Report Number: ICRR0023975

1. Project Data

Project ID	**Project Name**	
P154908	CM-Livestock Development Project	
Country	**Practice Area(Lead)**	
Cameroon	Agriculture and Food	
L/C/TF Number(s)	**Closing Date (Original)**	**Total Project Cost (USD)**
IDA-59080	31-Jan-2023	96,630,095.51
Bank Approval Date	**Closing Date (Actual)**	
27-Oct-2016	31-May-2023	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	100,000,000.00	0.00
Revised Commitment	97,794,769.43	0.00
Actual	96,632,644.23	0.00

Prepared by	Reviewed by	ICR Review Coordinator	Group
Shashidhara Laxman Kolavalli	J. W. van Holst Pellekaan	Avjeet Singh	IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDO) are to improve productivity of selected livestock production systems and the commercialization of their products for the targeted beneficiaries, and to provide immediate and effective response in the event of an Eligible Crisis or Emergency.

For this review, the PDO will be parsed into:

Objective 1: To improve productivity of selected livestock production systems

Objective 2: To commercialize their products for the targeted beneficiaries, and

Objective 3: Provide immediate at effective response in the event of an Eligible Crisis or Emergency

The third objective, embedded in the Contingency Emergency Response Component (CERC), was not triggered. Hence, its achievement will not be examined in Section 4.

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

No

c. Will a split evaluation be undertaken?

No

d. Components

Improvement of Livestock Services Access and Delivery (Appraised: US$26.63 million (Allocations in the PAD were, IDA: US$24 million; Govt:US$2.04 million; Beneficiaries US$0.09 million; and PFIs: US$0.50 million); **Actual US$22 million** (IDA US$ 22 million; other sources: US$0.00))

1. Improving access to animal health services, including: (a) design and development of an animal health information system at the Directorate of Veterinary Services; (b) development and operationalization of the Recipient's regulatory framework for the animal health system; (c) strengthening of the National Order of Veterinarians to improve the quality of veterinary service delivery; (d) provision of animal health services training and awareness building for Producer Organizations; (e) support for animal surveillance and disease control activities; (f) the implementation of a vaccination campaign against pest of small ruminants; and (g) updating and field-testing of animal health emergency plans.
2. Improving access to high quality livestock inputs, including: (a) development of a strategy for improving the supply of enhanced animal genetic resources and an associated investment plan; (b) support towards the implementation of said investment plan referred to in Part A.2(a); (c) promotion of good practices in animal feed production; (d) development of a quality control system with clear norms and quality standards for animal feed for selected value chains; and (e) support to *Ministere de l'Elevage, des Peches et Industries Animales* (Ministry of Livestock, Fisheries and Animal Industries - MINEPIA's) monitoring of the quality of breeds, feed, and pasture seeds.
3. Reinforcing institutional capacity including: (a) strengthening of relevant staff capacity within MINEPIA; (b) improving MINEPIA's livestock statistical information system; (c) development of a livestock management communication strategy and implementation plan; (d) support towards the development and implementation of food safety norms for livestock products and quality standards;(e) support to selected regional livestock service centers towards improved information delivery and promotion of livestock products; and (f) the development of a contingency emergency response plan for crises affecting the livestock sector.
4. Contingent emergency response through the provision of immediate response to an Eligible Crisis or Emergency, as needed.

Improvement of Pastoral Productivity, Access to Markets, and Resilience of Pastoral Communities
Appraised: US$25.98 million (Allocations in the PAD were, IDA: US$24 million; Govt:US$0.84 million; Beneficiaries US$1.14 million); **Actual US$22 million** (IDA: US$22 million; Other sources: US$ 0.00))

1. Support to animal production practices and the community based management of pastoral areas including: (a) (i) support towards the collaborative development of community management plans for pastoral resources (MPPR); and (ii) provision of MPPR Sub-project Grants to Participating Communes to finance MPPR community development projects ("MPPR Sub-projects"), including *inter alia,* construction or rehabilitation of access roads, water points and animal health infrastructure, delimitation of pastoral areas, improvement or regeneration of grasslands, and tsetse and weed eradication activities; (b) support towards the establishment and/or strengthening of local conflict resolution mechanisms; and (c) capacity building for producer organizations, including through the participatory development and implementation of adapted technical itineraries for herd management;
2. Support to commercialization and marketing of pastoral livestock products including: (a) support towards the establishment of dialogue platforms for stakeholders involved in the management of municipal markets and marketing of animals; (b) strengthening the marketing capacity of pastoralists and pastoralists associations; and (c) improving access for pastoralists to market information;
3. Improving the resilience of poor and conflict-affected communities in the Recipient's North and Far North regions, including: (a) the provision of productive safety nets linked to livestock value chains; (b) support for nutrition-sensitive agricultural interventions and behavioral change communications strategies for women on issues related to access to new technologies, maternal care, and child feeding practice; (c) provision of labor saving devices; (d) promotion of diversified food production; (e) support for income generation schemes; and (f) promotion of improved complementary foods for young children.

