&E	0	7	9	Mid-term target: Total 7, including 1 inter-sectoral, 3 sectoral and 3 land use planning procedures/guidelines. KG: 1 inter-sectoral, 1 sectoral, 1 land use planning. TJ: 0 inter-sectoral, 1 sectoral, 1 land use planning. UZ: 0 inter-sectoral, 1 sectoral, 1 land use planning. Final target: Total 9, including 3 inter-sectoral, 3 sectoral and 3 land use planning procedures/guidelines. KG: 1 inter-sectoral, 1 sectoral, 1 land use planning. TJ: 1 inter-sectoral, 1 sectoral, 1 land use planning. UZ: 1 inter-sectoral, 1 sectoral, 1 land use planning. It assumes sustained interest by relevant government institutions in the three countries in advancing climate-resilient and low-emission development.

Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development

Provide the total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms, disaggregated by country.

Unit				**No. of Items**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Government data/ official records • Programme M&E	0	7	9	Mid-term target: Total 7, including 1 inter-sectoral, 3 sectoral and 3 land use planning procedures/guidelines. KG: 1 inter-sectoral, 1 sectoral, 1 land use planning. TJ: 0 inter-sectoral, 1 sectoral, 1 land use planning. UZ: 0 inter-sectoral, 1 sectoral, 1 land use planning. Final target: Total 9, including 3 inter-sectoral, 3 sectoral and 3 land use planning procedures/guidelines. KG: 1 inter-sectoral, 1 sectoral, 1 land use planning. TJ: 1 inter-sectoral, 1 sectoral, 1 land use planning. UZ: 1 inter-sectoral, 1 sectoral, 1 land use planning. It assumes sustained interest by relevant government institutions in the three countries in advancing climate-resilient and low-emission development.
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	3	3	See above.
Tajikistan	0	2	3	See above.
Uzbekistan	0	2	3	See above.

Total ecosystems placed under conservation activities (ha)

Provide the total ecosystems placed under conservation activities (ha).

Unit				Hectares
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Government data / official records • GIS data • Programme M&E	0	30,000	168,966	It assumes there is sufficient interest from protected areas in receiving investment grants and compliance with the platform's financing requirements.

Total ecosystems placed under conservation activities (ha)				
Provide the total ecosystems placed under conservation activities (ha), disaggregated by country.				
Unit				**Hectares**
Means of Verification (MoV)	**Baseline**	**Target**		**Assumptions / Note**
		Mid-term	**Final target**	
• Government data / official records • GIS data • Programme M&E	0	30,000	168,966	It assumes there is sufficient interest from protected areas in receiving investment grants and compliance with the platform's financing requirements.
Disaggregation by: Project Countries	**Baseline**	**Mid-term**	**Final target**	**Assumptions / Note**
Kyrgyzstan	0	20,000	143,544	See above.
Tajikistan	0	10,000	25,422	See above.

D.2.2. Enabling Environment Indicators (Qualitative Indicators)

Core Indicator	Baseline context	Rating for current state	Target scenario	How the project will contribute	Coverage
Core Indicator 5: Degree to which GCF investments contribute to strengthening institutional and regulatory frameworks for low emission climate-resilient development pathways in a country-driven manner	Climate risks not systematically considered in AFOLU planning, prioritisation and investment programming across administrative levels; cross-sectoral coordination at national level is weak and not systemic; climate and AFOLU-relevant data is fragmented and not embedded in planning procedures; digital planning tools are not consistently used. At local level, climate-informed AFOLU planning is not scaled.	Low	Climate-informed AFOLU planning and implementation institutionalised across the three countries at national and subnational levels; enhanced cross-sectoral coordination between AFOLU-relevant institutions; updated regulatory frameworks make the use of climate/land/soil information an integral part of prioritisation, investment packages and monitoring;	At the multi-sectoral level, Output 1.1 strengthens permanent platforms for climate-informed AFOLU coordination and for translating regional pathways into country-specific actions. At the national level, Output 1.1 strengthens institutional and regulatory frameworks through building the capacities of hydromet and institutionalizing land use and soil/pasture data into standardised planning and digital land systems,	Multi-countries

Core Indicator	Baseline context	Rating for current state	Target scenario	How the project will contribute	Coverage
				supported by legal foundations and data-sharing protocols. Output 1.2 strengthens climate-relevant institutions on climate and carbon finance, and on repurposing harmful subsidies towards CRLE practices and restoration. At the sub-national/local level, Output 1.1 supports uptake of these tools for climate-informed and coordinated decision-making and better targeting of AFOLU interventions.	
Core indicator 7: Degree to which GCF Investments contribute to market development/transformation at the sectoral, local, or national level	Markets for CRLE agriculture products remain underdeveloped: producers and MSMEs face limited access to finance and high cost of capital; financial institutions have limited capability to assess climate and E&S risks and to develop products for CRLE technologies and practices as well as for value-chain upgrading investments. As a result, demand and supply for CRLE technologies and practices and associated services are not yet sustained at scale	Low	Finance and market access increasingly support CRLE adoption: domestic financial institutions offer CRLE products supported by internal screening; green bond readiness improves capital mobilisation potential for CRLE measures; producers and MSMEs access and commercial finance for CRLE technologies and practices; and value-chain investments and business models improve bankability, market incentives and returns, making CRLE adoption more attractive and sustainable. The market effect is expected to continue through stronger institutional capabilities in financial institutions, improved pipeline quality, demonstrated CRLE investments, and financing approaches that can be replicated after the initial programme-supported interventions.	On the public sector side, Output 1.2 supports enabling public finance conditions that support CRLE adoption. On the private sector side, strengthening the capacity of financial institutions to identify, assess, and manage CRLE investments through improved risk management, internal procedures, screening, and reporting systems, while also supporting CSA facility design and green/thematic bond readiness and issuance. Output 2.3 complements this by establishing programme financing mechanisms for producers, cooperatives, and rural MSMEs through the asset-based No-Till Adoption Accelerators, matching grants, and linkages to EIB-supported lending. In the Kyrgyz Republic, No-Till Adoption Accelerators support repeated financing cycles through repayment	Multi-countries

Core Indicator	Baseline context	Rating for current state	Target scenario	How the project will contribute	Coverage
				and reinvestment. Across the three countries, matching grants support investment in CRLE technologies and practices, helping beneficiaries address upfront cost barriers. Alongside value-chain support contributing to predictable demand, these measures strengthen the pipeline of investable activities and support wider uptake of CRLE-related inputs, services, equipment, and business models.	
Core indicator 8: Degree to which GCF investments contribute to effective knowledge generation and learning processes, and use of good practices, methodologies and standards	Insufficient regional cooperation on land use-related transboundary climate risks; weak coordination across transboundary landscapes; limited dialogue of certain stakeholder groups; insufficient regional capacity for long-term planning; weak cross-country capacities for joint climate investments	Low	Shared regional development pathways for the AFOLU sector are jointly developed and downscaled into national cross-sectoral platforms (Component 1); regular and institutionalized regional and bilateral exchange and learning between national and subnational institutions responsible for land use planning, private sector actors, public and private financial institutions, and national entities active across the three Rio Conventions. A regional climate investment platform enhances attraction and streamlining of climate finance for the AFOLU sector in the three Central Asian countries	Output 3.1 strengthens regional strategic foresight and scenario planning by building the capacities of high-level AFOLU decision-makers and supporting the joint development of long-term regional development pathways. Output 3.2 promotes regional and bilateral exchange, learning and stakeholder engagement, while strengthening CACIP through expanded AFOLU climate resilience content and improved user-tailored access. Output 3.3 establishes and operationalizes a regional climate investment platform, providing technical support to channel climate finance and grant funding, and supporting a sustainable funding mechanism for joint AFOLU adaptation action in transboundary landscapes across.	Multi-countries

D.3. Project/programme Specific Output Indicators							
Outcome Indicator	**Output Indicator**	**Unit**	**Means of Verification (MoV)**	**Baseline**	**Mid-term Target**	**Final Target**	**Assumptions/Notes**
(IRMF) Core 2 Direct and indirect beneficiaries reached (IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered	**Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors**	No. of Items	Programme M&E Document review and reports by line Ministries	0	3	3	Climate information products are considered useful by line ministries responsible for planning in the AFOLU sectors.
(IRMF) Core 2 Direct and indirect beneficiaries reached (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development	**Output 1.2. Sets of draft legal documents and guidelines to enhance access to innovative climate finance**	No. of Items	Programme M&E Document review of draft laws, regulations, guidelines	0	0	3	Interest by relevant government institutions, including NDAs, in assessing options for accessing compliance and voluntary carbon markets. Final target: Total 3 (KG 1; TJ 1; UZ 1).
(IRMF) Core 2 Direct and indirect beneficiaries reached (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered (IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-	**Output 1.3. Financing vehicles established, expanded and capitalised**	No. of Items	Programme M&E Press release	1	1	3	Willingness of local financial institutions to establish dedicated windows for CSA. Final target: Total 3 (KG 1; TJ 1; UZ 1 national).

Outcome Indicator	Output Indicator	Unit	Means of Verification (MoV)	Baseline	Mid-term Target	Final Target	Assumptions/Notes
resilient and low-emission development							
(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered (IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development	**Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level**	No. of Items	Programme M&E Document review of approved plans Field observation visits Focus groups	0	180	180	Interest from municipalities in working with the programme to develop climate-informed plans. Mid-term and final target: Total 180 (KG 60; TJ 60; UZ 60).
(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered (IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems (IRMF) Core 2 Direct and indirect beneficiaries reached Total number of established or	**Output 2.2. Climate-informed forest and pasture management plans approved**	No. of Items	Programme M&E Document review of approved plans Field observation visits Focus groups	0	165	165	Interest from SFEs in mainstreaming climate considerations into forest management plans. Mid-term and final target: Total 25 (KG 11; TJ 6; UZ 8). Pasture management plans: Interest from pasture management organizations in working with the programme to develop climate-informed plans. Mid-term and final target: Total 140 (KG 55; TJ 55; UZ 30).

