Inflation Dynamics and the Cost of Living in Madagascar: Price Trends, Structural Drivers, and Welfare Implications in a Low-Income Economy

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Abstract

Inflation has emerged as one of the most persistent macroeconomic and social challenges facing Madagascar over the past decade. In a low-income economy characterized by widespread poverty, high informality, and strong dependence on food and fuel imports, price increases directly translate into welfare losses for households and heightened vulnerability for firms. This paper analyzes inflation dynamics in Madagascar using a multi-year perspective covering the period from 2015 to 2026, integrating official consumer price index data, sectoral price trends, and recent policy developments. The study emphasizes that inflation in Madagascar is driven predominantly by supply-side and structural factors, including climate-sensitive agricultural production, import dependence for energy and selected staples, exchange-rate pass-through, and institutional constraints in pricing and market regulation. Particular attention is given to food inflation—especially rice—as well as fuel and electricity pricing, which together account for a substantial share of household expenditure and inflation expectations. Evidence indicates that while headline inflation fluctuates, the cost of living experienced by households remains persistently high, with food and energy prices rising faster than incomes for most workers. The paper concludes that inflation in Madagascar is not solely a monetary phenomenon but a multidimensional development constraint, requiring coordinated reforms across food systems, energy policy, infrastructure, market competition, and social protection to mitigate its welfare impacts.

Keywords: Madagascar, Inflation, Consumer Price Index, Food Prices, Rice Market, Fuel Pricing, Cost of Living, Exchange Rate Pass-through, Poverty

1. Introduction

Inflation in Madagascar represents one of the most immediate and tangible manifestations of economic vulnerability for households and firms. Unlike in higher-income economies where inflation may primarily affect savings or interest rates, in Madagascar price increases directly influence daily survival decisions. This is largely due to the structure of household consumption and the labor market. A significant proportion of Malagasy households allocate the majority of their income to food, transport, and basic utilities, while employment is dominated by informal and vulnerable activities with limited wage flexibility. Under these conditions, inflation functions as a regressive burden, disproportionately affecting low-income households and reinforcing poverty traps.

Over the past decade, Madagascar has experienced recurrent inflationary episodes linked not to excessive domestic demand but to structural and external shocks. World Bank data indicate that consumer price inflation averaged **7.4% between 2015 and 2020**, rising sharply during periods of climatic stress and global commodity price increases. Inflation reached **5.81% in 2021**, accelerated to **8.16% in 2022**, and peaked at **9.87% in 2023**, reflecting the combined effects of higher international fuel prices, domestic supply disruptions, and exchange-rate pressures. Although inflation moderated somewhat in 2024 and 2025, remaining around **7–8%**, the price level continued to rise, meaning households did not experience a reversal in cost-of-living pressures but rather a slower pace of increase.

The social significance of inflation in Madagascar is amplified by the centrality of food expenditures, particularly rice, which serves as the primary staple for the majority of the population. Rice prices are highly sensitive to domestic harvest conditions, transport

infrastructure, and import policy. Even modest increases in rice prices can significantly alter household welfare, as rice is purchased frequently and represents a large share of caloric intake. FAO price monitoring has shown that rice prices in Madagascar fluctuate substantially year to year, with periods of double-digit increases following poor harvests or import disruptions. These price movements often shape public perceptions of inflation more strongly than aggregate CPI figures.

Energy prices constitute another critical inflation channel. Madagascar is highly dependent on imported petroleum products, and fuel prices directly affect transport costs, electricity generation, and the distribution of goods. In recognition of the fiscal risks posed by fuel subsidies, the government introduced an automatic fuel price adjustment mechanism in 2024–2025, aligning domestic prices more closely with international reference prices and exchange-rate movements. While this reform aims to improve fiscal sustainability, it also means that households and businesses are exposed more directly to global price volatility, making fuel a visible and politically sensitive component of inflation.

Inflation dynamics in Madagascar are further influenced by institutional and policy factors, including taxation, tariff structures, and price regulation. Recent debates surrounding rice import taxation—particularly proposals to apply customs duties and value-added tax to certain categories of imported rice—illustrate how fiscal policy decisions can alter inflation expectations and market behavior. Such measures have implications not only for actual prices but also for perceived price stability and household planning.

Importantly, inflation in Madagascar interacts closely with labor market characteristics. With over **80% of employment classified as vulnerable**, most workers lack formal wage-setting mechanisms or collective bargaining power. As a result, nominal incomes often fail to keep pace with price increases, leading to declines in real purchasing power. Even when statutory minimum wages are adjusted, the impact is limited to a small formal sector, leaving the majority of workers exposed to inflation without compensation.

This paper argues that inflation in Madagascar must be analyzed as a structural development issue rather than solely as a macroeconomic indicator. By situating recent price trends within a longer historical and institutional context, the study seeks to explain why inflation remains persistent and socially damaging despite periods of macroeconomic stability. The analysis aims to contribute to the literature on inflation in low-income economies by highlighting the interaction between price dynamics, structural constraints, and welfare outcomes.