Support to livestock value chains development (Appraised: US$64.67 million (Allocations in the PAD were, IDA: US$40 million; Govt:US$0.50 million; Beneficiaries US$5.91 million; and PFIs: US$18.26 million); **Actual US$41 million** (IDA: US$41 million; Other sources: US$ 0.00))

Implementation of a program of activities to establish and promote a mechanism of productive partnerships between Producer Organizations and Agribusiness Entities for the purpose of enhancing the harmonization of livestock demand and supply, including, *inter alia:*

1. Facilitating the establishment of productive partnerships detailing such specifications as product quality and characteristics, delivery modalities, payment modalities and price determination criteria for the purpose of promoting and enhancing direct and sustainable partnerships between Producer Organizations and Agribusiness Entities through the carrying out of market studies and implementation of information workshops and sensitization campaigns, provision of Training and technical assistance to Producer Organizations; mobilizing of financial institutions, including facilitating the negotiations of co-financing of PO Subprojects by said financial institutions; development of training materials to strengthen the preparation of PO Sub-projects by Producer Organizations; and provision of training to local service providers to support Producer Organizations in the preparation of PO Sub-project proposals and implementation of approved PO Sub-projects; and
2. Provision of PO Sub-project Grants to Producer Organizations for support specific development projects ("PO Sub-projects") aimed at, *inter alia,* increasing production and productivity of select

livestock produce, rehabilitation and/or construction of post-harvest storage and processing facilities, and enhancing product quality.

Project coordination, management, communication, and monitoring (Appraised: US$16.87 million (Allocations in the PAD were, IDA: US$12 million; Govt:US$4.87 million); **Revised: Actual US$14million** (IDA: US$14 million; Other sources: US$0.00))

Project coordination, management and monitoring, preparation of financial audits periodic evaluations through, *inter alia,* advisory services, purchase of equipment, provision of Training, Operating Costs and monitoring and evaluation activities.

Changes to project components

- Introduction of “small” Special Projects (SPs) for poorer regions with a maximum of US$35,000 per SP along with the raising of project matching grant ceiling from 60 to 90 percent
- Introduction of “structuring” SPs requiring higher levels of investments up to a of maximum US$625,000 per SP, maintaining matching grant ceiling at 60 percent of total SP cost.
- Reduction of councils’ co-financing share in livestock related local development plans from 10 to 5 percent and increase project’s co-financing from 90 to 95 percent.
- Installation of a solar energy plant at the National veterinary Laboratory (LANAVET)
- Conduct of a diagnosis of livestock supply chains, institutional support, capacity building and communication.

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

Project Cost

Appraised: US$134.15 million; (IDA: US$96.63 million; Non-IDA: US$37.52 millions); Actual IDA: US$96.63 million; Non-IDA: US$26.63 millions

Financing

The project was financed through an IDA grant of US$100 million.

Borrower / Non-World Bank Contribution

Appraised: US$34.15 million (Beneficiaries: US$6.01 million; Participating financial institutions: US$18.76 million; Communes US$1.13 million; and Government: US$8.25 million)

Actual: US$26.63 millions (Beneficiaries: US$11.51 million; Participating financial institutions: US$6.43 million; Communes US$0.99 million; and Government: US$7.7 million)

Dates

The project was approved in October 2016 and became effective in September 2017. Midterm Review was held in June 2020. The project was to close in January 2023 but closed in May 2023.

Restructurings

The project went through three level-two restructurings:

June 2022: to speed up project implementation (changes in results framework, components and cost, and reallocation between disbursement categories

December 2022: to allow for completion of some activities and ensure orderly closure (closing date extended by four months)

May 2023: to cancel project activities that were not expected to be completed by the closing date (cancellation of financing and reallocation between disbursement categories)

Changes in RF

- At PDO level, a new productivity indicator was introduced: "Mortality rate in cattle under 6 months in pastoral areas"
- Five productivity indicators were reformulated (targets were changed from measurement units to percentage changes)
- At the intermediate level, three targets were adjusted upwards (Farmers reached with agricultural assets or services" was increased from 140,000 to 360,000; Number of business plans financed from 200 to 500; and post-vaccinal seroprevalence of small ruminants from 45 to 70 percent
- One intermediate indicator "Producers who received improved genetic material" was reformulated to "Quantity of improved genetic material (animal and vegetable) acquired and/or produced by the livestock stations and the project beneficiaries and delivered to end-users."

