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Facilitating Investment in Sustainable Palm Oil in Mexico

CONVERGENCE
BLENDING GLOBAL FINANCE

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Executive Summary

Palm oil is intertwined with an abundance of value chains, is fundamental to a number of emerging market economies, and has driven quality of life improvements to millions of people globally. In 2024/2025 nearly 80 million metric tons of palm oil was produced globally. By 2027, the palm oil industry is projected to contribute upwards of $65 billion to the global economy.

Proliferating demand for the commodity rapidly expanded its cultivation, particularly in Southeast Asia, leading to near-catastrophic levels of rainforest deforestation and poorly regulated value chains characterized by worker exploitation. Development finance was effectively cut off from engagement in the sector given the high reputational risk.

Following decades of controversy, the palm oil sector, spurred by the growing global coordination around climate change, initiated efforts to revitalize the sustainability of the industry. Notably, this included the creation of a set of standards and certification processes for sustainable palm oil production governed by the Roundtable on Sustainable Palm Oil (RSPO).

In 2024, IDB Invest, the private sector arm of the Inter-American Development Bank, became the first development finance institution to close a deal in the palm oil sector in Latin America and the Caribbean in the last 15 years, partnering with Prolade S.A.P.I. de C.V., a Mexico-based, RSPO certified sustainable palm oil cultivator. As a company early in its growth journey, Prolade was encountering challenges raising the capital needed to expand. Local and international financiers lacked the requisite expertise assessing the unique characteristics of agribusinesses with revenues tied to greenfield plantations and many had restrictions to the sector due to the sector's historical reputation in other regions. Prolade presented IDB Invest an opportunity to i) bridge the financing gap faced by the company and enable the expansion of sustainable palm oil cultivation and ii) demonstrate how palm oil production could be executed sustainably, achieve a high level of development impact and attract follow-on investment.

IDB Invest used blended finance from the Canadian Climate Fund for the Private Sector in the Americas and the Finland-LAC Climate Blended Finance Fund to achieve these twin objectives. First, innovative structuring of the

SYNOPSIS

THEME	Sustainable agriculture
DONOR CAPITAL POOL	Canadian Climate Fund for the Private Sector in the Americas (C2F) Finland-LAC Blended Finance Climate Fund (FINLAC)
DONOR MANDATE	**C2F** – a blended finance fund, capitalized by the Government of Canada and managed by IDB Invest, that aims to catalyze greater private sector investment in climate mitigation and adaptation projects in Latin America and the Caribbean, paying particular attention to the most vulnerable countries. The resources have a cross-cutting mandate to invest in promoting gender equality. **FINLAC** – a blended finance fund, capitalized by the Government of Finland and managed by IDB Invest, that aims to catalyze greater private sector investment in climate mitigation and adaptation projects in Latin America and the Caribbean region, with a focus on gender quality, biodiversity and inclusion.
COUNTRY	Mexico
BORROWER	Prolade S.A.P.I. de C.V. – a private sustainable palm oil cultivator established in 2013 in Huimanguillo, Tabasco, Mexico
BORROWER CERTIFICATION	100% of output Roundtable on Sustainable Palm Oil (RSPO) Identity Preserved (IP) certified
TOTAL CULTIVATION AREA	Approx. 4,000 hectares 100% on previously degraded land

concessional loans, informed by Prolade's unique cash flow characteristics, allowed for debt repayment flexibility and promoted the long-term financial stability of the company. Secondly, IDB Invest embedded an outcome-based incentive scheme into the concessional loans that would encourage robust climate outcomes.

The palm oil sector is in the early stages of a market driven shift towards sustainability, social awareness and better regulation. Large scale buyers, traders and users of palm oil, motivated by public opinion, are pledging to establish wholly certified sustainable value chains. The partnership between IDB Invest and Prolade demonstrates how blended finance instruments can be used to incentivize, enable and prove the viability of sustainable business models in the palm oil sector, particularly for smaller, growth stage companies.

Key insights from this case study include:

- Alternative asset classes require specialized expertise to value and invest in. Blended finance can bridge the financing need where investment gaps exist.
- Blended finance can be used as a tool to incentivize and lower the cost of the transition to sustainable business models.
- Blended finance is best suited to addressing investability challenges, rather than a poor commercial or sustainability premise. A committed partner plays an important role, particularly in nascent sectors.

FINANCING FACILITY	Total corporate debt financing – $15 million • **IDB Invest (own account)** - $5 million senior secured mezzanine loan • **C2F** – $5 million concessional senior loan with mezzanine features • **FINLAC** – $5 million concessional senior loan with mezzanine features **Private capital mobilized** (at transaction level) – Prolade shareholder equity injections during loan term for company growth as required by loan covenants
OUTCOME-BASED METHODOLOGY	Achievement of predetermined climate milestones related to i) cogeneration of energy from industrial waste, ii) biochar production from biomass waste and iii) sequestration carbon credit issuance, are monetized into interest payment reduction. Capitalized interest on the C2F and FINLAC loans is reduced based on the number of milestones met over loan term.
EXPECTED IMPACT	• Sequestered carbon from biochar production: ~310,000 tCo2eq over 25 years • Expected emissions avoided: ~1,200,000 tCo2eq over 25 years • Expected yield of sustainably produced palm oil by 2030: 17.5 tons/hectare • Restore up ~7,000 hectares of degraded land

Introduction and Background

Palm oil is the world's most traded and consumed vegetable oil. It is a highly productive perennial crop that requires 4-10 times less land than other oilseeds. Palm oil is used in around 50% of packaged food products and about 70% of cosmetics. In certain regions, like Latin America and the Caribbean (LAC), palm oil is an important source of biofuel. As a high-yield crop with a versatility of uses, palm oil cultivation soared in the last 25 years increasing affordability and further stoking demand. For most of the world's population, palm oil is a common staple of everyday consumption.

Palm oil is almost entirely cultivated in the humid tropics of developing countries, with smallholder farmers comprising nearly half of all growers. In primary economy countries, the industry has contributed markedly to socioeconomic stability and improvements to the quality of life for those directly and indirectly involved in its production.

