

Project Completion Report Validation

Infrastructure and Rural Finance Support Programme (IRFSP)

Armenia

Date of validation by IOE: July 2023

I. Basic project data

			Approval (US\$ m)		Actual (US\$ m)	
Region	Near East, North Africa and Europe Division	Total project costs	53.89		51.28	
Country	Armenia	IFAD (loan)	11.0	20.4 %	10.1	19.7 %
Loan number	IFAD Loan No. 2000000779 IFAD Grant No. 2000000780 OFID Loan No. 1673P GEF Grant No. 2000001401	IFAD (grant)	0.4	0.6 %	0.3	0.6 %
IFAD project ID	1100001690	OFID (loan)	25.0	46.4 %	24.9	48.6 %
Type of project (subsector)	Credit and Financial Services	GEF (grant)	3.9	7.3 %	3.9	7.7 %
Financing type	Loan & grant	Government	10.1	18.7 %	10.4	20.3 %
Lending terms*	Blend	Beneficiaries	3.5	6.6 %	1.1	3.0 %
Date of approval	18 Sep 2014					
Date of loan signature	12 Nov 2014					
Date of effectiveness	16 Jul 2015					
Loan amendments		Number of beneficiaries	98,000 beneficiaries		177,450 beneficiaries	
Loan closure extensions	one extension (12 months)					
Country programme managers	Naoufel Telahigue (current) Patrick Herlant	Loan closing date	30 Sep 2021		30 Sep 2022	
Regional director(s)	Dina Saleh (current); Khalida Bouzar	Mid-term review			18 Nov 2018	
Project completion report reviewer	Elsbeth Asbeek Brusse	IFAD loan disbursement at project completion (%)			91.9 %	
Project completion report quality control panel	Fabrizio Felloni	Date of the project completion report			12 Jun 2023	

Source: Project Completion Report (2023); Design Report (2014).

II. Project outline

Country & Project Name	Armenia Infrastructure and Rural Finance Support Programme (IRFSP)
Project duration	The total project duration was seven years. The project was approved on 18 September 2014. Signing took place on 12 November 2014 and entry into force occurred on 16 July 2015. The original project completion date was 30 September 2021, but was extended to 30 September 2022 (one year), and accordingly the Global Environment Facility (GEF) grant closing date was extended to 28 February 2023. There was an effectiveness lag of 10 months, and the time from entry into force to first disbursement of funds was six months. The loan closing date was 31 March 2023.
Project goal, objectives and components	The project goal was to improve the living standard, resilience and economic prospect among the rural population in the program area, including rural communities living in risk prone areas. The development objective was to increase incomes, assets, and quality of life of targeted small-scale producers and small/medium-sized agricultural processors and smallholder farmers investing in sustainable land management systems and technologies by generating income growth and sustainable employment opportunities through strengthening the agricultural production systems and the forward and backward linkages with value chains of cash crops. The program consisted of the following components: (i) Rural Finance; (ii) Rural Areas Water Infrastructure (RAWI); (iii) Farmers Awareness and Support; (iv) Program Management; and (v) Sustainable Land Management for Increased Productivity (SLMIP).
Project area and target group	<p>The Rural Finance Component (i) of IRFSP was planned to be implemented countrywide. Priority for refinancing and investment support was given to farmers and enterprises benefiting from the infrastructure component (ii) to ensure these beneficiaries' access to the necessary finance for farm development. The RAWI component (ii) targeted seven marzes (i.e. regions) being Shirak, Lori, Tavoush, Gegharqunik, Vajots Dzor, Sjunik, and Aragatsotn, based on their high poverty, potential for high value cash crops and potential for agriculture to lift beneficiaries out of poverty. Studies were conducted to guide investments towards pockets of poverty within these marzes. The farmer awareness and support component (iii) was implemented in areas covered by the RAWI component. The GEF component (v) was implemented in nine municipalities in Syunik, Vayots Dzor and Ararat.</p> <p>The main target groups of IRFSP were poor farmers and rural households, who cultivated crops in areas of obsolete or inefficient irrigation schemes. In addition, the IRFSP target group comprised of women, vulnerable women-headed households, and youth. All program components utilized demand based self-targeting, with transparent selection criteria for the targeting of the infrastructure (ii) and rural finance (i) components. Targeting would give specific consideration to vulnerable women-headed households and youth by mobilizing awareness and support activities for these groups to enable them to take advantage of opportunities provided by the program.</p>
Project implementation	The lead implementing agency of the program is the State Institution "Rural Area Economic Development Program Implementation Unit" (RAED PIU, further called PIU) of the Ministry of Economy of the Republic of Armenia. The PIU had overall responsibility for coordinating the implementation of the IRFSP in collaboration with the existing Rural Finance Facility (RFF) and Fund for Rural Economic Development in Armenia (FREDA). The PIU had direct implementation management responsibility for all program components, except for Component 1, which was implemented by the RFF (sub-component 1.1) and FREDA (sub-component 1.2).
Changes during implementation	<p>Several changes were made before, during and after mid-term review (MTR).</p> <p>The SLMIP component was added to the program in mid-2016 due to a delayed approval process, but underwent restructuring during the MTR, because lack of clarity about its implementation arrangements and complementarity with other program components. The complementarity between this component and other program activities was strengthened through the blending of GEF matching grants with RFF credit to support those RFF credit beneficiaries who intended to adopt climate resilient agricultural technologies at the farm level.</p> <p>The Farmers Awareness and Support component was modified using an amendment to the financial agreement to allow the International Fund for Agricultural Development (IFAD) grant to support capital investment in cold storage facilities to upgrade value chain infrastructure, which addressed gaps in the original design to support produce marketing by the target households. IRFSP's design originally included using small grants for farmers' training and technical assistance, but during implementation, the PIU</p>

