KfW Development Bank

KFW
Bank aus Verantwortung

Ex post evaluation – Rural Financing, Benin

Title	Rural financing, Benin		
Sector and CRS code	240300 Formal sector financial intermediaries financial		
Project number	2015 01 345		
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ) (Special initiative "One World No Hunger" (SEWoH))		
Recipient/project-executing agency	Recipients: Republic of Benin, represented by the Ministry of Finance Project-executing agency: Faîtière des Caisses d´Epargne et de Crédit Agricole Mutuel du Benin (FECECAM)		
Project volume/ Financing instrument	EUR 10.9 million, FC grant		
Project duration	3 April 2016 – 3 June 2020		
Year of report	2021	**Year of random sample**	2021

Objectives and project outline

The goal of the FC-SEWoH project "Rural financing, Benin" at outcome level was to improve long-term access to adapted rural financial services in order to increase the productivity of rural micro, small and medium-sized enterprises across Benin. At impact level, the project contributes to SEWoH priorities 4 (supporting socially compatible structural change in agriculture and rural areas), 3 (strengthening innovation in agriculture) and 1 (contributing to food security).

Key findings

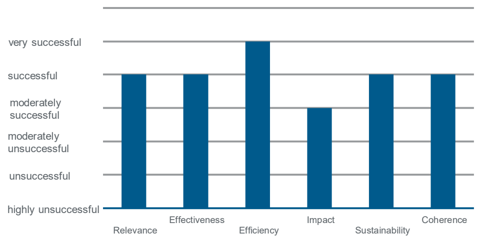
The project achieved development effectiveness, both at the level of the project-executing agency FECECAM and at the level of the rural target group.

– The provision of loans to women played a significant role. The project not only promoted women's economic independence but also incited structural change as female borrowers tend to use their loans differently to male borrowers (a tendency to withdraw from agricultural activities and substitute them with commercial activities), which also diversifies credit risks.

– Some of the project's success can also be attributed to the choice of an effective project-executing agency, one with a broad reach even in rural areas and one which is strategically planning to expand in this area. Despite the improved credit options, bigger investments in modernising agriculture (e.g. through mechanisation) were rare due to a lack of sufficient securitisation options. The establishment of a guarantee facility, for example, could greatly improve the project's impact here. However, the loans helped contribute to a significant rise in surface area productivity.

– That said, Benin is one of the most problematic countries in the world when it comes to child labour. The financing helped to increase agricultural production (and thus also improve employment within families). As such, measures should be taken to avoid the spread of child labour, at least by raising awareness among the target group, e.g. during the loan application process.

Overall rating:
Successful



Conclusions

– To optimise the effects of improved credit options, additional offerings (e.g. credit guarantee mechanisms) ought to have been present or developed.

– In the context of Benin, it is possible that private insurers may not be able to economically cover the risks associated with crop failure insurance. However, this insurance would significantly increase the economic resilience of borrowers from the agricultural sector – and thus improve the sustainability of the financing of their activities. For this reason, it may make sense to develop equivalent offers with FC support in parallel to these financing options.

1 = very successful, 2 = successful, 3 = moderately successful, 4 = moderately unsuccessful, 5 = unsuccessful, 6 = highly unsuccessful

Rating according to DAC criteria

Overall rating: 2

Ratings:

Relevance	2
Coherence	2
Effectiveness	2
Efficiency	1
Impact	3
Sustainability	2

General conditions and classification of the project

Remarks on how the project's rating is affected by the COVID-19 pandemic: A significant portion of the key data for the project's evaluation is taken from the LADYD/DED impact study, which was completed prior to the outbreak of the pandemic. The same applies for the data from the last certified annual report for the 2019 financial year. These figures play an important role in the evaluation of the project's success – more up-to-date figures serve exclusively to identify trends, whereby the negative effects of the pandemic are considered to be of a temporary nature.

Breakdown of total costs

O	Project (Planned)	Project (Actual)	CM (Planned)	CM (Actual)
Investment costs (total) EUR million	10.00	9.90	1.00	1.00
Counterpart contribution EUR million	0.00	0.00	0.00	0.00
Funding EUR million	10.00	9.90	1.00	1.00
of which BMZ budget funds EUR million	10.00	9.90	1.00	1.00

Relevance

The challenges in accessing credit – in addition to the low level of technical and organisational development within the agricultural sector combined with climate-related factors – present a major limitation to the ongoing development of Benin's rural areas. The project was intended to address the supply-related causes underlying the inadequate access to credit. Challenges were identified during the project appraisal (2015), particularly those regarded as typical for small-scale rural financing (including high operating costs, collateral of a very low value, agriculture-specific risks). In addition, there is a lack of expertise in many regards in relation to credit handling, particularly when it comes to specific knowledge of the agricultural sector.

In addition to granting a subordinated loan, the project directly addressed the aforementioned aspect in particular by employing suitable training measures as part of a complementary measure. However, the difficult underlying conditions for rural financing offers are not within the sphere of influence of a single project measure. Nevertheless, the project's concept intended to mitigate the impacts of these deficits by means of the favourable refinancing of a group of banks involved in rural financing (Faîtière des Caisses d´Epargne et de Crédit Agricole Mutuel du Benin/FECECAM, project-executing agency). By extending a grant to the Republic of Benin, which was then passed on to the project-executing agency as a subordinated loan, the aim was to improve the executing agency's situation in terms of equity and refinancing, thereby supporting the expansion of rural financing and improving its economic presentability, in spite of the aforementioned inherent challenges. By improving the quantity and quality of the financing offer, the goal was to improve long-term access to financing offers for the target group of rural micro, small and medium-sized enterprises (MSMEs). The intention here was to enable MSMEs to invest in production equipment and resources that would improve their productivity (module objective), which in turn would contribute to the objectives set out at impact level (see below, particularly priorities 1 and 3).

