

Agpaytech's Research
30th September, 2024

Stablecoin

A Promise of Minimal Volatility in Remittance to Africa

Executive Summary

Despite being low among developing nations, Diaspora remittances to Africa are significant enough, even more than FDI, to undertake mega projects. Remittance could be more efficient than debt-trap borrowing, especially for developing regions like Africa, Asia, and Latin America.

In 2022, global remittance flows to low- and middle-income countries reached an estimated \$626 billion, with Africa receiving over \$53 billion. However, traditional remittance services are often slow, costly, and inefficient. Sometimes, sending money to some parts of Africa costs 8% on average. These high fees disproportionately affect the people who need remittances the most.

**Why Stablecoin?
Stablecoins offer a promising alternative. As digital currencies pegged to stable assets like the U.S. dollar, stablecoins ensure minimal volatility, making them ideal for remittances.**

Using blockchain technology, stablecoins enable near-instant, borderless transactions at significantly lower fees than traditional methods. For example, sending money via stablecoin platforms can reduce fees to less than 1% of the total amount, drastically cutting user costs. Given that more than 50% of remittance recipients in Africa rely on mobile money services, integrating stablecoins with these platforms could revolutionize cross-border payments, providing faster, cheaper, and more accessible financial solutions.

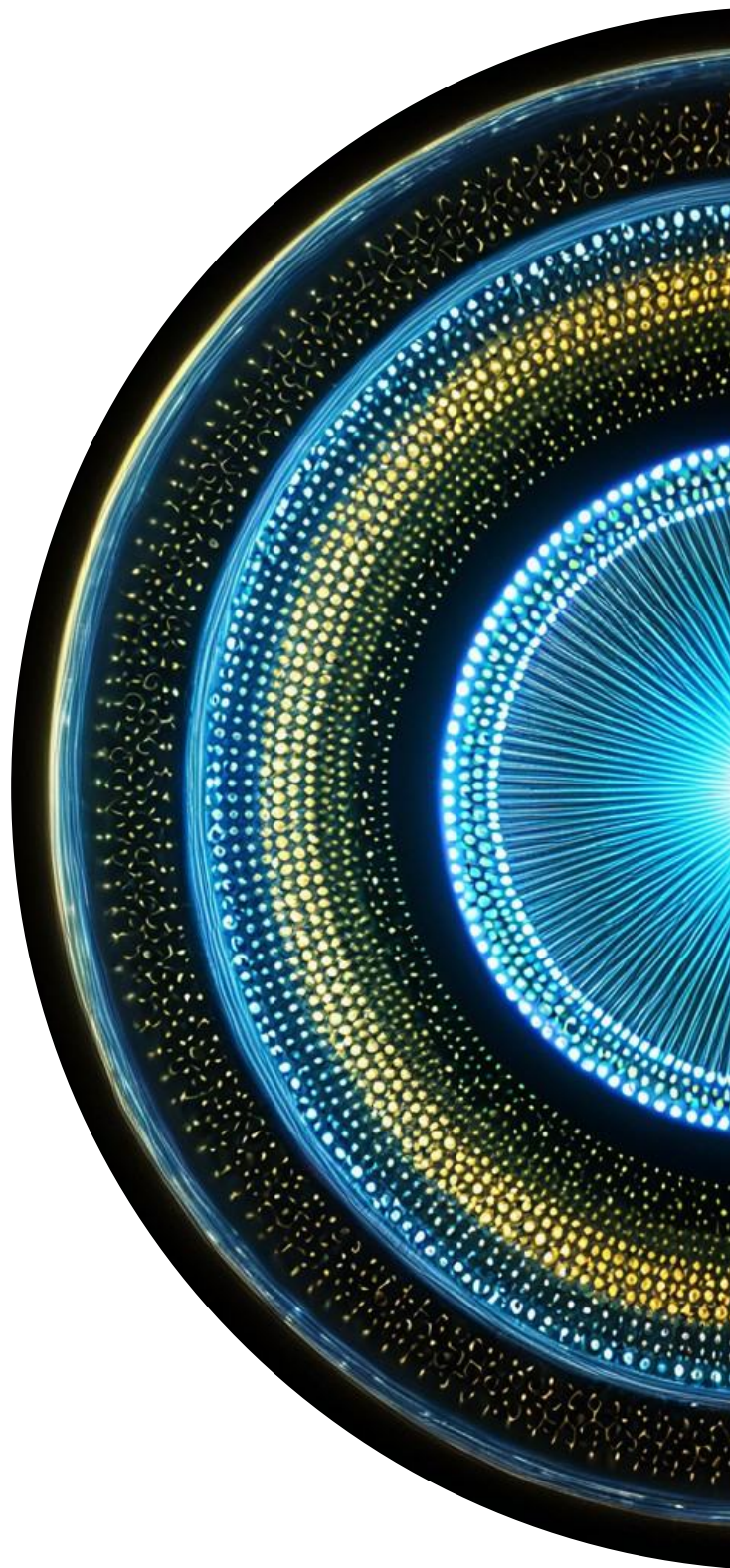


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Stablecoin and Remittance Possibilities

While remittances play a crucial role in Africa's economy, contributing significantly to the livelihoods of millions of families and communities, the average cost of sending money to Africa is unpalatable. Despite the era of digitalization and available digital payment mechanisms, it can cost 6% on average to remit to the African region (World Bank, 2022).

