IFAD
Investing in rural people

Executive Board

President's memorandum
Proposed additional financing to
Republic of Rwanda
Partnership for Resilient and Inclusive Small Livestock Markets Programme (PRISM)

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Action: The Executive Board is invited to approve the recommendation for the proposed additional financing contained in paragraph 58.

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Financing summary

Initiating institution:	IFAD
Borrower/recipient:	Republic of Rwanda
Executing agency:	Ministry of Agriculture and Animal Resources (MINAGRI)
Total programme cost:	US$65.03 million
Amount of original IFAD loan (PBAS):	SDR 10.85 million (equivalent to approximately US$14.9 million)
Terms of original IFAD financing:	Highly concessional
Amount of additional IFAD loan 1 (PBAS):	US$12.00 million
Terms of additional IFAD loan 1:	Super highly concessional: 50 years, including a grace period of 10 years, with a service charge of 0.10 per cent per annum (adjustments for single-currency loans)
Amount of additional IFAD loan 2 (PBAS):	US$3.00 million
Terms of additional IFAD loan 2:	Highly concessional: 40 years, including a grace period of 10 years, with a service charge of 0.75 per cent per annum (adjustments for single-currency loans)
Cofinanciers:	Enabel, Heifer International, Cordaid
Amount of original cofinancing:	Enabel: US$17.430 million Heifer International: US$4.677 million
Terms of cofinancing:	Heifer International: Grant Enabel: Parallel cofinancing (grant)
Amount of additional cofinancing:	Heifer International: US$3.113 million Cordaid: US$0.050 million
Terms of additional cofinancing:	Heifer International: Grant Cordaid: Grant
Original contribution of borrower:	US$3.312 million
Additional contribution of borrower:	US$0.654 million
Original contribution of beneficiaries:	US$2.381 million
Additional contribution of beneficiaries:	US$0.457 million
Original contribution of private sector:	US$0.994 million

Additional contribution of private sector:	US$0.110 million
Original contribution of financial institutions:	US$1.289 million
Original contribution of districts:	US$0.656 million
Amount of original IFAD climate finance:	US$1.33 million
Amount of additional IFAD climate finance:	US$3.28 million (of which US$1.259 million is a climate top-up)
Cooperating institution:	IFAD

I. Background and programme description

A. Background

1. The Government of the Republic of Rwanda and IFAD signed a financing agreement for the Partnership for Resilient and Inclusive Small Livestock Markets Programme (PRISM) on 10 December 2020, following approval by the IFAD Executive Board in September 2019 (EB 2019/LOT/P.4). The financing agreement entered into force on 10 March 2021, with a programme completion date of 31 March 2026 and a closing date of 30 September 2026.

2. The initial programme costs were estimated at US$45.643 million, including IFAD original financing, consisting of US$14.904 million from the Eleventh Replenishment of IFAD's Resources (IFAD11) performance-based allocation system (PBAS), parallel cofinancing of US$17.430 million from Enabel, US$4.677 million in cofinancing from Heifer International, US$3.312 million from the Government of Rwanda, US$1.289 from financial institutions, US$0.656 million from districts, US$2.381 million from beneficiaries and US$0.994 million from the private sector.

3. On 12 May 2025, the Government of Rwanda submitted a formal request for additional financing of US$15 million. The proposed additional financing would be provided as a super highly concessional loan (for 80 per cent of the amount) and a highly concessional loan (for 20 per cent), from IFAD13. The objectives of the proposed additional financing are to replicate and advance PRISM operations. The additional financing request includes an expansion of the geographical area and a three-year extension of the implementation period, aiming towards the completion of all activities covered under the additional financing.

B. Original programme description

4. PRISM was designed as a partnership programme implemented by the Rwanda Agriculture and Animal Resources Development Board and jointly funded by IFAD and Enabel, with Heifer International as key implementing partner.

5. The overall programme objective is to reduce poverty by empowering poor rural men, women and youth to participate in the transformation of Rwanda's livestock sector and to enhance their resilience. The programme development objective is to improve the food and nutrition security and incomes of poor rural households through better value chain performance.

6. The programme comprises three components aimed at achieving the respective three outcomes: (i) small livestock farmers are socially, technically and economically empowered; (ii) value chain actors access improved inputs, services and output markets; and (iii) institutional and policy environment improved.

II. Rationale for additional financing

A. Rationale

7. PRISM's ongoing performance is satisfactory, with a current likelihood of achieving development objectives (Key SIS1) rating of 4.31 and an overall project implementation performance (Key SIS2) rating of 4.33. At midterm review (MTR), PRISM had cumulatively achieved physical progress of approximately 67 per cent across activities. Component 1 had reached 70 per cent achievement towards targets at midterm. In particular, 21,046 poor households had received animals through the Pass on the Gift mechanism, and 857 self-help groups (SHGs) had been formed and benefitted from capacity development and training. Component 2 had met most targets, including the construction of 10 small pig slaughterhouses, 15 livestock markets and 15 proximity veterinary posts/clinics.

8. As a result, the midterm survey found that PRISM has had a positive impact on incomes (which have risen by 19.5 per cent versus 11.8 per cent in the control

group), sales of animals (a 100 per cent increase) and manure (a 66 per cent increase) and the overall welfare index (an increase of 7.7 percentage points (pp) versus 3.4 pp in the control group). In addition, recent missions observed the emergence of unions of SHGs that had organized for collective savings, built businesses and reinvested in individual or collective activities.

9. PRISM is therefore qualified to receive additional financing from IFAD and meets the necessary criteria, namely:

   (i) The additional financing objectives, activities, approaches and components are consistent with the original programme design;

   (ii) Rwanda is on the list of countries eligible for core funding under IFAD13, with an allocation of US$92 million;

   (iii) The activities to be financed comply with all relevant IFAD policies at the time of the additional financing request, including the Social, Environmental and Climate Assessment Procedures (SECAP), targeting policies and performance indicators;

   (iv) The Government of Rwanda submitted a formal request for additional financing of US$15 million.

Special aspects relating to IFAD's corporate mainstreaming priorities

10. In line with IFAD’s mainstreaming commitments, the programme has been validated as:

☒ Including climate finance

☒ Nutrition-sensitive

☒ Youth-sensitive

11. **Climate.** Rwanda's climate vulnerability stems from temperature fluctuations, irregular rainfall and extreme events, such as floods, droughts and landslides, that impact agriculture, livestock and rural livelihoods, threatening water availability, food security and economic stability. PRISM promotes fodder-tree planting, water harvesting and manure management while strengthening livestock value chains and ensuring compliance with environmental regulations to boost climate resilience. Under the additional financing, support for climate adaptation and mitigation at the farm level will be upscaled to all additional beneficiaries, while manure and waste management and solar power facilities will be installed in the two existing facilities built under the original financing and the newly constructed ones.

12. **Gender.** Despite progress in gender equality, Rwandan women remain overrepresented in informal work and unpaid care, facing financial, educational and climate-related barriers. PRISM addresses these through: (i) economic empowerment via livestock placements, group membership and training; (ii) greater roles in decision-making; and (iii) labour equity, with time-saving tools and shared responsibilities. Under the additional financing, PRISM will scale up Gender Action Learning System training for 9,200 beneficiaries.