2. Inflation in Developing and Low-Income Economies: Theoretical and Empirical Perspectives

Inflation dynamics in developing and low-income economies differ fundamentally from those observed in advanced industrialized countries, both in their underlying causes and in their social consequences. While inflation in high-income economies is often driven by aggregate demand pressures, wage dynamics, or monetary expansion, inflation in low-income settings is more frequently shaped by structural and supply-side constraints. These include climate-sensitive agricultural production, import dependence for key consumption goods and inputs, weak market integration, infrastructure deficits, and limited policy buffers. As a result, inflation in such contexts tends to be more volatile, less responsive to conventional monetary tools, and more damaging to household welfare.

Early development economics literature recognized that price instability could pose a serious obstacle to growth and poverty reduction. Structuralist theories of inflation emphasized that price increases in developing economies often arise from bottlenecks in food production, foreign exchange shortages, and rigidities in supply rather than excessive domestic demand. These theories remain highly relevant for Madagascar, where agricultural output is vulnerable to weather shocks, transport costs are high, and import capacity is constrained by limited foreign exchange availability. In such environments, inflation can persist even during periods of weak economic growth, creating a phenomenon often described as “stagflationary pressure” at the household level.

A central theme in the contemporary inflation literature is the role of food prices. Food inflation plays a disproportionately large role in overall inflation in low-income economies because food constitutes a much larger share of household consumption baskets than in high-income countries. The International Labour Organization and the World Bank consistently show that in Sub-Saharan Africa, food expenditures can account for 40–60% of total household spending, compared with less than 15% in many advanced economies. Consequently, fluctuations in food prices—particularly staple foods—can dominate headline inflation and strongly influence inflation expectations. Empirical studies demonstrate that food price shocks are often the primary drivers of inflation volatility in African economies, especially those with limited storage capacity, weak market integration, and high post-harvest losses.

Rice markets provide a particularly relevant lens for analyzing inflation in Madagascar. As the primary staple food, rice prices influence both caloric intake and perceived cost-of-living changes. The literature shows that staple food prices tend to exhibit asymmetric

adjustment: prices rise quickly following supply shocks but fall slowly when conditions improve. This asymmetry amplifies the persistence of inflation in consumer perceptions, even when official inflation rates moderate. For Madagascar, studies by FAO and regional food price monitoring systems indicate that rice prices respond strongly to domestic harvest outcomes, fuel costs, and import policy, reinforcing the structural nature of inflation dynamics.

Another critical strand of literature focuses on exchange-rate pass-through in developing economies. Exchange-rate pass-through refers to the extent to which changes in the nominal exchange rate affect domestic prices. In low-income, import-dependent economies, pass-through tends to be higher and faster because imported goods—including fuel, fertilizer, medicines, and processed foods—constitute a large share of consumption and production inputs. Weak competition and high transport costs further amplify pass-through effects. Empirical research in Sub-Saharan Africa suggests that exchange-rate depreciation can translate into significant increases in consumer prices within a relatively short period, particularly for energy and food items. For Madagascar, where fuel and selected food items are imported, exchange-rate movements represent a key transmission channel for inflation.

Energy prices represent another dominant driver of inflation in low-income economies. Petroleum products affect inflation directly through household fuel consumption and indirectly through transport costs, electricity generation, and the distribution of goods. The literature highlights that fuel price increases often generate second-round effects, raising prices across multiple sectors. Governments in developing countries frequently attempt to mitigate these effects through subsidies or price controls, but such measures are often fiscally unsustainable. Over time, delayed price adjustments can result in sharp corrections that intensify inflationary shocks. This tradeoff between price stability and fiscal sustainability is well documented in IMF and World Bank analyses of energy pricing reforms in low-income economies.

Administered prices and institutional pricing mechanisms also feature prominently in the inflation literature. In many developing countries, prices for electricity, water, transport, and fuel are partially regulated. While regulation can provide short-term relief, it may distort incentives, reduce investment, and generate fiscal liabilities. Empirical studies show that weakly designed pricing systems often result in under-recovery of costs, deterioration of service quality, and eventual inflationary pressure when tariffs are adjusted. In Madagascar, discussions surrounding electricity tariffs and fuel price adjustment mechanisms illustrate how institutional constraints can shape inflation outcomes over time.

Inflation expectations constitute another important dimension of price dynamics. In environments where households have experienced repeated price shocks, expectations may become backward-looking and adaptive. This means that past inflation heavily influences expectations of future inflation, even when macroeconomic conditions improve. Such expectation formation can lead households to accelerate consumption, reduce savings, or demand higher nominal wages where possible, contributing to inflation persistence. In informal labor markets, where wages are flexible downward but sticky upward, inflation expectations often translate into welfare losses rather than wage adjustments.

A growing body of empirical research emphasizes the distributional effects of inflation. Inflation is widely regarded as regressive in low-income economies because poorer households hold fewer financial assets that benefit from inflation and spend a larger share of income on necessities whose prices rise fastest. Studies across Sub-Saharan Africa show that food and energy inflation disproportionately affects rural households and urban informal workers, exacerbating inequality and undermining poverty reduction efforts. In Madagascar, where poverty rates remain extremely high and informal employment dominates, inflation can reverse development gains even during periods of positive economic growth.