This means a considerable amount is lost, making sending money illegally attractive. This is mainly because the existing remittance system is fraught with inefficiencies, high transaction fees, and slow processing times, particularly in cross-border transactions. Countries like Nigeria, Kenya, Egypt, and Ghana are among Africa's largest recipients of remittances. However, the cost of sending money to Africa remains higher than the global average, with fees ranging from 8-12%, making it challenging for people to maximize the funds they send home.

Many financial institutions and regulatory bodies are trying to minimize cross-border transaction charges and remittance costs. For instance, there are policies like gold for oil in Ghana to control currency volatility in the international market, the Central African Republic has voted to legalize Bitcoin as a legal tender, and others are using collaborative efforts to trade in local currencies. Several African countries are also exploring the possibility of a central bank digital currency (CBDC) project. Yet, such approaches have not yielded significant results.

With stablecoins, cryptocurrencies pegged to stable assets such as fiat currencies offer an innovative solution to transform the remittance market in Africa. More than 80% of the daily volume of the cryptocurrency market is made up of trades involving stablecoins.

Notably, the most popular stablecoin, Tether, consistently registers the most considerable daily trade volume on the market. (TechReport, 2023). Approximately 30% of global remittances are now facilitated through stablecoins, reflecting their growing utility in cross-border transactions (Circle, 2023). This report explores how stablecoins can be used in remittance services to Africa's market, highlighting the opportunities and challenges.



Stablecoins: What Are They?

According to the Bank of England (2023), A stablecoin is a digital asset that can be used to make payments. Stablecoin is a cryptocurrency designed to minimize volatility by pegging to a more stable asset.

CoinGecko (2024) explained that stablecoin is a cryptocurrency designed to reduce volatility by pegging to a more stable asset. Most stablecoins track popular national currencies such as the U.S. Dollar, Euro, and the British Pound. However, it is not like the cash or money in the bank. Stablecoin is an asset that could be created by a technology company rather than a bank.

Stablecoins are backed by a specified asset or basket of assets they use to maintain a stable value against that asset. This is usually a country's currency, such as the U.S. dollar. Stablecoins are digital assets designed to minimize the price volatility typically associated with cryptocurrencies.

They are backed by reserve assets like fiat currency (e.g., USD), commodities, or other cryptocurrencies. This makes stablecoins different from cryptoassets, which tend not to have assets as backing and are more volatile. Because of their stability, stablecoins are increasingly viewed as a tool for improving financial systems, especially in emerging markets like Africa, where remittances are essential for economic survival. This benefit includes taking advantage of blockchain technology and peer-to-peer value transfer while not being exposed to high volatility such as Bitcoin, Ethereum, or other cryptocurrencies. Stablecoins are a relatively new kind of technology that comes with different implementations, liquidity, risks, and acceptance.

Table 1: Types of Stablecoin

Type of Stablecoin	Stability Mechanism	Example
Fiat-Collateralized	Pegged to fiat currency, backed by reserves.	USDT, USDC, TrueUSD
Crypto-Collateralized	Backed by cryptocurrencies, over-collateralized.	DAI, Synthetix USD
Commodity-Collateralized	Backed by commodities like gold	Paxos Gold (PAXG), Tether Gold (XAUT)
Algorithmic	It uses algorithms to control supply without collateral.	TerraUSD (UST) Ampleforth (AMPL)
Hybrid	Combine multiple stabilization mechanisms, including a mix of collateralization and algorithmic management, to maintain their price peg.	Reserves

Source: Agpaytech

Stablecoins: How is it Different from Other Digital Currencies?

Stablecoins differ from other digital currencies like Bitcoin or Ethereum by being pegged to stable assets, such as fiat currency (e.g., USD), commodities, or a basket of assets. This linkage minimizes volatility, making Stablecoins more predictable in value compared to the significant price fluctuations common in cryptocurrencies. Unlike traditional cryptocurrencies, which derive value from market demand, Stablecoins are designed to maintain a fixed or stable price, offering a reliable means of exchange or store of value. They are widely used for remittances, trading, and payments, where stability is essential to avoid market speculation. Moreover, stablecoin is an asset that could be created by a technology company rather than by a bank. Stablecoins are backed by a specified asset or basket of assets they use to maintain a stable value against that asset. Many now view stablecoin as a cryptoasset or central bank digital currency (CBDC). But there is a vast distinction between stablecoin and other forms of cryptoasset.