13. **Youth.** Despite representing 27 per cent of the population, rural youth have limited access to jobs, land, finance and digital literacy. While 45.8 per cent rely on agriculture, land scarcity and lack of training hinder their potential. PRISM is a youth-sensitive programme and promotes youth empowerment through group membership, animal placements and technical and financial literacy support. Due to a revision of component 2, however, the programme will no longer target 1,530 unemployed youth through entrepreneurship support but establish 703 new SHGs with 30 per cent youth participation. Additional coaching will help youth-led cooperatives, while the new goat breeding station will create jobs in construction, maintenance and management.

14. **Nutrition.** Rwanda faces persistent nutrition challenges, with a 32.4 per cent stunting rate, high anaemia levels and inadequate infant feeding. Food inflation, poverty and climate shocks worsen access to nutritious food. PRISM is a nutrition-sensitive programme and addresses these challenges by: (i) increasing access to animal-source foods; (ii) boosting producer incomes for better diets; and (iii) improving nutrition knowledge through education. The additional financing will invest in awareness campaigns on protein consumption and increase food safety by upgrading slaughtering and processing facilities and enforcing sanitary regulations.

B. Description of geographical area and target groups

15. PRISM is designed to be implemented in 15 districts where poverty and malnutrition are widespread. The additional financing will expand its scope to include new sectors in these districts, with two additions: (i) a goat breeding station in Kayonza District; and (ii) a new pig slaughterhouse in Rwamagana District. These new districts were not originally analysed in the programme design. Information about them and its analysis have been included in the Environmental, Social and Climate Management Plan and SECAP review note of the overall programme. Targeting remains the same, with the main target groups and strategy unchanged. The only modification is the expanded outreach.

C. Components, outcomes and activities

16. The additional financing will be implemented under the same components as the original financing.

Component 1. Climate-smart intensification of small livestock production systems.

17. **Subcomponent 1.1. Social mobilization and graduation of vulnerable households.** The programme will extend its graduation approach to 17,575 households over and above the 30,100 already targeted. Of these, 3,800 will receive livestock, while 13,775 will benefit from the Pass on the Gift mechanism. The Livestock Farmer Field School methodology, introduced in the first phase to improve technical and business training, will be expanded to 28,400 beneficiaries. In addition, six collective production farms will be piloted among existing groups, with intensive coaching and pre-established agreements with offtakers to ensure market viability.

18. **Subcomponent 1.2. Improve animal health status and genetic potential of small livestock.** Disease surveillance will be further supported under the additional financing, including community-based surveillance involving producers' groups. The programme will also support Rwanda's participation in the global peste de petits ruminants (PPR) eradication programme by supporting private sector-led PPR vaccination and seromonitoring, with the Government providing vaccines. The contingency fund, largely used for African swine fever and PPR outbreaks, will be replenished with improved emergency disbursement mechanisms. Furthermore, seven new veterinary posts will be built and 15 upgraded. A national goat breeding station and artificial insemination centre will be constructed as initially planned in the PRISM design but later replaced by rehabilitation of the sheep breeding station in Gishwati.

19. **Subcomponent 1.3. Support climate-smart innovations.** Under the additional financing, the number of small-scale water harvesting systems allocated to poor households will be increased by 1,105 (adding to the 1,830 already built).

Component 2. Support to small livestock value chain development.

20. **Subcomponent 2.1. Facilitation of productive alliances between producers' groups and private sector.** Following the MTR-adopted approach, the programme will support the transition of 50 SHG unions into cooperatives that will receive investment and business development support to improve market access and input

supply. Partnerships with market aggregators and input suppliers will also be facilitated.

21. **Subcomponent 2.2. Market facilitation in small livestock value chains.** A new pig slaughterhouse will be constructed under the additional financing, on top of the 12 existing facilities that will be upgraded to meet the new Rwanda Inspectorate, Competition and Consumer Protection Authority standards. Five of them will also be equipped with hybrid power supply systems. The 15 current livestock market facilities will also be upgraded.

22. **Subcomponent 2.3. Improving access to finance.** On the supply side, the additional financing will support the roll-out and digitalization of the livestock credit assessment tool, the development of specific financial products and the formalization of saving and credit schemes established by groups. On the demand side, programme support will focus on the facilitation of linkages between groups/unions/cooperatives and financial institutions.

Component 3. Policy support and coordination.

23. **Subcomponent 3.1. Policy and regulatory support.** The main innovation introduced by the additional financing under this subcomponent will be the piloting of a school feeding programme, based on partnerships between producers' unions and schools. The outreach of the nutrition campaign will also be extended to new sectors in the 15 districts.

24. **Subcomponent 3.2. Programme coordination and management.** The additional financing will finance operating costs for programme coordination during the additional three years. Another climate and environment specialist position will be created.

D. Costs, benefits and financing

Programme costs

25. The total programme cost is US$65.03 million, including the requested additional financing amount of US$19.38 million, to be disbursed over five years (from late 2025 to 2029). IFAD will contribute US$15.00 million of this figure, while Heifer International will provide US$3.11 million. The private sector will contribute US$0.11 million and Cordaid will add US$0.05 million. The Government of Rwanda is expected to contribute US$0.65 million, mainly in the form of taxes and land. Finally, beneficiaries will provide US$0.46 million, primarily through in-kind contributions.

26. Programme components 1 and 2 are partially counted as climate finance. As per the multilateral development banks' methodologies for tracking climate change adaptation and mitigation finance, the total IFAD climate finance for the original design is estimated at US$1.33 million. The total additional IFAD climate finance for this additional financing proposal is estimated at US$3.28 million.

27. The recurrent cost is US$4.84 million, representing 25 per cent of the total programme costs, while the investment costs total US$20.72 million, accounting for 75 per cent of the overall budget. Recurrent cost under the IFAD loan will be 15 per cent.

Table 1
Original and additional financing summary
(Thousands of United States dollars)

	Original financing	*Additional financing*	*Total*
IFAD	14 904	15 000	29 904
Heifer International	4 677	3 113	7 790
Private sector	994	110	1 104
Cordaid	-	50	50
Beneficiaries	2 381	457	2 838
Government of Rwanda	3 312	654	3 966
Enabel	17 430	-	17 430
Credit	1 289	-	1 289
District	656	-	656
Total	**45 643**	**19 384**	**65 027**

Table 2
Additional financing: programme costs by component and financier
(Thousands of United States dollars)

	IFAD loan 1		*IFAD loan 2*		*Additional*										*Total*
					Heifer International		*Private sector*		*Cordaid*		*Beneficiaries*		*Borrower*		
Component	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*
1. Climate-smart intensification of small livestock production systems	8 689	58	2 172	15	3 113	21	-	0	-	0	457	3	518	3	14 949
2. Support to small livestock value chain development	960	65	240	16	-	0	110	7	50	3	-	0	113	1	1 473
3. Policy support and coordination	2 352	79	588	20	-	0	-	0	-	0	-	0	22	0	2 962
Total	**12 000**	**62**	**3 000**	**15**	**3 113**	**16**	**110**	**1**	**50**	**0**	**457**	**2**	**654**	**3**	**19 384**

Table 3
Additional financing: programme costs by expenditure category and financier
(Thousands of United States dollars)