Outcome Indicator	Output Indicator	Unit	Means of Verification (MoV)	Baseline	Mid-term Target	Final Target	Assumptions/Notes
strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development Total ecosystems placed under conservation activities (ha)							
(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered (IRMF) Core 2 Direct and indirect beneficiaries reached Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development (IRMF) Supplementary 2.1 Beneficiaries (female/male) adopting improved and/or new climate-resilient livelihood options	**Output 2.3. Operational financial mechanisms established or supported by the programme**	No. of Items	Programme M&E Documentation of financial mechanisms operational guidelines	0	9	9	Mid-term and final target: Total 9 (KG 5; TJ 2; UZ 2): 6 agricultural finance mechanisms (2 per country - matching grant mechanism + EIB credit programme) and 3 No-Till Adoption Accelerators in KG.
(IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development	**Output 3.1. Plausible future scenarios developed as a basis for the regional pathway(s)**	No. of Items	Programme M&E Post-training surveys Key-informant interviews Scenario reports	0	4	4	Sufficient interest of the countries and regional actors to build climate change into regional long-term development considerations.

Outcome Indicator	Output Indicator	Unit	Means of Verification (MoV)	Baseline	Mid-term Target	Final Target	Assumptions/Notes
(IRMF) Core 2 Direct and indirect beneficiaries reached							
(IRMF) Core 2 Direct and indirect beneficiaries reached Total number of established or strengthened institutional frameworks, polices, plans and coordination mechanisms to support climate-resilient and low-emission development	**Output 3.2. Climate resilience toolbox available online**	No. of Items	Programme M&E Live web link Usage analytics	0	0	1	CACIP remains the number one climate information online resource.
(IRMF) Core 4: Hectares of natural resource areas brought under improved low emission and/or climate resilient management practices (IRMF) Core 1 Greenhouse gas (GHG) emissions reduced, avoided or removed/sequestered (IRMF) Core 2 Direct and indirect beneficiaries reached Total ecosystems placed under conservation activities (ha) (IRMF) Supplementary 4.1 Hectares of terrestrial-forest, terrestrial-non-forest, freshwater and coastal-marine areas brought under restoration and or improved ecosystems	**Output 3.3. Fund for transborder climate action established**	No. of Items	Programme M&E Documentation of establishment Official launch documentation	0	1	1	National governments in the three countries committed to supporting the platform.

D.4. Project/programme activities and deliverables

Output Indicator	Activities	Deliverables	Unit
Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors	**Activity 1.1.1. Improve the knowledge base and institutionalise climate-informed planning and monitoring at the national level**	• 45 Hydromet staff capacitated on data management and climate product development • 3 sets of innovative and operational climate change information products agreed between Hydromet and relevant institutions in the AFOLU sector (one per country)	• # of staff • # of product sets • # of modules • # of AI modules • # of document sets

Output Indicator	Activities	Deliverables	Unit
		• 3 climate modules integrated in the digital land information systems (one per country) • 2 operational AI modules to run scenario-based analysis of land use and climate data (KG, TJ) • 3 sets of draft legal documents and procedures for improved data sharing, land use planning using climate information and the use of innovative digital tools (one per country) • Mid- and higher-level staff in AFOLU-relevant national and devolved institutions capacitated on climate-informed planning • Training materials institutionalised in 3 institutions (one per country)	• # of staff • # of institutions that institutionalise training materials
Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors	**Activity 1.1.2. Mainstream climate information into intersectoral coordination platforms and plans**	• National Council for Water and Land Resources with extended mandate (KG) • 2 sets of statutory documents for a multisectoral and multiscale platform drafted (TJ, UZ)	• # of coordination platforms • # of statutory document sets
Output 1.2. Sets of draft legal documents and guidelines to enhance access to innovative climate finance	**Activity 1.2.1. Support a conducive public financing environment promoting climate-resilient and low-emission land uses**	• Public and private sector partners capacitated on accessing climate finance • 3 options assessments for accessing carbon finance for the AFOLU sectors (one per country) • 3 sets of draft legal documents and guidelines to enhance access to innovative climate finance (one per country) • 1 pipeline of AFOLU investment concepts (TJ) • 2 CPEIR completed (KG, TJ) • 1 PER in the AFOLU sector completed (UZ) • 3 national processes launched for repurposing harmful subsidies into public support for scaling up CRLE practices and technologies and ecosystem restoration (one per country)	• # of partners capacitated • # of assessments • # of document sets • # of pipelines • # of CPEIRs • # of PERs • # of processes initiated
Output 1.3. Financing vehicles established, expanded and capitalised	**Activity 1.3.1. Support domestic financial institutions to better manage climate risks in the agriculture sector**	• 3 training curricula developed considering country specificities and digitised as video modules (one per country) • Staff of selected banks capacitated on climate risk management	• # of curricula • # of staff
Output 1.3. Financing vehicles established, expanded and capitalised	**Activity 1.3.2. Establish climate-smart agriculture financing facilities and support issuance of green bonds**	• 3 institutions onboarded with documented readiness gaps and an agreed support plan for the CSAFF or bond issuance (one per country) • 2 finance facilities established adn operationalised (KG, TJ) • 1 finance facility operationalised (UZ) • 4 green bonds issued (2 in KG, 1 in TJ and UZ each)	• # of institutions • # of facilities • # of facilities • # of bonds

Output Indicator	Activities	Deliverables	Unit
Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level	**Activity 2.1.1. Prioritization of municipalities based on district-level climate diagnostics**	• 180 Prioritised target municipalities identified (60 KG: 60 TJ; 60 UZ) • 180 Target municipalities validated (60 KG: 60 TJ; 60 UZ)	• # of prioritised municipalities • # of validated municipalities
Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level	**Activity 2.1.2. Develop local AFOLU adaptation plans in selected landscapes**	• 180 Situation models developed (60 KG: 60 TJ; 60 UZ) • Local AFOLU adaptation plans prepared (60 KG: 60 TJ; 60 UZ) • Local AFOLU adaptation plans approved (60 KG: 60 TJ; 60 UZ)	• # of models • # of prepared plans • # of approved plans
Output 2.2. Climate-informed forest and pasture management plans approved	**Activity 2.2.1. Scale land restoration practices in degraded forests in transboundary landscapes**	• 3 sets of training materials on climate-informed forest management planning developed (1 per country) • Intermediary partners trained • 25 Forest resources management and investment plans developed and approved at SFE level (11 KG; 6 TJ; 8 UZ) • 700 Lease agreements formalized (100 KG; 400 TJ; 200 UZ) • 125 needs-based trainings delivered • Investments in forest restoration and afforestation/reforestation implemented	• # of material sets • # of training sessions • # of plans • # of agreements • # of trainings • # of investment packages
Output 2.2. Climate-informed forest and pasture management plans approved	**Activity 2.2.2. Scale land restoration practices in degraded rangelands in transboundary landscapes**	• 3 sets of training materials for pasture management developed (1 per country) • 2 one-week (KG, UZ) and 1 one-week (TJ) training sessions for intermediary partners. • 140 Climate-informed pasture management plans approved (55 KG: 55 TJ; 30 UZ) • 140 needs-based local trainings delivered (55 KG: 55 TJ; 30 UZ) • Investments in pasture restoration and sustainable climate-resilient use implemented	• # of material sets • # of training sessions • # of plans • # of trainings • # of investment packages
Output 2.3. Operational financial mechanisms established or supported by the programme	**Activity 2.3.1. Scale the adoption of locally relevant CRLE land use practices and technologies in agriculture in transboundary landscapes**	• PICSA adjusted to regional conditions • E-PICSA operationalized in each country • 120 Extension services and intermediaries trained on E-PICSA • PICSA implemented in 180 selected municipalities (60 KG: 60 TJ; 60 UZ) • 36,000 producers capacitated (12,000 per country) • 300 field training sessions and field days held • Investments in the adoption of CRLE practices and technologies in agriculture	• # of scoping reports for PICSA adjustment • # of operational E-PICSA systems • # of training sessions • # of municipalities where PICSA is implemented • # of producers trained on PICSA • # of field trainings/field days • Volume through agricultural finance mechanisms disbursed

Output Indicator	Activities	Deliverables	Unit
Output 2.3. Operational financial mechanisms established or supported by the programme	**Activity 2.3.2. Establish financial mechanisms for enabling the adoption of CRLE practices in the agricultural sector**	• 3 No-Till Adoption Accelerators established and 24 operational CATs established in KG • 3 matching grant mechanisms established and operational (1 per country)	• # of No-Till Adoption Accelerators • # of CATs • # of matching grant mechanisms
Output 2.3. Operational financial mechanisms established or supported by the programme	**Activity 2.3.3. Investment in climate-resilient and low-emission agriculture and associated value-chain infrastructure**	• Simplified template for business models and investment plans aligned with the pre-selected value chains, including climate risk considerations • Pipeline of 600 investment files developed with producers, producer groups, and MSMEs, suitable for screening by financial institutions and programme mechanisms • 3 EIB loan programmes are operationalised for on-lending for CRLE investments (KG 1; TJ 1; UZ 1) • Investments in VC development through the financial mechanisms established by the programme. • EUR 15.5 million leveraged from matching contributions through the matching grant mechanism	• # of business model templates • # of investment files • # loan programmes • EUR volume of investments • EUR volume of matching contribution
Output 3.1. Plausible future scenarios developed as a basis for the regional pathway(s)	**Activity 3.1.1. Strengthening regional foresight and planning capacities**	• 1 regional and 3 national partner institutions selected • 1 Stocktaking and megatrend analysis completed • 1 Training package on strategic foresight developed • Training package institutionalised in 3 regional or national partner institutions • 60 stakeholders capacitated on foresight (from 5 countries) • 50 Young leaders capacitated on foresight at 2 editions of the Youth Leadership Programme	• # of regional and national institutions • # of reports • # of training packages • # of institutions where training institutionalised • # of stakeholders • # of young leaders
Output 3.1. Plausible future scenarios developed as a basis for the regional pathway(s)	**Activity 3.1.2. Creation of regional climate-informed development pathways for AFOLU**	• 1 set of 4 plausible future scenarios developed • 1 set of policy pathways towards a resilient AFOLU sector in Central Asia developed	• # of scenario sets • # of pathway sets
Output 3.2. Climate resilience toolbox available online	**Activity 3.2.1. Enhancing regional knowledge exchange and information sharing through sustainable mechanisms**	• 9 Regional knowledge and exchange events held • Strategy for secured financing of exchange events developed	• # of events • # of strategies
Output 3.2. Climate resilience toolbox available online	**Activity 3.2.2. Development of climate resilience toolbox**	• 1 climate resilience toolbox established under CACIP • 1 new CACIP interface developed • 150 regional experts capacitated on CACIP resources • 1 coaching programme established	• # of toolboxes • # of interfaces • # of experts • # of programmes