Table 2: How stablecoin is different from other digital currencies

Key Features	Stablecoins	Other Crypto Assets (e.g., Bitcoin, Ethereum)
Price Stability	Pegged to a stable asset like fiat currency (e.g., USD) or commodities, designed to minimize price volatility.	Highly volatile, with prices fluctuating based on market demand and supply.
Underlying Value	Backed by reserve assets such as fiat currencies, commodities, or a basket of assets.	No intrinsic backing; value is determined solely by market speculation.
Primary Use Case	Used for payments, remittances, and as a stable store of value; often a medium of exchange within the crypto ecosystem.	Often used as an investment, speculative trading, or in decentralized finance (DeFi) for purposes like lending, staking, or decentralized apps (dApps).
Transaction Speed	Comparable to other cryptocurrencies, depending on the blockchain network used.	Varies by asset and blockchain (e.g., Bitcoin can be slower; Ethereum faster with Layer 2 solutions).
Volatility	Minimal due to peg; intended to maintain a consistent value over time.	Highly volatile; prices can change drastically within short periods.
Regulatory Environment	More likely to face regulatory scrutiny due to its ties to traditional financial systems (e.g., fiat currency backing).	Generally viewed as more decentralized and may face less regulation, though this is changing with the rise of regulatory frameworks for crypto.
Adoption	Increasingly used by businesses and financial institutions due to price stability; popular in remittances, DeFi, and as a bridge between fiat and crypto.	Widely adopted by investors, traders, and developers building decentralized applications. Some businesses accept cryptocurrencies like Bitcoin as payment, but volatility is a challenge.
Inflation Hedging	Not typically used as a hedge against inflation since value is pegged to fiat or commodities.	Bitcoin, for example, is often seen as a potential hedge against inflation due to its fixed supply.

Source: Agpaytech

Stablecoin: A Promise of Minimal Volatility in Remittance to Africa

Remittance Inflows to Africa

Estimating the exact size of remittance flows is complicated because many occur through unofficial channels. However, the remittances that these migrants send to their home countries are one of the most significant types of international financial flows to developing countries.

In 2023, Sub-Saharan Africa saw remittance flows reach US\$54 billion, with Ghana among the most significant beneficiaries (\$4.6bn), receiving the second-highest inflows within the region. Remittances to Nigeria, accounting for 38% of remittance flows to the region, grew by about 2%, while two other major recipients, Ghana and Kenya, posted estimated gains of 5.6% and 3.8%, respectively (World Bank Migration and Development Brief, 2024).

The World Bank project increase remittance inflow to the Africa region driven by strong remittance growth in Mozambique (48.5%), Rwanda (16.8%), and Ethiopia (16%). Despite the effort to increase remittance inflow in Africa, it is the lowest among the Low- and Middle-Income Regions.

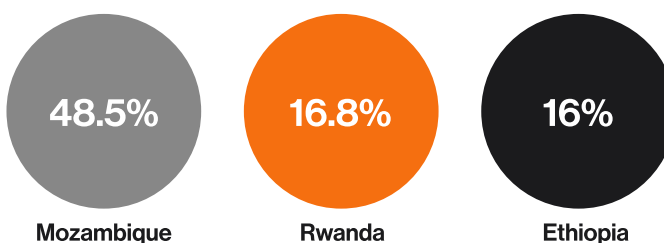
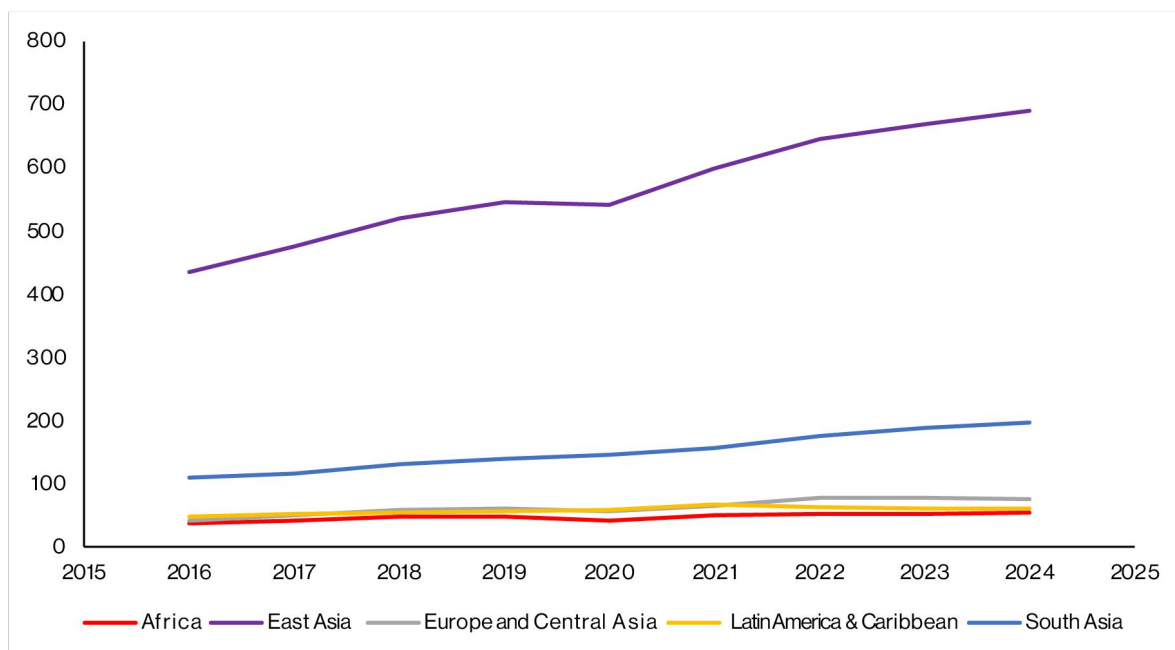