Recent global shocks have further reinforced these dynamics. The COVID-19 pandemic disrupted supply chains, reduced household incomes, and increased transport and logistics costs, contributing to inflationary pressures in many developing economies. Subsequent increases in global food and fuel prices in 2021–2023 intensified these pressures. The literature highlights that low-income economies with limited fiscal space and weak shock-response mechanisms were particularly exposed, experiencing higher and more persistent inflation than wealthier countries. Madagascar's inflation trajectory during this period aligns closely with these findings, underscoring the relevance of global-to-local transmission mechanisms.

Overall, the literature suggests that inflation in low-income economies like Madagascar cannot be adequately explained by monetary factors alone. Instead, inflation reflects the interaction of structural supply constraints, external price shocks, institutional pricing arrangements, and social vulnerability. These insights provide a critical foundation for the empirical analysis that follows, which

examines how these mechanisms have shaped inflation trends in Madagascar over recent years and how they continue to influence the cost of living entering the mid-2020s.

3. Data Sources, Inflation Measurement, and Methodological Framework

This study adopts a macro-level descriptive and analytical approach to examine inflation dynamics and price behavior in Madagascar within a multi-year framework. Given the objective of understanding structural and institutional drivers of inflation rather than short-term forecasting, the methodology emphasizes the interpretation of officially reported price indicators, sectoral inflation trends, and policy-related transmission mechanisms. This approach is particularly appropriate in a low-income context such as Madagascar, where inflation outcomes are shaped by supply-side constraints, external shocks, and institutional pricing arrangements rather than purely demand-driven dynamics.

The empirical foundation of the analysis relies on a combination of national and internationally harmonized secondary data sources. The primary source for inflation measurement is the **Consumer Price Index (CPI)** published by Madagascar's national statistical authority (INSTAT), which tracks changes in the cost of a representative basket of goods and services consumed by households. CPI data are complemented by internationally standardized indicators from the **World Bank's World Development Indicators (WDI)** and the **International Monetary Fund (IMF)**, which provide consistent annual inflation rates, historical series, and macroeconomic context. These datasets enable cross-year comparison and situate Madagascar's inflation performance within broader regional and global trends.

Inflation measurement in Madagascar follows a Laspeyres-type CPI methodology, in which price changes are weighted by fixed expenditure shares derived from household consumption surveys. Food items carry a particularly large weight in the Malagasy CPI basket, reflecting the consumption patterns of households, especially in rural areas and among low-income urban populations. Staples such as rice, cassava, and cooking oil, along with fuel, transport services, and basic utilities, exert a disproportionate influence on headline inflation. Consequently, CPI movements often reflect changes in a limited number of high-impact components rather than broad-based price pressures across all sectors.

In addition to headline CPI inflation, this study considers the role of **food inflation**, **energy-related inflation**, and **administered prices** as distinct but interrelated components of overall price dynamics. Food inflation is analyzed through reference to domestic agricultural conditions, seasonal patterns, and import dependence. Energy-related inflation is assessed through fuel price adjustments, electricity pricing policies, and transport costs, all of which act as transmission channels affecting prices throughout the economy. Administered prices—such as fuel pump prices and electricity tariffs—are treated as institutional variables that can either smooth or amplify inflation depending on the design and implementation of pricing mechanisms.

The temporal scope of the analysis spans the period from approximately **2015 to 2026**, allowing for the identification of medium-term trends, cyclical fluctuations, and structural breaks. This period includes multiple inflationary episodes associated with climatic shocks, global commodity price increases, exchange-rate movements, and policy reforms. By adopting a multi-year perspective, the study avoids treating inflation in 2026 as an isolated phenomenon and instead situates it within a longer trajectory of price behavior and policy responses.

The analytical framework integrates insights from development economics, structuralist inflation theory, and institutional economics. Rather than estimating econometric models, the study focuses on interpreting observed inflation patterns through the interaction of key drivers: supply shocks in food production, import cost transmission via fuel and exchange rates, pricing reforms in energy and utilities, and household income constraints. This qualitative-quantitative synthesis allows for a nuanced understanding of inflation mechanisms in a context where data limitations and structural complexity reduce the usefulness of purely statistical modeling.

Real-life price transmission examples play a central role in the analysis. These include observed changes in rice prices following harvest fluctuations, fuel price adjustments under automatic pricing mechanisms, and electricity cost pressures linked to generation constraints and tariff policies. Such examples illustrate how macro-level inflation indicators translate into everyday cost-of-living experiences for households and operating costs for firms. By grounding the analysis in concrete price movements, the study bridges the gap between abstract inflation measures and lived economic realities.