Yet, decades of rampant demand have turned palm oil into a contentious agricultural commodity. Palm oil cultivation has become synonymous with deforestation. It is estimated that about 5% of overall tropical deforestation is a direct result of palm oil cultivation. In Southeast Asia – specifically, Indonesia and Malaysia, representing about 85% of global palm oil production – expansion of cultivation led to unprecedented losses of tropical forests. This has had devastating effects for local biodiversity while also increasing the risk and severity of large-scale forest fires. While palm plantations sequester significantly more carbon than other industrially cultivated crops, they pale in comparison to natural rainforests and peatland. From a development finance perspective, despite the industry's proven poverty alleviation benefits, the severe public scrutiny and reputational/ headline risk associated with palm oil production has deterred and effectively cut off engagement and investments in this crop.

Efforts to improve the sustainability of palm oil value chains intensified in the mid-2000s. The objective was clear: ensure that the negative effects of cultivation practices used previously in Southeast Asia would not be repeated as other regions increased palm oil output. One notable outcome was the formulation of the global non-profit, the Roundtable on Sustainable Palm Oil (RSPO) in 2004. The purpose behind RSPO's founding was to create a set of voluntary sustainable palm oil cultivation standards that would motivate better cultivation practices and to certify palm oil industry stakeholders that adhered to these principles.

Over time, a confluence of factors, including the poor reputation of the palm oil industry, increasing environmental concerns and global coordination regarding the climate in general, and structural changes that were expected to occur in the palm market as a result, created a market-driven incentive to prioritize the environmental sustainability, productivity, biodiversity and social concerns in palm oil production.

Emerging palm oil markets, such as Mexico, presented a new frontier for sustainable practice and a new opportunity for public investors to support the development potential of the sector. It had been over 15 years since a multilateral development bank (MDB) or bilateral development finance institution (DFI) supported the palm oil sector. In the mid-2010s, IDB Invest, the private sector arm of the Inter-American Development Bank, began to actively seek out projects that could demonstrate how palm oil production could be executed sustainably, achieve a high level of development impact and attract follow-on investment.

In 2024, IDB Invest provided blended financing to Prolade S.A.P.I. de C.V. ("Prolade"), an early growth-stage, vertically integrated palm oil grower located in Huimanguillo, Tabasco, Mexico. Since its inception, sustainability has been integral to Prolade's business model. The founders understood that changing market preferences would unlock growth opportunities and profitability linked to the premiums of sustainably produced palm oil. Nonetheless, Prolade faced challenges raising growth capital. Local commercial banks and other investors lacked expertise in financing timberland/farmland assets, which are characterized by long time horizons, revenue vulnerability to exogenous factors such as weather conditions and volatility in international commodity markets, as well as unique liquidity tied to the harvest cycle.

This case study explores how IDB Invest used blended finance to fund an early-stage company and expand and deepen Prolade's sustainability commitments through an outcome-based finance model. Commercial financing from IDB Invest's own account, combined with concessional funds from the Canadian Climate Fund for the Private Sector in the Americas (C2F) and the Finland-LAC Blended Finance Climate Fund (FINLAC), was structured to provide loan repayment flexibility given the timeframe needed for crops to mature to reach optimal yield productivity and generate steady cash flows. Rather than have the company use scarce early-stage cash flows to service debt, the financing package allowed for revenue generated in the early years of the loan to be retained and instead allocated to company growth initiatives. The concessional loans did so by combining two products – principal payment deferral structure with a cash sweep mechanism and an interest rate reduction incentive structure linked to climate milestones. Importantly, the improved balance sheet management enabled by the IDB Invest financing would enhance the investability of Prolade for future rounds of commercial investment.

Design & Fundraising

Despite significant experience supporting perennial crops and the growing economic importance of palm oil production in the LAC region, IDB Invest had no track record in the sector until 2017 when the bank considered financing a large-scale palm oil producer in Ecuador. This was mainly tied to the industry's controversial reputation. However, the growing commitment among growers, buyers, and traders of palm oil to revitalize the industry's reputation through stricter deforestation control, better social governance of the value chain and better traceability of raw materials, presented a new opportunity for IDB Invest to engage in the sector and help facilitate these key objectives. While the financing in Ecuador did not materialize, it helped IDB Invest gain knowledge on the palm oil sector in the region.

In 2018, IDB Invest began its engagement with Prolade. IDB Invest had found it challenging to find a palm oil client that i) had capital needs aligned with IDB Invest's investment requirements, and ii) was sufficiently vertically integrated so that the entire value chain could be feasibly assessed to meet IDB Invest's high operational and climate standards. A complicating factor was that at the time, IDB Invest did not have a precedent transaction to illustrate the level of governance and operational standards required of the client, as well as how the client could benefit in terms of sustainability outcomes and product demand if those standards were met.

The palm oil market in Mexico at the time was effectively untapped. Despite favourable growing conditions for palm oil in much of southern Mexico, the country is a net importer of the commodity. In 2022, Mexico imported $550 million in palm oil, while domestic output accounted for less than 1% of global production.

Prolade's founders understood that the future of the palm oil industry was centered around sustainability, RSPO certification and the associated price premiums. The global push for more environmentally conscious production practices has increased demand from mainstream buyers, traders and consumer goods manufacturers for certified sustainable palm oil. Limited supply relative to market demand has driven higher equilibrium prices. In general, RSPO-certified palm oil and palm oil derivatives have generated a price premium of 8-15% over normal palm oil. Overall, sustainability was good business. With only about 10% of global palm oil cultivation meeting RSPO standards, certification presented an enormous business opportunity. For IDB Invest, this was a critically important draw. It displayed Prolade's willingness to meet IDB Invest's sustainability ambitions and addressed the transition risk at the outset. Transition risk refers to the investment risks associated with business models that do not sufficiently adapt to changing market conditions due to climate change.

Overview of the Sustainable Palm Oil Market

What is Palm Oil?

Palm oil is derived from the fruit (fresh fruit bunches, FFBs) of the oil palm tree. Crude palm oil is produced by milling the fleshy part of FFBs, whereas palm kernel oil is obtained by crushing the fruit's interior kernels. Crude oil extracts are refined to remove impurities. Refined crude palm oil is used in edible products and cosmetics, while refined palm kernel oil is used in non-edible products like detergents.

The Roundtable on Sustainable Palm Oil (RSPO)

RSPO is a voluntary membership-based organization, formed in 2004 to create and implement a global set of standards for the sustainable production and procurement of palm oil.

