

Project Completion Report Validation

Smallholder Dairy Commercialization Programme

Republic of Kenya

Date of validation by IOE: October 2020

I. Basic project data

			Approval (US\$ m)		Actual (US\$ m)	
Region	East and Southern Africa	Total project costs	19.75		40.01	
Country	Republic of Kenya	IFAD – Initial loan and percentage of total	17.49	88.5%	17.49	43
Loan number	Loan 678-KE; and Grant 815-KE and Loan 200000140800	IFAD – Additional financing			17.00	42.4
IFAD project ID	1100001305	IFAD grant	0.84	4.3%	0.89	2.2
Type of project (subsector)	Agricultural development	Borrower – Initial loan	0.92	4.6%	1.23	3
Financing type	Loan and Grant	Borrower – Additional financing			2.11	5.2
Lending terms	Highly concessional	Beneficiaries – Initial loan	0.50	2.5%	0.65	1.5
Date of approval	13/12/2005	Beneficiaries – Additional financing			1.14	2.7
Date of loan signature	25/01/2006					
Date of effectiveness	12/07/2006	Number of smallholder dairy farmers	24,000		26,462	
Loan amendment	15/2/2016	Number of households	50,626		63,609	
Loan closure extensions	1					
Country programme managers	Esther Kasalu-Coffin (current) ¹	Loan closing date	30/09/2019		31/03/2020	
Regional director(s)	Sara Mbago-Bhunu (current) ²	Mid-term review			09/08/2010	
Project completion report reviewer	Chiara Maria Grimaldi	IFAD loan disbursement at project completion (%)	100%		101%	
Project completion report quality control panel	Eoghan Molloy; Fabrizio Felloni	Date of the project completion report			1/4/2020	

Source: President's report, Project Completion Report (PCR).

¹ Previous Country Programme Managers: Samuel Wariboko Eremie (2010-2013); Nadine Gbossa (2014-2015); Nils Henrik Franklin (2015-2016); Hani Abdelkader Elsadani Salem (2016-2018).

² Previous Regional Directors: I. de Willebois (2006-2011); P. Saint Ange (2012-2015); S. Jatta (2015-2018).

II. Project outline

Country & Project Name	Republic of Kenya; Smallholder Dairy Commercialization Programme (SDCP).
Project duration	Total SDCP duration was from 2005 to 2019. SDCP was originally designed as a six-year programme. It was approved on 13/12/2005 and became effective on 12/07/2006. Effectiveness lag: seven months; time from entry into force to first disbursement of funds: seven months. SDCP's original completion was on 30/9/2012, while the original loan/grant closure was on 31/03/2013. At the time of the 2010 mid-term review, it was decided to extend the programme completion date by three years, with the amended completion date being on 30/09/2015 and the loan closing on 31/3/2016. In December 2015, upon the request of the Government of Kenya, IFAD approved a programme's additional financing of US\$17.0 million; SDCP's completion and loan closing dates were extended to 30/9/2019 and 31/3/2020, respectively.
Project goal, objectives and components	The overall goal of the SDCP was to increase the incomes of poor rural households that depend substantially on the production and trade of dairy products for their livelihoods. This development goal was to be pursued through two specific objectives: (i) improving financial returns of market-oriented production and trade activities by small operators, through improved information on market opportunities, increased productivity, cost reduction, value adding, and more reliable trade relations; and (ii) enabling more rural households to create employment through, and benefit from, expanded opportunities for market-oriented dairy activities, in particular as a result of strengthened farmer organisations. SDCP development objectives were to be achieved through five components: (i) organization and enterprise skill development; (ii) technical support to smallholder dairy producers; (iii) development of the milk marketing chain; (iv) support to policy and institutions; and (v) programme management and coordination.
Project area and target group	SDCP was originally designed to reach 24,000 smallholder dairy farmers engaged in dairy production and trading through 600 groups in nine districts/counties, including about 300 mobile milk traders and 90 milk bar operators. Within the nine counties, 25 sub-counties were selected based on indicators such as milk density, poverty threshold and road density for marketing purposes. With the approval of the additional financing in the year 2015, the programme support was scaled up to the dairy communities of eight new sub-counties within the previous nine counties, where dairy groups had demonstrated potential to graduate to market-oriented farming. The consolidated programme area thus covered 33 sub-counties in nine counties, with SDCP's total actual outreach upon completion being 1,096 and 26,462 dairy farmers. The programme target groups were: (i) resource poor dairy farmers; (ii) part-time dairy farmers; (iii) small scale intensive dairy farmers; (iv) crop-oriented farmers with dairy cows; (v) small-scale milk bars and shop operators; (vi) mobile milk traders. Under the additional financing, the programme modified its targeting strategy to place more emphasis on gender and youth. The new targeting focused on dairy groups with 20 members producing an average of 6 litres of milk/cow/day, comprising at least 30 per cent women and 10 per cent youth.
Project implementation	SDCP was executed under the leadership of the State Department in the Ministry of Agriculture, Livestock, Fisheries and Irrigation. A programme national steering committee composed of representatives from the concerned ministries and key stakeholders (processors, producers and traders) was to provide policy guidance and ensure that the programme activities were implemented in line with national policies and procedures. A programme coordination unit (PCU) was established in Nakuru, within the Ministry of Livestock and Fisheries Development, to coordinate the day-to-day programme's activities, supervise implementation of programme interventions, and contract the required services. A district programme coordinating team was responsible for coordinating and supervising activities in each of the nine districts.
Changes during implementation	The programme's extension from 30/9/2012 to 30/09/2015 was granted as SDCP had lost three years of implementation. ³ During the period of programme implementation, there was also experienced a population increase of about 10 million, which led to an increase in the youth population and hence for SDCP need to engage the youth. ⁴ After the approval of the additional IFAD financing in December 2015, the dairy goat scheme

³ This was due to the following reasons: (i) the first disbursement took over one year to process; and (ii) during the period 2007-2008, two years of execution were lost due to the post-election violence which resulted in displacement of programme beneficiaries and in a discontinuation of services from extension services and service providers.