Several limitations must be acknowledged. CPI data may underrepresent informal market transactions and regional price variation, particularly in remote rural areas where price collection is challenging. Additionally, the fixed-weight nature of CPI baskets may not fully capture shifts in consumption behavior during periods of high inflation, such as substitution toward cheaper goods. Despite these

limitations, CPI remains the most widely accepted and policy-relevant measure of inflation and provides a consistent basis for longitudinal analysis.

From an ethical standpoint, the study relies exclusively on publicly available, aggregated data and does not involve human subjects or confidential information. All data sources are appropriately cited, and the analysis adheres to academic standards of transparency and integrity. The methodological approach is designed to support evidence-based policy discussion rather than predictive precision.

Overall, this methodological framework provides a robust foundation for analyzing inflation in Madagascar as a structural and institutional phenomenon. By combining official price statistics with contextual interpretation and real-world examples, the study offers a comprehensive assessment of how inflation evolves, why it persists, and how it affects households and firms over time.

4. Historical Inflation Trends in Madagascar (2015–2025)

An examination of inflation in Madagascar over the past decade reveals a pattern of persistent price instability shaped by structural constraints, recurrent shocks, and limited policy buffers. Rather than exhibiting a smooth or predictable inflation trajectory, Madagascar's inflation history is characterized by cyclical spikes and incomplete disinflation phases, reflecting the economy's vulnerability to food supply disruptions, energy price movements, and exchange-rate fluctuations. Understanding this historical trajectory is essential for interpreting inflation conditions in the mid-2020s and for evaluating the effectiveness of policy responses.

Between **2015 and 2019**, Madagascar experienced moderate but volatile inflation. Annual consumer price inflation averaged approximately **7–8%** during this period, with notable year-to-year variation. In **2015**, inflation stood at around **7.4%**, driven largely by food price increases linked to adverse weather conditions and transport constraints. The following years saw partial moderation, with inflation declining to approximately **6.1% in 2016** and **6.0% in 2017**, reflecting relatively favorable agricultural conditions and some stabilization in global commodity prices. However, this moderation proved temporary, as inflation rose again to about **8.6% in 2018**, coinciding with higher fuel prices and renewed pressures in food markets.

The period **2019–2020** illustrates the sensitivity of inflation to both domestic and external shocks. In **2019**, inflation eased to around **5.6%**, partly due to improved rice harvests and relative currency stability. This decline, however, did not signal a structural shift toward price stability. In **2020**, the COVID-19 pandemic disrupted supply chains, constrained transport, and reduced household incomes. Although global demand weakened, domestic inflationary pressures persisted due to higher logistics costs and market disruptions. Inflation in Madagascar remained elevated at approximately **5.0–5.5% in 2020**, underscoring the limited disinflationary effect of economic slowdown in a supply-constrained economy.

A pronounced inflationary acceleration occurred during **2021–2023**, marking one of the most challenging periods for household purchasing power in recent decades. In **2021**, inflation increased to approximately **5.8%**, reflecting rising global food and fuel prices as economies reopened after pandemic-related restrictions. The situation intensified in **2022**, when inflation rose sharply to around **8.2%**. This increase coincided with global commodity price surges, particularly in energy markets, and was amplified by Madagascar's import dependence and transport costs. Food inflation played a dominant role, as higher fertilizer prices and climate-related production challenges affected domestic supply.

Inflation reached a peak in **2023**, with consumer prices increasing by approximately **9.9% year-on-year**, the highest rate recorded in over a decade. This peak reflected the cumulative impact of multiple pressures: elevated global fuel prices, exchange-rate depreciation, and domestic food supply constraints following adverse weather events. Rice prices, in particular, rose sharply in several regions, contributing disproportionately to headline inflation due to their large weight in the CPI basket. During this period, inflation was widely perceived by households as a "cost-of-living crisis," even though Madagascar did not experience hyperinflation or runaway price growth.

The inflation peak of 2023 had significant distributional consequences. Real incomes declined for most households, especially those dependent on informal labor and subsistence agriculture. Wage adjustments in the formal sector lagged behind inflation, and for the majority of workers in the informal economy, nominal incomes remained largely unchanged. This resulted in a marked deterioration in purchasing power and heightened food insecurity, particularly in urban areas where households rely heavily on purchased food.

In **2024**, inflation showed signs of partial moderation but remained elevated. Annual inflation declined to approximately **7.5–8.0%**, reflecting some easing in global commodity prices and improved domestic food supply conditions. Nevertheless, price levels continued to rise, and households did not experience a reduction in the cost of living. Instead, the moderation represented a slower pace of increase

rather than a reversal of earlier price hikes. Inflation expectations remained high, shaped by recent experience and ongoing uncertainty surrounding fuel prices and policy reforms.

The year **2025** continued this pattern of high but slightly lower inflation. By late 2025, annual inflation was estimated at around **7.0–7.3%**, still well above levels consistent with price stability. Several factors contributed to the persistence of inflation. First, food prices remained sensitive to climatic variability, with localized shortages and transport disruptions affecting regional markets. Second, fuel prices continued to transmit global price movements into domestic costs through the automatic adjustment mechanism introduced in the mid-2020s. Third, institutional pricing decisions—such as discussions around import taxation and utility cost recovery—added to uncertainty and inflation expectations.

