



SUSTAINABLE LAND MANAGEMENT FOR INCREASED PRODUCTIVITY IN ARMENIA (SLMIP)

TERMINAL EVALUATION REPORT



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Abbreviations and acronyms

ACC	Adaptation to Climate Change
COVID-19	Coronavirus Disease 2019
CFP	Combined Financial Product
DICA	Development and Investment Corporation of Armenia
FREDA	Fund for Rural Economic Development in Armenia
GEF	Global Environment Facility
GOA	Government of Armenia
IFAD	International Fund for Agricultural Development
IRFSP	Integrated Rural Finance Support Programme
LLC	Limited Liability Company
MOE	Ministry of Environment
M&E	Monitoring and Evaluation
MTR	Mid-term Review
OFID	OPEC Fund for International Development
PCR	Project Completion Report
PFI	Participating Financial Institutions
PIU	Project Implementation Unit
PPP	Public-Private Partnership
PDR	Project Design Report
RAWI	Rural Areas Water Infrastructure
RF	Rural Finance
RFF	Rural Finance Facility
SDS	Sustainable Development Strategy
SLM	Sustainable Land Management
SMEs	Small and Medium Enterprises
ToC	Theory of Change
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar
W1	Window 1 under SLMIP
W2	Window 2 under SLMIP
WASH	Water, Sanitation and Hygiene
WUAs	Water User Associations

I. Project Identification Table

Project ID	8005
Title	Sustainable Land Management For Increased Productivity In Armenia (SLMIP)
Location	Armenia
Start Date	29/07/2016
End Date	28/02/2023
Mid-term Evaluation	18/11/2018 - 04/12/2018
Executing and Implementing Agencies	<u>GEF Agency:</u> International Fund for Agricultural Development (IFAD). <u>Executing Agency:</u> Project Implementation Unit under the Rural Areas Economic Development Programme. <u>Partners:</u> Ministry of Economy, Ministry of Agriculture and Ministry of Environment.
Budget	USD 3,937,500

II. Executive Summary

1. SLMIP was designed as a complementary fully blended project with the baseline IFAD-supported IRFSP Project, addressing in an integrated way the root causes of agriculture decline and rural poverty in the targeted marzes. The input of the GEF funding aimed to yield more sustainable land management, higher yields and more diversified production through efficient irrigation and sustainable agriculture systems and technologies and the ecological restoration of functional agro-landscapes in the target areas, preventing land degradation problems; (ii) improved access to suitable technologies and knowhow thanks to the facilitated access to improved services and the positive impact of technical and institutional capacity development
2. The specific objective of SLMIP is “to increase income and assets generated by smallholder farmers through investments in sustainable land management systems and technologies”.
3. SLMIP in fact not well blended with the IFAD baseline project. Although the IFAD design recognized the environmental challenges and the requirement for potential GEF funding to tackle them, SLMIP was developed separately after the completion of the main IRFSP design. As a result, its integration and synergy with the rest of the programme were limited. This shortcoming was only addressed during the MTR.
4. The overall project rating is **Moderately Satisfactory**. The project managed to achieve good results related to increasing the resilience capacity index (RCI), increase in assets, increase in overall productivity as well as income. Beneficiaries of the project also reported less food insecurity compared to non-beneficiaries. The restructuring done to SLMIP at MTR was crucial to execute the activities and ensure their relevance to the project objectives. The restructuring also allowed the project to increase its focus on women and youth.
5. However, the project still fell short of its absolute targets on increasing assets, income and food security mainly due to the late implementation of activities affected by the pandemic and conflict-related disruptions. The M&E system was efficient to a certain extent but failed to track the GEF indicators properly and did not reflect well the changes made at MTR. There are also still concerns about the sustainability of some of these benefits exacerbated by not executing the policy work and underachieving the capacity building targets. The financial and socio-political risks also further threaten sustainability on the longer term.
6. These shortcomings are justified given the context of the project that was severely affected by COVID-19 related delays, Armenia-Azerbaijan conflict and the frequent changes among government leadership especially at the Ministry of Environment.
7. The two grant windows that were introduced during the restructuring at MTR contributed to outcomes 1.1, 1.2 and 2.2 that aimed to increase the productivity of investments in sustainable fruit tree farming systems, support women groups to adopt efficient land and water management practices for crop diversification and food security and enhance value chain development of high quality by-products resulting from landscape restoration developed by farmers’ groups.
8. Window 1 grants benefited around 553 households including 150 women on activities such as greenhouses, beekeeping and herbal products. However, there are concerns of the

sustainability of these activities on the longer run. Window 2, on the other hand, relied on blended grants and loans where a total of 70 households benefited and the impact assessment concluded around a 30% increase in crop production as a result. The activities under this window seem to have a higher chance of being sustainable on the longer run due to the loan component.

9. Under outcome 2.1 on restored ecosystem services supporting agriculture production, the project also managed to utilise GIS to select the degraded areas for potential land restoration. SLMIP managed to successfully restore 220 hectares of degraded land which represents around a quarter of the original target at design that seems to have been overambitious and underestimated. Concerns on the sustainability of the lands restored remains since this activity was executed in the final year of the project.
10. Outcome 3.1 on upgraded capacity of key practitioners to adopt sustainable land management practices was key to achieve the rest of the outcomes. Despite the limited number of beneficiaries trained, the training inputs were highly targeted and proved to be effective in promoting the inclusion of women and youth in the agricultural sector. The certification earned by the beneficiaries from these trainings helped them to benefit from window 1 starter packages and window 2 grants plus loan package. Additionally, the knowledge and skills acquired during the training were further reinforced by follow-up support and mentorship, which contributed to a success rate of over 90% in the window 1 and window 2 supported activities. The trainings to WUAs has been key to building their capacities for the management of the irrigation infrastructure developed under the RAWI component. However, the financial capacity of WUAs remains the bigger concern on the longer term.
11. Despite the absence of policy support (outcome 3.2), SLMIP remains of moderately likely rating on the likelihood of sustainability. The main threats to the project environmental gains are political, institutional and financial. IRFSP has taken measures to ensure the institutional sustainability of the water infrastructure by mobilizing and training WUAs to handle the ownership and management but the quality of these WUAs vary and their financial sustainability is affected by the lack of regular financial contributions from members. RFF's profitability has already made it financially sustainable by covering all its financial and operational expenses from its own revenue. On the other hand, SLMIP grants remain vulnerable to economic shocks that may affect cash flows and the beneficiaries' have limited ability to mobilize the working capital required for continued operations in the future.
12. COVID-19, Armenia- Azerbaijan war and the changes in the government during SLMIP's lifetime show that the socio-political risks can have detrimental impacts on rural development in general and on the most vulnerable groups in the agriculture sector in particular. The spill over effect of the Russia-Ukraine war and its potential escalation remain a major regional and global risk. These are all risks that are beyond the project's capacity to address but the project has shown a good practice in adaptive management that could be replicated by the government if similar situations arise in the future.
13. Based on the lessons learned from SLMIP, it is recommended that future IFAD projects funded by GEF in Armenia integrate co-financed project components in the main designing process to avoid potential disconnect. Projects should also ensure that policy engagement activities are clear, inclusive and have clear implementation modalities. Project management units require

extensive training on the Monitoring and Evaluation Requirements of the GEF. Any restructuring should reconcile adjusted activities with the original outcomes and indicators in the GEF document. It is also very important to incorporate clear gender, youth and vulnerable communities strategies since design.

III. Introduction and Background

1. The overall objective of SLMIP is “to enhance the overall resilience of rural communities living in risk-prone areas of Armenia”. The specific objective of SLMIP is “to increase income and assets generated by smallholder farmers through investments in sustainable land management systems and technologies”.
2. The Project responds to the following LD FA objectives: (i) LD-1 (Maintain and improve flow of agro-ecosystem services to sustain food production and livelihoods), promoting climate-resilient SLM options to reduce soil erosion rates, and improve habitats and agro-biodiversity in the production landscapes; (ii) LD-3 (Reduce pressures on natural resources by managing competing land uses in broader landscapes), through increased investments in integrated watershed management and restoration approaches adopted by water users associations (WUAs), municipalities and local land users, which will also facilitate the achievement of multiple global benefits within the Biodiversity, Climate Change and Sustainable Forest Management focal areas.
3. SLMIP was designed as a complementary fully blended project with the baseline IFAD-supported IRFSP Project (see Table 1), addressing in an integrated way the root causes of agriculture decline and rural poverty in the targeted marzes. The input of the GEF funding aimed to yield: (i) more sustainable land management, higher yields and more diversified production through efficient irrigation and sustainable agriculture systems and technologies, better adapted crop types and varieties, and the ecological restoration of functional agro-landscapes in the target areas, preventing land degradation problems; (ii) improved access to suitable technologies and knowhow thanks to the facilitated access to improved services, inputs, and credit for producers, the positive impact of targeted technical and institutional capacity development, and the implementation of on-the ground activities.

Table 1 Complementarity between IRFSP and SLMIP at Design

IRFSP Objective/Component	SLMIP Additional Benefits
<p>The overall goal of IRFSP is to improve the economic and social status of the population in selected rural areas where poverty is prevalent by generating income growth and sustainable employment opportunities through strengthening the agriculture production systems and the forward and backward linkages of value chains for cash crops.</p> <p>The specific objectives for rural poverty mitigation are: (i) increased efficiency of high value cash crops value chains; (ii) improving water infrastructures; (iii) upgrading food safety, the quality of marketable products, and family health.</p>	<ul style="list-style-type: none"> - The GEF interventions aimed to improve resilience of the smallholder farmers’ production systems to land degradation and climate-related risks by promoting Efficient Irrigation Technologies (EIT), soil and water conservation (S&WC) farming systems, and ecological restoration measures; - The GEF project aimed to incorporate erosion control measures (e.g. protective vegetation shelterbelts to prevent wind erosion and siltation problems in the irrigation infrastructure) and water efficiency technologies in the rehabilitated tertiary

	irrigation infrastructure and conveyance networks.
Component 1 of IRFSP is Rural Finance, including credit for farmers and small enterprises to be channelled through the existing Rural Finance Facility (RFF), and equity and semi equity financing through the Fund for Rural Economic Development in Armenia (FREDA).	<ul style="list-style-type: none"> - Project beneficiaries trained on environmental impacts reduction measures and climate-resilient technologies to be acquired through IRFSP available credits - Financial Institutions selected by IRFSP integrate the necessary information to evaluate robustness of applications for finance for environmentally sound, economically viable and socially beneficial investments.
Component 2 of IRFSP is Rural Areas Water Infrastructure (RAWI), mainly irrigation improvement and rural water supplies, designed to improve the economic opportunities and standard of living for small farming families living in poor communities.	<ul style="list-style-type: none"> - Municipalities with communal lands close to the command areas of the IRFSP rehabilitated irrigation schemes benefit from grants supporting investments in EIT, CA, OA, IPM systems and technologies. - Technologies are adapted and livelihoods diversified into the most productive and resistant products and value chains. - Service providers selected via tender by the PIU support farmers and farmers' organizations in the adoption of sustainable farming systems and technologies, and in the implementation of landscape restoration works. - The financial support for agro-forestry planting and ecological restoration investments to significantly decrease soil erosion rates in farmland/rangelands and in the upstream and downstream neighbouring lands, soil fertility to significantly improve at a lower production costs leading to higher and more stable crop yields, and water requirements for crops shall be reduced.
Component 3 of IRFSP is to cover the Farmer awareness and Support, providing technical support, capacity building, and technical studies.	<ul style="list-style-type: none"> - Project beneficiaries trained on the environmental benefits of efficient irrigation, sustainable farming systems and landscape restoration measures. - Information material (i.e. leaflets, handbooks, articles, etc.) showing lessons learned on sustainable farming systems and technologies and landscape restoration prepared and disseminated widely to practitioners and society in general.