Output Indicator	Activities	Deliverables	Unit
Output 3.3. Fund for transborder climate action established	**Activity 3.3.1. Creation of a regional climate investment platform**	• 1 platform structure and role defined • 1 regional climate investment platform formally established • Secretariat staff capacitated • 1 coaching programme for secretariat staff implemented • 1 investment roadmap developed	• # of platform design packages • # of platforms • # of staff • # of programmes • # of roadmaps
Output 3.3. Fund for transborder climate action established	**Activity 3.3.2. Support the implementation of adaptation actions in transboundary landscapes in the AFOLU sectors**	• 1 funding mechanism established • 10 climate adaptation action plans developed in transboundary landscapes • Needs-based technical assistance visits and on-site trainings carried out • 10 Investment grants awarded (totaling max EUR 3 million) • 3 Learning events on results of transboundary climate adaptation plans held	• # of mechanisms • # of plans • # of support visits/trainings • # of grants • # of events
N/A	**M&E**	M&E	
N/A	**Contingency**	Contingency	
N/A	**PMC**	PMC	

D.5. Monitoring, reporting and evaluation arrangements (max. 500 words)

Monitoring, reporting and evaluation arrangements

125. Monitoring, reporting and evaluation arrangements (in addition to the ESMP and GAP) will comply with the relevant GCF policies, as stipulated in the AMA, FAA and programme-related Financing Agreements with EEs and IPs.
126. The programme will apply a customized results-based monitoring and evaluation (M&E) system to track programme (sub-) activities, outcomes and impacts based on:
- GIZ Standard Operating Procedures ("GIZ's evaluation policy – principles, guidelines and requirements")
- M&E plan (Annex 12)
- IRMF and logical framework
- Implementation timetable (Annex 3)
- GCF's Annual Performance Report requirements
- Procedures and requirements of programme partners and stakeholders in the Kyrgyz Republic, Tajikistan, and Uzbekistan.

127. The GIZ GCF Oversight Unit will approve the monitoring system and ensures quality control of reports to the GCF.

Recruitment of M&E staff

128. GIZ EE will dedicate specialists to establish the monitoring system and coordinate contributions from all programme partners and EEs.

Independent evaluation

129. GIZ AE's Corporate Unit Evaluation will conduct a **mid-term evaluation and a final evaluation**.
130. GIZ evaluations are carried out by GIZs' independent evaluation unit, steered by a corporate unit separate from operational business and reporting directly to the Management Board. Evaluations are supported by external evaluators.
131. GIZ applies the "Evaluation criteria for German bilateral development cooperation" (2006, revised 2020), based on the six OECD-DAC criteria: relevance, effectiveness, efficiency, impact, coherence and sustainability.
132. Additionally, the following GCF criteria will be evaluated: gender equity, country ownership, innovativeness in results areas, replication and scalability, and unexpected results.
133. **GCF evaluation principles on impartiality, objectivity, relevance, use and participation** will be upheld in line with Chapter V(a–d) of the GCF Evaluation Policy, DAC standards, DeGEval standards and UNEG norms. Evaluation team members selected by GIZ must not be directly responsible for policy setting, design or management of the evaluated programme.
134. **Regarding GCFs' Evaluation Principle: Credibility and Robustness:** GIZ uses appropriate quantitative and qualitative empirical methods, adapted to the evaluation object and questions. A theory-based approach is the minimum standard, with contribution analysis used to assess whether and to what extent programme contributions are associated with observed changes, and to identify what works, what does not and why

135. Projects will be rated against the six OECD-DAC and GCF criteria, each on a scale from 1 to 100, increasing transparency and comparability.

136. An Interim Independent Evaluation Report and a Final Independent Evaluation Report will be submitted to the GCF according to FAA timeline.

137. Results from the mid-term evaluation should be reflected within the programme design, to influence upscaling, and improve overall programme implementation (adaptive management).

Data collection and frequency

138. GIZ EE will coordinate data collection for implemented activities through the responsible EE in charge of leading the monitoring activities at local level. It will supervise and guide the monitoring and evaluation and will aggregate monitoring reports based on local partner inputs at least every six months and make a summary report available to GIZ's AE unit at head office, again at least every six months.

E. FINANCING INFORMATION

E.1. Sources of Funds

(a) Requested GCF funding	Currency	Total amount	USD (converted)
	EUR	119,580,500.00	136,261,979.76

Sources of funds

Institution	Financial Instrument	Currency	Amount	USD (converted)	Tenor & grace *tenor / grace*	Pricing
GCF	Grants	EUR	119,580,500.00	136,261,979.76		

(b) Co-financing	Currency	Total amount	USD (converted)
	EUR	144,794,870.00	167,991,008.09

Institution	Financial Instrument	Currency	Amount	USD (converted)	Tenor & grace *tenor / grace*	Pricing	Seniority
Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR	12,000,000.00	13,922,399.99			N/A
European Investment Bank (EIB)	Senior Loans	EUR	120,000,000.00	139,223,999.93			
Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR	3,980,870.00	4,618,605.37			N/A

Institution	Financial Instrument	Currency	Amount	USD (converted)	Tenor & grace *tenor / grace*	Pricing	Seniority
Committee of Environmental Protection under the Government of Tajikistan (CEP)	In-kind	EUR	4,675,000.00	5,423,935.00			N/A
National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	In-kind	EUR	4,139,000.00	4,802,067.80			N/A

(c) Total financing (c) = (a) + (b)	Currency	Amount	USD (converted)
	EUR	264,375,370.00	304,252,987.85

(d) Other financing arrangements and contributions (max. 250 words)	EIB, as the European Union's financing institution, is expected to receive a guarantee from the European Commission. Countries' co-financing for the programme will be provided in the form of in-kind contributions, including some staff time, office premises, transport, access to data, and selected agricultural inputs, and government-funded national programme, i.e., particularly afforestation measures. Further details on tax exemptions are provided in Annex 4. Through the matching grant mechanism, the programme is expected to leverage approximately EUR 15.5 million from beneficiary contributions. In addition, support for green bond issuance and the establishment of CSA facilities will help mobilise and leverage further private finance both during and beyond the programme implementation period.

E.2. Uses of funds

Output Indicator	Activities	Source	Instrument	Indicative cost (% of Output)	USD (converted)	Country
Output 1.1. Sets of climate information products applied by	Activity 1.1.1. Improve the knowledge base and institutionalise	Federal Ministry for Economic	Grants	EUR 909,255.00 (20.2%) EUR 852,423.00 (18.9%)	1,054,917.65 988,981.16	Kyrgyzstan Tajikistan

planning institutions in the AFOLU sectors	climate-informed planning and monitoring at the national level (1.1.1)	Cooperation and Development (BMZ)		EUR 841,656.00 (18.7%) EUR 95,572.00 (2.1%)	976,489.29 110,882.63	Uzbekistan Non-country specific
Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors	Activity 1.1.1. Improve the knowledge base and institutionalise climate-informed planning and monitoring at the national level (1.1.1)	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 967,341.00 (21.3%)	1,113,602.96	Kyrgyzstan
Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors	Activity 1.1.2. Mainstream climate information into intersectoral coordination platforms and plans (1.1.2)	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 150,669.00 (3.3%) EUR 136,396.00 (3%) EUR 142,842.00 (3.2%) EUR 95,572.00 (2.1%)	174,806.17 158,246.64 165,725.29 110,882.63	Kyrgyzstan Tajikistan Uzbekistan Non-country specific
Output 1.1. Sets of climate information products applied by planning institutions in the AFOLU sectors	Activity 1.1.2. Mainstream climate information into intersectoral coordination platforms and plans (1.1.2)	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 323,082.00 (7.1%)	371,932.00	Kyrgyzstan
Output 1.2. Sets of draft legal documents and guidelines to enhance access to innovative climate finance	Activity 1.2.1. Support a conducive public financing environment promoting climate-resilient and low-emission land uses	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 511,573.00 (27.2%) EUR 504,463.00 (26.8%) EUR 444,598.00 (23.7%) EUR 95,572.00 (5.1%)	593,526.99 585,277.97 515,822.60 110,882.63	Kyrgyzstan Tajikistan Uzbekistan Non-country specific
Output 1.2. Sets of draft legal documents and guidelines to	Activity 1.2.1. Support a conducive public financing environment	Ministry of Natural Resources, Ecology and Technical	In-kind	EUR 323,082.00 (17.2%)	374,839.74	Kyrgyzstan

