Report Number: ICRR0024381

1. Project Data

Project ID	Project Name
P151363	CAMP4ASB
Country	**Practice Area(Lead)**
Central Asia	Environment, Natural Resources & the Blue Economy

L/C/TF Number(s)	Closing Date (Original)	Total Project Cost (USD)
		56,403,863.87
Bank Approval Date	**Closing Date (Actual)**	
03-Nov-2015		

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	0.00	19,000,000.00
Revised Commitment	0.00	18,999,990.32
Actual	0.00	18,997,464.36

Prepared by	Reviewed by	ICR Review Coordinator	Group
Vibecke Dixon	Chikako Miwa	Avjeet Singh	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Program Development Objective (PDO) was “to enhance regionally coordinated access to improved climate change knowledge services for key stakeholders (e.g., policy makers, communities, and civil society) in participating Central Asian countries, as well as to increased investments and capacity building that, combined, will address climate challenges common to these countries” (PAD page 6, para 14). The formulation of the PDO is identical in the Financing Agreement for Tajikistan (5742-TJ) from January 2016 (Schedule 1, page 5), in the Financing Agreement for the grant (D094-7C) from May 23, 2016 (Schedule 1, page 6), and in the Financing Agreement for Uzbekistan (5741-UZ) from March 2017 (Schedule 1, page 5),

apart from the minor difference in the word “increase”. The word was “increased” in the PAD and the Grant Agreement signed May 23, 2016. On the other hand, the word was “increase” in the Financing Agreements for Tajikistan and Uzbekistan dated January 2016 and March 2017, respectively.

The PDO will be parsed as follows:
1) enhanced regionally coordinated access to improved climate change knowledge services

2) increased investments that will address climate challenges

3) improved capacity building that will address climate challenges

b. Were the project objectives/key associated outcome targets revised during implementation?
Yes

Did the Board approve the revised objectives/key associated outcome targets?
No

c. Will a split evaluation be undertaken?
No

d. Components
The program had three components:

Component 1: Regional Climate Knowledge Services (US$13.4 million at appraisal, of which US$12.5 million IDA and US$ 0.9 million GCF. The cost estimate was revised to US$13.4 million at appraisal of the AF. Actual cost was: US$13.2 million). This component were to: (i) strengthen the knowledge and capacity base for climate action of Central Asian stakeholders through improved data, knowledge, tools for climate assessment and decision making, and (ii) facilitate regional dialogue and multi-stakeholder engagement for effective climate action at scale. This were to be achieved primarily through the development of a regional analytical platform for climate resilient and low emissions development in Central Asia.

Component 2: Regional Climate Investment Facility (US$38.4 million at appraisal, of which: US$21.4 million IDA, US$17 million GCF. The cost estimate was revised to US$17 million at appraisal of the AF. Actual cost was: US$37.1 million). This component was to increase productivity, improve livelihoods, and address climate change in targeted rural communities in Tajikistan and Uzbekistan through the adoption of climate-smart technologies and practices in agricultural production and land and water management. Targeted communities received financial and technical support to implement sub-projects that would improve their livelihoods while demonstrating climate change mitigation and/or adaptation efforts that could ultimately be shared and scaled up across the region. Targeted rural areas, located in climate vulnerable areas, included 46 districts in Uzbekistan (Republic of Karakalpakstan, Bukhara, Khorezm and Navoi regions) and 8 districts in Tajikistan (in GBAO, RRS, Sughd and Khatlon regions).

Component 3: Regional and National Coordination (US$5 million at appraisal, of which: US$3.9 million IDA, US$1.1 million GCF. The cost estimate was revised to US$1.1 million at appraisal of the AF. Actual: US$6 million). This component was to ensure efficient and effective management of the program. It financed the operating costs for the Program at the regional and national levels, including procurement,

financial management, reporting, safeguards oversight, monitoring and evaluation. It supported: (i) the Regional Coordination Unit (RCU) hosted by CAREC for implementation of regional activities under Component 1 and (ii) the National Coordination Units (NCU) hosted by the Rural Restructuring Agency (RRA) under the Ministry of Agriculture and Water Resources in Uzbekistan and the Committee on Environmental Protection (CEP) and the Ministry of Finance (Tajik MOF) in Tajikistan for implementation of national activities under Component 2.

Revised program components

Minor revisions to the components were introduced with the GCF AF on

- The structure of Component 1, which was streamlined into the following two sub-components under the GCF AF (other sub-components being funded under the IDA grant):
    - Sub-component 1.1 Climate Investment Assessment Mechanism
    - Sub-component 1.2 Outreach and Coalition Building

- Implementation modalities of Sub-component 2.2, with the introduction of a grant window for climate investments.

Restructurings:
The PDO remained unchanged throughout the program although the program underwent eight restructurings (see the list of dates under 2e below and a table with more details in the ICR's paragraph 22). Only two of the restructurings entailed significant changes; the fourth restructuring (August 21st 2019) was post Mid-Term Review (MTR) and reduced the targets for some of the key indicators; and the 8th restructuring (June 2021) provided USD19 million in additional financing to scale up program activities. Target values were not formally increased, however, resulting in inflated achievement values (very high achievements compared to original targets due to additional financing and non-revised targets).

The target values of two key intermediate results indicators (IRI) were revised after the MTR (Table 1, ICR page 7), downsizing the program's ambition in terms of (i) direct beneficiaries from an original target of 240,000 to a revised target of 50,000; and (ii) hectares of program areas covered by sustainable management practices from an original target of 40,000 to a revised target of 10,000. The ICR states (paragraph 17) that the revisions were introduced because the targets proved to be unrealistic given the nature of the activities financed. This was mainly due to the evolved nature of the subprojects financed by the sub-loans, which was unforeseen during preparation as direct beneficiaries turned out to be individual farmers rather than large communities or farmer organizations, resulting in fewer direct beneficiaries. Moreover, the subprojects resulted in more adoption of climate-smart technologies rather than sustainable land management, resulting in less program area covered by effective agricultural, land and water management practices.