Even from today's perspective, the results chain appears logical and plausible: the same also applies to the target system and the underlying assumptions.

The FC project was financed using funds from the special initiative Eine Welt ohne Hunger (*A World Without Hunger* - SEWoH) and is consistent with its objectives[1], especially:

- Extending the range of needs-based rural financial services (priority 4)
- Strengthening the force of innovation within the agricultural sector in Benin (priority 3)
- Increasing the income of rural households and microenterprises as well as improving productivity in rural value chains, thus contributing to food security (priority 1)

The agricultural financing package is one of the key elements in the Beninese strategy to alleviate poverty and plays a prominent role in the Beninese national agricultural strategy and the strategy to develop microfinancing.

This also gives rise to the appropriateness of the design for the needs of the target group of rural MSMEs, whereby the aim of the complementary measure was to ensure that the expanded range of credit options meets the needs of the rural target group in particular (especially in relation to the term of loans, the adjustment of repayment dates in line with the harvest cycle, and the shortest handling times possible) by means of providing agriculture-specific advanced training to credit officers and supporting the development of adapted financing offers.

At the same time, the project measures were in line with the project-executing agency's requirements. While the executing agency actually had sufficient refinancing potential based on the volume of its deposit business, it still required additional equity to underpin the ongoing growth of credit. It then received the equity it needed in the form of equity-like subordinated loans.

The project was unable to address the problem that larger-scale individual loans – for example, to finance larger machine investments – present a high individual risk for FECECAM, particularly due to the generally limited financial standing of borrowers and the lack of a guarantee mechanism. However, it is precisely these capital-intensive investments that play such an important role in the structural evolution of the Beninese agricultural sector.

Consideration of the needs of particularly disadvantaged and vulnerable groups is an indirect result of FECECAM's selection as the project-executing agency. Benin's rural population can generally be regarded as socially and economically disadvantaged compared to the urban population, including in relation to the supply of credit. This rural target group is a (non-exclusive) focus of the project-executing agency's activities. A further aim was to maintain the rate of loans awarded to women of 40%, as specified during the project appraisal.

The extent to which the project's design pursued a holistic approach to sustainable development cannot be conclusively determined. On the one hand, the project was clearly suitable for improving the living conditions of the rural target group. However, in the present context, the required change to the structure of the Beninese agricultural sector would count towards sustainable development, for example addressing the problems related to wide-scale cotton farming (high dependence on export markets, water requirements, use of pesticides, child labour). Yet there were no incentives for increased diversification or for the establishment of more sustainable farming standards (e.g. in the form of subsidised loans for suitable purposes or restrictions placed on loan purposes). At the same time, unrealistic results should not be expected from the limited project funds. A better supply of credit and the strong integration of credit providers into rural areas form an important basis for the ongoing sustainable development of rural areas.

---

[1] https://www.bmz.de/resource/blob/39130/acbbe75672aafcaca1b59778cba2df19/191122_FS_SEWoH_web.pdf

Overall, the project's approach is seen as a suitable way for improving the rural financing offer, including due to the selection of a suitable project partner with a broad reach. Furthermore, the project was clearly focused on the target group's needs as well as on improving the services offered by the project-executing agency. From today's perspective, the programme's relevance is therefore rated good.

Relevance rating: 2

Coherence

The project is not part of an overarching DC programme, though it does meet the objectives of the "Financial System Development" sectoral policy document of the Federal Ministry for Economic Cooperation and Development, the German Federal Government's 2015 Action Programme, and the G20's Global Partnership on Financial Inclusion, under the scope of which particular focus was placed on the promotion of MSMEs and rural households.

There were points of contact with several TC approaches, particularly with the PROCIVA (Centres d'innovations vertes pour le secteur agro-alimentaire) programmes and the TC-SEWoH components of the global PROFINA project (promotion of agricultural financing for agricultural enterprises in rural areas). FC and TC have been working particularly closely together since 2019, which is due to be picked up during phase II of the FC programme (memorandum of understanding has been concluded between GIZ and FECECAM). For instance, as part of this work, the project-executing agency's credit officers will receive training on aspects relevant to the agricultural sector (in addition to the training measures under the FC complementary measure), while borrowers on the demand side will receive training on business and finance issues.

The project is broadly consistent with the international standards common within DC, with the exception of the standards set out by the International Labor Organisation (ILO). FECECAM did not accept these standards until 2020 for the second phase of the project. A critical view is taken of this, particularly in the context of Benin, where child labour is widespread, in cotton farming for example.

FC's involvement in the sector is a sensible addition to the Beninese government's efforts in this regard; the government clearly acknowledges the importance of the financial sector for rural development and is supporting it with its own measures, e.g. under the Fonds National de Microfinance/FNM – a public fund in Benin, which, for example, refinances agricultural approaches and also cooperates with the project-executing agency. A partnership with the (also public) Fonds National de Développement Agricole (FNDA) is currently under negotiation with the aim of supporting the granting of agricultural loans by issuing guarantees for the project-executing agency's equipment loans.

FECECAM's involvement in rural areas was also supported by the FC project with a focus on objectives. For instance, funds were invested in the existing branch network and the content of the credit supply was also enhanced as a result of in-depth needs analysis and target-oriented project development. The project is also clearly built on the existing MFI infrastructure, and achieves a good reach through the project-executing agency's involvement as an organisation.