	<ul style="list-style-type: none"> - Best practices and lessons learned reflected in IFAD's country programme and contribute to policy dialogue. - Creation of an effective reporting system on monitoring findings.
Component 4 of IRFSP is Programme Management.	<ul style="list-style-type: none"> - The GEFTF project helps integrate combating land degradation and climate-risk aspects in the overall IRFSP project management and monitoring. - The GEFTF project covers the costs for a GEFTF Project Coordinator that ensures the overall coordination, management and implementation of the GEFTF activities and effective integration in the IRFSP baseline. - National and international experts hired to provide technical support and guidance for the effective implementation of the different project components, and help fully integrate sustainable land management, ecological restoration and climate-risk reduction issues in the baseline interventions and M&E system.

4. The IRFSP completion mission took place during the period between 17 and 28 November 2022 (agenda attached in Annex 2). The development of this Terminal Evaluation Report (TER) for SLMIP took place between 24 April and 15 May 2023.

IV. Scope, Objective and Methods

5. The methodology adopted included in-depth review, analysis and assessment of the programme performance and results based on the project documents and reports listed in Annex 3. The evaluator followed the guidelines for GEF Agencies in Conducting Terminal Evaluation for Full Sized Projects. The evaluator also conducted verbal consultations with the Project Implementation Unit (PIU). Field visits were conducted in the November 2022 completion mission.
6. This GEF TER is intended to provide a comprehensive and systematic account of the performance of SLMIP by assessing its design, implementation, and achievement of objectives. However, it also takes into consideration the overall impact of IFAD's baseline project IRFSP that is complemented by the GEF grant.
7. The TER rates the project's overall performance in comparison to the theory of change, outcomes, monitoring and evaluation system, sustainability, gender concerns and adherence to the objectives. For each outcome, the TER assesses the relevance, effectiveness and efficiency to arrive at the final ratings. Finally, the TER provides a set of lessons learned and recommendations to guide future GEF projects in Armenia and other countries as well.

V. Project Performance and Impact

Project Theory of Change

8. The lack of an explicit Theory of Change (ToC) in the design is a significant limitation. It hinders a clear understanding of how the broad interventions proposed in the design will lead to the desired outcomes. Nevertheless, the narrative of an intervention logic can be derived from the project justification section in the CEO endorsement document. Overall, the analysis of the problems was adequate, and the broad interventions proposed were pertinent. The proposed activities at design were relevant to the combination of land degradation and climate change in the target areas. The improvement of water and land management, restoration of ecosystem and capacity building all aimed at enhancing resilience of the agriculture sector in the face of increasing land degradation and climate change impacts.
9. However, SLMIP was not well blended with the IFAD baseline project. Although the IFAD design recognized the environmental challenges and the requirement for potential GEF funding to tackle them, SLMIP was developed separately after the completion of the main IRFSP design. As a result, its integration and synergy with the rest of the programme were limited. There were no clear pathways that could demonstrate how the programme beneficiaries would combine the GEF-supported activities to enhance their climate resilience and environmental sustainability. This shortcoming was only addressed during the MTR.

Assessment of Project Results (Moderately Satisfactory)

Project Outcomes and Objectives

Overall objective of the SLMIP project is **“to enhance the overall resilience of rural communities living in risk-prone areas of Armenia”**, while the specific objective is **“to increase income and assets generated by smallholder farmers through investments in sustainable land management systems and technologies”**.

10. The IRFSP has increased the resilience capacity index (RCI) of 16,698 households with a 7.2% incremental increase in RCI compared to the control group. Beneficiaries also reported an increase in assets, productivity and income, with partner enterprises reporting an increase in sales and profitability. Beneficiaries also reported less food insecurity compared to the control group. However, the IRFSP fell short of its absolute targets on increasing assets, income and food security mainly due to the late implementation of activities affected by the pandemic and conflict-related disruptions.
11. According to the impact assessment survey, 10.2% of beneficiary households reported an increase in their household asset ownership index, falling short of the 15% target set at the design stage. IRFSP has benefited its target group with an overall 10.3% positive impact on their average annual income. The IA survey found that the actual change in household income before and after the programme was only 0.9%, which is significantly lower than the target of 20%. However, the control group's income declined by -9.4% during the same period. Thus, IRFSP's activities directly contributed to a 0.9% increase in the average annual income of the

target group and prevented a -9.4% decline in their income, which was observed in the control group. On the land management front, the land restoration for 220 ha out of 880 ha has been achieved again due to the delays in implementation in addition to an overestimated target.

Outcome 1.1 Investments in sustainable fruit tree farming systems for increased productivity in communal marginal lands

Original design

12. SLMIP would support the target municipalities with funding of about USD 1,000/ha for the conversion of degraded marginal communal land into sustainably managed fruit tree plantations, with the objective to regain healthy soil conditions and productivity in about 750 ha (50% of the lands suffering degradation problems in the target municipalities). The target municipalities would have received a maximum of USD 125,000 for the fruit tree planting and management operations following SLM guidelines. During the first half of year 1, the project implementation unit (PIU) should have supported local beneficiaries in a community resource GIS mapping exercise, which would be an integral part of the baseline study. This participatory exercise should have looked at the whole landscape units within the target municipalities to map the different land uses, understand the root-causes of land degradation, learn about local perceptions and coping strategies to environmental-risks, and identify vulnerable sites affected by environmental problems. This participatory process would involve the organization of a series of workshops in each municipality, involving all concerned local actors and external experts, to debate about climate-risk reduction and land degradation mitigation options, and, select suitable measures to increase the landscape resilience to environmental risks. This would involve the identification and mapping the land uses which are most appropriate for each site, and the type of interventions – e.g. agro-forestry management, ecological restoration, biodiversity conservation - that help increase the entire landscape resilience to the environmental risks.
13. The PIU would hire an international expert to identify and assess best practices from Armenia and elsewhere applicable to the project context, and provide support in decision-making, training and monitoring actions. The PIU would establish a collaboration framework with a service provider (to provide the necessary technical support to the target municipalities in developing and implementing fruit tree planting and management plans. The provision of sustainable fruit tree planting and management plans would have been conditional for accessing grant funding.

Changes to original design

14. The Window 2, with a total of USD 750,000, was restructured to contribute to both outcomes 1.1 and 2.2. The main change is that grants from this sub-component were restructured to be used in a blend nature with RFF loans (25 % grant ceiling for a max total of GEF grant allocation of USD 7,000). Based on the feasibility study (that was already undertaken by the PIU and identified stakeholders needs and demand) and the scope of GEF6 Land Degradation Focal Area Strategy in alignment with the approved GEF CEO endorsement document, the MTR revised the proposed investment guidelines list to re-center it on eligible GEF land degradation activities. The guidelines were revised to include three areas for GEF Window 2: (i) CFP 1:

investment in sustainable orchards and (ii) CFP 2: investment in beekeeping and (iii) CFP3: dried fruits production. The total allocations were made to amount to USD 600,000 for CFP1 and USD 150,000 for CFP2 and CFP3.

15. The selection process of beneficiaries for Window 2 follows agreed criteria of targeting of at least 30% women (based partly on the awareness and feasibility studies done under Component 3 of IRFSP), with the main being that they are engaged in agriculture and receive not less than half of their income from agriculture, they don't possess more than 3 ha of agricultural land (all types), willing and able to access loans and willing to participate in training and coaching activities. PIU conducts awareness campaign in selected target areas, advertisement in the mass media, through social networks and through local municipalities on the Project's opportunities and terms. All interested farmers apply to the PIU/RFF for screened and to be pre-selected for the programme. The selected beneficiaries apply to the selected PFIs for both parts of financing (grant and loan).

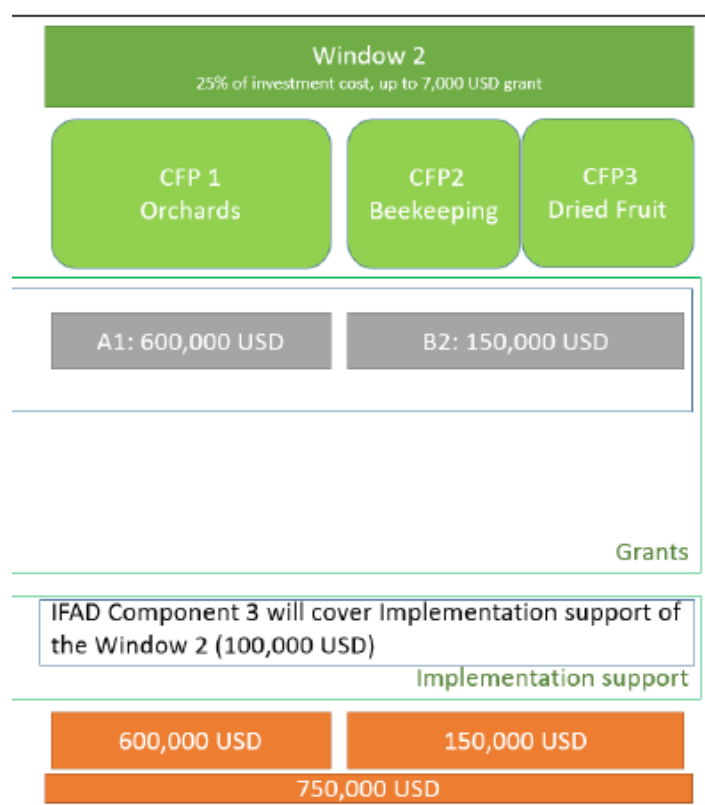


Figure 1 Window 2 as restructured at MTR

Relevance

16. PIU has selected and contracted research company (ARGUMENT) to undertake a feasibility study in target areas of the IRFSP and SLMIP projects to understand better socio- demographic and livelihood systems of local communities, to scope needs and priorities for further elaboration of investment and business action plans. The final report was submitted in September 2017 and provided a foundation for elaboration of the investment and action plans, but also for proper targeting strategy for the window 2. This has ensured that the grant packages were relevant to the needs and are economically feasible.

Effectiveness

17. The activities under this output were very effective. A total of 70 households have benefited from the W2's combined financial products comprising SLMIP grants plus RFF credit. Only 13% outreach women is achieved against the target of 30%.
18. The total farmers reporting improved fruit tree productivity have exceeded the target by far as shown in the table below. The Impact Assessment shows a 30.1% increase in the index of beneficiary households who experienced increase in crop production. The highest number of beneficiary households experiencing an increase were in fruits and berries (38%), followed closely by forage crops (37%), grains (37%), and grapes (35%). Similarly, there was 28.3% increase in the index of beneficiaries who experienced increase in livestock production during the programme period. The highest number of beneficiary households experiencing an increase were in honey production (53%), followed by pig production (44%) and cattle production (37%).

Indicator	Target	Final Result
Farmers reporting an increased improved fruit tree productivity	500	16,137
Agro-forestry areas with diversified fruit tree	N/A	24

Efficiency

19. Window 2 was an innovative modality for delivering grant packages with higher likelihood for financial sustainability. However, the implementation of the window 2 grants was delayed due to internal factors related to policy changes that were necessary to make the Partnering Financial Institutions (PFI) eligible to receive grant funding from the PIU. Had this modality been agreed before the MTR, the delivery of window 2 grants would have been more efficient.

