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Technical Assistance Report

PUBLIC

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Resilient and Inclusive Agricultural Development and Food Security in the Central Asia Regional Economic Cooperation Program Member Countries

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ABBREVIATIONS

ADB	–	Asian Development Bank
CAREC	–	Central Asia Regional Economic Cooperation
TA	–	technical assistance
TASF	–	Technical Assistance Special Fund

NOTE

In this report, "\$" refers to United States dollars.

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TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 57033-001
Project Name	Resilient and Inclusive Agricultural Development and Food Security in the Central Asia Regional Economic Cooperation Program Member Countries	Department/Division SG/SG-AFNR
Nature of Activity	Policy Advice	Executing Agency Asian Development Bank
Modality	Regular	
Country	REG (AZE, GEO, KAZ, KGZ, MON, PAK, PRC, TAJ, TKM, UZB)	
2. Sector		ADB Financing (\$ million)
✓ Agriculture, natural resources and rural development	Agricultural policy, institutional and capacity development	3.000
Total		3.000
3. Operational Priorities		Climate Change Information
✓ OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability		GHG Reductions (tons per annum) 0
✓ OP5: Promoting rural development and food security		Climate Change impact on the Project High
✓ OP6: Strengthening governance and institutional capacity		ADB Financing
✓ OP7: Fostering regional cooperation and integration		Adaptation (\$ million) 2.100
		Mitigation (\$ million) 0.900
		Cofinancing
		Adaptation (\$ million) 0.000
		Mitigation (\$ million) 0.000
Sustainable Development Goals		Gender
SDG 2.a, 2.c		Some gender elements (SGE) ✓
SDG 5.b		
SDG 13.b		Poverty Targeting
		General Intervention on Poverty ✓
4. Risk Categorization N/A		
5. Safeguard Categorization Safeguard Policy Statement does not apply		
6. Financing		
Modality and Sources		Amount (\$ million)
ADB		3.000
Technical assistance: Technical Assistance Special Fund		3.000
Cofinancing		0.000
None		0.000
Counterpart		0.000
None		0.000
Total		3.000
Currency of ADB Financing: US Dollar		

I. INTRODUCTION

1. The multiregion technical assistance (TA) will strengthen food security in the Central Asia Regional Economic Cooperation (CAREC) member countries. It will support the commitment of the Asian Development Bank (ADB) to achieving resilient and sustainable food security in the region. Specifically, the TA will support the implementation of priority activities identified under the Cooperation Framework for Agricultural Development and Food Security in the CAREC Region,¹ which was endorsed by the CAREC Ministerial Conference on 24 November 2022.² Building on the outcomes of key regional cooperation priority activities, the TA will help identify business opportunities for bankable food-security-related investment projects relevant to the focus areas stated in the cooperation framework. The TA is intended to support CAREC member countries (i) increase knowledge sharing in agriculture modernization and food security, (ii) prioritize the planned and/or proposed activities under the existing CAREC initiatives in terms of their significance for agricultural development and food security in the CAREC region, (iii) design and undertake additional CAREC activities to foster inclusive agriculture modernization and/or enhance food security in the region, (iv) increase synergies among these activities, and (v) amplify the overall positive impacts of these activities on agricultural development and food security in the CAREC member countries.³

2. The TA is anchored in ADB's Strategy 2030 operational priority 3 on building climate-smart agriculture to promote food security in developing member countries.⁴ The TA will contribute to ADB's climate financing ambition, which aims for cumulative climate finance of \$100 billion by 2030. It will also contribute to ADB's food security investment of \$14 billion by 2025.⁵

II. ISSUES

3. The CAREC member countries face considerable challenges in ensuring food security. A number of factors, including climate change, disasters triggered by natural hazards, the coronavirus disease (COVID-19) pandemic, geopolitical tensions, and disruptions in cross-border food supply chains, have adversely impacted food security in the CAREC region. Many of these factors will continue to pose significant risks to food security in the region.

4. **Agriculture's share in the economy.** In the CAREC region, agriculture is important for inclusive and sustainable economic growth. Agriculture accounts for more than 33.5% of total employment and generates more than 10.0% of gross domestic product in most CAREC member countries, averaging 14.2% for all CAREC economies in 2019. The sector also accounts for 9.4% of total export value of CAREC economies.⁶ It is a major source of livelihood for the rural

¹ CAREC Secretariat. 2022. [Cooperation Framework for Agricultural Development and Food Security in the Central Asia Regional Economic Cooperation Region](#). Manila.

² ADB. 2022. [CAREC Ministers Endorse New Green Recovery, Food Security, and Clean Energy Cooperation Initiatives](#). News release. 22 November.