Coordination with other multilateral or bilateral donors was not deemed suitable in this case.

The project exhibits a good degree of consistency with German DC's overarching objectives and is linked to TC approaches in Benin in a productive manner. Furthermore, subsidiarity with the efforts of the Beninese government and project-executing agency is ensured. A critical view is taken on the aspect of child labour, though this is already reflected under the criterion of Impact and is therefore not taken into account a second time under the Coherence rating. The coherence is therefore rated as good against this background.

Coherence rating: 2

Effectiveness

The project was implemented according to plan. The FC subordinated loan enabled the project-executing agency's rural credit supply to be expanded on a quantitative basis. Furthermore, the complementary measure specifically increased FECECAM's personnel capacities, particularly owing to the agriculture-specific advanced training for credit officers and support in the development of new, agriculture-based credit products. The resulting improvements to the quantity and quality of the credit supply at conventional market conditions were met with corresponding demand from the target group and were reflected in a significant increase in the size of the loan portfolio.

The target achievement at the outcome level is summarised in the table below.

Indicator	Status PA, target PA	Ex post evaluation
(1) Financial projects for rural areas are successfully supplied on the market by the project-executing agency: The rural credit portfolio grows by an average of at least 10% per year	Status PA: n.a. Target value: + 10% p.a.	(31 December 2020) + 0.5% compared to 2019 (Actual value as of 31 December 2019: + 15%)
(2) The quality of the credit portfolio is satisfactory PaR30[a] < 5%	Status PA: n.a. Target value: < 5%	(31 December 2020) 8.06% (Actual value as of 31 December 2019: 6.17%)
(3) The project-executing agency works efficiently and is financially sustainable: The annual mean operating sustainability (income/costs) is at least 110%	Baseline value at PA: 115% (financial year 2014) Target value: 110%	(31 December 2019) 129%
(4) New – Increased productivity in yield (FCFA/ha)	Status PA: n.a. Target value: + 30% (defined at EPE)	Comparison from the impact study (2018) + 83%

a) Portfolio at Risk 30 = Percentage of loans in the overall portfolio whose repayment is overdue by more than 30 days
b) Food Insecurity Experience Scale (lower value corresponds to higher perceived security of food supply, scale from 0-8)

Indicator (2) clearly falls short of the target value, with a variety of effects likely to have contributed to this. For instance, against the background of a sharp increase in the size of the overall portfolio (+75%), the average loan amount fell from FCFA 143,000 (EUR 218) in 2015 to FCFA 86,000 (EUR 131) in 2020. This may also have led to customers with a smaller business size being reached (as was intended), though this involved an inherently higher credit risk at the same time. Nevertheless, the PaR30 value in the previous years was at a much better level (still at 6.17% as of 31 December 2019). This leads to the conclusion that the failure to achieve the PaR30 target value can be predominantly attributed to COVID-19 effects as opposed to the granting practices of the project-executing agency's network. The same applies to the growth of the rural credit portfolio [indicator (1)]: while the growth rate in 2019 was still at 15% compared to 2018, this growth fell to 0.5% during the first year of the coronavirus pandemic (2020). The failure to achieve these two indicators is therefore regarded as a temporary effect of the COVID-19 pandemic. The effectiveness rating is therefore based on the values from the previous year, in which the relatively high level anticipated for these two indicators was exceeded (1) or almost achieved (2).

Indicator (3), which measures the project-executing agency's profitability, has clearly been reached.

Indicator (4), which was defined as a new indicator during the evaluation, measures the increase to the specific monetary yield. The data related to this area is taken from the DED/LaDyD impact study and reveals a significantly higher yield among "early" borrowers compared to "late" borrowers, which can be seen as a positive effect of rural loans and, as such, of the project itself (see next but one paragraph and figure 5 under Impact). However, it can be ascertained that the increase in productivity can mainly be attributed to the financing and the adequate use of auxiliary material and resources (see next section): investments in mechanisation are in fact the exception here due to the difficulty in guaranteeing the high loan amounts required for this purpose. Productivity in the sense of yield in relation to the resources or personnel used remains at a relatively similar level.

The development of a new product is regarded as positive (Credit Achat Intrants Groupé/CAIG). Here, group loans are issued to farmers to finance seeds, fertilisers, etc., combined with advice on suitable products, how much to use and how to use them. So far, the product has been limited to the area of soya farming but is due to be expanded to further areas in future. Another product, also promoted under the complementary measure (crédit warrantage/inventory loan), is designed to ensure a more even spread of income from agriculture over time. However, the branches are somewhat cautious in offering this product since it is difficult to create a profitable calculation due to the strong fluctuations in the market prices of the inventory financed.

To assess the project's effects, this evaluation is based on resources including an impact analysis[2] conducted in October 2018 by DIE (German Development Institute) and LaDyD (Laboratoire d´Analyse des Dynamiques sociales et du Développement/Universität Abomey-Calavi, Benin).

Given the lack of long-term panel data, which would enable the development of borrowers to be analysed over an extended period, the method applied here was a pipeline approach combined with propensity score matching[3]. To achieve this, a group of borrowers who received a loan from FECECAM in 2016 and 2017 (hereinafter also referred to as the "control group") were compared to a group of borrowers who received their loans in 2015 or earlier (hereinafter also referred to as the "intervention group", even though both groups were ultimately subjects of the intervention). Here it is assumed that, while both groups are comparable in essence, the effects of the loans on the group of "late" borrowers were limited and still appear to be less pronounced. By pairing up and comparing similar members (e.g. in terms of age, education, size of enterprise) of the "early" and "late" groups of borrowers, the effect of the loans is extrapolated over a range of socio-economic variables. Responses from a total of 750 borrowers were evaluated.

