



# Ripe opportunity

## Embedded finance in agriculture



**Agriculture is the foundation upon which our global population grows and thrives. It’s also way behind other industries in the transition to embedded finance and digital payments.**



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The seasonal nature of agricultural production cycles poses a unique challenge, too. Small to medium-sized farms rely on the revenue from harvest to pay for seed, fertilizer, and equipment, which leads to a cash crunch in between cycles. This demand for financing and shortage of digital payment options creates a largely untapped market for banks and fintechs to implement tailored solutions that benefit all stakeholders.

One clear opportunity: online agribusiness marketplaces, built to make it easier for all parties to exchange goods. Imagine Facebook Marketplace, but for large orders of fertilizer or tractor equipment. While these digital platforms allow farmers and suppliers to arrange sales more efficiently, payment is often completed outside the platform – in cash or in check. With the support of a partner, those marketplaces could offer payment and/or digital financing options directly in the platform, enabling a more efficient and secure payment process.

### **Working capital needs for agricultural sector**

Compared to other industries, the agricultural sector is more likely to cite “cash flow” as a reason for utilizing external working capital.<sup>1</sup> Of those utilizing working capital, the most commonly used tools are working capital loans, bank lines of credit, and third-party revolving credit facilities. A supplier could offer a line of credit directly, which can be disadvantageous for the farmer, or a bank could provide a loan or line of credit. These can be difficult to obtain – especially in rural areas far from physical banks.



In 2022, nearly 60% of farmers globally reported that they still used cash as their main payment method.<sup>5</sup>

Access to working capital varies across regions. In Latin America, more than a third of agriculture growth corporates utilized working capital to smooth out expected cash flow gaps.<sup>2</sup> In India, only half of farmers have access to traditional financing services at all.<sup>3</sup> Even in the well-banked U.S., the demand for farm lending continues to grow while the number of farm-focused banks is falling.<sup>4</sup> In 2022, nearly 60% of farmers globally reported that they still used cash as their main payment method.<sup>5</sup>

The volume of transactions in the value chain magnifies the inefficiencies of cash and increases the considerable risk to farmers who rely on it. All stakeholders, from family farms to massive manufacturers, stand to benefit from the adoption of efficient, digital payment solutions.

### Evolving digital payments landscape

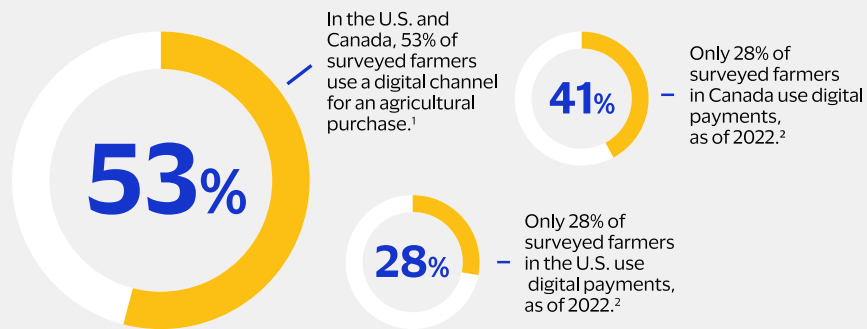
The digitalization of agriculture payments has moved at a slower pace compared to other industries, but technological transformation is picking up speed. Regionally, payment innovation in this industry often mirrors the digital adoption of the respective population.

1. [Working Capital Index 2023-24](#), Visa & PYMNTS, published 2023.
2. [Working Capital Index 2023-24](#), Visa & PYMNTS, published 2023.
3. [How Agtech is Poised to Transform India into a Farming Powerhouse](#), McKinsey, published 2023.
4. [The Next Fintech Revolution: Agriculture Finance](#), Forbes, published 2023.
5. [Global Farmer Insights](#), McKinsey, published 2022.

## The digital payments landscape region-by-region

### USA and Canada

Digital payments are commonplace in the U.S., with more than 90% of surveyed consumers reporting usage in 2023.<sup>6</sup> But it's another story in the agriculture sector.



In the U.S. and Canada, 53% of surveyed farmers use a digital channel for an agricultural purchase – but only 28% in the U.S. and 41% in Canada use digital payments, as of 2022.<sup>7</sup>

They might use a website or app to agree on a price, but the payment itself is completed offline.

Agribusiness marketplaces are also in early stages of digital payment adoption: about one-tenth of small and medium-sized farms and 15% of large farms utilized them, as of 2022.<sup>8</sup> There is huge potential for growth, though, with nearly a quarter of large farms planning to start using the marketplaces by the end of 2024.<sup>9</sup>

6. [Consumer digital payments: Already mainstream, increasingly embedded, still evolving](#), McKinsey, published 2023.
7. [Global Farmer Insights](#), McKinsey, published 2022.
8. [Voice of the US farmer in 2022: Innovating through uncertainty](#), McKinsey, published 2022.
9. [Voice of the US farmer in 2022: Innovating through uncertainty](#), McKinsey, published 2022.



## Latin America

**Latin America has gone from a region with nearly half its population unbanked, to a booming digital economy, projected to double by 2026.<sup>10</sup>**

Since 2020, governments in the region have pushed new payment technologies: Argentina launched Transferencia 3.0, Brazil created Pix, Costa Rica revamped SINPE, and Mexico added Cobro Digital (CoDi) to its real-time payment (RTP) platform, SPEI.