					Additional										
	IFAD loan 1		*IFAD loan 2*		*Heifer International*		*Private sector*		*Cordaid*		*Beneficiaries*		*Borrower*		*Total*
Expenditure category	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*
Investment costs															
Works	2 073	71	518	18	-	0	-	0	-	0	-	0	325	11	2 916
Vehicles	17	80	4	20	-	0	-	0	-	0	-	0	0	0	21
Equipment and materials	1 393	64	348	16	18	1	-	0	-	0	286	13	128	6	2 173
Contingency fund	707	71	176	18	-	0	-	11	-	0	-	0	-	0	883
Goods, services and inputs	3 932	76	984	19	26	1	110	0	-	0	26	1	177	3	5 255
Services	24	65	6	16	-	0	-	0	-	0	-	0	7	18	37
Credit and guarantee funds	-				-		-		-		-		-		-
Consultancies	656	72	163	18	90	10	-	0	12	0	-	0	0	0	921
Training	1 364	58	341	15	609	26	-	0	19	1	-	0	0	0	2 333
Total investment costs	10 166	70	2 541	17	743	5	110	1	31	0	312	2	637	4	14 541
Recurrent costs															
A. Salaries	835	27	209	7	1 973	65	-	0	-	0	36	1	0	0	3 053
B. Operating costs	998	56	250	14	397	22	-	0	19	1	109	6	17	1	1 790
Total recurrent costs	1 834	38	459	9	2 370	49	-	0	19	0	145	3	17	0	4 844
Total	**12 000**		**3 000**		**3 113**		**110**		**50**		**457**		**654**		**19 384**

Table 4
Programme costs by component and programme year (PY)
(Thousands of United States dollars)

	PY1		*PY2*		*PY3*		*PY4*		*PY5*		*Total*
Component	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*	*%*	*Amount*
1. Climate-smart intensification of small livestock production systems	992	7	4 901	33	4 865	33	3 922	26	270	2	14 949
2. Support to small livestock value chain development	155	10	692	47	521	35	105	7	-	0	1 473
3. Policy support and coordination	28	1	751	25	913	31	956	32	314	11	2 962
Total	**1 174**	**6**	**6 344**	**33**	**6 299**	**32**	**4 983**	**26**	**584**	**3**	**19 384**

Financing and cofinancing strategy and plan

28. The total additional financing costs, including physical and price contingencies, are estimated at US$19.38 million, with a base cost of US$17.46 million and contingency allowances of US$1.92 million. Taxes and foreign exchange respectively account for 11 per cent and 35 per cent of the total programme costs. The largest share is allocated to component 1, climate-smart intensification of small livestock production systems (US$13.48 million, base costs), followed by component 3, policy support and coordination (US$2.65 million, base costs) and finally, component 2, support to small livestock value chain development (US$1.34 million, base costs).

Disbursement

29. All donor-funded programme bank accounts are included in the treasury single account mechanism. Therefore, IFAD's additional financing for PRISM will flow through the designated and operating accounts already opened for the programme at the National Bank of Rwanda. Both are basket accounts, and specific account codes will be assigned to each financing instrument to segregate the sources and uses of funds. Disbursements will be based on the submission of quarterly interim financial reports, which shall be submitted to IFAD within 30 days of each quarter's end.

30. The total programme costs will be disbursed over five years, from the end of 2025 to 2029. The financial plan allocates 6 per cent (around US$1.17 million) in the first year, 33 per cent (around US$6.34 million) in the second year, 32 per cent (around US$6.30 million) in the third year, 26 per cent (around US$4.98 million) in the fourth year and 3 per cent (around US$0.58 million) in the final year.

Summary of benefits and economic analysis

31. The financial analysis shows that the targeted activities are sound, while the economic analysis confirms that the programme is economically viable. The economic internal rate of return for the overall programme is 17.05 per cent and the net present value US$7.54 million, discounted at 9.5 per cent. The programme is sensitive to changes in some of the model's variables (variations in benefits and costs and lags in the realization of benefits and adoption rates), highlighting the critical importance of sustainable investments in livestock value chains for the programme's success.

Exit strategy and sustainability

32. Key exit and sustainability aspects related to the additional financing activities are as follows:

33. **Sustainability of self-help groups** created under the initial phase will be supported through their involvement in income-generating activities, either as SHGs, or preferably, unions/cooperatives. The programme will provide governance and business management support to these organizations, as well as seed capital, to enable them to manage collective enterprises such as input/feed shops, chick brooding, product marketing and saving and credit programmes. The programme will also facilitate contractual arrangements between these organizations and the private sector (offtakers, input suppliers) to secure market access.

34. **The sustainability of animal health and market infrastructure** works will be supported by delegating their management to the private sector (for veterinary posts and abattoirs) or local authorities (municipalities, for markets). The services provided by these facilities will generate income that covers operating costs and generates profits, as shown in the economic and financial analysis.

35. **Sustainable financing mechanisms** will be preferred over grants and subsidies. Small livestock production requires substantial amounts of cash flow but with quick turnaround due to short production cycles. This type of financing is much easier to mobilize from the private sector than investment capital, and existing unions have

begun mobilizing financing without major difficulties. The programme will further support these arrangements by facilitating productive partnerships that could involve the financing of working capital (e.g. credit facilities with feed millers).

III. Risk management

A. Risks and mitigation measures

36. **Market volatility.** Depending on export opportunities (subject to geopolitical conditions), feed costs, climate conditions and major investments in the value chains, the demand/supply balance can change rapidly, requiring timely adaptation of programme support. The programme should monitor the market situation and adapt its strategy to changes in value chain context. Market diversification will also reduce vulnerability to export market fluctuations.

37. **Price of feed and food/feed competition.** Poultry and pigs are in direct competition with humans for their feeding. Given the structural food insecurity situation in Rwanda and the recent surge in feed prices, the technical and economic model of pig and poultry production has become fragile. This risk can be mitigated by: (i) testing field-level technical solutions to reduce reliance on purchased feed; and (ii) supporting policy-making through a feed balance assessment and the development of a national feed strategy.

B. Environment and social category

38. The original programme activities were classified as **environmental and social category B**. However, after considering the new geographical areas in the Eastern Province and the inclusion of the goat breeding station under the additional financing, the environmental and social risk categorization has been updated to "**substantial**," based on the new SECAP guidelines.

39. While small livestock value chains typically have lower environmental impacts, potential risks include soil erosion and degradation from construction activities, overgrazing leading to catchment degradation, water resource mismanagement and pollution from improper waste disposal and agrochemicals.

40. To mitigate these risks, the programme will focus on sustainable practices such as resource efficiency, rainwater harvesting, renewable energy use and proper manure and waste management. Smallholders will receive training in water conservation, erosion control, safe agrochemical use, fodder-tree cultivation and organic waste recycling. Additionally, installing sanitation facilities in key infrastructure will address hygiene risks, while establishing a contingency fund will prepare for potential climate-related emergencies and disease outbreaks.

41. The social risk categorization has been updated to "**substantial**," primarily due to the potential exposure to occupational and safety risks, including zoonotic diseases, chemicals such as acaricides and hazardous substances such as liquid nitrogen. Since the additional financing focuses on upscaling and does not deviate from the original design, except for the construction of a goat breeding station, the remaining social risks are classified as "low" or "moderate," with mitigation measures included in the Environmental, Social and Climate Management Plan (ESCMP).