These standards apply to seven stakeholder groups engaged in the palm oil sector:

i. growers
ii. processors and traders
iii. consumer goods manufacturers
iv. retailers
v. banks and investors
vi. NGOs, and
vii. policy makers

Standards are reviewed and revised on a predetermined cycle based on feedback from industry stakeholders. RSPO also issues an Independent Smallholder Standard certification for growers with plantations of 50 hectares (ha) or less, given the significant role smallholder farmers play in palm oil production globally. This unique certification aims to reduce the financial and procedural burden of the certification process for small/independent growers and improve their awareness of sustainable practices. To date, RSPO membership comprises over 5,500 organizations across more than 90 countries. More than 375,000 smallholder ha have been certified, representing about 8% of all smallholder palm oil plantation area globally.

Certification

RSPO certifies four supply chain models for palm oil and palm oil derivatives:

1. **Identity Preserved** – certified sustainable palm oil from a single source that is kept separate from non-certified sustainable palm oil throughout the value chain.
2. **Mass Balance** – certified sustainable palm oil that is mixed with non-certified sustainable palm oil at some point in the value chain.
3. **Segregated** – certified sustainable palm oil from multiple certified sources that is kept separate from non-certified sustainable palm oil throughout the value chain.
4. **RSPO credits** – sustainability credits generated by growers, crushers and independent smallholder producers to encourage the continued expansion of RSPO certified production. Various credit types exist linked to different stages of palm oil production[1]. RSPO hosts a digital marketplace for palm oil credit trading. This allows credit sellers to access an additional revenue stream and buyers to offset their palm oil usage.

The Sustainable Palm Oil Market

Structural characteristics of the palm oil market and palm oil production make market entry more feasible and sustainable standards more attainable for smaller companies and growers than in other produce markets. Margins tend

1 RSPO recognizes six credit types: Certified Sustainable Palm Oil Credits (CSPO), Certified Sustainable Palm Kernel Expeller Credits (CSPKE), Certified Sustainable Palm Kernel Oil Credits (CSPKO), Independent Smallholder Certified Sustainable Palm Oil Credits (IS-CSPO), Independent Smallholder Certified Sustainable Palm Kernel Expeller Credits (IS-CSPKE), Independent Smallholder Certified Sustainable Palm Kernel Oil Credits (IS-CSPKO).

to be much higher in palm oil cultivation than other produce industries, especially for certified sustainable or organic production. Historical average profit margins for palm oil producers are around 30%, compared to less than 10% for organic coffee producers for example. This is in part because palm plantations are less intensive to maintain. As a less intensive crop, palm oil has lower input demand, which reduces costs linked to monitoring sustainability standards across supply chains. In supply saturated markets like bananas or coffee, the additional costs required to meet organic or sustainability standards shrink margins to such a degree that only very large-scale operations can achieve positive cash flows through economies of scale. Saturated markets also face much higher price volatility risk. For example, organic coffee producers exhibit negative margins in some years due to steep drops in prevailing market prices. Further contributing to the profitability of palm oil production is that palm plantations tend to be much larger than those of other agricultural commodities, leading to higher yields. Ultimately, palm oil companies are intrinsically more bankable than most agribusiness sectors.

Box 1. Summary of palm oil cultivation and RSPO certification.

Developing the climate thesis with Prolade

At the outset of its engagement with IDB Invest, Prolade had already begun integrating sustainability measures into its business model. For example, land acquisition only included parcels of previously degraded land (i.e., previously deforested land pasture or other crop uses), which could be Forest Stewardship Council (FSC) certified[2]. Prolade was also paying social security for its workers, a rare practice in the agriculture sector in both developed and developing markets.

For IDB Invest, Prolade's ambition to meet RSPO standards was a strong starting point. IDB Invest's track record in agribusiness financing had shown that starting at the ground floor of a company's sustainability transition could be very complex, expensive and only attainable over a long time horizon. Most agribusiness companies in the region are family-owned, with entrenched approaches to farming and operating. For such companies, encouraging the new governance structures, budgeting systems and traceability of inputs that are required of certification frameworks can be arduous. However, even with Prolade's existing sustainability ambitions, IDB Invest wanted to go further. IDB Invest required that as the first investment made by an international finance institution in the LAC palm oil sector for more than a decade, the environmental, social and governance thesis would meet a high standard.

Leveraging the lessons learned from the engagement with Grupo Oleana in 2017 and the expertise of a series of external consultants with technical knowledge of palm oil cultivation, IDB Invest highlighted several aspects of Prolade's business model that could be developed to strengthen its marketable sustainability. These included developing a procedure for land tenure and acquisition, for both land title and with respect to biodiversity; developing robust greenhouse gas emissions monitoring and reporting; and strengthening corporate governance. In its Environmental and Social Impact Assessment (ESIA), Prolade had also outlined its intention to develop a biochar program. Biochar is charcoal derived from the burning of organic materials in a zero-oxygen environment, which can then be sequestered in the soil. The biochar program had the potential to vastly enhance the sustainability case of the transaction and could provide Prolade an alternative income stream through the sale of high-quality sequestration carbon credits. IDB Invest saw it as critical that Prolade prioritize this concept.

2 Utilizing previously degraded land for palm oil cultivation is a common practice in LAC. Nearly 80% of current palm oil production in the region is on degraded land, compared to less than half in Southeast Asia.

The due diligence process to develop a sustainability plan that met IDB Invest standards was intensive for Prolade and imposed upfront costs before any financing was received. Prolade's founders remained engaged because they understood the expected future financial benefits linked to the premiums of certified sustainable palm oil. Likewise, existing company shareholders, primarily local Mexican investors, also took a longer-term view to these upfront costs because of the potential market penetration a strong climate-aware business model could provide.

Attracting investment in timberland and farmland assets

Prolade encountered fundraising challenges typical of an early growth-stage company[3]. One primary barrier was the unique investment structure of greenfield timberland/farmland assets. Box 2 provides an overview.