A notable feature of Madagascar's inflation history over this period is the **asymmetry between inflation increases and decreases**. Inflation accelerations tend to be rapid when shocks occur, but subsequent disinflation is slow and incomplete. This reflects structural rigidities in food and energy markets, as well as the persistence of high production and distribution costs. Once prices rise, they rarely return to previous levels, reinforcing the perception of a continuously rising cost of living.

Another important characteristic is the **concentration of inflation in specific components**. Rather than broad-based price increases across all sectors, inflation in Madagascar is repeatedly driven by food and energy. This concentration amplifies social impact because these components dominate household expenditure. Even when non-food inflation remains moderate, increases in rice, cooking oil, fuel, and transport costs can produce severe welfare losses.

From a policy perspective, the historical record suggests that inflation in Madagascar is not easily controlled through short-term measures alone. Monetary tightening has limited effectiveness in addressing supply-driven inflation, while price controls and subsidies create fiscal pressures and market distortions. The persistence of high inflation from 2015 to 2025 therefore reflects deeper structural issues, including limited agricultural productivity, import dependence, weak infrastructure, and institutional constraints in pricing and regulation.

In summary, Madagascar's inflation trajectory over the past decade reveals a pattern of chronic vulnerability rather than episodic instability. Inflation has remained consistently above levels compatible with income growth and poverty reduction, eroding purchasing power and reinforcing social fragility. This historical perspective provides critical context for analyzing sectoral price dynamics and policy responses, which are examined in the following section.

5. Sectoral Price Dynamics: Food, Energy, Transport, and Housing

A defining characteristic of inflation in Madagascar is its strong concentration within a limited number of high-impact consumption categories. While headline inflation aggregates price changes across a wide basket of goods and services, the lived experience of inflation for Malagasy households is shaped predominantly by movements in food prices—especially staple foods—energy costs, transport expenses, and housing-related expenditures. These sectors not only carry substantial weight in the consumer price index but also exhibit high volatility and strong transmission effects across the broader economy.

Food prices constitute the most influential component of inflation in Madagascar, reflecting both their large weight in household consumption and their sensitivity to domestic and external shocks. In low-income households, food expenditures commonly account for **45–60% of total spending**, a proportion significantly higher than in middle- or high-income economies. Within this category, rice occupies a central position as the primary staple food and a cultural cornerstone of daily consumption. As a result, fluctuations in rice prices exert a disproportionate influence on perceived inflation and household welfare.

Rice price dynamics in Madagascar are shaped by a combination of domestic production conditions, transport infrastructure, fuel costs, and import policy. Domestic rice production remains largely rain-fed and is therefore highly vulnerable to climatic variability. Droughts in southern regions and cyclones affecting major production zones periodically reduce output and disrupt supply chains. In years of poor harvests, local shortages emerge, and market prices respond quickly. FAO and regional food security monitoring reports indicate that rice prices in Madagascar have experienced repeated year-on-year increases during supply-constrained periods, including double-digit growth in some local markets during peak inflation years such as 2022 and 2023. Even when national averages moderate, regional disparities persist, particularly in remote or poorly connected areas.

Import dependence further amplifies rice price volatility. Madagascar has historically relied on rice imports to stabilize domestic markets during periods of production shortfall. Import policy therefore plays a critical role in price formation. Since **2006**, rice imports have

generally benefited from tax exemptions aimed at protecting consumers from price spikes. However, fiscal pressures and policy debates have periodically reopened discussions around reintroducing import duties and value-added tax on certain categories of rice. Proposals linked to the **2026 finance framework**, including potential application of **20% customs duties and 20% VAT** on selected imported rice categories, illustrate how fiscal decisions can directly affect food inflation expectations. Even when such measures are targeted or delayed, their announcement alone can influence importer behavior, wholesaler pricing, and consumer expectations, contributing to inflationary pressure.

Beyond rice, prices of other food items—such as cooking oil, sugar, vegetables, and dried fish—also exhibit sensitivity to fuel costs and transport constraints. Madagascar's internal transport system relies heavily on road networks that are costly to maintain and vulnerable to weather-related damage. When fuel prices rise or roads become impassable, transport costs increase, raising food prices in urban markets. These effects are often asymmetric: prices rise rapidly following shocks but decline slowly when conditions improve, contributing to inflation persistence.

Energy prices represent the second major pillar of inflation dynamics. Madagascar is highly dependent on imported petroleum products, making domestic fuel prices sensitive to global oil markets and exchange-rate movements. Fuel prices affect inflation directly through household consumption and indirectly through transport, electricity generation, and production costs across multiple sectors. Recognizing the fiscal burden of fuel subsidies, the government implemented an automatic fuel price adjustment mechanism during **2024–2025**, aligning domestic pump prices more closely with international reference prices and the ariary–dollar exchange rate. This mechanism introduced more frequent, smaller price adjustments rather than large, politically sensitive increases.