⁴ The SDCP intervention took advantage of the youth mentorship programme to attract young people to dairy farming.

	was discontinued and the programme focused solely on better-off dairy farmers already producing a surplus for market. ⁵ In addition, the component to support institutions and policy was dropped off too. Other changes to SDCP implementation were: the introduction of the gender action learning systems (GALS) methodology, the youth mentorship programme and nutrition improvements in households.
Financing	The SDCP started in 2006 with initial total financing of US\$19.75 million, including an IFAD loan of US\$17.49 million, an IFAD grant of US\$0.84 million, a Government contribution of US\$0.92 million and a community contribution of US\$0.5 million. In December 2015, IFAD approved an additional loan of US\$17.00 million to consolidate its achievements, with the completion date further extended to 20 September 2019. The final total cost of the programme amounted to US\$40.01 million, of which US\$35.33 million was from IFAD financing (IFAD initial loan US\$17.49 million, an additional loan US\$17.00 million, and IFAD grant of US\$0.84 million); US\$3.036 million from the Government and; US\$1.649 million was from beneficiary contribution.

Table 1
Project costs (US\$ millions)

<i>Funding source</i>	<i>Appraisal</i>	<i>% of appraisal costs</i>	<i>Additional financing</i>	<i>Total allocation</i>	<i>% of total allocation costs</i>	<i>Disbursed</i>	<i>% disbursed</i>
IFAD (loan)	17.49	88.5%	17.00	34.49	86.2%	34.93	101%
IFAD (grant)	0.84	4.3%		0.84	2.1%	0.89	106%
Government	0.92	4.6%	2.11	3.03	7.6%	3.75	124%
Beneficiaries	0.5	2.5%	1.14	1.64	4.1%	1.88	114%
Total	19.75	100%	20.25	40.01	100%	41.4	104%

Source: Project Completion Report (PCR).

Table 2
Component costs (US\$ millions)

<i>Component</i>	<i>Appraisal</i>	<i>% of appraisal costs</i>	<i>Actual allocation</i>	<i>% of actual costs</i>	<i>Expenditure</i>	<i>% disbursed</i>
Organizational and enterprise skills development	5.09	26.0	9.81	25%	10.48	107%
Technical support to smallholder dairy producer	4.45	22.7	9.10	23%	9.51	105%
Development of the milk marketing chain	3.08	15.6	10.74	27%	10.15	95%
Support to policy and institutions	3.02	15.3	3.00	7%	2.99	100%
Programme coordination and management	4.11	21.0	7.35	18%	8.30	113%
Total	19.75	100%	40.01	100%	41.4	104%

Source: PCR.

⁵ Despite being successful, it was decided to drop the dairy goat subcomponent, as there was a plan to design a whole new project that would focus on dairy goats. As this project did not materialize, the 2019 supervision mission recommended to include a dairy goat pass-over scheme in SDCP nutrition activities.

III. Review of findings

<i>PCR finding</i>	<i>Rating</i>
A. Core Criteria	
Relevance	
<p>1. The Smallholder Dairy Commercialization Programme was aligned with IFAD’s Country Strategic Opportunities Programme for Kenya for 2013-2018, as: (i) it aimed to increase the incomes of poor rural households that depended substantially on production and trade of dairy products for their livelihood through improved productivity and reduction in the cost of production; (ii) it had an emphasis on enhancing capacity of the smallholder dairy farmers to increase the marketed milk and derive better financial benefits. SDCP was also aligned with the Government of Kenya’s Big Four Agenda and, following the Country Programme Strategic Evaluation (2011) and the Country Strategic Opportunities Programme for 2013-2018, it was also in line with IFAD’s switch in emphasis to a commodity-driven, value chain approach with stronger private sector engagement.^{6,7}</p> <p>2. SDCP was relevant to the needs of the smallholder dairy farmers, by focusing on the development of the entrepreneurial capacity of the dairy groups, of the apex organizations (farmers’ cooperatives and societies), and by creating stronger marketing linkages for small-scale milk producers, traders and processors to local milk markets. The programme aimed to support the move towards private-sector market-oriented development of smallholder producers and small-scale processors and traders as the key to sustainability of programme benefits. SDCP’s targeting approaches for dairy farmers’ groups were participatory and inclusive.⁸ In addition, SDCP aimed to reach poorer smallholders, in particular women, through a dairy goat scheme; this approach was appropriate, owing to the minimal capital investment, feed and land required to look after the goats as well as the nutritional benefits and potential for income generation. However, as stated by the 2019 Kenya Country Strategy and Programme Evaluation (CSPE), the updated design of SDCP discontinued the dairy goat scheme and focused solely on better-off dairy farmers already producing a surplus for market.⁹ Although this move was relevant to achieve the commercialization objective, the dropping of the dairy goat sub-component reduced the potential impact of the programme both on nutrition and poverty reduction. On the other hand, during the additional funding period, the adjustment in the implementation arrangements included changes in the targeting strategy including criteria for groups to have more women and youth gender and youth, and expansion of the sub-counties. The expanded sub-counties enabled the programme to reach out to more youth and empowered both the women and youth to derive more benefits from the dairy enterprises.</p> <p>3. During the initial financing, SDCP’s design focused on enhancing the technical skills and dairy management capacity of the smallholder farmers to adopt market-oriented dairy production. This approach was very relevant to address the needs of smallholder dairy farmers at the start of the programme, primarily the low level of knowledge and skills in dairy farming. During the additional financing period, based</p>	4

⁶ In 2017, a new national policy agenda, termed the Big Four Agenda, was launched to guide development from 2018 to 2022. The Big Four Agenda focused on the key basic needs that were critical in uplifting the living standards of Kenyans in the quest to becoming an upper middle-income country by 2030. Priorities included: affordable and decent housing, affordable health care, food, and nutritional security and employment creation through manufacturing. These four areas were expected to bolster strong inclusive economic growth.