³ CAREC member countries covered under this TA are Afghanistan, Azerbaijan, Georgia, Kazakhstan, the Kyrgyz Republic, Mongolia, Pakistan, the People's Republic of China, Tajikistan, Turkmenistan, and Uzbekistan. For Afghanistan, ADB placed on hold its regular assistance effective 15 August 2021. ADB. 2021. [ADB Statement on Afghanistan](#). Manila (published on 10 November). References and studies pertaining to Afghanistan will be considered if a complete picture of the CAREC member countries is required. The TA will have no direct engagement with the de facto government.

⁴ ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila. Operational priority 3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability.

⁵ The TA first appeared in the business opportunities section of ADB's website on 13 October 2021.

⁶ D. Lazaro et al. 2021. [Expanding Agri-Trade in Central Asia through the Use of Electronic Certificates](#). *ADB Briefs* No. 184. Manila: ADB.

populations in all CAREC member countries. As a supplier of food, agriculture has considerable impacts on nutrition and health outcomes. It is a major user of land and water resources and a significant source of soil, water and air pollution, and greenhouse gas emissions.

5. **Gender disparities.** Agricultural development has significant implications for poverty reduction, gender equality, and youth employment. In most CAREC member countries, the incidence of poverty and youth unemployment is higher in rural areas than in urban areas. Rural poverty rates are double urban ones and are consistently higher across all provinces in Pakistan as of 2023.⁷ Women account for 37% of the rural agricultural workforce worldwide and 48% in low-income countries.⁸ There are significant gender pay gaps in agriculture, with women being paid less than men. The gender wage gap in Pakistan is estimated to be 34%, much higher than the global average of 23% in 2022. In 2019, per capita income for men in Tajikistan was \$6,427 compared to only \$1,440 for women.⁹ There are also gender gaps in technical and professional expertise in agriculture, with women underrepresented in agricultural education, research, and extension services. Compared to male farmers, female farmers experience greater constraints on accessing extension services, finance, new technologies, and markets for agricultural inputs and products. Based on the Integrated Food Security Phase Classification,¹⁰ the prevalence of moderate and severe food insecurity is substantially higher in the adult female population than in the adult male population in several CAREC member countries.

6. Since the 2010s, the CAREC member countries have made considerable progress in agricultural development. This includes implementing institutional reforms in agriculture, adopting modern farming practices, and introducing green and/or digital agricultural technologies. These include organic and/or ecological farming, high-efficiency irrigation, and precision agriculture. In 2020, agriculture sector value-added contributed more than 20% of gross domestic product in several CAREC member countries compared to 12%–15% in 2011. During 2011–2020, agricultural value added grew at an average annual rate of 8.5% in Mongolia, and 6.5% in Tajikistan. In the same period, per capita food production increased in most CAREC member countries, notably in Mongolia (60%), Tajikistan (20%), and Georgia (17%) (footnote 1).

7. **Remaining challenges in the sector.** Despite improvements in recent years, there are still many compound challenges in the agriculture sector of the region. In most CAREC member countries, agriculture predominantly comprises small farms,¹¹ where mechanization levels are low, and the use of modern and sustainable farming practices and technologies is limited. There are also major inefficiencies in the sector. Productivity, measured as agricultural value-added per worker, is lower in many CAREC member countries than in the world on average. In 2019, the annual average productivity in CAREC member countries was \$10,000 per worker, significantly lower than the corresponding \$28,100 for member countries of the Organisation for Economic Co-operation and Development (footnote 1). Food crop yields were also generally low in the CAREC member countries, though wheat yields in the People's Republic of China, and maize and rice yields in Tajikistan, are exceptions. Agricultural value added (at 2015 prices) per cubic meter of water used in agriculture is less than \$1 in all CAREC member countries except in the

⁷ World Bank. 2023. *Poverty and Equity Brief South Asia - Pakistan, April 2023*. Washington, DC.

⁸ Food and Agriculture Organization of the United Nations. 2023. *The Status of Women in Agrifood Systems*. Rome.

⁹ Iqbal Institute of Policy Studies. 2023. *Gender Gaps in the Workforce of Pakistan*; and O. Sevimli and A. Rajabov. 2022. *Working Towards Gender Equality in Tajikistan's Labor Market*. World Bank Blogs. News release. 7 March.

¹⁰ The Integrated Food Security Phase Classification is a system for food security crises based on a range of livelihood needs.

¹¹ Farmers with less than 0.8 hectares of land.

People's Republic of China, where it is about \$2.¹² Agricultural production and trade are also highly vulnerable to negative shocks. These include outbreaks of plant disease epidemics, animal diseases, disasters triggered by natural hazards, and geopolitical crises. Agriculture contributes to, and is negatively affected by, climate change. Farm emissions account for more than 30% of total greenhouse gas emissions in many CAREC member countries. Agriculture also has significant adverse effects on the environment, notably the leaching of agrochemicals into water sources.