A split rating will not be conducted, as project activities were scaled up by the AF and most original indicators were achieved or exceeded anyway. Neither original or revised target values under the third objective were achieved, so a split rating would not have affected the Efficacy rating anyway. The failure to increase target values following the additional financing will be taken into account in the assessment of achievements in section 4 Efficacy, and in the assessment of Bank Performance and M&E Quality.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Cost

The total planned cost at appraisal was US$ 44.78 million IDA credit and grant (PAD, table 1, page 13), which included US$6.78 million Beneficiary contribution to Component 2. This increased to US$ 57 million total with the addition of a US$ 19 million GCF grant during the 2016 AF. At Program Closing the actual cost was US$ 56.4 million, representing 99 percent of the total budget.

Financing

The program was financed through IDA credits and grants, and a US$19 million grant from the Green Climate Fund. The actual amount of Beneficiary contribution is not clearly presented in the ICR.

Borrower Contribution

There was no borrower contribution.

Dates

The program was approved by the World Bank Board of Directors on November 3, 2015, and became effective on August 4, 2016. The GCF AF was approved in June 2021 and became effective on January 14, 2022. The program underwent eight restructurings on the following dates; January 28th, 2017, August 6th, 2017, February 12th, 2019, August 21st, 2019, October 19th, 2020, March 24th, 2021, May 3rd, 2021 and June 22nd, 2021 (see the ICR table in paragraph 22 for details. There are some inconsistencies wrt the restructuring dates in the Data Sheet (ICR, page iii and the dates in Table 2 in para 22 of the ICR). The original closing date was April 30th, 2021, (according to the PAD, information is missing in the ICR) and the actual closing date was May 31st, 2024, i.e. the program experienced an 35 months' extension, or nearly 3 years.

3. Relevance of Objectives

Rationale

Context

Due to their reliance on natural resources, Central Asian countries - Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan – were particularly vulnerable to external shocks. Despite experiencing rapid economic growth following the independence gained in 1992 after the collapse of the Soviet Union, these countries were still facing the highest levels of poverty in the Europe and Central Asia region at the time of appraisal, with many living on less than US$2.50 a day, particularly in rural areas dependent on agriculture. Agriculture was a key economic driver in Tajikistan, providing 21% of its Gross Domestic Product (GDP) and employing 64% of its workforce. Nearly half of Central Asia's population resided in Uzbekistan, where the economy was propelled by natural gas, gold, and cotton exports.

High vulnerability to climate change was a major threat to poverty reduction and shared prosperity in Central Asia. Since the mid-20th century, average annual temperatures had risen by 0.5°C to 1.6°C,

resulting in significant consequences such as the loss of one-third of glacier volume in highland areas and increased droughts and floods in lowlands, causing substantial economic losses. Aging infrastructure, poor land and water management, rural poverty, and low adaptive capacity further exacerbated these risks.

There was high political tension over water management in the region. Prior to the program, there was no regional dialogue or cooperation on environmental and climate change issues in Central Asia. The environmental agenda was overshadowed by contentious water management issues and high political tensions, which precluded any regional cooperation in this field. Program preparation encountered significant challenges due to this pollical context, with countries intermittently joining and leaving the program. Reaching a consensus on the Implementation Agency for the Regional Component also proved to be challenging. The Bank team invested substantial efforts discussing institutional arrangements, diplomatic issues, and country dialogue.

Alignment with national and regional strategies

Prior to the program, there was no regional environmental dialogue or cooperation in Central Asia, with the environmental agenda overshadowed by contentious water management issues and high political tensions. However, the risks from climate change were recognized and all countries started to take country-level action, which included: climate strategies, policies, and programs to reduce vulnerability and move towards climate resilient development. The PDO is as such well aligned with the national and regional policies. In May 2014, recognizing the urgency of climate action, the Central Asian nations called for a regional initiative to enhance dialogue and cooperation for better climate change preparedness. All five countries agreed on the necessity of a regional program focused on climate adaptation and mitigation, building on the existing regional's experience and initiatives.

Alignment with WB strategies and policies

The PDO’s aim to strengthen regional and national institutions in addressing climate change is well aligned with the climate change priorities of Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan Country Partnership Strategies (CPSs), as well as the Turkmenistan Country Engagement Note. All five country strategies stress the importance of climate change preparedness in key sectors, including water, energy and agriculture. Some of the CPSs also emphasize the importance of regional cooperation, including for tackling transboundary challenges and better managing shared natural resources. In that regard, the PDO is well aligned with the vision of enhanced dialogue and cooperation for sustainability in Central Asia, notably by supporting an existing regional institution (International Fund for Saving the Aral Sea, IFAS) and by closely coordinating with the Central Asia Hydromet Modernization Project (CAHMP, P120788).

At project closing, the program (CAMP4ASB) remained highly relevant to the strategic development priorities in Central Asia region and was fully aligned with the World Bank CPFs in Central Asia. It was consistent with the World Bank Group (WBG) Regional Engagement Framework for Central Asia (REFCA, January 2023 update), Pillar 2 (Regional Public Goods) and its focus on “Climate, Environment, and Disaster Risk Management”. It was furthermore well aligned with the FY22-26 CPF of Uzbekistan which recognizes the important role of regional cooperation in national development and focus on greener growth (Uzbekistan CPF High level outcome 3 “Improved Livelihoods and Resilience through Greener Growth”), and the most recent FY19-23 Tajikistan CPF which identifies climate change mitigation/adaptation and gender mainstreaming as priority cross-cutting issues for World Bank operations in the country. It is furthermore consistent with the FY20-25 CPF of Kazakhstan Focus Area 3 “Securing Sustainable, Resilient,

and Low Carbon Growth" and the Kyrgyz FY24-28 CPF26 High-Level Outcome 2 "Improved access to sustainably managed natural resources".