Figure 1: Remittance inflow to Africa region and other low-income countries



Source Agpaytech [Data from World Bank Migration and Development, 2023]

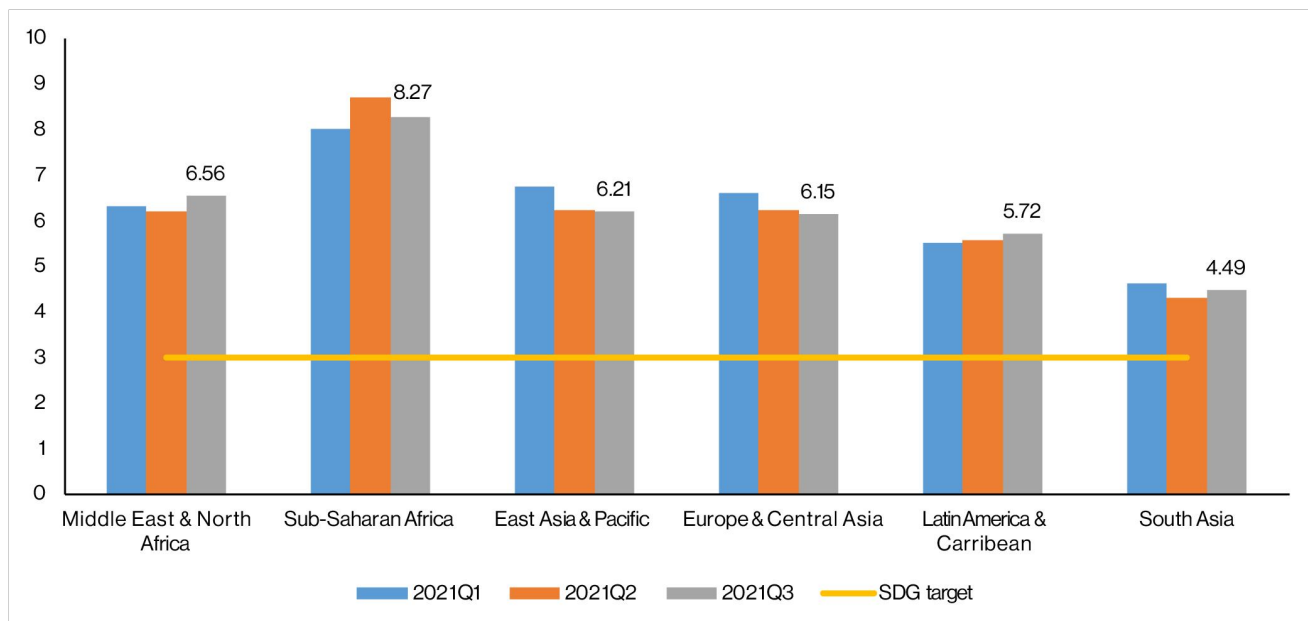
Remittance Cost Still Remains a Concern

World Bank Migration and Development Brief (2024) projects remittance flows to the African region to increase by 2.5%. Also, sending \$200 to the area would cost 7.9% on average. In Q3 2021, Africa remains the most expensive region to send money to, recorded at 8.27% of the total average cost.

Moreover, mobile money remained the least costly instrument to originate remittances and the least expensive instrument to receive remittances. Agpaytech previous analysis based on World Bank Group (2021) indicated that the cost of sending money to South Asia was the lowest. Latin America and the Caribbean, Europe, and Central Africa followed this.