enhance access to innovative climate finance	promoting climate-resilient and low-emission land uses	Supervision of the Kyrgyz Republic				
Output 1.3. Financing vehicles established, expanded and capitalised	Activity 1.3.1. Support domestic financial institutions to better manage climate risks in the agriculture sector (1.3.1)	GCF	Grants	EUR 538,492.00 (9.1%) EUR 490,744.00 (8.3%) EUR 460,317.00 (7.8%)	624,758.42 569,361.19 534,059.78	Kyrgyzstan Tajikistan Uzbekistan
Output 1.3. Financing vehicles established, expanded and capitalised	Activity 1.3.2. Establish climate-smart agriculture financing facilities and support issuance of green bonds (1.3.2)	GCF	Grants	EUR 1,570,023.00 (26.4%) EUR 1,522,213.00 (25.6%) EUR 1,354,228.00 (22.8%)	1,821,540.68 1,766,071.52 1,571,175.32	Kyrgyzstan Tajikistan Uzbekistan
Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level	Activity 2.1.1. Prioritization of municipalities based on district-level climate diagnostics (2.1.1)	GCF	Grants	EUR 597,777.00 (12.8%) EUR 571,245.00 (12.3%) EUR 579,428.00 (12.4%)	693,540.88 662,758.45 672,252.37	Kyrgyzstan Tajikistan Uzbekistan
Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level	Activity 2.1.1. Prioritization of municipalities based on district-level climate diagnostics (2.1.1)	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 107,694.00 (2.3%)	124,946.58	Kyrgyzstan
Output 2.1 Climate-informed AFOLU adaptation plans approved at subnational level	Activity 2.1.2. Develop local AFOLU adaptation plans in selected landscapes (2.1.2)	GCF	Grants	EUR 929,098.00 (20%) EUR 926,871.00 (19.9%) EUR 944,713.00 (20.3%)	1,077,939.50 1,075,355.73 1,096,056.02	Kyrgyzstan Tajikistan Uzbekistan

Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.1. Scale land restoration practices in degraded forests in transboundary landscapes (2.2.1)	GCF	Grants	EUR 7,818,561.00 (18.2%) EUR 4,665,816.00 (10.9%) EUR 5,846,228.00 (13.6%)	9,071,094.47 5,413,279.72 6,782,793.72	Kyrgyzstan Tajikistan Uzbekistan
Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.1. Scale land restoration practices in degraded forests in transboundary landscapes (2.2.1)	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 484,624.00 (1.1%)	562,260.76	Kyrgyzstan
Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.1. Scale land restoration practices in degraded forests in transboundary landscapes (2.2.1)	Committee of Environmental Protection under the Government of Tajikistan (CEP)	In-kind	EUR 3,400,000.00 (7.9%)	3,944,680.00	Tajikistan
Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.1. Scale land restoration practices in degraded forests in transboundary landscapes (2.2.1)	National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	in-kind	EUR 948,194.00 (2.2%)	1,100,094.68	Uzbekistan
Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.2. Scale land restoration practices in degraded rangelands in transboundary landscapes (2.2.2)	GCF	Grants	EUR 7,697,925.00 (17.9%) EUR 6,808,688.00 (15.9%) EUR 4,269,632.00 (9.9%)	8,931,132.58 7,899,439.81 4,953,627.04	Kyrgyzstan Tajikistan Uzbekistan
Output 2.2. Climate-informed forest and	Activity 2.2.2. Scale land restoration practices in degraded rangelands in	Ministry of Natural Resources, Ecology and Technical	In-kind	EUR 682,714.00 (1.6%)	792,084.78	Kyrgyzstan

pasture management plans approved	transboundary landscapes (2.2.2)	Supervision of the Kyrgyz Republic				
Output 2.2. Climate-informed forest and pasture management plans approved	Activity 2.2.2. Scale land restoration practices in degraded rangelands in transboundary landscapes (2.2.2)	National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	In-kind	EUR 302,721.00 (0.7%)	351,216.90	Uzbekistan
Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.1. Scale the adoption of locally relevant CRLE land use practices and technologies in agriculture in transboundary landscapes (2.3.1)	GCF	Grants	EUR 9,906,665.00 (5.5%) EUR 14,015,071.00 (7.8%) EUR 17,565,301.00 (9.8%)	11,493,712.73 16,260,285.37 20,379,262.21	Kyrgyzstan Tajikistan Uzbekistan
Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.1. Scale the adoption of locally relevant CRLE land use practices and technologies in agriculture in transboundary landscapes (2.3.1)	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 484,624.00 (0.3%)	562,260.76	Kyrgyzstan
Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.1. Scale the adoption of locally relevant CRLE land use practices and technologies in agriculture in transboundary landscapes (2.3.1)	National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	In-kind	EUR 1,959,984.00 (1.1%)	2,273,973.44	Uzbekistan

Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.2. Establish financial mechanisms for enabling the adoption of CRLE practices in the agricultural sector (2.3.2)	GCF	Grants	EUR 3,438,983.00 (1.9%) EUR 599,687.00 (0.3%) EUR 637,645.00 (0.4%)	3,989,908.07 695,756.86 739,795.73	Kyrgyzstan Tajikistan Uzbekistan
Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.3. Investment in climate-resilient and low-emission agriculture and associated value-chain infrastructure (2.3.3)	GCF	Grants	EUR 3,457,902.00 (1.9%) EUR 3,544,241.00 (2%) EUR 3,696,755.00 (2.1%)	4,011,857.90 4,112,028.41 4,288,975.15	Kyrgyzstan Tajikistan Uzbekistan
Output 2.3. Operational financial mechanisms established or supported by the programme	Activity 2.3.3. Investment in climate-resilient and low-emission agriculture and associated value-chain infrastructure (2.3.3)	European Investment Bank	Senior Loans	EUR 30,000,000.00 (16.7%) EUR 30,000,000.00 (16.7%) EUR 60,000,000.00 (33.5%)	34,805,999.98 34,805,999.98 69,611,999.96	Kyrgyzstan Tajikistan Uzbekistan
Output 3.1. Plausible future scenarios developed as a basis for the regional pathway(s)	Activity 3.1.1. Strengthening regional foresight and planning capacities (3.1.1)	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 311,132.00 (13.5%) EUR 316,796.00 (13.8%) EUR 278,642.00 (12.1%) EUR 519,250.00 (22.6%)	360,975.35 367,546.72 323,280.45 602,433.85	Kyrgyzstan Tajikistan Uzbekistan Non-country specific
Output 3.1. Plausible future scenarios developed as a basis for the regional pathway(s)	Activity 3.1.2. Creation of regional climate-informed development pathways for AFOLU (3.1.2)	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 220,790.00 (9.6%) EUR 223,913.00 (9.7%) EUR 188,300.00 (8.2%) EUR 238,406.00 (10.4%)	256,160.56 259,783.86 218,465.66 276,598.64	Kyrgyzstan Tajikistan Uzbekistan Non-country specific

Output 3.2. Climate resilience toolbox available online	Activity 3.2.1. Enhancing regional knowledge exchange and information sharing through sustainable mechanisms (3.2.1)	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 220,097.00 (12.5%) EUR 222,989.00 (12.6%) EUR 188,993.00 (10.7%) EUR 258,276.00 (14.6%)	255,356.54 258,711.84 219,269.68 299,651.82	Kyrgyzstan Tajikistan Uzbekistan Non-country specific
Output 3.2. Climate resilience toolbox available online	Activity 3.2.2. Development of climate resilience toolbox (3.2.2)	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 220,790.00 (12.5%) EUR 223,913.00 (12.7%) EUR 188,300.00 (10.7%) EUR 240,716.00 (13.6%)	256,160.56 259,783.86 218,465.66 279,278.70	Kyrgyzstan Tajikistan Uzbekistan Non-country specific
Output 3.3. Fund for transborder climate action established	Activity 3.3.1. Creation of a regional climate investment platform (3.3.1)	GCF	Grants	EUR 992,943.00 (16.7%) EUR 965,315.00 (16.3%) EUR 978,908.00 (16.5%)	1,152,012.47 1,119,958.46 1,135,729.06	Kyrgyzstan Tajikistan Uzbekistan
Output 3.3. Fund for transborder climate action established	Activity 3.3.2. Support the implementation of adaptation actions in transboundary landscapes in the AFOLU sectors (3.3.2)	GCF	Grants	EUR 1,013,876.00 (17.1%) EUR 984,169.00 (16.6%) EUR 999,842.00 (16.8%)	1,176,298.93 1,141,832.87 1,160,016.69	Kyrgyzstan Tajikistan Uzbekistan
	M&E	GCF	Grants	EUR 3,136,904.00	3,639,436.02	Non-country specific
	M&E	Federal Ministry for Economic Cooperation and Development (BMZ)	Grants	EUR 602,073.00	698,525.09	Non-country specific
	Contingency	GCF	Grants	EUR 1,620,000.00	1,879,524.00	Non-country specific
	PMC	GCF	Grants	EUR 4,434,294.00	5,144,667.90	Non-country specific
	PMC	Federal Ministry for Economic	Grants	EUR 2,556,033.00	2,965,509.49	Non-country specific

		Cooperation and Development (BMZ)				
	PMC	Ministry of Natural Resources, Ecology and Technical Supervision of the Kyrgyz Republic	In-kind	EUR 607,709.00	705,063.98	Kyrgyzstan
	PMC	Committee of Environmental Protection under the Government of Tajikistan (CEP)	In-kind	EUR 1,275,000.00	1,479,255.00	Tajikistan
	PMC	National Committee on Ecology and Climate Change of the Republic of Uzbekistan (NCECC)	In-kind	EUR 928,101.00	1,076,782.78	Uzbekistan

E.3. Financial structure and flow of funds (max. 1,000 words, max. 500 words for SAP)

Financial structure

139. The programme uses GCF grant resources and co-finance to provide technical assistance and targeted financing mechanisms that **address structural barriers to CRLE investment across the AFOLU sectors** in the Kyrgyz Republic, Tajikistan, and Uzbekistan. The proposed structure reflects the climate problem, market gaps and the role of GCF, combining support for public goods, institutional strengthening and financing constraints that cannot be addressed through commercial finance alone. Climate risks threaten rural livelihoods, food security, forests and pasture systems, while investment is constrained by fragmented planning, limited use of climate information, weak implementation capacity, high financing costs and limited loan tenors. These barriers are particularly acute for smallholders, herders, cooperatives and rural MSMEs, especially where **CRLE investments involve high upfront costs, long payback periods** or collective landscape benefits that cannot be fully captured through private cash flows.