Outcome 1.2 Efficient land and water management practices for crop diversification and food security adopted by women groups

Original design

20. SLMIP would provide start-up packages (20% contribution from grant beneficiaries) of about USD 3,000 each targeting women groups willing to diversify crop production in their farmland plots, making use of sustainable farming technologies, in line with the priorities of the Armenian government to mitigate land degradation and the impact of climate-risks to agriculture development. As part of the participatory analysis described in Outcome 1.1, the PIU would make a diagnosis of suitable sustainable farming systems and production opportunities addressing the food security and income generating needs of women groups in

the target areas. Grant funding will cover start-up packages including, for example, soil analysis, land preparation, efficient irrigation and other farming equipment, plant material, etc.

21. The PIU should define selection criteria as part of the Project Implementation Manual, addressing: (i) household selection criteria such as willingness to belong to an interest/women's group if not already a member, interest in participating in SLM and climate-resilient farming activities, willingness to bring a financial or in kind contribution, readiness to attend training activities, etc; (ii) checklist for expenditures eligibility, in line with the Governmental priorities and experts' assessment about SLM and climate-resilient farming systems suitable for the environmental and social conditions of the target areas.

Changes to original design

22. At MTR, the project made some changes to be able to achieve this outcome. Window 1 (DFSP), with Start-up Packages of about 1,160,000 USD, was introduced under SLMIP outcomes 1.2 and 2.2. This window aims to reach at least 330 smallholders farmers through technical and business skills support (160,000 USD) and providing grant financing (USD 1m from GEF). The Start-up Packages under this Window 1 are allocated to selected individuals or groups (one household cannot receive more than one package from the Project). The Window 1 beneficiaries receive a package of maximum USD 3,000 and need to match the grant funding with own contribution at 10% in kind or in cash (instead of 20% in the original design). The packages are to be provided through a competitively selected service provider.
23. Window 1.1 for the total amount of USD 500,000 is mostly for production activities on household plot, land preparation, efficient irrigation and other small farming equipment, and plant material. The supported activities reduce pressure on forests (especially in GEF highland areas). Eligible activities under window 1.1 are:
 - Sustainable vegetable production: tomato, cucumber, pepper, eggplant, garlic, berries, and mushrooms including small-sized low tunnels, necessary for vegetable production in Armenia.
 - Establishment or maintenance of orchards (small tools, seedlings): Apple, pear, apricot, pomegranate, peach, walnut, almond.
 - Installation of small scale efficient irrigation systems (e.g. drip irrigation).
 - Purchase/production of organic fertilizers as compost and lombricompost³ (GEF resources are not used for purchase of inorganic fertilizers).
24. The Window 1.2 supports beekeeping (for those who do not have any beehives or less than 50) and possible investment in small fruit driers and small equipment for wild products value chain development responding to the "Basic selection criteria" that were agreed. The total amount

of about USD 500.000 is allocated to Window 1.2. The ceiling per beneficiary is USD 3,000. These packages are implemented in communal and private lands and include:

- Beekeeping start-up package including procurement of bees and beehives, honey extraction machines and packaging materials.
- Small fruit driers (capacity of 150kg, low-energy usage 5 Kwh).
- Small equipment for wild products value chain (e.g. production and packaging of wild herbs and berries).



Figure 2 Window 1 as restructured at MTR

Relevance

- PIU has selected and contracted research company (ARGUMENT) to undertake a feasibility study in target areas of the IRFSP and SLMIP projects to understand better socio- demographic and livelihood systems of local communities, to scope needs and priorities for further elaboration of investment and business action plans. The final report was submitted in September 2017 and provided a foundation for elaboration of the investment and action plans, but also for proper targeting strategy for the window 1. This has ensured that the grant packages were relevant to the needs and are economically feasible.

Effectiveness

- A total of 553 households benefited from grants for activities such as greenhouses, beekeeping, and herbal products production and marketing under window 1.
- Although Window 1 small grants met the 30% women outreach target, its outreach extended to only a small group of 150 women beneficiaries. The limited outreach to women is due to the

use of RFF as the main vehicle for rural finance, without modifying the loan policies and products of RFF's partners to align with the requirements of RFSP's female beneficiaries who were initiating commercial production but lacked collateral and credit history. *For more on the results on the impact of the project on women's income and productivity, see the assessment of gender concerns section.*

28. The ability of some of the Window 1 grant beneficiaries to sustain their newly acquired skills and knowledge in the long run remains uncertain in the absence of technical backstopping, limited marketing linkages, and vulnerability to economic shocks.

Indicator	Target	Final Result
Percentage of targeted women-headed households reporting yields increased by at least 50% on diversified high value crops	30%	8.8%
Average annual gross revenue of targeted women groups	N/A	8.6%

Efficiency

29. Similar to window 2, the implementation of the window 1 grants was also delayed. In this case, it was the lack of clarity regarding the selection criteria and the mechanism of grant distribution that caused the delay.

Outcome 2.1 Ecosystem services supporting agriculture production are restored in the target areas

Original design

30. Under the participatory GIS mapping exercise described in Outcome 1.1, vulnerable natural sites, affected by land degradation and posing problems to the provision of ecosystem services supporting agriculture production and natural resource management in the rural landscapes of the target municipalities, should have been identified and mapped. A multi-stakeholder consultation process, involving project beneficiaries and external experts, should have taken place in the whole territory of the target municipalities – the landscape context - resulting in the identification of where and how restoration actions should be implemented, the restoration methods and the monitoring and evaluation system. The project would then provide financial support to the target municipalities and the WUAs in charge of the irrigation systems in the target areas for the implementation and maintenance of the restoration works. It was estimated that about 880 ha will be restored in the target municipalities in total. The Project would provide an average of USD 1,250 per ha of restored land that will be matched by the municipalities and WUAs to cover labour costs. Grant funding will cover packages including the necessary seedlings and seeds and the land preparation equipment and inputs. The provision of support should have been conditional to the preparation of restoration plans by the municipalities and WUAs.

Relevance

31. The activities designed and carried out are very relevant to Armenia's priorities. Land restoration for 220 ha (out of 880 ha) was executed in close coordination with the Ministry of Environment and other relevant stakeholders for selection of the sites and methods. The ecosystem restoration approach is extremely relevant to the GEF objectives in terms of Global Environmental Benefits and is well aligned with Armenia's priorities in the relevant national policies to address land degradation as well as climate change mitigation. Ecosystem restoration is also a climate change mitigation measure under Armenia's updated Nationally Determined Contribution (NDC) 2021-2030.

Effectiveness

32. The land restoration activity has successfully restored 220 hectares of degraded land although the original target set during the design was 880 hectares. The target at design seems to be an overestimation and the project has not realised this until late. The activity was further hindered by delays caused by the Covid-19 pandemic and the Armenia-Azerbaijan war as well as a redesign and multiple studies and discussions the Ministry of Environment to execute. The 220 hectares were restored in the last year of the project which does not allow for a proper assessment of the benefits and raises concerns on the sustainability (see sustainability section below).
33. GIS was successfully used to map the degraded areas and to help select the areas that were eventually restored. The project has not applied the Revised Universal Soil Loss Equation (RUSLE) to assess the size of land with reduced erosion based on RUSLE as a result of project activities. On the other hand, the design was not clear (neither in the CEO Endorsement nor the Full Design document) on how or where this measurement should occur.

Indicator	Target	Final Result
Hectares of land with rehabilitated or restored ecosystem services	880 ha	220
Hectares of land with reduced erosion based on RUSLE	N/A	0

Efficiency

34. The project was moderately efficient in carrying out the activities under this outcome. Despite the delays and the changes in the Ministry of Environment, The PIU managed to restore 220 ha in less than 1 year which indicates high efficiency in execution. However, the PIU was still late in carrying out the discussions with the Ministry of Environment and doing the necessary studies that could have increased the achievement rate.
35. The cost per hectare at design seems to have been largely underestimated at USD 1,250. The actual cost during execution for the 220 ha was around USD 4,800.

Outcome 2.2 Complementary value chain of high quality by-products resulting from landscape restoration developed by farmers' groups

Original design

36. In the framework of the landscape mapping and community consultation process described in Outcome 2.1, the PIU should produce a directory and a GIS map of potential products and producers in the target areas, and should hire an expert to undertake market analyses identifying potential market opportunities, mapping the market networks, understanding the relationships between actors, etc. The PIU should hire another ecologist with knowledge about sustainable NRM, in order to assess the availability of wild products in the natural ecosystems within the target municipalities, and develop management guidelines for the sustainable harvesting (e.g. harvesting techniques, collection period, volumes to be harvested) of the target products.
37. The PIU together with the target municipalities should organize a number of information events locally to raise awareness about the potential economic opportunities derived from the landscape restoration actions and the funding opportunities provided by SLMIP project to support a number of demonstration actions supporting the establishment or strengthening of local associations or cooperatives willing to produce and market the selected wild products. SLMIP will make available grants up to USD 12,000 (an average of 75 grants in total, distributed among target municipalities) to cover the necessary investments that local associations or cooperatives may need for the production, processing and marketing of high quality honey and other selected products. The PIU together with the target municipalities would establish selection criteria to become eligible for the grants. The PIU should hire a service provider among those national NGOs and other organizations with demonstrated solid experience on supporting the institutional development and production, processing and marketing operations of local agriculture cooperatives and associations with a gender and youth focus.

Changes to original design

38. Instead of having a separate grant window for outcome 2.2, it has been blended with the packages under Window 1.2 (560,000 USD) and Window 2 - CFP 2 (150,000 USD) as explained above. Selection criteria of those two windows were followed.

Relevance

39. The outcome is very relevant to the objective and in line with the priorities for value chain development. The changes made at the MTR were necessary to provide the needed complementarity with window 1 and window 2 and link outcome 2.2 with outcomes 1.1, 1.2 and 3.1. It also provides the needed support to local associations to ensure higher impact among target areas.

Effectiveness

40. The project has not given grants to local associations but only individuals as under window 1 and window 2. *For the assessment of the effectiveness, see **outcomes 1.1 and 1.2.***

Indicator	Target	Final Result
Average annual sales from wild and sustainable product	N/A	N/A
Income generated by production and sales of wild products	N/A	N/A

Efficiency

41. The activities under this outcome also suffered from the same delays for window 1 and window 2. *For the reasons of delay for each window, check **outcomes 1.1 and 1.2**.*

Outcome 3.1. The capacity of key practitioners to adopt sustainable land management practices and technologies is upgraded

Original design

42. This outcome should build the adaptive capacity of key civil servants and agriculture practitioners – individual farmers, members of farmer’s associations and cooperatives, extension agents - at the municipal and marz level to mainstream sustainable farming systems and technologies, ecosystem-based landscape restoration, and resilient value chain development in integrated rural development in the target areas. The learning process would include three consecutive stages: (i) comprehensive inventory, assessment and critical analysis of existing knowledge; (ii) learning from available local/international experience and from field demonstration actions implemented by the GEFTF Project; (iii) elaboration of findings and recommendations addressing prospects for sustainable farming practices and landscape restoration in Armenia in the long-term.
43. The capacity building programme should be carried out according to the principle of "learning-by-doing", through the implementation of theoretical and practical training modules that will be demonstrated in the field together with the project beneficiaries, during the implementation of components 1 and 2. The same service providers and national/international experts hired by the PIU for these components should have the responsibility to design and implement capacity building programmes. Specific should will target women and youth needs.

Changes to original design

44. Outcome 3.1 with its capacity development programme benefits approximately 6,000 farmers with: (i) theoretical training modules organized in the premises of the target municipalities, and farmers’ organizations; (ii) field demonstration modules, scheduled throughout the implementation of the different field activities of SLMIP; (iii) horizontal learning involving exchanges between the different sites in the target marzes and municipalities. The same service providers and national/international experts competitively hired by the PIU for Component 1 and Component 2 have the responsibility to design and implement capacity building programmes (for window 1 and 2, see above).