⁷ The aim was to support the Government to create an environment to promote private sector-led commercialization of the dairy sector, by enhancing the technical capacity of smallholder dairy producers, introducing improved technologies, and creating stronger marketing linkages.

⁸ The communities identified their development needs and constraints and were then assisted to develop sustainable solutions through the Dairy Commercialization Area Action Plan, based on their priorities and local capacities.

⁹ The dairy goat sub-programme was implemented in collaboration with existing dairy groups, targeting the most vulnerable women among the groups. By June 2015, the Programme had procured and distributed a total of 1,821 dairy goats against the planned 200 dairy goats to both women and dairy groups (a 910 per cent achievement). The PCR mission team witnessed the positive impacts that these vulnerable households had experienced including: improved nutrition and health status resulting from the intake of goat milk, increased incomes from zero incomes at baseline arising from the sale of surplus goat milk, and an overall improvement in the living standards of these beneficiaries.

PCR finding	Rating
<p>on: (i) the lessons learnt from the initial financing; (ii) the terms of financing agreements for the additional financing; and (iii) the changes in the policy context (such as: new constitution, changes in the country development blue print, sector policies and strategies), changes were made in SDCP's design. More emphasis was placed on attitudinal change and entrepreneurial and organization skills, with an aim to strengthen the capacities of both farmers and dairy groups to employ the knowledge acquired in profitable dairy enterprises. The modification of SDCP's design with the additional financing was relevant, as both farmers and dairy groups acquired more knowledge and useful skills to manage their respective enterprises of dairy farming and marketing to drive the commercialization process.</p> <p>4. The PCR indicated that one SDCP design flaw was the assumption that the dairy groups were ready to take up commercialization, which did not always prove true. Dairy groups were not homogeneous and, therefore, there was a need for increasing the capacity of members to meet the market requirements in the dairy sector. This took longer than originally planned in the design, and resulted in the delayed commercialization process. An additional constraint concerned the tension between the objectives of commercialization and poverty targeting in IFAD's value-chain approach, as the PCR mission noted that better targeting was required, and this could consider the groups' economic activity, level of organization and individual farmers' milk production in order to support groups' progression to market-oriented dairy farming.^{10,11}</p> <p>5. On balance, due to the lack of dairy groups' readiness to take up commercialization as well as the shortcomings in the targeting mechanisms, the PCR rating for this criterion is <i>moderately satisfactory</i> (4), a point lower than the PCR rating.</p>	
Effectiveness	
<p>6. SDCP has been fairly effective in reaching its specific development objectives and did so by using community-based and group-led approaches and action plans. The programme had more success in animal production-related aspects (e.g. breeding, grazing and feeding), but less promising results in terms of marketing. In terms of outreach, at the closure of the programme, the total number of households reached were 63,609 households against a target of 50,626, which is indicative of 126 per cent achievement rate. A total of 1,096 dairy groups were reached against a target of 1,058 dairy groups, which shows that there was an over achievement.</p> <p>7. The programme targeted dairy-farming productivity through grants, trainings, field days and demonstrations, to build their enterprise, managerial and organizational skills as well as to enhance dairy farming productivity and reduce production costs. Findings from the SDCP Impact Assessment Study (IAS, 2019) indicate positive effects on farmers' improved animal management and breeding services, including grazing and feeding practices, use of artificial insemination and animal health services.¹² As reported by the IAS, the outcome of these interventions was largely successful and milk production increased as a consequence. To strengthen market linkages, SDCP invested in improving road infrastructure as well as it provided financial literacy to equip groups of farmers to make sound use of financial services.</p> <p>8. SDCP was successful in increasing milk production, but with more limited impacts on increasing milk marketing and increasing milk prices received by smallholders. A market-oriented dairy enterprise model (MODE) has been at the center of the programme's approach as a model to promote dairy commercialization, whereby the programme's interventions were targeted to support the progressive movement of groups or individuals through three steps towards becoming successful market-oriented business entities primarily concerned with milk and dairy products. The process of graduation of dairy groups from MODE II to MODE III, where significant</p>	4

¹⁰ The geographic targeting of SDCP was based on selection of districts with a poverty incidence of 46 per cent and more.

¹¹ The 2018 supervision mission reported that, in order to achieve poverty targeting, the programme has reached out to some groups that had poor and vulnerable members, such as widows and persons living with disabilities. For these groups, the programme has waived the requirement for 10 per cent cash contribution and accepted contribution in kind.

¹² An impact evaluation for SDCP in Kenya, was conducted by the American Institutes for Research, the International Initiative for Impact Evaluation Grantee Final Report. Funding for this impact evaluation was provided by IFAD.