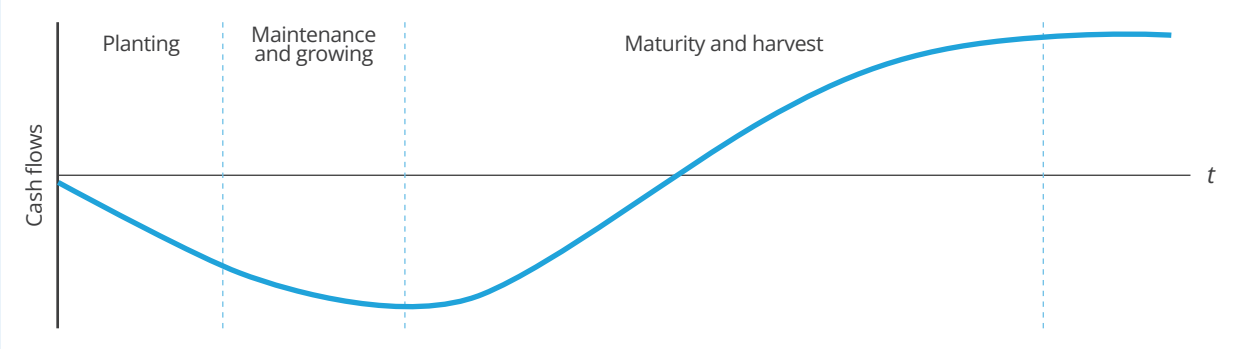
Few appropriate sources of long-term financing existed in the domestic market. Domestic commercial banks were far more familiar lending to the large-scale agriculture

Investing in Timberland/Farmland Assets

Investment in greenfield timberland/farmland assets involves providing financing or equity to landowners and/or plantation operators and farmers to plant, maintain and harvest trees (timberland) or crops (farmland).

Cash flows and returns for investors are tied to the harvest and sale of the raw material. In the case of timberland and perennial tree-based crops like palm oil, cash flows are typically negative in the early years of the project because trees require time to mature until they are ready for harvest or begin bearing fruit (a J-curve return structure, see below). For oil producing palms, this is typically 3-5 years. For timberland assets linked to high-quality lumber used in construction, harvest typically occurs 25 years or more after planting. The long investment time horizon, cash flow instability linked to price volatility of the underlying commodity and general illiquidity of the asset class mean timberland/farmland investment is only suited to certain investor classes (e.g., institutional investors with long-term liabilities).

Timberland/farmland assets are generally attractive to these investors because they have little correlation to other asset classes, are generally less impacted by macroeconomic factors (although price volatility is of concern), and they can produce higher yields for investors than equities and fixed income.



Box 2: Overview of timberland and farmland assets.

3 Prolade's fundraising challenges were also exacerbated by the COVID-19 pandemic.

4 C2F is a blended finance fund, capitalized by the Government of Canada and managed by IDB Invest, that invests in climate mitigation and adaptation private sector projects in vulnerable countries in the LAC region. The resources have a cross-cutting mandate to invest in promoting gender equality. FINLAC is a blended finance fund, capitalized by the Government of Finland and managed by IDB Invest, that invests in private sector climate mitigation and adaptation projects in vulnerable countries in the LAC region. The fund has a particular focus on gender equality, diversity, inclusion, and biodiversity outcomes.

companies owned by well-established families that dominated the region and lacked experience lending to growth-stage agribusinesses. Without positive cash flows and an already strong balance sheet, banks were unable to properly assess the nature of Prolade's capital needs.

Even for IDB Invest, lending to an early growth-stage agribusiness was somewhat new territory. Like the domestic commercial banks, IDB Invest was used to taking on mature agribusiness balance sheet risk via senior debt. The combination of negative cash flows early in the loan period and volatility of the underlying commodity market presented an issue for IDB Invest and necessitated the need for innovative structuring and blended finance.

Addressing growth-stage financing needs using blended finance

The donor community, like the development finance institutions, was reticent to fund initiatives in the palm oil sector given the environmental reputation risks. Approval for use of these funds to support opportunities in the palm oil sector hinged on the client's ability to demonstrate a high level of commitment to environmental sustainability which could justify a donor partner taking on the high perceived headline risk. This is where the depth of Prolade's climate thesis proved critical. To ensure the support of the C2F and FINLAC concessional funds in the transaction, a few elements were fundamental to the success of the investment thesis. First was the prioritization of the biochar program. This would allow Prolade to generate positive climate impacts and added circular economy aspects to its business model, as well as generate an additional revenue stream. Second was the financial structure, while expressly structured to affirm the financial feasibility of Prolade's business model, enabled a long-term commitment to environmental sustainability by allowing for retained earnings to fund the targeted sustainability initiatives. Lastly, there was the proof-of-concept potential of the transaction. IDB Invest placed high value on the opportunity to showcase a model for sustainable investment in palm oil to the development community. An important aspect of this was the carbon credit scheme linked to the biochar program because it presented a market-based approach to long-term carbon sequestration that had the potential to be replicated across the region.

Given the market risk (price volatility of palm oil), business risk (uncertainties regarding inputs and weather uncertainties) and liquidity risk presented by Prolade's balance sheet, IDB Invest deemed that a significant part of the financing package should be concessional finance to mitigate risks and attain the target results. Liquidity risk was of particular importance. Prolade had existing senior loans from international and domestic lenders on its balance sheet. As a lender, IDB Invest needed to ensure the company's capacity to service its existing debt as well as the proposed bank-sponsored debt facility. Second, from an impact and company sustainability standpoint, the development bank believed it critical to ensure that the borrower was not siphoning scarce cash flows away from reinvestment opportunities simply to meet debt obligations. As such, the financing was structured so that 2/3s were concessional capital and 1/3 market-rate capital.

The final financing facility was comprised of $5 million in own account senior secured mezzanine debt from IDB Invest, and two $5 million concessional senior loans with mezzanine features managed by IDB Invest on behalf of C2F and FINLAC. IDB Invest structured the concessional component by combining two products:

1. a principal payment deferral structure, with capitalization of interest, except for a fixed floor interest payment of 1%
2. an incentive structure, or outcome-based finance structure, with an interest rate reduction linked to the achievement of climate milestones.

The principal repayment mechanism reduces periodic payment amounts by deferring principal repayment to loan maturity. The principal deferral structure is enabled by a cash sweep mechanism, which as will be explained in the Capital Structure section, allows Prolade to prepay loans based on cash flow levels. The interest payment mechanism reduces Prolade's cash interest burden by capitalizing and compounding interest to maturity - apart from a 1% floor - and is paired with an outcome-based mechanism rewarding incremental impact. The overall debt structure aims to:

1. reduce Prolade's debt service burden so that retained earnings can be invested in growth,
2. while ensuring the loan is repaid pro-actively when cash flow conditions allow, while
3. encouraging additional impactful climate activities.

