

**EXECUTIVE  
BOARD  
MEETING**

SM/23/95

April 18, 2023

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From: The Secretary  
Subject: **Central African Republic—Selected Issues**

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**\*Unless an objection from the authorities is received prior to the conclusion of the Board's consideration, the document will be published.**





# CENTRAL AFRICAN REPUBLIC

## SELECTED ISSUES

April 18, 2023

Approved By  
**African Department**

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# FINTECH AND CRYPTO ASSETS IN THE CENTRAL AFRICAN REPUBLIC: BALANCING OPPORTUNITIES AND RISKS<sup>1</sup>

## A. Executive Summary

Many African countries have experienced substantial benefits from leapfrogging using digital technologies and vibrant Fintech activities. Yet successful digital transformation requires a certain level of readiness in terms of digital infrastructure, education, legal frameworks, and institutions, on which the CAR faces substantial gaps. CAR's initial steps in the form of the 2022 crypto law have created legal uncertainties at the CEMAC level and raised numerous concerns but some of the most controversial provisions have been recently revised. The authorities have proceeded with the launch of a digital coin named Sango and namesake platform-ecosystem with multifaceted features. While only a limited amount of coins have been issued and other elements of the project have not been launched, project Sango has attracted considerable interest as it can potentially bring opportunities through digitization, while also raising complex risks. These range from macro-fiscal and financial to financial integrity, governance, consumer protection and others. The Sango project appears too complex, creating interconnectedness between multiple sectors and private and public balance sheets in a manner which could raise systemic risks, pointing to the importance of reconsidering the existing blueprint.

## B. Context

**1. The last two decades have seen rapid development of a range of technological innovations worldwide.** Financial services arise to meet user needs—to make payments, to save, to borrow to finance consumption and investment, to manage risks including around all these activities, and to get advice on how best to handle all these needs for services—and technological innovations have offered improvements in service provision. Figure 1 provides a stylized road map on how user needs for financial services have traditionally been provided, the key gaps that have been issues for finance, and the new fintech solutions on offer to potentially address these problems (see IMF (2019) *Fintech—The Experience so Far*).

**2. Sub-Saharan Africa (SSA) has become the global leader in mobile money innovation, adoption, and usage.** Starting with the early 2000s, the use of mobile phones to send money (mobile money) as the main form of digital banking, has expanded primarily in SSA. In 2012, of the 27 million global active mobile money accounts, 84 percent was in SSA (Figure 2, left panel). By 2021, SSA accounted for 52 percent of the 364 million mobile money accounts. As of 2021, it is estimated that 55 percent of adults in the region had an account, including 33 percent of adults who

<sup>1</sup>The team led by Adina Popescu (SPR) and including Masha Iyabo, Khushboo Khandelwal (AFR), Yaiza Cabedo (MCM), Akihiro Yoshinaga, Sebastian Grund, Marianne Bechara, Pierre Bardin, Emmanuel Mathias, Paula Paixao e Silva Zarazinski (LEG).

had a mobile money account - the largest share of any region in the world, (Dermirgur-Kunt et al, 2022). With advancements in technology, a deeper digital financial services ecosystem has emerged, and the focus has expanded to a broad range of services, including cross-border payments, remittances, savings, credit, insurance, etc. The rise of Fintech has been a major contributor to financial inclusion in SSA.

**3. More recently, the adoption of crypto assets has also been increasing in many African countries, bringing with it substantially more risks.** Between July 2020 and June 2021, Africa was the fastest growing crypto assets market in the world in terms of adoption, with an increase of 1,200 percent. Nigeria and Kenya are among the top twenty countries in the world in terms of crypto asset adoption according to the 2022 Global Crypto Adoption Index (with South Africa and Tanzania also ranking high). In addition to accessibility and cost which drove the adoption of mobile banking, the promise of crypto assets as hedge against weak domestic currencies has been an important factor in some countries. However, widespread adoption of inadequately regulated crypto assets, particularly in fragile and conflict-affected states, can give rise to new risks to macroeconomic and financial stability, financial integrity, legal and regulatory frameworks, corruption, consumer protection, cyber risks and others, if associated vulnerabilities are not well managed.

**Figure 1. Central African Republic: Evolution of Financial Services<sup>1</sup>**

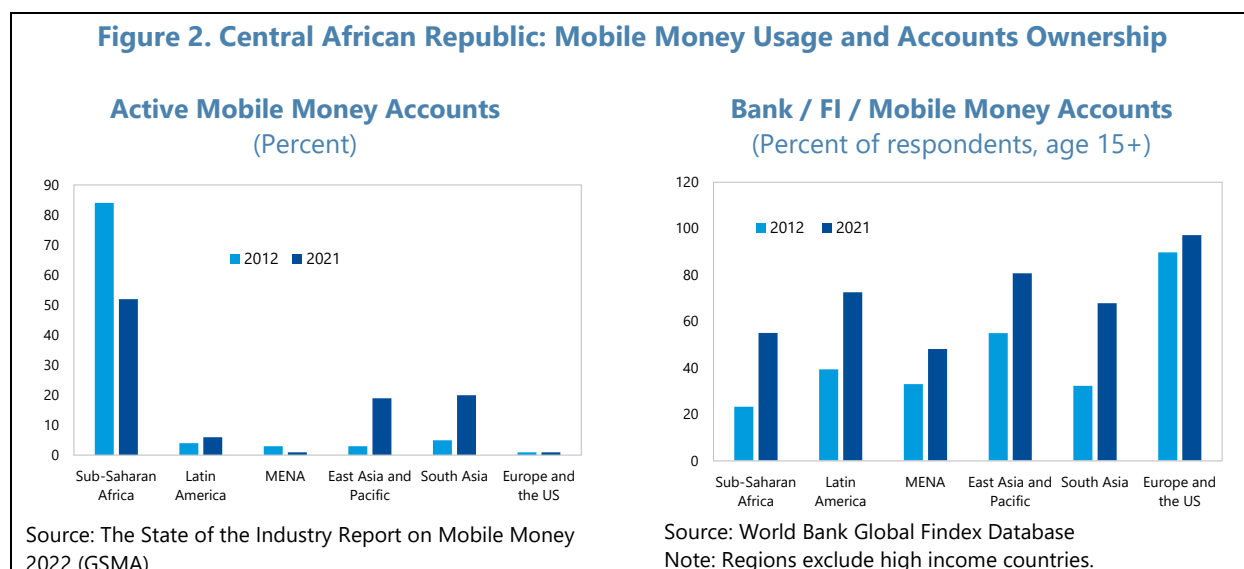
User Needs	Traditional Model	Gaps <sup>2</sup>	Technological Innovations <sup>3</sup>				Fintech Solutions
			AI / ML	Data / Cloud Platforms	DLT/ Crypto	Mobile	
<b>Pay</b>	Cash / ATM Check Wire/MTO's Debit/Credit Cards Centralized Settlement	Speed	L	H	H	H	Virtual currencies Remittances Mobile payments Mobile PoS P2P payments B2B transactions DLT-based settlement
<b>Save</b>	Bank deposits Mutual funds Bonds Equities	Cost	L	H	H	L	Virtual currencies Mobile market funds Blockchain bonds
<b>Borrow</b>	Bank loans Bonds Mortgages Trade credit	Transparency	H	H	H	L	Credit modeling Platform lending Crowd-funding Blockchain bonds
<b>Manage Risks</b>	Brokerage underwriting Structured products Trading regulatory Compliance KYC Insurance	Access	H	L	H	L	Regtech, smart contracts Suptech Crypto-asset exchanges eKYC, Digital ID
<b>Get Advice</b>	Financial planner Investment advisor	Security	H	M	L	M	Robo-advising Automated wealth management

Source: IMF Policy Paper. Fintech: The Experience So Far, June 2019.

<sup>1</sup> This figure maps users' needs for financial services - explained in IMF (2017a) - to traditional solutions and emerging fintech solutions. In doing so, it flags the key gaps that technology seeks to fill, and which new technologies are applied in different services.

<sup>2</sup> In gaps, transparency encompasses search and matching frictions, while access encompasses product tailoring needs.

<sup>3</sup> AI/ML refers to Artificial Intelligence and Machine Learning algorithms applied to extract insights from large amounts of data. Data/Cloud Platforms are cloud-based technologies which facilitate B2B, C2B, C2C, and B2C exchange of data via Application Programming Interfaces (APIs), across fintech firms, financial institutions, customers, and governments. Access to digital platforms can be secured with digital identification technologies, such as biometrics. DLT/Crypto captures distributed ledgers, such as smart contracts and related decentralized technologies. Mobile refers to feature phones and smartphones running financial apps. The colors scheme reflects a judgement on whether the specific technology has a low (L), medium (M), or high (H) level of benefit for the corresponding fintech solutions. Scaling is purely illustrative.

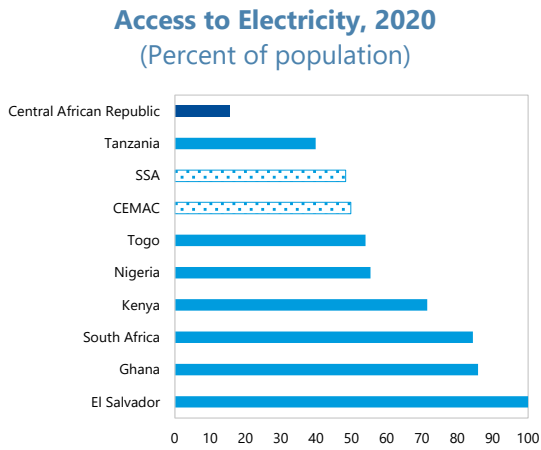


**4. Increasingly, many African countries have also shown interest in Central Bank Digital Currencies (CBDCs), partly in response to the risks posed by crypto assets.** Nigeria was one of the first countries in the world to launch its live CBDC, the e-Naira, in 2021, while Ghana and South Africa are in pilot stages, and 8 other African countries are in early stages of research and conception. The interest in CBDCs is partly driven by the expectations that they can increase efficiency of payments, lower transaction costs, and improve financial inclusion; however, competition from crypto assets to fiat currencies has also been a driver.

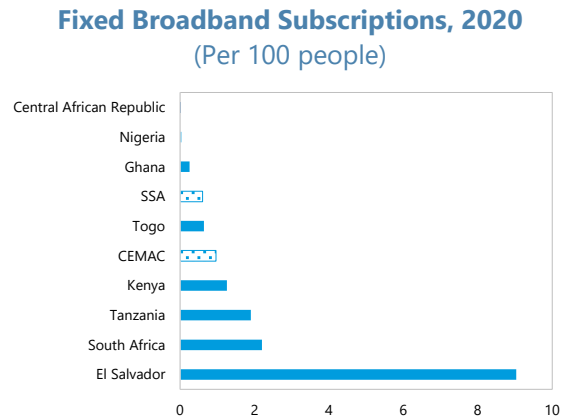
**5. Fintech adoption in CAR is an opportunity to overcome important bottlenecks:**

- **Low socio-economic development.** Repeated instability and violence over the years have kept the country at very low growth levels and at the bottom of global development rankings with a 70 percent poverty rate. Human capital and literacy are very low compared to regional peers (Figure 3). According to the CPIA 2022, the CAR's policy and institutional assessment score is the lowest in SSA, in particular in the areas of public sector management and institutions.
- **Logistic and infrastructure challenges.** The CAR is a large land-locked country with low population density and poor physical infrastructure. Challenges include low access to electricity and the internet (slightly over 10 percent of the population), as well as limited mobile cellular subscription of around 40 percent, relative to the SSA average of 80 percent (see Figure 3). The country is among the few without fiber optic, though it should be installed in the near future.
- **Low financial inclusion.** A large proportion of the population lack access to basic financial services, which also constrains government services and exacerbates the inequality and poverty. Key inclusion metrics such as account ownership at a financial institution, ownership of debit or credit cards, or borrowing from a financial institution (Figure 4), are among the lowest in Africa, pointing to significant unmet potential which can be addressed by Fintech, if the right prerequisites are put into place.

**Figure 3. Central African Republic: Socio-Economic and Digital Infrastructure**

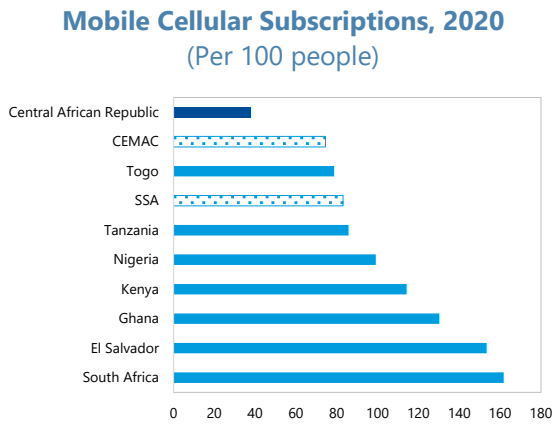


Source: World Bank

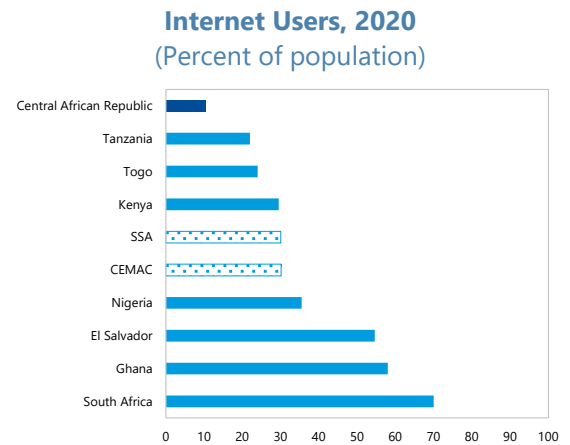


Source: World Bank

Note: CAR data is from 2019 and reads 0.01.

