Exploring The Impact Of Sustainable And Green Practices On Inflation And Consumption In Bhutan's Changing Expenditure Patterns

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Abstract
In 2021, a resurgence of inflation caused disruptions across the global economy. Factors such as surging economic activity, supply-chain disruptions, more flow of money in the economy and increasing commodity prices have contributed to high inflation since 2015. Further, lockdowns and stringent containment measures of driver switching between high and low-risk areas have aggravated inflation. In addition, the hike in fuel prices, house rent, utilities and unfair market practices have adversely affected the purchasing capacity of many households. The inflation of both developed and emerging markets increased significantly in 2021. This was due to several factors, including supply chain disruptions, increased demand, and expansionary monetary policy. However, there was significant variation in inflation rates across different countries. Inflation affects prices by causing a general increase in the overall price level of goods and services within an economy over a period. The primary consequence of inflation is the erosion of real income, impacting consumers as prices rise unevenly, eroding their purchasing power. This study relies on secondary data sourced from reports by institutions like the Royal Monetary Authority (RMA), Ministry of Finance (MoF), National Statistics Bureau (NSB), International Monetary Fund (IMF) and World Bank. Its primary objective is to analyze the impact of sustainable and green practices on inflation and consumption patterns in Bhutan's changing expenditure landscape. Furthermore, a correlation analysis was conducted between inflation and consumption expenditure, revealing a strong negative correlation, consistent with prior research in the field. Overall, this study seeks to emphasize the importance of sustainable and green practices in shaping inflation rates and consumption patterns in Bhutan. By highlighting the potential positive impacts of sustainable practices.
initiatives, the research aims to inform future policy decisions and strategies that promote economic stability, environmental conservation, and sustainable consumption practices.

**Keywords:** Inflation, Consumption expenditure, Households Consumption, GDP, National Savings, sustainable and green practices.

1. **Introduction**

Inflation, the persistent increase in prices of goods and services over time, has become a prominent topic in economic discussions. The year 2021 witnessed a global surge in inflation, driven by factors such as heightened economic activity, disrupted supply chains, and rising commodity prices. This resurgence of inflation raises important questions about its impact on consumer spending, particularly in the context of Bhutan, a country known for its emphasis on sustainable development and green practices.

This research study aims to explore the relationship between inflation and consumption patterns in Bhutan, with a focus on the role of sustainable and green practices in managing inflationary pressures. Drawing on data from reputable institutions such as the Royal Monetary Authority (RMA), Ministry of Finance (MoF), National Statistics Bureau (NSB), International Monetary Fund (IMF), and World Bank, this research seeks to provide valuable insights for policymakers, businesses, and individuals navigating an economic environment prone to inflation.

By analyzing the correlation between inflation and consumption, this study aims to uncover the potential impacts of inflation on consumer behavior and expenditure in Bhutan. Additionally, it seeks to examine how sustainable and green practices can serve as effective tools for managing and controlling inflation. Bhutan's unique focus on sustainable development provides an ideal context for studying the interplay between inflation, consumption patterns, and the implementation of sustainable practices.

The findings of this research will contribute to the existing body of knowledge on the relationship between inflation and consumption, with a specific focus on the role of sustainable and green practices in Bhutan. The insights gained from this study will be valuable for policymakers in formulating effective strategies to mitigate the impact of inflation on consumer spending. Furthermore, businesses can benefit from understanding the consumer behavior dynamics influenced by inflation and the potential opportunities presented by embracing sustainable practices.

**Comparison of the impact of inflation in Bhutan and World economies**

The impact of inflation in world economies has proven to be more severe than that experienced in Bhutan. In the year 2021, global inflation surged to an average of 5.9% higher than as forecasted at 4.7%, reaching its highest level in decades. This escalation can be attributed to a multitude of factors, including the disruptive influence of the COVID-19 pandemic, supply chain disturbances, and the conflict in Ukraine (International Monetary Fund, 2023).
Notably, inflation has exerted a particularly adverse influence on low-income households within global economies. These households allocate a larger proportion of their income toward essential commodities and services, such as food and energy, which have borne the brunt of inflationary pressures (World Bank, 2023). Additionally, inflation has cast a shadow over businesses, resulting in diminished profits and job losses (BBC News, 2022). For instance, the United States and United Kingdom, inflation reached 7% and 9% in 2022, respectively. In Sri Lanka, inflation reached 70%, the highest level in the country's history.