Demonstration effect

A core motivation behind IDB Invest's partnership with Prolade was to showcase a replicable financing and business model for sustainable palm oil. In communications with IDB Invest, RSPO underscored the importance of generating a demonstrable transaction. The deal could signal to the market that palm oil can represent a strong climate finance opportunity and that the very components that enhance the environmental sustainability of the sector also strengthen the economics for producers. It was a particularly complex transaction, given the multitude of unique elements that had to be designed or considered, including market and liquidity risks and the sector's environmental reputation. The reason was that the Prolade deal was to create a set of environmental and governance pre-requisites, such as RSPO certification, for future clients in the palm oil sector. The aim is that this baseline will accelerate future transactions and expand the availability of capital for producers from donors, banks and other investors who are increasingly committed to only backing palm oil assets that is sustainably produced.

The transaction also illustrated the multi-faceted value of blended finance to improving sustainability in the sector. Critically, the concessional loans to Prolade achieved two things:

1. they improved the financial sustainability of its business model especially in the initial years of cultivation; and
2. they facilitated/incentivized buy-in from the company to pursue the additional climate outcomes sought by IDB Invest and donors.

Finally, in terms of the technical elements of the financing package, IDB Invest selected financial tools with proven replicability. For example, the principal payment deferral structure and interest rate reduction tied to climate outcomes, had previously featured in IDB Invest's support of Engie's accelerated closure of coal power plants in Chile. Likewise, IDB Invest used an innovative application of a cash sweep mechanism, a common instrument in project and corporate finance linked to debt repayment.

Capital Structure

IDB Invest extended a 10-year $15 million mezzanine finance facility to Prolade. The package comprised a $5 million senior secured mezzanine own account loan that included Payment in Kind (PIK) features (in the form of interest capitalization during the grace period) and a back-ended amortization schedule[5]. Pricing for the IDB Invest own account loan was constructed using comparable USD-denominated instruments in Mexico and applicable loan margin above the 6-month Secured Overnight Financing Rate (SOFR). The structure also included two $5 million concessional senior loans with mezzanine features from C2F and FINLAC, managed by IDB Invest. The concessional loans include their own PIK features; however, in this case, until maturity of the loans.

PROVIDER	AMOUNT	SENIORITY	CONTINGENCIES
IDB Invest Own account loan	$5 million	Mezzanine, senior secured	Earnings before interest, taxes, depreciation and amortization (EBITDA) participation at periodic payment dates
C2F Concessional loan, managed by IDB Invest	$5 million	Senior secured, with mezzanine features	Interest rate reduction on capitalized interest payment at maturity based on achievement of climate milestones over term of loan Principal deferral structure with cash sweep mechanism
FINLAC Concessional loan, managed by IDB Invest	$5 million	Senior secured, with mezzanine features	Interest rate reduction on capitalized interest payment at maturity based on achievement of climate milestones over term of loan Principal deferral structure with cash sweep mechanism
Prolade Shareholder equity injections required by financial covenants on loans and retained earnings directed to reinvestment	--	--	--

Table 1. Structure of IDB Invest debt facility

Mezzanine instruments are often used to finance growth-stage companies. They provide greater structural flexibility than senior loan products, allowing them to be better tailored to the unique cash flow dynamics of the borrower. Mezzanine features enable a higher rate of return as well as upside, such as warrants, conversion rights and EBITDA participation rights[6]. Despite these benefits, mezzanine instruments have a relatively short history in the LAC region, due to limited use from domestic commercial banks and asset managers and cursory familiarity among investee companies. While the mezzanine market has evolved in the past decade due to an enabling regulatory environment and increased demand from middle-market borrowers, use of subordinated financing remains relatively uncommon.

In the case of Prolade, the financing needed to have the unique features that aligned with the particular

5 A Payment in Kind debt feature capitalizes interest payments until maturity, reducing the cash payment at periodic payment dates. Since interest is deferred to a later date, it can increase the overall amount of interest paid because it increases the amount of debt outstanding at subsequent periodic interest payment dates to which the interest rate is applied. PIK is typically applied to mezzanine debt.

6 Warrants and equity conversion rights are equity-like features applied to debt instruments. Warrants allow the lender to subscribe to new shares in the borrower at a fixed price. Equity conversion rights allow the lender to convert outstanding loan value into shares at a predetermined conversion ratio (# of shares per $X par value of debt).

characteristics of a growth-stage company. The extra Beta (market systematic risk) presented by i) the company's negative EBITDA, and ii) the need for debt service flexibility given expected business expansion plans and liquidity constraints presented by the cash flow structure of timberland/farmland assets, made a mezzanine instrument the most suitable financing option. The IDB Invest own account loan includes EBITDA participation rights at periodic interest payment dates.

Structural elements of the concessional loans

The PIK interest rate feature on the C2F and FINLAC loans is a capitalized repayment structure, except for a fixed minimum floor interest of 100 basis points per annum (bps p.a.) paid on a semi-annual basis. Interest above the floor rate is known as the "income fee", which is capitalized and paid at maturity at a compounded rate that makes it equal to the IDB Invest own account loan at initiation (spread above 6-month SOFR). At maturity, the income fee is adjusted by an interest rate incentive scheme (described below) linked to the achievement of predetermined climate milestones.

The concessional loans utilize a cash sweep mechanism to tailor repayment to the actual cash flows of Prolade. Effectively, the mechanism creates a synthetic amortization schedule that maximizes company liquidity. Typically, a cash sweep requires a borrower to set aside any excess cash produced in a period for debt service. In a project finance context, a cash sweep would ensure that cash flows (net of costs) generated by asset operations are first allocated to pay down existing debt.

IDB Invest adapted this model to a corporate finance context in a way that preserved Prolade's cash flows for reinvestment. Specifically, the cash sweep connected to the concessional loans ensures that only excess cash is allocated to repaying loans' principals.