Split Rating

The restructurings did not change the objectives or the scope of activities. The revision of the PDO indicators helped in making the indicators more measurable. The project became a little more ambitious with some targets adjusted upwards. This review, therefore, concluded that a split rating of outcomes is not warranted.

3. Relevance of Objectives

Rationale

Country context

At the time of appraisal, Cameroon was characterized by lagging social indicators and persistently high poverty rates. Despite the relatively strong macroeconomic performance in the decade prior to project appraisal, the pace of economic growth was not enough to drive sustainable development, poverty reduction, or shared prosperity (ICR, para 1). Poverty incidence stood at 38 percent at the national level, and it was concentrated in rural areas (57 percent) and in the North and Far North regions, which together contained 90 percent of all the poor in the country. Northern Cameroon is affected by multiple poverty traps associated with insecurity, high rates of population growth, environmental degradation, malnutrition, isolation and low levels of productivity (PAD, para 3). Its agricultural sector – to the GDP of which crops contributed 64 percent followed by livestock at 13 percent – contributed about 20 percent of the national GDP but employed 60 percent of the active population.

Country Strategy

To foster inclusive growth, the Government of Cameroon (GoC) had identified livestock as one of the priority sectors (ICR, Para 2). The Government, through its National Agriculture Investment Plan (NAIP) (2014-2020), had targeted a 9.3 percent growth of the livestock sector between 2014 and 2020. The objectives of the NAIP were to improve the productivity and competitiveness of its different segments, foster a more commercial orientation, protect pastureland, and attract young entrepreneurs into the sector. The objectives to raise sector productivity, commercialize, reduce inequality, and deliver jobs were in line with the priorities laid out in the GoC 's Growth and Employment Strategy (2009-2019). The PDO is also relevant to GoC's current priorities under the structural transformation pillar of the National Development Strategy (NDS30), which aims to promote further development of the livestock sector, including promotion of livestock value chains, facilitation of access to inputs, and structuring and strengthening of the capacities of actors in the sector (ICR, para 19).

World Bank strategy

The PDO aligned with (a) 2016 Systematic Country Diagnostic (SCD), which identified low rural productivity as a major constraint to combating the higher levels of poverty that persisted in rural areas among people who are largely self-employed on and off the farm and (b) the objective of inclusive growth of the Country Partnership Framework (CPF 2010-2014). It remains relevant to the current Cameroon Country Partnership Framework (CPF 2017-2021), specifically Objective 1.1, "increase productivity and access to markets in the agriculture and livestock sectors" under Focus Area 1, "addressing multiple poverty traps in rural areas" (with focus on the northern regions).

Level of ambition

The PDO is pitched at the right level. Its achievement was expected to address the causes of poverty in rural areas.

The PDO statement was clear, focused and pitched at an adequate level of ambition. The PDO continued to be in line with the Bank Strategies and the Government priorities at completion. Therefore, Relevance of Objectives is rated High.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To improve productivity of selected livestock production systems.

Rationale

Theory of Change

The ToC articulated in the ICR (para 4) identifies the following project inputs/activities: Developing animal health information systems and updating health emergency plans; organizing vaccination campaigns for PPR; Improving quality of inputs; developing and implementing communal management plans for pastoral resources (MPRR) strengthening market linkages of pastoral farmers and providing training and animals to poor households and women. These activities were expected to result in improved inputs delivered, farmers reached with assets and services, days of training provided, communal management measures undertaken, reflected in intermediate outcomes, such as post-vaccinal seroprevalence among small ruminants and the extent of technology adoption. These changes were anticipated to lead to the achievement of the project's objective measured in terms of reduction in mortality and increase in productivity of livestock.

Overall, the ToC reflected relevant activities that were directly connected to the outputs, intermediate outcomes, and the PDO in a plausible causal chain.