	<p>found that these funds would be more beneficial if invested to construct two cold storage facilities which led to the financing agreement amendment post-MTR.</p> <p>The Farmers Awareness and Support component was further modified to reduce its budget and make it fully executable during the implementation period. The excess funds were reallocated to the Rural Finance component.</p> <p>The original design in terms of gender and youth participation was refined at MTR which proposed actions to diversify income and improve food security through the creation of Window 1 in the SLMIP component. Window 1 was designed to allocate start-up packages with commodity grants in the amount of about US\$3,000 to 50 per cent women, 30 per cent youth and 20 per cent poor smallholders. Through these grants, the beneficiaries got the opportunity to engage in or develop small-scale agriculture through horticulture, greenhouse cultivation, dry farming, and beekeeping. In addition, the program has implemented a gender action plan, and a gender and social inclusion specialist was recruited to drive the program results related to gender equity and women's empowerment.</p> <p>The lead implementing agency was changed from the Republic of Armenia Government Staff Public Administration Institution to the Ministry of Economy, due to government restructuring during the IRSFP implementation. The Financing Agreement was amended in 2021 to reflect this change.</p> <p>The completion date for the IFAD loan and grant was extended by one year to 30 September 2022, and the GEF grant completion date was also extended to 28 February 2023. These extensions were needed to allow sufficient time to complete the implementation of the SLMIP component and farmers awareness activities which were impacted by various delays.</p>
Financing	<p>At design, it was envisaged that total project costs would be US\$52.833 million.¹ IFAD financing would total US\$11.35 million comprising a loan of US\$11.0 million and a grant of US\$0.35 million. A loan from the Organisation of Petroleum Exporting Countries (OPEC) Fund for International Development (OFID) of US\$25 million would be mainly used for the Rural Infrastructure component. The Government contribution was estimated at US\$10.1 million and about US\$2.0 million was being sought from other partners. US\$3.5 million would be provided by the beneficiaries as contributions (cash) to small-scale infrastructure investments and US\$0.9 million by RFF clients as credit linked to RFF. Funding from RFF clients has not been included as a funding source at completion. A grant from the Government of Denmark of US\$2.08 million is mentioned in the PCR, but is not included in the funding tables. In addition, it is mentioned in every available Supervision Mission Report, but not in the Financial Audits. In 2016, an additional grant from GEF of US\$3.94 million was included to fund an extra project component. The actual project disbursement at project completion was 95 per cent of the total project allocation, and the disbursement rate of IFAD funding at project completion was 92 per cent. Table 1 below displays the total project cost at design and completion as per the PCR, and Table 2 shows the project costs per component.</p>

Table 1
Project costs (US\$ '000) *

<i>Funding source</i>	<i>Appraisal at design</i>	<i>% of appraisal costs</i>	<i>Actual</i>	<i>% of actual costs</i>	<i>% disbursed*</i>
IFAD (loan)	11 000	20.4 %	10 112	19.7 %	91.9 %
IFAD (grant)	350	0.6 %	323	0.6 %	92.3 %
OFID (loan)	25 000	46.4 %	24 949	48.6 %	99.8 %
GEF (grant)**	3 938	7.3 %	3 938	7.7 %	100 %
Government	10 065	18.7 %	10 423	20.3 %	103.6 %
Beneficiaries	3 542	6.6 %	1 539	3.0 %	43.5 %
Total	53 895	100 %	51 284	100 %	95.2 %

Source: Project Completion Report (2023).

¹ This is mentioned in the Design Report (2014), and is different from total project costs mentioned in the PCR.

* A grant from the Government of Denmark of US\$2.08 million is mentioned in text, but not in the funding tables in the PCR. It is mentioned in every available Supervision Mission Report, but not in the Financial Audits.

** This grant became available in 2016.

Table 2
Component costs (US\$ '000)*

Component	Appraisal at design	% of appraisal costs	Actual	% of actual costs	% disbursed**
(i) Rural Finance	8 700	16.1 %	8 668	16.9 %	99.6 %
(ii) Rural Areas Water Infrastructure	36 244	67.2 %	35 171	68.6 %	97.0%
(iii) Farmer Awareness and Support	911	1.7 %	770	1.5 %	84.5 %
(iv) Program Management	4 102	7.6 %	2 401	4.7 %	58.5 %
(v) Sustainable Land Management for Increased Productivity *	3 938	7.3 %	4 274	8.3 %	108.5 %
Total	53 895	100.0 %	51 284	100.0 %	95.2 %

Source: Project Completion Report (2023).

* This Component was added in 2016 and funded by GEF.

III. Review of findings

A. Evaluation criteria

Relevance

1. IRFSP was in line with the Armenian Sustainable Development Strategy (SDS, 2012-2030), which aimed to address the underperformance of the country's agriculture sector. The SDS sought to promote intensification of agricultural development, increase productivity, reduce rural unemployment, support the food industry value chain and export potential, and increase the commercialization of farms. The program was also in line with the Government's Agricultural Development Strategy (2010-2025), which emphasized the need for intensification of agriculture, and increasing the value added in agricultural and rural labour. The IRFSP design was well-aligned with the SDS and the Agricultural Development Strategy, as both aimed to increase agricultural productivity, support value chains, and export potential, and enhance the economic prospects of small-scale producers and processors.
2. The program also followed IFAD's strategy in Armenia and the region (as noted in the 2003 country strategic opportunities paper), and focused on strengthening the capacity of the rural poor and local organizations (water user associations, village credit associations, and social infrastructure maintenance groups); ensuring more equitable access to irrigation water; and increasing the access of the poor to financial services and markets. The program was also in line with the 2018-2024 country strategic opportunities paper that focuses on supporting the government's inclusive transformation vision for improved rural livelihoods through the creation of agribusiness partnerships for integration of smallholders into resilient value chains, and enhancing an enabling environment for rural commercial development.
3. The specific objectives of the IRFSP are addressing rural poverty in selected regions of Armenia by: (i) increased productivity of small scale farming, post production processes and transition by smallholders to growing high value cash crops; (ii) creation of linkages between agro-processing facilities and poor rural smallholders to enhance their improved access to domestic and international markets and employment opportunities along the value chain; (iii) improved resilience of agricultural production systems to fluctuation in rainfall levels; and (iv) upgrading food safety, the quality of marketable products, and family health by improving household water supplies. IRFSP's components and activities were aligned to increase the target group's access to essential services by improving their access to drinking water supply, and to improve the efficiency of irrigation systems by modernizing the irrigation schemes. Additionally, the program aimed to increase beneficiaries' access to financial services, disseminate information about modern agricultural production methods, and promote the adoption of improved agricultural technologies to increase agricultural productivity, support job creation and increase farmers' resilience to the adverse impacts of climate change.
4. While the IRFSP design provided the main tools needed to address the broad challenges faced by the target households, in some areas the design of these tools were not refined enough to