The structure works as follows: except for the 1% floor interest rate, Prolade only makes principal payments if the company is performing well (i.e., generating excess cash flow). In this case, Prolade makes a mandatory prepayment on outstanding principal, which reduces the balloon payment at maturity, therefore ultimately reducing the capitalized interest due at maturity. If the company is not generating sufficient excess cash flows in any given period, there is no principal payment and only the floor interest payment is made. The structure boosts liquidity and operational sustainability by protecting against exogenous factors that could negatively impact company revenues, mainly price volatility in the international commodity market and low crop yields from poor growing conditions. Overall, the structuring improves cash flow management. Moreover, a grace period of two years is provided before the mechanism comes into effect, to account for the more acute cash flow uncertainty in the initial stages of cultivation (planting and early growth period). Excess cash flow in this period is retained given the higher relative risk of operations. Stress testing and scenario analysis were essential to determine the amount of retained cash flow Prolade needed to continue to grow the company.

Figure 1 on the following page provides a further breakdown of the cash sweep.

Does annual net cash flow exceed agreed threshold?

NO

No principal payment on concessional loans is made. Only 1% floor interest is paid.

YES

A mandatory principal payment is made on the concessional loans equal to either 50% of net cash flows OR the amortization required to cause the cumulative mandatory prepayment to equal the Target Blended Finance Amortization Schedule (TBFAS).

See right

TARGET BLENDED FINANCE AMORTIZATION SCHEDULE

Year	Principal Amortization
1+2	0%
3	12.5%
4	25%
5	37.5%
6	50%
7	62.5%
8	75%
9	87.5%
10	100%

* Enforced until full amortization of the concessional loans

HYPOTHETICAL DEBT SERVICE PAYMENT ON CONCESSIONAL LOANS

In Year 5, Prolade has generated cash flows above the agreed threshold. On the payment date, Prolade will make a 1% interest payment based on outstanding principal and pay down either i) an amount corresponding of 50% of cash generated the prior year to reduce the outstanding principal of the concessional loans, OR ii) the amount which ensures that 37.5% of the principal of the concessional loans has been cumulatively repaid (i.e., up to US$3.75 million in Year 5); see Year 5 in above TBFAS. Therefore, in any given year with a cash flow superior to the agreed threshold, the company can either repay the principal amount up to the target amortization schedule, or an amount equal to 50% of net cash flow.

ADDITIONAL COVENANTS OF CASH SWEEP MECHANISM	
Dividends	• No dividend payout to shareholders unless a mandatory prepayment is made that satisfies the TBFAS
Equity carve-out	• New injections of equity from existing or new shareholders do not trigger the mandatory prepayment (not considered cash flows) • Aims to ensure new equity is directed towards growth initiatives and not paying down debt
Limits on prepayment	• Prepayments cannot exceed the TBFAS • Protects company liquidity

Figure 1: Breakdown of cash sweep mechanism on concessional loans

Outcome-based incentive structure

CLIMATE MILESTONE	TIMELINE	INTEREST RATE REDUCTION
15% residual biomass produced during operating year is transformed into biochar meeting independent certification	By end of Year 3	50bps
Registration of biochar in a carbon removal standard and registry company	By end of Year 2	50bps
Certification and issuance of 6,000 biochar sequestration credits	By end of Year 4	50bps
Certification and issuance of 12,000 biochar sequestration credits	By end of year 5	75bps
Commissioning of biogas cogeneration using biomethane derived from palm oil mill effluent with a minimum capacity of 500KW	By end of year 4	75bps
Total potential rate reduction:		**300bps**

Table 2. Concessional loan climate milestones and rate reduction scheme.

Proceeds of the two concessional loans are intended for a series of climate-linked activities:

1. acquisition of previously degraded/deforested land for future plantations;
2. production of biochar from residual biomass;
3. expansion of sustainable soil-water management practices;
4. expansion of an existing extraction mill for production of RSPO certified palm oil; and
5. additional working capital and capital expenditure needs.

Both loans carry an interest rate spread reduction if predefined milestones connected to the above activities are met (see Table 2 below). The realized interest rate reduction is applied from the following period after the validation of the milestone achievement and applied to the income fee, or the amount of interest capitalized over the loan's term, which is due at maturity of the concessional loans. Prolade must meet the following two climate prerequisites before they are eligible for interest rate discounts;

1. **Procurement** – for biochar-related milestones. Prolade's purchase of pyrolizers (the systems used to decompose organic matter into biochar) must be done through a competitive process
2. **RSPO certification** – 100% of palm oil produced and milled by Prolade is certified, and all land acquisition is consistent with current RSPO standards

As of January 2026, Prolade has successfully achieved the milestone of registering its biochar program in a carbon removal standard and registry company.

Figure 2 below, is an indicative debt service schedule of the overall IDB Invest debt facility.

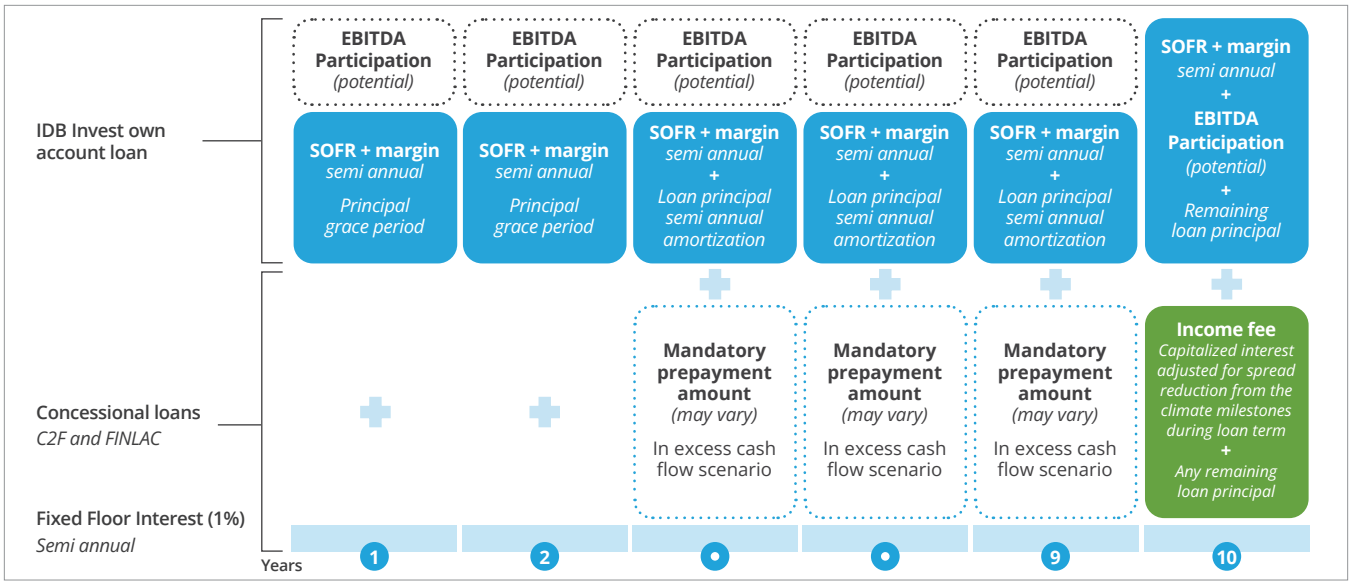


Figure 2: Indicative debt service schedule of IDB Invest's debt facility.