While the automatic adjustment mechanism improves fiscal transparency and sustainability, it also increases the visibility of fuel price changes for consumers and businesses. In practical terms, households and transport operators now experience more regular fuel price adjustments, which can influence inflation expectations even when individual adjustments are modest. For small businesses and informal transport providers, fuel price increases translate quickly into higher service charges, contributing to second-round inflation effects across urban economies.

Electricity prices and energy access further shape inflation outcomes. Madagascar's electricity sector remains constrained by limited generation capacity, high reliance on thermal generation, and operational inefficiencies in the national utility. As of the mid-2020s, electricity access remains below **40% of the population**, with much lower coverage in rural areas. Where electricity is available, tariffs have historically been kept below cost-recovery levels, resulting in financial deficits for the utility and periodic supply disruptions. Discussions around tariff restructuring to improve cost recovery have important inflation implications, as electricity costs feed into household expenses and business operating costs. Even in the absence of formal tariff increases, unreliable supply can raise effective costs through reliance on generators and alternative energy sources.

Transport prices act as a powerful transmission channel linking fuel costs to broader inflation. Public transport fares, freight charges, and informal transport services respond quickly to fuel price changes. In urban areas, transport costs represent a significant share of household expenditure, particularly for low-income workers commuting daily. When fuel prices increase, transport operators often adjust fares upward to maintain margins, passing costs directly to consumers. These adjustments can be rapid and are rarely reversed, reinforcing inflation persistence. Transport cost increases also raise the price of goods distributed within cities, contributing to generalized cost-of-living pressure.

Housing and housing-related costs represent an additional, though often less visible, component of inflation. In urban areas, housing rents have trended upward over the past decade, driven by population growth, urbanization, and limited supply of affordable housing. While housing costs may carry a smaller weight in the CPI compared to food, they exert significant pressure on urban households, particularly renters. Increases in construction material costs—often linked to imported inputs and fuel prices—have further contributed to rising rents and maintenance expenses. Informal housing markets, which dominate urban expansion, offer limited protection against rent increases, leaving tenants vulnerable to sudden cost hikes.

The interaction of these sectoral dynamics explains why inflation in Madagascar is experienced as a continuous cost-of-living crisis rather than as a series of isolated price changes. Food, energy, transport, and housing costs reinforce one another through multiple transmission channels, amplifying the impact of shocks and prolonging inflationary episodes. Because these sectors dominate household budgets, particularly among the poor, their price movements have outsized welfare effects even when headline inflation appears moderate.

Importantly, these sectoral pressures also shape inflation expectations. Households form expectations based on frequent purchases—food, fuel, transport—rather than on less visible price categories. When prices of staples rise repeatedly, expectations of future inflation become entrenched, influencing consumption behavior and increasing demand for nominal income adjustments where possible. In an economy dominated by informal employment, such adjustments rarely materialize, translating instead into reduced real consumption and heightened vulnerability.

In sum, sectoral price dynamics in Madagascar reveal that inflation is not evenly distributed across the economy but concentrated in essential goods and services. Food and energy prices serve as primary drivers, with transport and housing acting as amplifiers. These dynamics underscore the need for policy responses that address supply constraints, market integration, and institutional pricing mechanisms rather than relying solely on aggregate macroeconomic tools.

6. Policy Responses, Price Controls, and Institutional Constraints

Government responses to inflation in Madagascar have historically reflected a delicate balancing act between protecting households from rising prices and maintaining fiscal and macroeconomic stability. Over the past decade, policymakers have employed a combination of price controls, subsidies, tax exemptions, and gradual reform initiatives to manage inflationary pressures. However, the effectiveness of these measures has been constrained by limited fiscal space, weak institutional capacity, and the structural characteristics of the Malagasy economy. As a result, policy interventions have often mitigated inflation temporarily while failing to address its underlying drivers.

One of the most prominent policy instruments used to contain inflation has been **price intervention in essential goods**, particularly food and fuel. Given the central role of rice in household consumption, successive governments have treated rice prices as a politically sensitive variable. Since **2006**, Madagascar has generally maintained tax exemptions on rice imports to stabilize domestic prices during periods of production shortfall. This policy has helped prevent extreme price spikes in some years but has also created dependency on imports and exposed domestic prices to international market volatility and exchange-rate movements. Furthermore, the fiscal cost of foregone tax revenue has increased during periods of high import volumes, limiting resources available for broader social protection or infrastructure investment.

Fuel pricing policy has represented another major inflation-related challenge. Historically, Madagascar relied on implicit and explicit fuel subsidies to shield consumers from global oil price fluctuations. While such subsidies offered short-term relief, they generated significant fiscal liabilities and contributed to arrears in the energy sector. In response, the government—supported by the International Monetary Fund—initiated reforms to introduce an **automatic fuel price adjustment mechanism** during the mid-2020s. This mechanism links domestic pump prices to international reference prices and exchange-rate movements, with predefined adjustment parameters aimed at smoothing price changes over time.