Regarding the remittance service providers (RSPs), banks remain the most expensive service providers, with an average price of 10.40% (WBG, 2021). This is more than double the Sustainable Development Goal (SDG) target of 3% by 2030 (SDG target 10c).

Figure 2: Remittance average cost by world regions



Source: Agpaytech [Data from Remittance Price World, 2022]

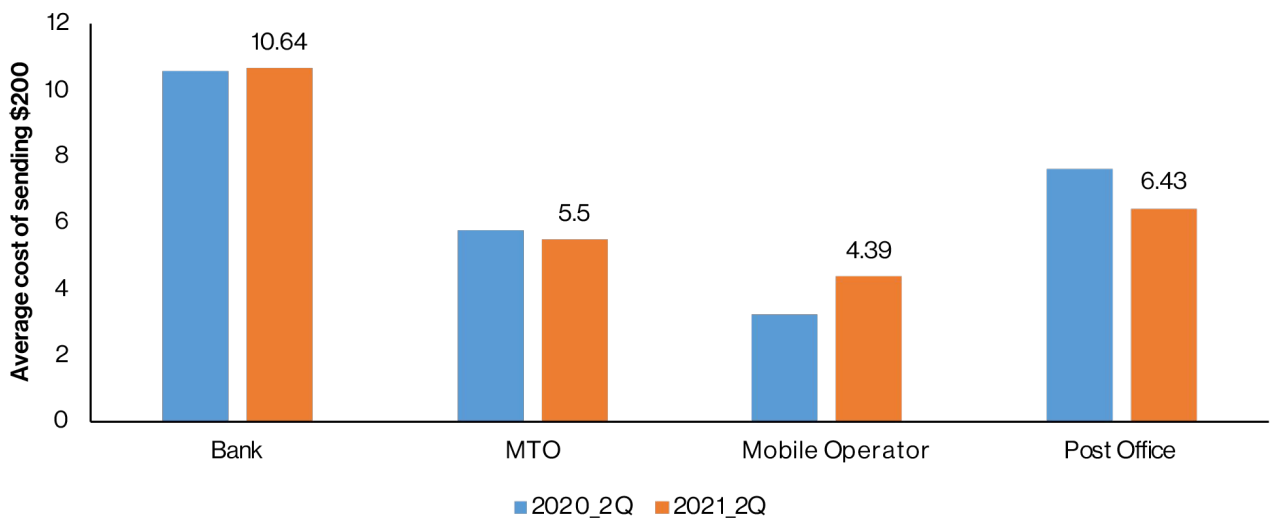


Total Average Cost by Remittance Service Provider

The cost incurred in remittance is slightly different based on the remittance service provider (RSP). Figure 3 provides an overview for each RSP type in Q2 2020 and Q2 2021. Banks continue to be the costliest RSP type, with an average cost of 10.64 percent in Q2 2021.

Post Offices recorded a 6.43% cost in Q2 2021, Money Transfer Operators recorded an average cost of 5.50%, while Mobile Operators are the cheapest RSP type by an average price of 4.39%. However, Mobile Operators only account for a small share (less than 1%) of the sample size.

Figure 3: Total average cost by RSP type



Source: Agpaytech [Data from Remittance Price World, 2022]

How Stablecoins can make a difference in Remittance Cost

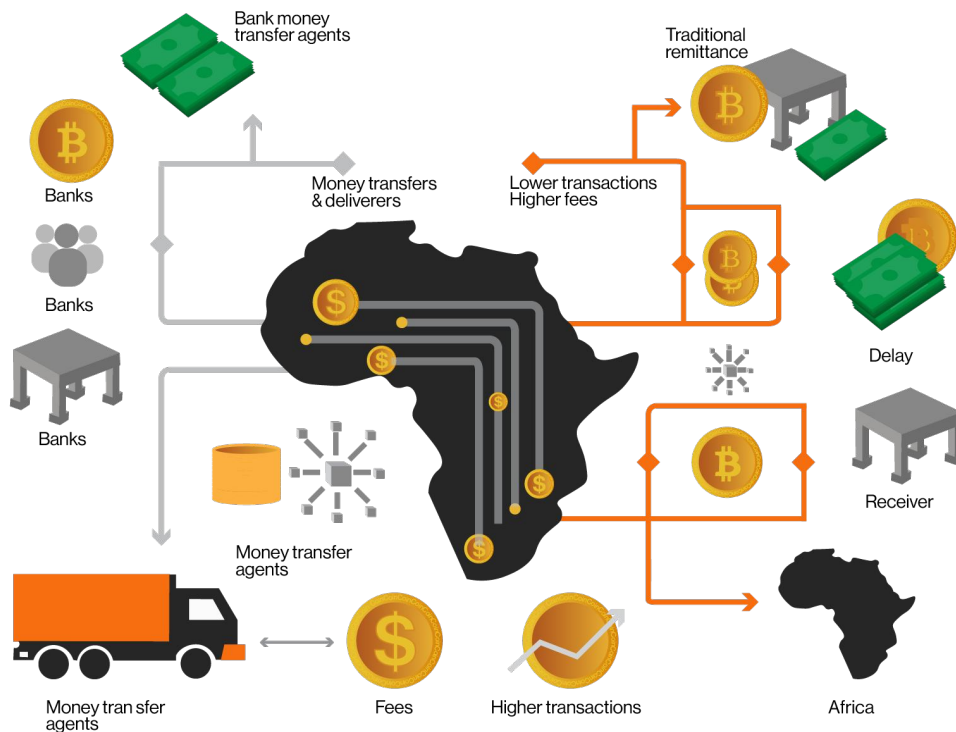
Stablecoins offer a promising alternative. As digital currencies pegged to stable assets like the U.S. dollar, stablecoins ensure minimal volatility, making them ideal for remittances. Traditional remittance services often involve high fees due to multiple intermediaries like banks and money transfer agents, currency conversion fees, and regulatory compliance.