appropriately address the challenges faced by the target group. Firstly, the collateral-based loan delivery mechanism was a challenge that prevented the target households' access to rural financial services. Thus, the original design of the rural finance component (i) was more relevant for expanding the rural financial outreach in general rather than focusing on the specific target groups. Similarly, the IRFSP design recognized that start-up agribusinesses can benefit more from equity investments rather than from loans. However, the design was not clear on how FREDAs' agribusiness partners should build on the advantage of accessing equity investments to establish and strengthen marketing partnerships with IRFSP target groups and did not provide any mechanism for developing synergies between RFF and FREDAs. Furthermore, the original design identified women-headed households as a vulnerable group that needed special attention and expected that training and capacity building carried out under the farmers' awareness component (iii) would address their needs. However, these measures were not strong enough to bring about an economic change in these households, which was recognized and later addressed through a design modification at MTR. Lastly, the IRFSP design did not have specific measures to address youth inclusion and reduce their migration from rural areas, despite youth being identified as a major target group and youth migration being a recognized problem in the project area.

5. The objectives of the project were consistent with country needs, institutional priorities, and beneficiaries' requirements. However, the implementation was not consistently tailored to the target groups. Consequently, this PCR concurs with the PCR and proposes a rating of *moderately satisfactory* (4) as well.

Effectiveness

6. The project target was to reach 98,000 individuals from 24,500 rural households. At completion, the overall outreach was 177,450 individuals (181.1 per cent of target), of which 51 per cent were women and 49 per cent were men, from 50,428 households (205.8 per cent of target).
7. **Component (i): Rural Finance.** The objective for this component was to increase access to financial services for enhancing investments in agricultural value chains and generating jobs. The RFF partnered with a total of six Participating Financial Institutions (PFIs) against the target of 18 PFIs as defined during the design and provided access to rural financial services to 432 persons in rural areas, which slightly exceeded the target of 426 (101 per cent). Of these 432 persons, 386 were men (against a target of 298, 130 per cent) and 46 women (against a target of 128, 36 per cent). Against the target of 600 persons trained in financial services, 1,452 persons were trained (242 per cent) of which 1,038 were men (against a target of 420, 247 per cent) and 414 women (against a target of 180, 230 per cent). The total value of gross loan portfolio for all PFIs and borrowers was US\$4.66 million, against a target of US\$3.50 (133 per cent). Lastly, 1,075 farmers were selling produce to FREDA-supported companies, against a target of 1,500 (72 per cent of target).
8. **Component (ii): Rural Areas Water Infrastructure.** The objective for this component was improved infrastructure for increasing access to water for agriculture and household consumption. Community water supply activities supported the construction or rehabilitation of 31 drinking water systems against the target of 25 systems (124 per cent). The total number of households benefitting from the drinking water systems is 13,394, which is more than twice the targeted 5,700 households (235 per cent). Against a target of 7,600 households, 8,392 households with farmland development including backyards (110 per cent) benefitted from small and medium scale irrigation distribution activities. In addition, 3,798 hectares of land were improved with soil or water conservation methods, against a target of 1,630 hectares (233 per cent). Similarly, 4,156 hectares of farm land had improved irrigation efficiency, against a target of 3,200 hectares (130 per cent). Also, the program facilitated 57,976 farmers with secure access to water, against a target of 25,100 farmers (231 per cent of target). Lastly, 4,156 hectares of land was brought under climate-resilient practices, against a target of 4,130 hectares (101 per cent).
9. **Component (iii): Farmer Awareness and Support.** The objective for this component was to upgrade the target groups' capacities for modern agricultural production methods. Trainings and courses aimed at increasing farmers' awareness, capacity building, and improving business and financial planning abilities were organized for 1,022 farmers against a target of 15,800 farmers (6 per cent of target). Of these farmers, 741 were men (against a target of 7,900, 9 per cent) and 281 were women (against a target of 7,900, 4 per cent). Against a target of training 6,100 young people in production practices and technologies, 184 young people were trained (3 per cent). Lastly, against a target of training 72 members of staff of service providers, 7 were trained (10 per cent).
10. **Component (v): Sustainable Land Management for Increased Productivity.** The objective for this component was to increase productivity in marginal lands and enhance policy processes for sustainable land management in Armenia. Results from this component are not included in the PCR,

as this component is evaluated separately. It is mentioned that the land restoration activity has successfully restored 220 hectares of degraded land, although the original target set during design was 880 hectares. In addition, 553 beneficiaries received start-up packages for activities such as horticulture, greenhouse cultivation, drying, and beekeeping under Window 1 activities. Lastly, 70 households who received loans from PFIs using RFF credit resources were supported with 25 per cent matching grants under Window 2 activities.