Legal Structure & Governance

Prolade S.A.P.I. de C.V. is a private, Mexico-based palm oil cultivator established in 2013 in Huimanguillo, Tabasco. The company, currently the 4th largest palm oil producer in Mexico by total plantation area, produces RSPO-certified palm oil and is one of the first businesses in Mexico to meet RSPO certification standards. Prolade is vertically integrated in the palm oil value chain, which enables it to have greater control over FFB quality and harvest management. Prolade does not rely on a supply chain of smallholder farmers for palm cultivation but rather maintains its own plantations across 18 estates. The company directly owns and operates ~3,200 ha of plantations and another ~800 ha through joint ventures through a profit-sharing structure with landowners. As of October 2023, all ~4,000 ha of plantation were 100% RSPO certified sustainable. Prolade's activities and expansion plans, including those supported by the IDB Invest financing, are expected to restore around 7,000 ha of previously degraded land.

Operations & Impact

Operations

Prolade currently operates ~4,000 ha of oil palm plantations. Yields have averaged around 5.5–6 tons/ha, which exceed those historically realized in Indonesia and Malaysia (< 3.5 tons/ha) despite Prolade's exclusive use of previously degraded land. Prolade operates its own extraction mill machinery to produce both crude palm oil and palm kernel oil. It is expected that the IDB Invest financing will facilitate a two-phase expansion of the mill to increase capacity from 15 tons/hour to 45 tons/hour. The mill also has the potential to produce palm kernel meal for feed use in the Mexican dairy market. Expected additional capital investments include the capture of methane generated by waste processing and the replacement of fossil fuel energy sources with solar power and battery storage.

A primary operational challenge for Prolade has been overcoming the long-standing traditional agricultural approaches, governance structures and behaviours endemic to agricultural production in Mexico. For example, commonly employed planting schedules that are based on weather may not coincide with more formalized approaches that consider budgeting and business plans. In part, this is a symptom of the discrepancy between what is required of broad-based certification or professional standards systems, like RSPO or the International Finance Corporation (IFC) Performance Standards, and the unique realities on the ground.

The core operational focus for Prolade in the short- to medium-term is hedging key risks, especially drought risk. In 2023-2024, southern Mexico endured one of the worst droughts on record. The situation proved how drought risk exacerbates other primary risk factors, including credit risk, operational risk, and valuation risk. Prolade is seeking to invest significantly in irrigation systems to hedge risk, boost yield and elevate its environmental impact by increasing output on less land. The company expects that the introduction of irrigation could increase yields from an expected maximum of 15.3 tons/ha to 17.5 tons/ha by 2030. Other risks, such as price volatility are more difficult to hedge; however, Prolade is somewhat insulated from severe price shocks given the stable demand for palm oil as a fuel source in the region.

Impact

Prolade's engagement with IDB Invest deepened its Environmental and Social management procedures and led to the creation of an internal Environmental and Social Action Plan (ESAP). The degree of detail required by IDB Invest under IFC Performance Standards and RSPO was onerous for Prolade, necessitating coordination and agreement from various layers of consultants across various impact areas. For IDB Invest, however, this attention to detail was critical. As mentioned, the development bank's engagement depended on the transaction having a robust climate thesis.

Environment

A critical element of the transaction's climate thesis was the biochar program. The use of biochar would reduce biomass waste and incentivize a circular economy model. Further, biochar use would reduce emissions from fertilizer use and improve soil conservation to ultimately boost productivity. Although Prolade had already piloted a small-scale biochar project, the terms and conditions of the concessional loans were fundamental to incentivize Prolade to prioritize the scale-up of this initiative. The concessional loans' incentive scheme also encouraged the issuance of sequestration carbon credits from the biochar work, designed to unlock an additional income stream for Prolade, and make the company the first issuer of palm oil derived sequestration carbon credits in the region. Prolade will seek to issue Co2 Removal Certificates (CORC), each representing one metric ton of Co2 permanently removed from the atmosphere. Credits will be issued through Puro.Earth.

Palm plantations absorb a net average of 64 equivalent tons of carbon dioxide (tCo2eq) per ha per year. Plantations cultivated on degraded rather than deforested land have an amplified Co2 reduction benefit because they avoid emissions produced from deforestation work (machinery, burning, etc.) and do not remove the higher carbon capture capacity of natural tropical rainforests and peatland. Table 3 outlines some headline climate outcomes of the transaction.

METRIC	EXPECTED OUTCOME
Carbon sequestered through biochar program *(emissions otherwise emitted due to decomposition of biomass waste produced from operations)*	~308,000 tCo2eq over 25 years
Application of biochar to soil *(emissions reduction from reduced need of synthetic fertilizer)*	~62,000 tCo2eq over 25 years
Combustion of captured palm oil mill effluent *(emissions reduction from the combustion of biomethane to power the extraction mill and biochar pyrolysis units in place of diesel, and which would otherwise be vented into the atmosphere)*	~575,000 tCo2eq over 25 years
Total emissions reduction facilitated by the transaction	**~1,200,000 tCo2eq over 25 years** **~375,000 tCo2eq over 10-year life of the loan**

Table 3. Expected emissions reduction achieved through Prolade business model.

Social

The poverty rate in Huimanguillo stands at about 62%, about double the national average in Mexico. In addition to its commitment to make social security payments to its farmers, Prolade is also developing employment opportunities for the local community. The expected operational expansion will increase the size of its workforce by over 60% by 2025. Given the underrepresentation of women in the sector, Prolade also took steps to enhance the gender awareness of its business model by developing a more comprehensive E&S framework. Prolade signed IDB Invest's women empowerment principles, conducted a gender GAP analysis for more gender equitable hiring practices and adopted protocols to address sexual harassment.