The level of the PDO The three parts of the PDO (1. enhanced regionally coordinated access to improved climate change knowledge; 2. increased investments that will address climate challenges; and 3. improved capacity building that will address climate challenges) are all at the outcome level of the results chain, and address concrete development problem of current and future climate challenges.

Rating
High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1
Objective
Objective 1: enhanced regionally coordinated access to improved climate change knowledge services

Rationale
Theory of Change:

An explicitly outlined Theory of Change was not a requirement at the time of appraisal, but one was reconstructed for the ICR. Relevant to this objective are the following inputs/activities: strengthening the information platform for Central Asia; Targeted upgrading of climate-related monitoring systems; and Outreach and coalition building for Climate Change. These inputs were expected to lead to the following outputs: Central Asia Climate Information Platform (CACIP) created and operationalized, Uzbekistan and Tajikistan hydromet services equipped with upgraded monitoring systems; Climate knowledge networks supported and a Climate Knowledge Forum organized annually. These Outputs were expected to lead to the PDO outcome of enhanced regionally coordinated access to improved climate change knowledge services. The long term impact (when combined with the outcomes from Objectives 2 and 3) were: Sustained dialogue and regional integration on climate change; Reduced disaster and climate risk; Sustainably Managed Natural resources and Enhanced green growth in rural areas.

One major assumption underlying this theory of change was that all five countries in the region would participate in the program. The project was implemented as a regional project, with a regional component and national components in Tajikistan and Uzbekistan. It was initially supposed to be a "series of project", to expand national components and investments in the other three Central Asian countries. Although this expansion did not occur, all five countries (Kazakhstan, Turkmenistan, Tajikistan, Uzbekistan, and the Kyrgyz Republic) actively participated in regional activities implemented by CAREC which contributed to improved regional collaboration in Central Asia for effective climate adaptation and mitigation.

Hence, both critical assumptions identified in the Theory of Change (ToC) (figure 1, page 4 of the ICR); "shared national interest and agendas support regional collaboration and decision making" and "a sustainable

financing mechanism is established for the knowledge platform" did come true. The theory of change is clear and convincing and contains no logical gaps.

Outputs:

- 9 multi-country climate coordination networks were supported under the Program, enabling intra-governmental, sectoral, Non-Government Organizations (NGO), etc. cooperation, exceeding the target of 3 networks.

- Several high level conferences were organized with participation from all five regional countries:
  - UNFCCC COPs Participation: through the project CAREC provided support during the preparations and participation of Central Asian countries at the UNFCCC COPs. High-level government staff, including the presidents of Kyrgyzstan, Tajikistan, Kazakhstan, and Uzbekistan, participated in the UNFCCC COPs held in Glasgow, Sharm-El-Sheikh, and Dubai.
  - Meetings of representatives from the Ministries of Foreign Affairs (MFAs) and parliamentarians. Representatives from all five countries participated. During these meetings, various regional priorities were discussed harmonizing emission calculation formulas and other regional standards, which led to more effective climate action.
  - Six Central Asia Climate Change Conferences (CACCC). Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, and Uzbekistan participated in the six Central Asia Climate Change Conferences. One of the major outcomes of the sixth conference was the reaffirmation of Central Asian countries' commitments under the Paris Agreement. The countries focused on enhancing the alignment of their Nationally Determined Contributions (NDCs) to regional climate goals. They agreed on a regional target to reduce greenhouse gas emissions by 20% by 2030 and adopted standardized methodologies for climate change adaptation across the region, particularly in agriculture, water management, and disaster risk reduction.

- The following key multi-country events were led by the Program: an online conference focusing on the outcomes of the "Paris Agreement Art. 6 Cooperative approaches-Opportunities for Central Asia" (August 2023); a hybrid conference on "Strengthening regional dialogue on Post 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC)" in Dubai, United Arab Emirates (UAE) (December 2023); the 10th Meeting of Central Asian Foreign Ministries and Parliamentarians on Climate Change (December 2023); online coordination meetings with the UNFCCC Focal Points (October 2023). The program regularly organized various events, including media training (over 120 journalists and media representatives), youth participation in the Leadership Program, creation of climate platforms involving Central Asia's Foreign Ministries and Parliamentarians, and Coalition of Climate NGOs in Central Asia.
- 25,711 users of public climate data and analytical services provided by the platform, exceeding the original target of 9,000.
- 2 Cooperative actions resulting in the financing of investments that require collaboration across countries (e.g., transboundary investment or multi country coordination of national policies), achieving the target of 2. The two cooperative actions were: Energy infrastructure:
  - Forecasting Information and Communications Technology (ICT) (Kyrgyzstan (KG), Kazakhstan (KZ), Tajikistan (TJ), Turkmenistan (TKM) and Uzbekistan (UZ)): The program supported the update of the receiving station of Moderate Resolution Imaging Spectroradiometer (MODIS) data used by the MODSNOW software (a tool for real-time monitoring of Asia's snow cover, hydrological forecasting, daily snow water equivalent, snow depth, and snow melt, and short-

term forecasting of water availability) to assess runoff of mountain rivers in the Aral Sea basin and improve forecasting in the region.
    - Forecasting ICT (KG, KZ and UZ): Purchase of a supercomputer installed and put into operation in Uzhydromet to use numerical methods of weather forecasts, including using the predictive model COSMO.

- In addition to the achievements reported on in the RF, correspondence from the World Bank team on May 2, 2025 show that all five Central Asian countries participated in and benefited from the development of the Central Asia Climate Information Platform (CACIP). Each country can access the platform to exchange data, reports, and publications. The system is used to make short- and long-term forecasts, which is essential for decision-making processes, particularly in sustainable water resource use. This included identifying water uptake quotas for each country. Furthermore, Hydrometeorological organizations from all countries were trained in developing long-term climate projections, significantly enhancing their ability to forecast and adapt to climate impact, and specialists from all five countries participated in training sessions and workshops organized by CAREC under the regional component of the project. These events focused on environmental safeguards, climate change projections, and climate-smart agriculture.