140. The financing architecture therefore addresses different barriers through complementary instruments, i.e., grant financing for public goods and institutional strengthening, targeted support for beneficiaries to adopt CRLE investments, and support to financial institutions to strengthen longer-term domestic financing capacity for CRLE investments.

141. Non-reimbursable grant funding for enabling conditions, institutional capacity, technical assistance, and public or community-oriented investments, with No-Till Adoption Accelerators, matching grants, and an EIB-credit programme to support productive investments and crowd in additional finance over time. Grants are appropriate for Components 1 and 3, which largely generate public rather than direct financial returns. These

components support climate-informed AFOLU planning, digital decision-support systems, regional cooperation, knowledge exchange and investment platforms. **Grant funding is also justified for community and ecosystem investments**, including forest and pasture restoration, **where benefits accrue over long periods and are shared across users and landscapes.**

142. For Component 2, the programme **applies minimum concessionality** by combining grant-funded technical assistance and catalytic support with mechanisms designed **to improve affordability, reduce risk and enable replication**. These include matching grants in all three countries, No-Till Adoption Accelerators in the Kyrgyz Republic, support to partner financial institutions to establish CSA financing facilities and strengthen green bond issuance capacity, and EIB co-finance for eligible CRLE investments and value-chain development. Standard senior lending alone would be insufficient under current market conditions because interest rates are high, collateral requirements restrict access for smaller rural borrowers, and many agriculture, forestry and rangeland investments have repayment periods or risk profiles that do not fit conventional commercial products. Matching grants address upfront affordability constraints and facilitate adoption of CRLE technologies and practices by beneficiaries with different financial capacities. Their segmentation and contribution ratios are informed by international guidance, benchmarking and stakeholder consultations, which indicate that higher beneficiary contributions could exclude vulnerable smallholders. In the Kyrgyz Republic, the Accelerator is designed to support repeated financing cycles through repayment and reinvestment. Support to financial institutions will strengthen CRLE and CSA lending capacity through improved procedures, screening, governance and reporting. Together, these measures reduce entry barriers, strengthen borrower readiness and pipeline development, and help establish financing approaches that can be scaled with EIB co-finance.

143. Scaling and replication are central to the structure. Matching grants and the Accelerator support adoption of CRLE technologies and practices, including soil conservation and forest and pasture restoration measures prioritised in local plans in transboundary landscapes. The Accelerator is intended to continue beyond the programme period through repayment and reinvestment. CSA financing facilities and green bond support are intended to strengthen longer-term domestic financing capacity and mobilise additional private finance. Value-chain strengthening will further reduce risks and improve returns for producers and MSMEs, supporting both sustained CRLE adoption and crowding-in of additional finance. The structure therefore combines catalytic support for vulnerable end users with market-building and institutional measures that can continue and scale beyond programme implementation.

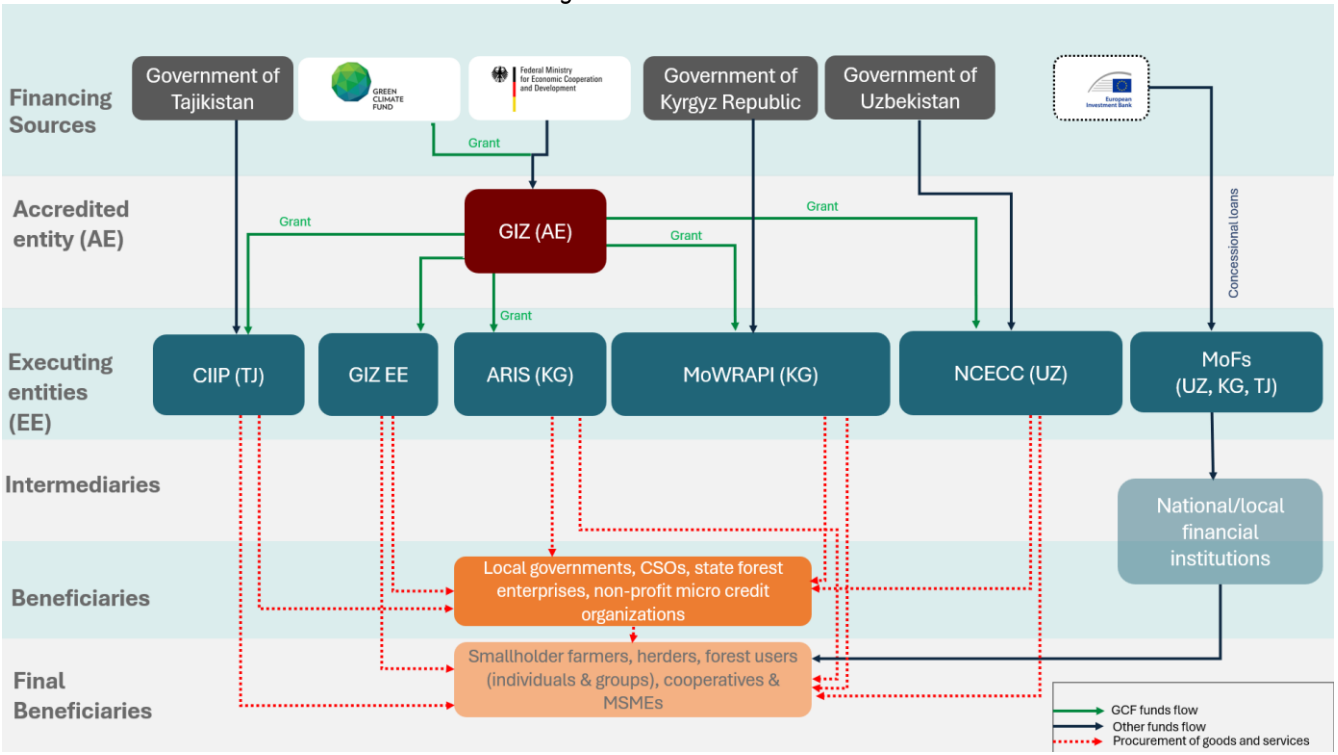
144. Other instruments, including **reimbursable grants, loans, equity, guarantees, and results-based payments, were considered less suitable as primary instruments for the programme's main barriers and beneficiary groups**. Loans alone would increase indebtedness without sufficiently addressing affordability, risk and capacity constraints for smallholders. Equity is generally unsuitable for smallholder, cooperative, public and community investments. Guarantees could support selected lending but would not address broader needs for technical assistance, planning, institutional capacity and public-good investments. Results-based payments are also less suitable because many interventions require upfront support and long lead times before results can be measured at scale. The proposed mix is therefore considered the most appropriate balance between climate impact, affordability and implementation feasibility.

Flow of Funds

145. GCF funds and BMZ cofinance will reach final beneficiaries through financial support and technical assistance (see Figure 11). GCF proceeds will be channelled to GIZ as Accredited Entity and subsequently to the Executing Entities. MoWRAPI, ARIS, CIIP and NCECC will manage relevant financial mechanisms and channel support to eligible beneficiaries, including associations, cooperatives, herders and smallholder farmers, for CRLE agriculture, sustainable forest management and rehabilitation of rangelands and grasslands. GIZ, acting as an EE, will also channel GCF proceeds to selected

implementation partners and provide technical assistance to partner institutions. EIB co-finance will follow a separate lending pathway through the Ministries of Finance, acting as EEs, and will then be on-lent to participating local financial institutions (LFIs) that have passed EIB due diligence. LFIs will provide loans to eligible MSME beneficiaries for CRLE investments.

Figure 11: Flow of funds



146. Under GCF-funded mechanisms, funds will flow to final beneficiaries through different modalities depending on the type of support provided. Matching grants will be managed by the relevant EEs and will be channelled to eligible beneficiaries against approved investments through direct procurement. In the Kyrgyz Republic, support to the Accelerator will be provided in kind through inputs and mechanisation equipment capitalised under the selected non-profit MCO, which will manage onward provision to farmers and service providers under agreed repayment arrangements to cover operational expenditures. Technical assistance funds will be used to support implementation, advisory services, capacity building, screening, monitoring, and operational support to the financial mechanisms and to participating institutions.

E.4. Justification of GCF funding request (max. 1,000 words)

147. The proposed programme is aligned with, and supportive of, the Kyrgyz Republic, Tajikistan and Uzbekistan government policies (see Section D.5) as well as GCF's Updated Strategic Plan 2024-2027 (USP-2), notably 4 (food), 5 (ecosystem), 9 (locally-led action), 10 (MSMEs), and 11 (LFIs).[4]

148. **GCF resources are critical for bridging the climate finance gap** required to meet the climate commitments of the Kyrgyz Republic, Tajikistan and Uzbekistan, particularly in the AFOLU sectors. The Kyrgyz Republic estimates that implementing its third NDC requires USD 23 billion, with a USD 9.3 billion gap. Tajikistan's NDC indicates financing needs of at least 7% of GDP for climate action from 2020 to 2030, equivalent to at least USD 1 billion annually by 2030, with around half related to land use, agriculture, irrigation and biodiversity. Uzbekistan's NDC 3.0 identifies investment gaps of USD 9.5 billion for mitigation and USD 7.2 billion for adaptation until 2030. These gaps constrain CRLE land use transitions at the required scale, including in transboundary landscapes.