PCR finding	Rating
<p>surplus could be commercialized, was not very clear, and only 17.3 per cent of groups had reached MODE III (IAS, 2019).</p> <p>9. Among the reasons for these less than satisfactory results, the effectiveness of market-related training was found to be low, as entering the market and understanding how to expand the dairy business was still a challenge for many farmers. In addition, there has been an inadequate coordination of the value chain actors, as processors were not always well connected with producers, and selling to the public and to local buyers remained the most popular channels. Contract enforcement has been an issue, as a number of agreements between the farmers' cooperatives and milk processors were skewed in favor of the latter: contract breaks by the processors were reported, both in terms of prices offered as well as in terms of timeline of payments.¹³</p> <p>10. In addition, the PCR mission found that some groups were provided with equipment such as coolers although they were already in possession of such equipment, which was not fully utilized. In some cases, similar equipment was provided to the same group by different development agencies leading to over-capacity and under-usage.</p> <p>11. On the positive side, the community-based resource persons and the youth mentorship programme contributed significantly to reaching the resource-poor farmers. The PCR mission observed that the farmer to farmer extension was effective in contributing to the success of the youth farmers.¹⁴ The IAS (2019) notes that the programme trained a total of 252 community resource persons (model farmers) on facilitation skills, development of model farms, appropriate husbandry practices, farming as a business, financial management, farm management, marketing, and monitoring and evaluation. The model farms were used for peer learning for other farmers from within and outside the community or county.</p> <p>12. Overall, while positive results were achieved for animal production and animal health-related activities, limited progress was made in terms of marketing (particularly for milk marketing). Therefore, the PCR rates this domain as <i>moderately satisfactory</i> (4), in line with the PCR rating.</p>	
Efficiency	
<p>13. The analysis at project completion showed that the Programme's internal rate of return stood at 25.3 per cent over the 15-year period, against the 24 per cent projected at design. In addition, as mentioned in the 2019 CSPE, despite having the PCU headquarter outside of Nairobi, SDCP's management costs did not exceed more than 6 per cent of the allocated costs.</p> <p>14. On the other hand, SDCP faced challenges due to delays in the flow of funds at the beginning of every financial year for about four years, as the line ministry was slow to release authority to incur expenditures to the counties, resulting in a loss of almost five months of the fiscal year. Such delays were mainly attributed to: (i) delayed preparation of the withdrawal applications for their timely submission to IFAD for payment; and (ii) the two levels of approving authority, i.e. the implementing agency and the national treasury. This occasionally prevented the programme to implement its activities at full speed, and contributed to reduced efficiency and programme delivery. Following the mid-term review, there was a remarkable improvement, as withdrawal applications were prepared on a timely basis, and funds were transferred to implementing parties/counties on time.</p> <p>15. The PCR also highlighted that overall SDCP investment was of about US\$40 million for 63,609 households, which is on the higher side for a programme that focused on capacity enhancement and not major infrastructure development. Additionally, the cost of delivery was at about US\$630 per beneficiary household compared to the</p>	4

¹³ Reliability and stability of price is the main advantage that farmers obtain from selling to processors through farmer cooperatives. Therefore, contract breaks by processors have weakened farmer organizations by leading farmer to side-sell their milk to informal traders, which generally offer a higher price.

¹⁴ As reported by the PCR, one youth farmer from Uasin Gishu, who visited the Matende farm in Kakamega, also run by youths, adopted the technologies learnt and reduced his cost of production per litre by about Kshs. 4.00.

PCR finding	Rating
<p>benchmark of about US\$300 per household for similar projects on enhancing farmers and group capacities for commercial agriculture.¹⁵</p> <p>16. Given, on the one hand, the positive internal rate of return and low management costs, but on the other hand, the significant delays and higher than usual cost-per beneficiary, the PCR rates this criterion as <i>moderately satisfactory (4)</i>, in line with the PCR rating.</p>	
Rural poverty impact	
<p>17. With regards to household income and assets, the findings of the IAS (2019) showed that SDCP resulted in an improvement in average income per household from milk production from Kshs. 6,572 per month at baseline to Kshs. 16,777 per month. This shows that the income from milk production has increased by 1.55 times representing a 150 per cent improvement per household. In addition, SDCP farmers who sold to the market, obtained a selling price of milk of 31 per cent higher than that received by non-beneficiaries, suggesting beneficiaries had better linkages with milk markets or had higher-quality dairy products. The total value of milk sold – the quantity of milk sold times the price obtained – obtained by SDCP farming households was 43 per cent higher than the value obtained by control groups. The PCR mentioned that 86 per cent of the targeted beneficiary households reported this increase in income levels. In addition, lower transportation costs, better prices and stronger local demand also led to efficiency gains in terms of reduction in milk cost of production per litre and thus in increased incomes. As reported in the CSPE, SDCP’s beneficiaries also increased their livestock, as beneficiaries owned 49 more heads than control groups, this representing a 21 per cent increase. Finally, it has been estimated that 88,000 additional jobs have been created along the milk value chain: the cooperatives, milk dispensers, milk bars, milk hawkers. However, it should be recalled that the dropping of the dairy goat sub-component reduced the potential impact of the programme both on nutrition and poverty reduction, specifically for poor rural women.</p> <p>18. With regards to food security and agricultural productivity, there is evidence that SDCP effectively contributed to enhance household food security and better nutrition, as SDCP beneficiary households were more likely to have a more diverse and nutritional food basket, and had access to three quality meals a day. This resulted from the increased milk production that was consumed internally by the household, as well as from the higher incomes stemming from the excess milk taken to profitable markets, which enhanced the household’s capacity to purchase food. According to the PCR, through the SDCP’s interventions, children malnutrition rate in the target communities went down from 16.4 per cent prior to the programme to 2.5 per cent at the end of the programme.¹⁶ With regards to agricultural productivity, the IAS (2019) noted a significant increase in milk production attributable to the programme’s efforts in improving the feeding and management of the animals, as well as advocating for keeping of improved breeds. Milk production increased from an average of 4 liters per cow per day at design to an average of 15 liters per cow per day at the end of the programme, and a majority of beneficiaries at the end of the programme owned improved breeds. The 2019 supervision mission also reported higher yields of crop production as a result of the use of slurry for the production of vegetables and other crops.</p> <p>19. With regard to the impact domain of human and social capital and empowerment, SDCP focused on building the capacity of individual dairy farmers, as well as of the farmer organizations, both dairy groups and their apex organizations. To this aim, groups were supported to be strong and viable institutions through the transfer of knowledge, technologies, training, facilitation skills, and group mobilization. The IAS (2019) noted that the programme had trained a total of 252 community resource persons (model farmers) on facilitation skills, development of model farms, appropriate husbandry practices, farming as a business, financial management, farm management, marketing, and monitoring and evaluation. SDCP also provided</p>	5

¹⁵ No information was provided in the PCR to specify where does this benchmark come from, and how it has been calculated.

¹⁶ SDCP’s impact assessment recorded SDCP farmers’ higher levels of dietary diversity, with higher levels of animal and vegetable proteins (such as red meat, milk products and legumes) and lower levels of tubers and fruits.