Financial additionality of development finance involvement

The combination of blended finance and innovative financial structuring unlocked the capital required for Prolade's expansion and sustainability ambitions, with a level of financial flexibility that was not otherwise available in the market. These tools were tailored to the cash flow characteristics of the asset class and Prolade's stage of growth. Recalling that domestic lenders lacked experience modelling the particularities of timberland/farmland cash flows and the general aversion to financing palm oil among donors, mainstream lenders and philanthropies, Prolade was unlikely to secure growth capital had it not been for blended finance. For IDB Invest, the partnership with Prolade represents a first step towards systemic mobilization of commercial resources to sustainable palm oil companies in the region. The use of concessional instruments intends to i) prove the viability of business models, and ii) demonstrate the economic case for environmentally sound operations linked to productivity increases, cost reductions and additional sources of revenues, to eventually deepen the quantum of capital and breadth of financial instruments available to investee companies in the sector. Proof of concept transactions using blended finance contribute to market-building efforts by helping to better align market perceptions with market realities and promote replication through wholly commercialized structures.

At the project level more specifically, the transaction is an example of indirect mobilization. The repayment flexibility of the concessional and IDB Invest loans permitted Prolade to retain earnings and reinvest to grow the company. Other financing sources (local commercial banks) would have instead required cash flows be routed to capital costs, with less funds available to the firm. Moreover, debt to equity covenants of the IDB Invest corporate financing required new shareholder equity injections into the company prior to disbursements, increasing Prolade's equity base over the life of the loan. The growth enabled by the IDB Invest debt facility also allows Prolade to be in a more advantageous position to raise future funds. The ultimate goal is to enable Prolade to finance future expansion by tapping into the local capital market, when balance sheet risk stabilizes as the company matures and cash flows have greater predictability.

Key Insights

i Alternative asset classes require specialized expertise to value and invest in. Blended finance can bridge the financing need where investment gaps exist.

Timberland/farmland assets are only suited to specific investor classes given their unique characteristics. Due to a lack of market exposure and different operational mandates, conventional financiers in Mexico did not possess the capacity to properly evaluate Prolade's business model. For example, applying typical financial ratios that are used in conventional corporate finance to greenfield palm oil cultivation places an unfeasible repayment burden on the borrower who may need to wait 5-10 years to generate sufficient cash flow. The structure of the concessional loans was explicitly designed to help Prolade overcome the scarcity of appropriate financing options. The principal payment deferral structure, combined with the embedded outcome-based incentive structure, provided essential repayment flexibility, reduced capital cost and improved debt service coverage. The back-ended amortization schedule improved early-stage credit worthiness by reducing the heightened default risk early in the loans' term, where cash flows are lowest and vulnerability to volatility is highest. The value of IDB Invest's structuring and blended finance expertise should not be minimized. While blended finance helped to solidify the investability of Prolade, the IDB Invest team delivered the structuring expertise demanded of timberland/farmland assets. The development bank's longstanding exposure to agribusiness opportunities in the region, blended finance structuring experience and suite of implementable blended finance instruments from past transactions made them a fundamental contributor to the success of the financing, overcoming the shortfalls of other potential partners. Looking forward, there is the hope that development banks like IDB Invest continue to develop their exposure to earlier stage assets in the agribusiness sector and become more willing to take on less mature balance sheet risk - blended finance can play a central role to facilitate this.

ii Blended finance can be used as a tool to incentivize and lower the cost of the transition to sustainable business models.

The transition to a lower carbon economy is underway. The question is no longer if, but when do existing business models need to be reworked to succeed in the new market dynamic. This evolution is already well underway in some agricultural commodity sectors, for example, FSC certification is gradually becoming a prerequisite for timber production in many developed markets. In the palm oil sector, many of the largest traders and buyers of refined oil are pledging to fully transition to purchasing only RSPO certified product. A demand-driven transition is a significant validation of sustainable business models and translates into tangible earnings premiums for producers who prioritize these aspects of their operations. Blended finance can prove the viability of alternative income streams and a comprehensive business model linked to sustainability. The activities incentivized by the climate milestones aim to unlock additional revenue from the biochar carbon credit scheme, alongside the premiums received for producing certified palm oil and the economic savings from the productive use of industrial waste into fertilizers or energy. It is important to keep in mind that companies are made up of various principals, agents and stakeholders, with varying interests and objectives. Blended incentive schemes are proven tools to incent and empower positive changes to internal company functions by accounting for these diverse priorities and aligning them to particular goals that benefit the majority. In the case of Prolade, the incentive structure empowered the founders to put forward a business model that was otherwise not a leading objective of other shareholders, but which presented tangible benefits for company financial sustainability over the long-term. Overall, blended instruments can assist founders or transaction proponents to secure buy-in from boards, shareholders and other internal

stakeholders by proving the financial viability of new or underdeveloped business models. With a clear economic rationale in place, companies are more inclined to prioritize sustainable practices

iii Blended finance is best suited to addressing investability challenges, rather than a poor commercial or sustainability premise. A committed partner plays an important role, particularly in nascent sectors.

Viability refers to a project's intrinsics, such as cash flow generation ability and having an adequate market for products/services. Investability refers to external factors, like credit risk and currency risk. Apart from ground-level blended finance tools, such as project preparation grants, blended finance cannot move an unviable business model to a viable one without fundamental changes to the underlying model. Likewise, blended finance cannot solely drive a company away from bad practices to sustainable ones. This is where vision and commitment from the client is vital. Prolade's founders had a sustainability commitment from inception, based on the expected palm oil market transition and prior industry challenges. The framework for the transition was already in place when IDB Invest engaged. Because of this strong starting point and Prolade's openness to innovate, IDB Invest could then employ blended finance to broaden and expedite the sustainability commitments and ensure they made fiscal sense for the company. The financing has provided IDB Invest with a demonstrable transaction that illustrates the level of commitment required of partners to structure and implement a sufficiently robust sustainability plan.

CONVERGENCE
BLENDING GLOBAL FINANCE

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BLENDED FINANCE uses catalytic capital from public or philanthropic sources to scale up private sector investment in emerging markets to realize the SDGs.

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