8. To foster inclusive and sustainable economic growth and address the food security challenges they are facing, CAREC member countries need to further modernize the agriculture sector. This includes promoting a more inclusive, productive, resilient, and environmentally sustainable agriculture. CAREC member countries also need to (i) strengthen agricultural education and research to be more inclusive of women; (ii) develop the seed industry and agricultural extension services, with specific features to ensure suitable access for female farmers; (iii) deepen institutional reforms in agriculture; and (iv) expand the use of modern farming practices and green and/or digital agricultural technologies, including access for female farmers. In doing so, most CAREC member countries can take advantage of the comparatively high literacy and internet penetration rates.

9. Regional cooperation can support CAREC member countries to foster agricultural modernization and enhance food security. The CAREC Program can serve as an effective platform for such collaboration.¹³ One of the operational clusters of CAREC 2030 includes agriculture along with water management.¹⁴ Several other operational clusters of the CAREC 2030 Strategic Framework cover various aspects of food security.¹⁵ A range of activities, including TA and investment projects related to agricultural development and/or food security, have been or are being implemented or are planned and/or proposed under existing CAREC initiatives such as the Water Pillar, the CAREC Integrated Trade Agenda 2030, the Almaty–Bishkek Economic Corridor Development, and the Shymkent–Tashkent–Khujand Economic Corridor Development. In addition, the CAREC Secretariat proposed a multiregion TA to support regional actions to address climate change as a crosscutting theme under CAREC 2030.¹⁶ Based on lessons,¹⁷ the TA aims to enhance and consolidate the impacts of completed and ongoing agricultural development and food security initiatives.

10. Considering the importance of agricultural development and food security, and the interest in increasing collaboration in these areas, the CAREC member countries agreed on a cooperation framework. The multiregion TA is required to support the implementation of priority activities identified in the cooperation framework: (i) modernizing agriculture, (ii) strengthening the policy framework, (iii) developing food value chains, (iv) harnessing international trade in food products, and (v) strengthening food security information sharing.

¹² ADB. Agriculture and Food Security in the CAREC Region. A Background Report for the Cooperation Framework for Agricultural Development and Food Security in the CAREC Region. Unpublished.

¹³ The CAREC Program is a committed partnership of 11 countries and development partners working together to promote development through regional cooperation.

¹⁴ ADB. 2017. [CAREC 2030. Connecting the Region for Shared and Sustainable Development](#). Manila.

¹⁵ CAREC Secretariat. [CAREC 2030 Strategic Framework](#).

¹⁶ ADB. 2023. [Supporting Regional Actions to Address Climate Change under the Central Asia Regional Economic Cooperation Program](#). Manila.

¹⁷ The main lessons are that, given the intertwined issues in the agriculture sector of the region, CAREC countries need a comprehensive approach to strengthen agricultural education and research, develop the seed industry and agricultural extension services, deepen institutional reforms in agriculture, and expand the use of modern farming practices and green and/or digital agricultural technologies.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

11. The TA is aligned with the following impact: inclusiveness, productivity, resilience, and sustainability in agriculture increased, and food security enhanced in the CAREC region (footnote 1). The TA will have the following outcome: regional cooperation among the CAREC member countries in agricultural development and food security increased.¹⁸ The TA will be aligned with the priorities identified in the national strategies on agriculture and food security national programs of CAREC member countries. It will also consider ongoing and planned projects of development partners in the region to avoid duplication.

B. Outputs, Methods, and Activities

12. **Output 1: Effective implementation of regional cooperation priority activities supported.** The TA will support implementation of priority activities identified under the cooperation framework. Specifically, this output will support implementation of high-impact regional activities under all five thematic areas. These are (i) deepening modernized, inclusive, and climate-smart agriculture; (ii) strengthening policy frameworks; (iii) developing food value chains; (iv) harnessing international trade in food products; and (v) strengthening food security information sharing. The output will support initiatives across major crosscutting priorities including innovation and digitalization, environmental protection, climate change adaptation and mitigation, improved food safety, private sector development, and promotion of gender equality and youth employment. Following the demand-driven approach, the TA will facilitate (i) technical cooperation, (ii) formulation of knowledge solutions (knowledge products and cross-country knowledge sharing events for CAREC member countries), (iii) study and exchange visits, (iv) harmonization of regulations and practices, and (v) knowledge and data exchanges. To further advance CAREC regional cooperation in agricultural development and food security, the TA will support the preparation of CAREC's agricultural development and food security cooperation strategy based on the lessons from past and ongoing regional cooperation initiatives. This output will not involve any civil works or pilot activities involving any safeguard issues.