PCR finding	Rating
<p>equipment such as coolers to facilitate farmers' organizations linkages to milk processors such as Kenya Cooperative Creameries and Brookside. All this has contributed to the creation of social capital. Farmers benefitted from group or cooperative membership through the provision of technical inputs and input credit, a more reliable and diversified market outlet, which contributed to strengthen their resilience to fluctuations in milk price, and to experience economies of scale in milk marketing.</p> <p>20. In terms of institutions and policy engagement, SDCP contributed to the creation of awareness among the stakeholders of the need for conducive policy and legal frameworks for the dairy subsector. This was achieved through the following: (i) strengthening and upgrading the Dairy Training Institute, developing its capacity to be a regional centre of excellence for dairy training; (ii) supporting the Kenya Dairy Board in terms of stakeholder needs analysis, branding of milk bar premises and upgrading of the Board's website; and (iii) supporting the Department of Veterinary Services. The programme supported the development of National Animal Breeding and Animal Feedstuffs Policies and Bills. These policies have been reformed into Livestock Policy and Bills have been reformed as regulation in the Livestock Bill.</p> <p>21. In light of these reasons, the PCR rates this criterion as <i>satisfactory (5)</i>, in line with the PCR rating.</p>	
Sustainability of benefits	
<p>22. At design, the programme aimed to have, by the end of its implementation, a range of commercially sustainable and interlinked dairy businesses in place, integrated with suppliers of physical and financial goods and services. As indicated by the CSPE, the SDCP groups have generally been sustainable. They were based on the existing groups and have been empowered with capacity building, introduction of technologies and dissemination of knowledge, which had contributed to their social sustainability. The PCR also noted that the training of dairy groups in business skills and enterprise management, including training of apex bodies to provide services to members, would contribute to the sustainability of programme results.</p> <p>23. The PCR highlighted that the introduction of community resource persons was key in ensuring the sustainability of benefits beyond the period of SDCP support in the programme area. They provided a practical approach to skill development and diffusion of information within the community, county and beyond.</p> <p>24. SDCP prepared a sustainability and exit strategy in 2018, and made provisions for exit through ensuring cost-sharing of programme activities to encourage groups to graduate to self-reliance. For example, for the acquisition of post-harvest milk coolers beneficiaries were requested to provide in cash contributions up to 35 per cent.</p> <p>25. According to the PCR, although many dairy groups, cooperatives and apex organizations were operating profitably and were financially viable, some lacked sufficient business management capacities and faced challenges, due to low milk collection, poor leadership and governance as well as a lack of a coherent plan to increase the supply of milk to the collection centres. In addition, although many apex organizations were financially viable, there was a need for additional capacity building and financial support for these apex bodies in order to develop institutionally strong cooperatives.</p> <p>26. In some cases, access to financial services and resources through linkages with financial service providers and private sector actors has been limited and this might hinder the sustainability of benefits that depend on continued access to finance to maintain and expand SDCP's assets.¹⁷ Additional capacity building would also be needed in areas such as business operations, contract negotiation, marketing and financial management, as well as financial support for these apex bodies in order to</p>	4

¹⁷ The involvement of the private sector has been a key element of sustainability. Where links were made with private sector actors to enable continued commercial growth of production activities, this has been valuable. Examples include links to bulk buyers such as Brookside.

PCR finding	Rating
<p>develop institutionally strong cooperatives.</p> <p>27. In view of the above findings, the PCRV rates this criterion as <i>moderately satisfactory (4)</i>, in line with the PCR rating.</p>	
B. Other performance criteria	
Innovation	
<p>28. Among some of the programme's innovations, there were included: specific implementation modalities for targeting, information and technology in support of the MODE approach; and youth mentorship programme. The deployment of community-based resource persons (model farmers) has also proved effective, as these persons were key in ensuring the sustainability of benefits beyond the period of SDCP support in the programme area. The GALS, introduced during SDCP's additional period in 2017, was a further innovation that has been largely successful in improving family relations. The SDCP market inclusion of programme beneficiaries in policy dialogue and legislative processes has also been innovative, allowing many of them to contribute to subsector orientation and development.</p> <p>29. The CSPE also highlighted that SDCP presents a model of smallholder success in the deployment of breeding, feeding and health technologies. An important innovation, mentioned in the PCR, is the community-based animal health revolving fund for disease surveillance and vaccination, which was established by the programme in 27 dairy commercialization areas. The fund was used to buy vaccines and farmers paid a subsidized rate for the various vaccinations on their dairy herd. Since its inception, the fund went beyond vaccinating dairy animals to include all the domestic animals.</p> <p>30. The dairy goat activities were further innovations that were introduced by IFAD in the programme's areas. As previously mentioned, these activities were dropped later on during programme's implementation.</p> <p>31. In view of the above findings, the PCRV rates this criterion as <i>satisfactory (5)</i>, a point higher than the PCR rating.</p>	5
Scaling up	
<p>32. As highlighted in the CSPE, through SDCP's additional financing, initial successful achievements, also including modalities and technologies that proved effective, were scaled up within the already targeted sub-counties and also to new counties. For example, in Nakuru County, IFAD-trained staff had been working in new sub-counties to create 29 dairy commercialization areas and introducing commercial fodder production. Field days, demonstrations and study tours have all supported replication. Following the experience with dairy goat activities introduced by IFAD, county officers in Nyamira and Transzoja counties expressed their willingness to introduce those activities in the county planning. In addition, the skills developed at the group level through the GALS household methodologies have been replicated by SDCP's communities at the household and community level, supported by peer group members and trained facilitators.</p> <p>33. As reported by the PCR, the county governments indicated their commitments to scale up the community-based resource persons in order to enhance the capacity of the smallholder dairy farmers. The national government and county governments also indicated their commitments to scale up SDCP interventions, by starting the provision of coolers to apex organizations to enable them cool and bulk milk for processors. A number of 460 coolers have already been procured and they will be increased to 1,000 coolers by 2022.</p> <p>34. Given the good number of scaled-up interventions, the PCRV rates this criterion as <i>satisfactory (5)</i>, in line with the PCR rating.</p>	5