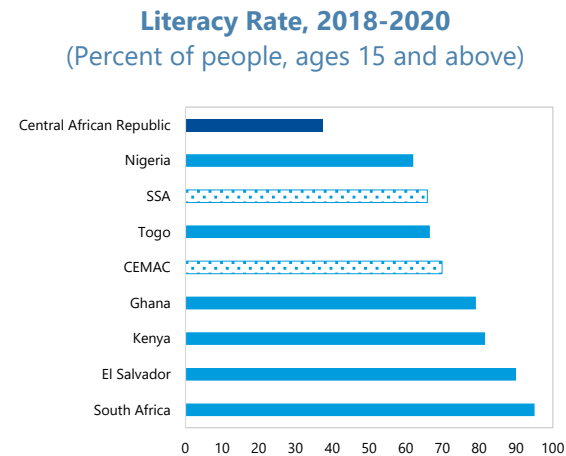


Source: World Bank



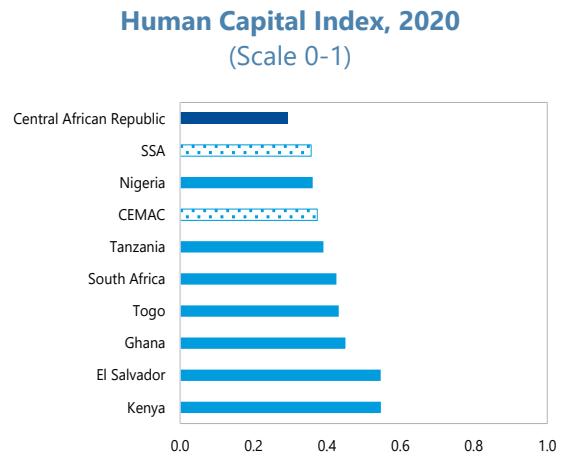
Source: World Bank

Note: CEMAC average excludes Congo Rep. and Equatorial Guinea.



Source: World Bank

Note: CEMAC average excludes Chad and Equatorial Guinea due to non-availability of data.

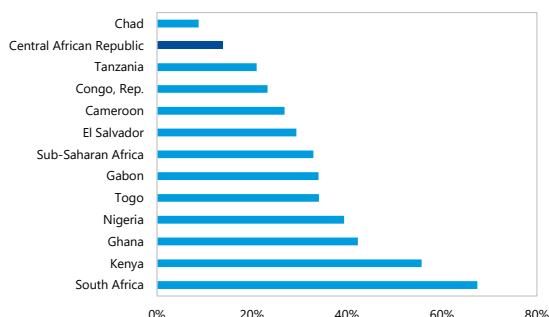


Source: World Bank

Note: CEMAC average excludes Equatorial Guinea due to non-availability of data.

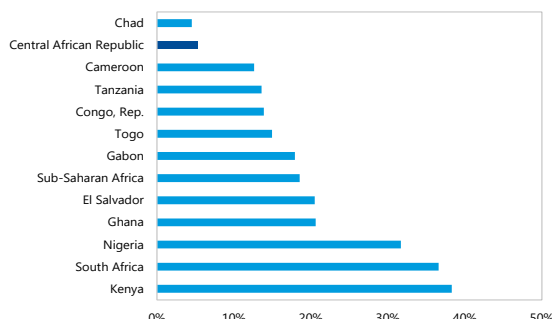
**Figure 4. Central African Republic: Access to Financial Services in Select African Countries**

**Financial Institution Account, 2017**  
(Percent of respondents, age 15+)



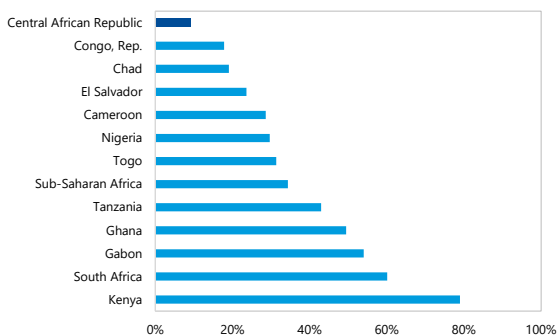
Source: World Bank Global Findex Database

**Owns a Debit or Credit Card, 2017**  
(Percent of respondents, age 15+)



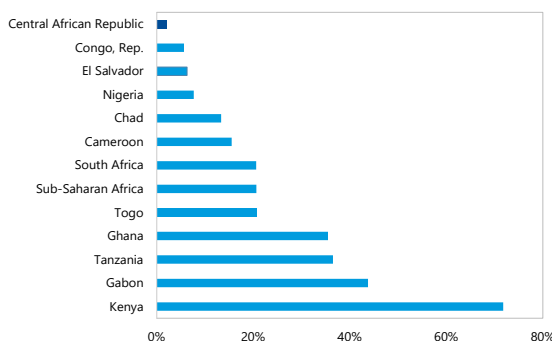
Source: World Bank Global Findex Database

**Made or Received Digital Payment, 2017**  
(Percent of respondents, age 15+)



Source: World Bank Global Findex Database

**Used Mobile Phone or Internet to Access an Account, 2017**  
(Percent of respondents, age 15+)



Source: World Bank Global Findex Database

## C. Overview of The Central African Republic’s Cryptographic Ambitions

### Crypto Legislation

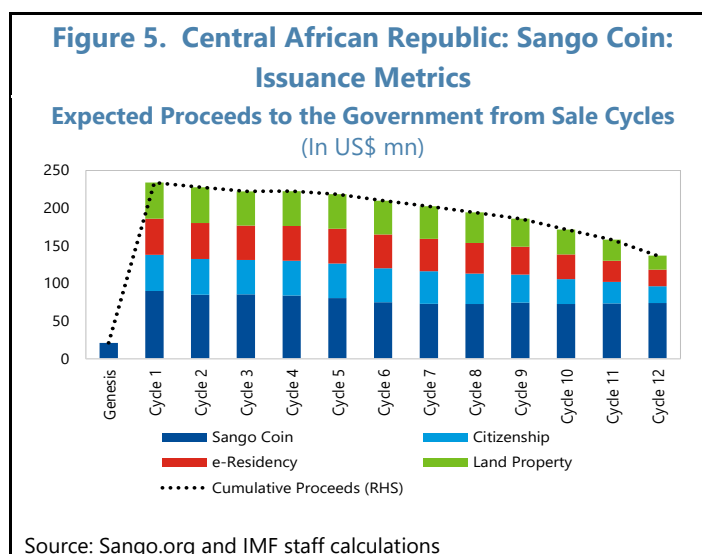
**6. The CAR has embarked upon digitization by adopting a law initially providing legal tender status to crypto assets, though key elements of which have since been reversed.** CAR adopted crypto assets as legal tender on 21st April 2022 - alongside the existing CFA Franc by virtue of the crypto law (*Loi n°22.004 du 22 avril 2022 régissant la cryptomonnaie en République Centrafricaine*). The main provisions of the law were as follows: all economic agents were required to accept crypto assets as a form of payment; taxes could be paid in crypto assets; the state would provide access to automatic and instant convertibility of crypto assets in the CAR currency through the creation of a trust fund; and the creation of a National Agency for Regulating Electronic Transactions (ANTE). CEMAC authorities expressed their concerns that CAR’s crypto currency law was inconsistent with CEMAC’s legal framework and created risks to macroeconomic and financial

stability for the monetary union (April 29, 2022). Following feedback from CEMAC authorities, other CEMAC member countries and international partners, the authorities have agreed with BEAC to harmonize their crypto legislation with the monetary union framework on April 6, 2023—including by amending key articles of the crypto law pertaining to the legal tender status as well as the guaranteed convertibility provisions) law (*Loi n°23.005 du 6 avril 2022 modifiant et complétant certaines dispositions de la loi n°22.004, régissant la cryptomonnaie en République Centrafricaine*).

**7. The legal and regulatory framework for crypto assets in CAR remains incomplete and uncertain, and coordination with the CEMAC in strengthening and clarifying the framework is of paramount importance going forward.** The regional banking regulator COBAC issued a regulation prohibiting its supervised institutions from engaging in transactions with crypto assets or holding crypto assets in their own accounts or third parties accounts, citing risks to financial stability (Decision D-2022/071 from May 6, 2022). On July 21, 2022, the financial market supervisor COSUMAF issued a regulation (01/22/CEMAC/UMAC/CM/COSUMAF) which extended the definition of market intermediaries to crypto assets service providers (Art 145) and is defining such services to include “buying and selling crypto assets with a legal tender currency or other crypto assets” (Art 160). Domestically, the Constitutional Court has declared key elements of Project Sango illegal, including the purchase of citizenship, e-residence, land, and natural resources for Sango coin (August 1, 2022). At a Summit held in Yaoundé on March 17, 2023, CEMAC Head of States reaffirmed their attachment to the provisions of Article 6 of the Convention governing the Central African Monetary Union on the legal tender in the Community. It encouraged the BEAC, in collaboration with the other regional regulators, to continue the reflections already initiated, with a view to developing a legal and regulatory framework for activities relating to the issuance and management of crypto assets, as well as the regulation fintech and propose, if necessary, credible alternative solutions.

## Sango Coin and Project Sango

**8. CAR authorities launched Project Sango as an ambitious vision intended to spur development through cryptoization, spanning multiple areas of activity.** The CAR launched Project Sango and started issuing Sango coin to investors worldwide on July 15, 2022. The project aims to reshape the country’s economy and “pave the way to a digital future of endless possibilities.” At the center of the project lies Sango coin (named after the country’s second official language), advertised as CAR’s “national digital currency”. Issued on the blockchain and backed by Bitcoin, the Sango coin platform would create a



“new digital monetary system” for the country, including a “Digital National Bank” and “National Bitcoin Treasury”. The government reliance on the private sector to develop this project is akin to public-private partnership.

**9. The Sango initial coin offering has faced delays amidst low investor interest.** According to the initial issuance calendar, the government plans to issue a total of 21 billion Sango coins over one year, half of which to be sold to investors with the goal of raising about \$2.5 billion (around 100 percent of GDP), split between US\$1 billion through Sango coins (4.2 bn tokens) and US\$1.5 billion through other offerings, e.g., the sale of CAR citizenship, e-residency and land property (6.3 billion tokens). By January 15, 2023, less than US\$2 million worth of Sango coin (0.2 percent of the total planned issuance) is estimated to have been purchased, despite the extension of the original time window, while the sale of CAR citizenship, e-residency and land property have been delayed by the Supreme Court decision (see above).

**10. While most of the features remain to be developed, the blueprint for the Sango ecosystem is multidimensional, technically complex, and subject to significant legal uncertainty.** Substantial uncertainty remains on key elements of the project, which have not been specified, amidst broader uncertainty triggered by a global decline in the crypto industry. Some of the key advertised features are as follows:<sup>2</sup>

- Citizenship, e-Residency, company registration, and land purchases will be available through the Sango platform for certain minimum investment with locking periods of up to 10 years for the equivalent Sango coin (see Table 1);

Allocation Type	Allocation %	Total Tokens to be released	Release Schedule	Minimum Investment
Country's Treasury	20.0%	4,200,000,000	4 years cliff, 6 years linear unlock - yearly	N.A.
Foundation funds	10.0%	2,100,000,000	2 years cliff, 8 years linear unlock - yearly	N.A.
Rewards & Incentives	15.0%	3,150,000,000	2 years cliff, 8 years linear unlock - yearly	N.A.
Liquidity	5.0%	1,050,000,000	16.67% at Public Launch, 16.67% every 6 months	N.A.
Market Coins	20.0%	4,200,000,000	Genesis Cycle - Cycle 12	\$500
Land Offering	10.0%	2,100,000,000	Cycle 1 - Cycle 12	\$10,000 10 years locking period
Citizenship Offering	10.0%	2,100,000,000	Cycle 1 - Cycle 12	\$60,000 5 years locking period
e-Residence Offering	10.0%	2,100,000,000	Cycle 1 - Cycle 12	\$6,000 3 years locking period
<b>Total</b>	<b>100.0%</b>	<b>21,000,000,000</b>		

Source: Sango.org

<sup>2</sup> This information is based on documents published on the "[www.sango.org](http://www.sango.org)" website, in particular the Genesis Paper, the Sango Initiative (<https://sango.org/initiative>), and the Concept Deck (<https://sango.org/ConceptDeckSango.pdf>) as last retrieved on Jan 15, 2023.

- Tokenization of the country’s abundant natural resources (gold, diamonds, iron ore, graphite, uranium, limestone, copper, cobalt etc.) will be available in the future “solely” via the Sango platform;
- Real estate: a ‘Crypto City’ would be developed on the ‘Crypto Island’, located in the capital Bangui and operated as a special economic zone;
- Institutional setup: a “crypto hub” to spearhead the country’s digitization projects, oversight responsibilities through the Agence Nationale de Régulation de Transaction Électronique (ANTE) and the creation of a “digital national bank”, Banque Nationale Digitale de la République Centrafricaine (BNDRC);
- Other expected benefits:
  - Tax advantages: crypto transactions will be exempted from tax, no income or corporate tax, tax payments to be performed through Sango.
  - Crowdfunding platform: access to government infrastructure projects (public-private partnerships) would be available through Sango.
  - Governance features: investors would be able to vote on the future development of the Sango ecosystem.