Outputs/Intermediate results

- 3,442 improved genetic material acquired and/or produced by livestock public stations and the project beneficiaries, and delivered to end-users, exceeding the target of 2,845. Of the total (i) 1,243 cattle genetic material delivered, falling short of the target of 1,500; (ii) zero genetic material for small ruminants delivered, falling way short of the target of 2,900; (iii) 1,343 pig genetic material delivered, exceeding the target of 1,300; (iv) 856 metric tons of improved seeds delivered, exceeding the target of 45
- 369,000 farmers reached with agricultural assets or services, exceeding the target of 360,000; Of the total, 23.20% were female, falling short of the target of 35%; Of the total, 46% were youths, exceeding the target of 35%
- 49,222 client days of training provided, exceeding the target of 5,000; Of the total, 9,274 client days training provided to females, exceeding the target of 1,750; Of the total, 25,497 client days of training provided to youths, exceeding the target of 1,750
- 30 communal management plans developed and implemented using participatory approach, meeting the target of 30.
- 17,475 ha managed sustainably as part of the communal planning process, exceeding the target of 3,000
- 27 mediation platforms established and functioning, falling short of the target of 30
- 142 management committees established and functional for pastoral grazing areas, exceeding the target of 80
- 74% post-vaccinal seroprevalence of small ruminant plague [PPR], exceeding the target of 45%
- 38,680 farmers adopted improved agricultural technologies, falling short of the target of 72,000; Of the total, 72.10% were women, exceeding the target of 35%; Of the total, 84.60% were youths, exceeding the target of 35%

- 96% of herders adopted at least one improved production practice under component 2, exceeding the target of 40%
- 85.80% of beneficiaries were satisfied with the quality of services provided by the project for the livestock sector, exceeding the target of 80%; Of them, 86.60% of youth beneficiaries satisfied with services, exceeding the target of 80%; Of them, 84.00% of female beneficiaries satisfied with services, exceeding the target of 80%

Outcomes

Productivity

- Small ruminant mortality rate reduced to 11.50%, exceeding the target of 12 percent
- Mortality rate of cattle under 6 months in pastoral areas reduced to 9.10%, against the target of 15%
- 76% increase in the quantity of broiler live weight produced in 45 days per m2, exceeding the target of 25%
- 0.00% increase in number of eggs produced per laying hen in 60 weeks, falling short of the target of 10%
- 80% increase in the number of weanlings per sow per year, exceeding the target of 25%
- 527% increase in the number of liters of milk produced per cow per year, exceeding the target of 150%
- 20% increase in the quantity of honey produced per beehive per year, meeting the target of 20%

The outcome of this objective, increase in productivity, was measured in terms of reduction in mortality rate and increase in productivity of broiler, egg, breeding pig, dairy cattle, and honey production.

The project trained, reached with assets and services, and delivered improved genetic material to more than the targeted numbers. It also helped in developing and implementing community management plans bringing a much larger than targeted area under sustainable management.

Post-vaccinal surveys showed that vaccination of small ruminants resulted in a rate of post-vaccinal seroprevalence much higher than targeted (ICR, para 17). The adoption of improved agricultural technologies by farmers, however, fell short of the target, but a larger than targeted share of beneficiaries expressed satisfaction with the services delivered by the project.

Mortality among small ruminants and cattle under six months was reduced to a greater extent than targeted. Productivity also increased to a greater extent than targeted, except in the case of egg production.

The theory of change postulated that improving the delivery of veterinary services and access to improved inputs coupled with measures to improve the management of pastures would increase productivity. The project delivered the outputs as targeted. There is evidence of reduced mortality and an increase in productivity except in one case. The ICR implied that the project's inputs and outputs contributed to increased productivity, although the adoption of some technologies fell short of what was expected. Based on almost fully achieving Objective 1, the efficacy with which it was achieved is rated substantial.

Rating

Substantial

OBJECTIVE 2

Objective

To commercialize their products for the targeted beneficiaries.

Rationale

Theory of Change

In addition to the TOC for Objective 1, the ToC for this objective postulated that helping establish “productive partnerships” (PPs) between livestock producer organizations (POs) and buyers and supporting their implementation through the project's provision of matching grants (MG) would increase producers' access to rural financing and help them commercialize pig, poultry, beef, goat, sheep, milk, and honey production and improve marketing value chains. Overall, the ToC reflected relevant activities that were directly connected to the outputs, intermediate outcomes, and the PDO in a plausible causal chain.

Outputs/Intermediate Results

- 25 productive partnerships established, falling short of the target of 30
- 507 business plans financed by the project, exceeding the target of 200
- 26 market management platforms benefitting from the participation of herder organizations, almost 90% of the target of 30.
- 99.3% of producers in productive partnerships who have adopted an improved agricultural technology promoted by the project, exceeding the target of 80%

Outcomes

29% incremental sales by project beneficiaries in targeted value chains, exceeding the target of 25%. This was the only indicator used to directly measure the extent to which the objective was achieved.

The project fell short of establishing the targeted number of PPs but it financed more than twice the targeted number of business plans. Herder organizations participated in a slightly smaller than the targeted number of market management platforms.