The introduction of automatic adjustment represents a significant institutional shift. On one hand, it enhances fiscal transparency and reduces the accumulation of subsidy-related deficits. On the other hand, it increases households' direct exposure to global price volatility, making fuel prices a more visible and frequent contributor to inflation. For transport operators and small businesses, even modest monthly fuel price increases can translate into higher operating costs and immediate price pass-through to consumers. The political economy of fuel pricing therefore remains complex, as public acceptance of reform depends on trust in institutions and the availability of compensatory social measures.

Electricity pricing and energy sector governance constitute another critical policy domain influencing inflation. Madagascar's national electricity utility has faced chronic financial and operational difficulties, including high production costs, reliance on thermal generation, and inefficiencies in billing and collection. Tariffs have historically been set below cost-recovery levels, resulting in persistent deficits and reliance on government transfers. While keeping tariffs low has helped limit direct inflationary effects, it has also constrained investment in generation and distribution infrastructure, leading to unreliable supply and hidden costs for households and firms.

Institutional weaknesses further complicate inflation management. Limited administrative capacity affects the implementation and enforcement of pricing regulations, competition policy, and consumer protection. In markets characterized by informality and weak oversight, price controls can be circumvented or lead to shortages rather than lower prices. Empirical evidence from Madagascar suggests that attempts to cap prices without addressing supply constraints often result in reduced availability of goods or the emergence of parallel markets, undermining policy objectives and potentially exacerbating inflation.

Tax policy has also played a role in shaping inflation dynamics. Adjustments to value-added tax (VAT), customs duties, and excise taxes can directly affect consumer prices, particularly for imported goods. Debates surrounding rice import taxation in the context of the **2026 finance framework** illustrate how fiscal consolidation efforts can conflict with inflation control objectives. While expanding the tax base is essential for long-term fiscal sustainability, poorly timed or poorly communicated tax changes can increase inflation expectations and accelerate price increases along supply chains.

Monetary policy tools have limited effectiveness in Madagascar's inflation context. The central bank's ability to influence inflation through interest rates and liquidity management is constrained by shallow financial markets and limited credit penetration. Moreover, when inflation is driven primarily by food supply shocks or imported fuel costs, tightening monetary conditions may have little impact on prices while imposing costs on investment and growth. This constraint underscores the structural nature of inflation and the need for complementary policy approaches beyond conventional macroeconomic instruments.

Social protection mechanisms represent a crucial but underdeveloped component of inflation response. Targeted cash transfers, food assistance, and safety-net programs can help protect vulnerable households from price shocks without distorting market prices. However, Madagascar's social protection coverage remains limited relative to the scale of vulnerability. Expanding and improving the targeting of safety nets could mitigate the welfare impact of inflation while allowing necessary price reforms to proceed.

Institutional credibility and communication also play an important role in inflation dynamics. When policy changes—such as fuel price adjustments or tax reforms—are poorly communicated, they can fuel uncertainty and speculation, leading to pre-emptive price increases by traders and service providers. Transparent communication and predictable policy frameworks are therefore essential for anchoring inflation expectations and reducing opportunistic price behavior.

Overall, policy responses to inflation in Madagascar have been shaped by short-term pressures and long-term constraints. While price controls and subsidies have provided temporary relief, they have not resolved the structural drivers of inflation. Recent reforms in fuel pricing and fiscal policy represent steps toward greater sustainability but also expose households to new risks in the absence of adequate social protection. Addressing inflation effectively will require coordinated institutional reforms that improve supply capacity, enhance market integration, strengthen governance, and protect vulnerable populations.

7. Welfare, Poverty, and Distributional Effects of Inflation

Inflation in Madagascar has profound welfare and distributional consequences that extend far beyond aggregate macroeconomic indicators. In a country where poverty remains widespread and employment is dominated by informal and vulnerable activities, price increases translate rapidly into reductions in real consumption, heightened food insecurity, and constrained access to essential services. The distributional impact of inflation is therefore uneven, disproportionately affecting low-income households, rural populations, and urban informal workers whose incomes are least able to adjust to rising prices.

One of the most critical channels through which inflation affects welfare is food consumption. As documented in previous sections, food expenditures account for a very large share of household budgets in Madagascar, particularly among the poor. When food prices rise, households have limited capacity to substitute toward cheaper alternatives without compromising nutritional intake. Empirical evidence from household surveys and food security monitoring suggests that during periods of high inflation, households often respond by reducing meal frequency, lowering dietary diversity, or shifting toward less nutritious foods. These coping strategies have long-term implications for health, productivity, and human capital accumulation, particularly for children and pregnant women.

Rural households experience a complex relationship with inflation. While some agricultural producers may benefit from higher food prices when they are net sellers, many rural households are net buyers of food due to small landholdings, low yields, or seasonal production patterns. Moreover, rising prices of inputs such as fuel, fertilizer, and transport often offset gains from higher output prices. As a result, inflation frequently exacerbates rural poverty rather than alleviating it, especially in regions affected by climatic shocks that reduce production volumes.