At the same time, this approach means that the specific impact of the FC refinancing is not measured (the part not yet disbursed in 2015). Instead, its impact is made up of two factors: the general effects of the project-executing agency's loans in rural areas, as described in the aforementioned study. Furthermore, these effects have to be studied in relation to the increase in the issuing of loans in rural areas as enabled by the FC project (effect resulting from the additional loans issued thanks to FC funds). It is not possible to precisely assign the equity-like FC funds to a specific segment of FECECAM's portfolio; however, due to the following factors:

- significant increase to the rural credit portfolio, particularly in the years 2017 and 2018 (around + 30% each year, i.e. the respective absolute expansion of the portfolio in each individual year corresponds to the volume of FC funds distributed)
- no other external contribution of equity during the period under review
- targeted promotion of rural loan provision under the FC complementary measure

the observations related to the issuing of rural loans by the executing agency are transferred to the impact of the FC funds for the purposes of the evaluation. This has already played a role for the criteria of Relevance and Effectiveness, though it primarily affects the rating for Impact.

Two thirds of the borrowers surveyed as part of the impact study took out 4-6 loans during the six-year period under review. Around one third of the borrowers in the period under review were women. Here, it is

[2] LADyd/DIE: Impacts du Crédit Agricole de la Faîtière des Caisses d´Epargne et de Crédit Agricole Mutuel du Benin, October 2018 (hereinafter: impact study)

[3] A simple comparison of borrowers with a control group of non-borrowers would result in an excessively high selection bias as it is very likely that there are structural differences between borrowers and non-borrowers, which would be reflected both in the demand for credit and also in the credit approval process. See also DeGEval, Professor Caspari: Wirkungsmessung im Kontext von Evaluationen – Möglichkeiten und Grenzen in der Praxis, September 2017 (https://www.degeval.org/arbeitskreise/methoden-in-der-evaluation/)

important to note that – in contrast to male borrowers – the areas farmed by female borrowers and their agricultural yields are generally on a downwards trajectory as female borrowers tend to use the loans to cut back their farming activities and substitute them with commercial ones.

The majority of the financing was used for farming (80% of the loan agreements), while most of the remaining portion was used for commercial activities involving the resulting products – primarily maize, cotton and soya. In terms of the farming-related loans, the funds were invested in the procurement of seeds and other resources in around half of the cases. Investments in pieces of equipment and agricultural technology did not play a significant role. From the project-executing agency's perspective, the main reason for this is the lack of securitisation options for the higher loan amounts required for these purchases.

When asked how satisfied they were with the borrowing process, most of the borrowers appeared happy with scores ranging from 6.4 to 7.9 (on a scale of 0–10, where 10 corresponds to maximum satisfaction) depending on the criterion. The best scores were awarded to the terms allocated and the loan amounts, while the interest rates and fees received the lowest scores.

The information available contains no indication of inequality or discrimination in relation to accessing credit offers. Nevertheless, access to the offers is naturally not equally simple for all members of the target group, since individual factors, such as credit standing or distance from the nearest bank, also play a role. To reduce geographical obstacles and increase its own reach, FECECAM is planning to expand its digital mobile services (this is also part of the complementary measure in the FC follow-on phase).

The project-executing agency's high standard of professionalism and its good rural reach owing to its existing branch network had a positive impact on the project's good target achievement (internal project factor). The project's success was held back in particular by the lack of a credit guarantee mechanism in Benin's rural financial sector, which could replace the lack of securitisation options and enable additional structure-relevant exposure (factor outside of the project).

Management of the implementation phase by the project-executing agency is regarded as positive on the whole, even though organisational and IT-related weaknesses make it difficult to stringently monitor the issuing of credit at a branch level. This meant that not all of KfW's requirements related to credit approval monitoring could be met. Work is already underway to strengthen both organisational and technical elements of FECECAM's management information system (MIS) and a new process for reporting to KfW has been agreed. Improvements to the MIS will also be part of the complementary measure in the follow-on phase and will not only serve to improve the way the FC project's implementation is monitored but will also assist with regulatory issues.

There is no indication of unintended consequences (either potential or existing) at outcome level.

The temporary failure to achieve individual indicators is regarded as a temporary effect of the COVID-19 pandemic and also partially down to the ambitious objectives (portfolio at risk). At borrower level, the FC measure's positive impacts can also be verified, reflected by the borrowers' satisfaction and improved income situation. On the whole, the measure is rated as positive in view of its quantitative and qualitative target achievement.

Effectiveness rating: 2

Efficiency

The project very intentionally addressed a specific constraint that was limiting the project-executing agency's growth objectives in the rural area. In particular, it lacked equity capital to satisfy regulatory requirements and underpin its future growth. The FC funds therefore did not constitute a classic refinancing loan, but instead took the form of a subordinated loan, which is recognised as equity in FECECAM's balance sheet. According to the project-executing agency, this was the deciding factor for the subordinated loan. While the funds also exhibit a refinancing nature, this function takes a back seat compared to the capitalisation function as a result of the project-executing agency's strong deposit business.

By addressing an existing limitation and making use of the project-executing agency's already extensive network of rural branches, the project takes a very efficient approach to increasing credit approval in rural areas.

The project was implemented within the planned timeframe.

An equivalent alternative to the implemented measure cannot be identified from today's perspective. Another possible option would be to invest in an existing Beninese fund (Fonds National de Microfinance), though this would involve fewer steering options and more political dependencies.