These fees can sometimes exceed 7-10% of the transferred amount. Stablecoins, which operate on blockchain technology, can bypass these intermediaries, enabling direct transfers between parties. Since stablecoins are pegged to fiat currencies, they reduce volatility and ensure the value remains stable. With a decentralized network, transaction fees are significantly lower, often just a fraction of traditional remittance

services, and transfers can be completed almost instantly, improving speed and efficiency. This can make a huge difference in Africa, where remittance inflows are a key economic lifeline. For example, sending money via stablecoin platforms can reduce fees to less than 1% of the total amount, drastically cutting user costs.

Since more than 50% of remittance recipients in Africa rely on mobile money services, integrating stablecoins with these platforms could revolutionize cross-border payments, providing faster, cheaper, and more accessible financial solutions.

Figure 4: How Stablecoins reduce remittances costs to Africa



Source: Agpaytech

Stablecoins Gaining Attention in Africa's Remittances Business

Celo and Valora in Kenya

Celo, a mobile-first blockchain platform, has developed a stablecoin, cUSD, used to remit remittances to Kenya. The Valora app, built on the Celo blockchain, enables users to send and receive stablecoins directly on their mobile phones, even in areas with limited internet connectivity.

The Celo Kenya Shilling (cKES) is a stablecoin pegged 1:1 to the Kenyan Shilling (KES) that operates on the Celo blockchain. cKES is part of Mento Labs' wider ecosystem of decentralized

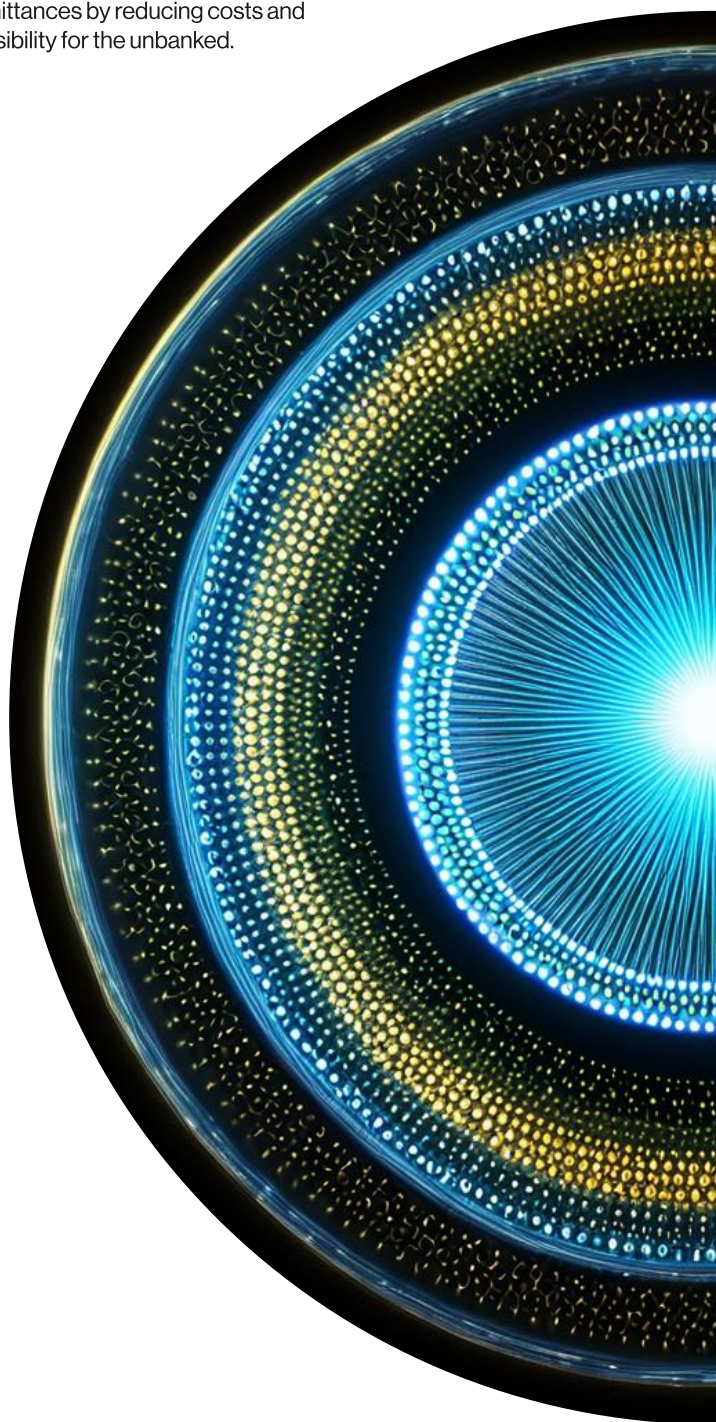
stablecoins, including the Celo Dollar (cUSD), Celo Euro (cEUR), Brazilian Real (cREAL) and West African Franc (eXOF). This solution showcases the potential for stablecoins to revolutionize remittances by reducing costs and improving accessibility for the unbanked.