## D. Roadmap to Improving Current Projects

### Design Aspects: Sango Coin

**11. The concept for Sango coin is complex and has an untested design.** Sango coin is not easily classifiable, blending features of private and public digital money. While representing a means of payment promoted by the State, Sango coin does not satisfy the standard definition of a CBDC, since it is not a digital liability of the central bank. While it is supposed to be backed by Bitcoin, Sango coin cannot be classified as a stablecoin, due to high volatility of Bitcoin. Additionally, Sango Coin, as currently planned, falls within the FATF definition of virtual assets.<sup>3</sup> Finally, the Sango coin can be used for transfer of value, governance, asset tokenization, digital identity, and ownership thus blending features of non-fungible tokens (NFT), utility tokens, security tokens, and governance tokens in a complex, untested design with substantial ambiguities.

**12. The legal treatment of Sango Coin is not clear from the crypto law, including whether it should be treated as debt or liability of the State.** The documentation for the Sango project framework does not clarify whether Sango Coin is issued by the State or by another entity. If the legal design does not recognize the issuance as direct liabilities of the State, there are still important fiscal risks under consideration. For example, it is not clear whether (a) Sango Coin enjoys an explicit

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<sup>3</sup> A digital representation of value that can be digitally traded, transferred and used for payment or investment purposes.

guarantee by the State (if so, this contingent liability should be properly reflected in CAR's fiscal and financial reports); (b) the future revenue streams on natural resources be considered pledged for the purposes of the Sango coin issuance; and (c) Sango Coin enjoys considerations on implicit guarantees by the State. Having clarity on these issues seems to be an important precondition for an appropriate measurement of public debt.

**13. The design of the Sango coin creates uncertainty regarding its valuation.** Given that the Sango coin is issued on a sidechain to the Bitcoin blockchain, with a two-way peg mechanism enabling conversion from Sango to Bitcoin and vice versa, the Sango coin would inherit Bitcoin's high volatility, making it a highly speculative asset. It is not clear (or not determined) whether the Sango Coin is fully or partially backed up by Bitcoin. In case Sango Coin would be pegged to Bitcoin while fractionally backed by it, Sango Coin will carry a risk of "de-peg/devaluation" vis-à-vis Bitcoin. However, another feature of Sango is that validation and consensus would be achieved by a quorum of nodes controlled by CAR's institutions, implying that the valuation of the coin would also depend on the sovereign credibility.

## **Digitization through Project Sango: Potential Opportunities**

### ***Leveraging Blockchain Technologies***

**14. New infrastructure may increase efficiency, transparency, and traceability of transactions, but the architecture and specifications remain unclear.** The Sango project is highly ambitious, creating a transversal infrastructure with many features and functions, based on a sidechain to the main Bitcoin blockchain. The espoused advantages of the sidechain are faster transfers at very low fees, at scale (allowing a higher number of transactions), and also enabling additional functionality through smart contracts. This technology could bring increased transparency and offer the basis to build different infrastructures that could modernize and strengthen CAR's institutions (for instance, maintaining property registration records). Supported by a sound legal framework and effective enforcement, applications of blockchain could increase legal certainty, simplify administrative procedures, and ultimately help reducing corruption.

**15. The potential benefits of using blockchains depend on the technological and governance design choices and on a robust regulatory and supervisory framework for financial stability.** One of the advantages of a decentralized financial platform like the Sango blockchain is that it could lower costs and increase transactions speed, especially in cross-border payments (although this poses also risks at the level of the monetary union, more on it below). At the same time, blockchains could offer new supervisory and compliance possibilities: the information on ledgers could be used to identify suspicious illicit activities and transactions based on automated triggers through the deployment of Regtech and Suptech (regulatory and supervisory technology). However, whether such benefits materialize will depend on policy and technological design choices. Transactions on the Sango blockchain need to be secured by validators, which may contribute to transaction costs and require clear governance arrangements to ensure adequate functioning. In the case of Sango, design choices might undermine the benefits of decentralization

as validations are centralized in the hands of a group of politically connected individuals, the “institutional quorum.”

**16. Furthermore, building a blockchain infrastructure and tokenizing assets can bring financial opportunities and innovation if fundamental underlying problems are solved first.**

The CAR could potentially benefit from using distributed ledger technology (DLT) solutions in many areas, with economic impact beyond financial transactions. At the same time, DLT and the digital representation of assets (tokenization) are leapfrogging technologies that can help build new markets. Nonetheless, technology *per se* cannot solve pre-existent fundamental issues, such as security and access issues, weak infrastructure, or the lack of an adequate institutional framework. Tokenized natural resources need to be as accessible, prompt, and quantifiable as physical resources exchanged in traditional markets.

***Financial Inclusion***

**17. Potential financial inclusion benefits from the Sango project require broad participation of the population.** While the authorities hope that the Sango project would allow the population “instant access to financial services”, additional efforts are needed to achieve both fair access to the purported benefits of the project and financial inclusion. Accessing the Sango ecosystem through the Sango App requires smart phones and good connectivity. In the CAR, low educational attainment, low access to electricity, poor internet penetration, and low access to bandwidth raise substantial questions about the feasibility of access of the Sango ecosystem by the broader population. Minimum investment in the Sango project in the ICO phase is US\$100 (US\$500 in the now ended Genesis cycle), in a country with annual per capita income of just around US\$800. The government’s “Young People Initiative” to provide young people with free smart phones seems to create discrimination against older citizens. The relative sophistication required to access the Sango platform raises concerns whether it will reinforce the digital divide and exclude the less educated, less affluent, elder, and less technologically savvy population.<sup>4</sup>

**Overview of Potential Risks**

***Risk from a Legal Perspective***

**18. The original CAR crypto law provided legal tender status to crypto assets and was inconsistent with the monetary union’s legal framework.** In the monetary union, BEAC has the exclusive right to issue banknotes and coins serving as legal tender in the member states, which made the crypto law fundamentally inconsistent with the foundations of the monetary union. In addition to financial, fiscal, and other risks discussed below, crypto assets in general are not suitable to become legal tender because the legal tender status requires that a means of payment be widely accessible by the public. However, internet access and the technology needed to transfer crypto

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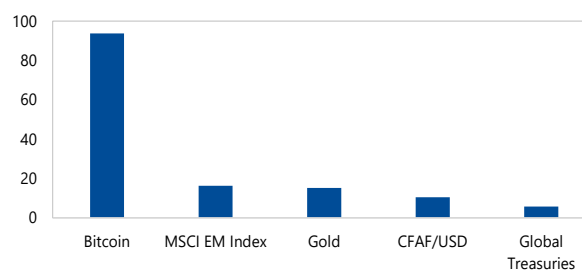
<sup>4</sup> Crypto users worldwide tend to be young, financially, and digitally literate, already have access to financial institutions, better educated and higher income than the general population. Alvarez et al (2022) show that Bitcoin usage is concentrated among the banked, educated, young, and male population who have a cell phone with internet.

assets, remain scarce in the CAR, raising issues about fairness and financial inclusion as noted above. Concerns remain as Sango Coin could potentially be perceived as de-facto currency in the CAR (e.g., a means of payment promoted by the State), and this can create various risks linked to a currency substitution effect. The abolition of legal tender status on April 6 reduces such risks.

**19. The lack of clarity in the legal foundations for Sango Project could result in significant legal risks.** In general, providing proper legal foundations for crypto ecosystems raises complex and novel legal issues, including: (a) the legal classification of the crypto assets under private, financial and tax law; (b) rights and obligations of the parties, including investors and the State; and (c) setting adequate regulatory rules to mitigate risks involved in transactions on the Sango platform. More broadly, CAR's governance vulnerabilities related to the enforcement of contract and the protection of property rights would also affect this project. In addition, the decision made by the CAR's Constitutional Court (see paragraph 7) adds uncertainties and questions the "rule of law" if the project were to proceed without further fundamental changes.

**20. Tokenization of natural resources would require a sound legal framework.** One of the key features of the Sango Project is expressed as the "democratization and tokenization of natural resources via blockchain, allowing unrestricted access for international investors," which is designed to "omit intermediaries from processes and sustains the capacity to ensure ethicality and transparency in the supply chains." However, designing a legal framework for the tokenization of natural resources raises significant legal complexities, including determining the legal nature of rights of the holders of crypto assets over the real-world assets (in this case the natural resources) or how the tokenization would be accounted in the State's balance sheet (more detail on the risks of tokenization can be found below). Moreover, without an appropriate legal framework for governance and disclosures, there would be fundamental risks to international investor protection. Structural vulnerabilities related to the severity of corruption and to rule of law weaknesses – including the lack of protection of property rights, that have been hampering the exploitation of CAR's resources, are equally relevant when building a blockchain infrastructure and tokenizing minerals. Similar risks such as safety, access, or lack of adequate framework issues, can arise for the prospective crypto crowdfunding for infrastructure projects on the Sango platform.

**Figure 6. Central African Republic: Historical Volatilities of Different Asset Classes**



Source: Bloomberg and IMF staff calculations

Note: Volatility is calculated as the standard deviation of daily returns of the assets. The MSCI EM (Emerging Markets) Index is a free-float weighted equity index that captures large and mid-cap representation across 24 EM countries and is considered a global benchmark to measure the financial performance of companies in fast growing emerging economies. Global treasuries is represented by the Bloomberg Global Agg Treasuries Total Return Index.

### ***Risks from a Monetary Perspective***

**21. Membership in the CEMAC monetary union has served the CAR well, and the Sango coin and Sango project should be fully aligned with its regulations.** The CAR, as a member of

CEMAC and UMAC, benefits from the stability of the CFA franc (pegged to the Euro) in particular, in terms of exchange rate predictability and low inflation. On the other hand, crypto assets do not serve well the fundamental functions of money, given their high volatility, relative to the stability of the current monetary framework (see Figure 6 and IMF (2023)).

**22. Widespread use of crypto assets can pose threats to monetary sovereignty and the ability of the central bank to fulfil its mandate.** The CAR's promotion of Sango coin and Project Sango activities could incentivize crypto adoption in the CEMAC monetary union and potentially lead in the future to a weakening of monetary policy effectiveness, even if the Sango coin does not represent legal tender. Cryptoization can create instability in money demand and weaken the transmission of monetary policy, particularly if accompanied by banking disintermediation. Such effects, coupled with a loss of seignorage revenue, can complicate monetary policy in the monetary union.

**23. Crypto assets pose the risk of weakening the effectiveness of capital controls in the monetary union.** Crypto assets create the risk of untracked capital inflows and outflows due to their anonymity features and by generally circumventing regulated intermediaries (see He and others (2022)). Sango project allows customers to own a non-custodial wallet that supports both Bitcoin and Sango "enabling fast worldwide payments". In the context of the CEMAC monetary union, convertibility between CFAF and crypto assets could create a risk for the accumulation of pooled reserves in the region, weakening existent capital controls that are needed to prevent capital flight. Shifts in the demand for CFAF because of moves in and out of crypto assets could affect CFAF liquidity conditions and the management of the CFAF peg. Mitigating options exist, using, for example, smart contracts to enforce capital controls and other measures (see paragraph 15). However, these smart contracts would require the setup of adequate such regulatory, supervisory, as well as monitoring capabilities.

### ***Risks From the Fiscal Perspective***

**24. Exposure to crypto assets in the government's balance sheet could lead to high volatility in revenue and spending, which would threaten the conduct of fiscal policy.** The possibility to use Sango coin to discharge tax obligations could create room for tax arbitrage and tax evasion. Even without an automatic convertibility mechanism, government exposure to crypto assets in terms of both revenue and spending can lead to large shocks to fiscal balances, given the extremely high volatility of crypto assets. This could threaten the conduct of fiscal policy in an already very vulnerable country and endanger its economic, social, and political stability.<sup>5</sup>

**25. Project Sango poses complex risks to the sound management of public finances.** While Project Sango aims to raise a very substantial amount of capital through the sale of Sango coin, citizenship, residency, and land plots; the proceeds are to be paid in other major crypto assets (Bitcoin, Ethereum, Tether, etc.), increasing the exposure of the public balance sheet to crypto assets.

<sup>5</sup> In the case of El Salvador, the government's significant fiscal losses on its crypto investments have contributed to a deteriorating fiscal situation and ratings downgrades (see, e.g., Alvarez et al., 2022).

It is not clear whether the government or extrabudgetary entities are involved in these transactions, which raises serious concerns regarding the management of these funds from the accountability, transparency, governance, and oversight perspective. Additionally, government spending may increase in order to finance different investment components of Project Sango (from infrastructures to real estate). Furthermore, contingent liabilities for the State may also arise from State-supported entities connected with Project Sango or from financial sector exposures to crypto assets, which could spill over to public finances. The tax incentives designed to attract investors (zero income tax for capital gains on crypto assets and zero corporate tax for corporate investors) create the risk of substantial loss of revenue for the State. Other incentives designed to foster adoption by the broad population (such as the free distribution of mobile phones), also raise concerns in the context of the paucity of fiscal space.

### ***Risks from the Financial Stability Perspective***

**26. The widespread use of crypto assets in the economy can increase the risks of financial disintermediation.** Project Sango aims to create a “new digital monetary system”, “without interference from the banking system.” If economic activity shifted towards the Sango ecosystem, financial resources would likely to be moved away from the traditional financial system. This could weaken core funding of banks, consisting of traditionally stable deposits and lead to a gradual process of financial disintermediation, which would negatively impact bank credit and thus the non-digital part of the economy. Abrupt shifts could potentially result in bank stresses and add to risks to the stability of the financial sector, which could spill-over to the monetary union’s financial system, given the high degree of financial market integration.