Relevance

45. The outcome is of very high relevance to the nature of the project and is vital towards achieving the objective. The mechanism of grant packages necessitates strong technical support and knowledge transfer to ensure high success rates of the grant packages. The trainings are also crucial to ensure the longer-term sustainability of the project interventions especially when it comes to WUAs and the maintenance/management of infrastructure. The changes made to the original design were crucial to ensure that the capacity building component is adapted to the changes introduced under window 1 and window 2.

Effectiveness

46. Despite the limited number of beneficiaries trained, the training inputs were highly targeted and proved to be effective in promoting the inclusion of women and youth in the agricultural sector. The certification earned by the beneficiaries from these trainings helped them to benefit from window 1 starter packages and window 2 grants plus loan package. Additionally, the knowledge and skills acquired during the training were further reinforced by follow-up support and mentorship, which contributed to a success rate of over 90% in the window 1 and window 2 supported activities. The training also had a positive impact on the inclusion of the priority target group, with 50% women and 30% youth represented in the window 1 activities and at least 30% women represented in the window 2 activities. Furthermore, the follow-up and mentorship provided have contributed significantly to the success of the priority target group in implementing the activities. These findings suggest that the targeted training and follow-up support have proven to be a successful strategy for improving the effectiveness of window 1 and window 2 activities, and for promoting the inclusion of women and youth in the agricultural sector.
47. The trainings to WUAs has been key to building their capacities for the management of the irrigation infrastructure developed under the RAWI component. However, the financial capacity of WUAs remains the bigger concern on the longer term (see assessment of sustainability below).

Indicator	Target	Final Result
Number of demands for advisory assistance on SLM farming systems and technologies	N/A	148
Percentage of women and young unemployed cooperatives supported by the project that become autonomous	50%	36.4%

Efficiency

48. The training outreach for the beneficiaries of window 1 and window 2 were only 4% of the 15,800 target which was set at design. The poor outreach of this activity was due to the long

delay in starting the implementation of this component due to the lack of clarity about its implementation arrangement and intersections with the other components. Later on, the outbreak of the Covid 19 pandemic and Armenia-Azerbaijan conflicts spillover in the programme areas-imposed restrictions on movement and gathering training participants in one place. However, IRFSP met the target of training 728 persons in irrigation infrastructure management practices, which included 289 women (40%) and 439 men (60%) as targeted at design.

Outcome 3.2. Policy processes for SLM in Armenia are enhanced

Original design

49. SLMIP was supposed to assess current policies and regulations that may facilitate or prevent the adoption of sustainable farming systems and technologies and ecological restoration techniques. The PIU should have also developed a collaboration framework with the Armenian National Agrarian University (ANAU) and the Environmental Research and Management Centre (ERCM) to undertake several policy analyses. These revisions included the evaluation of coordination mechanisms and coherence with existing legislation on cross-cutting policy issues such as combating desertification, climate change, water use, soil protection, the use of herbicides, pesticides or other chemicals, the use of crop residues, bio-energy production, land tenure, forestry, etc. Agriculture and agro-forestry related incentives or subsidies and credit lines as well as legal aspects of farm lease arrangements should have been screened and evaluated to ensure that they do not jeopardize the farmers' ability to adopt sustainable farming practices. In addition, coordinating mechanisms Policy recommendations for the application of integrated natural resource management (INRM) practices in the wider landscapes should have been formulated accordingly and presented at a national seminar. The outcomes of the seminar would have been collected in a series of policy papers.

Relevance

50. The proposed activities at the time of the design in 2016 were very relevant to the land degradation policy processes in Armenia. Due to the delays in executing the project and in order to ensure the continued relevance of this outcome, the project engaged with the Ministry of Environment and it confirmed the importance of articulating this work around the nexus between agricultural and protected land areas. In this regard, the Ministry of Environment suggested conducting one study and one workshop focusing on developing farmers' incentive structures to alleviate the pressure on the land in the buffer zones around protected areas. Thus, the outcome remained relevant to the land degradation priorities of Armenia.

Effectiveness

51. There is no room for evaluation of effectiveness since the activities under this outcome have not taken place.

Indicator	Target	Final Result
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The Number of implementation decrees issued in the field of SLM and NRM	N/A	0
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Efficiency

52. The project was not efficient in carrying out the activities under this outcome. The PIU was late in carrying out the discussions with the Ministry of Environment and only reached an agreement on the priorities (1 study and 1 workshop) in 2022 near the project's completion. In addition, the high turn-over in the Ministry and changes in leadership resulted in the gap in pursuing this activity. The time left in the project was not adequate to conduct the study and the workshop.

Assessment of Risks to Sustainability of Project Outcomes (Moderately Likely)

Likelihood of sustainability of outcomes

Financial risks

53. While IRFSP has taken measures to ensure the institutional sustainability of the water infrastructure by mobilizing and training WUAs to handle the ownership and management, the quality of these WUAs vary and their financial sustainability is affected by the lack of regular financial contributions from members. Furthermore, farmers' reluctance to pay for water and the absence of water meters add to the financial gaps of the WUAs and the water distribution systems they manage.
54. RFF's profitability has already made it financially sustainable by covering all its financial and operational expenses from its own revenue. Furthermore, the RFF's strict lending policies, backed by strong oversight and regular monitoring, have resulted in a high quality of portfolio for the PFIs. Their low portfolio at risk, less than 1%, demonstrates their strong policies and processes which has already withstood the economic shocks experienced in the region. 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. On the other hand, SLMIP grants remain vulnerable to economic shocks that may affect cash flows and the beneficiaries' have limited ability to mobilize the working capital required for continued operations in the future.
55. Finally, the financial sustainability of land restoration interventions is hindered by gaps in funding for monitoring and maintenance of the afforested area.

Socio-political risks

56. COVID-19, Armenia- Azerbaijan war and the changes in the government during SLMIP's lifetime show that the socio-political risks can have detrimental impacts on rural development in general and on the most vulnerable groups in the agriculture sector in particular. The spill over effect of the Russia-Ukraine war and its potential escalation remain a major regional and global risk. These are all risks that are beyond the project's capacity to address but the project has

shown a good practice in adaptive management that could be replicated by the government if similar situations arise in the future.

Institutional Framework and governance risks

57. Despite the technical trainings and capacity building provided by the project, the lack of improved marketing linkages and farmers' organizations limits the beneficiaries' ability to seek additional support for the success of their interventions. In addition, failure of the project to implement output 3.2 on policy support jeopardizes the sustainability of the outcomes.

Environmental risks

58. Two major risks were identified at completion. First, in Meghri community, the villages which are located far almost do not receive water due to the drying of the river. Secondly, in Dsegh village in Lori region, the irrigation pipeline pass over the target area without entering deep into the lands, resulting in few beneficiaries using irrigation water.
59. The final impact assessment survey has revealed that climate change continues to have a significant impact on the sustainability of these water distribution systems. Several communities have reported that they have not experienced an increase in water supply due to drying of the source springs affected by hot weather and low precipitation. Further deterioration in water supply can ultimately impact the sustainability of irrigation infrastructure.
60. Finally, institutional and financial risks threaten the environmental gains from the land restoration activities under SLMIP.

Sustainability of main outcomes

Outcome 1.1

1. The activities supported by window 2 grants are similar in nature to those supported by the RFF in general, and they are implemented by the same PFIs that have delivered RFF loans. These activities have been successful in increasing the beneficiaries' income and their productive asset base, indicating a high possibility of technical sustainability. Furthermore, the beneficiaries of the window 2 grants already have previous experience in their agricultural production systems and are more experienced in marketing their produce. This experience is expected to contribute to the technical and financial sustainability of the activities supported by window grants.

Outcome 1.2

2. Window 1 grants have demonstrated positive results in terms of improving the productive assets and income of the beneficiaries, as well as their overall resilience. This success can be attributed to the technical assistance and mentoring provided during implementation. The beneficiaries' familiarity with the technologies used also suggests a high level of technical sustainability. However, the long-term financial sustainability of these interventions may be at risk due to various factors. Firstly, the interventions were implemented only in the last year of the programme, leaving little time for technical backstopping and guidance to be provided to

those who may face difficulties in subsequent seasons. Secondly, the lack of improved marketing linkages and farmers' organizations limits the beneficiaries' ability to seek additional support for the success of their interventions. Furthermore, these interventions remain vulnerable to economic shocks that may affect cash flows and in the absence of bank linkages the beneficiaries' have limited ability to mobilize the working capital required for continued operations in the future.

Outcome 2.1

3. SLMIP has supported afforestation in degraded land by introducing regenerative agricultural practices. In terms of technical sustainability, the introduction of regenerative agricultural practices has the potential to contribute to improve the soil health, increase water retention capacity, and reduce erosion, leading to long-term benefits for the ecosystem. However, the afforestation activities were recently completed after much delay, which did not allow for testing the adequacy of the maintenance arrangements and thus may have implications on the sustainability of the intervention. While the monitoring and protection of the afforested area are within the mandate of the Ministry of Environment, uncertainties remain about their timeliness and effectiveness in the absence of SLMIP from a governance perspective. The financial sustainability of the intervention may also be impacted by the absence of SLMIP, as there may be gaps in funding for ongoing monitoring and maintenance of the afforested area.

Outcome 2.2

4. The sustainability of outcome 2.2 is dependent on the sustainability of outcomes 1.1 and 1.2 (window 1 and window 2 grants) since it is blended within them. As mentioned above, window 2 seems more likely to be sustainable due to its linkage with rural finance beneficiaries who have more experience and go through different set of criteria than window 1.

Outcome 3.1

5. The SLMIP training and technical services have been instrumental in building the capacity of programme beneficiaries including window 1, window 2 and Water User Associations. The mobilization of highly qualified resource persons has contributed to the programme's technical sustainability, as their expertise has been essential in transferring knowledge and skills to participants. This, in fact, supports the likelihood of sustainability of the other components. However, the sustainability of these capacity building services themselves has been challenged by the fact that with programme 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 on the longer run.

Outcome 3.2

6. The policy and knowledge dissemination work that was planned under this outcome would have contributed to the longer-term sustainability of the other outcomes through mainstreaming land degradation concerns across cross-cutting policy areas. The inability to

execute activities under this outcome jeopardises the sustainability of the rest of the outcomes.

Assessment of M&E System (Moderately Satisfactory)

M&E design

7. At design, it was foreseen that project monitoring and evaluation will be conducted in accordance with established IFAD and GEFTF procedures. In line with the GEFTF operational principles, the Project M&E activities would be country driven and will provide for consultation and participation. The Strategic Results Framework provides indicators for project implementation along with their corresponding means of verification. These should form the basis on which the project's Monitoring and Evaluation system was built. The IRFSP/SLMIP joint monitoring was designed to be a three-level system, consisting of output monitoring, outcome monitoring and impact evaluation.
8. Output monitoring comprises the monitoring of physical and financial inputs, activities and outputs, both planned and actual. Outcome monitoring assesses the use of outputs and measures their benefits at beneficiary level; it focuses on the accessibility of programme outputs and the extent to which they provide benefits to the target groups in terms of access to infrastructure facilities, financial services, markets, etc. Impact evaluation assesses the measured change in selected variables between the beginning and the end of the Programme or a later selected date. The main instruments for the impact evaluation are the Programme's Baseline Survey and Programme Completion Report.
9. The design also had foreseen setting up a results and impact management system (RIMS) and the CC-Tracking Tool at programme start-up with IFAD support. Primary geo-referenced data collection and analysis was to be done by the PIU. The project was designed to contribute data to the national environmental monitoring system in accordance with the DPSIR model used in evaluating ecosystems.