Project beneficiaries increased their sales in targeted value chains. The unweighted average increase was 29 percent (ICR, para 30) but it was short of the target of 25 percent in the case of beef with an increase of only 9 percent (explained in the ICR as due to low cyclical cattle sales when measured). Increases in others were as follows: eggs: 43%; dairy: 25%, and poultry: 40%. While the unweighted average maybe of questionable value, the increases for three of the livestock activities together with the cyclical low in cattle sales suggests that the target of 25 percent was achieved.

The theory of change postulated that helping producers get into productive partnerships with traders and offering matching grants to help them implement the agreements would enable them to increase their sales. The project fell marginally short of establishing the targeted number of productive partnerships and in having herder organizations participate in marketing platforms. Nevertheless, project beneficiaries increased their sales in targeted value chains arguably exceeding the target and the ICR concluded, but without solid evidence, that these outcomes were attributable to project’s promotion of productive partnerships. This review rates the efficacy with which Objective 2 was achieved as substantial, but with moderate shortcomings because of the absence of direct evidence on attribution.

Rating
Substantial

OVERALL EFFICACY

Rationale

The project sought to achieve two outcomes: increased productivity and increased sales in selected value livestock value chains. The theory of change postulated that improving the delivery of veterinary services, access to improved inputs, and the management of pastures would increase productivity. The efficacy of the achievement of this objective is rated substantial because of the evidence presented and the plausibility of project objectives contributing to it. The theory of change further postulated that helping producer organizations engage in productive partnership with marketing agents would help them increase their sales. The efficacy with which this objective was achieved is also rated substantial (but with moderate shortcomings) based on the assumption that measured outcomes were largely attributable to the project. Thus, the overall efficacy rating is Substantial.

Overall Efficacy Rating

Substantial

5. Efficiency

At appraisal, the analysis considered: i) benefits from improved pasture production, and ii) benefit streams from the funded sub-projects (SPs) and business plans (BPs). To estimate the benefits from improved pastures, the estimated benefits per ha without project of 525 FcFa per ha per year were expected to quadruple over two years on the 3,000 ha that was targeted to come under improved management. The project estimated benefits form 200 SPs/BPs, assuming that a third of them will fail. The additional economic benefit from the SPs/BPs accounted for 60 percent of the total benefit from the two sources. Considering all Project costs, the Project yielded an Economic Internal Rate of Return (EIRR) of 17.9 percent and a Net Present Value (NPV) of US$122.9 million (at a 5 percent discount rate).

The analysis done for the ICR considered benefits from reduced mortality – observed in the surveys – in the entire livestock population of the project and gross margins observed in the supported SPs/BPs (Annex 4, paras 10 and 11). The benefits were valued with a probabilistic distribution of prices; a sample of 39 businesses was used to fit probability distribution, assuming negligible failures, as observed. As in the analysis at appraisal, the benefit stream from SPs/BPs accounted for 60 percent of the overall benefits. The estimate of the mean net present value (NPV) of the investment was US$160 million and that the economic internal rate of return (EIRR) was 20.6 percent.

Several factors affected administrative efficiency.

The project initially faced considerable delays because of limited technical and institutional implementation capacity. The project became effective a year after approval because of delays in setting up the PIU with suitable expertise and managerial skills. The mobilization of government counterpart funds was slow and irregular, resulting in delays in compensating the members of the Special Tender Board Commission. The procurement delays could also be attributed to global supply chain issues resulting from the COVID-19 pandemic, which resulted in longer lead times and higher import costs. Producer Organizations were authorized to procure directly following project guidelines, which initially caused delays but contributed to building their institutional capacity.

There was a partial cancellation of activities that were not expected to be completed before the end of the project. They required the import of equipment, which was delayed because of global supply chain issues. Despite the delays, the project was extended only by four months.

Given that the internal rate of return was higher than projected at appraisal and there were only marginal implementation delays, the efficiency is rated as Substantial.

Efficiency Rating

Substantial

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

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	17.90	100.00 ☐ Not Applicable
ICR Estimate	✓	20.60	100.00 ☐ Not Applicable

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

6. Outcome

The PDO to raise livestock productivity and increase the commercialization of livestock value chains to reduce poverty in some of the poorest parts of the country was highly relevant to Cameroon’s development strategy. The objective of increased productivity was largely met through reduced mortality from diseases, improved pasture management, and access to quality inputs. The achievement of the other objective of increased commercialization was mainly met through productive partnerships, resulting in increased sales by the project beneficiaries in targeted value chains. The economic returns to investments, estimated at 20.6% based on observed project benefits, were higher than projected at appraisal. Despite some early-stage delays, the project was extended only by four months. The relevance of objectives is rated as High, the efficacy and efficiency were rated as Substantial, and therefore, its overall outcome is rated Satisfactory.