42. Regarding SECAP compliance, the programme will adhere to the SECAP requirements based on the "substantial" risk categorization. The programme will conduct environmental and social impact assessments for new activities, including the goat breeding station, and will continue to implement and monitor ESCMPs for all infrastructure projects. These assessments and plans will ensure that the programme meets the necessary environmental and social standards and complies with relevant policies and guidelines.

C. Climate risk classification

43. The programme was initially classified under the original design as having a "**moderate**" climate risk. Even with the inclusion of new activities and geographical areas under the additional financing, this classification has remained unchanged based on the new SECAP guidelines.

44. Rwanda's climate variability poses significant challenges across its regions. The Northern and Western Provinces often experience floods and landslides, while the Eastern and Southern Provinces are prone to droughts and erratic rainfall. These conditions adversely affect land and livestock productivity. Key climate risks include rising temperatures, unpredictable rainfall patterns, declining fodder yields, a higher incidence of livestock diseases, soil degradation, water scarcity and erosion. Floods, landslides and prolonged dry spells further threaten rural livelihoods. However, Rwanda's relatively high adaptive capacity aids in coping with these challenges.

45. The programme promotes climate-smart practices such as efficient resource use, rainwater harvesting, fodder and soil health management, climate-resilient infrastructure, livestock insurance and the promotion of small livestock better suited to variable climate conditions. It also supports fodder trees, manure and waste management and solar energy use in slaughterhouses to cut greenhouse gas emissions and improve carbon sequestration. These measures are aimed at lowering emissions and boosting sustainability.

IV. Implementation

A. Compliance with IFAD policies

46. There will be no alterations in PRISM's original design. The additional financing for the programme will still be aligned with the Government's second Economic Development and Poverty Reduction Strategy. More specifically, the additional financing remains well-aligned with Rwanda's Strategic Plan for Agriculture Transformation, the Government's flagship investment programme for the agriculture sector. The additional financing is consistent with both the IFAD Strategic Framework 2016–2025 and IFAD's Strategy and Action Plan on Environment and Climate Change 2019–2025. It is also aligned with the overall country strategic opportunities programme (COSOP) 2025–2030, due for review by the Executive Board at its September 2025 session, including its goal of strengthening sustainable food security and nutrition in vulnerable rural households, with the objectives of enhanced production, market access and nutrition practices and of increased efficiency and investments across agrifood systems.

B. Organizational framework

Management and coordination

47. Implementation modalities will remain unchanged under the additional financing. The programme will be implemented through the single project implementation unit (SPIU) under the Rwanda Agriculture and Animal Resources Development Board. In line with ongoing practices, the current project steering committee will be responsible for guidance and the review of overall PRISM implementation. The programme has entered into partnerships with decentralized entities to support activities under the direct coordination of districts. Similar partnerships have also been forged with relevant specialized government technical agencies. The programme also has a partnership with Heifer International, which serves as both a cofinancier and key implementing partner and will continue to play a vital role under the additional financing.

Financial management, procurement and governance

48. **Financial management (FM).** The additional financing for PRISM is expected to employ the same FM arrangements as the original financing, which is aligned with country systems. Accounting and financial reporting will be performed through the Integrated Financial Management Information System (IFMIS). The accounting for PRISM's additional financing will follow national regulations, which are gradually transitioning to the accrual standards of the International Public Sector Accounting Standards (IPSAS), which are expected to be fully adopted by 2026. Annual financial statements will be audited by the Office of the Auditor General in accordance with the International Standards of Supreme Audit Institutions. Until full adoption of the IPSAS accrual standards and the customization of IFMIS, the programme will monitor in-kind contributions through the monitoring and evaluation (M&E) system and report to IFAD at least semi-annually. Expenditures will be reported to IFAD only when the funds are utilized.

49. **Animal disease contingency fund.** There will be a basket fund account to which different donors will be transferring funds, but a separate chart of accounts will be set up to monitor the use of funds by financier. Advances transferred to this account will be recognized as eligible expenditure, and oversight arrangements will be in place to report to IFAD on the use of funds. Unused funds will not be returned to IFAD at financial closure but will be used for future country development objectives.

50. **Procurement.** Procurement arrangements will continue to follow the national procurement framework. A dedicated procurement staff member needs to be assigned for PRISM. Heifer International shall follow its Global Procurement Guidelines, with SPIU technical support, and the organization's periodic reports shall include procurement details, with SPIU procurement support. The SPIU shall prepare a plan of action for the implementation of infrastructure activities. SECAP risks related to procurement are to be adequately provided for, considering the current "substantial" SECAP risk category. The Project Procurement Arrangement Letter shall be amended to align with the thresholds established in the latest procurement manual.

C. Monitoring and evaluation, learning, knowledge management and strategic communication

51. **Monitoring and evaluation.** With the additional financing, PRISM will continue to monitor activities as guided by the M&E plan, using mobile data collection tools and a geographic information system. As a result, the PRISM M&E plan and geospatial database will be updated to reflect additional beneficiaries, infrastructure and interventions. Furthermore, in line with the additional funding, indicator end targets have been updated in the logframe.

52. **Logical framework modifications.** Regarding specific modifications with the additional financing funds, the following tentative indicators will be updated: (i) increase in the development objective-level outcome indicator of minimum dietary diversity of women to 62 per cent from a 50 per cent end target; (ii) increase in output 1.1 and 1.2 activities provided to all new beneficiaries, resulting in 95 per cent of new additional financing allocated to all targeted beneficiaries receiving services under component 1 output indicators; (iii) at the output level, the addition of the following new facilities under IFAD core outcome indicator (COI) 2.1.6: 15 market facilities (livestock markets), 11 processing facilities (pig slaughterhouses), and 50 storage facilities (egg and feed stores), for a total of 76 new facilities; (iv) the addition of mandatory multipliers of processing and storage facilities, alongside their targets, under COI 2.1.6; (v) removal of IFAD COI 3.2.1 – tons of greenhouse gas emission avoided and/or sequestered, and replacement with IFAD COI 3.2.2 – households reporting adoption of environmentally sustainable and climate-resilient technologies and practices, as

agreed at MTR; (vi) removal of outcome indicator duplications of MDDW and improved access to markets. Moreover, indicators that had no end targets in the original financing have been updated; and (vii) removal of indicator 14 – number of youth benefitting from the start-up package, as this activity is discontinued; and (viii) reduction of end target for output 2.5 from 6 to 4.

53. **Learning, knowledge management and strategic communication.** Through its knowledge management and communication strategy, PRISM plans to (i) equip beneficiaries with materials to sustain technical knowledge and monitor adoption; (ii) generate and document lessons from programme implementation and results monitoring; and (iii) share this knowledge with the Ministry of Agriculture and Animal Resources (MINAGRI), IFAD, donors and partners. It will also support policy engagement by drafting briefs and developing strategies to foster dialogue with high-level stakeholders in the livestock sector.

D. Proposed amendments to the financing agreement

54. An amendment to the current financing agreement between the Republic of Rwanda and IFAD will be necessary to formalize the additional allocation of US$12.0 million on super highly concessional terms and US$3.0 million on highly concessional terms, as per table 2. The amendment will also extend the programme completion and financing closing dates by 36 months, targeting completion in March 2029 and closure in September 2029. There will be no other changes to the financing agreement.