149. While the three countries are increasingly prioritising climate action, **domestic public resources remain limited and AFOLU climate finance is scarce relative to needs, often short term and project based**. Climate and land priorities are not systematically translated into investable projects or reflected in land allocation, forest and pasture management, and agricultural support measures. Private investment is further constrained by high interest rates, limited risk-sharing mechanisms, long payback periods, and weak incentives to finance systemic resilience. Blended finance and carbon-market opportunities remain underused due to evolving regulatory frameworks, institutional capacity gaps, and data and MRV constraints. DFI and MDB finance is available but remains concentrated in more commercially viable sectors and does not adequately address AFOLU adaptation, landscape restoration, or vulnerable rural beneficiaries.

150. In this context, **GCF funding addresses key market failures**, specifically, underinvestment in public goods, imperfect information and weak data accessibility, coordination failures across institutions and levels, and risk return mismatches that discourage private capital from financing CRLE adoption by smallholders and MSMEs. GCF resources will build enabling conditions and delivery mechanisms for sustained CRLE investment rather than substitute commercially viable finance.

151. The three countries face **constrained fiscal space**, despite moderate debt-to-GDP ratios (KGZ 45.5%, TJK 43.8%, UZB 36.3%). This limits additional public borrowing for AFOLU climate action, particularly for investments generating public benefits, involving long payback periods, or depending on dispersed smallholder adoption. This supports the case for concessional finance and a GCF grant contribution for public goods and targeted mechanisms that can leverage private finance.

152. The proposed financing package matches the economic and financial profile of activities and applies a **sequenced approach** focused on setting the enabling environment, supporting CRLE adoption, and longer-term finance mobilisation. This sequencing is reflected in the combination of public-good investments, targeted grant-based mechanisms, pipeline development under activity 2.3.3, and subsequent mobilisation of larger-scale debt finance through the EIB programme and participating LFIs.

153. **Grant financing is concentrated on public goods and enabling conditions** that do not generate direct financial reflows and are therefore unsuitable for debt financing. This includes climate-informed planning and coordination (Output 1.1); improved climate and land information; climate-aligned public

[4] GCF (2023). *Strategic Plan for the Green Climate Fund, 2024-2027*.

finance through CPEIR and related analyses, including identifying and repurposing harmful subsidies into CRLE incentives (Output 1.2); and forest and pasture restoration managed by the state or collectively by user groups (Output 2.2).

154. For revenue-generating activities, the programme improves bankability by linking finance with value-chain development (Output 2.3), including reduced post-harvest losses, stronger producer organisation, improved services, and market linkages. It simultaneously strengthens domestic financial institutions' capacity to assess climate risks and understand CRLE business models. Matching grants support adoption by smaller producers and local organisations unable to access suitable finance, while the EIB credit programme provides agri-MSMEs and other eligible value-chain actors with access to concessional debt through participating LFIs.

155. These mechanisms are linked to local prioritisation and investment planning and combined with technical assistance, safeguards, eligibility criteria, and beneficiary segmentation. This helps reduce risks of misuse and elite capture, supports climate additionality, and ensures that concessionality reflects need, with greater grant support directed to more vulnerable beneficiaries.

Complementary measures to crowd in finance and support post-programme sustainability

156. Under Activity 2.3.3, the programme will develop an investment pipeline through business development, investment-readiness support, market linkages, and practical financial literacy for smallholders, producer groups, cooperatives and MSMEs. The programme is expected to generate 600 investment files with costed investment plans, cash-flow projections, basic climate-risk analysis, route-to-market evidence, and documentation aligned with LFI screening requirements. It also supports climate-resilient agriculture financing facilities in the Kyrgyz Republic and Tajikistan and expands capital mobilisation for CRLE value chains through CSA financing facilities and green/thematic bonds (Output 1.3).

157. The programme applies the principle of minimum concessionality. First, grant resources are reserved primarily for non-revenue-generating activities essential to a low-carbon and climate-resilient transition, including public planning, coordination, data and climate products, policy action, and forest and pasture restoration. These activities generate important public benefits but no sufficient financial reflows to support debt financing.

158. Second, for investments with revenue-generating potential, concessionality is reduced through matching contributions, clear eligibility criteria, and beneficiary segmentation. Smaller and more vulnerable actors receive targeted support, while larger and more bankable beneficiaries are directed towards debt financing. This focuses concessional resources on actors facing the greatest barriers to CRLE investment, particularly smallholders, community-based organisations, and micro and small agri-enterprises, including women- and youth-led enterprises.

159. Third, the No-Till Adoption Accelerator model in the Kyrgyz Republic is designed to sustain benefits beyond the programme period. Managed by a regulated, non-profit microcredit organisation rather than a separate legal entity, it will retain and reinvest repayments for the agreed CRLE agricultural financing purpose. Successive financing cycles will reduce dependence on recurring public funding and maintain access to inputs and services, with charges intended mainly to cover operating costs. A cooperation agreement will establish fiduciary, reporting, audit, and post-programme asset-use provisions to safeguard the long-term use of the resources.

E.5. Financial management and procurement (max. 500 words)

Financial Management

160. The financial management of the programme will follow GIZ's internal rules and regulations. GIZ has bank accounts with Deutsche Bundesbank and Commerzbank. GIZ will not open a specific bank account for the GCF programme but will ensure that all funds provided are clearly identifiable and distinguishable from GIZ's other funds by setting up separate cost units exclusively for the funds disbursed by the GCF for each funded activity (ledger accounts). Funds received and expenditures incurred will be booked to the respective cost unit according to generally accepted accounting principles and procedures accepted by the German Government. As a general principle, GIZ disburses funds to recipients in accordance with the progress of the programme. The Executing Entities (GIZ, MoWRAPI, ARIS, CIIP, NCECC) have to report on the proper use of funds and defined progress as a prerequisite for any further disbursement. Independent external auditors will perform annual financial audits of the programme in line with International Auditing Standards.

161. The respective Ministries of Finance will receive and manage the EIB sovereign loan proceeds in accordance with the applicable EIB financing agreements and national public financial management requirements. EIB funds will be accounted for and monitored separately from GCF proceeds, with reporting to EIB and relevant information provided to GIZ for consolidated programme monitoring. EIB will retain fiduciary oversight of its financing, while GIZ will monitor the mobilisation and use of the co-financing as part of overall programme implementation.

Procurement

162. Goods, works and services under the programme will be procured by the AE and the EEs in line with their respective implementation responsibilities. GIZ, in its role as Accredited Entity (AE) and Executing Entity (EE), will carry out procurement in accordance with the applicable German and European public procurement rules, as operationalised through GIZ internal procurement procedures. National EEs will carry out procurement under their respective subsidiary agreements with GIZ and in accordance with the GIZ Procurement Guidelines for recipients of financing. These guidelines constitute the contractually agreed minimum standards for procurement by recipients of GIZ financing. In addition, the EEs must comply with all applicable statutory regulations under national public procurement law. The EEs are responsible for the award and processing of contracts under their part of the programme and must ensure that all procurement steps are appropriately documented. The programme's procurement plan is available in Annex 6a and GIZ's procurement requirements in Annex 6b.

E.6. Indicative terms – non-grants only (max. 500 words)

(Not for public disclosure – for the Secretariat's use only)

F. RISKS AND MITIGATION MEASURES

F.1. Risk and mitigation measures

Risk 1	**Political instability, conflict sensitivity and regional security**		
Risk Origin	**External Factors**		
Risk Area	Political		
Risk Sub-area	N/A		
Description	Localised tensions related to land, water and other natural resources in border areas, or a broader deterioration in the regional security environment could restrict access, mobility, cross-border coordination and institutional engagement. Possible spillover effects from instability in neighbouring Afghanistan are relevant for southern Tajikistan and the Surkhandarya region of Uzbekistan. The March 2025 border agreement between the Kyrgyz Republic and Tajikistan is a positive development; however, it does not remove underlying resource competition or the possibility of localized tensions.		
Consequences	Disruption could delay regional activities, temporarily suspend field implementation in affected locations and reduce coverage of vulnerable rural communities.		
Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	4 - High	8 - Medium High
Mitigation Measure(s)	• **Likelihood reduction:** Apply a conflict-sensitive and do-no-harm approach throughout land-use planning, AFOLU action planning, and stakeholder engagement. Decisions on land and natural resources will involve local authorities, resource users, civil society, women, youth and vulnerable groups, and accessible grievance mechanisms will be available to address disputes before they escalate. • **Monitoring and trigger:** GIZ's regional risk management structures and the programme governance bodies will review political, security and cooperation dynamics at least quarterly and whenever a material incident occurs. Official travel or security restrictions, border closures, or a resource-related dispute that materially affects access or participation will trigger an immediate management review. • **Impact reduction:** Affected activities may be temporarily suspended, relocated or re-sequenced; meetings may be moved to a neutral location, held virtually or conducted through separate national consultations. Country-level activities may continue through national implementation structures, while security, emergency communication and business-continuity procedures are activated. Environmental and social risks will be reassessed before suspended activities resume.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Comments			
Risk 2	**Institutional continuity and implementation capacity**		
Risk Origin	**Partner Related**		
Risk Area	Partner capacity and suitability		
Risk Sub-area	N/A		
Description	High staff turnover, institutional reforms and (re)distribution of responsibilities across ministries may weaken retention of knowledge, ownership and timely decision-making. In addition, the workload of national Executing Entities, in particular CIIP and ARIS, could affect implementation if programme-specific staffing and oversight are not maintained.		
Consequences	This could delay delivery, weaken compliance and reduce the institutionalisation and sustainability of programme results.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	3 - Medium	9 - Medium High
Mitigation Measure(s)	• **Likelihood reduction:** Each EE will maintain a dedicated, programme-specific implementation structure and budget. CIIP will draw on its permanent management, fiduciary, safeguards, gender, M&E and administrative functions and the regional and district network of the Committee for Environmental Protection. ARIS will establish a separate PIU, supported by its permanent Central Unit and central ESS Unit. Staffing will not depend on reallocation from other projects. • **Institutional continuity:** Formal coordination mechanisms, documented standard operating procedures, structured handovers, shared repositories and cross-training will be used to retain knowledge. Technical staff of ministries and local institutions will remain involved in implementation,		