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

The risk to the development outcomes listed in the ICR is significant (paras 73 to 75).

Fiscal: At the macro level, the country's limited fiscal resources allocated to the sector and its reliance on development partners for the resources pose a risk because it may not be able to make the investments necessary to sustain the project's benefits.

Community finances: At the micro level, maintaining the infrastructure built under the pastoral resources management plans may become difficult if they are to be financed through beneficiary contributions.

Community Conflicts: At the pastoral community level, in addition to maintaining their infrastructure, the communities need to manage resource-related conflicts. Although the project tried to mitigate some of these risks by training, building the capacity of management committees, and establishing platforms for dialogues, according to the ICR (para 75) they remain.

Climatic: Cameroon experiences an increasing frequency and intensity of weather shocks, but the government's poor capacity to mitigate the impact of shocks poses a risk to outcomes. Abnormal weather phenomena, such as violent winds, high temperatures, and heavy rainfall, raise the risk of losing investments made through SPs and pastoral resource management plans.

Sustainability of subprojects: Sustaining the activities of sub-projects is critical to maintaining the gains made through increased productivity and commercialization. The risk emanates from doubts about the ability of government and communities to maintain productivity and quality standards in the long term. Some of the supported producer organizations would come into production after the project closing. The Government was exploring options to continue limited support to the producer organizations**.** Productive alliances are also threatened by the risk of one of two parties to the contracts breaking it to benefit from price movements in their favor.

8. Assessment of Bank Performance

a. Quality-at-Entry

The Project’s design was appropriate as it was designed to help GoC operationalize aspects of its Growth and Employment Strategic Plan. The design incorporated lessons and experiences from other projects within and outside Cameroon, contextualizing the design to the country and the sector through extensive stakeholder consultations. Adopting a participatory approach to ensure inclusiveness of indigenous population, conflict affected households in the North and far North regions, women, and youth, stakeholders were consulted extensively at design.

The overall risk, including that of institutional capacity for implementation and sustainability, was rated as substantial. To mitigate it, the design proposed providing tailored technical support to producers during the preparation and implementation of subprojects. To mitigate the fiduciary risk associated with implementing subprojects at regional levels, the plan proposed involving many stakeholders in vetting subprojects. The implementation arrangements considered the capacity limits and built on some of the mechanisms the Government had put in place prior to the appraisal, including divisional focal points from decentralized Ministry of Livestock, Fisheries, and Animal Industries (MINEPIA) services to work alongside technical service providers, to provide the organizational development and technical advisory services to beneficiary communes, POs, and livestock entrepreneurs (ICR, para 66). The design required the GOC to create a special tender board to reduce the procurement risk from high to substantial (PAD, Para 103). However, its implementation was not smooth. It took some time for the government to have the board in place and meet regularly.

Results Framework and Monitoring plan could have been better. The results framework at appraisal included unclearly defined indicators and lacked key indicators to track progress toward project objectives, which necessitated significant modifications after the MTR. The monitoring plan at appraisal was ambitious and had to be modified from the original plan, which envisioned that officers would physically visit all POs and pastoral infrastructure locations every month to collect data to a more participatory form of reporting.

In summary, while the project's design focused on relevant activities, there were substantial shortcomings in key indicators in the Results Framework, a weak monitoring plan, and inadequate mitigation arrangements for the anticipated weak implementation capacity. Quality at Entry is therefore rated Moderately Satisfactory.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision
According to the ICR (para 69), the World Bank project team provided adequate support with 13 missions organized at six-month intervals. The team made suitable changes when it had to conduct supervision virtually during the COVID-19 pandemic by strengthening the capacity to use virtual meeting platforms and increasing the frequency and length of meetings.

The supervision team proactively identified and resolved critical fiduciary issues. Its procurement reviews led to set of recommendations to address some of the issues to ensure strict compliance with procedures, filing of information in accordance with the manual, and documenting all the contracts in Systematic Tracking of Exchanges in Procurement (STEP). Following the MTR, which revealed persistent shortcomings, the Bank team introduced monthly meetings and work sessions at the Project's request to address the bottlenecks. The supervision team put forward action plans to address Financial Management

(FM)-related issues, such as delays in advance justification and inconsistencies in reporting that persisted till project closure (ICR, para 70).

The supervision also promptly addressed the environmental and social issues that arose. One issue related to the appropriate functioning of the GRM mechanism, to ensure that all incidents were reported and adequately reflected and preventing the exclusion of indigenous populations. An Indigenous Peoples' Plan (IPP) was developed to ensure that the Baka people in the rainforests would also benefit. The World Bank supervision continued to monitor and suggest improvements to the GRM, training and building capacity as needed (ICR, para 71).