Chipper Cash and USDC Integration

Chipper Cash, a popular mobile payments platform across several African countries, recently integrated USD Coin (USDC) into its service.

By working with African platforms like Chipper Cash and Yellowcard, Circle facilitates access to USDC, providing a stable entry point for Africans, simplifying cross-border transactions and reducing volatility. Users can send and receive USDC on the platform, allowing seamless remittance transactions at low costs.

This case highlights how platforms already entrenched in Africa's FinTech ecosystem are adopting stablecoins to improve remittance services.



How Stablecoin Adoption Would the African Remittance Market

The traditional remittance system involves intermediaries like banks and money transfer operators (MTOs), which increase transaction fees. Stablecoins eliminate the need for these intermediaries by leveraging blockchain technology, enabling direct peer-to-peer transfers. This significantly reduces transaction costs, allowing more remitted funds to reach the recipient. For example, a worker in the U.S. could use a stablecoin like USDC (USD Coin) to send money directly to a recipient in Kenya. The transaction would be processed on a blockchain, ensuring near-instant settlement at a fraction of the cost of traditional methods. For countries with a high dependency on remittances, this speed and reliability can be life-changing for individuals needing quick access to funds.

Table 3: Implication of stablecoin adoption in Africa

Aspect	Importance of Stablecoin Adoption	Challenges to Stablecoin Adoption
Cost Reduction	Lower transaction fees compared to traditional remittance services.	High volatility in cryptocurrencies may affect stability and costs.
Speed	Faster transactions and settlements compared to traditional methods.	Regulatory hurdles and a lack of infrastructure can delay adoption.
Financial Inclusion	Provides access to financial services for unbanked and underbanked populations.	Limited internet and digital literacy may restrict access and usage.
Transparency	Enhanced transparency and traceability of transactions.	Concerns about privacy and security risks related to digital assets.
Exchange Rate Stability	Reduces exposure to currency fluctuation risks.	Potential for regulatory interference and lack of legal framework.
Access to Global Markets	Facilitates easier cross-border transactions and access to international markets.	Fragmented regulatory landscape and varying legal statuses across countries.
Innovation and Growth	Encourages technological advancements and new financial products.	Lack of widespread acceptance and understanding among consumers and businesses.
Resilience to Economic Instability	Can provide a stable alternative during periods of economic instability.	Potential resistance from established financial institutions and traditional systems.

Source: Agpaytech

The Future of Stablecoins in Remittances to Africa

- **Regulatory Clarity and Partnerships:**

For stablecoins to be widely used in Africa's remittance market, governments must establish clear regulations that promote innovation while protecting consumers. Partnerships between stablecoin issuers, remittance companies, and financial institutions can further drive adoption by integrating stablecoin solutions into existing remittance channels.