By shaping the interest conditions for its borrowers, the project-executing agency was able to tie a high level of demand for loan funds to a sufficient interest margin for its operational activities (see indicator 3). The FC/SEWoH funds were issued to the Beninese government (represented by the Ministry of Finance) on a grant basis. The funds were then passed on to the project-executing agency as a loan (8-year term). While FECECAM regards the conditions as favourable in principle, it believes that a lower interest rate or a waiver of interest for the loan funds received would have been suitable for the years 2019 and 2020, thereby creating scope for lower final borrower interest rates to generate even higher demand for credit. This could have helped to mitigate the negative effects of the COVID-19 pandemic. However, the interest differentials achieved by the Ministry of Finance should also flow into agricultural projects – at this time, it is not possible to assess the extent to which these additional benefits might outweigh the alternative.

The lean project structure, the focused use of funds, the use of existing executing agency structures and the profitable executing agency demonstrate the very good efficiency of the project approach and implementation.

Efficiency rating: 1

Impact

At the national level, several of the variables that are relevant to the population's living standards have improved in Benin since the project appraisal (2015). This includes a marked decline in child mortality (from 64.3 to 59.0 per 1,000 live births) and the poverty rate (from 40.1% to 38.5%). An increase in the national product per capita (from USD 2,900 to 3,400) can also be observed[4]. However, this growth is not evenly distributed. For example, income increases among the poorest 40% of the population were 30 percentage points lower than the average for the population as a whole.[5] Irrespective of this, the project is too small to identify a link between the project's impact and the developments at a national level. However, it is important to consider that the project-executing agency's development of new agriculture-specific credit products generates a unique leverage effect on account of the agency's size and reach. This is because the large branch network enables the new products to spread quickly and across a broad area, meaning that FECECAM becomes visible both as an initiator and as an important multiplier for the structural effects in the rural financial sector.

No explicit impact-level objectives were defined for the project. However, because the financing uses SEWoH funds, the SEWoH objectives addressed by the project are examined, particularly:

- Increasing the income of rural households and microenterprises and improving productivity in rural value creation chains, thus contributing to food security (SEWoH priority 1)
- Strengthening the force of innovation within the agricultural sector in Benin (priority 3)

To draw any conclusions about the project's impact, the impact study is used as the primary source. To measure target achievement at impact level, two additional indicators were defined for the purposes of the evaluation:

Indicator	Status PA	Ex post evaluation
(5) New: Borrowers' total income p.a. has increased	Control group: FCFA 1.7 million	Intervention group: FCFA 3.9 million

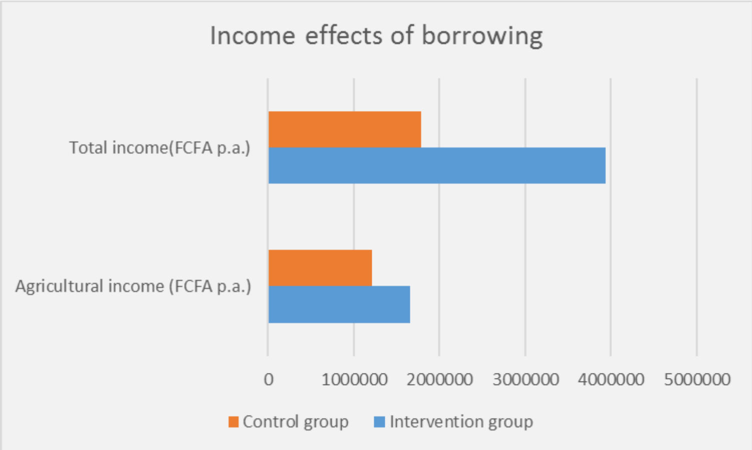
[4] Source: World Bank Data Bank, data for 2019 compared to 2015, poverty rate based on national poverty line, national product as purchasing power parity in international USD).

[5] Source: UNDP, Human Development Report 2019

(6) New: The security of food supply for borrowers has increased compared to the control group[6]	FIES[a] value for the control group 2.74 target value:< 2.74)	FIES value for the intervention group 1.91

a) Food Insecurity Experience Scale (lower value corresponds to higher perceived security of food supply, scale from 0-8). Further information on the FIES scoring approach can be found at http://www.fao.org/3/i7835e/i7835e.pdf

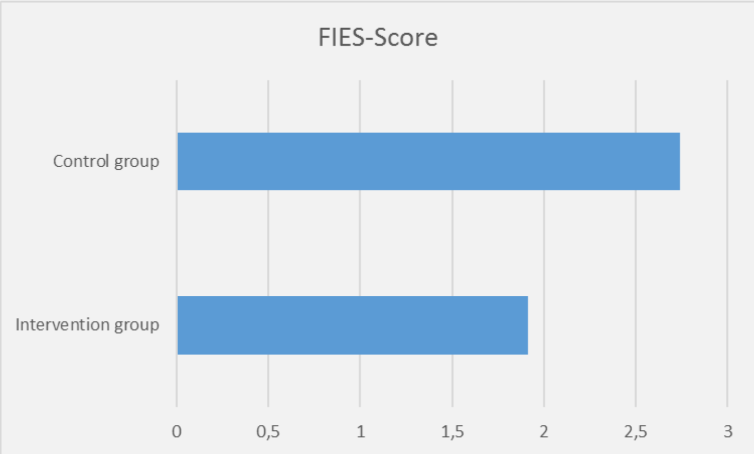
While the impact study does not specifically look at the loans made possible by the FC subordinated loan, it still appears plausible to carry over the effects of the rural loans examined in the study (and issued by the same project-executing agency) to the FC-induced loans (see also the comments under Effectiveness).