11. The PCR concludes that program effectiveness of IRFSP was satisfactory. This PCRV agrees and proposes a rating of *satisfactory (5)* as well.
12. **Innovation.** According to the PCR, IRFSP supported a range of innovations during implementation. Firstly, the PCR mentions the roles of RFF and FREDa as refinancing facilities, who provided a comprehensive set of financial instruments to support rural finance delivery. However, RFF was established in 2005 and FREDa in 2008, and both institutions have been involved in past IFAD programs in Armenia (i.e., Farmer Market Access Programme, 2015; and Rural Areas Economic Development Programme, 2011). Therefore, their role in IRFSP cannot be considered innovative.
13. Secondly, the PCR mentions as an innovation the matching grant facility under the SLMIP (v) component, that delivers 75 per cent credit and 25 per cent grants bundled and delivered as a single package through PFIs, as an innovation. However, IFAD produced a technical note on matching grants in 2012² and has since implemented this in other programs.
14. Thirdly, the PCR mentions that IRFSP introduced a range of “innovative on-farm technologies, such as beekeeping, small greenhouses, herbal products development, mechanical dryers and greenhouse production technologies” (PCR par 174). Even though these are considered activities and not technologies, and cannot be considered innovative in itself, the introduction of small greenhouses and electric dryers might be innovative to the Armenian context. Small greenhouses were new to many farmers who had previously relied on open-field agriculture, and electric dryers were more efficient and produced higher quality dried products than traditional mechanical drying methods.
15. Furthermore, the PCR mentions as innovations the use of grant for supporting physical assets (cold storage facilities), the beneficiary selection approach introduced for implementing Window 1 and Window 2 activities where a more comprehensive approach was used taking into account the socio-economic conditions, livelihood status, and long-term commitment of potential beneficiaries, and the development of an online sales e-commerce platform where products of FREDa-supported companies are offered. As this has been done before in many programs, it cannot be considered innovative.
16. However, the online sales e-commerce platform Agrolog, developed by FREDa together with its partner companies, where products of FREDa-supported companies are offered, can be considered innovative to the Armenian context. FREDa supported the rural enterprises to allow the connection to larger markets through the use of this platform, and it ensured access to markets during the pandemic and the war in Ukraine.
17. Based on the aforementioned, the aspects of the project, as claimed by the PCR, cannot be considered innovative. However, as the programme introduced small green houses and electric dryers to increase farm production, and developed the online sales e-commerce platform Agrolog, this PCRV rates innovation as *moderately satisfactory (4)*, one points lower than the PCR.

Efficiency

18. IRFSP encountered several internal and external challenges, leading to delays and a slow pace of implementation before and after MTR. In 2017, the government restructuring led to a revision and reduction of the state budget, causing a blockage of funds available to the PIU and resulting in delays. Furthermore, in 2018, the change in government resulted in uncertainties related to the change in the lead implementing agency and reporting lines of the PIU, which further contributed to delays. Another significant factor was the complexity and readiness of several program components. The SLMIP component (v), faced a lengthy and separate design process, which led to improper integration with the rest of the IRFSP components, and a late start of activities. Similarly, the implementation arrangements of the farmers' awareness component (iii) were unclear, particularly with reference to its utility and integration with the SLMIP component, causing delays in implementation. Both the SLMIP and the farmers awareness components were restructured during the MTR. The implementation of the Window 2 grants was delayed due to internal factors related to policy changes that were necessary to make the PFIs eligible to receive grant funding from the PIU.

² IFAD, 2012. *Matching Grants. Technical Note*, Rome: IFAD.

The land restoration activities in the SLMIP component were delayed, due to the interruptions and re-orientation in the institutional set up for the SLMIP implementation, which witnessed successive high-level changes in leadership during the course of implementation. The construction of the cold storage facilities in the farmers awareness component (iii) was delayed due to lengthy financing agreement modifications needed to repurpose the funds required for this activity. Finally, as the program progressed, it experienced a slowdown in implementation due to external factors such as the Covid-19 pandemic, the Nogorno-Karabakh conflict, and the war in Ukraine. As a result of these delays, the program completion date was extended by one year.

19. The aggregated benefits from the project net of all costs, calculated over a 20-year period, at a discount rate of 10.5 per cent, offered a financial Net Present Value of 8.5 million Dram, and an economic Net Present Value of 4.0 million Dram, for the productive investments through the Rural Finance (i) and Rural Areas Water Infrastructure (ii) components. A Financial Internal Rate of Return of 18 per cent and an Economic Internal Rate of Return (EIRR) of 14.4 per cent was calculated, which was in line with the appraisal at design, where the EIRR was estimated at 14 per cent.
20. The project has disbursed 95.2 per cent of its financing at project completion without any significant over expenditure. The IFAD allocation for project management and the total fund allocation for project management at appraisal was 13 per cent and 7.6 per cent, respectively. At completion, the expenditure was 10 per cent from IFAD and 4.7 per cent from the total funds. The cost per beneficiary household was US\$144, compared to cost per beneficiary household at design of US\$295.
21. Despite several internal and external challenges causing delays in the implementation, the project has managed to double its outreach at lower costs per beneficiary household than expected at appraisal. Appropriate adjustments were made during MTR, and the EIRR was as anticipated at design. This PCRV therefore rates the efficiency of IRFSP as *satisfactory (5)*, in line with the PCR rating.

Rural poverty impact

22. **Income and assets.** According to an impact assessment survey³ conducted by the program, 10.2 per cent of beneficiary households reported an increase in their household asset ownership index, falling short of the 15 per cent target set at design (68 per cent of target). Compared to the control group, beneficiary households' asset ownership index was 1.2 per cent higher. Tests for statistical significance are not performed in the impact assessment.
23. Beneficiary household's average annual income increase was only 0.9 per cent, falling short of the targeted 20 per cent (4.5 per cent of target). However, the control group's average annual income decreased by 9.4 per cent. Thus, IRFSP's activities may have prevented a decline in income, which was observed in the control group.
24. The number of jobs generated by small and medium enterprises in project areas decreased from 745 before the start of the project, to 650 after project completion (13 per cent decrease), not meeting the target of generating 1,450 jobs (44.8 per cent of target).
25. **Social and human capital.** According to the PCR, most of the human capital building was at the individual level. There are limited examples and evidence of improving the collective capacities and the social capital of beneficiaries.
26. According to the impact assessment survey, 94 per cent of surveyed beneficiaries have successfully adopted new and improved inputs, technologies, and practices. This includes beneficiaries of RFF and Windows 1 and 2, who have effectively implemented a range of innovative agricultural practices.
27. The farmers awareness component (iii) contributed to upgrading the target group's capacities through training and mentorship on a range of farming practices, hygiene and sanitation, effective use of drinking water, sustainable rural practices, post-harvest handling and cold storage of agricultural products. However, the outreach of this component was very poor (see paragraph 8, Effectiveness), due to a long delay in starting the implementation of this component, because of a lack of clarity about its implementation arrangement, and intersections with other components. In addition, the outbreak of the Covid-19 pandemic as well as the Armenia-Azerbaijan conflict spillover in the program areas, imposed restrictions for movement and gathering participants in one place.
28. **Food security and nutrition.** According to the impact assessment survey, a higher proportion of beneficiary households reported food insecurity at project completion (49 per cent), compared to the proportion of beneficiary households who reported food insecurity before the program (45 per