**27. The Sango project and the infrastructure it entails could exposes CAR’s financial system to substantial financial stability risks if used by regulated institutions.**<sup>6</sup> Financial institutions may become directly or indirectly exposed to crypto asset volatility if they provide credit or other financial services to crypto asset trading platforms, wallet providers, institutional or retail investors in crypto assets, or if they accept crypto assets as collateral for lending. The following risks emerge in case of cryptoization of the economy – without proper regulatory and supervisory safeguards):<sup>7</sup>

- *Legal risk.* The application of CEMAC laws and regulations could render contracts executed under CAR crypto law provisions’ illegal or unenforceable. This risk also derives from contradictory or inconsistent regulations, such as the regulatory misalignments highlighted in the section on legal risks.
- *Credit risk.* The acceptance of crypto assets as collateral, with improperly designed legal protection and haircuts, can increase credit risk. Crypto asset’s volatility could give rise to

<sup>6</sup> COBAC prohibits exposure to crypto assets by regulated institutions.

<sup>7</sup> Similar risks were highlighted in the CEMAC country Report No 2022/013, see Annex I. Crypto assets as a Legal Tender: Risks and Policy Response.

adverse wealth effects to exposed corporate or household balance sheets', which in turn could reduce repayment capacity and deteriorate bank assets quality through raising NPLs.

- *Liquidity risk.* In the case of CAR and CEMAC, banks' holding and dealing with crypto assets could deteriorate banks' liquidity, as crypto assets may not qualify as high-quality liquid assets. In addition, the Sango Project involves the deployment of a payment system and other market infrastructures that would act as central security depositories and securities settlement systems, for which liquidity risks may also materialize.
- *Market risk.* Potential direct or indirect bank exposures to extremely volatile crypto assets could increase market risk, with important spillovers across the monetary union.
- *Operational risk.* The Sango project involves complex infrastructure, and this translates in high operational risk. Deficiencies in information systems or internal processes, human errors, management failures, or disruptions from external events could result in the reduction, deterioration, or breakdown of services provided and even result in large losses of customer funds.
- *Cyber risk.* The Sango infrastructure proposes a model with centralized elements, which increases the risk of failure, in contrast to crypto assets issued on a decentralized public network with nodes and validators potentially spread around the world.

### ***Risks to Financial Integrity, Governance, and Consumer Protection***

**28. Without effective anti-money laundering and combating the financing of terrorism (AML/CFT) measures, crypto assets can present significant risks to financial integrity.** The crypto law does not provide for any measure to prevent, investigate, prosecute, and sanction the criminal misuse of crypto assets. In these circumstances, crypto assets can easily be misused to commit crimes such as fraud or sanctions' evasion and/or be misused to conceal and launder the proceeds of crimes, including corruption. This is due to their pseudo-anonymous and decentralized nature, the speed at which transactions can be done, including in a cross-border context, and potential anonymity-enhancing features. Granting legal tender status to crypto assets (as authorities initially did and recently reversed) would compound those risks further, both domestically and in comparison to other countries (where crypto assets are not given an official status) because there is an expectation that these assets will be widely used.

**29. Those risks are particularly acute in CAR because of the country's weak institutional and administrative capacity.** As a fragile and conflict-affected state and given its weak rule of law environment and institutional capacity gaps, concerns remain about the ability of CAR's AML/CFT competent authorities to effectively detect, investigate, and prosecute financial crimes in particular when laundered through transactions involving crypto assets. In light of the systemic corruption, the absence of safeguards may also create an opportunity for rent seeking (e.g., in the context of the exchange of crypto assets to CFAF; and vice versa).

**30. The tokenizing of natural resources and other features of the Sango project raise further financial integrity concerns.** Without an adequate AML/CFT framework, tokenizing natural resources would increase further the risk of ML/TF. In addition, other features of the Sango project, in particular, plans to grant a citizenship through an investment program – which the CAR’s Constitutional Court has declared illegal –, raise further risks to financial integrity. The ML/TF risks associated with citizenship through investment programs can be high if not properly managed. New citizenship can, for example, disguise higher risk profiles and/or facilitate the commission of crimes such as corruption, ML, and tax evasion. As a result, countries offering such programs can suffer significant damage, including reputational, affecting financial integrity and stability with potential spillovers to other countries.

**31. Achieving good governance of the Sango project is essential for promoting appropriate projects and avoiding policy errors and associated fiscal costs.** The public-private partnership nature of the Sango project raises important governance concerns. The conflict-of-interest aspect appears significant due to the lack of clarity on the organs of decision and on the apparent concentration of power (issuance, custody, and validation) in the hands of the so-called “institutional quorum”, constituted from public elected officials (Presidency, ministers and National Assembly). Additionally, the private sector partners involved in the creation, operation, and the administration of the platform may have different profit-maximizing incentives. Given the potentially significant capital the project is expected to raise, an unclear governance of this public-private partnership can give rise to conflicts of interest, absent organizational devices to ensure integrity, and lack of transparency and of prudent management of fiscal risks. In this regard, the political and institutional weakness in the CAR, as well as the high level of corruption, pose significant risks to the governance of the Sango ecosystem.

**32. The governance of the Sango project raises additional equity concerns.** The Sango coin has tokenized governance features and gives voting power to investors in the blockchain project. While the Sango project claims to provide a “voice for every citizen to share their future”, the requirement of a minimum investment of US\$100 equivalent (to be paid in cryptocurrency) to participate in the ICO does not appear to encourage the participation of CAR’s population. The experience of El Salvador’s with Bitcoin as legal tender suggests that the broad population’s acceptance and usage of crypto assets may not increase quickly.<sup>8</sup> The governance token feature raises the risk that actors that gain enough voting rights may impose policies that would favor their interests. In the context of the planned tokenization of CAR’s mineral wealth through the Sango platform, significant risks emerge in terms of the misappropriation of the country’s valuable resources.

**33. Lack of clarity regarding key elements of Sango coin and project Sango point to increased consumer protection risks.** These can arise when consumers and investors are unaware or do not fully comprehend the risks associated with activities related to the Sango ecosystem. The

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<sup>8</sup> Alvarez et al. (2022) highlight that, despite the legal tender status of bitcoin, the large incentives implemented by the government, and the favorable preconditions (high share of remittances, low financial inclusion, low penetration mobile banking), Bitcoin is largely not an accepted medium of exchange in El Salvador.

risks of crypto activities to users are even more significant in a country with very low levels of financial literacy like the CAR. Without the development of an adequate legal framework for the Sango project, risks to domestic and foreign investors from limited recourse, unclear benefits, understated risks, inadequate governance, poor oversight, or even outright fraud can occur.

### ***Risks from Tokenization of Natural Resources and Infrastructure Projects***

**34. Tokenization of natural resources as part of the Sango ecosystem can give rise to novel risks.** At least the following should be considered:

- Assets to be potentially involved in the tokenization project are natural resources in a jurisdiction with no guaranteed safe access. Tokenization does not solve fundamental issues which have rendered the valuation and exploitation of such resources difficult in the CAR.
- One of the purported benefits of tokenization in the Sango proposal is the democratization of resources and the possibility of making these available to the general public, due to fractionalization. However, the wider distribution to potentially unsophisticated investors raises additional consumer protections risks.
- The deployment of the project entails risks of contagion to the financial sector, to the extent that traditional financial sector entities would become involved in financing such projects and thus gain direct exposure to the high volatility of the crypto asset sector.
- Tokenizing natural resources creates new risks of double spending or “double selling”. The regulatory and supervisory framework needs to provide legal certainty on how to prevent that the same asset is sold on the blockchain and outside the blockchain.
- Given the currently deficient legal framework to address the ML/TF risks associated with mining, dealing in precious metals and precious stones, tokenizing CAR’s natural resources could increase the risks of ML/TF.
- Tokenized trading requires a combination of intermediaries’ actions, which bring new types of risk to tokenized transactions. These intermediaries are the technology providers that need to digitally represent these assets on the blockchain, the actors determining the value of the asset, the certifiers on on-going basis of the existence of the asset outside the blockchain, the registers of the property of such assets, and the range of actors that exploit the natural resources outside blockchain. These risks must be addressed by a robust regulatory and supervisory framework.

**35. The physical infrastructure aspects of Project Sango are ambitious but entail substantial implementation risks.** Project Sango has an important infrastructure component, providing for the creation of a crypto economic zone, which could serve to attract investment, innovation and growth. However, the plans, which include the development of a high-tech commercial and residential real estate project for the Crypto City and Crypto Island, would require substantial capital investment and recurrent outlays unmatched in the country. Even if Project Sango aims to raise a very substantial amount of capital which can finance such investments, fundamental

questions remain as to the realism of the materialization of such projects at CAR's current level of development.

## E. Policy and Regulatory Options

**36. The current Sango project is complex and overarching, raising questions about the criticality of certain features.** The current vision creates interconnectedness between multiple activities and private and public balance sheets in a manner that could raise systemic risk. The elements of Sango project that should be pursued are those for which the required prerequisites in terms of infrastructure, institutions, legal and regulatory framework, capacity development, and others, can be realistically met.

**37. The priority is to ensure consistency with the CEMAC legal and regulatory framework.** As a member of a currency union, it is important for the CAR to align with the existing dispositions in the UMAC Convention and the legal framework surrounding its application circulation of monetary assets as well as the harmonization of monetary, banking, and financial regulations. In coordination with regional institutions, especially BEAC, CAR recently revoked the legal tender status and guaranteed convertibility of bitcoin. The authorities should continue to cooperate with CEMAC authorities to ensure that legal and regulatory frameworks for crypto assets are coordinated and coherent, ensuring monetary stability, managing macroeconomic and financial stability risks, protecting consumers, and fostering compliance with the AML/CFT standards, while at the same time creating pace for legitimate innovation. The CAR authorities need to fully follow union-wide prudential requirements on regulated financial institutions (such as banks and insurers) concerning their exposure to, and engagement with, crypto assets.

**38. The growing body of international expertise provides useful guidance in designing an effective policy framework for crypto assets in CAR.** The FATF has amended its AML/CFT standards to address explicitly the mitigation of the ML/TF risks related to crypto assets.<sup>9</sup> In addition, the IMF's Executive Board has recently endorsed, nine core elements<sup>10</sup> that can help inform a comprehensive, consistent, and coordinated policy framework for crypto assets (see Box 1). This guidance underpinned the staff advice regarding the removal of crypto assets' legal tender status and guaranteed convertibility and can serve as the basis to build a sound framework around crypto assets after the Sango Project is reshaped to be compliant with CEMAC regulation. Although CAR's circumstances and capacity constraints may condition the sequence of implementing the elements, putting in place a framework consistent with this guidance should be a pre-requisite to enable policy makers to address crypto assets' risks while reaping the potential benefits from technological innovation.

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<sup>9</sup> See in particular FATF Recommendation 15 and its Interpretive Note, as well as the relevant guidance issued by the FATF.

<sup>10</sup> IMF. 2023. *Elements of Effective Policies for Crypto Assets*. Policy Paper No 2023/004. Washington, DC International Monetary Fund. ISBN 9798400234392/2663-3493

**39. Fiscal risks stemming from Project Sango need to be identified, monitored, and mitigated.** At a minimum, fiscal risks emerging from Project Sango should be timely and properly quantified and monitored, in order to promote fiscal transparency. Government guarantees, including for convertibility of crypto assets into fiat legal tender, should be avoided. Moreover, the Sango project should be explicitly delinked from the public sector balance sheet. The tax treatment of crypto assets needs to be unambiguous and strike a balance between stimulating innovation and raising much-needed revenue. Following international best practices, such as the OECD (2022) new tax transparency framework for the reporting and automatic exchange of information in respect of crypto assets, is recommended.

**40. A sound legal and regulatory AML/CFT framework, complemented by adequately skilled, and resourced, competent authorities is essential to address the financial integrity issues presented by the crypto law and the Sango project.** The mitigation of the ML/TF risks related to crypto assets and to the Sango project features requires several steps, starting with a robust assessment of those risks and of their impact on CAR's risk profile. The findings of the assessment should then guide the authorities in the design and implementation of appropriate tailored and effective mitigating measures. Finally, in light of the often cross-border nature of crypto assets -related activities, including criminal activities, extensive dialogue and cooperation with foreign AML/CFT counterparts is also required.

**41. Clear and robust governance requirements are essential in the Sango Project.** Governance should cover fit and proper senior management, management liabilities, and resources and control functions, as well as identifiable decision-making structures that promote safety and efficiency of the Sango infrastructure. This should include a clear policy on conflict-of-interest management and rules on prohibited activities. The CAR needs to develop comprehensive regulations and enforce prudential supervision and oversight requirements applying to all actors involved in the Sango ecosystem. Rules similar to the ones existing for financial service providers should apply to crypto asset service providers which fulfill functions such as storage, transfer, exchange, and custody of reserves and assets. Additional requirements to reflect the new business models may need to be designed, relying on global standards wherever relevant.

**42. A multi-faceted infrastructure such as Sango requires a comprehensive and robust risk-management strategy and review processes.** In addition to the mitigation of the ML/TF risks mentioned above, risk-control policies and practices should include, but not be limited to, legal, credit, liquidity, general business, and operational resilience, including outsourcing, fraud and cyber risk, risk of loss of data, and various nonfinancial risks (such as data integrity), operational resilience (i.e., operational reliability and capacity), and third-party risk management.

**43. Increasing financial inclusion in CAR can arguably be better achieved through mobile money, a solution which has been successful in the region.**<sup>11</sup> Mobile payments allow anyone with an unsophisticated mobile device and phone connectivity to engage in activities such

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<sup>11</sup> [Is Mobile Money Part of Money? Understanding the Trends and Measurement.](#)

as conducting payments, sending remittances, and making savings and investments. The CAR already has started to experience mobile money, with increased penetration (see Figure 4). Mobile money transfer services can then be followed by a full suite of mobile services.