Outcomes:

- 94% of users reporting satisfaction with climate knowledge services provided by the Program, exceeding the target of 60%. This feedback was collected from participants of various events/trainings provided.
- 5 country led plans and programs that draw on the Program's climate knowledge services, including lessons from climate investments, exceeding the target of 3. The 5 plans and programs included:
    - Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated 11.29.2018. No. 970 "On measures to strengthen the material and technical base of the Center for Hydrometeorological Service of the Republic of Uzbekistan" for the period 2019-2022.
    - Uzbekistan subsidy rules for partial reimbursement of investment costs incurred by agroindustrial complex. Farmers in Uzbekistan to Receive Improved Subsidy Allocation
    - Tajikistan National Action Plan on Adaptation to Climate Change and a National Adaptation Strategy 2019-2030.
    - A government program on the National export strategy of Tajikistan
    - A government instruction to enhance the export potential of honey production in Tajikistan

While not fully reflected in the Results Framework, the ICR reports that the program established a regional dialogue and coordination mechanism on climate change, and enhanced climate change knowledge services in Central Asia. It is stated that the program developed a range of high quality climate change knowledge services, including monitoring systems, methodologies, studies, e-learning and information platform, which were widely disseminated throughout regional outreach and coalition building activities. The two main instruments were the Central Asia Climate Information Platform (CACIP) and the Central Asia Climate Change Conference (CACCC) (although neither of them are reported on in the Results Framework). Prior to the program, there was no regional dialogue or cooperation on environmental and climate change issues in Central Asia. The program initiated a regional dialogue on climate change that, according to the ICR, enabled cooperation among Central Asian countries and fostered a common understanding and approach to climate issues.

Summary:
The indicators relevant to Objective 1 were not affected by the post-MTR restructuring. The output and outcome targets were achieved or exceeded under this Objective. The target values were not formally revised upwards with the Additional Financing to reflect the expected increase in achievements. However of the US$19 million in Additional Financing, US$17 million was allocated to activities under objective 2, so comparably less extra funds were allocated to activities under this objective. Achievement of Objective 1 is therefore rated Substantial.

Rating
Substantial

OBJECTIVE 2
Objective
Objective 2: increased investments that will address climate challenges

Rationale
Theory of Change:

An explicitly outlined Theory of Change was not a requirement at the time of appraisal, but one was reconstructed for the ICR. Relevant to this objective are the following inputs/activities: Setting up of a climate investment assessment mechanism; Financing climate resilient investments in targeted areas; and building capacity of partner financial institutions (PFI) and rural communities to support climate resilient investments in targeted areas. These inputs were to lead to the following outputs: Climate investments evaluated with lessons learned and best practices disseminated; Sub-loans and sub-grants provided to rural communities for climate investments; Climate smart agricultural, land and water management practices and technologies implemented in targeted areas; and PFI staff and rural communities trained for implementation of climate resilient investments. These outputs were expected to lead to the following PDO-level outcome: Increased investments and capacity for climate change adaptation and mitigation. The long term impact (when combined with the outcomes from Objectives 1 and 3) were: Sustained dialogue and regional integration on climate change; Reduced disaster and climate risk; Sustainably Managed Natural resources and Enhanced green growth in rural areas.

A critical assumption underlying this theory of change was that a sustainable financing mechanism would be established for the knowledge platform. Willingness of financial institutions and demand from farmers to support and implement climate-resilient investments would also need to be in place.

The theory of change is clear and convincing and contains no logical gaps.

Outputs:

- US$ 41.63 million mobilized in additional resources for knowledge, capacity, and investment for regional climate/green action through increased Program coordination among Central Asian countries and development community, achieving the target of US$40 million.

The ICR reports that in addition to the two cooperative actions (reported on above under, a third cooperative action was achieved, namely the hydrological modelling of the Ruslovoe water reservoir of the Tuyamuyun Hydroelectric Complex in order to aid decision-making to select viable technical solutions which takes into account the risks of sedimentation. The Tuyamuyun Hydroelectric Complex is a transboundary facility between Uzbekistan and Turkmenistan, which may require collaboration across countries for decision making, which is in line with the PDO 2's definition.

Outcomes:

- 70,742 direct program beneficiaries, exceeding the revised target of 50,000, of which 49.9 % were female, exceeding the target of 35%.
- 37,677 beneficiaries reached with financial services, exceeding the target of 3,000. 9,419 households were reached, and the ICR has estimated an average of 4 people per household. Of these, 53% were female, exceeding the target of 35%. These micro-projects cover various climate-smart technologies and practices, such as drip irrigation, mulching, composting, and agroforestry.
- 87.5% of the beneficiaries of the micro loan terms and conditions felt that the program investments reflected their needs, exceeding the target of 80%.

While the target values in the program's Results Framework were not formally revised upwards following the Additional Financing, some of the GCF targets were;

- For IRI4, Direct project beneficiaries, the Original target was 240,000, the revised target (post MTR) was substantially reduced to 10,000. It was increased after the Additional Financing for the GCF target, to 90,000, but this was unfortunately not reflected in the RF. The achievement of 70,742 direct program beneficiaries was thus not fully reaching the target of 90,000.
- The GCF added an indicator that was not reflected in the RF, namely "Total number of direct and indirect beneficiaries", setting the target to 205,000, achieving 206,317.

Summary:
While the output and outcome targets were achieved or exceeded under this Objective, the target values were not reflecting realistic targets. Firstly, some target values were reduced after the MTR, and with the Additional Financing of US$19 million, the target values were not formally revised upwards to reflect the expected increase in achievements However, despite the lack of formally revised targets, the intention was to set targets closer to the GCF ones, and when those are taken into account, it is clear that achievements are closer to the intended targets than the original targets. Achievement of Objective 2 is therefore rated Substantial with moderate shortcomings.