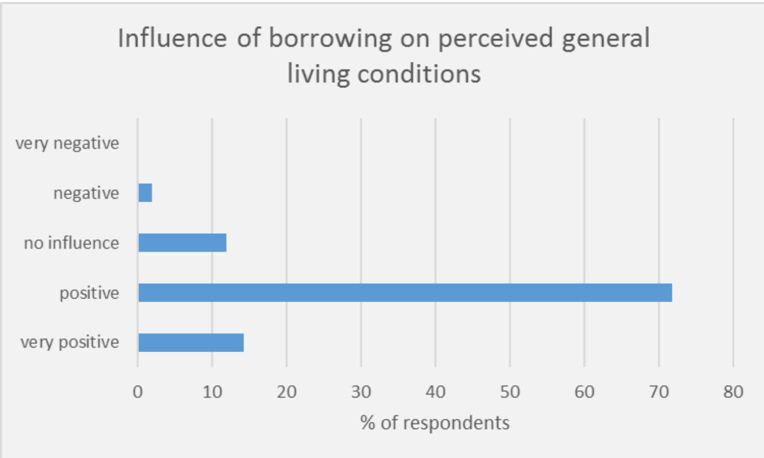
The study enables us to deduce that the granting of credit has a significant effect on borrowers' income. For instance, the total income (at the time of the survey in October 2017) of the "early" borrowers is on average almost twice as high as the income of "late" borrowers. The role of non-agricultural income also plays an interesting role here: insofar as the study is limited to agricultural income, the increase is much lower but still very significant (FCFA 1.7 million to FCFA 1.2 million). The larger part of the increase in income therefore originates from non-agricultural activities (particularly trade). This development must also be regarded in relation to the much-observed withdrawal from agricultural activities, particularly among female borrowers, in favour of expanding commercial activities following receipt of a loan. Across both of the groups, the effects of taking out a loan on total income are broadly regarded (over 80% of those surveyed) as "positive" or "very positive".

The data collected as part of the impact study leads to the conclusion that the security of food supply is (perceived as) relatively good among those questioned; on average, the FIES index value is 2.03 (lowest score theoretically possible is 8.0). Nevertheless, the surveys reveal that more than half of the households (53.7%) experienced at least one temporary shortage of food availability in the year before the survey.

[6] This indicator deliberately only records a portion of the impact on the security of food supply (self-sufficiency). More extensive effects caused by the general increase in production cannot be examined using the data available as other influencing factors come into play here (e.g. consolidation of production and percentage of exports, particularly to Nigeria)



There are marked regional differences in the FIES values, particularly between the North (1.64), where food farming is more frequent, and the South (3.23). There are also significant differences between "early" and "late" borrowers in relation to their own security of food supply, whereby the value is significantly better for "early" borrowers (1.91 compared to 2.74 for "late" borrowers). As such, the provision of credit can be accredited with a strong positive effect for the target group's security of food supply. The same applies to the perception of their own living standards:



On the whole, the borrowers questioned during the study see the effects of borrowing credit on their living standards as positive (72%) or very positive (14%), whereby female participants in the surveys regard the effects as even more positive on average.

The goal of at least maintaining the share of total loans issued to women at the time of the project appraisal (40%) was not achieved, though only by a small margin: it dropped to around one third of the loans (see Effectiveness). Despite the decline in this percentage, it is important to note that – in absolute figures – loans to female borrowers have more than doubled since 2015 and the volume of lending has risen by around 50%. When looking at the impacts on the economic situation and social status of women, there are only small (albeit quantifiably positive, see Fig. 4) differences between "early" and "late" borrowers. From the impact study's perspective, the wide range of disadvantages experienced by women in the rural areas of Benin are too extensive and too heavily rooted to be significantly reduced by the impacts of credit. Nevertheless, it appears plausible that the increase in independent economic activities among women forms the basis for long-term improvements to their social standing.

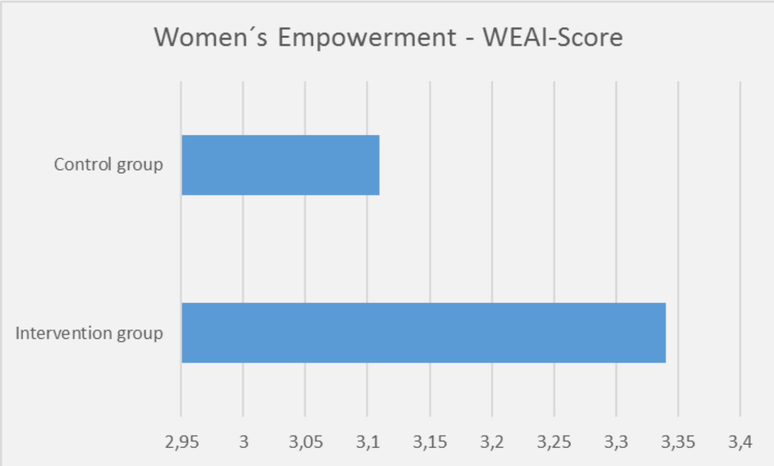


Fig. 4: Differences related to WEAI scores between “early” and “late” borrowers

A multi-dimensional indicator (Women’s Empowerment in Agriculture Index / WEAI) is used to measure the change in autonomy among women[7]. While the differences in the WEIA score trends between the intervention and control groups are significant (around +7%), they are somewhat less marked than the other impact dimensions. Ultimately, this aspect, too, underlines the fact that the process of strengthening the role of women will be a long-term one.