**44. The sound and appropriate exploitation of CAR’s natural resources can accelerate growth and should be pursued beyond the Sango project.** Barriers<sup>12</sup> to sound exploitation need to be addressed, while considering various exploitation alternatives. Tokenization of assets, if thought to bring benefits compared to traditional investors, could be considered, however it does not need to depend on the Sango project infrastructure. This separation can bring some benefits as it will reduce some of the interconnectedness risks of the Sango infrastructure as defined in the current blueprint. Tokenization of natural resources would also require a legal framework consistent with the FATF standards to address the ML/TF risks associated with mining and dealing in precious metals and stones.

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<sup>12</sup> These barriers include access to natural resources, lack of appropriate financial integrity measures and of transparency on the governance arrangements as well as on the available reserves.

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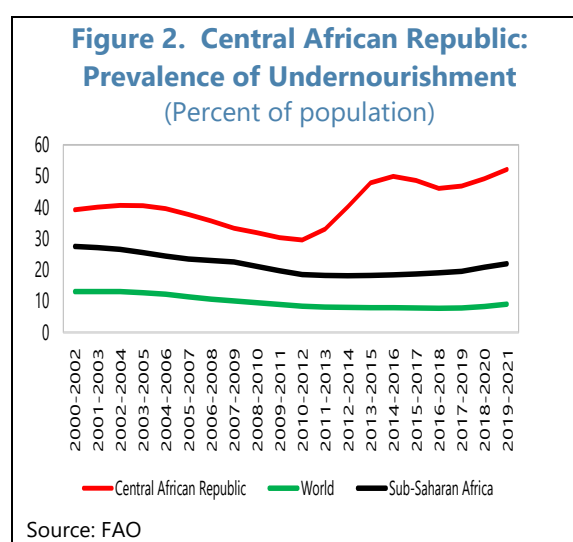
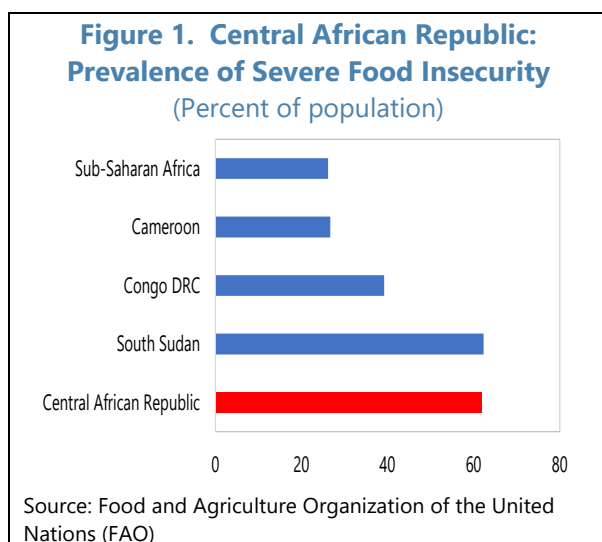
# ADDRESSING FOOD INSECURITY IN THE CENTRAL AFRICAN REPUBLIC—CHALLENGES, DRIVERS, AND POLICY OPTIONS<sup>1</sup>

## A. Executive Summary

A confluence of pre-existing structural factors and recent macroeconomic shocks are contributing to the aggravation of food insecurity in the Central African Republic. The government has a limited capacity to respond through social protection programs, due to fiscal and institutional fragility. Under the circumstances, the near-term response to reduce the adverse impacts includes increased humanitarian aid and resumption of donor support in the form of grants. In the medium to long term, policies to address the structural drivers of food insecurity should be part of government's development agenda, acting on all four dimensions of food security—availability, access to, utilization and stability of food.

## B. Background

**1. The Central African Republic (CAR) has one of the highest prevalence of food insecurity in the world.** The prevalence of severe food insecurity reached 61.8 percent of the population on average in 2019–21 (Figure 1). According to estimates from the Integrated Food Security Phase Classification by the Food and Agriculture Organization of the United Nations (FAO), 2.2 million people, or 44 percent of the population, experienced elevated levels of acute food insecurity between April and August 2022. The majority of the affected live in rural areas and mainly rely on agriculture for their livelihoods. Amid conflict, undernourishment rates surged since 2013

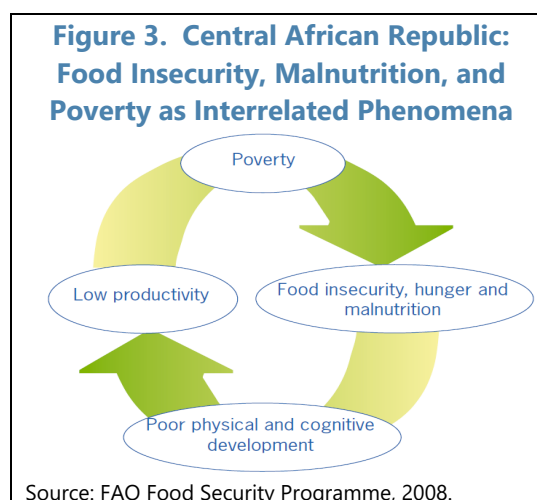


<sup>1</sup> Prepared by Felix F. Simione and Marcel Nshimiyimana (AFR).

and remain among the worse in Sub-Saharan Africa (SSA) and in the world (Figure 2)<sup>2,3</sup>. Furthermore, the UNICEF estimates that 40 percent of children under five are already suffering from chronic malnutrition, a rate above the emergency threshold of 30 percent. With such high rate of malnutrition, the country is likely to continue to rank near the bottom on Human Development indicators, especially education and health.

**2. Elevated food insecurity in the CAR is a drag to the country's long-term economic potential.** Food insecurity and malnutrition carry a high cost in terms of foregone economic opportunities, which can extend into future generations (FAO and OECD 2014). With almost half of the population lacking access to adequate food, there is a risk that children school dropout will increase among coping households in the affected areas. This would lead to permanent negative effects on the productivity of the future cohort of workers. Food insecurity in the CAR also risks exacerbating the existing conflict and political instability, trapping the country permanently into poverty (Figure 3). As recently discussed in IMF (2022a), the CAR is among 48 countries that are most affected by the ongoing food crisis both from a balance-of-payments and humanitarian needs perspectives. Accordingly, food insecurity is likely to impede real GDP growth rates sufficient to reduce poverty.

**3. CAR's food insecurity cannot be dissociated from its classification as a fragile and conflict-affected state (FCS).** As part of the Congo Basin—the second largest rainforest in the world in size after Amazon rainforest—and among the highest arable land per capita in Africa, CAR's level of food insecurity stands as anomaly. However, political instability and violent conflicts between different armed groups all around the country have contributed heavily to this outcome.



## C. The Rising Challenge of Food Insecurity

**4. The ripple effect from Russia's war in Ukraine is the latest of successive crisis in recent years, that have triggered new waves of food shortages in the CAR.** Food supply in 2021 was hit by the COVID-19 pandemic and related supply chain disruptions, and renewed violence and insecurity amid election disputes. The situation worsened in 2022 when CAR faced a negative terms of trade-shock on account of rising food and fuel prices triggered by the war in Ukraine. The higher fuel price negatively impacted humanitarian agencies' transportation costs and relief efforts, limiting

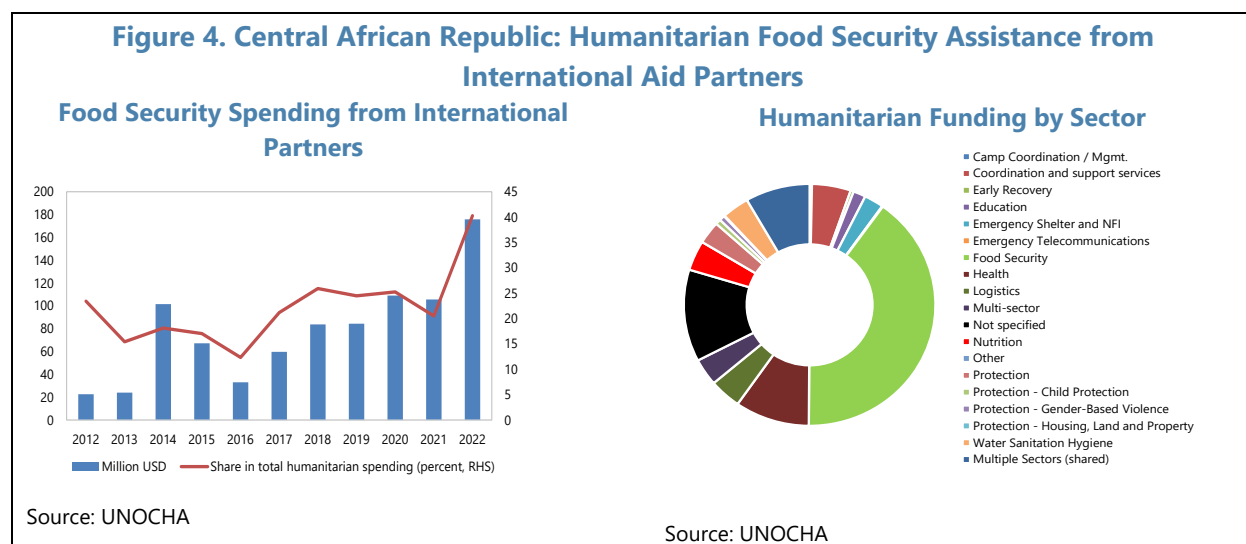
<sup>2</sup> **Prevalence of undernourishment (PoU)** is FAO's traditional indicator used to monitor hunger at the global and regional level and is based on country data on food availability, food consumption and energy needs. It estimates the adequacy of a population's dietary energy intake.

<sup>3</sup> According to FAO guidelines, a person is considered to be in **severe food insecurity** when he or she has run out of food and has gone an entire day without eating at times during the year.

the resources available for food assistance. The number of people experiencing elevated levels of acute food insecurity is expected to rise to 2.7 million between September 2022 and March 2023, and may reach 3 million between April and August 2023 if no additional assistance is provided.

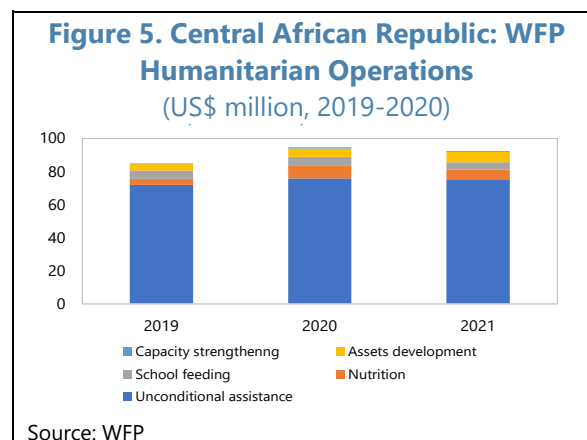
**5. The Government's limited capacity to respond to rising food insecurity underscores the need for building a social protection system.** CAR's stressed public finances, very low tax revenue, deteriorated institutional capacity after the war, and the temporary nature of humanitarian aid perpetuate food insecurity. The country has no system of social protection in place. Existing transfers and subsidies account for about 2.4 percent of GDP in the draft 2023 budget, which includes pensions (0.5 percent of GDP), and transfers (1.5 percent of GDP) and other spending (0.4 percent of GDP) that are not necessarily targeted to social protection. In response to limited space for social protection, the government has attempted to insulate the public from rising food and fuel prices through discretionary policies such as fuel subsidies financed by foregone VAT and import tariff revenue, further magnifying fiscal fragility. Building a social protection system through the budget would provide the basis for a more efficient response.

**6. Absent a social protection system, near-term food assistance in the CAR relies heavily on humanitarian aid, while longer-term programs depend on off-budget donor funding.** From the pandemic to date, food security spending from partners increased both in nominal terms and as a share of total humanitarian assistance, with an uptick in 2022 as the war in Ukraine drove food prices up. Food security accounts for the largest share (40.5 percent) of total humanitarian assistance in the CAR estimated at US\$ 403.7 million in 2022 (Figure 4).



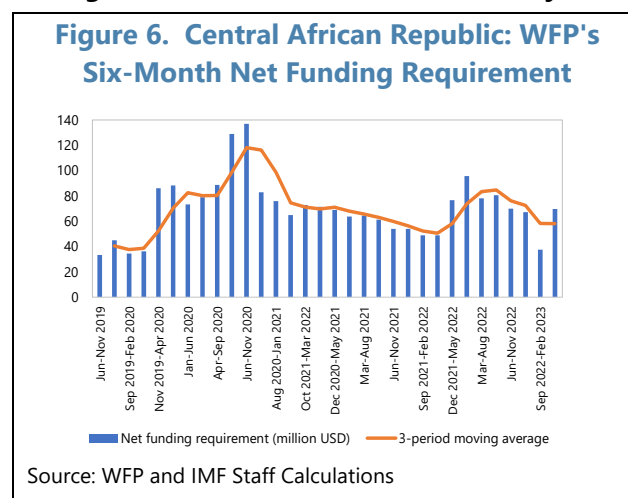
- Existing assistance is geared towards short-term relief and long-term resilience projects.
- The World Food Program (WFP) is a major player with regards to short-term aid, mainly through its unconditional food assistance program, which includes food distribution and cash-based transfers. The program accounts for almost two-thirds of all WFP's aid operations, estimated at around US\$90 million on average in 2019-2021 (Figure 5).

- Another program is the World Bank’s PACAD approved in 2021. With a US\$16 million envelope, PACAD has provided targeted mobile money transfers to internally displaced households and those impacted by the pandemic and floods.
- Other programs focus on improving food security in the longer term, including two World Bank programs: Agricultural Recovery project (US\$25 million for 2019-24), and the Urgent Response to the Food Crisis project (US\$50 million for 2021-24) implemented in coordination with the WFP and the Food and Agriculture Organization of the United Nations (FAO). Among other objectives, these programs seek to strengthen rural infrastructure development and agricultural markets, and strengthen access to inputs (fertilizer, seeds) and equipment for smallholders, respectively. Other partners such as the European Union also support food security indirectly through off-budget rural and agricultural development projects.