V. Legal instruments and authority

55. A financing agreement between the Republic of Rwanda and IFAD will constitute the legal instrument for extending the proposed financing to the borrower/recipient. The signed financing agreement will be amended following approval of the additional financing.

56. The Republic of Rwanda is empowered under its laws to receive financing from IFAD.

57. I am satisfied that the proposed additional financing will comply with the Agreement Establishing IFAD and the Policies and Criteria for IFAD Financing.

VI. Recommendation

58. I recommend that the Executive Board approve additional financing in terms of the following resolution:

> RESOLVED: that the Fund shall provide a loan on super highly concessional terms to the Republic of Rwanda in an amount of twelve million United States dollars (US$12,000,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.
>
> RESOLVED FURTHER: that the Fund shall provide a loan on highly concessional terms to the Republic of Rwanda in an amount of three million United States dollars (US$3,000,000) and upon such terms and conditions as shall be substantially in accordance with the terms and conditions presented herein.

Alvaro Lario
President

Updated logical framework incorporating the additional financing

Results hierarchy	Indicators: Name	Baseline	Midterm	Original target	End target	Means of verification: Source	Frequency	Responsibility	Assumptions/notes
Outreach	**1 Persons receiving services promoted or supported by the project**					Programme records and progress reports	Yearly	SPIU and SPs	In additional financing 703 groups (25 producers/group) will be supported resulting in new additional 17 575 total beneficiaries. 2 955 that were supposed to be reached out through SC2.1 will be removed (1,425 Market Oriented producers and 1 530 youth). The activity on youth is dropped, and the 1.425 market oriented producers are replaced by 1250 existing beneficiaries of comp1, that will be involved in productive alliances, but are not accounted for a second time in outreach
	Males - Males	0	9 157	13177	20 487				
	Females - Females	0	11 889	13178	20 487				
	Young - Young people	0	5 912	7906	12 292				
	Total number of persons receiving services - Number of people	0	21 046	26355	40 975				
	1.a Corresponding number of households reached								
	Women-headed households - Households	0	6 407	7906	10 244				
	Non-women-headed households - Households	0	14 639	18449	30 731				
	Households - Households	0	21 046	26355	40 975				
	1.b Estimated corresponding total number of households members								
	Household members - Number of people	00		115962	180 290				
T A	**2.Average increase in rural per capita income, derived from targeted value chains**					National statistics, household surveys incl. poverty & gender studies Impact assessment report, Programme reports	y1, y3, y5	SPIU	Incomes increase through a combined effect of increased production and improved market access (A) Strong political leadership and support (A) Absence of natural disaster (A) Political and economic stability (A) IFAD COI 2.2.6 was missing multipliers in the original financing. This has been added at the additional financing stage to include the measure of improved physical access to storage and processing facilities. At AF, it is projected that from the pig beneficiaries, 15% of the total outreach will report improved access to processing facilities (pig slaughter slabs). The project has added 50 egg collection centres were 15% of the targeted beneficiaries are also estimated to report improved
	average increase - Percentage (%)	0	15	25	25				
	3. Percentage increase of assets ownership of participating households								
	Increase - Percentage (%)	0	15	25	25				
Development Objective: Improve food security, incomes and resilience of rural households through intensification of small livestock production systems and improved performance of the value chains	**1.2.8 Women reporting minimum dietary diversity (MDDW)**								
	Women (%) - Percentage (%)	29.3	30	50	50				
	Women (number) - Females	2 125	3 953	6 589	10 244				
	Households (%) - Percentage (%)	29.3	30	50	50				
	Households (number) - Households	0	3 953	6 589	10 244				
	Household members - Number of people	0	17 393	28 991	45 073				
	2.2.6 Households reporting improved physical access to markets, processing and storage facilities					Impact assessment report, Programme reports	y1, y3, y5	SPIU	
	Households reporting improved physical access to markets - Percentage (%)	7.80	30	80	80				
	Households reporting improved physical access to processing facilities - Percentage (%)	0			15				

Results hierarchy	Indicators: Name	Baseline	Midterm	Original target	End target	Means of verification: Source	Frequency	Responsibility	Assumptions/notes
	Households reporting improved physical access to storage facilities - Percentage (%)	0			15				access to storage facilities. Improved access to market facilities will remain the same as no new markets will be constructed/rehabilitated. 80% of all beneficiaries will have improved access to market through various market infrastructures and facilitation of productive alliances
	Households reporting improved physical access to markets - Households	1131		13178	32 780				
	Households reporting improved physical access to processing facilities - Households	0			6 146				
	Households reporting improved physical access to storage facilities - Households	0			6 146				
Outcome 1: Small livestock farmers are socially, technically and economically empowered	**6.Number of vulnerable households graduated from the Value Based Holistic Community Development (VBHCD) model**					Outcome survey	yearly from y2	SPIU	Vulnerable household willingness to participate and allocate time for the graduation programme.
	households graduated - Number	0	7020	23 400	40 975				
	1.2.4 Households reporting an increase in production					Outcome survey	Baseline, midline, endline	SPIU	At MTR, IFAD COI 3.2.1 was replaced with COI 3.2.2 as recommended and agreed. However, this is not yet reflected in ORMS. At AF, the change has been made to ensure the ORMS update.
	Total number of household members - Number of people	0			144 232				
	Households - Percentage (%)	0	15	30	80				
	Households - Households	0			32 780				
	7.Productivity of small livestock production systems increased (COSOP indicator)								
	Increase - Percentage (%)	0	15	30	30				
	3.2.2 Households reporting adoption of environmentally sustainable and climate-resilient technologies and practices								
	Total number of household members - Number of people	0			135 217				
	Households - Percentage (%)	0			75				
	Households - Households	0			30 731				
Output 1.1: Strengthened production skills of vulnerable rural households, women and youth	**8.Number of vulnerable households receiving a full package of capacity building and small livestock assets**					Programme records and progress reports	yearly	SPIU and SPs	Availability of adapted breeds, quality and healthy animals for placement in vulnerable households (A)
	Households - Number	0	10000	23400	40 975				
Output 1.2: Improved animal health and genetic potential	**9.Number of producers accessing animal health and breeding services**								
	Producers - Number		7900	26355	**40 975**				
Output 1.3: Response capacities to sanitary risks improved	**10.Number of contingency plans developed or updated**					Programme records and progress reports	Yearly	SPIU	Government able to mobilize its contribution to the contingency fund.
	Plans developed - Number	0	2	4	2				