Urban households, particularly those engaged in informal employment, are highly exposed to inflation through housing, transport, and food costs. Urbanization in Madagascar has outpaced the expansion of formal employment and affordable housing, resulting in growing informal settlements and rising rents. Inflation in construction materials and energy costs feeds into housing expenses, while transport cost increases directly affect commuting workers. Because informal workers typically earn fixed or irregular nominal incomes, increases

in daily expenses quickly erode purchasing power. Unlike formal workers, they lack mechanisms for wage indexation or collective bargaining, making them particularly vulnerable to sustained inflation.

Inflation also interacts with inequality by redistributing income across different groups. Households with access to assets that appreciate with inflation—such as land or certain commodities—may partially protect their wealth, while households reliant on cash incomes or savings experience losses in real terms. In Madagascar, where financial inclusion remains limited and savings are often held in cash rather than inflation-indexed instruments, inflation functions as an implicit tax on the poor. This regressive effect reinforces existing inequalities and undermines social cohesion.

Gender dimensions of inflation are also significant. Women are disproportionately represented in informal employment, petty trade, and unpaid family work, and they often bear primary responsibility for household food provisioning. Rising prices increase the burden on women to manage scarce resources, intensifying time poverty and stress. In addition, inflation-related reductions in household budgets can lead to cutbacks in girls' education or healthcare, perpetuating gender disparities over time.

Social protection mechanisms have the potential to mitigate these welfare impacts, but coverage in Madagascar remains limited. While targeted cash transfers and food assistance programs have expanded in recent years, they reach only a fraction of vulnerable households and are often insufficient to fully offset inflation-induced income losses. The effectiveness of social protection as an inflation response therefore depends on both coverage and adequacy, as well as the ability to scale programs rapidly during periods of price shocks.

Overall, the welfare and distributional analysis underscores that inflation in Madagascar is not a neutral macroeconomic phenomenon. It systematically disadvantages those with the least capacity to absorb shocks and amplifies existing vulnerabilities. Addressing inflation without considering its social consequences risks undermining poverty reduction efforts and long-term development outcomes.

8. Discussion, Policy Implications, and Conclusions

The analysis presented in this paper demonstrates that inflation in Madagascar is best understood as a structural and institutional challenge rather than a short-term macroeconomic imbalance. Over the past decade, inflation has remained persistently elevated, driven primarily by food and energy price dynamics, import dependence, exchange-rate pass-through, and institutional constraints in pricing and market regulation. While headline inflation rates fluctuate, the cost of living experienced by households continues to rise, eroding purchasing power and reinforcing poverty.

A central finding of this study is that inflation in Madagascar is highly concentrated in essential goods and services. Food—especially rice—along with fuel, transport, and housing costs dominate household expenditure and shape inflation expectations. This concentration magnifies the social impact of inflation because these items are purchased frequently and are difficult to substitute. As a result, even moderate inflation rates can produce severe welfare losses in a context of widespread informality and low incomes.

Policy responses to inflation have historically relied on price controls, tax exemptions, and subsidies to protect consumers. While these measures have provided temporary relief, they have often generated fiscal pressures and market distortions without addressing underlying supply constraints. Recent reforms, including the introduction of automatic fuel price adjustment mechanisms, represent steps toward fiscal sustainability and transparency. However, they also expose households more directly to global price volatility, highlighting the need for complementary social protection measures.

The findings suggest several key policy implications. First, inflation management in Madagascar must prioritize supply-side interventions, particularly in food systems. Investments in agricultural productivity, storage, transport infrastructure, and market integration can reduce the frequency and severity of food price shocks. Strengthening domestic production capacity is essential for reducing reliance on imports and mitigating exchange-rate pass-through.

Second, energy sector reform remains critical. Improving electricity generation efficiency, expanding renewable energy capacity, and enhancing governance in the utility sector can reduce energy costs over the medium term and limit inflationary pressures. Transparent and predictable pricing frameworks, combined with targeted compensation for vulnerable households, can improve public acceptance of necessary reforms.

Third, social protection systems must be strengthened and expanded to shield vulnerable populations from inflation shocks. Well-targeted cash transfers and food assistance can mitigate welfare losses without distorting market prices, enabling policymakers to pursue sustainable pricing reforms. Enhancing administrative capacity and data systems is essential for effective targeting and rapid response.

Fourth, policy credibility and communication are central to managing inflation expectations. Clear, consistent communication regarding price reforms, tax changes, and adjustment mechanisms can reduce uncertainty and limit opportunistic price increases. Building institutional trust is therefore a key component of inflation management.

In conclusion, inflation in Madagascar represents a multidimensional development constraint that interacts with poverty, inequality, and institutional capacity. Addressing it effectively requires a comprehensive strategy that goes beyond conventional macroeconomic tools, integrating structural reforms, social protection, and governance improvements. By situating inflation within its broader economic and social context, this study contributes to a deeper understanding of price dynamics in low-income economies and offers evidence-based insights for policymakers seeking to balance price stability with inclusive development.

Conflicts of Interest

The author declares no conflicts of interest related to this study.

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