M&E plan implementation

10. The PIU was fully acquainted with IFAD guidelines on monitoring and evaluation. It implemented the actions agreed during the supervision missions and followed the M&E plan until completion. The annual Project Implementation Reports (PIRs) were submitted to the GEF by IFAD in a timely manner. However, one of the main shortcomings of the M&E system was that the GEF indicators were not regularly updated including the LD Tracking Tool. The changes made at MTR were not matched with the required amendments in the indicators capturing SLMIP activities and so it has been difficult to link results to SLMIP outcomes. In addition, no climate change mitigation tracking tool was set up as foreseen at design. Another challenge in the M&E system has been the lack of integration of the M&E system in the PIU and FREDA. While an M&E manual was followed by the PIU, FREDA had its own M&E arrangements. Nevertheless, FREDA had regularly contributed to the data needed by the M&E unit in the PIU to report on the log frame indicators. However, FREDA's focus was concentrated on SME enterprises. Consequently, FREDA reports had limited details and data collection regarding

FREDA's multiplier effects and influence on the changes in the livelihoods of downstream value chain actors, particularly on smallholder producers and the target group households.

11. Regular monitoring activities of the programme were carried out, including field visits and documentation of lessons learned and analysis of programme beneficiary databases. The M&E system is based on reporting on logical framework indicators. Reports are prepared based on those indicators. The system was improved to include disaggregated data by gender, age, and community. However, the logical framework does not report on IRFSP's performance on overall youth outreach. The disaggregation of logical framework indicators according to youth outreach was not required at the time of design and is therefore not reported except in the case of training and capacity building outreach. The M&E team worked closely with service providers for beneficiary selection for relevant programme activities and provided inputs for the beneficiary ranking and selection tools. This support from the M&E section proved effective in the selection of suitable and committed W1 and W2 beneficiaries- under SLMIP- who have reported a high level of success in increasing their income and productive assets by implementing the programme supported activities.
12. Finally, IFAD has contacted a project completion mission for IRFSP and developed a Project Completion Report (PCR) in addition to an impact assessment carried out by an independent service provider.

Budgeting and Financing for M&E activities

13. The original design has budgeted for start-up workshop, experts, survey, MTR and final impact evaluation from the GEF budget. Co-financing from IFAD and OFID also contributed significantly to M&E activities and the PIU's salaries. The PIU has recruited M&E and gender/targeting consultants complying with IFAD recommendations to strengthen the programme performance on these aspects after the departure of the two staff in charge of M&E and targeting in 2020. IFAD also held regular supervision missions from its own resources and GEF Agency Fees to help support the project on monitoring and evaluation.

Assessment of Implementation and Execution Performance

Implementation Rating - IFAD (Satisfactory)

14. During implementation, IFAD provided timely support and guidance through annual supervision missions, implementation support missions, remote missions, MTR, and completion as well as regular review of the annual progress report, AWPB, procurement plan, audit reports, logical framework updates and Project Implementation Reports (PIRs). IFAD also provided training in specialized areas such as procurement, M&E, KM and gender considerations. The project also benefited from participation in IFAD retreats and exchanges with projects across the NEN region.
15. IFAD was proactive in engaging with Government for the optimization of the institutional set up of the project in line with Armenia's objectives to streamline project PMUs and increase their efficiency. IFAD has helped to point out bottlenecks in the implementation of the GEF activities and has identified solutions for timely resolution, especially regarding the implementation of window 1 and 2 as well as the land restoration component. For instance, the MTR made necessary changes to SLMIP to make it more focused on window 1 and 2 interventions directly on women and youth inclusion while remaining in line with the

objectives of the project. Flexibility in the approach to address emergencies, such as the COVID-19 pandemic, was also crucial for facing delays. IFAD has also supported the government in identifying suitable exit strategies has conducted detailed assessments with clear exit options.

Execution Rating - Government and Other Partners (Moderately Satisfactory)

16. The project has been in line with Government strategy and vision for Agricultural development. It has received steady government support in an evolving institutional context and government reforms. IRFSP maintained its PIU as a fully dedicated unit for the implementation of the Programme ensuring a stable management and coordination of the Programme, including responsibility for Programme planning, budgeting, financial management, procurement, monitoring, impact assessment, and administrative reporting. Supported by IFAD, this stability was crucial for Programme performance and delivery.
17. The Project Steering Committee composition has been evolving in line with the institutional reforms that have been implemented by the Government. The PSC was chaired by the Minister of Economy and composed of the Ministry of the Territorial Administration. The PSC met regularly (The last meeting was held on 5 July 2022). The programme has also established a procurement committee, headed by a representative of the Ministry of Environment for the GEF-related procurement and includes representatives from the Ministry of Economy and the Ministry of Territorial administration. FREDA Board of Trustees, chaired by the Minister of Economy, also met regularly.
18. The RAED-PIU has established diligent internal processes for the implementation and monitoring of the AWPB, procurement and M&E plans. The PIU operated in line with the PSC recommendations and prepared monthly reports on the financial and technical progress of programme implementation to the chair of the PSC. The PIU has been diligently providing progress reports to IFAD and submitting the AWPB and PPs on a timely manner for no-objections. The PMU staff were motivated, experienced, and well acquainted with IFAD procedures. They have been proactive and actively participating in IFAD-led events and trainings (M&E and Procurement for instance). PMU has been committed in supporting IFAD Supervision, MTR and completion missions and have ensured diligent follow up on different recommendations and action points. The PIU maintained a close and continuous communication flow with IFAD and with different stakeholders of the programme.
19. The RAWI component was supported by OFID-financing through parallel financing arrangements. However, a joint participation of OFID and IFAD in supervision missions did not take place, resulting in the absence of joint recommendations to the Programme. This led to significant gaps, such as the failure to mobilize the RAWI component beneficiaries and create demand for RFF loans which led to the absence of convergence between RAWI and the rural finance component (mainly RFF and FREDA).
20. Amongst the rural finance service providers, under the DANIDA grant advisory services were contracted and have successfully supported smallholder farmers in the implementation of innovative horticultural technologies. Service providers contracted for targeting study and mobilization of rural households for Window 2 performed well submitting the requested

studies as well as implementing the envisaged awareness raising and training of rural households.

21. The DANIDA Grant has also supported FREDA to identify investees, and to provide dedicated technical assistance to their staff as well as to the current clients of the Fund. FREDA has also used the grant to prepare the exit/sustainability strategy.

Assessment of processes affecting attainment of project results

Preparation, readiness and delays

22. IRFSP was approved by IFAD's Executive Board on 18 September 2014 and entered into force on 16 July 2015. The Mid Term Review (MTR) was conducted in December 2018 and the last Supervision Mission was held in September 2021. The Programme Completion date was extended by one year to 30 September 2022 and the GEF grant completion was scheduled on 28 February 2023. The Programme closing date was 31 March 2023.
23. The implementation of the IRFSP encountered several internal and external challenges, leading to delays and a slow pace of implementation before and after the mid-term review (MTR). These included political changes and government restructuring, complexity of some components, and the impacts of the COVID-19 pandemic, the Nagorno-Karabakh conflict, and the war in Ukraine.
24. 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 executing entity and reporting lines of the PIU, which further contributed to delays.
25. SLMIP 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 of the IFAD baseline project (IRFSP) were also unclear, particularly with reference to its utility and integration with SLMIP, causing delays in implementation. Both SLMIP and the farmers awareness components were restructured during the MTR before smoother implementation could occur.
26. The implementation of the window 2 grants under GEF was delayed due to internal factors related to policy changes that were necessary to make the Partnering Financial Institutions (PFI) eligible to receive grant funding from the PIU. The land restoration activities in SLMIP were delayed due to the interruptions and re-orientation in the institutional set up for the GEF implementation which witnessed successive high-level changes in leadership during the course of implementation.
27. Finally, as the project progressed, it experienced a slowdown in implementation due to external factors such as the Covid-19 pandemic, the Nagorno-Karabakh conflict, and finally the war in Ukraine resulted in logistical challenges and further delays.

Country ownership

28. The IRFSP was designed in the backdrop of the Armenian Sustainable Development Strategy (SDS 2012-2025), which aimed to address the underperformance of the country's agriculture sector despite the previous liberal reform policies. The SDS sought to promote intensive development, increase productivity, reduce rural unemployment, support the food industry value chain and export potential, and increase the commercialization of farms. The IRFSP design was well-aligned with the SDS, as both aimed to increase agricultural productivity, support the value chain, and export potential, and enhance the economic prospects of small-scale producers and processors. Moreover, IRFSP's focus on sustainable land management systems and technologies was in line with SDS's objective of moving agricultural production towards intensive development while increasing the level of commercialization of farms. Thus, the IRFSP design was well poised to contribute to the success of the SDS objectives in the agricultural sector.
29. Despite some time passing since the design of the IRFSP, the programme has remained relevant to the core objectives of the relatively new Agricultural Development Strategy (ADS 2020-2030). The ADS aims to make agriculture more sustainable, introduce innovative solutions, and increase competitiveness and efficiency in the sector. IRFSP's objectives remain harmonized with the ADS' aim to transition the agriculture sector from traditional small-scale production towards modern, technology-enabled, market-driven, and value-added agriculture. Some of the specific areas of alignment are as follows:
- The focus of IRFSP on increasing incomes, assets, and the quality of life of small-scale producers and processors are aligned with the ADS' priority to enhance the sustainability of agriculture and introduce new technologies.
 - IRFSP's objective to increase the resilience index of beneficiaries continue to be consistent with the Armenian government's goal of ensuring food security and nutrition.
 - IRFSP's technical components, such as rural finance, rural areas water infrastructure, farmers awareness and support, and SLMIP soil and land management for increased productivity, also remained aligned with the Armenian government's measures to enhance access to finance, improve irrigation systems, enhance human capacities and skills training, and support adaptation to climate change and environmental sustainability.
30. SLMIP is aligned with Armenia's National Plan to Combat Desertification in Armenia (2002) and the National Forest Policy and Strategy (2004) through land restoration and anti-erosion measures. From a climate change adaptation perspective, IRFSP is well aligned with the Armenia's Third National Communication to the UNFCCC (2014) through increasing irrigation efficiency, restoration of fruit trees and ecosystem restoration. SLMIP is also in line updated Nationally Determined Contributions (2021) through land restoration as a climate change mitigation measure to reduce greenhouse gases.
31. When the IRFSP was designed, the target group in the programme area faced several key development challenges. These included inadequate access to essential services, inefficient irrigation systems, restricted rural finance, low agricultural productivity, limited female participation in the workforce, increasing proportion and vulnerability of female-headed households, high levels of rural youth migration and high level of environmental degradation and the continuation of unsustainable traditional farming technologies. The IRFSP was highly relevant to the needs and priorities of the programme target groups both at the time of programme design and at completion. The IRFSP programme was designed to address the

criticality of smallholders in Armenia's agricultural systems, as these farmers contributed to a significant proportion of the country's gross agricultural produce. Despite changes in the political and economic landscape, Armenia's 360,000 family farms (89% with <3 ha land) still contribute to 97% of the country's gross agricultural produce. However, their low productivity has led to a decline in agricultural output and made them highly vulnerable to food and income insecurities. At the same time, the MOE's orientation to drive future agricultural growth through large scale land consolidations and private sector partnerships makes the position of the smallholders uncertain and vulnerable. In this context, IRFSP's focus on these target households remain highly relevant to increase their income, food security and resilience to external shocks. Additionally, the programme is also aligned with several Sustainable Development Goals (SDG), including SDG 1.1 extreme poverty, SDG 1.5 build resilience, reduce vulnerability, SDG 15 "Life on Land," and directly supports the national voluntary land degradation neutrality (LDN) Target 1 "Stop cropland degradation and apply agro ecology" and Target 2 "Reforest two-thirds of the degraded land".