Results hierarchy	Indicators					Means of verification			Assumptions/notes
	Name	Baseline	Midterm	Original target	End target	Source	Frequency	Responsibility	
									Reduced to only African Swine fever, and foot and mouth disease.
Output 1.4: Climate smart innovations promoted	**3.1.1 Groups supported to sustainably manage natural resources and climate-related risks**					Programme records and progress reports	yearly	SPIU and SPs	In additional financing, SHGs will be supported to sustainably manage natural resources and climate-related risks, while in original financing was assumed that 50% will Groups (whether formally registered or not, and also including indigenous peoples' communities) involved in the management of natural resources (rangelands, common property resources, water resources, forests, pastures, fishing grounds and other natural resources) for agricultural production that have received project support during the considered period, to improve the sustainability of services provided to the resource base and to manage climate-related risks. Natural resource management groups involved in promoting technologies and practices for environmental protection, combating deforestation and desertification, or promoting soil/water conservation initiatives to prevent or increase resilience to climate-related risks should also be considered. At MTR, 857 SHGs were supported through trainings exceeding MTR targets by 171%, which was deemed 65% of the end target (1320). The AF will build on the positive result and reach 100% of groups in support with rainwater harvesting, soil and conservation and waste management.
	Total size of groups - Number of people	0		23 400	40 975				
	Groups supported - Groups	0	500	1170	1 873				
	Males - Males	0		11 700	20 487				
	Females - Females	0		11 700	20 488				
	1.1.8 Households provided with targeted support to improve their nutrition					Programme records and progress reports	yearly	SPIU and SPs	Targeted beneficiaries will directly participate in project-supported activities designed to help improve nutrition during the period. specifically, the nutrition-sensitive activities from the Project will not be generic but will be
	Total persons participating - Number of people	0	7912	26355	40 975				
	Males - Males	0	3956	13177	20 487				
	Females - Females	0	3956	13178	20 487				
	Households - Households	0	7913	26355	40 975				

	Indicators					*Means of verification*			*Assumptions/notes*
Results hierarchy	*Name*	*Baseline*	*Midterm*	*Original target*	*End target*	*Source*	*Frequency*	*Responsibility*	
	Household members benefitted - Number of people	0	34815	115962	180 290				tailored to address context-based nutrition problems in the Country.
	Young - Young people	0	2374	7913	12 620				
Outcome 2: Value chain actors access improved inputs, services and output markets	**12. Number of small livestock VC actors accessing improved inputs, services and output markets**					Outcome survey	yearly from year 3	SPIU and SPs	Number of new full-time or recurrent seasonal on-farm and off-farm jobs created thanks to project activities since project start-up, either as independent individuals (self-employed) or as employees of micro, small and medium-sized enterprises. Jobs created within farmers' organizations that received project support are also included, but temporary jobs created for a limited period (e.g. for road construction) shall be excluded. 236 additional target for jobs include: (i) 44 jobs in pig slaughterhouses, (ii) 110 jobs in vet clinics, and (iii) 50 jobs from egg collection points and feed shops; (iv) 12 jobs from collective sheds and; (v) 20 jobs from the goat breeding station
	VC actors - Number	0	6390	15910	24 585				
	1.2.5 Households reporting using rural financial services								
	Total number of household members - Number of people	0		96250	144 232				
	Households - Percentage (%)	0		83	80				
	Households - Households	0		21875	32 780				
	2.2.1 Persons with new jobs/employment opportunities								
	Males - Males	0		103	221				
	Females - Females	0		102	220				
	Young - Young people	0		62	132				
	Total number of persons with new jobs/employment opportunities - Number of people	0		205	441				
Output 2.1: Partnership between small livestock farmers and private actors supported (4P)	**13. Number of rural producers engaged in productive alliance**					Programme records and progress reports	yearly	SPIU and SPs	Sufficient number of private actors interested to be part of productive alliance (A) The indicator name has been changed from 'Number of rural producers engaged in productive alliance with input suppliers' to 'Number of rural producers engaged in productive alliance'
	rural producers - Number	0	1500	2955	1250				
Output 2.2: Unemployed rural youth participation in small livestock production enterprises increased	**14.Number of youths benefitting from the start-up package**					Programme records and progress reports	yearly	SPIU and SPs	Local government will provide land to establish youth groups production units. At additional financing, this activity is no longer being conducted and planned to be conducted. Hence, it should be removed in ORMS.
	Youth - Number	0	500	1530	0				

Results hierarchy	Indicators: Name	Baseline	Midterm	Original target	End target	Means of verification: Source	Frequency	Responsibility	Assumptions/notes
Output 2.3: Infrastructures rehabilitated, and food safety and animal welfare improved	**2.1.6 Market, processing or storage facilities constructed or rehabilitated**					Programme records and progress reports	yearly	SPIU and SPs	Financial sector is willing to lend to private sector investing in food safety and improved animal welfare equipment (A) In additional financing, PRISM will construct 1 new processing facilities (pig slaughterhouses). In the original financing 7 vet posts were deemed as storage facilities but this is incorrect. This has been revised as PRISM SPIU indicated storage facilities will not be directly constructed or rehabilitated. By the IFAD definition, Storage facilities include structures used for mid- to long-term storage or preservation of produce. The facilities may be on-farm storage structures such as containers and small silos, or village/community facilities such as warehouses, granaries and large silos. In additional financing, the project will support the establishment of 50 egg collection centers, which apply to the definition of storage facilities.
	Total number of facilities - Facilities	0	19	32	76				
	Market facilities constructed/rehabilitated - Facilities	0	8	15	15				
	Processing facilities constructed/rehabilitated - Facilities	0	5	10	11				
	Storage facilities constructed/rehabilitated - Facilities	0		15	50				
Output 2.4: Smallholder access to financial services improved	**1.1.5 Persons in rural areas accessing financial services**					Programme records and progress reports	yearly	SPIU and SPs	Financial institutions will be able to mobilize guarantee from BDF or upcoming Risk Sharing and Financing Facility. This refers to the number of individuals who have accessed a financial product or service specifically promoted/supported by the project and its partner financial service provider (FSP), at least once during the considered period (annual reporting). Such services include loans and micro-loans, saving funds, micro-insurance/insurance, remittances, and membership of a community-based
	Women in rural areas accessing financial services - savings - Females	1000	2000	6338	10 243				
	Young people in rural areas accessing financial services - savings - young people	600	1200	3803	6 145				
	Men in rural areas accessing financial services - savings - Males	1000	2000	6338	10 243				
	Men in rural areas accessing financial services - credit - Males	1000	2000	6338	10 243				
	Women in rural areas accessing financial services - credit - Females	1000	2000	6338	10 243				
	Young people in rural areas accessing financial services - credit - Young people	600	1200	3803	6 145				

Results hierarchy	*Indicators*					*Means of verification*			*Assumptions/notes*
	Name	*Baseline*	*Midterm*	*Original target*	*End target*	*Source*	*Frequency*	*Responsibility*	
	Total persons accessing financial services - savings - Number of people	2000	4000	12676	20 487				financial organization (e.g. savings and loan group). Note: When rural enterprises access financial services promoted/supported by the project, only owners and co-owners of enterprises receiving financial services are counted as persons accessing services.
	Total persons accessing financial services - credit - Number of people	2000	4000	12676	20 487				
Output 2.5: Small Livestock Multi-Stakeholder Fora set up at both local and national level	**Policy 2 Functioning multi-stakeholder platforms supported**					Programme records and progress reports	yearly from y3	SPIU	Value chains actors are willing to work together through the platforms (A) The end target for this indicators has been reduced from 6 to 4, since the project has been supporting one platform per targeted value chain, which are only 4 (poultry, pig, sheep and goats).
	Number - Platforms	0	3	6	4				
Outcome 3: Institutional and policy environment improved	**Policy 3 Existing/new laws, regulations, policies or strategies proposed to policy makers for approval, ratification or amendment**					Programme records and progress reports	yearly from y3	SPIU	Strong political support from Minagri will continue (A)
	Number - Number	0	3	6	6				
Output 3.1: Small Livestock sector policies and regulations updated and enforced	**Policy 1 Policy-relevant knowledge products completed**					Programme records and progress reports	yearly	SPIU	Strong political support from Minagri will continue (A)
	Number - Knowledge Products	0	2	5	5				

Updated summary of the economic and financial analysis

The initial financial models developed during the formulation phase were updated to incorporate revised targets and unit costs. In addition, new models were developed to reflect the expanded scope of activities under the Additional Financing (AF). A total of eight financial models were prepared for small livestock farms, representing both the initial placement packages and the Pass-on-Gift (POG) approach. Two additional models were developed for collective farms: one for a 5,000-layer poultry farm and another for a pig breeding unit with 270 piglets and 30 sows. Under Component 2, financial models were also developed for feed shops, along with two service provider models—one for abattoirs and another for veterinary clinics.