Rating
Substantial

OBJECTIVE 3
Objective

Objective 3: improved capacity building that will address climate challenges

Rationale

Theory of Change:

An explicitly outlined Theory of Change was not a requirement at the time of appraisal, but one was reconstructed for the ICR. Relevant to this objective are the following inputs/activities: Building capacity, developing methodology and knowledge products; building capacity of partner financial institutions (PFI) and rural communities to support climate resilient investments in targeted areas (the latter inputs overlap with Objective 2). These inputs were expected to lead to the following outputs: Climate-related methodologies and knowledge products for decision support would be developed and disseminated (Climate Risk and Vulnerability Assessment (CRVA) methodology, vulnerability maps, climate country profiles, and policy briefs); PFI staff and rural communities trained for implementation of climate resilient investments (this latter output overlaps with Objective 2). These outputs were expected to lead to the following single outcome: Enhanced regionally coordinated access to improved climate change knowledge services; and Improved climate resilience of targeted rural communities. The long term impact (when combined with the outcomes from Objectives 1 and 2) were: Sustained dialogue and regional integration on climate change; Reduced disaster and climate risk; Sustainably Managed Natural resources and Enhanced green growth in rural areas.

No critical assumptions related to this part of the theory of change were presented in the ICR. However, this logic builds on an underlying assumption that training and information sharing will automatically lead to behavioral change, and it does not take into account the funnel of attrition (i.e. that while for example 100 people may participate in training sessions, maybe only 70 of them will understand the message, maybe 50 of them will agree, 40 may adopt the new technology/behavior change and maybe 20-30 will succeed).

The theory of change is relatively clear and convincing despite the logical gap of automatically assuming behavior change from training sessions.

Outputs:

Improved understanding of gender-specific implications of climate change among key stakeholders and implementation of key activities, was measured in number of activities undertaken. 14 key activities were organized to increase understanding of climate change impacts for women, exceeding the target of 10. This included outreach efforts (regional events and publications such as “Women, food and climate change in Central Asia, CAREC 2020), and training activities. It is worth noting that measuring the number of activities undertaken only measures that; number of activities. It does not adequately measure how or to what degree "improved understanding” (of gender-specific implications of climate change) has taken place. Hence, this indicator only measures the output (number of activities), and is inadequate to measure the expected outcome from it: “improved understanding”. In order to measure the degree of improved understanding, other types of measurements would be needed, such as for example observations and measurements of actual behavior change (e.g. counting changed practices), tests to check changes in knowledge and awareness, and beneficiaries’ perception surveys. While the target values in the program’s Results Framework were not formally revised upwards following the Additional Financing, some of the GCF targets were.

Outcomes:

- 77,857 hectares of program area covered by effective agricultural, land and water management practices suited to local agroecological conditions, which can address climate change, exceeding the

target of 10,000. The program covered 33,465 ha in Uzbekistan and 44,392 ha in Tajikistan. The nature of sub-projects financed by the program changed from what was foreseen during preparation. The program financed numerous sub-projects that resulted in adoption of new technologies for climate smart agriculture, which was transformed into number of ha covered by sustainable land and water management technologies. For IRI5 “Number of hectares in program area covered by effective agricultural land, and water management practices suited to local agro-ecological conditions, which can address climate change”, the original target was 40,000, the revised target (post-MTR) was 10,000 and the GFC target was set to 35,000 with the Additional Financing. 77,847 hectares covered by effective management practices were achieved at completion, exceeding all target values.

- The ICR claims that 4,302 farmers adopted climate-smart agricultural technologies, exceeding the target of 3,000. The description provided in the Results Framework, however, shows that what has been measured here is the number of sub-projects, but without any information on the adoption of climate smart agricultural technologies. What has actually been measured and reported on is different from the indicator.

Summary:
While the output and outcome targets were achieved or exceeded under this Objective, the target values were not reflecting realistic targets. Firstly, some target values were reduced after the MTR, and with the Additional Financing of US$19 million, the target values were not formally revised upwards to reflect the expected increase in achievements. However, despite the lack of formally revised targets, the intention was to set targets closer to the GCF ones, and when those are taken into account, it is clear that achievements are closer to the intended targets than the original targets. Achievement of Objective 3 is therefore rated Substantial with moderate shortcomings.

Rating
Substantial

OVERALL EFFICACY
Rationale
While most outputs and outcome targets were either achieved or exceeded, the target values were not reflecting realistic targets. However, while no formal revisions of the targets were done, the project was close to meeting the GCF targets.

Overall Efficacy is therefore rated Substantial with moderate shortcomings.

Overall Efficacy Rating

Substantial

5. Efficiency

Economic Efficiency

At appraisal and at AF stages, Cost-Benefit Analyses (CBA) were conducted for component 2. The economic analyses used a time horizon of 14 years and a discount rate of 12 percent. The investment costs and the beneficiaries' contribution were considered without including annual operation and maintenance (O&M) costs. In terms of benefits, the expected income increase from the investments made through the IDA sub-loans (at appraisal) and GCF grants (at AF stage) were considered. The CBA results showed an internal rate of return (IRR) ranging within 0-44 percent at appraisal, and within 0-60 percent at the AF stage.

The economic analysis at completion was based on the same CBA method. To determine the programs economic performance, a comparable analysis with that presented in the PAD was conducted by using the same key parameters, such as time horizon, discount rate, and sole focus on component 2.