32. The IRFSP design was aligned with national agricultural policies and strategies and addressed several critical development challenges faced by the target group, in some areas the design of these tools were not refined enough to appropriately address the challenges faced by the target group, for example:

- The programme design recognized the lack of collateral as a challenge that prevented the target households' access to rural financial services, but the RFF which was used as the main tool for increasing rural finance outreach relied on the collateral-based loan delivery mechanism of the partnering financial institutions. Thus, the original design of the rural finance component was more relevant for expanding the rural financial outreach in general rather than focusing the rural finance outreach to 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. In this context, the design also lacked clarity and did not provide any mechanism for developing synergies between RFF and FREDA
- 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 would address their needs. However, these were soft measures not strong enough to bring about an economic change in these households which was recognized and later addressed through a design modification at MTR as discussed later.
- 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 programme area.

Stakeholder involvement

33. IRFSP has engaged with a range of public and private stakeholders. It has strongly engaged with the Ministry of Environment for the implementation of SLMIP in terms of planning,

implementation, and monitoring. RFF and FREDA have supported the financial strengthening of the PFI's and the SME agribusinesses which had a positive impact on window 1 and window 2 impacts under SLMIP. Through IRFSP, the PIU has developed a range of partnerships with institutions and farmers' organisations at municipal levels, with financial institutions and with complementary projects. The irrigation component used KfW funded feasibility studies for site selection; irrigation sites selection in the region of Meghri was based on investments of World Bank as well as studies of the Swiss funded project "Markets for Meghri". Municipalities played a key role in identifying and financing part of the costs of physical infrastructure in rural areas, including contributions to the cold storage facilities.

34. However, IRFSP's performance on mobilizing and supporting farmers' organisations has been insufficient, resulting in missed opportunities to organize beneficiaries into groups and support sustainably their marketing integration in the value chain. On the other hand, the Programme did provide some support for the development and strengthening of WUAs and agricultural cooperatives through training and capacity building. An agricultural cooperative was formed towards the end of the Programme to support the management of cold storage facilities using PPP arrangements, and its governance and management capacities will be tested in the future, depending on the ability to mobilize technical support in the absence of IRFSP. In terms of examples of engagement with the private sector, the PIU has successfully engaged a private service provider to develop the public-private-partnerships arrangement for the management of the cold storage facilities. SLMIP also enhanced partnership with the private sector with "AM Partners Consulting Company" LLC as the service provider for Window 1.

Financing planning and management

35. The quality of financial management at project level has been rated as satisfactory in a consistent way from 2016 onward. The financial risk was assessed as substantial at design but consistently evaluated at low by several IFAD supervision missions since 2017. In terms of Staffing and Organization, the financial team at project level had adequate capacities and resources to manage the project. They have participated to several IFAD trainings and workshop throughout the course of the project implementation period.
36. The Annual Working Plan and Budget (AWPB) submitted by the project was in line with IFAD requirements, with planned expenditures split by categories, components, and sources of funds. Despite the delays caused to the implementation by the pandemic, the project has been able to fully disburse and justify the funds allocated by IFAD and other co-financiers. The project Designated accounts were held in USD at the Armenian state treasury and were used for payments in local currency with conversion done automatically in AMD at the prevailing exchange rate at the date of the payment. The project operating account was only used to pay staff salaries and opened in a commercial bank.
37. The last supervision mission noted that segregation of duties was properly implemented at project level and audits' and IFAD supervisions' recommendations generally implemented. Cash payments were not used at project level, which further reduced project financial risk. The quality and timeliness of audit was considered as highly satisfactory for several consecutive

years with audit reports received on time, satisfactory quality of the financial statements and acceptable audit and accounting standards.

Co-financing

38. The actual total co-financing that was envisaged at the CEO Endorsement was USD 29,473,000. IRFSP became effective in July 2015 with a total budget of US\$ 54.20 million financed by an IFAD loan of US\$ 11.00 million, IFAD grant of US\$ 0.35 million; OFID loan of US\$ 25 million; Government of Armenia (GOA) contribution of US\$ 10.07 million; beneficiaries' contribution of US\$ 1.77 million; a Danish grant of USD 2.08 million in addition to the GEF grant of US\$ 3.94 million. Table x below shows the expenditure per co-financier as of 31 March 2023.

Table 2 Co-financing status at project completion

Financier	Appraisal (USD)	Total Expenditures (%)
IFAD Loan	11,000,000	100
IFAD Grant	350,000	99.9
OFID	25,000,000	99.9
Danish Grant	2,077,791	100
Government	10,066,000	95.8
Beneficiaries	1,770,000	89.7

Environmental and social safeguards

39. The project had an Environment and Social category B as per IFAD's Social, Environmental and Climate Assessment Procedures (SECAP) categorization system at the time of the project's approval. Overall, the project did not encounter any significant adverse environmental or social implications. Investments in natural resources management to support rural communities were compliant with national regulations on environment, labour and occupational safety. Overall compliance with the environmental and social safeguards was adequate during the implementation of the project. A clear site selection process was in place to ensure the participation of the local communities. Irrigation schemes put in place by the project did not exceed 100 ha and are disconnected small plots of land. Irrigation efficiency and technology advancement have also improved with an increased use of drip irrigation and afforestation activities will reduce soil erosion rates. From a targeting perspective, there was no evidence of discrimination or exclusion of vulnerable groups. On the contrary, the strategy focused on ensuring the participation of local communities and the inclusion of women and youth.
40. The grievance and redress mechanism as foreseen during design was in place and the PIU was fully aware and familiar with them. In the initial stages of project implementation, the project received a SECAP-related complaint from a community neighbouring one of the project's intervention areas. IFAD duly followed respective guidelines and conducted an independent investigation with a detailed technical study of the case and thorough internal reviews. The

case was ultimately reviewed and closed by Armenian Human Rights Defender's decision on terminating the consideration of the complaint.

Gender concerns

41. IRFSP has made serious efforts to facilitate the participation of women. IRFSP data is disaggregated by sex for all components and overall IRFSP has served 51% women and 49% men. The programme as a whole has implemented a gender action plan and a gender and social inclusion specialist was recruited to drive the programme results related to gender equity and women's empowerment. The IRFSP design was also updated at MTR to increase the focus on women's inclusion through 50% outreach quota for women headed households in W1 activities and 30% in W2 activities that are both funded by SLMIP.
42. As a part of the grant delivery process, the women beneficiaries received training on modern agricultural practices and some of them have built on this experience to develop linkages to training institutions to further develop their knowledge and skills. For example, one woman beneficiary who received beekeeping training has now joined a USAID supported beekeeping technical education facility. There are also examples of women leveraging the window 1 support to receive additional support from other donor programmes for their businesses. For e.g., one women beneficiary who received equipment support for the preparation of herbal products has leveraged this experience to obtain UNDP technical support for preparing a business plan for expanding her herbal products business. Thus, IRFSP supported inputs facilitated many of the women-headed households to start their own businesses, such as medicinal and aromatic herbs and honey production. As a result, women have been able to diversify their sources of income, reduce their dependence on traditional agriculture and enhance their economic independence.
43. **Increase in resilience capacity index of women headed households:** As a consequence of the IRFSP's efforts towards strengthening women's empowerment and equality a higher resilience capacity index is observed in beneficiary women-headed households (10.98%) compared to both non-women headed beneficiary households (9.04%) and women-headed control group households (2.43%). The increase in the resilience capacity index is attributed to the outreach of the W1 activities to women headed households with productive assets such as greenhouses, beehives, dryers and small farming machinery. Most of the women beneficiaries are directly involved in the implementation of the activities which has increased their engagement in productive economic activities and their contribution to the household income.
44. **Impact on preventing further decline in income:** An encouraging development is that the support provided by IRFSP to women-headed households has prevented a further decline of -4.2% in their income, as observed in the control group's income, which declined by -8.9%. As previously discussed, the IRFSP supported productive assets for increasing the income of women-headed households, were mostly adopted in IRFSP's last year of implementation. As the productivity of these assets peak over time, their contribution to increasing the income of women-headed households will increase.
45. **Increase in targeted women-headed households reporting at least 50% yield increase:** The Impact Assessment survey has reported 8.6% of the women headed beneficiary households with more that 50% productivity increase for high value crops compared to the target of 30% increase. The gap between the achievement and the target is mainly due to external factors

influencing production already discussed above in addition relatively low agricultural knowledge and shortage of agricultural labour in women headed households. Melons, gourds, and vegetables production supported the maximum increase in the proportion of women headed households who experienced increase in production in this range from 13.6 to 17.5%. Moreover, annual crops were more successful in generating more than 50% increase in yield compared to perennial crops. However, the productivity of perennial crops increased with the age of trees/plants.

46. **Disparity in increase in assets ownership and income:** Although IRFSP has achieved almost equal outreach to women (51%) and men (49%) income and asset ownership disparities still exist. The average gross revenue of beneficiary women-headed households decreased by -4.7% before and after IRFSP, in contrast to overall beneficiary households' +0.9% increase in income. Similarly, 6.9% of the beneficiary women headed households reported an increase in their household asset ownership index before and after IRFSP compared to the 10.2% of all beneficiary households. These disparities are attributed to the gaps in agricultural knowledge and skills among women headed households as well as the insufficient availability of family labor within these households. However, the results also indicate that the income of women-headed households was disproportionately impacted by the inflationary effects of the COVID-19 pandemic and the war in Ukraine during the 2021-22 period when the W1 and W2 activities under SLMIP targeting women headed households were mostly implemented. Finally, RFF's limited outreach to women has also contributed to the disparity in their increase in asset ownership and income.
47. **RFF's limited outreach to women:** Although women's participation has been satisfactory in the RAWI and window 1, their participation in RFF facilitated credit activities remained a key challenge where women comprise only 10% of the RFF loans disbursed compared to the target of 30%. This has impacted window 2 activities, which is also linked to the RFF show a similar low level of women's participation (13%). RFF's outreach to women is a major area of underachievement, as it has only reached only 10% women, compared to the target of 30%. Despite recommendations from supervision missions, policies to increase the proportion of women borrowers were not implemented by RFF or the PFIs. Financial training and capacity building for women were identified as one mechanism to increase women's inclusion as PFI borrowers. However, only 28% of the 1,452 persons trained on rural financial services were women and these training were not effective in increasing women's inclusion in RFF services. Meanwhile, the war and COVID-19 pandemic have worsened the economic situation and increased the risks associated with rural credit, making the financial suppliers more reliant on physical collateral, credit history and prior business experience of potential borrowers. These strict appraisal criteria make it extremely challenging for women to qualify for the RFF supported loans.

VI. Conclusions and Rating

48. The overall project rating is **Moderately Satisfactory**. The project managed to achieve good results related to increasing the resilience capacity index (RCI), increase in assets, increase in overall productivity as well as income. Beneficiaries of the project also reported less food insecurity compared to non-beneficiaries. The restructuring done to SLMIP at MTR was crucial to execute the activities and ensure their relevance to the project objectives. The restructuring also allowed the project to increase its focus on women and youth.
49. However, the project still fell short of its absolute targets on increasing assets, income and food security mainly due to the late implementation of activities affected by the pandemic and conflict-related disruptions. The M&E system was efficient to a certain extent but failed to track the GEF indicators properly and did not reflect well the changes made at MTR. There are also still concerns about the sustainability of some of these benefits exacerbated by not executing the policy work and underachieving the capacity building targets. The financial and socio-political risks also further threaten sustainability on the longer term.
50. These shortcomings are justified given the context of the project that was severely affected by COVID-19 related delays, Armenia-Azerbaijan conflict and the frequent changes among government leadership especially at the Ministry of Environment.
51. In the coming sections, a set of lessons learned and recommendations are provided based on the results of SLMIP.