The data used for the Economic and Financial Analysis (EFA), including input/output coefficients for AF models, prices, and wage rates, was collected during the February 2025 mission in Rwanda. The AF team gathered this information through field visits and direct consultations with stakeholders to ensure that the estimates accurately reflect local conditions. The introduction of new models aligns with the expanded project scope, addressing key gaps and emerging priorities. Justification for these models is based on their strategic role in strengthening livestock value chains, while the updates to existing models reflect refined cost structures and productivity assumptions. The new models include collective farms and all models representing Component 2.

Targets

Table A
Beneficiary adoption rates and phasing

Component 1							
Initial placement beneficiaries	**unit**	**2025**	**2026**	**2027**	**2026**	**2027**	**TOTAL**
Poultry (20 chicken)	farmers	-	332	334	334	-	1,000
Small ruminants (2 goat/sheep)*	farmers	-	332	334	334	-	1,000
Swine (1 pig)	farmers	-	932	934	934	-	2,800
Number of HHs		**-**	**1,264**	**1,268**	**1,268**	**-**	**3,800**
Pass on the Gift (POG) beneficiaries		**2025**	**2026**	**2027**	**2026**	**2027**	**TOTAL**
Poultry (10 chicken)	farmers	-	2,250	2,250	2,250	-	6,750
Small ruminants (2 goat/sheep)*	farmers	-	2,250	2,250	2,250	-	6,750
Swine (2 piglets)	farmers	-	2,341	2,342	2,342	-	7,025
Number of HHs		**-**	**4,591**	**4,592**	**4,592**	**-**	**13,775**
Collective farms (new models)		**Year 1 2025**	**Year 2 2026**	**Year 3 2027**	**Year 1 2026**	**Year 2 2027**	**TOTAL**
Poultry farm (5000 layers)	farm	1	1	1	0	0	3
Pig farm (fattening)	farm	1	1	1	0	0	3
Component 2 (new models)							
Productive alliances (PA) / unions (coops)		**Year 1 2025**	**Year 2 2026**	**Year 3 2027**	**Year 1 2026**	**Year 2 2027**	**TOTAL**
	groups	15	25	25	0	0	65
Service providers		**Year 1 2025**	**Year 2 2026**	**Year 3 2027**	**Year 1 2026**	**Year 2 2027**	**TOTAL**
Abattoir	unit	0	0	1	0	0	1
Veterinary clinic/post	unit	0	0	7	0	0	7
Component 1 and 2 beneficiaries							
Total number of beneficiaries	**HHs**	**-**	**5,855**	**5,860**	**5,860**	**-**	**17,575**
**same benefiaries as poultry*							

The primary beneficiaries of the Project include: (i) smallholder livestock farmers; and (ii) workers and service providers engaged in collective farms and livestock-related enterprises such as veterinary clinics, abattoirs, and feed shops. With the support of the Additional Financing (AF), the Project is expected to reach an additional 17,575 households.

Assumption

Table B presents the key assumptions and conversion factors. The Financial Discount Rate (FDR) of 8.5% and the Social Discount Rate (SDR) of 9.5% were maintained from the previous design for comparability. The Standard Exchange Ratio (SER) for exported products (0.90), the Shadow Wage Rate Factor (SWRF) (0.87), and the Conversion Factor (CF) for non-tradable goods (1.00) were applied following economic pricing principles. The official exchange rate of 1,480 RwFr:US$ (March 2025) was used for conversions. The prices used in the Economic and Financial Analysis (EFA) are from 2025 and were collected during the February 2025 field mission.

The adoption rates for existing and new models have been distinguished. The 100% adoption rate for original models aligns with the achievements outlined in the President's Memo (PM). For Component 1 models (livestock rearing and production), adoption is more immediate, as beneficiaries engage in familiar activities with direct support. For Component 2 models (abattoirs, veterinary clinics, and feed shops), adoption is phased, reflecting infrastructure development and operational scaling. These models already incorporate a gradual increase in benefits and costs, starting at approximately 70% of full capacity in the first year (except for shops, which start at around 54%) and reaching full development in the second year after investment.

In the aggregation, the EFA applies a 100% adoption rate, underpinned by the strong uptake and solid implementation progress achieved during the main phase of the project. This evidence-based assumption ensures alignment with the project's implementation trajectory, reinforces the internal consistency of the EFA with project design, and avoids speculative Without Project (WOP) scenarios that could distort the estimation of incremental benefits.

Table B
Main assumptions and shadow prices

Standard Exchange Ratio (SER) for exported products	0.90
Shadow Wage Rate Factor (SWRF)	0.87
CF for non-tradeable goods	1.00
Financial Discount Rate (FDR)	8.50%
Social Discount rate (SDR)	9.50%
Official Exchange rate, March 2025 (RwFr: US$)	1,480.00

The financial analysis confirms the soundness of the proposed activities, while the economic analysis demonstrates that the project is economically viable. The overall Economic Internal Rate of Return (EIRR) is estimated at 13.85 per cent, with a Net Present Value (NPV) of US$4.39 million, discounted at 9.5 per cent. Sensitivity analysis indicates that the project's viability is influenced by variations in key assumptions—including benefit and cost changes, delays in benefit realization, and adoption rates—underscoring the importance of sustainable investments in livestock value chains for the project's success.