Gender equality and women's empowerment

35. SDCP demonstrably mainstreamed gender equality and women's empowerment across all programme activities.¹⁸ In the additional financing period, SDCP sustained the gender-related gains made during the initial financing period, and a draft gender strategy and gender sensitive indicators were developed to guide gender mainstreaming. At the closure of the programme, SDCP supported 1,096 dairy groups consisting of 28,712 small dairy farmers, of whom 12,953 were male, 15,759 were female and 6,672 were youth. This represented 55 per cent of women against a target of 30 per cent and 22 per cent of youth against the set quotas of 10 per cent. At the apex level, 50 per cent were women and 32 per cent were youth.
36. Overall, women benefited from a number of interventions covering: (i) the extensive gender-sensitive training and capacity building in topics ranging from community-driven development to making business plans and improving production and marketing; (ii) the introduction of low-cost gender-friendly technologies such as labour and time-saving technologies; (iii) the use of gender-sensitive methodologies such as GALS, which contributed to strengthen women's influence in design-making at home and in groups.¹⁹
37. SDCP's promotion of gender equality and women's empowerment has resulted in significant achievements, improving women's access to resources, assets and services and their influence in decision-making at home, in groups and in the community. The findings of the IAS (2019) showed that women have demonstrably gained better access to financial services, as the beneficiary female-headed households recorded high incomes (Kshs 49,150.4) compared to the non-beneficiary female-headed households (Kshs 20,744.2). Participating households were also more likely to have women managing cash from the sale of milk compared to non-participating households. In particular, SDCP's specific interventions to support poultry and dairy goat production for vulnerable women, have led to increased consumption of eggs and milk, respectively, improving household nutrition. In addition, there is evidence that women and men have had a more equal voice at home, as SDCP made a concerted effort to promote women's participation in leadership roles to increase their influence in decision-making. According to the IAS, women have become important members of the dairy commercialization area committees, and they were more involved in taking decisions relating to the use of services such as artificial insemination, vaccination and curative treatments, which are tasks traditionally undertaken by men.
38. With regards to youth, the target for their representation set at 10 per cent has been surpassed, as the final outreach to the youth stood at 22 per cent. The youth mentorship programme implemented during the additional financing phase was observed to have been an effective tool for attracting youth to seeing dairy as a viable business. Youth were the majority of those who had benefitted from the job creation resulting from the implementation of the programme interventions by the direct beneficiaries. They were mainly involved in milking, milk collection, transportation of milk and inputs, commercial pasture production as well as employment in the milk bars and milk-cooling centers, and less so in dairy cattle management activities.
39. In light of these notable achievements, the PCRV rates this criterion as *satisfactory* (5), in line with the PCR rating.

5

¹⁸ To promote gender mainstreaming, the programme targeted dairy groups that had a membership of at least 30 per cent of women and 10 per cent of youths.

¹⁹ The programme implemented household methodology in beneficiary groups, with the aim to tackle the root causes of inequalities – social norms, attitudes and behaviors – to improve gender relations and promote equal social and economic opportunities between men and women.

Environment and natural resources management	
<p>40. As mentioned in IFAD 2019 supervision mission report, SDCP included environment and natural resource management activities, such as: promotion of sustainable manure use and management; fodder trees and fodder conservation; water harvesting, bio slurry use, and animal husbandry and health management. The PCR also reported that at the beginning of the programme, zero-grazing was promoted as the preferred option to minimize environmental degradation associated with free-range grazing. The CSPE reported that SDCP contributed to natural resource management outcomes through the establishment of 120 tree nurseries for agro-forestry and the distribution of 66,100 seedlings. It was also noted that 25 per cent of targeted dairy farmers invested in environmentally friendly and climate-smart systems, as well as labor-saving devices such as biogas and energy-saving stoves. Biogas digesters have been promoted to reduce firewood collection and the cutting down of trees; energy-saving stoves were successfully adopted in SDCP to reduce firewood collection and cooking time.</p> <p>41. On the other hand, the IAS (2019) noted that, although 50.9 per cent of beneficiaries had been introduced to new energy savings jikos and fuels, the majority of the farmers were still using traditional three-stone jiko making firewood to be the main source of energy and thus significantly affecting the environment and natural resources.²⁰</p> <p>42. On balance, taking into account the positive findings, but also considering the low uptake of the jiko stoves, overall the PCRV rates this domain as <i>moderately satisfactory</i> (4), a point lower than the PCR rating.</p>	4
Adaptation to Climate Change	
<p>43. As mentioned in the CSPE, at design level, SDCP's recognition of climate risks was minimal and indicators not included. However, the pace of programme implementation, such as uptake of technologies, was notably affected by climate change. Nevertheless, during its implementation, actions such as supporting drought-resistant crops, biogas plants, energy-saving stoves and tree nurseries appeared as part of the programme's main climate change mitigation practices. The programme promoted the conversion of the cow dung into biogas as an efficient and economical way of reducing the emission of methane into the air. As also indicated by the 2019 supervision mission report, the promotion of biogas had an advantage in reducing the rural family dependence on fuel wood, resulting in increased vegetative cover on their farms, and reducing tree cutting. An innovative use of surplus biogas was observed in Kemei, Bomet county, where it was used to run the engine of chopping fodder.</p> <p>44. The 2018 supervision mission highlighted that the programme approach remained too strictly oriented to individual farm plots, while a broader view/approach that focused on the entire watershed/landscape would be beneficial. SDCP should have also identified and promoted biogas technologies that were more affordable than those currently promoted by the programme.</p> <p>45. For these mixed results, the PCRV rates this criterion as <i>moderately satisfactory</i> (4), a point lower than the PCR rating.</p>	4
C. Overall Project Achievement	
<p>46. Overall, SDCP has contributed to foster the market-driven development of Kenya's dairy sector, working with poor smallholder dairy producers and traders to strengthen their capacity to respond to market opportunities. It has contributed to build poor smallholder dairy producers and traders' understanding of the market and technical knowledge of production processes, and has improved their organizational and enterprise skills. During its implementation, an increase in milk production and productivity attributable to the programme's intervention has led to improved food and nutritional security of the households. This was matched by a reduced cost of milk production. The programme has also strongly contributed to an increase in beneficiaries' income level. The programme's intervention of commercialization of</p>	4

²⁰ Jiko is a portable, charcoal-burning stove used for cooking.