VII. Lessons Learned

52. **Disconnect between GEF and IFAD designs caused delays in implementation.** The GEF design had a number of weaknesses, inaccuracies and imprecise description of implementation modalities. the GEF funded activities have suffered from vague design that has left implementers (including PIU) struggling to operationalise the component into concrete engagements that benefits climate vulnerable farmers. Moreover, there also seemed to be limited analysis as to what the policy engagement should entail. This caused the programme to be delayed and subject to protracted discussions among the stakeholders. Going forward, efforts should be made to ensure that project design is consistent with the overall programme, has clear implementation modalities and contain realistic targets. There is also a need to ensure that outreach estimates are ambitious yet realistic. Moreover there is also a need to make sure that budget lines are allocated to correct activities ensuring that implementation, including disbursement, can take place as planned.
53. **Blending and integrating activities funded by GEF from the very beginning of a programme can better support the mainstreaming of environmental and adaptation to climate change aspects.** Such blending should be in the context of a clear initial assessment (at programme design) of the key environmental issues associated with the present agricultural practices of the beneficiaries. This would allow better integration of Sustainable Land Management (SLM) and Adaptation to Climate Change (ACC) measures within the rural finance and the infrastructure components through mechanisms such as the contracting of specialized extension services and potentially engaging interest PFIs (where relevant) that provide continuous support to farmers instead of the current “one shot” training programmes on sustainable farming practices. In the rural infrastructure component, adopting a SLM/ACC approach can ensure sustainable land and water management.
54. **Interconnections between project components amplifies the impact.** There is a need for creating a stronger interconnectedness between mutually reinforcing project components at project design. The overall objective of the project should be the result of coordinated actions and activities of all components. The actual achievements of each single component currently under implementation are remarkable, and all contribute to achieving the overall project design objectives. However, there is an apparent “information flow” silo syndrome among the individual components that blinds the evidence of inter-component linkages. Furthermore, to reach a greater level of cohesiveness, the M&E structure in place would need to allow for the capture and monitoring of such inter-/intra-component synergies. It is, therefore, paramount for the management coordination mechanisms to be in place and formally scheduled as required from the start. Redesigning project components at MTR stage – as was the case for component 3 and SLMIP -- is already too late, thus making it very difficult to establish strong linkages among component parts.
55. **Institutional stability and dedicated and experienced programme teams under strong government oversight can lead to successful results.** During the programme's implementation, the PIU was subject to numerous uncertainties and challenges, such as changes in the political environment, government restructuring, relocation of authority to the Ministry of Economy, and economic shocks caused by conflicts and pandemics. Despite the various uncertainties and challenges, IFAD and the government had discussions and ensured that the PIU remained a separate unit dedicated to the programme's implementation. This stability of the PIU provided the necessary environment for the staff members to remain dedicated and committed to their work. Furthermore, the majority of the PIU staff had prior

experience working on IFAD programmes, which made them well-versed with IFAD objectives, processes, and procedures. The PIU's stability and the dedication of its experienced staff members played a crucial role in achieving the IRFSP's objectives within the set timeframe.

56. **Limited operational-level collaboration between different co-financiers supporting different programme components can contribute to the lack of synergies between different programme components and reduce the programme's overall effectiveness.** The RAWI component was supported by OFID co-financing through parallel financing arrangements. However, a joint participation of OFID and IFAD in supervision missions did not take place, resulting in the absence of joint recommendations to the programme. This led to significant gaps, such as the failure to mobilize the RAWI component beneficiaries and create demand for RFF loans which led to the absence of convergence between RAWI and the rural finance component (mainly RFF and FREDAs). Future designs of joint ventures should have clear supervision roles, responsibilities and budgetary allocations for additional studies and incremental supervision costs.
57. **Heavy physical investments that are not matched with individual targeting, strong investment in human capital and rural finance outreach does not generate the required full impact.** The IRFSP made significant investments in physical infrastructure, particularly in the rehabilitation of drinking water and irrigation distribution structures. While the structures remained functional three years later, the WUAs established to manage them encountered various problems, including a lack of finances and weak management approach. Additionally, the contribution of these infrastructure programmes to increasing the income levels of beneficiaries was lower than that of other interventions within the IRFSP. The programme's settlement-level targeting approach did not pay sufficient attention to the individual needs of households to improve their productivity and income. As a result, there was a gap in technical support and rural finance outreach to meet the capacity and financial requirements of these households to increase productivity. If the implementation of these activities had been planned and coordinated from the beginning with this approach, they would have had a much better impact on achieving the programme's objectives.
58. **A more inclusive, gender-sensitive and youth-sensitive approach from the onset is needed for producing satisfactory results on gender and youth engagement in agricultural value chain and RF components.** Although the IRFSP design had identified the importance of including women and youth in its target group, but unfortunately, it did not have specific interventions to facilitate outreach to these groups, which was a major gap. However, the MTR identified this gap and addressed it by introducing the W1 and W2 packages with outreach quotas for women and youth. Nonetheless, the implementation of these interventions was delayed until the end of the programme due to the pandemic and conflicts prevailing in the areas. Thus, the interventions had a limited outreach and overall impact on increasing income and productivity compared to the potential result if they were implemented from the beginning. Furthermore, the absence of a youth-sensitive approach hindered monitoring and reporting on youth outreach. Although the disaggregated reporting on women inclusion improved over time, this process was not followed consistently for youth. As a result, there is a lack of quantitative data to support the anecdotal observations of the IRFSP's impact on income generation and the prevention of youth migration from rural areas. Overall, a gender and youth-sensitive approach from the outset could have produced improved results on women and youth inclusion.
59. **A detailed beneficiary selection process and targeted capacity building before delivering grants leads to the identification of more interested and capable beneficiaries who are more involved in implementation and hence more successful.** IRFSP implemented a thorough and rigorous beneficiary selection process for the W1 and W2 activities, which resulted in a more

successful implementation of these activities. Prior to implementation, IRFSP hiring a service provider to conduct surveys, prepare a long list of potential beneficiaries, and then screen them through household visits to assess their level of interest and potential for successfully adopting the activities. The shortlisted potential beneficiaries received technical and business training and certification, followed by follow-up and mentoring support, particularly for W1 first-time commercial farmers who required closer guidance and support. This process ensured that the beneficiaries had the basic skills and knowledge necessary to implement the programme activities, followed by practical guidance during implementation, resulting in a high level of success. The IA survey found that the W1 and W2 activities contributed the most to increasing the income and productive assets of the beneficiaries. This experience indicates that a detailed beneficiary selection process and targeted capacity building before delivering loans and grants can lead to the identification of more interested and capable beneficiaries who are more involved in implementation and, therefore, more successful.

60. **More formal engagement of the programme with beneficiaries for example, based on some type of formal contract/agreement can increase the quality of beneficiary participation along with the effectiveness and sustainability of such support.** The IRFSP's success in improving the income of beneficiaries and increasing their productive assets can be attributed to the individual attention given to W1 and W2 beneficiaries during the selection and implementation process. These interventions demonstrate the positive impact of direct engagement with beneficiaries and highlights the importance of a tailored approach to programme implementation. In contrast, the RFF and FREDA interventions did not involve direct selection of smallholder beneficiaries by the programme, instead relying on PFIs and partnering enterprises to make the selection. While these interventions contributed to the overall success of the programme, critical gaps were identified, including the failure to meet targets related to women outreach and a lack of farmers selling produce to SMEs. If the programme had directly participated in developing the capacity of these beneficiaries and supported their market access through a formal contractual agreement, results would have been more positive. This would have also resulted in a synergy between RFF loans to increase production and FREDA investments in SMEs to purchase the produce. Thus, more formal and direct engagement with beneficiaries, e.g. through a contract or agreement can result in their greater involvement, capacity development, access to markets, and contribution to more effective programme outcomes.
61. **Alignment between the M&E matrix indicators, Logical framework and GEF Tracking Tool is key.** To ensure correct reporting on Logical Framework (LF) indicators and establish correct link with the M&E matrix, a detailed description of all indicators included in the LF and of the alignment between the M&E matrix indicators and LF, should be included as an annex to the LF from the beginning of the programme implementation. It will be very useful for both the M&E Unit (in case of a change of personnel) and IFAD (including supervision teams). It is very important that GEF indicators are clearly linked to the outputs and outcomes to avoid losing track of the results. The Tracking Tool should also be more elaborate on how the results were aggregated. Greater ownership and accountability from the technical staff in the monitoring aspects of their work, pertaining to target setting and systematic, consistent tracking of both output and outcome level indicators, can help further strengthen the project M&E systems, in addition to relevant training of the technical staff responsible for the component implementation.
62. **Procurement processes should be initiated as early as possible.** Ensure timely completion of all procurement phases within the programme closing date. Contract amendments must be promptly issued when necessary, and more robust contract management practices should be employed to identify gaps and apply remedial actions. Furthermore, grouping and packaging of

procurement activities should be done to achieve economies of scale, and all activities must be clearly described.

VIII. Recommendations

63. **Integrate co-financed project components in the main designing process.** Developing a design for co-financed component separately from the main process can result in a lack of integration of the co-financed component with the other components, as was observed in the case of SLMIP and IRFSP. Create interconnections between the components through a clear Theory of Change for the project as a whole.
64. **Ensure that policy engagement activities are clear, inclusive and have clear implementation modalities.** The delay in the identification of the needs of the Ministry of Environment has led to not executing policy engagement actions under SLMIP. This jeopardises the sustainability of the project's investments.
65. **Train PMUs on the Monitoring and Evaluation Requirements of the GEF.** It is important to ensure that GEF indicators and Tracking Tools are accounted for from the inception of the project to harmonize the M&E process throughout the project lifecycle.
66. **Restructuring should reconcile adjusted activities with the original outcomes and indicators in the GEF document.** The project did necessary adjustments at MTR but should have mapped the adjusted components to the original outcomes and indicators of SLMIP that were approved in the CEO Endorsement document and how the data will be aggregated for the Tracking Tool.
67. **Incorporate clear gender, youth and vulnerable communities strategies since design.** This should reflect on the targeting strategy, the M&E system and the overall objective of the project. A theory of change with clear pathways for involving these groups would very much help implementing a more inclusive project.
68. **Clearly document the priority for integrating rural finance activities with other project components in all documents leading to credit disbursements to beneficiaries.** To ensure effective integration between rural finance activities and other project components, it is recommended that the priority for such integration be clearly documented in all project documents, from the PDR to the investment guidelines of the PFIs. The IRFSP design recognized the need for integrating the RFF supported credit activities with the RAWI component, but this priority was not reflected in RFF's loan agreements with the PFIs or in the PFIs' investment guidelines and led to a lack of synergy between rural credit activities and other components of the project.
69. **Provide direct support to farmers who sell to the SMEs that benefit from project investments.** In designing a project that aims to invest in the development of agribusiness SMEs, it is recommended that the project provides direct support to farmers who sell their produce to the SMEs. The project should not limit its support to the SMEs alone, as this may result in the failure to strengthen the engagement of the SMEs with the intended target group.
70. **Develop synergies between RFF and FREDa to increase SME outreach to smallholder farmers.** RFF specializes in supporting retail credit for individual farmers through PFIs, while FREDa's expertise is in bulk SME investments for capital expenditure and working capital needs. Collaboration between RFF and FREDa, whereby RFF-supported PFIs provide retail credit to farmers who then sell their produce to the credit-supported SMEs that have expanded their

capacity using FREDA investment, can result in greater outreach of the SMEs to the target smallholders. This can overcome the current situation where FREDA-supported SMEs' outreach to smallholder farmers selling produce to the SMEs is relatively limited.