The ex-post analysis considered all program costs, such as program investments, beneficiaries' contribution, and O&M costs beyond the program lifetime. It estimated the benefits of increased income derived from the investments funded by the sub-loans and grants during the program lifetime for each country. The results show that the program's component 2 was economically viable, with an IRR estimated at 39 percent – in the same range calculated for the PAD/AF. In addition to replicating the analysis carried out at appraisal, a new analysis of the entire program was also carried out. The findings show that the entire program was economically viable, with an IRR of 27 percent. The ICR pointed out that these results are conservative, as they do not capture benefits which could not be quantified due to lack of data, such as the enhanced value of ecosystem services (e.g., through forest restoration), reduced impacts of natural disasters due to better climate knowledge among communities, and strengthened institutional knowledge on climate change at the national and regional levels.

Administrative Efficiency

The original program design, which was maintained for GCF replenishment (AF), provided a robust implementation strategy that included both regional and national activities. At the regional level, the expectation was that the program would contribute to regional cooperation in areas such as knowledge sharing and capacity building, where the benefits of a regional approach were well recognized. At the national and local levels, the strategy supported demand-driven climate investments on the ground. In the GCF phase, more emphasis was placed on the most vulnerable communities and community participation. Challenges affecting the overall program included lengthy preparation of the GCF phase (2016-2021) and delays caused by the COVID-19 pandemic (2020-2022). Moreover, the implementation was affected by a) specific challenges at regional level (i.e., one year vacancy of Program Manager and three of the five countries not participating in the program);b) in Tajikistan regarding limited on-lending in the first year due to sub-loans conditions; and c) in Uzbekistan regarding changes in implementing agency which impacted withdrawing GCF funds in the first year.

Despite these difficulties, the program disbursed 99 percent of the allocated IDA and GCF funds. Overall, the above analysis indicates that the program generated positive net returns, in the same range calculated at appraisal. In addition, despite the difficulties faced during implementation, the program managed to implement the activities on a timely basis, while demonstrating a good capacity to adapt to the COVID-19 crisis.

However, the program had a slow start . In Tajikistan, sub-loans were not made as planned in the first year. The preparation of GCF AF took 5 years, resulting in some planned activities to be implemented sequentially instead

of in parallel. In Uzbekistan, withdrawing GCF funds in the first year was disrupted. These implementation delays resulted in the overall project extension of 3 years.

Furthermore, the alignment of procedures between the GCF and the World Bank, as well as the development of internal procedures within the GCF resulted in significant delays in the preparation and effectiveness of the GCF AF, taking five years from GCF Board approval to the effectiveness of the AF. Consequently, activities initially planned to be implemented in parallel were instead implemented sequentially. For these reasons, Efficiency is rated Modest.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	44.00	0 ☑ Not Applicable
ICR Estimate	✓	27.00	0 ☑ Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance was rated High as the PDO was well aligned with national, regional and World Bank strategies and priorities. Despite achievement and over-achievement of several output and outcome indicator targets, Efficacy was rated Substantial with moderate shortcomings as target values were not adjusted to reflect the increase in funds that came with the additional financing, and hence it is not possible to compare achievements against realistic targets. However, using GCF targets as a proxy (as they reflected well the project's intention), show that achievements were quite well on track Efficiency was rated Modest, due to administrative inefficiency despite the economic analysis both at appraisal and at closure showed positive economic returns from the program. The combination of High Relevance, a Substantial with moderate shortcomings rating for Efficacy and Modest Efficiency give an overall outcome rating of Moderately Satisfactory.

a. Outcome Rating

Moderately Satisfactory

7. Risk to Development Outcome

Government Ownership Risk: The Governments of Uzbekistan and Tajikistan have demonstrated their commitment to global climate change efforts through active participation in regional program activities and recent UNFCCC COPs, supported by national programs and policies. The non-participation of three of the five regional countries show limited government ownership on a regional basis. However, in Uzbekistan and Tajikistan, the enhanced capacity and leadership of hydromet agencies, the Committee on Environmental Protection (CEP) and International Strategic Center for Agri-Food Development (ISCAD) on climate change issues are expected to sustain program results. The demand-driven approach and beneficiary contributions have built ownership.

Environmental Risk: The program's focus on climate resilient investments and sustainable resource management practices aims to generate long-term benefits without undermining the natural resource base. The environmental risk is hence low.

Financial Risk: The Central Asia Climate Information Platform (CACIP) portal remains a vital resource for climate data, research, and policy insights, enabling informed decision-making and promoting regional collaboration on climate initiatives. Some sustainability issues have been raised, however. At the regional level, the financial sustainability of the Regional Environmental Center of Central Asia (CAREC) to operate CACIP and hold the annual Central Asia Climate Change Conference (CACCC) remains uncertain without country contributions. Although CAREC has secured some additional donor financing to support these platforms in the near future, no sustainable financing mechanism is currently in place. At the national level, the lack of long-term financing for climate investments through governmental programs poses some risks to development outcomes without additional external support. The program aimed to address this challenge by building capacity on climate change in the banking sector and through a 20-year revolving credit line to PFIs. However, the lack of data on the use of revolving funds makes it difficult to assess the sustainability and success of this approach.

8. Assessment of Bank Performance

a. Quality-at-Entry

According to the ICR (p28), program preparation encountered significant challenges due to the regional political context on water resources. The Bank team invested substantial efforts on diplomatic issues, country dialogue and discussions on regional institutional arrangements. The Bank team mobilized resources from the Europe and Central Asia Capacity Development Trust Fund (ECADEVP-TF) to support program preparation, resulting in the establishment of a Regional Technical Working Group on Climate Change and the 2014 Call for Action by Central Asian nations at the Second Central Asia Climate Knowledge Forum.

The program design was logical with clearly structured components and predetermined activities. The program design balanced regional and national components, focusing on knowledge management and dissemination at the regional level, and subproject investments at the national level. A critical assumption and expectation from preparation was the participation of all countries in the region, which did not materialize. Lessons from Bank-financed natural resource management and rural development projects in the region were incorporated into the program design, including Community-Driven Development activities. Recognizing the nascent banking sector in the region, the World Bank team anticipated the

need for training Partner Financial Institutions (PFIs) on climate change and environmental and social issues, to ensure sub-project proposals met the eligibility criteria for climate resilience.