<p>the dairy sector has contributed to the expansion of investments in dairy production and processing, thereby spurring job creation in the programme area.</p> <p>47. On the less positive side, the programme's poverty targeting mechanisms brought areas with high poverty levels into the programme, which proved not to be conducive for commercialization. The dropping of dairy goat activities arguably left a gap in support for poor rural women. In addition, SDCP encountered challenges in its implementation, such as those related to linking dairy groups to various service providers and limited knowledge among farmers to negotiate terms favorable to them. These challenges prevented SDCP from fully achieving its commercialization focus and establishing effective linkages between the programme's beneficiaries and the milk value chain actors. The findings of the IAS (2019) suggest that the SDCP was successful in increasing milk production but had more limited, though positive, impacts on increasing milk marketing and increasing milk prices received by famers. According to the PCR, a main flaw was the readiness of the dairy groups to take up commercialization, as the non-homogeneity of dairy groups took longer than the time foreseen to achieve the programme's objective.</p> <p>48. Overall, considering these mixed results, the PCRV rates the SDCP's performance as <i>moderately satisfactory (4)</i>, a point lower than the PCR rating.</p>	
D. Performance of Partners	
IFAD	
<p>49. IFAD conducted a total of 13 supervision and 13 implementation support missions. The various mission recommendations were generally relevant in addressing challenges faced in programme implementation. IFAD country offices led the missions and followed up to ensure agreed actions were duly implemented. A mid-term review was conducted in 2010 and its findings were relevant and timely to enhance the adoption of the MODE approach. However, the PCR noted that IFAD should have strengthened its follow-up mechanisms to ensure that all agreed actions were implemented by the programme and the Government.</p> <p>50. The PCRV rates this criterion as <i>moderately satisfactory (4)</i>, in agreement with the PCR rating.</p>	4
Government	
<p>51. Being the main partner, the Government of Kenya showed commitment to the agriculture sector from a policy perspective, and developed appropriate sectoral policies that contributed to enhancing the implementation and realization of the programme objectives. The Government set up project implementation structures such as PCU, the national steering committee, the county programme facilitation teams to facilitate SDCP's implementation and provided staff at the county and sub-county levels. As reported by the 2018 supervision mission, the national steering committee was proactive and held regular meetings. Overall, although the PCU functioned well and, together with the implementing partners it adjusted timely to the changes following the additional financing, it encountered some challenges in managing the large number of service providers engaged by SDCP.²¹</p> <p>52. As indicated in the CSPE, although compliance to loan agreements and covenants was overall good, an important exception was the lack of the adherence to the covenant of procuring and installing an off-shelf accounting package, as this was not fully utilized since an excel system continued to be used alongside the financial management system. Over the programme implementation period, the procurement process lagged behind in launching of the various planned procurement activities and the timely delivery of procured goods and services. In addition, there were instances of non-compliance with IFAD guidelines including one transaction that was under investigation by IFAD. The 2019 supervision mission also highlighted that challenges were detected in the implementation of some mission recommendations, such as those related to lengthy procurement, monitoring and evaluation functions,</p>	4

²¹ While the programme management team had a wide and solid experience in dealing with the different actors in the milk value chain, the team was less experienced with regards to private service providers. This posed a challenge in the context of a value chain project with a commercialization focus.

delays in issuing the authority to incur expenditures, lengthy procedures for amending annual work programmes and budget, the establishment of mechanisms to avoid elite capture in grants.	
53. In light of these mixed factors, the PCRV rates this criterion as <i>moderately satisfactory (4)</i> , in line with the PCR rating.	

IV. Assessment of PCR quality

PCR finding	Rating
Scope	
54. All the chapters, as well as the relevant annexes, have been adequately covered and are in line with the PCR Guidelines.	5
Quality	
55. This is a good quality PCR, which presented the SDCP's main achievements and overall implementation results in a comprehensive, clear and straightforward way. It has benefitted from a wealth of reliable and robust data, partly derived from Kenya's CSPE conducted by IFAD's Office of Evaluation in 2019, as well as from the IAS carried out in 2019 by the International Initiative for Impact Evaluation. The PCR process has been inclusive of the relevant stakeholders.	5
Lessons	
56. The lessons learned have been drawn from the project implementation and have been based on explicit evaluation findings. However, this PCRV deems that more emphasis should have been put on the learning concerning the challenges encountered in the dairy farming commercialization, as this was a very critical issue that contributed to reduce programme's effectiveness.	4
Candour	
57. The PCR narrative is objective, reporting both positive and negative results.	5
58. The ratings are mostly coherent with the narrative.	