Annex 1: The Evaluation Terms of Reference

Expected Activities:

- Provide a comprehensive and systematic account of the performance of the GEF-Funded SLMIP by assessing its design, implementation and achievement of objectives;
- Review all Project documents and reports and collect all information deemed necessary to understand and analyse the Project implementation achievements and failures, management and implementation capacities, structure and sustainability;
- Prepare a first draft of the SLMIP GEF Terminal Evaluation Report in line with guidelines for GEF Agencies in Conducting Terminal Evaluation for Full Sized Projects, which includes sections on General Information, Project Theory of Change, Assessment of Project Results, Outputs, Outcomes, Sustainability, Progress to Impact, Assessment of Monitoring and Evaluation Systems, Assessment of Implementation and Execution, Other Assessments and Lessons and Recommendations;
- Address any comments made by the IFAD and GEF Independent Offices of Evaluation on the Draft Terminal Evaluation Report;
- If necessary and related to GEF Funding, undertake any other task assigned by the IFAD Country Director.

Expected Outputs:

- SLMIP GEF Terminal Evaluation Report in line with the GEF Evaluation Policy (2019) and the Guidelines for GEF Agencies in Conducting Terminal Evaluation for Full Sized Projects.
- Revised SLMIP GEF Terminal Evaluation Report based on GEF Independent Office of Evaluation's comments.

Annex 2: Completion Mission Agenda and People Met

Mission meetings schedule

17/11/2022	Thursday		Departure from Rome	Status of meeting
18/11/2022	Friday	04.30	Arrival Yerevan	
18/11/2022		11.00-12.00	Security Briefing at UNDSS	
		12.00 – 13.00	Meeting with the PMU/FREDA	
		13.00–14.30	Lunch	
		15:00 – 15.30	Meeting at Ministry of Economy- A.Khojoyan	Confirmed
19/11/22	Saturday	09:00	Field visit Ararat marz, Poqr Vedi and Surenavan communities, W1 (2 beneficiaries), W2 (1 beneficiary),	
19/11/22		16:00	Back to Yerevan	
20/11/22	Sunday			
21/11/22	Monday	Starting at 09:00	PIU office, work with team	
21/11/22		10:00-13.00	Consultants for Impact Assessment	
		13.00-14.00	Lunch	
		14.00-onwards	Rafael on the log frame Alaa (meeting with Wadzi) Other individual meetings	
22/11/22	Tuesday	9:30 – full day	Field visit to Gegharkunik marz, Vardenik community cold storage, irrigation schemes	
23/11/22	Wednesday	9.00-10.00	Naoufel/Daniela Meeting with RC	Confirmed
		9.00-10.00	RFF discussion with Vahe Other individual meetings	
		10.30-12.30	Meeting with 2 PFIs for 45 minutes each one after the other Other individual meetings	
		12.30-13.30	Lunch	
		14:10-15:00	Meeting at Ministry of Environment- G.Gabrielyan deputy minister (Naoufel, Daniela, Margarita, Swandip, Seiko) Other individual meetings	Confirmed
		15.00 – 16.00	Other individual meetings	
		16:00-19:00	Meeting with FREDA and PFIs	
24/11/22	Thursday	9:00-13:00	Visit to FREDA's SMEs: SIS Natural and Gofroline in Yerevan	
		13-14.00	Lunch	

People met

Date	Beneficiary details	Province	Community	Project	Position
18.11.22	Arman Khojoyan	Yerevan	Yerevan		Deputy Minister of Economy
19.11.22	Angelina Sarukhanyan	Ararat	Poqr Vedi	W2	Farmer
19.11.22	Ruzanna Ghukasyan	Ararat	Poqr Vedi	W2	Farmer
19.11.22	Hrachik Margaryan	Ararat	Poqr Vedi	W1	Farmer
19.11.22	Hasmik Karapetyan	Ararat	Poqr Vedi	W1	Farmer
19.11.22	Artsrun Khachikyan	Ararat	Poqr Vedi	W2	Farmer
19.11.22	Armine Abrahamyan	Ararat	Surenavan	W1	Farmer
22.11.22	Hovik Hoveyan	Gegharkunik	Martuni	RAWI	Head of Martuni city
22.11.22	Vardan Manukyan	Gegharkunik	Vardenik	RAWI	Farmer
22.11.22	Andranik Arakelyan	Gegharkunik	Vardenik	RAWI	Farmer
23.11.22	Gayane Gabrielyan	Yerevan	Yerevan		Deputy Minister of Environment
23.11.22	Arpine Arshakyan	Yerevan	Yerevan		Deputy CEO at Kamurj PFI
23.11.22	Arsen Bazikyan	Yerevan	Yerevan		CEO at Armenia Leasing
23.11.22	Nune Harutyunyan	Yerevan	Yerevan	SLMP	Executive Director at The Regional Environmental Centre for the Caucasus (REC Caucasus)
23.11.22	Dshkhuhi Sahakyan	Yerevan	Yerevan	SLMP	EIA/Monitoring Expert
23.11.22	Tatiana Danielyan	Yerevan	Yerevan		Biodiversity/forestry expert
23.11.22	Seryoj Karapetyan				GIS Expert
24.11.22	Alexandr Kalantaryan				FREDA Director

Summary of final IRFSP/SLMIP closing stakeholder workshop findings (16 March 2023)

The purpose of the event was to represent the results of the IRFSP, share knowledge with partner organizations and highlight the main difficulties that the project had throughout its implementation. RFF Director Vahe Harutyunyan had a welcome speech. He greeted all the guests and thanked everybody for the participating in the IRFSP closing event and thanked the donor organizations for their contribution in the IRFSP.

Daniela Frau, Programme Officer at International Fund for Agricultural Development (IFAD) had a speech, highlighting the importance of the IRFSP and its achievements towards the rural area development of the RA. Afterwards Vahe Harutyunyan represented the overview of the IRFS Programme. He talked about the IRPFS components, the main works implemented under each of the components and the main outputs.

The GEF coordinator Grigor Janoyan spoke for the IRFSP component 4 - “Sustainable Land Management for Increased Productivity in Armenia” (SLMIP), outlining the work that has been implemented so far in the frame of the project, the number of trees planted in the selected areas and the selection of lands for tree plantation.

M&E Specialist Rafayel Hakobyan represented the main results of the Impact Assessment study. The main aim of the study was to measure the project’s final outcomes and impacts on its target population and measure the effectiveness of the project in achieving its objectives. He explained the methodology of the Impact Assessment and showed the main results that IRFSP achieved in accordance with the Logical framework indicators. Vardan Aghbalyan, partner at AM Partners, which is one of the Service providers in the frame of the IRFSP represented the main obstacles and issues that they faced during the project implementation. The main issues were related to the rural communities and households, and their perception of using drinking water in their communities. Georgi Gevorgyan, the head of construction works at RAED PIU had a speech and thanked everybody for the cooperation. At the end RFF director Vahe Harutyunyan had a speech at the end and thanked everybody for taking part in the event. For the hard and dedicated work the RAED PIU staff received a certificate.

Annex 3: List of documents consulted

- IRFSP Base line Survey
- SLMIP CEO Endorsement Document
- SLMIP Full Project Document
- SLMIP GEF Project Implementation Reports (PIRs)
- IFAD Supervision Missions' Reports
- IFAD Implementation Support Missions' Reports
- IRFSP Mid-Term Review Report
- IFAD Project Completion Report (PCR)
- Project M&E reports
- IRFSP Logical Framework
- GEF Tracking Tool
- IRFSP Final Impact Assessment Report

Annex 4: Summary of co-finance information and a statement of project expenditure by activity

Table 1A – Expenditure by Financier in USD (as at 31 March 2023)

FINANCIER:	Appraisal	Total expenditures	Total expenditures
	(USD 000)	(USD 000)	%
IFAD Loan	11,000	10,112	92%
IFAD Grant	350	323	92%
OFID	25,000	24,949	100%
GEF	3,938	3,938	100%
Government	10,065	10,423	104%
Beneficiaries	3,542	1,539	43%
TOTAL INVESTMENT	53,895	51,284	95%

Table 1 B – Expenditure by Component and Financier in USD (as at 31 March 2023)

Component	IFAD Loan			IFAD Grant			OFID		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
Rural Finance	8,700	8,668	100%						
Rural Areas Water Infrastructure				350	323	92%	22,770	23,731	104%
Farmer Awareness and Support	900	424	47%						
Programme Management	1,400	1,021	73%				2,230	1,218	55%
Total	11,000	10,112	92%	350	323	92%	25,000	24,949	100%

Component	GEF Grant			Government			Beneficiaries			Total		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
Rural Finance										8,700	8,668	100%
Rural Areas Water Infrastructure				9,582	9,577	100%	3,542	1,539	43%	36,244	35,171	97%
Farmer Awareness and Support				11	347	3152%				911	770	85%
Programme Management				472	162	34%				4,102	2,401	59%
Total				10,065	10,086	100%	3,542	1,539	43%	49,957	47,010	94%

Table 2: Status of Funds – IFAD LOAN (as at 31 March 2023)

CATEGORY	CATEGORY	CATEGORY		ALLOCATED	DISBURSED	DISBURSED	AVAILABLE
CODE	DESCRIPTION	FURTHER DESCRIPTION			AMOUNT	%	BALANCE
200008	CONSULTANCIES			2,00,000.00	2,01,712.94	100.86%	-1,712.94
200013	GOODS, SERVICES AND INPUTS	INCLUDING EQUIPMEN		1,75,000.00	1,76,460.36	100.83%	-1,460.36
200016	OPERATING COSTS			3,75,000.00	3,37,240.25	89.93%	37,759.75
200018	SALARIES AND ALLOWANCES			3,25,000.00	3,21,840.11	99.03%	3,159.89
200042	INVESTMENT CAPITAL	(RFF)		29,20,000.00	29,71,859.14	101.78%	-51,859.14
200043	INVESTMENT CAPITAL 2	(FREDA)		32,55,000.00	32,40,472.83	99.55%	14,527.17
				72,50,000.00	72,49,585.63	99.99%	414.37

Table 3 - Status of Funds – IFAD Grant (as at 31 March 2023)

CATEGORY	CATEGORY	CATEGORY		ALLOCATED	DISBURSED	DISBURSED	AVAILABLE
CODE	DESCRIPTION	FURTHER DESCRIPTION			AMOUNT	%	BALANCE
200013	GOODS, SERVICES AND INPUTS	INCLUDING EQUIPMEN		231000	230863.48	99.94%	136.52
				231000	230863.48	99.94%	136.52

Table 4: Status of Funds – GEF Grant (as at 31 March 2023)

	GEF Grant			GOVERNMENT			Total		
	Appraisal	Actual	%	Appraisal	Actual	%	Appraisal	Actual	%
GEF component	3,937.5	3,937.5	100%	0	336.69		3,938	4,274	109%

Annex 5: Comprehensive list of knowledge products

- Video on SLMIP's Impact (2021): <https://youtu.be/t0UYCMu8rko>
- Study on Land Degradation in Armenia