Following the MTR, the project was restructured to allow for a quicker implementation and a smooth closing of the planned activities. In response to feedback from beneficiaries, design features related to matching grants (MGs) to producer associations and councils were modified; the changes allowed a wider range of special projects and an increase in the share of MGs in subproject costs.

Appropriate level of supervision that modified some activities in response to the needs of beneficiaries and promptly acted to ensure compliance with fiduciary and safeguard issues is rated Satisfactory.

The shortcomings in quality at entry were mostly addressed during implementation by the World Bank team by suitably modifying the design and implementation features to reflect the changing context. Following the first restructuring, the Bank's close implementation support helped in identifying and addressing implementation issues as they emerged. Proactive interventions by the team made it possible to turn the performance around, successfully completing planned activities, although some had to be cancelled because of factors that were beyond the control of the project.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The M&E captured project outputs, as well as intermediate and final outcomes. However, it had a shortcoming in including only one indicator to measure commercialization outcomes without adequate intermediate indicators that could help in linking the outcomes to project outputs. In addition, the original design, which assumed that data would be collected by visits to each of the POs, was later changed to allow self-reporting.

The M&E required modification at restructuring that involved the introduction of new indicators and redefinition of several indicators.

The M&E had many intermediate indicators with sub indicators for types of livestock they related to the vulnerable groups reached. Ten of them captured the activity level or outputs of the project. Three intermediate outcomes captured the extent of technology adoption among the beneficiaries, their satisfaction and seroprevalence following the vaccination program.

The M&E system was designed to link technical and financial data on project progress to impact.

Baseline data were to be collected in project and non-project area by a third party.

The design also suggested tracking nutritional and gender outcomes by requiring the measurement of dietary diversity score and women's empowerment in agricultural index (WEAI) at mid-term and at the end of the project (PAD, para 68). However, no indicators were included in the RF.

b. M&E Implementation

The ICR notes that the implementation was mostly effective (para 56). Data collected and entered at the regional levels were processed and validated by the national M&E unit.

The M&E team monitored the delivery of livestock services to producers and communities; and the pipeline of approved projects and their implementation to identify the bottlenecks and take suitable action to expedite the implementation of the sub-projects.

Data on key outcome indicators was monitored, but not systematically cross-validated for accuracy (ICR, para 58).

Yearly surveys of ruminant vaccination outcomes were carried out. Baseline and endline surveys were conducted, but the midline survey was not because of implementation delays (ICR, para 57). Both dietary diversity score and WEAI were not measured at midterm and at the end of the project, thus failing to integrate gender and nutritional considerations in impact evaluation studies, recommended at appraisal.

c. M&E Utilization

According to the ICR (para 58) the M&E was not used to its potential because it was used primarily to track activities.

<u>Summary</u>: The design would have benefited from more intermediate indicators that could help in linking outcomes to outputs. Baseline and endline surveys were conducted, but not the two gender and nutrition related surveys recommended in the design at appraisal. There was no control group against which to measure project outcomes from productive partnerships and matching grants (the key project activities); therefore, the assessment of the outcomes of these partnerships relied on the assumption that without the project's partnerships and matching grants agricultural productivity would not have increased. M&E data were utilized for tracking activities but there is no evidence of it being used to inform stakeholders. Overall, while these shortcomings did limit the project's ability to have a clear handle on the effective and less effective aspects, the M&E did have a broad range of indicators useful in highlighting progress on

productivity and market access. In addition, the data collection was useful in differentiating between the supported product groups. Thus, the overall M&E rating is Substantial.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

Environment

The project was rated category B. The environmental safeguard policies triggered were (i) Environmental Assessment (OP/BP 4.01); (ii) Pest Management (OP 4.09); (iii) Natural habitats (OP/BP 4.04); (iv) Physical Cultural Resources (OP/BP 4.11); and (v) Forests (OP/BP 4.36).

Screenings were carried out per the Environmental and Social Management Framework (ESMF) guidelines. The Project placed particular emphasis on implementing the measures recommended in the Environmental and Social Clause books and the Environmental and Social Impact Notices, with the regular production and archiving of quarterly activity reports and the systematic completion of an environmental monitoring diary by POs.

At Project closing, the Project's environmental performance was rated as Satisfactory.