**7. While humanitarian organizations have provided crucial food aid assistance, their recently rising funding gap calls for further financing from the international community.** For

example, the deteriorating situation since early 2022 has led to an increasing financing gap that will require a scaling up of funding. For instance, WFP’s six-month net funding requirement—a measure of the funding gap to conduct food assistance operations—has again surged after the food price crisis triggered by the war in Ukraine in early 2022 (Figure 6). In 2022 only, WFP’s estimated needs amounted to US\$ 217.3 million, while only 54 percent of that amount was available from donor contributions. Addressing the funding shortfall will require a scaling up in donor contributions, in the form of grants and humanitarian assistance.

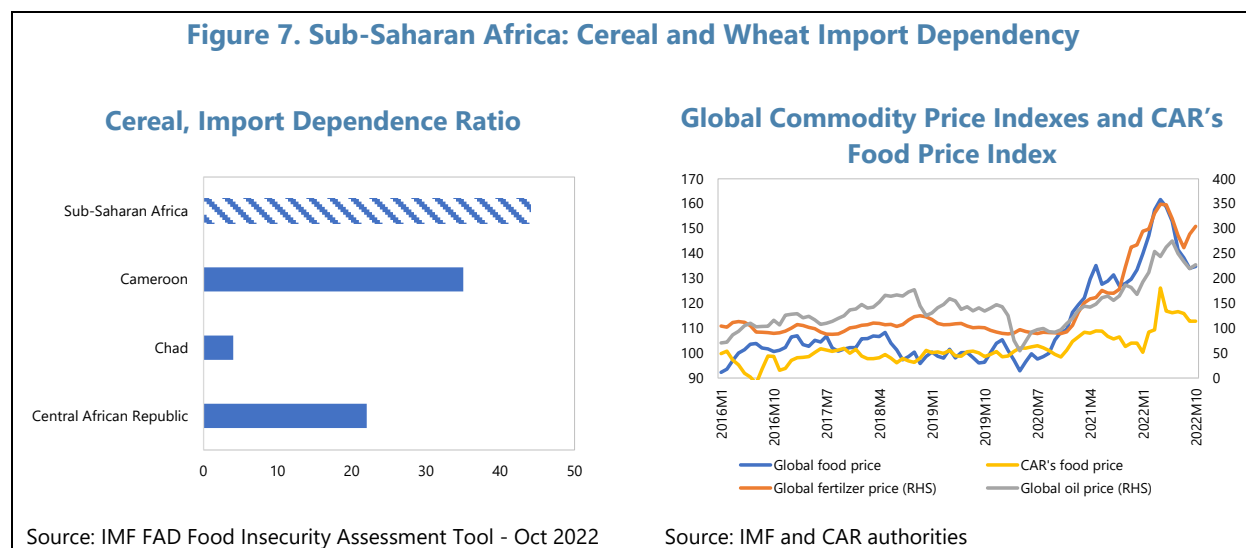


## D. Drivers of Food Insecurity

### Macroeconomic Drivers

**8. Recent macroeconomic shocks are exacerbating pre-existing structural drivers of food insecurity.** The country’s cereal import dependency is over 20 percent, while wheat dependency is about 12 percent (Figure 7). While these food dependency ratios are low relative to SSA average, the CAR’s fragility worsens the overall impact. For example, with the sharp increase in commodity prices,

the UNOCHA estimated that its programs in CAR “expect a 30 percent increase in the price of rice, a 67 percent increase for the price of wheat flour and a staggering 70 percent increase in the price of vegetable oil”. The story is not much different for fuel. As global fuel prices increased, a parallel market surged where fuel is sold at a premium price, impacting humanitarian agencies’ transportation costs and relief efforts.



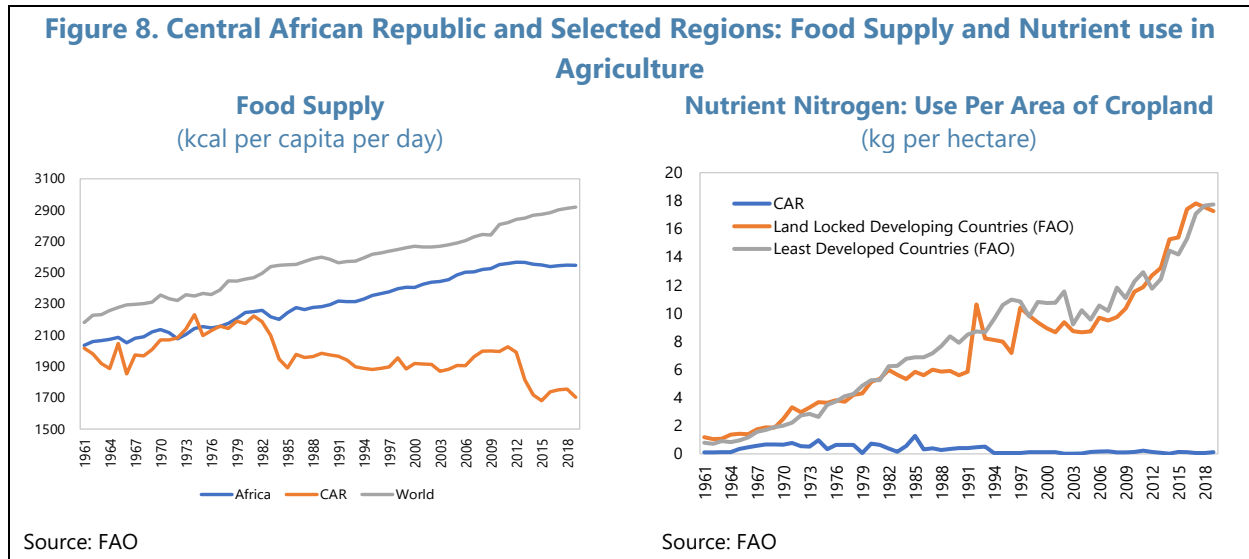
## Structural Drivers

**9. Food insecurity in the CAR also reflects structural factors that hinder all four dimensions of food security—availability, access, utilization, and stability.** As defined by FAO (2008), availability refers to availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports. Access refers to access by individuals to adequate resources for acquiring appropriate food for a nutritious diet. Utilization refers to utilization of food through adequate diet, clean water, sanitation, and health care to reach a status of nutritious well-being. Stability refers to the ability to access adequate food at all times.

### Availability

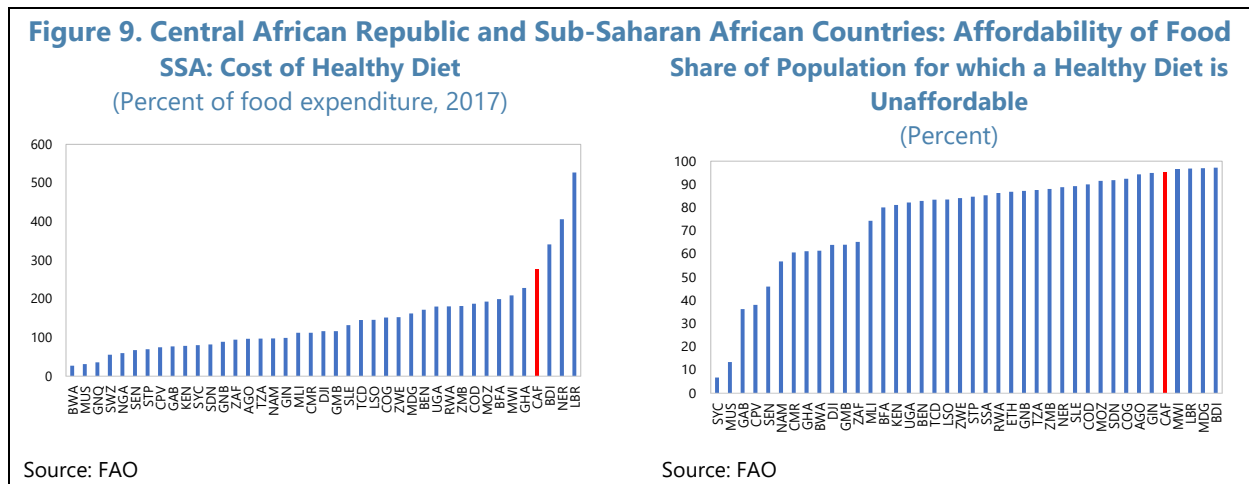
**10. Availability of food in the CAR is critically constrained by political and structural factors that deter productivity growth in agriculture.** The amount of food supply available from domestic production is low, translating into lower kilocalories per capita per day relative to the average of both Africa and the world. Behind this divide is the low agricultural productivity, which has stagnated for many years. Although the share of agriculture in GDP has declined significantly since 2013, such decline is rather a result of the deteriorating security situation, especially in rural areas impacted by violence from armed groups, rather than increasing productivity (World Bank 2022). Moreover, productivity growth remains highly constrained by limited access to seeds and fertilizers, together with incipient extension services. For example, the usage of fertilizer in agriculture is only a small fraction of the levels seen in other developing countries (Figure 8), resulting in very low yields of basic crops such as maize and rice. As a result, agricultural yields over

time have remained low and unstable. The incipient domestic production of food makes CAR highly dependent on imports which in turn makes food security highly prone to international prices and the exchange rate.



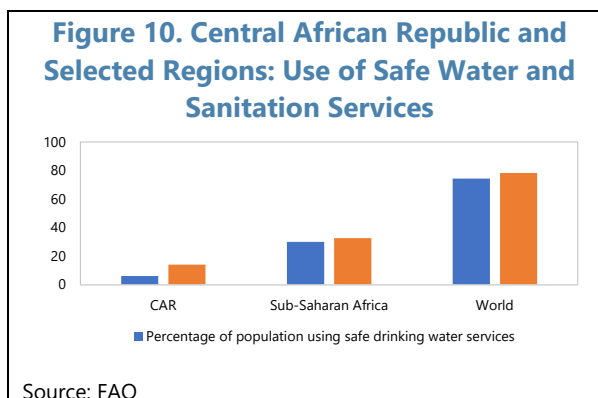
**Access**

**11. Access to food is also inadequate for a large share of the population due to widespread poverty and unaffordable costs.** The cost of accessing a healthy diet (by FAO standards) is almost three times higher than the average expenditure on food. As a result, almost the whole population cannot afford a healthy diet (Figure 9). Furthermore, underdeveloped road and transport infrastructure amid conflict environment also constrains physical access to food as linkages between rural agricultural markets and food commercialization networks fail to emerge.



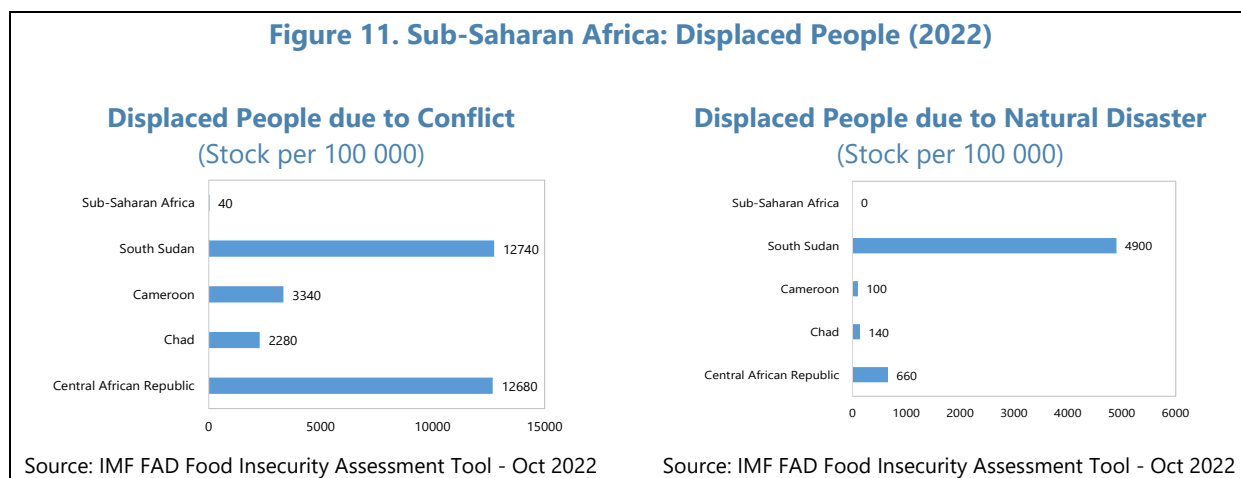
## Utilization

**12. Utilization of food—storage and processing—is unsafe due to precarious access to safe drinking water for a significant part of the population.** Access to safe water—a key ingredient for processing and cooking—is limited to 6 percent of the population. The interaction of unsafe water and the almost absence of basic sanitation services (available to only 14 percent of the population), reduces the prospects for safe utilization of food (Figure 10). Even where safe water and sanitation is available, low educational attainment reduces the ability to access and digest nutritional information.