V. Final remarks

Issues for IOE follow up (if any)
None

Definition and rating of the evaluation criteria used by IOE

Criteria	Definition *	Mandatory	To be rated
Rural poverty impact	Impact is defined as the changes that have occurred or are expected to occur in the lives of the rural poor (whether positive or negative, direct or indirect, intended or unintended) as a result of development interventions.	X	Yes
	<i>Four impact domains</i>		
	<ul style="list-style-type: none"> Household income and net assets: Household income provides a means of assessing the flow of economic benefits accruing to an individual or group, whereas assets relate to a stock of accumulated items of economic value. The analysis must include an assessment of trends in equality over time. 		No
	<ul style="list-style-type: none"> Human and social capital and empowerment: Human and social capital and empowerment include an assessment of the changes that have occurred in the empowerment of individuals, the quality of grass-roots organizations and institutions, the poor's individual and collective capacity, and in particular, the extent to which specific groups such as youth are included or excluded from the development process. 		No
	<ul style="list-style-type: none"> Food security and agricultural productivity: Changes in food security relate to availability, stability, affordability and access to food and stability of access, whereas changes in agricultural productivity are measured in terms of yields; nutrition relates to the nutritional value of food and child malnutrition. 		No
	<ul style="list-style-type: none"> Institutions and policies: The criterion relating to institutions and policies is designed to assess changes in the quality and performance of institutions, policies and the regulatory framework that influence the lives of the poor. 		No
Project performance	Project performance is an average of the ratings for relevance, effectiveness, efficiency and sustainability of benefits.	X	Yes
Relevance	The extent to which the objectives of a development intervention are consistent with beneficiaries' requirements, country needs, institutional priorities and partner and donor policies. It also entails an assessment of project design and coherence in achieving its objectives. An assessment should also be made of whether objectives and design address inequality, for example, by assessing the relevance of targeting strategies adopted.	X	Yes
Effectiveness	The extent to which the development intervention's objectives were achieved, or are expected to be achieved, taking into account their relative importance.	X	Yes
Efficiency	A measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into results.	X	Yes
Sustainability of benefits	The likely continuation of net benefits from a development intervention beyond the phase of external funding support. It also includes an assessment of the likelihood that actual and anticipated results will be resilient to risks beyond the project's life.	X	Yes
Other performance criteria			
Gender equality and women's empowerment	The extent to which IFAD interventions have contributed to better gender equality and women's empowerment, for example, in terms of women's access to and ownership of assets, resources and services; participation in decision making; work load balance and impact on women's incomes, nutrition and livelihoods.	X	Yes
Innovation	The extent to which IFAD development interventions have introduced innovative approaches to rural poverty reduction.	X	Yes
Scaling up	The extent to which IFAD development interventions have been (or are likely to be) scaled up by government authorities, donor organizations, the private sector and others agencies.	X	Yes
Environment and natural resources management	The extent to which IFAD development interventions contribute to resilient livelihoods and ecosystems. The focus is on the use and management of the natural environment, including natural resources defined as raw materials used for socio-economic and cultural purposes, and ecosystems and biodiversity - with the goods and services they provide.	X	Yes
Adaptation to climate change	The contribution of the project to reducing the negative impacts of climate change through dedicated adaptation or risk reduction measures.	X	Yes

<i>Criteria</i>	<i>Definition</i> *	<i>Mandatory</i>	<i>To be rated</i>
Overall project achievement	This provides an overarching assessment of the intervention, drawing upon the analysis and ratings for rural poverty impact, relevance, effectiveness, efficiency, sustainability of benefits, gender equality and women's empowerment, innovation, scaling up, as well as environment and natural resources management, and adaptation to climate change.	X	Yes
Performance of partners			
• IFAD	This criterion assesses the contribution of partners to project design, execution, monitoring and reporting, supervision and implementation support, and evaluation. The performance of each partner will be assessed on an individual basis with a view to the partner's expected role and responsibility in the project life cycle.	X	Yes
• Government		X	Yes

* These definitions build on the Organisation for Economic Co-operation and Development/Development Assistance Committee (OECD/DAC) Glossary of Key Terms in Evaluation and Results-Based Management; the Methodological Framework for Project Evaluation agreed with the Evaluation Committee in September 2003; the first edition of the Evaluation Manual discussed with the Evaluation Committee in December 2008; and further discussions with the Evaluation Committee in November 2010 on IOE's evaluation criteria and key questions.

Rating comparison^a

<i>Criteria</i>	<i>Programme Management Department (PMD) rating</i>	<i>IOE Project Completion Report Validation (PCR) rating</i>	<i>Net rating disconnect (PCR-PMD)</i>
Rural poverty impact	5	5	0
Project performance			
Relevance	5	4	-1
Effectiveness	4	4	0
Efficiency	4	4	0
Sustainability of benefits	4	4	0
Project performance^b	4.25	4	-0.25
Other performance criteria			
Gender equality and women's empowerment	5	5	0
Innovation	4	5	1
Scaling up	5	5	0
Environment and natural resources management	5	4	-1
Adaptation to climate change	5	4	-1
Overall project achievement^c	5	4	-1
Performance of partners^d			
IFAD	4	4	0
Government	4	4	0
Average net disconnect			-2/12=-0.17

^a Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

^b Arithmetic average of ratings for relevance, effectiveness, efficiency and sustainability of benefits.

^c This is not an average of ratings of individual evaluation criteria but an overarching assessment of the project, drawing upon the rating for relevance, effectiveness, efficiency, sustainability of benefits, rural poverty impact, gender, innovation, scaling up, environment and natural resources management, and adaptation to climate change.

^d The rating for partners' performance is not a component of the overall project achievement rating.

Ratings of the project completion report quality

	<i>PMD rating</i>	<i>IOE PCR rating</i>	<i>Net disconnect</i>
Candour	n.a.	5	n.a.
Lessons	n.a.	4	n.a.
Quality (methods, data, participatory process)	n.a.	5	n.a.
Scope	n.a.	5	n.a.
Overall rating of the project completion report	n.a.	5	n.a.

Rating scale: 1 = highly unsatisfactory; 2 = unsatisfactory; 3 = moderately unsatisfactory; 4 = moderately satisfactory; 5 = satisfactory; 6 = highly satisfactory; n.p. = not provided; n.a. = not applicable.

Abbreviations and Acronyms

CSPE	Country Strategy and Programme Evaluation
GALS	Gender Action Learning Systems
IAS	Impact Assessment Study
IOE	Independent Office of Evaluation
MODE	Market Oriented Dairy Enterprise
PCR	Project Completion Report
PCRV	Project Completion Report Validation
PCU	Programme Coordination Unit
SDCP	Smallholder Dairy Commercialization Programme

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