13. **Output 2: Readiness of climate-resilient agriculture and food security investments improved.** Building on the outcomes of regional cooperation priority activities as stated in output 1, the TA will help identify business opportunities for suitable investment projects relevant to the focus areas stated in the cooperation framework. Specifically, under output 2, the TA will support formulating pipelines of high-impact and inclusive investment projects and/or initiatives that may include regional projects and/or country-specific projects with regional cooperation features (e.g., cross-border trade facilitation, replication of regional best practices). These projects may encompass various financing assistance modalities such as sovereign, subsovereign, nonsovereign, blended concessional finance, and public-private partnerships. To ensure project bankability and readiness, the TA will finance upstream assessments for formulation of lending and nonlending pipelines, including upstream climate disaster and safeguard risk assessments for the sector and/or projects as appropriate and feasible, project scoping studies, financial and economic analysis, and theme-specific studies such as empowerment of and entrepreneurship for women, gender equality and youth engagement in agriculture, and innovative technologies. Similar to output 1, this output will not involve any civil works or pilot activities involving any safeguard issues.

¹⁸ Design and Monitoring Framework (Annex 1).

C. Cost and Financing

14. The TA financing amount is \$3,000,000, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF).¹⁹ The key expenditure items are listed in Annex 2.²⁰ The participating governments will provide counterpart support in the form of staff, access to data and information, and other in-kind contributions.

15. The government will provide counterpart support in the form of counterpart staff, access to data and information and other in-kind contributions. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

16. The total TA amount is broken down per output in Table 1.

Table 1: Cost Breakdown per Output

Output	Indicative Cost (\$)	Percentage of TA Amount (%)
Output 1: Effective implementation of regional cooperation priority activities supported	1,020,000	34.0
Output 2: Readiness of climate-resilient agriculture and food security investments improved	1,980,000	66.0
Total	3,000,000	100.0

TA = technical assistance.

Source: Asian Development Bank estimates.

D. Implementation Arrangements

17. ADB will administer the TA. The Central and West Asia and South Asia Team of the Agriculture, Food, Nature, and Rural Development Sector Office; Sectors Group (SG-AFNR) will implement the TA. SG-AFNR will select, supervise, and evaluate consultants. In implementing the TA, active participation of the Regional Cooperation and Integration Unit, Central and West Asia Department would be sought in consultations and dialogues with CAREC member countries. A consulting firm will be recruited to prepare the CAREC agricultural development and food security cooperation strategy. Given the differing circumstances among the CAREC member countries and the multidisciplinary and cross-sector and/or thematic nature of the TA activities, individual international and national consultants will be recruited as needed during the TA period to undertake various tasks related to both outputs.

18. Implementation arrangements are summarized in Table 2.

¹⁹ \$270,000 from TASF 6 (savings and cancellations), \$1,450,000 from TASF 7, \$480,000 from TASF 7 (savings and cancellations), and \$800,000 from TASF-other sources.

²⁰ Cost Estimates and Financing Plan (Annex 2).

Table 2: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	December 2023–November 2026		
Executing agency	ADB		
Implementing agency	Central and West Asia and South Asia Team; Agriculture, Food, Nature, and Rural Development Sector Office; Sectors Group; ADB		
Consultants	To be selected and engaged by ADB		
	Selection Method	Selection Title	Amount (\$)
	Firm: Quality- and cost-based selection (90:10)	Preparation of the Central Asia Regional Economic Cooperation agricultural development and food security cooperation strategy (international: 9 person-months, national: 44 person-months)	\$800,000
	Individual: Individual consultant selection	Multiple positions as needed (international: 56 person-months, national: 104 person-months)	\$1,200,000
Disbursement	Disbursement of TA resources will follow ADB's <i>Technical Assistance Disbursement Handbook</i> (2020, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	Fixed assets will be turned over to the relevant government agencies upon completion of the TA.		

ADB = Asian Development Bank, TA = technical assistance.

Note: The indicative list of consultants is provided in Terms of Reference for Consultants (Annex 3).

Source: Asian Development Bank.

19. **Consulting services.** ADB will engage consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated staff instructions.²¹ The TA will require 65 person-months of international consulting services and 148 person-months of national consulting services. A consulting firm will be engaged following the quality- and cost-based selection method, with quality-cost ratio of 90:10. The TA will recruit international and national individual consultants on needs basis to implement the cooperation framework for agricultural development and food security.

E. Governance

20. Since ADB is the executing agency, the financial management, procurement, and integrity risks during TA implementation are assessed as low. Thorough risk assessments for financial management, procurement, and integrity for ensuing investment projects to be implemented in the target countries will be conducted under the TA.

IV. THE PRESIDENT'S DECISION

21. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$3,000,000 on a grant basis for Resilient and Inclusive Agricultural Development and Food Security in the Central Asia Regional Economic Cooperation Program Member Countries, and hereby reports this action to the Board.

²¹ Terms of Reference for Consultants (Annex 3).