<table>
<tr><td></td><td colspan="3">monitoring and adaptive management, and programme tools will be aligned with national mandates and procedures.
• Monitoring and trigger: Staffing, workload and milestone delivery will be reviewed quarterly. A key position remaining vacant for more than 60 days, turnover in several key functions, or two consecutive delayed milestones attributable to capacity constraints will trigger a time-bound corrective action.
• Impact reduction and contingency: GIZ may provide backstopping, reassign tasks within the agreed institutional arrangements, or adjust workplans and sequencing until capacity is restored.</td></tr>
<tr><td rowspan="2">Residual Risk</td><td>Likelihood</td><td>Impact</td><td>Severity</td></tr>
<tr><td>2 - Possible</td><td>3 - Medium</td><td>6 - Medium</td></tr>
<tr><td>Comments</td><td colspan="3"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>Risk 3 (A)</td><td colspan="3">Money laundering, terrorist financing, prohibited practices and sanctions non-compliance (1)</td></tr>
<tr><td>Risk Origin</td><td colspan="3">Project Related</td></tr>
<tr><td>Risk Area</td><td colspan="3">Integrity</td></tr>
<tr><td>Risk Sub-area</td><td colspan="3">Money Laundering (ML) & Terrorist Financing (TF)</td></tr>
<tr><td>Description</td><td colspan="3">Due to the involvement of multiple Executing Entities, implementing partners, financial institutions, suppliers and beneficiaries, and due to the use of procurement, contracting, grant and beneficiary-selection processes, programme funds or decisions may be exposed to money laundering, terrorist financing or conflict-of-interest risks.</td></tr>
<tr><td>Consequences</td><td colspan="3">This could result in the engagement of unsuitable counterparties, misuse or diversion of funds, compromised decision-making, ineligible expenditures, implementation delays, reputational damage or the need for corrective action.</td></tr>
<tr><td rowspan="2">Inherent Risk</td><td>Likelihood</td><td>Impact</td><td>Severity</td></tr>
<tr><td>1 - Unlikely</td><td>4 - High</td><td>4 - Medium</td></tr>
<tr><td>Mitigation Measure(s)</td><td colspan="3">• Likelihood reduction: GIZ will manage GCF proceeds through its financial management, procurement, contracting, compliance and internal-control systems. Partner, supplier and financial-institution engagement will be subject to due diligence, including AML/CFT-related checks, sanctions and business-partner screening. Procurement, grant and beneficiary-selection processes will follow documented procedures, eligibility criteria, approval steps and segregation of duties. Conflict-of-interest requirements will be reflected in relevant governance, procurement and contractual arrangements.
• Monitoring and trigger: Financial flows, procurement, contracting and grant processes will be monitored through regular programme management, financial management, and risk reviews. Red flags such as unusual payment arrangements, unexplained links between decision-makers and beneficiaries, adverse media, incomplete documentation or complaints will trigger review and escalation.
• Impact reduction and contingency: Where ML/TF or conflict-of-interest concerns are identified, the affected procurement, contract, grant, payment or activity may be paused pending review. Confirmed cases will lead to corrective measures, which may include exclusion, suspension or termination of contracts or grants, recovery of funds, referral to compliance functions and notification through agreed governance channels, as applicable. Where required, affected partners, suppliers or beneficiaries may be replaced and activities re-sequenced in line with applicable procedures.</td></tr>
<tr><td rowspan="2">Residual Risk</td><td>Likelihood</td><td>Impact</td><td>Severity</td></tr>
<tr><td>1 - Unlikely</td><td>3 - Medium</td><td>3 - Low</td></tr>
<tr><td>Comments</td><td colspan="3"></td></tr>
<tr><td colspan="4"></td></tr>
<tr><td>Risk 3 (B)</td><td colspan="3">Money laundering, terrorist financing, prohibited practices and sanctions non-compliance (2)</td></tr>
<tr><td>Risk Origin</td><td colspan="3">Project Related</td></tr>
<tr><td>Risk Area</td><td colspan="3">Integrity</td></tr>
<tr><td>Risk Sub-area</td><td colspan="3">Sanctions</td></tr>
<tr><td>Description</td><td colspan="3">Spillover effects of Russia’s war of aggression in Ukraine, in particular evolving sanctions environment and regional financial links to Russia, may expose programme funds, payments, and business relationships to sanctions-related non-compliance. Exposure may arise through counterparties, suppliers, intermediaries or financial institutions directly or indirectly linked to sanctioned entities or circumvention networks.</td></tr>
<tr><td>Consequences</td><td colspan="3">A breach could interrupt transactions, result in financial loss and create serious legal and reputational consequences.</td></tr>
</table>

Inherent Risk	Likelihood	Impact	Severity
	2 - Possible	4 - High	8 - Medium High
Mitigation Measure(s)	• **Likelihood reduction:** GIZ and EEs will apply GIZ procurement and consultant guidelines, Procurement Plan, applicable AML/CFT requirements, GCF's Policy on Prohibited Practices and AML/CFT Policy, and relevant sanctions regimes. Counterparties and financial institutions will be screened at onboarding against the UN sanctions list as well as EU sanction packages, before contracting and payment, and periodically during implementation. No programme funds will flow through sanctioned entities or banks presenting unacceptable sanctions or correspondent-banking risk. • **Monitoring and trigger:** A confirmed or potential sanctions match, suspicious transaction, and adverse compliance information will trigger suspension of the relevant transaction, due diligence and escalation through GIZ compliance management and programme governance channels. • **Impact reduction and contingency:** Payments and contractual relationships will only resume after clearance. Alternative compliant banking or procurement arrangements may be used where legally and operationally feasible, and material cases will be reported and managed in accordance with GIZ and GCF requirements and respective funded activity agreement.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	3 - Medium	3 - Low
Comments			
Risk 3 (C)	**Money laundering, terrorist financing, prohibited practices and sanctions non-compliance (3)**		
Risk Origin	**Project Related**		
Risk Area	Integrity		
Risk Sub-area	Fraud / Bribery & Corruption / Collusion and any other prohibited practice		
Description	Prohibited practices, such as bribery, corruption, fraud, coercion, collusion or obstruction, may arise in connection with the programme's multi-country implementation arrangements and its procurement, contracting, grant allocation, investment-pipeline development and beneficiary-selection processes.		
Consequences	This could result in resources being used for unintended or ineligible purposes, delays in implementation, reputational harm and the need for corrective or remedial action.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	4 - High	12 - Medium High
Mitigation Measure(s)	• **Likelihood reduction:** GIZ will apply its procurement rules, compliance management framework, internal-control system and anti-corruption standards. EEs, implementing partners, contractors, suppliers and financial institutions will be required to comply with GCF's Policies, GIZ compliance standards and applicable anti-corruption requirements. Procurement, contracting, grant and beneficiary-selection processes will follow transparent eligibility criteria, documented evaluations, segregation of duties and clear approval responsibilities. • **Monitoring and trigger:** Procurement, grant and contracting processes will be monitored through regular programme management, financial management, and risk reviews. Complaints, whistleblowing and grievance channels will be available to relevant stakeholders. Integrity-related red flags and external audit findings of irregularities will trigger review, escalation and investigations, as applicable. • **Impact reduction and contingency:** Suspected prohibited practices may lead to pausing the affected procurement, contract, grant or activity pending review. Confirmed cases will result in corrective measures, which may include exclusion, suspension, termination, recovery of funds and notification through governance channels. Where needed, affected suppliers, beneficiaries or partners may be replaced and activities re-sequenced in line with applicable procedures.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Comments			
Risk 3 (D)	**Money laundering, terrorist financing, prohibited practices and sanctions non-compliance (4)**		
Risk Origin	**Project Related**		
Risk Area	Integrity		
Risk Sub-area	Conflict of interest		

Description	Due to the involvement of multiple Executing Entities, implementing partners, financial institutions, suppliers and beneficiaries, and due to the use of procurement, contracting, grant and beneficiary-selection processes, programme funds or decisions may be exposed to money laundering, terrorist financing or conflict-of-interest risks.		
Consequences	This could result in the engagement of unsuitable counterparties, misuse or diversion of funds, compromised decision-making, ineligible expenditures, implementation delays, reputational damage or the need for corrective action.		
Inherent Risk	Likelihood	Impact	Severity
	1 - Unlikely	4 - High	4 - Medium
Mitigation Measure(s)	• **Likelihood reduction:** GIZ will manage GCF proceeds through its financial management, procurement, contracting, compliance and internal-control systems. Partner, supplier and financial-institution engagement will be subject to due diligence, including sanctions and business-partner screening. Procurement, grant and beneficiary-selection processes will follow documented procedures, eligibility criteria, approval steps and segregation of duties. Conflict-of-interest requirements will be reflected in relevant governance, procurement and contractual arrangements. • **Monitoring and trigger:** Financial flows, procurement, contracting and grant processes will be monitored through regular programme management, financial management, and risk reviews. Red flags such as unusual payment arrangements, unexplained links between decision-makers and beneficiaries, adverse media, incomplete documentation or complaints will trigger review and escalation. • **Impact reduction and contingency:** Where ML/TF or conflict-of-interest concerns are identified, the affected procurement, contract, grant, payment or activity may be paused pending review. Confirmed cases will lead to corrective measures, which may include exclusion, suspension or termination of contracts or grants, recovery of funds, referral to compliance functions and notification through agreed governance channels, as applicable. Where required, affected partners, suppliers or beneficiaries may be replaced and activities re-sequenced in line with applicable procedures.		
Residual Risk	Likelihood	Impact	Severity
	1 - Unlikely	3 - Medium	3 - Low
Comments			