With regard to the aim of strengthening the force of innovation within the agriculture sector in Benin, the picture is mixed. While agricultural surface area productivity has increased by a significant amount (see Effectiveness), a large portion of this increase can be attributed to the heavier use of tools and resources and a rise in the number of labourers used. The project executing agency’s specific financing offers for operating materials and the usage advice provided as part of this package has already led to a short-term increase in yield by area and is contributing to improved expertise among the target group over the medium- and long-term. As already mentioned above, momentum for innovation generated by the procurement of technical equipment – which would also facilitate the more efficient use of the aforementioned production factors – is difficult to realise and finance, and plays a minor role.

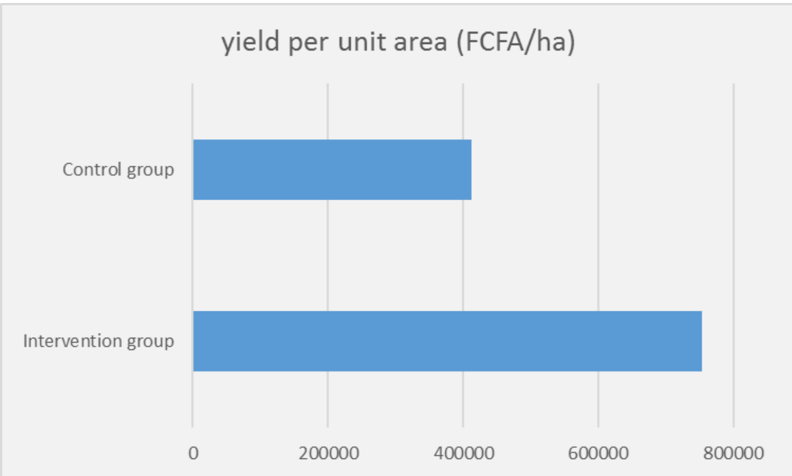


Fig. 5: Differences related to the development of the yield per unit area between “early” and “late” borrowers

In terms of external factors that had a negative impact on target achievement, the development of the Nigerian naira and the COVID-19 pandemic are worth mentioning. The value of the Nigerian currency, for

[7] The WEAI indicator studies various dimensions of female empowerment within agricultural activities and in relation to gender equality at home, see also International Food Policy Research Institute (IFPRI): https://ifpri.org/projet/weai

example, fell by over half between 2015 and 2021. This is relevant to the project to the extent that Nigeria is an important customer for the products of the Beninese agricultural sector, particularly cotton, and the negative development of the naira limited the sales options for Beninese producers accordingly. The largest drops in the currency's value took place as early as 2016, meaning that these effects were recorded in the impact study.

The data recorded as part of the impact study covers a period up to 2018 and therefore does not reflect the negative outcomes of the COVID-19 pandemic. It can be assumed that in addition to measurable negative effects from the pandemic at the project-executing agency's level (particularly at outcome level), the income situation was also negatively affected, meaning that the borrowers' living standards were impacted too (impact level). However, just like at the outcome level, these negative effects are regarded as temporary and have been factored out for the evaluation of the project.

Furthermore, it can be assumed that an additional product offering (CAIG) from one of the leading banks will make a structural impact in the sector, provided it is well received. This is indeed the case and, according to FECECAM, this has also motivated competing banks to refine their product range to avoid losing their shares in the market.

From the perspective of the evaluation, the financing measure's additionality is confirmed – owing less to the FC funds' refinancing effect and more to the regulatory impact of the equity-like loan. This has enabled the rural credit offering to be expanded and has also allowed the executing agency to meet the necessary capital requirements for the first time. Furthermore, it appears plausible that the advances in the product range and the technical improvements at the project-executing agency would not have been achieved without the project or would only have been achieved to a reduced extent.

The executing agency's structures have also been improved from a technical point of view. For instance, as part of the complementary measure, the branches' technical IT networks were enhanced, specifically by connecting up 22 branches in the north of the country. The ongoing improvement of digital structures is a focus area of the complementary measure in the project's follow-up phase.

From the current perspective, there were no comprehensive changes that had a negative effect on development policy. However, the existing weaknesses in the Beninese agricultural sector have become particularly clear since the outbreak of the COVID-19 pandemic. These include, in particular, its susceptibility to external shocks (see border closures to the important customer of Nigeria and market price fluctuations for farmed produce). The type of project was aimed less at bringing about structural change in rural areas and more at maintaining the status quo while improving conditions and increasing productivity. It was not possible to attain more in-depth modernisation in the farming sector through the increased financing of mechanisation investments.

The ongoing use of labour-intensive methods means that increased farming of farmland also triggers equivalent effects on employment. The impact study reveals that the increased use of operating materials and tools results in positive employment effects in over half of the loans granted. Each borrower creates an average of 0.84 jobs. Even though this figure does not relate to full-time positions but to zero-hours or seasonal workers, this effect is generally seen as positive.

However, in the context of Benin, the problem of widespread child labour must always be examined, particularly for labour-intensive plants such as cotton. Unfortunately, the impact study does not contain any specific information on this topic. The complex interdependencies between the employment of children and credit approval also do not permit any clear clarification of causes and effects. The credit approval process generally led to areas being farmed more intensively and additional workers being required as a result. From the aforementioned 0.84 jobs created, 0.30 were given to family members. However, it is not possible to ascertain what proportion of these family members were children. It is equally difficult to draw a conclusion regarding the extent to which the workers employed from outside of the families are children (from other families).

Furthermore, the project may also have the opposite effect: it is feasible that the monetary means made available by the granting of credit enable underage workers to be replaced by paid adult labourers, thereby countering child labour. Due to the lack of current data, it is not possible to determine with any certainty whether the project ultimately has a positive or negative effect on the employment of children.