³ AM Partners Consulting Company (2022). *Infrastructure and Rural Finance Programme Final Impact Assessment (Including RFF, FREDAs)*, Yerevan: Armenia.

cent), indicating an increase of four per cent instead of the five per cent decrease that was set at design. In the control group, 55 per cent of the surveyed households experienced food insecurity. The worsening of households' food security situation can be attributed to various factors. First, the Armenia-Azerbaijan war in 2020 resulted in the loss of large areas of pastures and grasslands, loss of livestock, decrease in the cultivated areas in and around the affected villages, and safety problems in these villages that reduced the recovery of economic activities. Furthermore, the Covid-19 pandemic caused disruptions in the food supply chain, some of which are not yet fully restored and thus impacting food availability in remote areas.

29. The impact assessment survey showed that 30.1 per cent of surveyed beneficiary households reported an increase in crop production, and 28.3 per cent reported an increase in livestock production during the program period. Among the treatment group, this was 29.2 per cent and 26.4 per cent, respectively. Households reporting an increase in production was a log frame indicator, but it is unclear from the PCR and MTR report what the target was at design.
30. **Institutions and policy.** In terms of institutional support, IRFSP has strengthened RFF and FREDAs as sustainable and scalable independent rural finance institutions. In addition, the program supported small and medium enterprises, PFIs, and Water User Associations (WUAs). However, the rural finance approach using RFF and FREDAs lacked convergence and synergies between themselves and with other components, and a lack of focus on women beneficiaries. Mobilizing and supporting farmers' organisations has been weak, resulting in missed opportunities to organize beneficiaries into groups and support sustainable integration into the value chain.
31. The central bank's policy previously did not allow PFIs to receive grant financing. However, this policy has been amended to allow PFIs to receive grant financing, as long as they comply with the principles that were used for implementing the Window 2 activities.
32. While IRFSP fell short of its absolute targets on increasing assets, income and food security, this was mainly due to the late implementation of activities affected by the pandemic and conflict-related disruptions. Therefore, the PCR concludes that the rural poverty impact of IRFSP was *moderately satisfactory (4)*, in line with the PCR.

Sustainability of benefits

33. **Sustainability.** RFF had already established itself as an independent foundation prior to the inception of the IRFSP. IRFSP has further supported RFF's pathway for inclusion in the Government's vision of consolidating the various rural financing instruments under the single umbrella of the Development and Investment Corporation of Armenia (DICA). RFF's repositioning as DICA's subsidiary rural refinancing arm will increase its visibility and institutional and technical sustainability with government support available for addressing critical technical and financial needs in the future. However, RFF's sustainability is not without its challenges and depends on government commitment to continue supporting it and on RFF's ability to continue demonstrating and conserving its value proposition.
34. As with RFF, the program has supported FREDAs pathway for inclusion under the single umbrella of the DICA, as its agribusiness equity investment arm. However, as an equity investment institution, FREDAs is exposed to relatively higher financial risks compared to RFF, as its business model involves greater risks. Therefore, as with RFF, FREDAs sustainability depends on government commitment to continue to support it. According to the PCR, the government recognises the importance of RFF and FREDAs as specific tools that support agricultural small and medium enterprises and smallholder producers and is committed to preserve their value proposition. In the MTR report, it was mentioned that the private financial sector had expressed tentative interest in partnering with FREDAs, which may prove a credible and desirable exit strategy. However, this is not mentioned in the PCR.
35. The impact assessment survey showed that all the drinking water infrastructures and irrigation infrastructures are still functioning after three years of implementing them, indicating technical sustainability of these infrastructures. IRFSP has taken measures to ensure the sustainability of the water infrastructure by mobilizing and training WUAs to handle the ownership and management in the future. However, the quality of these WUAs vary, and their financial sustainability is affected by a lack of regular financial contributions from members. Moreover, most WUAs follow a reactive management approach instead of the proactive maintenance of the water distribution systems. Furthermore, farmers' reluctance to pay for water, and the absence of water meters add to the financial gaps of the WUAs and affect the water distribution systems they manage. Along the same lines, the quality of the physical works of the cold storage facilities is reported to be good, indicating technical sustainability. However, these structures were implemented towards the end of the program, and the agricultural cooperatives responsible for their management are newly developed

and trained. As the program has closed and will not provide backup support to overcome critical problems, their sustainability is questionable.