By 2021, over half of the region's e-commerce volume was paid through mobile phones.<sup>11</sup> That shift is reflected in the payment methods of surveyed Brazilian farmers: the majority now use a combination of digital platforms, instant messaging, and in-person interactions for agricultural purchases, though more than a third still use cash as a main form of payment.<sup>12</sup>

10. [Accelerating Digital Payments Latin America and Caribbean](#), IDB Lab and World Economic Forum, published 2022.

11. [Payments Evolution Accelerates Digital Commerce in Latin America](#), Forbes, published 2024.

12. [The Brazilian Farmer's Mind](#), McKinsey, published in 2022.



## Europe

While adoption varies by country, Europeans have moved to incorporate digital payment technologies – particularly after the Covid-19 pandemic. According to [Visa research](#), nearly three-quarters of Europeans “actively engage with mobile wallets.”

**More than a third of surveyed farmers reported using digital payments for agricultural purchases.<sup>13</sup>**

Farmers in the European Union are taking advantage of digital payment options, too. More than a third of surveyed farmers reported using digital payments for agricultural purchases, and more than half reported using digital channels at some point in the process.<sup>13</sup>

13. [Global Farmer Insights](#), McKinsey, published 2022.



## Africa and the Middle East

**Sub-Saharan Africa is a global leader in mobile money, evidenced by the 835 million registered mobile money accounts, nearly half of the global total.<sup>14</sup> For their part, the Middle East and North Africa region boasts a 57% YoY growth rate in transaction volume in 2023.<sup>15</sup>**

The agriculture sector accounts for 35% of Africa's GDP with 80% of the continent's food supply coming from small-scale farmers.<sup>16</sup> Small and medium enterprises make up much of the sector, but 75% of agri-SMEs are unable to access bank loans and are too large to benefit from microfinancing opportunities.<sup>17</sup> Despite the prevalence of mobile money usage overall – which include 87% of farmers – less than 15% of farmers use it for agricultural purchases.<sup>18</sup>

14. [The State of the Industry Report on Mobile Money](#), GSMA, published 2023.

15. [The State of the Industry Report on Mobile Money](#), GSMA, published 2023.

16. [Africa's agricultural revolution: From self-sufficiency to global food powerhouse](#), White & Case, published 2023.

17. [Financing Agricultural Small- and Medium Enterprises in Africa](#), USAID, published 2023.

18. [Use of mobile financial services among farmers in Africa: Insights from Kenya](#), [Global Food Security](#), published 2022.



## Asia Pacific

**Given the proliferation of digital wallets in the region, Asia Pacific is no stranger to digital payments. In China, which has the largest value of cumulative digital payment transactions globally, 66% of surveyed farmers were already using digital payments in 2022.**<sup>19</sup>

Comparatively, most surveyed farmers in India, which has a larger volume of digital payments (many are small or micro transactions carried out through UPI), had never heard of digital payment options for agricultural purchases.<sup>20</sup>

19. [Digital Payments – China](#), Statista, updated in March 2024. [Farmers using digital payments: Global Farmer Insights](#), McKinsey, published 2022.
20. [Volume of real-time payment transactions: Global Digital Payment Forecasts 2023-20237](#), yStats.com.

## Opportunity for banks and fintechs

While digital payment adoption trends vary globally, the pain points for farmers are consistent – and the utilization of embedded finance offers a solution.



### Agribusiness marketplaces

The development of digital marketplaces for agricultural purchases has been a welcome innovation for the industry, but most platforms lack integrated payment options. Buyers and sellers agree on a price and then complete the payment outside of the system, creating delays and requiring tedious, manual processes. Embedding payment processes within an already popular platform would differentiate the marketplace from its competitors, and offer a seamless, secure transfer of funds for all parties.



### Tokenization

Agrotoken, a Brazilian fintech company that specializes in Real-World Asset (RWA) tokens of agricultural products, announced an agribusiness collaboration with Banco de Brasil, allowing farmers to purchase fertilizers and equipment directly on the bank's digital platform with the tokenized form of their grain production.<sup>21</sup> This innovation, built on blockchain technology, eliminates the hassle of cash or check payments for both producers and distributors.



The transition to embedded finance presents a ripe opportunity for the agricultural sector.

## Closing thoughts

The cash flow challenges faced by small to medium-sized farms present a significant opportunity for the integration of digital payments and embedded finance. Beyond the benefits of added security and speed, digital loan and BNPL options would alleviate the need for traditional loans.

The inefficiencies and risks associated with cash transactions, still the main payment method for approximately 60% of farmers globally, further underscore this need. Emerging solutions, such as the tokenization of agricultural products and integrated payments through online marketplaces, demonstrate the potential benefits of digitalization in this sector.

Banks, fintechs, and other stakeholders are positioned to benefit from the development and implementation of these tailored solutions. Not only can they help smooth out expected cash flow gaps and improve access to credit, but they can also enhance efficiency and security in the value chain. As such, the transition to embedded finance presents a ripe opportunity for the agricultural sector.

21. [Driving payments innovation for business in Latin America and the Caribbean](#), Visa.