Nevertheless, it remains certain that children in Benin are heavily affected by child labour. While official data on this subject is sparse, it can be assumed from statistics from UNESCO and the ILO that around one third of Beninese children under the age of 14 are forced to work, including in the agriculture sector. During peak periods in particular, when extra high numbers of workers are needed in the fields, working children are a daily sight in Benin. And yet, the project did not take any approaches to address this problem.

A credit programme cannot be expected to make any significant contribution to the reduction of child labour. However, it would probably have been helpful to at least push the subject into the spotlight by raising borrower awareness (e.g. by asking in the loan application whether the borrower plans to employ underage workers or whether there are any alternatives to this). Apart from an agreement concluded at the end of 2020 to review FECECAM's respective monitoring systems (with FECECAM itself stating that it has no data on this subject), the subject is not addressed by the project. Given the critical underlying conditions already identified in the Beninese agricultural sector, this appears to be inadequate.

In summary, the project achieves a good level of effectiveness in relation to the target group's living standards, particularly when it comes to income improvement and food security. While it was possible to increase the productivity of farmed land, the project was not able to significantly encourage any more advanced modernisation in agriculture, in particular through the financing of investments in mechanisation. The waiving of any project-related safeguards or awareness-raising measures related to child labour appears problematic in the context of Benin and should be addressed more in the follow-up phase. In view of this situation, the success of the effects at impact level is rated as limited.

Impact rating: 3

Sustainability

As its mid-term goal, FECECAM is striving to further expand its market share in the agricultural sector. If the executing agency is able to maintain or even expand its capital stock – despite the gradual repayment of the FC funds – it is plausible that the project's positive effects are sustainable and linked to this. According to the executing agency, its strategic plans contain several handling options for improving its equity and thus ultimately for substituting the FC funds. However, the conditions linked to these options would be less attractive, which is why the partner's clear preference is to continue its cooperation with FC in the form of further add-on loans.

The project-executing agency's economic situation is stable and has also successfully passed a stress test. FECECAM operates at a profit; even the preliminary annual report for 2020 records a profit of FCFA 1.6 billion (around EUR 2.4 million) with a balance sheet total of around FCFA 100 billion. According to the information provided, the (legally independent) members of the FECECAM network (Caisses locale de Credit Agricole Mutuel/CLCAM) were also able to generate a profit and thus increase their own equity reserves. Even though results for the year 2021 are predicted to fall as a result of the pandemic, the executing agency's stable economic situation contributes to its resilience to external factors.

There are potential future challenges in the area of human resources. These will be addressed by the partner as part of its strategic plans for 2021 to 2025. For instance, one of its focuses will be developing staff qualifications in view of its objectives.

Furthermore, the target group of ultimate borrowers – and indirectly the executing agency's agricultural loan business as well – is susceptible to external shocks. In particular, its dependence on volatile market prices and export relationships are significant potential risks to the rural population's income and living standards, as are environmental uncertainties. Given this state of affairs, an urgent need has been identified (also by the project-executing agency) related to the creation of options for providing protection against crop failures (e.g. caused by an extended period of drought). At present, however, commercial insurance companies appear unwilling to insure against these hard-to-calculate risks.

The complementary measure aimed to address the sustainability of the executing agency's rural credit portfolio in several areas, and this work was also continued in the follow-up phase (see previous section). The structural impacts at FECECAM include the review and updating of internal processes and the credit application and approval process. This work generates medium- and long-term effects, including from the development of the new product (CAIG).

The borrowers’ resilience to economic hurdles was strengthened to the extent that they now have permanent access to an additional credit offering. As a result of this extension to their financing base, some borrowers now no longer need to rely on informal lenders with excessive interest rates.

Furthermore, the impact study also revealed that the autonomy and social status of female borrowers had improved. According to over 80% of the female borrowers, the loans granted had had positive or very positive effects in this area.

With regard to the underlying conditions, reference is made here to the planned revisions to the regulation of the microfinance sector in the BCEAO Zone, supported by the United Nations Capital Development Fund (UNCDF). In principle, the aim here is to improve the sector’s stability and resilience and also take technological developments into account. However, depending on the content of future regulations, it cannot be ruled out that the scope of microfinance institutions may be subjected to restrictions.

No statements can be made at this time regarding the sustainable impact of the FC funds following repayment of the loan to the Beninese Ministry of Finance. The Ministry of Finance has yet to propose any specific uses for the funds from the repayment and interest. The funds may possibly be used in the previously mentioned FNDA fund, which could also contribute to the sustainability of the programme results through the future cooperation between FECECAM and FNDA.

From today’s perspective, the sustainability of the project is rated as good. The project-executing agency is planning to further expand its activities in rural areas, a goal that it is capable of achieving thanks to its good economic standing. With this, the ultimate borrowers will continue to have access to better credit offerings, which in turn will contribute to their improved resilience to external shocks. One factor that remains uncertain is the extent to which and how FECECAM will replace the FC loan once it has been repaid in full (expected to happen in 2028).

Sustainability rating: 2

Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being **relevance, effectiveness, efficiency** and **overarching developmental impact**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

Level 1	Very good result that clearly exceeds expectations
Level 2	Good result, fully in line with expectations and without any significant shortcomings
Level 3	Satisfactory result – project falls short of expectations but the positive results dominate
Level 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Level 5	Clearly inadequate result – despite some positive partial results, the negative results clearly dominate
Level 6	The project has no impact or the situation has actually deteriorated

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).