36. The IRFSP's training and technical services have built the capacity of several program beneficiaries. However, the sustainability of these services has been challenged by the fact that with program closure, access to training and technical services has ended, despite the ongoing need for such training in the field. It is unclear whether the beneficiaries can sustain their newly acquired skills without continued technical assistance. This lack of institutionalization could have a negative impact on the beneficiaries' ability to continue utilizing their new skills and knowledge in the long run. The MTR report mentions that with the IRFSP closing, it will be important that both Ministry of Agriculture and of Nature Protection and Environment become more engaged in the activities, with a view to take the concepts, approaches and support measures forward post-project. It is not mentioned in the PCR that this has occurred.
37. It is mentioned in the MTR report that an exit strategy for FREDa was to be developed. This exit strategy for FREDa is not mentioned in the PCR, nor is an exit strategy for the other project components.
38. **Scaling up.** The government plans to consolidate the various rural financing instruments available under the DICA and plans to use RFF as a main vehicle to scale up agricultural credit and improve smallholders' agricultural productivity. If this materializes, RFF will be integrated as a subsidiary of DICA to serve as an umbrella agency for delivering rural finance support. This repositioning should enable RFF to leverage on-lending funds, expand its network of PFIs, and scale up its activities.
39. FREDa's expertise in identifying high-growth agribusinesses and offering technical support and equity financing makes it a suitable candidate for scaling up its outreach. FREDa's potential to attract financing from international financial institutions and engagement in complementary agribusiness support activities, further strengthens its readiness for scaling up. The government initiated measures to integrate FREDa as a subsidiary of the DICA, along the lines of RFF. Integration with DICA would promote the complementarity and synergies between FREDa and other DICA activities, including RFF, resulting in leveraging more capital for FREDa and scaling up its business enterprise portfolio.
40. The central bank's policy previously did not allow PFIs to receive grant financing. However, with the implementation of the Window 2 activities, the central bank's policy has been amended to allow PFIs to receive grant financing as long as they comply with the principles that were used for implementing the Window 2 activities. This policy change paves the way for scaling up the delivery of grants to smallholders in the future, by blending them with credit from the PFIs and channelizing them through the PFIs themselves. However, it is unclear how these grants will be provided.
41. **Environment and natural resources management & climate change adaptation.** With regard to environment and natural resource management, IRFSP aimed to address the problem of inefficient use of water in agriculture through the rehabilitation of irrigation systems. While the majority of the farmers practiced flood irrigation at the on-farm level, resulting in water losses that offset the water efficiencies achieved upstream, the program introduced the adoption of improved and efficient irrigation systems, such as drip irrigation. The PCR does not report on measures to prevent pollution by agrochemicals, which could be an issue if drainage water flows into lakes or rivers. The MTR reports that discussions with farmers on this issue will be held, and possible action to reduce this impact will be taken, but this is not mentioned in the PCR.
42. Lastly, the land restoration activity under the SLMIP component (v) has successfully restored 220 hectares of degraded land, although the original target was 880 hectares.
43. An increase in the resilience capacity index (RCI) indicates an increase in adaptive capacity, reduced vulnerability and buffered economic conditions. According to the PCR, IRFSP has increased the RCI of 16,698⁴ households, which is double the initial target of 8,000 households (209 per cent of target). According to the impact assessment survey, the resilience capacity improved 9.41 per cent for beneficiary households, as opposed to 2.13 per cent in the control group. The main driver of the increase in the RCI of beneficiary households is identified as the rise in the ownership of assets. This finding is directly linked to the 10.2 per cent increase in the household asset ownership index, reported by beneficiary households. Several of these assets have enhanced the resilience of households to economic and climatic shocks, such as solar dryers, mechanical dryers, green houses, and solar panels.

⁴ This number is not presented in the log frame.

44. Under the program, 3,798 hectares of land were improved with soil or water conservation methods, 4,156 hectares of farm land had improved irrigation efficiency, and 4,156 hectares of land was brought under climate-resilient practices. Additionally, the program enabled 57,976 farmers with secure access to water. The combination of efficient irrigation and sustainable land management will allow beneficiaries to improve resilience and adaptation to climate change.
45. Drawing on the above highlights, this PCRV proposes a rating of *moderately unsatisfactory* (3) with regards to the sustainability of benefits, one point lower than the assessment of the PCR. While the PCR rates the project's potential for scaling up as satisfactory (5), this PCRV concludes that the effective scaling up of IRFSP was *moderately satisfactory* (4). Lastly, the PCR concludes that the natural resource management of IRFSP was moderately satisfactory (4) and rates climate change adaptation as moderately satisfactory (4) too. This PCRV proposes a rating of *moderately satisfactory* (4) for the combined score of both criteria.

Gender equality and women's empowerment

46. During MTR, the project had not yet developed a gender strategy and action plan, which was one of the factors of insufficient gender integration measures taken by the implementing parties at that time, especially by RFF and FREDa. The MTR report shows that the development of a gender strategy and action plan was under agreed actions, indicating that these were not present at design. After MTR, a gender strategy and action plan were developed and a gender and social inclusion specialist was recruited.
47. Of the total number of individuals reached by the program, 51 per cent were women. The impact assessment survey showed that beneficiary women-headed households increased their resilience capacity index with 11.0 per cent, while non-women headed households increased this by 9.0 per cent, and women-headed households in the control group by 2.4 per cent. Women-headed beneficiary households experienced a 4.7 per cent decrease in income, as opposed to women-headed beneficiary households in the control group, who experienced a 8.9 per cent decrease in income. However, beneficiary households overall had a 0.9 per cent increase in income. In addition, a lower proportion of women headed households (6.9 per cent) reported an increase in household asset ownership, compared to a 10.2 per cent overall increase among beneficiaries. These disparities may be attributed to gaps in agricultural knowledge and skills among women-headed households, as well as the insufficient availability of family labour within these households. In addition, the income of women-headed households could be disproportionately impacted by the effects of COVID-19 and the war in Ukraine during the 2021-22 period, when the Window 1 and Window 2 activities targeting women-headed households were mostly implemented.
48. The impact assessment survey also showed that 8.6 per cent of women-headed beneficiary households increased productivity with more than 50 per cent for high value crops, compared to 6.4 per cent of non-beneficiary women-headed households. However, the target set at design was a 30 per cent increase.
49. The outreach to women under the rural finance component (i) was only 10 per cent. The limited outreach to women is mostly due to the use of RFF as the main vehicle for rural finance. Despite recommendations from supervision missions, policies to increase the proportion of women borrowers were not implemented by RFF or the PFIs, and loan policies and products of RFF's partners were not aligned with the requirements of IRFSP's female beneficiaries, who were initiating commercial production, but lacked collateral and credit history.
50. The water infrastructure component (ii) benefited women as well as men, especially in regard to access to clean and safe water, and improved sanitation facilities. However, several women reported to have more time to spend with children and engage in income generation activities, because they no longer have to fetch water. Under the farmers awareness component (iii), trainings and courses aimed at increasing farmers' awareness, capacity building, and improving business and financial planning abilities reached 281 women, against a target of 7,900. For the SLMIP component (v), Window 1 met the 30 per cent women outreach target for small grants, although the outreach extended to only a small group of 150 women beneficiaries. The outreach to women under Window 2 was 13 per cent, despite a 30 per cent target.
51. A gender strategy and action plan were developed and quota were set for women's participation under Window 1 and Window 2. However, targets with regard to gender and women participation were, for the most part, not met by the program. In addition, gender mainstreaming criteria such as household decision-making, workload balance, and changes in social norms with regard to gender inequality, have not been targeted nor measured. Therefore, this PCRV proposes a rating of *moderately unsatisfactory* (3) for IRFSP's performance with regard to gender equality and women's empowerment, one point lower than the PCR.