- **Expanding Mobile and Internet Access:**

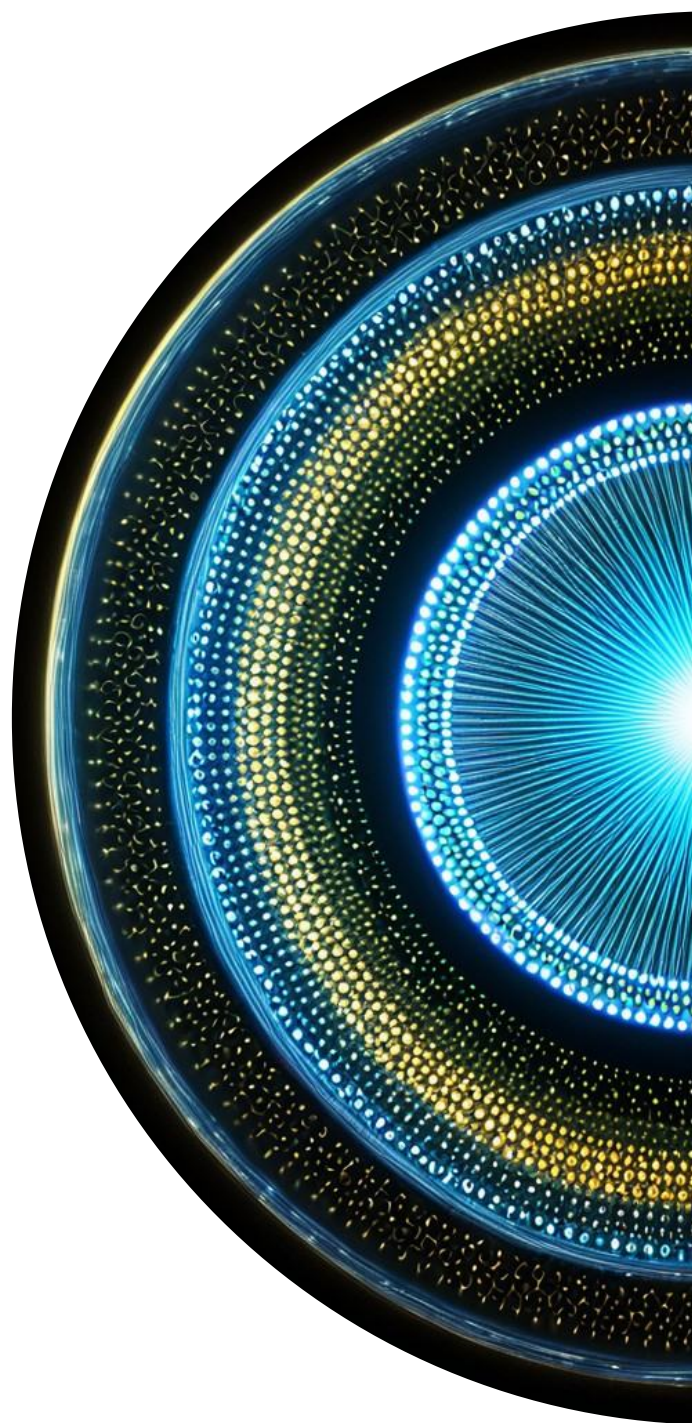
Efforts to improve internet access in remote areas, such as through satellite-based networks, will be critical for the expansion of stablecoin-based remittances. Fintech companies and governments should collaborate on expanding infrastructure to ensure that even the most isolated communities can benefit from stablecoin technologies.

- **Education and Awareness Campaigns:**

Education initiatives that focus on the benefits and safety of using stablecoins for remittances will be vital for overcoming barriers to trust. These campaigns can leverage mobile money providers, who already have a trusted presence in many African countries, to promote the advantages of stablecoins.

- **Growth of Stablecoin-Backed Platforms:**

As more FinTech platforms integrate stablecoins, we will likely see an expansion of use cases beyond remittances, including savings, lending, and investments. Stablecoin-backed platforms can further accelerate Africa's digital financial ecosystem, creating a more inclusive and efficient financial landscape.



Conclusion

Stablecoins hold immense potential for transforming Africa's remittance market by reducing costs, improving transaction speed, and enhancing accessibility for the unbanked. However, to realize these benefits, challenges such as regulatory uncertainty, trust, and infrastructure barriers must be addressed. With the right partnerships, education efforts, and investment in digital infrastructure, stablecoins could revolutionize how remittances are sent and received across Africa, fostering greater financial inclusion and economic growth.

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About Agpaytech

Agpaytech Ltd. is a company pioneering in the Fintech space with a focused approach to building robust technologies for e-commerce Card Processing Solutions for Payment Service Providers (PSPs). Additionally, we provide Compliance and Regulatory Umbrella, Remittance-as-a-Service (RaaS), Banking-as-a-Service (BaaS), Foreign Exchange, Cross Border Payments, and digital currency technology.

We also provide practical white paper research support to central banks, government and private institutions, economic organizations, and NGOs in Africa. Our services expand from research projects, state-of-industry reports, project assessment, data collection, and consulting services in the fintech space.

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