Table C
Financial cash flow models

	Farm models' net incremental benefits (in US$)												
	Initial placement packages				POG packages				Collective Farms		Union (coops) model	Abbatoir	Veterinary clinic
	Poultry	Swine	Sheep	Goat	Poultry	Swine	Sheep	Goat	Pig breeding	5000 layers farm	Feed shops	Abbatoir	Vet clinic
PY1	-17	-289	-192	-192	-50	-629	-278	-278	-178,641	-352,483	-2,638	-78,255	-10,565
PY2	39	177	26	26	11	203	26	26	27,483	89,116	2,274	21,915	3,970
PY3	39	264	66	66	11	203	66	66	27,483	89,116	2,336	24,855	4,032
PY4	39	177	66	66	11	291	66	66	27,483	89,116	2,356	27,795	3,970
PY5	39	177	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY6	39	264	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY7	39	177	66	66	11	291	66	66	27,483	89,116	2,356	27,795	3,970
PY8	39	177	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY9	39	264	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY10	39	177	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY11	39	177	66	66	11	291	66	66	26,469	82,302	2,356	27,795	3,970
PY12	39	264	66	66	11	203	66	66	27,483	89,116	2,356	27,795	3,970
PY13	39	177	66	66	11	203	66	66	27,413	89,116	2,356	27,795	3,970
PY14	39	177	66	66	11	291	66	66	27,407	89,116	2,356	27,795	3,970
PY15	39	264	66	66	11	203	66	66	27,401	89,116	2,356	27,795	3,970
PY16	39	177	66	66	11	203	66	66	27,395	89,116	2,356	27,795	3,970
PY17	39	177	66	66	11	291	66	66	27,389	89,116	2,356	27,795	3,970
PY18	39	264	66	66	11	203	66	66	27,384	89,116	2,356	27,795	3,970
PY19	39	177	66	66	11	203	66	66	27,378	89,116	2,356	27,795	3,970
PY20	39	177	66	66	11	203	66	66	27,372	89,116	2,356	27,795	3,970
IRR	239%	70%	29%	29%	21%	35%	21%	21%	14%	25%	88%	33%	38%
B/C ratio	1.08	1.26	1.20	1.20	1.02	1.26	1.15	1.15	1.17	1.19	1.04	1.58	1.12
NPV (US$ @8.5%)	322	1,487	354	354	47	1,358	275	275	69,504	433,557	17,608	157,991	24,224

Table D
Project costs and log frame targets

Beneficiaries (HHs)	**17,575**
Cost per beneficiary (HHs) in US$	**1,103**
Components and Cost (US$ million)	
C1: Climate- smart intensification of small production systems	**14.95**
C2: Support to small livestock valve chain development	**1.47**
C3: Policy and regulatory support	**2.96**
Total project costs (US$ million)	**19.38**

The economic costs related to livestock production and service provision activities have been estimated at US$12.96 million. To ensure accuracy and avoid double counting, the investment costs already captured in the Economic and Financial Analysis (EFA) and included in COSTAB for key interventions. The following activities were deducted to avoid double counting: Investment costs for key project interventions:

- Family farms (POG approach): Purchase of new animals, vaccines, startup packages, and construction materials.
- Collective farms (poultry and pig breeding farms): Construction of sheds, provision of animals, medicines and veterinary costs, and farm equipment.
- Service providers (feed shops, veterinary clinics, and abattoirs): Support for the establishment of egg and pig aggregation points, equipment for veterinary clinics, and construction of slaughterhouses.

By removing these costs, the economic cost calculation more accurately reflects the incremental costs associated with project activities, ensuring consistency and preventing overestimation.

These adjusted economic costs were then subtracted from the overall stream of economic benefits to determine the Project's net incremental benefit stream. The economic analysis yields strong results, with a Net Present Value (NPV) of US$4.39 million and an Economic Internal Rate of Return (EIRR) of 13.85 per cent, confirming that the Project is economically viable and financially attractive.

Table E
Economic cash flow

Project year	NET INCREMENTAL BENEFITS (in US$)														Economic Costs (US$)	Cash flow (US$)
	Initial placement packages				POG packages				Collective Farms		Union (coops) model	Abbatoir	Veterinary clinic	Total Net Inc. Benefits (US$)		
	Poultry	Swine	Sheep	Goat	Poultry	Swine	Sheep	Goat	Pig breeding	5000 layers farm	Feed shops	Abbatoir	Vet clinic			
PY1	0	0	0	0	0	0	0	0	-35,572	-325,058	-35,572	0	0	*-396,202*	597,186	**-993,388**
PY2	1,616	-243,639	-28,176	-28,176	-77,279	-1,358,766	-276,187	-276,187	-28,520	-240,403	-28,520	0	0	*-2,584,235*	3,550,174	**-6,134,409**
PY3	21,055	-93,470	-23,655	-23,655	-31,369	-961,149	-244,402	-244,402	22,759	-155,748	22,759	-79,897	0	*-1,858,385*	3,692,158	**-5,550,543**
PY4	40,602	131,252	-12,878	-12,878	14,542	-562,781	-171,553	-171,553	133,325	253,965	133,325	19,595	0	*-177,976*	2,965,361	**-3,143,337**
PY5	58,523	526,587	26,282	26,282	137,731	1,380,068	177,482	177,482	133,325	253,965	133,325	22,224	0	*3,080,338*	464,831	**2,615,507**
PY6	58,523	526,587	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,364*	112,697	**3,064,667**
PY7	58,523	526,429	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,206*	112,697	**3,064,509**
PY8	58,523	526,587	32,377	32,377	137,731	1,380,068	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,285*	112,697	**3,064,588**
PY9	58,523	526,587	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,364*	112,697	**3,064,667**
PY10	58,523	526,429	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,206*	112,697	**3,064,509**
PY11	58,523	526,587	32,377	32,377	137,731	1,194,932	218,545	218,545	133,325	247,829	133,325	24,854	0	*2,986,014*	112,697	**2,873,317**
PY12	58,523	526,587	32,377	32,377	137,731	1,380,068	218,545	218,545	133,325	247,829	133,325	24,854	0	*3,171,150*	112,697	**3,058,453**
PY13	58,523	526,429	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	247,829	133,325	24,854	0	*3,171,071*	112,697	**3,058,374**
PY14	58,523	526,587	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,364*	112,697	**3,064,667**
PY15	58,523	526,587	32,377	32,377	137,731	1,380,068	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,285*	112,697	**3,064,588**
PY16	58,523	526,429	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,206*	112,697	**3,064,509**
PY17	58,523	526,587	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,364*	112,697	**3,064,667**
PY18	58,523	526,587	32,377	32,377	137,731	1,380,068	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,285*	112,697	**3,064,588**
PY19	58,523	526,429	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,206*	112,697	**3,064,509**
PY20	58,523	526,587	32,377	32,377	137,731	1,380,147	218,545	218,545	133,325	253,965	133,325	24,854	0	*3,177,364*	112,697	**3,064,667**
															NPV@ 9.5 % (US$)	**4,388,820**
															NPV@ 9.5 % (´000 US$)	**4,389**
															EIRR	**13.85%**

The analysis tested the sensitivity of results to variations in benefits, costs, and potential delays in benefit realization. A two-year delay in generating benefits would reduce the Economic Internal Rate of Return (EIRR) to 10.71 per cent, while a 30 per cent decline in benefits would lower it to 9.86 per cent—both still well above the discount rate. A 30 per cent cost overrun would have a moderate impact, reducing the EIRR to 10.92 per cent. Overall, the Project demonstrates strong economic resilience, with robust performance across all tested scenarios.

Table F
Sensitivity analysis

	IRR	NPV (US$)
base scenario	**13.85%**	**4,388,820**
costs +10%	12.78%	3,465,149
costs +20%	11.81%	2,541,478
costs +30%	10.92%	1,617,806
benefits +10%	14.90%	5,751,374
benefits +20%	15.85%	7,113,927
benefits -10%	12.67%	3,026,267
benefits -20%	11.36%	1,663,713
benefits -30%	9.86%	301,160
benefits delayed 1 year	12.20%	2,734,230
benefits delayed 2 years	10.71%	1,223,213

Table G
Project Aggregate Cash flows, Benefits and Costs (in US$)