The proposed implementation arrangements proved adequate. The design of the results framework (RF) had some shortcomings; it would have benefited from a more concise wording of the PDO, clearer definitions of the indicators and additional indicators to monitor the achievement of national investment results (see further discussion under section 9a. M&E Design). Therefore, Quality-at-Entry is rated Moderately Satisfactory.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

The World Bank team conducted 16 implementation support missions over the course of the program's eight years of implementation, i.e. two missions per year, except in 2021 when only one supervision mission was undertaken. Fiduciary and safeguard aspects were regularly monitored. Performance reporting was candid, with detailed Aide-Mémoires recording critical milestones, key decisions, next steps, and information on sub-project visits. Implementation Status and Results Reports (ISRs) were candid and filed on time. Supervision was affected by the COVID 19 pandemic, but the Bank team remained in close and regular contact with the clients, including for the preparation and negotiation of the GCF AF.

There was relative instability in program management with frequent changes of Task Team Leaders (TTLs). The program was generally supervised by a TTL-co-TTL pair, with a total of eight TTLs and co-TTLs over the course of the program. The Bank team successfully prepared the GCF AF, albeit with long delays. The team also addressed issues affecting program implementation, as indicated by the multiple restructurings. While the high number of restructurings could indicate implementation flexibility, it also suggests that there were potential and missed opportunities to anticipate and consolidate the implementation issues. A significant shortcoming was the failure to formally revise the program's target values with the AF, failing to reflect the program scale up in the Results Framework, which not only led to inconsistencies in reporting with the GCF logical framework but also complicated the assessment of program achievements against targets, resulting in a downgrading of efficacy. Supervision is therefore rated Moderately Unsatisfactory.

Justification of Overall Rating of Bank Performance

Based on the Quality at Entry and Supervision, the overall Bank performance is rated Moderately Satisfactory reflecting shortcomings mainly related to M&E (in the initial RF design, and oversight from the WB team to formally revise targets to reflect program scale-up with the AF).

Quality of Supervision Rating
Moderately Unsatisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The M&E design had significant shortcomings. The PDO statement was structured around three interconnected outcomes but would have benefitted from being more concise and targeted. For instance, avoiding enumerative lists such as “policy makers, communities, and civil society” and specifying the “climate change challenges” more precisely would have improved clarity. While the Theory of Change was generally sound (albeit with some logical gaps as pointed out in sections 3 and 4), it was not fully reflected in the Results Framework.

At appraisal, the RF had some shortcomings, and some were addressed during MTR and AF restructurings. Some indicators were reformulated, and new ones were added. For example, initially, there were no indicators capturing elements of improved livelihoods of beneficiaries; these were only introduced with the GCF AF (e.g., “Beneficiaries have improved their situation due to the jobs created”; “Number of males and females benefiting from the adoption of diversified, climate-resilient livelihood options”). Additionally, the PDO-level indicators primarily monitored regional activities under Component 1. However, it should be noted that M&E of climate investments was incorporated into program design with dedicated activities under Component 1 (assessments of climate investments), and a GCF indicator monitored the number of climate investments evaluated, ensuring adequate capitalization.

b. M&E Implementation
The M&E system involved multiple entities, including the Regional Coordination Unit (RCU) of CAREC, the Uzbekistan National Coordination Unit (NCU) initially under the Rural Restructuring Agency (RRA)| and later ISCAD, the Tajikistan NCUs under the Committee on Environmental Protection (CEP) and Ministry of Finance (MOF), Partner Financing Institutions (PFIs), as well as program beneficiaries and other stakeholders. These entities were responsible for collecting, monitoring, processing, and disseminating essential program data. While aide-memoires did not comment on the quality of M&E, annual program reports, which were submitted on time, demonstrated significant efforts in monitoring and reporting program activities. At the regional level, events, trainings, participant numbers (with disaggregated data), and knowledge products were well documented in annual reports to IDA. At the national level, NCUs, including M&E specialists, conducted regular field visits in each program region, and databases on climate investments were compiled.

Program documentation showed that some indicators and measurement methods required clarification and that the modifications introduced at the MTR were not systematically implemented. However, steps were taken to address these challenges: in 2021, an M&E Analyst was recruited to support overall M&E, including the national component. A survey was conducted in Uzbekistan to inform the IRI “Beneficiaries that feel program investments reflected their needs,” and a list of climate-smart technologies was developed to report on IRI “Farmers adopting climate-smart agricultural technologies.” In the latest GCF reporting (Annual Assessment Report 2022, 2023), uneven reporting was observed, but overall, the

regional and national M&E specialists maintained a proactive approach, working collaboratively to identify and address challenges.

A significant shortcoming in the M&E implementation was that targets were not formally revised during the AF restructuring to reflect the increased scale, particularly for national climate investments. This increase in scale was only captured in the GCF logical framework included in the GCF Funded Activity Agreement (FAA). Consequently, there was a misalignment between the program RF and the GCF logical framework, resulting in two distinct M&E systems and reporting processes. This misalignment made it not only challenging to reconcile data for the entire program, but it also complicated the assessment of program achievements against targets, resulting in a downgrading of efficacy due to lack of evidence.

c. M&E Utilization

M&E data were regularly used to track progress towards program objectives, to assess performance and to inform program management. For example, monitoring data showed that the number of beneficiaries and the area supported by the program were lower than originally expected due to the nature of the activities. In particular, the program supported more initiatives involving climate-smart technologies than sustainable land management practices, which resulted in a smaller area covered. In Uzbekistan, sub-loans financed a smaller number of large-scale programs, resulting in fewer direct beneficiaries. As a result, the RF was restructured at the MTR to adjust the final targets to reflect the reduction in the number of direct program beneficiaries and the area covered by program interventions.

The overall rating of the quality of the M&E system is Modest given the shortcomings in the Results Framework (RF) design and the failure to formally revise the targets to reflect the AF.