Performance of Partners

52. **IFAD.** IFAD provided regular supervisions and implementation support missions over the course of the program; five supervision missions were carried out, of which two were remote and one was a partial supervision mission. Six implementation support and follow-up missions were carried out, and an MTR mission in 2018. During the early stages of the program, IFAD supervision missions observed and recorded some of the gaps in design, which informed necessary design revisions during the MTR. In addition, IFAD provided support to empower and enhance the skills of the IRFSP team through regular training on fiduciary and technical issues (e.g., Monitoring & Evaluation (M&E) and procurement).
53. Timely technical support from IFAD played a crucial role in restructuring FREDA's investment guidelines, and repositioning its business approach. In addition, IFAD showed flexibility in the approach to address emergencies, such as COVID-19; IFAD promptly approved concessional loans from FREDA to small and medium enterprises to tide over their working capital problems during the pandemic, supporting their survival during an acute period of crisis.
54. During MTR, IFAD approved the use of the IFAD grant to support capital investment to construct two cold storage facilities. Whereas IRFSP's design originally included using small grants for farmers' training and technical assistance, the cold storage facilities provided an upgrade to the value chain infrastructure, and addressed gaps in the original design to support produce marketing by the target households.
55. In view of the above, this PCRVR agrees with the PCR and rates IFAD's performance as *satisfactory* (5).
56. **Government.** Despite the change in the lead implementing agency from the prime minister to the ministry of economy, IRFSP maintained its PIU as a fully dedicated unit for the implementation of the program, ensuring stable management and coordination, including responsibility for program planning, budgeting, financial management, procurement, monitoring, and administrative reporting. The PIU established diligent internal processes for the implementation and monitoring of the annual work programmes and budget, procurement and M&E plans, and prepared monthly reports on the financial and technical progress. In addition, the PIU managed timely submission of the annual work programme and budget and procurement plans throughout the program, with the only exception in 2019 due to inclusion of the SLMIP component (v). The project management staff was well acquainted with IFAD procedures and actively participated in IFAD-led events and trainings (e.g., M&E and procurement). Similarly, the financial team at project level had adequate capacities and resources to manage the project, and participated in several IFAD trainings and workshop throughout the course of the project implementation. The PIU maintained a close and continuous communication flow with IFAD, and supported IFAD Supervision, MTR and completion missions.
57. One of the main challenges in monitoring project progress, was the lack of integration of the M&E systems in the PIU and FREDA. While a specific M&E manual is followed by the PIU, FREDA has its own M&E arrangements. Nevertheless, FREDA has regularly contributed to the data needed by the M&E unit in the PIU to report on the log frame indicators.
58. Based on the above, this PCRVR agrees with the PCR and rates the Government's performance as *satisfactory* (5).

B. Assessment of PCR quality

59. **Scope.** The PCR follows the outline presented in IFAD's Project Completion Review Guidelines and contains all chapters, sections, and annexes and provided substantive and relevant content. However, a table on yearly disbursement rates in US\$ is missing from the PCR.
60. Nevertheless, this PCRVR rates the scope of the PCR as *satisfactory* (5).
61. **Quality.** From the list of persons met by the PCR consultant during the completion review validation mission, it can be concluded that the PCR process has been inclusive of all relevant stakeholders.
62. The PCR is for the most part well written. However, for several paragraphs in the PCR the content of the paragraph is not in line with the title of the paragraph: "Targeting strategy proposed at design" (paragraphs 37-41) does not describe how the program has planned to select and involve potential beneficiaries. Instead, it is a reiteration of what IRFSP has accomplished for the target groups. The paragraph on environment and natural resources management is mostly about secure drinking water and irrigation, and does not mention the extent to which the development interventions contributed to enhancing the environmental sustainability, or if farming practices were improved to minimize the damage and if offsets were introduced to counter the damage caused by those farming practices. There is also no mention of supporting agricultural productivity that is sustainable and integrated

into ecosystems. A grant from the Government of Denmark of US\$2.08 million is mentioned in the text, but not included in the table of project costs in the PCR. It is mentioned in every available Supervision Mission Report, but not in the Financial Audits. Therefore, the numbers in the table of project costs in the PCR may be incorrect. This grant has been evaluated in a separate report in 2017, which has not been mentioned in the PCR.

63. Lastly, several numbers in the text are not in line with the numbers in the log frame (e.g., in paragraphs 60, 67, and 71), and several paragraphs are redundant as they are almost similar (e.g., paragraphs 17 and 59; paragraphs 184 and 185; paragraphs 145 and 152; and paragraphs 30 and 170).
64. Based on the above, this PCRV rates the quality of the PCR as *moderately unsatisfactory (3)*.
65. **Lessons.** A number of lessons, that are based on evaluation findings, have been formulated in key areas such as design, implementation, and operational management. These lessons provide meaningful insights on several aspects of the project interventions and are properly elaborated under the subheading "Lessons learned and knowledge generated".
66. This PCRV rates the lessons criterium for the PCR as *satisfactory (5)*.
67. **Candour.** The PCR narrative is objective, and both positive and negative results have been reported.
68. This PCRV rates the candour criterion for the PCR as *satisfactory (5)*.