## Stability

**13. Stability of food is challenged by permanent conflict and environmental issues, perpetuating the trap of limited availability, inadequate access to, and unsafe utilization.** As documented in World Bank (2022), CAR’s agriculture sector has been particularly vulnerable to the various episodes of conflict, violence, and coups since independence in 1960. As a result, there has been significant variability in food production and per capita food supply over time, an indication that individuals do not have access to adequate food at all times. Because of population displacement (currently estimated at around 25 percent of the population, Figure 11), households have been unable to engage in agricultural and livestock activities, resulting in a depletion of food stocks, rising prices, the adoption of negative coping mechanisms by nearly half of the population and increased dependency on food aid. Livelihoods are further destroyed by climate shocks, including torrential rains and extreme flooding, that are seasonally prevalent in different parts of the country. The ND-GAIN Index ranks CAR 180 out of 181, indicating the high level of vulnerability to climate change shocks. Climate change is expected to further intensify food insecurity (IMF 2022b).



## E. Policy Options

### **14. Achieving a food secure CAR calls for near-term emergency interventions, while addressing the structural drivers of food insecurity through medium-to-long-term policies.**

Macroeconomic shocks could dissipate as the surge in global food prices eases, oil prices decline, and the war in Ukraine is resolved. However, structural drivers of food insecurity cannot be effectively addressed in the near term given their myriad dimensions discussed earlier. The political situation in the country remains fragile, with limited elite consensus towards a durable solution. Climate and environmental factors are projected to worsen, considering CAR's susceptibility to flood and drought, further worsening displacement and food insecurity. Thus, policies to address the structural drivers will likely yield results only in the medium to long term.

#### **Near-Term Measures**

**15. Immediate measures should focus on alleviating food pressures and mitigating the humanitarian crisis with help from aid partners.** In the absence of strong social security programs from the government, and given the limited fiscal space, the authorities should continue to appeal for external humanitarian support. Humanitarian aid partners already have a very strong field presence in the CAR, and can deploy quickly to expand their food, humanitarian assistance and protection programs. Many of their programs assist to mitigate fragility because of their cross linkage to distribution of agricultural and livestock inputs, access to safe water and adequate sanitation, health, and nutrition systems reforms.

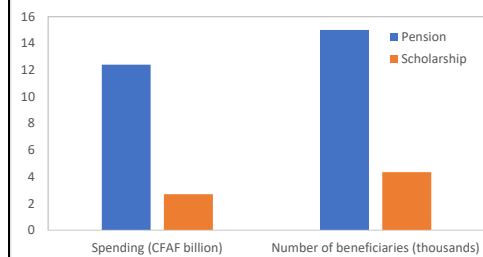
**16. Donor budget support could help protect vulnerable groups not supported by humanitarian assistance, such as pensioners and students, while safeguarding transparency.** Pension and scholarship transfers currently account for 0.8 percent and 0.1 percent of GDP, respectively, with the former being the single most important budget line within transfers and subsidies. Both groups were highly negatively impacted by higher fuel- and food-driven inflation (Box 1). While pension and scholarship spending increased by about 3 percent in nominal terms in 2022, annual inflation was much higher at around 11 percent, depressing their purchasing power. Additional donor budget support would help free resources to support pensioners and vulnerable students, as well as to ensure timely wage payments to civil servants coping with higher food prices. To address potential transparency issues over the use of funds, the authorities could leverage the recent experience of the Ministry of Finance's Fiduciary Management Committee in producing quarterly monitoring reports and ex-post audits.

### Box 1. Social Protection amid the Global Food Price Crisis in the Central African Republic

**The CAR is being severely impacted by the global food and fuel price crisis.** Despite the lack of a social protection system in the country, the budget has allocations for some social spending, including old age pensions and scholarship assistance to university students. There is room to support the government through direct budget support to help mobilize resources to these spending items.

**Old-age pensioners are among the most vulnerable.** There are currently a total of 15,000 pensioners for a total pension spending of around CFAF 12 billion per year (0.8 percent of GDP in 2022). This is equivalent to only CFAF 6,666 (around US\$10) per month per pensioner in a country where, according to FAO data, the cost of a healthy diet is among the most unaffordable in the world. With recent cash flow pressures due to rising fuel and food prices, to be able to meet its obligations with pensioners, the government has cut spending in other budget lines, including through accumulation of arrears in scholarship spending (more on this below). However, while such reallocation helped maintain the nominal monthly value of pension benefit for pensioners, it does not address the significant loss in purchasing power. With rising food prices, y/y inflation is estimated to have reached 11 percent in 2022, depressing the pension value in real terms.

**Box Figure 1. Central African Republic: Pension and Scholarship Spending**



Source: Central African Republic Authorities

**Scholarship arrears have impacted vulnerable students.** Total scholarship assistance accounts for 0.1 percent of GDP in 2022. Scholarship support is provided to 4,350 university students, of which 3,300 studying in the country and the remaining abroad. The monthly stipend for domestic students is CFAF 30,000 for nine months (around US\$48). Beneficiaries are selected and retained based on social need (first-time application) and academic merit, respectively. Scholarship payments in the academic year 2021/22 reached CFAF 2.35 billion, of which CFAF 1.45 billion to students abroad and the remaining to those in the country. The total amount envisaged in the 2023 budget is CFAF 2 billion. Recently, not only the real value of scholarships was depressed by higher inflation but, due to cash flow problems related to declining tax revenue, the government also accumulated arrears on stipend payments to domestic students in the academic year 2021/22. Some payments that were due to students abroad in the academic year 2020/21 were not paid, either putting the total amount of arrears at CFAF 370 million by December 2022.

**Protecting old-age pension and student scholarship can help mitigate the impact of rising fuel and food prices.** Pensioners are among the most vulnerable groups in the CAR given the extremely low value of the monthly payment entitled to them and the lack of alternative occupation at old age in a country where 80 percent of employment is in subsistence agriculture that requires active physical labor. Although the old-age dependency ratio is low (5 percent in 2021) due to a young population, the poverty rate among the old is likely to be high given that over 70 percent of the population lives below the international poverty line. On the other hand, university students have been negatively impacted by stipend arrears since 2020. These risks increasing the school dropout rate, resulting in foregone human capital in a country where the percentage of the population with university degree is low. It would also result in wasted budgetary resources allocated to stipends in the past.

## Medium-to-Long-term Policies

**17. Improvement in political stability would come from eliminating conflict and its root causes.** Such improvements would come from progress on the peace agreements and consensus building on governance and other issues underlying the conflicts. A successful political solution

would create the environment for effective implementation of economic policies and strengthen the stability dimension of food security. The reintegration of ex-combatants into the social life and labor market is also key to preserve stability. This will require investments in human capital development, including vocational and other skills.

**18. Efforts should be made to increase agricultural productivity through higher usage of modern inputs, rural infrastructure development and secure access to land.** Rebuilding the agriculture sector is vital to food security, including in the post-conflict reconstruction period. According to FAO's estimate, every US\$1 invested in crop production can yield approximately US\$12 in food (FAO 2022). Stopping conflict alone can already remarkably boost agricultural productivity by unleashing the labor potential. Nevertheless, even within the current context, the government and humanitarian organizations can support productivity growth by supplying inputs such as higher yielding seeds, improved fertilizers, and extension services, including in conflict-affected areas to the extent that some stability is present. Furthermore, considering that the agriculture sector still employs more than 80 percent of the labor force, a recent diagnostic by the World Bank concludes that policymakers should prioritize agricultural infrastructure development, targeting rural and marginalized communities. A careful agricultural land reform that helps individuals secure land titles, particularly in rural areas, can also avoid fueling future conflicts.

**19. Effective social protection programs run by the government can be introduced to improve affordability of and access to food, backed by higher domestic revenue mobilization.** Considering that access to adequate food is unaffordable to almost the whole population in the CAR, targeted cash transfer-based social protection programs hold the potential to help attenuate food insecurity. However, establishing a meaningful social protection program in the context of CAR will require a concurrent increase in tax revenue which currently stands at only 8 percent of GDP, among the lowest in the World. In the meantime, with technical assistance from the Fund, the World Bank and other partners, the authorities could explore reforms to increase tax revenue in the medium to long term, while laying the foundations for a solid social protection system in the future. Such foundations include continuing the work in progress to establish a global social protection policy, the single registry of vulnerable people, among other actions.

**20. The authorities can also help improve food resilience by tapping into global climate funds to strengthen the adaptation of the agriculture sector to climate change.** As CAR's agricultural output is highly impacted by climate change- and environment-related shocks, the authorities could benefit from applying to global climate projects aimed at increasing agriculture adaptation to climate shocks. This could be achieved by partnering with global climate funds such as the Adaptation Fund, the Global Environment Facility, and the Green Climate Fund, from which grants and concessional loans are potentially available to CAR and other countries vulnerable to climate change. Access to these funds (with available financing of US\$3.7 billion in 2021 only) could help increase space for food security-related spending. Historically, like several other low-income countries, the CAR has had a very limited access to climate funds. During the period 2008-2021, the country secured from climate funds disbursements of only US\$8.1 million, out of approved funds amounting to US\$27.8 million. Gaining a greater access to climate funds requires pre-conditions

that include, among others, political stability, transparency of public financial management, and capacity to prepare climate adaptation projects. The latter can be addressed by applying to climate funds in partnership with accredited institutions such as the World Bank or the UN.

**21. Digital technology can be increasingly employed to reduce the cost of humanitarian operations, while extending their reach.** There is room to expand cash transfers towards mobile money-based ones. While mobile money technology is available from local telecom operators, its use in cash transfer programs is still incipient in the CAR and currently only applied within the World Bank's PACAD program. However, the low level of CAR's digital connectedness limits the extent to which cash transfers can be digitalized in the current juncture. According to ITU data, in 2020 only 38 percent of CAR's population had a mobile phone subscription (compared to an average of 83 percent and 106 percent in Sub-Saharan Africa and the World, respectively). Looking ahead, it will be critical to address this problem which is in part made worse by recurring conflict preventing the needed digital infrastructure upgrade in rural areas. The ability to deploy mobile money-based transfers would help reach more beneficiaries with lower operational costs.

## F. Conclusions

**22. The current food insecurity shock in the CAR results from a confluence of pre-existing structural factors and recent macroeconomic shocks that emerged after the war in Ukraine at a time when the recovery from the pandemic was still fragile.** The government has a limited capacity to respond through social protection programs, due to fiscal and institutional fragility. Under the circumstances, in the near term, the authorities have the following options to reduce the adverse impacts of food insecurity (i) continue to appeal for increased humanitarian aid; and (ii) work to resume donor budget support by addressing transparency and governance issues. In the medium to long term, policies to address the structural drivers of food insecurity should act on all four dimensions of food security—availability, access to, utilization and stability of food. In this regard, key measures include resolving the long-standing conflict, investing in the agriculture sector for higher productivity, deploying a robust social protection system backed with higher domestic revenue mobilization, and expanding access to safe drinking water and sanitation services.

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# REFORMING THE CENTRAL AFRICAN REPUBLIC'S FUEL PRICING REGIME FOR SUSTAINABLE DEVELOPMENT<sup>1</sup>

*All fuels consumed in CAR were imported and sold at a fixed price, unchanged since 2016 until end 2022. The lack of pass-through of international oil prices to domestic pump prices led to a reduction in tax revenue from sales of fuel products by 60 percent in 2022 due to shortages. The recent significant adjustment to domestic fuel prices aimed to reduce shortages and rekindle revenues but it reinforced the existing structural problems and induced a widening of the black market supplied from smuggling. Around a quarter of the tax revenue corresponds to tax revenue from sales of fuel products, which highlights the importance of stabilizing a base of taxable consumption and a price structure that allows a stable revenue collection. A reform of the hydrocarbon distribution sector is essential. This reform should achieve three objectives namely: (i) guarantee reliable supply of good quality products; (ii) stabilize tax revenues; and (iii) protect the most vulnerable populations.*

## A. Context

**1. Recent adjustment to fixed petroleum prices has not entirely solved the issue of under-performance of tax revenues.** In an environment of rising oil price, from 2016 until end-2022 pump prices were lower than what would have prevailed if the government had allowed a full pass-through of the changes in international prices. During this period, the retail price was stabilized through quasi-fiscal operations and discretionary changes in taxes which were used as instruments to stabilize fuel prices. This led to (implicit) subsidies compared to the maximum tax that was allowed under the law—as well as corporate losses and fuel shortages at times. The cost of combined impacts of rising petroleum prices and depreciation of the CFAF gradually eroded the government's revenue base, making the 2022 price regime fiscally unsustainable. However, new higher domestic prices introduced in January 2023 created incentive for an expansion of the black market supplied through smuggling from Chad and Cameroon and a severe reduction of the demand in the formal market, reducing the taxable base, and therefore the tax revenue collection from sales of fuel products.

**2. Under the CAR's current macroeconomic and structural challenges, reforming the fuel market is an urgent priority.** The reforms should lead to increased revenue collection, elimination of shortages, efficiency gains, reduced distortions, and more balanced domestic energy consumption. The remainder of the paper is organized as follows. We review the structure of the market for petroleum in the CAR in Section B. Section C undertakes analysis of the fiscal impacts of the petroleum pricing regime and presents a simulation on the expected revenues given the new fixed prices announced by the government in January 2023. In section D, we present the key elements that a fuel subsidy reform could consider, based on international experience. The study

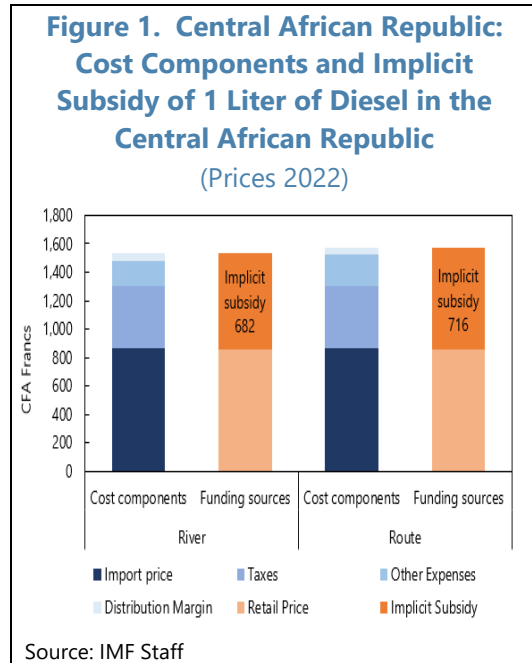
<sup>1</sup> Prepared By Julieth Pico (FAD), Samba Mbaye, Marcel Nshimiyimana, and Iyabo Masha (AFR).

concludes with a discussion of the key issues and recommendations for fuel price deregulation in the CAR.