M&E Quality Rating

Modest

10. Other Issues

a. Safeguards

The program safeguard was classified as Category B, and the following policies were triggered: Environmental Assessment OP/BP 4.01; Natural Habitats OP/BP 4.0; Forests OP/BP 4.36; Pest Management; OP 4.09 Environmental Management Frameworks (EMFs) were prepared for Tajikistan and Uzbekistan prior to appraisal (dated May 2015) based on pre-identified sub-programs and they were updated in 2017 to reflect changes related to the AF (regarding source of financing and implementing arrangements). Environmental and social risks and impacts were limited by the program design, which excluded some activities from financing under the credit line and sub-grants. Potential environmental impacts associated with eligible Climate Investment Facility sub-programs were mostly site-specific and temporary, and easily mitigated and managed through good programs design and implementation practices. Safeguard trainings were provided and all sub-projects were subject to an environmental assessment. No

major safeguards issues arose during implementation. The main issue was related to the use of chemicals / pesticides and mitigation measures were implemented in agreement with the World Bank team.

b. Fiduciary Compliance

Financial Management

The overall FM capacity of CAREC and RRA was adequate and satisfactory to the Bank, and both had previous experience in implementing either WB programs or other donor programs. In Tajikistan, the MOF PMU was relatively new to World Bank program implementation and required FM capacity building. Overall, throughout implementation, FM arrangements, including budgeting and planning, accounting and financial reporting, flow of funds, internal controls and staffing of the FM function were considered adequate and acceptable to the Bank in all implementing agencies. Most audits were received on-time and with unmodified (clean) opinion. Only the 2017 CAREC audit identified issues related to (i) administrative costs and ineligible expenditure (VAT), (ii) weaknesses in the control of accounting data related to labor costs in the accounting system, and (iii) insufficient segregation of accounts between different programs implemented by CAREC. These issues were addressed through restructuring to include VAT in eligible costs and improved financial management.

Procurement

At appraisal, procurement risk was assessed to be High, based on the experience of past and ongoing Bank-financed programs in the countries, the general public procurement environment, and the current capacity of the proposed implementing agencies to manage international procurement. The implementing agencies were staffed with procurement specialists and had technical experts to provide technical input on procurement documents and procedures. The procurement arrangements agreed for the program remained unchanged during program implementation. Procurement for the program was carried out in accordance with the Procurement Regulations dated July 1, 2016, which was revised in September 2023. No major procurement issues were reported. Gaps identified during the last post-procurement review in May 2024 highlight the need for further capacity building of program staff for future programs. The main problem was the incomplete recording in STEP by all implementing agencies throughout the program. Throughout implementation, the procurement rating remained Satisfactory. During the final implementation support mission in April 2024, the overall procurement risk was assessed as Moderate.

c. Unintended impacts (Positive or Negative)

The ICR does not report on any unintended impacts.

d. Other

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11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Moderately Satisfactory	Shortcoming related to lack of formally revised targets and efficiency aspects/.
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	
Quality of M&E	Modest	Modest	
Quality of ICR	---	Substantial	

12. Lessons

Building regional cooperation on climate change requires a long-term engagement and investment. Building regional cooperation is a long and resource-intensive process, especially in terms of human resources. The regional component of this program required substantial time to initiate and achieve tangible results. However, after eight years and six months of dedicated support, the program was successful in fostering meaningful cooperation on climate issues in Central Asia. Key to this success was the program's emphasis on dialogue activities, exemplified by the annual Central Asia Climate Change Conferences (CACCCs).

If future financing mechanisms are not considered and integrated into program design when supporting the creation of knowledge or outreach platforms, there is a risk that they may not be sustainable. The CACIP platform and annual CACCC were instrumental in fostering regional cooperation on climate issues in Central Asia. However, the future sustainability of these platforms, operated by CAREC, remains uncertain without a sustainable financing mechanism.

Direct investment support to farmers to implement agricultural climate investments can be effective when backed by robust capacity building at both community and institutional levels. Providing direct investment support through loans and grants has enabled climate investments and the adoption of climate-smart practices in the agricultural sector. This approach has also created ownership among beneficiaries to take responsibility for the interventions and sustain their livelihoods sustainably. However, this approach requires significant facilitation support and capacity building, not only for communities, but also for facilitating organizations and partner financial institutions to ensure compliance with safeguards and climate related requirements.

Use of Green Climate Fund resources can be beneficial for large scale programs if considerable lead planning and close coordination for efficient implementation are in place. The program successfully mobilized additional financing from the Green Climate Fund (GCF) to scale up CAMP4ASB activities and increase the program’s impact. Notably, this was the first GCF-funded program in Central Asia. However, the alignment of procedures between the GCF and the World Bank, as well as the development of internal procedures within the GCF, were still ongoing. This resulted in significant delays in the preparation and effectiveness of the GCF AF, taking five years from GCF Board approval to the effectiveness of the AF. Consequently, activities initially planned to be implemented in parallel were instead implemented sequentially. The GCF AF process

also required extensive support from the World Bank team. This experience underscores the need to focus GCF resources on large programs to ensure efficiency, plan well in advance, and preferably consider it for multi-phased programs.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR is generally well written, but with some shortcomings.

The quality of evidence is generally good in that it is appropriately referenced and from a credible source. However, the weakness in the Results Framework and Monitoring System itself complicated the assessment of program achievements due to the lack of appropriate target values. The quality of analysis is sufficient: The lessons are based on the evidence and analysis presented and they are sufficiently linked to the narrative in the report. The performance narrative is good.

The report is somewhat weak with regard to results orientation. It does not sufficiently highlight how activities inform outcomes. The report is not internally consistent. There are discrepancies in both dates (for restructurings) and amount of funds several places in the report, complicating assessment. The report is double the recommended length according to OPCS guidelines.

a. Quality of ICR Rating

Substantial