Definition and rating of the evaluation criteria used by IOE

Criteria	Definition	Mandatory	To be rated
Relevance	The extent to which: (i) the objectives of the intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies; (ii) the design of the interventions, the targeting strategies adopted are consistent with the objectives; and (iii) the intervention has been (re-) adapted to address changes in the context.	X	Yes
Effectiveness	The extent to which the intervention/country strategy achieved, or is expected to achieve, its objectives and its results at the time of the evaluation, including any differential results across groups. A specific sub-domain of effectiveness relates to:	X	Yes
• Innovation	Innovation, the extent to which interventions brought a solution (practice, approach/method, process, product, or rule) that is novel, with respect to the specific context, time frame and stakeholders (intended users of the solution), with the purpose of improving performance and/or addressing challenge(s) in relation to rural poverty reduction. ⁵	X	Yes
Efficiency	The extent to which the intervention or strategy delivers, or is likely to deliver, results in an economic and timely way. "Economic" is the conversion of inputs (e.g., funds, expertise, natural resources, time) into outputs, outcomes and impacts, in the most cost-effective way possible, as compared to feasible alternatives in the context. "Timely" delivery is within the intended timeframe, or a timeframe reasonably adjusted to the demands of the evolving context. This may include assessing operational efficiency (how well the intervention was managed).	X	Yes
Impact	The extent to which an intervention/country strategy has generated or is expected to generate significant positive or negative, intended or unintended, higher-level effects. The criterion includes the following domains: -changes in incomes, assets and productive capacities -changes in social / human capital -changes in household food security and nutrition -changes in institution and policies The analysis of impact will seek to determine whether changes have been transformational, generating changes that can lead societies onto fundamentally different development pathways (e.g., due to the size or distributional effects of changes to poor and marginalized groups).	X NO	Yes NO
Sustainability	The extent to which the net benefits of the intervention or strategy continue and are scaled-up (or are likely to continue and be scaled-up) by government authorities, donor organizations, the private sector and others agencies.	X	Yes
• Environment and natural resources management and climate change adaptation	Note: This entails an examination of the financial, economic, social, environmental, and institutional capacities of the systems needed to sustain net benefits over time. It involves analyses of resilience, risks and potential trade-offs.	X	Yes
• Scaling-up	<u>Specific domain of sustainability:</u> <u>Environment and natural resources management and climate change adaptation.</u> The extent to which the development	X	Yes

⁵ Conditions that qualify an innovation: newness to the context, to the intended users and the intended purpose of improving performance. Furthermore, the 2020 Corporate-level Evaluation on IFAD's support to Innovation defined transformational innovations as "those that are able to lift poor farmers above a threshold, where they cannot easily fall back after a shock". Those innovations tackle simultaneously multiple challenges faced by smallholder farmers. In IFAD operation contexts, this happens by packaging / bundling together several small innovations. They are most of the time holistic solutions or approaches applied of implemented by IFAD supported operations.

Criteria	Definition	Mandatory	To be rated
	<p>interventions/strategy contribute to enhancing the environmental sustainability and resilience to climate change in small-scale agriculture.</p> <p><u>Scaling-up</u>* takes place when: (i) bi- and multi laterals partners, private sector, communities) adopt and diffuse the solution tested by IFAD; (ii) other stakeholders invested resources to bring the solution at scale; and (iii) the government applies a policy framework to generalize the solution tested by IFAD (from practice to policy).</p> <p>*Note that scaling up does not only relate to innovations.</p>		
Gender equality and women's empowerment	<p>The extent to which IFAD interventions have contributed to better gender equality and women's empowerment. For example, in terms of women's access to and ownership of assets, resources and services; participation in decision making; workload balance and impact on women's incomes, nutrition and livelihoods; and in promoting sustainable, inclusive and far-reaching changes in social norms, attitudes, behaviours and beliefs underpinning gender inequality.</p> <p>Evaluations will assess to what extent interventions and strategies have been gender transformational, relative to the context, by: (i) addressing root causes of gender inequality and discrimination; (ii) acting upon gender roles, norms and power relations; (iii) promoting broader processes of social change (beyond the immediate intervention).</p>	X	Yes
Performance of Partners	The extent to which IFAD and the Government (including central and local authorities and executing agencies) supported design, implementation and the achievement of results, conducive policy environment, and impact and the sustainability of the intervention/country programme.	X	Yes
• IFAD			
• Gouvernement	The adequacy of the Borrower's assumption of ownership and responsibility during all project phases, including government and implementing agency, in ensuring quality preparation and implementation, compliance with covenants and agreements, supporting a conducive policy environment and establishing the basis for sustainability, and fostering participation by the project's stakeholders.	X	Yes

Table 2

Table of the ratings

Criterion	PCR rating	PCR Rating	Disconnect (=PCR rating - PCR rating)
Relevance	4	4	0
Effectiveness	5	5	0
• <i>Innovation</i>	5	4	-1
Efficiency	5	5	0
Impact	4	4	0
Gender	4	3	-1
Sustainability of benefits	4	3	-1
• <i>Scaling up</i>	5	4	-1
• <i>NRM and CCA⁶</i>	4	4	0
Overall Project achievement	4.44	4.00	-0.44
Partner performance			
IFAD	5	5	0
Government	5	5	0
Average rating disconnect			-4 / 11 = -0.36

Table 3

Ratings of the project completion report quality

Quality Criterion	IOE PCR rating
Scope	5
Quality	3
Lessons	5
Candour	5
Overall rating of the project completion report	4.5

⁶ The PCR concluded that natural resource management was moderately satisfactory (4) and rated climate change adaptation as satisfactory (5). The average of both criteria is presented as the PCR rating.

Abbreviations and Acronyms

DICA	Development and Investment Corporation of Armenia
EIRR	Economic Internal Rate of Return
FREDA	Fund for Rural Economic Development in Armenia
GEF	Global Environment Facility
IFAD	International Fund for Agricultural Development
IRFSP	Integrated Rural Finance Support Programme
M&E	Monitoring and Evaluation
MTR	Mid-term Review
OFID	OPEC Fund for International Development
OPEC	Organisation of Petroleum Exporting Countries
PFI	Participating Financial Institution
PIU	Project Implementation Unit
RAED PIU	Rural Area Economic Development Program Implementation Unit
RAWI	Rural Areas Water Infrastructure
RCI	Resilience Capacity Index
RFF	Rural Finance Facility
SDS	Sustainable Development Strategy
SLMIP	Sustainable Land Management for Increased Productivity
WUA	Water User Association

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