## B. The Petroleum Sector in the Central African Republic until End-2022

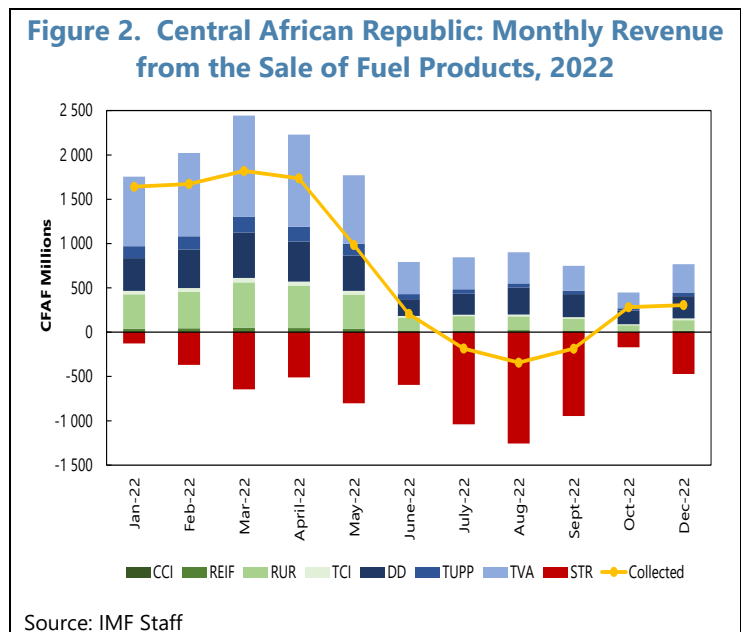
### 3. The market for distribution of petroleum products in the CAR is shallow, reflecting the country’s limited infrastructure and fragility.

As a landlocked country, imported petroleum products are transhipped from ports of neighboring countries on shallow rivers, some of which are navigable only a few months a year. In the absence of a domestic refinery, refined petroleum is initially imported into the Democratic Republic of Congo (DRC) or Cameroon and transported to the CAR through a combination of small boats and pipelines to Bangui. Supplies from Cameroon are also transported by road, mainly during the months of February and March, when transportation from DRC is not feasible because of seasonal river dryness. A government majority-owned company controls storage depots, from where importers organize transportation to distribution points. Two thirds of the stations are located in Bangui. For reasons of limited access and infrastructure, the northeastern part of the country is not served.



### 4. The retail prices of the four different types of petroleum products are subject to price regulation and fixed by the government.

The difference between the administered pump price and the recovery price is incorporated into the budget either as additional revenue (when administered price is higher than recovery price due to falling or stable oil prices), or a subsidy/expense (when the administered price is lower than the recovery price due to rising oil prices). The final price at the pump is an aggregation of four main components: the import/border price; storage, distribution, and tax charges; ex-warehouse charges; and other margins and levy.



### 5. A quarter of government tax revenue in the CAR comes from the import and sale of petroleum products, and both fuel subsidy and shortages

**contributed to a significant revenue shortfall in 2022.** Between 2021 and the first half of 2022, the FOB price of gasoline increased by 64.3 percent. During the same period, the CFAF exchange rate depreciated by 17.6 percent against the US dollar. Since consumers pay the same price, regardless of changes in the parameters induced by global oil price or the exchange rate, the subsidy is wholly borne by adjustments to the VAT. As shown in Figure 1 the cost of delivering a liter of diesel in 2022 exceeded the administered retail price (CFAF 855) by around 80 percent, and the gap (CFAF 682) was the implicit fuel subsidy per liter. The subsidy reflects forgone revenue (CFAF 444 per liter), as well as payments owed to fuel importing companies (CFAF 238 per liter) to compensate for the difference between the cost recovery price and the government administered pump price.

**6. Compounding the revenue problem is the emergence of fuel shortage since July 2022.**

Fuel shortage has caused not only a reduction of oil related revenues but also reduction in other taxes, given the contraction in the production of goods and services induced. Tax revenue from sales of fuel products fell from a monthly averaged of around CFAF 1.5 to 2 billion to about CFAF 0.1 billion at the end of 2022 (see Figure 2).

### C. Fiscal Impact of Fuel Subsidies Since January 2023

**7. Price increases and changes to the pricing structure have been introduced to align importer incentives, which is expected to reduce fuel shortages.**

In January 2023, to contain the fiscal cost of the subsidy and relieve pressures on importers' balance sheets, several ad-hoc adjustments were made to the official fuel price structures, which reflected the arbitrary adjustments of tax rates and quasi-taxes. However, one of the main drivers of the high cost, the import cost paid to importers, whose setting is carried out in a non-transparent manner, and without following the rules established by law. This practice has important effects on the very high recover cost price in the CAR, as shown in Figure 3: in November 2022, the average import price in the CAR was 1.8 times the price paid in other countries in the region.

**8. The new prices place the CAR among the five countries with the highest gasoline and diesel prices in the world.** As treasury tensions intensified, the government raised pump prices for gasoline, diesel, and kerosene by 50, 70, and 78 percent, respectively, on January 3, 2023. The prices were set to ensure that when using the import prices and the price structure of the products imported in December by the land route, the fuel subsidy would be equal to zero. Therefore, the prices set by the government imply a surplus in the sale of products by importers by the river, at the expense of the consumers' welfare.

**9. The fuel subsidy policies of neighboring countries generate externalities that limit the capacity of the government to collect revenue, and this phenomenon is amplified when the price differential increases.**

Cameroon, Chad, and the DRC have much lower prices than those of the Central African Republic (Table 1), which creates incentives for illegal imports from these countries. While the black market has always existed in the CAR (it is estimated that historically about 20 percent of the fuel market has been served by the black market), the sustained fuel shortage in 2022, as well as the high prices set in January 2023, created the incentives for the

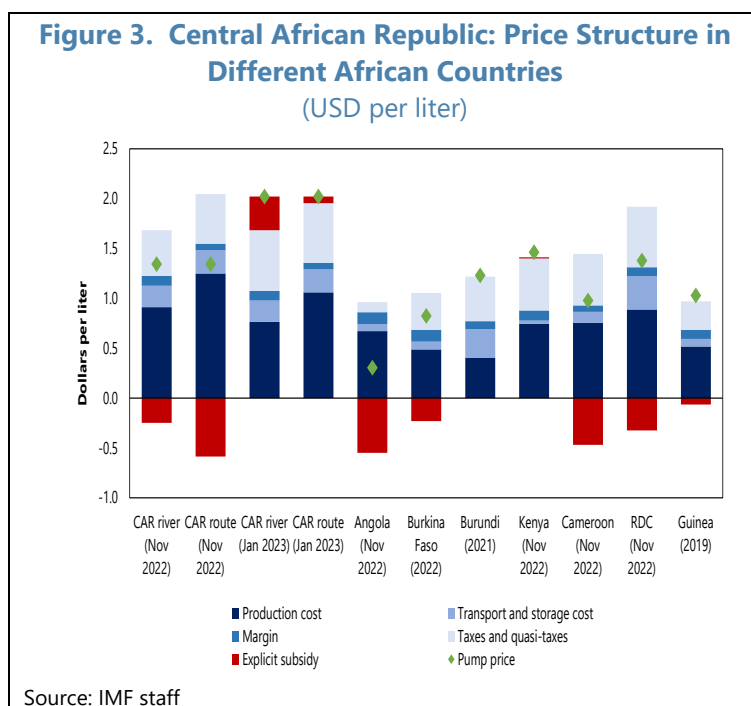
expansion of the said market. Currently, the black market can meet all the demand that passes from formal to informal channels.

**Table 1. Central African Republic: Fuel Prices for Imports from Neighboring Countries**

	Gasoline			Diesel		
	Cameroon	DRC	Chad	Cameroon	DRC	Chad
<b>Pump price (13/02/2023)</b>	<b>730</b>	<b>837</b>	<b>520</b>	<b>720</b>	<b>836</b>	<b>580</b>
Transport and various fees	200	200	200	200	200	200
<b>Customs value</b>	<b>930</b>	<b>1037</b>	<b>720</b>	<b>920</b>	<b>1036</b>	<b>780</b>
Customs duty 10%	93	103.7	72	92	103.6	78
Community taxes (CEMAC et EEAC), 1,4%	13.02	14.518	10.08	12.88	14.504	10.92
VAT at customs	196.84	219.49	152.40	194.73	219.28	165.09
<b>Tax and fees</b>	<b>302.86</b>	<b>337.71</b>	<b>234.48</b>	<b>299.61</b>	<b>337.38</b>	<b>254.01</b>
<b>Consumer price (including taxes)</b>	<b>1232.86</b>	<b>1374.71</b>	<b>954.48</b>	<b>1219.61</b>	<b>1373.38</b>	<b>1034.01</b>
<b>Pump price in CRA</b>	<b>1300</b>	<b>1300</b>	<b>1300</b>	<b>1450</b>	<b>1450</b>	<b>1450</b>

Source: IMF Staff

**10. The government could expect to collect CFAF 18 billion (1.2 percent of GDP) in tax revenue from sales of fuel products in 2023, given the new price structure, and the new official price.** In response to the sharp increase in pump prices in January 2023, demand in the official network experienced a reduction of 58 percent in January 2023 relative to January 2022 and similar figures in February 2023 relative to February 2022. Given the delay in carrying out the reform, and the significant reduction in imports during the rainy season, the fuel stock will not be enough to meet the demand in the coming months, therefore the imports by the route will be significantly larger than in previous years (increasing the import costs). Adding to the difficult situation the CAR may face, Cameroon periodically implements quotas on the export of fuels to the CAR, due to the scarcity they are experiencing and the prioritization of the domestic market, which could potentially lead to another episode of fuel shortage in the CAR.



**D. Reforming Fuel Price: Considerations and Recommendations**

**11. The current price structure reward importers, to the detriment of consumer welfare and tax collection.** Establishing a transparent methodology to determine efficient import costs is crucial. Under the current price structure import prices are determined in a non-transparent manner,

and in such a way that importers' requirements are fully satisfied, which represents a high cost for consumers and reduces tax-collection. Reducing the importers margin to 30 percent of the price of the FOB, will allow the government to reduce pump prices, without compromising revenue collection from sales of fuel products. Setting fuel prices to CFAF 1,100 and CFAF 1,350 per liter of gasoline and diesel respectively, while the tax rates and quasi-taxes contemplated in the Tax Code, the Financial Law and the CEMAC Directives are applied, will lead to an estimated additional collection of CFAF 11.7 billion in 2023.

**12. The reform of the hydrocarbons sector should seek to stabilize the government's finances while avoiding an economic, humanitarian, and security crisis.** The success of the reform of the sector will lie in its correct implementation, which must be based on the application of the laws that govern the sector. A first step in the reform agenda would be the application of tax rates and quasi-taxes following the provisions of the tax code, the finance law, and CEMAC directives. When considering the price structure and price levels, the government needs to strike a balance between tax collection and incentives for informal market development. Fighting the informal market is key to stabilizing the tax base. The existing complex pricing structure seems to give rise to suboptimal practices, which could potentially lead to revenue losses. The reform should simplify the price structure formula, rationalizing all parafiscal and quasi-taxes, and ensuring the allocation of receipts to public entities based on an investment plan.

**13. Fighting against the informal market and making the fuel market more transparent and competitive is paramount.** The authorities should reduce any incentive to import outside the formal network, to this end the authorities can collect all taxes and quasi-taxes at customs, which will make the playing field level for all importers, regardless of whether the imports are made through the agreed importers or not. Due to the high import prices paid by the CAR to the agreed importers, the government must carry out an import cost audit (margins and tariffs) to ensure that the price paid is competitive. The country must go to a tender to import fuel, which will allow it to increase its bargaining power in the international market. The country can benefit from the existing legal framework for the application of said tender. Finally, to improve transparency in the sector and prepare consumers for the adoption of an automatic pricing mechanism, the authorities must make the price structure public, this will guarantee transparency to the public in the calculation of prices, and it will make it easier to understand the reasons behind the price movements at the pump. While the adoption of an automatic pricing mechanism should be the ultimate goal of the reform, in the meantime the authorities should review the sales prices periodically, to reduce the volatility of the revenue from sales of fuel products.

**14. International experience shows that successful fuel subsidy reforms rely on five key components (Clements, et al., 2013):**

- A comprehensive reform plan that considers setting clear long-term goals, assessing the impact of the reform, and consulting with stakeholders.

- A far-reaching communication strategy. International experience has shown that strong public support and proactive public communication triple the probability of success of a fuel subsidy reform (IMF, 2011).
- Appropriately phased price increases, sequenced differently across products. A sharp increase in fuel prices will increase the likelihood of a failed reform and will also increase the unintended macroeconomic consequences of removing fuel subsidies, such as inflation.
- Targeted mitigation measures. While unconditional or conditional cash transfers are the preferred approach, when this is not possible some other alternatives can be contemplated, e.g. expansion of school feeding programs, public works, reduction of education and health fees, among others.
- Depoliticization of fuel subsidies to avoid the recurrence of subsidies.

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