Social

Social safeguards triggered were Indigenous peoples (OP 4.10) and Involuntary Resettlement (OP 4.12)

OP 4.10 was triggered because the project activities targeted areas with indigenous people. Three site specific indigenous people’s plans (IPP) were prepared and successfully implemented, despite challenges including limited PIU capacity, physical remoteness, and relative novelty of livestock activities.

For OP 4.12, the main safeguards instruments implemented included a Resettlement Policy Framework (RPF) and a Process Framework (PF). Land required for pastoral infrastructure was acquired through voluntary land donations. Given that the project led to restrictions on land use in some cattle rearing zones, site specific natural resource management plans were prepared and implemented in the 30 targeted communes.

At Project closing, compliance to OP 4.10 was rated Satisfactory, and OP 1.12, Moderately Satisfactory. .

Grievance Redress Mechanism (GRM): The project GRM had a slow start but once operational was effective in handling complaints from project stakeholders including livestock communities and indigenous people.

b. Fiduciary Compliance

Procurement

There were no cases of mis-procurement. Documentation and decisions, however, were of moderate quality and delivery times remained long. Frequent changes in procurement committee members and delays in appointing new members disrupted the functioning of the committee throughout the duration of the Project (ICR, para 48). The project implemented the recommended measures to mitigate procurement risks by addressing the complaints received from bidders. The review of procurement revealed that updating STEP remained a challenge throughout because of the absence of documents related to the contract management phase. The Project design required the POs and the councils to take the lead in establishing and conducting their procurement, which helped strengthen their capacity but required additional capacity strengthening activities. At project closing, Procurement was rated Moderately Satisfactory.

Financial management (FM)

The overall performance of the Project's FM was regularly rated Moderately Unsatisfactory and the risk as Substantial during implementation. Some weaknesses highlighted during project implementation were not fully addressed by the closing date. These include: (i) undocumented advances to suppliers, Communes, POs; and (ii) missing reconciliation statements for the 500 joint accounts between the PIU and the POs due to lack of access to the bank statements with a total of US$8.4 million in such accounts. However, Interim Financial and audit reports were received on time. At project closing also, Financial management was rated Moderately Satisfactory.

c. Unintended impacts (Positive or Negative)

Before the project, communities often used the same water sources for both domestic use and animal care. The building of solar powered tubewells, which provided access to groundwater, enabled them to have separate sources of water, resulting in improved health and time saved collecting water.

d. Other

---

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	Due to shortcomings in Quality at Entry overall Bank Performance is rated Moderately Satisfactory

Quality of M&E	Modest	Substantial	The data and metrics required to differentiate between the successful elements of the project were adequate.
Quality of ICR	---	Modest	

12. Lessons

Two of the lessons from the ICR restated with editing are as follows:

Inclusion of or consultations with, wherever feasible and appropriate, various actors whose involvement is essential to the project, has the potential to enhance their participation and success of the relevant components. Producer organizations struggled to obtain the 10 percent financing from local financial institutions required to benefit from matching grants. It was partly because the local financial institutions did not understand how the matching grants worked, and they were reluctant to co-finance because they felt that the transaction cost of doing their own due diligence would be high. Following the midterm review, the problem was addressed by including the financial institutions in the evaluation and selection of business proposals seeking matching grants. This proved to be effective as the process became transparent to local financial institutions and, having signed off on the proposals, they were able to streamline the process for cofinancing.

Delegating complex administrative processes to communities and producer organizations while empowering them may nevertheless challenge their capacities to perform the necessary tasks, requiring significant efforts to build their capacity. The model of supporting local councils and producer organizations with matching grants was designed to bring together stakeholders such as local financial institutions and off-takers. The beneficiaries were required to procure their requirements using the World Bank guidelines, but many of them who were smallholders were unfamiliar with formal processes. The financial institutions had limited engagement in the livestock sector in the regions where the Project was implemented. The requirement caused considerable implementation delays.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR provides an overview of the implementation of the project, its activities, outputs, and intermediate and final outcomes in a structure that complies with the Guidelines. The report is written with outcomes in mind. The ICR articulates how ratings were derived and candidly notes some shortcomings in the RF, for example. The lessons it derives are provided with adequate information on the experiences in the project they are based on.

There were some moderate shortcomings. The ICR could have done a better job of linking the outputs to outcomes for the second objective. There was no information on the baseline and the end-line surveys or the reason for the limited use of the survey data as evidence for achieving the project activities. The Bank team acknowledged in a discussion with IEG on February 8, 2024, that the end-line survey was based on a small sample and unreliable because it included (usually unreliable) recalled information. It did not examine "with and without" scenarios as planned. An additional shortcoming included an incomplete Annex 3.

Overall, the ICR quality is rated as Modest.

a. Quality of ICR Rating

Modest