Risk 4	**Geopolitical instability and macroeconomic shocks**		
Risk Origin	**External Factors**		
Risk Area	Macro-economics		
Risk Sub-area	N/A		
Description	Russia's war of aggression in Ukraine and conflict or heightened tensions in the Middle East and Gulf may increase energy, fertilizer, transport, and equipment prices and contribute to macroeconomic volatility in Central Asia.		
Consequences	These shocks could increase project and beneficiary investment costs, weaken affordability and private sector participation, and delay or reduce CRLE agricultural investments.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	4 - High	12 - Medium High
Mitigation Measure(s)	• **Immediate preparedness:** PMUs will maintain rolling cost forecasts and review inflation, key input prices, procurement outcomes and fiscal conditions quarterly. Procurement may be phased or repackaged, and local or regional sourcing will be used where it meets quality, value-for-money and safeguards requirements. • **Trigger and contingency:** A forecast or awarded cost exceeding the approved estimate by more than 10%, repeated failed procurement, or a material reduction in beneficiary affordability will trigger a formal cost and implementation review. Responses may include revised quantities, rephasing, prioritisation of essential investments and budget reallocation. The budget contingency is a supplementary buffer; hence, not the core response; any adjustment affecting scope, targets or financing arrangements will be discussed and agreed with GCF. • **Impact reduction:** CRLE practices that reduce dependence on imported synthetic inputs, together with stronger local and regional value chains, post-harvest facilities and processing, will progressively reduce beneficiary exposure to external shocks.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Comments			

Risk 5	**Technical and operational complexity**		
Risk Origin	**Project Related**		
Risk Area	Financial		
Risk Sub-area	N/A		
Description	Implementation across three countries, several EEs, 180 municipalities, multiple technical workstreams and different financing mechanisms creates substantial coordination and absorption-capacity demands.		
Consequences	Weak interfaces between institutions or mechanisms could delay planning, procurement, disbursement and safeguards compliance and reduce coherence and achievement of project outcomes.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	4 - High	12 - Medium High
Mitigation Measure(s)	• **Likelihood reduction:** Dedicated national PMUs, along with a central GIZ EE, clearly assigned decision rights and focal points, and integrated annual workplans, procurement plans and disbursement forecasts will be established. Shared templates, reporting calendars and safeguards procedures will standardise implementation across countries and mechanisms. • **Phased delivery:** Sequencing will avoid launching multiple high-burden processes simultaneously where institutional capacity is insufficient. • **Monitoring and trigger:** A quarterly implementation dashboard will track milestones, procurement, disbursement, staffing, safeguards and dependencies. A delay for two consecutive quarters, a critical vacancy lasting more than 60 days, or repeated non-compliance across an EE will trigger a corrective action plan within 30 days. • **Impact reduction and contingency:** Corrective measures may include targeted capacity support, temporary surge staffing, GIZ backstopping, revised delegation of functions, simplification of workflows, resequencing and reallocation of budget, where possible, subject to applicable agreements and GCF approval where required.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Comments			
Risk 6	**Climate variability and extreme weather events**		
Risk Origin	**External Factors**		
Risk Area	Natural hazard		
Risk Sub-area	N/A		
Description	Drought, heat, extreme rainfall, floods, landslides and changes in glacier and snowmelt dynamics may damage or destroy project-supported restoration, conservation, water and CRLE agricultural investments across the targeted landscapes.		
Consequences	This could reduce pasture and agricultural productivity, undermine livelihoods and weaken achievement and durability of the project's outcomes.		
Inherent Risk	Likelihood	Impact	Severity
	3 - Likely	4 - High	12 - Medium High
Mitigation Measure(s)	• **Exposure and design reduction:** Local climate diagnostics and site-specific screening will guide location, technical design and seasonal implementation. Measures will use climate-resilient technical standards, appropriate species and planting material, water-efficient and soil-conservation practices, resilient construction and maintenance arrangements. • **Monitoring and trigger:** Weather and early-warning information will be integrated into implementation planning. An official severe-weather warning, conditions exceeding design assumptions, or material damage to an intervention will trigger suspension or adjustment of exposed activities and rapid damage and safety assessment as soon as access is possible. • **Impact reduction:** Damaged activities may be rehabilitated, redesigned, relocated or sequenced, and resources may be prioritised to viable sites and critical maintenance. Post-event environmental and social screening will be undertaken before any activity resumes. The response will draw on workplan flexibility and specific maintenance or replacement provisions, rather than relying only on the general budget contingency.		
Residual Risk	Likelihood	Impact	Severity
	2 - Possible	3 - Medium	6 - Medium
Comments			

<table>
<tr><td>Risk 7</td><td colspan="3">Co-financing mobilisation risk</td></tr>
<tr><td>Risk Origin</td><td colspan="3">Project related</td></tr>
<tr><td>Risk Area</td><td colspan="3">Financial</td></tr>
<tr><td>Risk Sub-area</td><td colspan="3">N/A</td></tr>
<tr><td>Description</td><td colspan="3">Due to potential changes in government borrowing decisions, legislative approvals, fiscal constraints, appraisal and processing timelines, EU pipeline priorities, or failure to meet financing conditions, the envisaged co-financing from EIB may be delayed, reduced in scale, or not materialise during the project implementation period.</td></tr>
<tr><td>Consequences</td><td colspan="3">As the EIB financing represents almost half of total project financing, full or partial non-materialisation would materially reduce finance mobilisation and the scale of investments under Output 2.3, particularly for irrigated agriculture and associated value chains.</td></tr>
<tr><td rowspan="2">Inherent Risk</td><td>Likelihood</td><td>Impact</td><td>Severity</td></tr>
<tr><td>2 - Possible</td><td>4 - High</td><td>8 - Medium High</td></tr>
<tr><td>Mitigation Measure(s)</td><td colspan="3">• Likelihood management: GIZ and EIB will have joint high-level engagement and structured dialogues with political partners, i.e., the European Commission (EC), Ministries of Finance, and national partners. Progress against appraisal, sovereign approval, guarantee and on-lending milestones will be reviewed at least semi-annually. These actions support timely decisions but do not remove the structural sovereign and legislative approval risk.
• Phased implementation: Outcomes 1 and 3 and Outputs 2.1 and 2.2 will proceed independently of EIB loan mobilisation. Preparatory activities for Output 2.3, including financial-institution capacity, investment criteria and business-plan support, will be implemented first and sequenced according to the availability of the associated credit line.
• Trigger: Absence of EC guarantee decision and sovereign approval by the end of implementation year 2, a formal decision not to borrow, delayed decision, or a material reduction in the expected amount will trigger contingency planning for the affected country.
• Impact reduction and contingency: Options include seeking financing from other development finance institutions or national facilities, accelerating planned green or thematic bond activities where feasible, reallocating available finance to mature investments and countries, continuing support through the remaining project mechanisms at a smaller scale, and reprioritising less capital-intensive investments in forests, rangelands, sustainable land management and rainfed agriculture. A material change would be addressed through formal restructuring or re-scoping with GCF, EIB and national partners. Non-participation by one country would not prevent implementation in the others.</td></tr>
<tr><td rowspan="2">Residual Risk</td><td>Likelihood</td><td>Impact</td><td>Severity</td></tr>
<tr><td>2 - Possible</td><td>3 - Medium</td><td>6 - Medium</td></tr>
<tr><td>Comments</td><td colspan="3"></td></tr>
</table>

G. ANNEXES			**Section**	**Confidentiality**
Annexes will be published with the FP, unless marked as confidential				
☒	Annex 1	No-objection letter(s)	C	
☒	Annex 2	Feasibility study - and a market study, if applicable	C	☐
☒	Annex 3	Implementation timetable including key project/programme milestones	C	☐
☒	Annex 4	Legal due diligence	C	☐
☒	Annex 5	Evidence of internal approval	C	☐
☒	Annex 6	Procurement plan	C/E	☐
☒	Annex 7	E&S document corresponding to the E&S category (A, B or C; or I1, I2 or I3): **(optional for SAP)** ☒ Environmental and Social Impact Assessment (ESIA) or ☒ Environmental and Social Management Plan (ESMP) or ☐ Environmental and Social Management System (ESMS) or ☐ Environmental and Social Management Framework (ESMF) ☐ Others (please specify – e.g. Resettlement Action Plan, Resettlement Policy Framework, Indigenous People's Plan, Land Acquisition Plan, etc.)	C	
☐	Annex 8	Environmental and social due diligence	C	☐
☒	Annex 9	Summary of consultations and stakeholder engagement plan	C	☐
☒	Annex 10	Gender assessment and project/programme-level action plan	C	
☒	Annex 11	Economic and financial analyses: i) Excel spreadsheet ii) Explanatory note	C/E	☐
☒	Annex 12	Monitoring and evaluation plan	D	☐
☒	Annex 13	Assessment of GHG emission reductions and their monitoring and reporting (for mitigation and cross cutting-projects)[15] **(optional for SAP)**	D	☐
☒	Annex 14	Detailed budget plan and AE fee request	E	☒
☒	Annex 15	Co-financing commitment letter, if applicable	E	☐
☒	Annex 16	Term sheet	E	☒
☐	Annex X	Other references as applicable		☐