In Bhutan, inflation has, in recent years, maintained a relatively low average of approximately 2.5% annually. Nevertheless, in 2021, inflation soared to 7%, marking the highest rate witnessed in over a decade. This surge can be attributed to a confluence of factors, including a surge in economic activity, disruptions in supply chains, and the ascent of commodity prices (World Bank, 2023). The impact of inflation in Bhutan presents a mixed picture. On one hand, it has led to heightened consumer prices, particularly affecting imported goods. On the other hand, it has also galvanized economic growth and fostered employment opportunities (The Bhutanese, 2023).

All in all, the repercussions of inflation have been more pronounced in the context of world economies when compared to Bhutan. This discrepancy can be attributed to Bhutan's advantageous position, characterized by its modest size, emphasis on self-sufficiency, and robust social safety net (World Bank, 2023). Nevertheless, it is essential to recognize that Bhutan is not entirely shielded from the consequences of inflation, and as the nation increasingly integrates into the global economy, the impact is expected to intensify (The Bhutanese, 2022).

It is imperative to acknowledge that inflation is a multifaceted issue with a wide-ranging array of effects. It is essential to remain cognizant of its potential impact and take proactive steps to mitigate its consequences. These steps encompass prudent financial management, such as budgeting and expenditure tracking, seeking cost-effective purchases, considering bulk buying, self-investment, and planning for future financial security.

**Objectives**

- To analyze the trend of inflation and consumption expenditure pattern in Bhutan.
- To know if significance relationship exists between inflation and consumption.
- To examine how sustainable and green practices can serve as effective tools for managing and controlling inflation.

**Research Methodology**

This paper is based on secondary data collected from various online sources, such as Royal Monetary Authority of Bhutan (RMA), Ministry of Finance (MoF), National Statistics Bureau (NSB), IMF, and World Bank. Exploratory Research has been used in this study to understand the variables and to investigates the problems. And descriptive research methodology has been adopted to understand the underline trends and the relationship of the variables which helps in validating the existing conditions.
2. Literature Review

The relationship between inflation and consumption expenditure is intricate and has been the focal point of extensive research. Several studies have identified varying associations between inflation and consumption expenditure. Some studies have detected a negative correlation, while others have observed a positive one. Moreover, evidence suggests that the relationship between inflation and consumption expenditure is subject to change depends on the factors such as the nature of goods or services consumed, the level of inflation, and consumers' expectations.

A recent study conducted by Olusola et al. (2022) uncovered a long-term negative correlation between private consumption expenditure and inflation in Ghana. In India, Yadav et al. (2014, 2015) found that households with higher inflation expectations tend to spend more presently but plan to curtail their future expenditures. Burke et al. (2013) determined that inflation expectations have a mildly stimulating effect on overall consumption in the United States. Ichiuem et al. (2013) ascertained that augmented inflation expectations are anticipated to result in higher immediate consumer expenditure when interest rates are at the zero lower bound. Obinna (2020) identified a positive long-term relationship between inflation and household consumption spending in Nigeria. D’Acunto et al. (2015) established that households anticipating an increase in inflation exhibit greater willingness to invest in durable goods in Germany. Manasseh et al. (2018) underscored that interest and inflation rates serve as significant predictors of consumer spending in Nigeria. Bonsu et al. (2017) affirmed that inflation significantly shapes household consumption spending patterns in Ghana. Begum, S., Kumar, A., and Durga R, G. (2022) conducted a correlation test between the inflation rate and consumption expenditure for the period 2010 to 2022, revealing a strong negative correlation. This indicates that as the inflation rate increases, consumption expenditure tends to decrease significantly. However, a literature review concerning the correlation between the inflation rate and consumption expenditure in the context of Bhutan could not be conducted due to the absence of any research papers on this subject.

Collectively, the existing body of literature implies that the connection between inflation and consumption expenditure is intricate and is subject to variation influenced by a multitude of factors. Nonetheless, there exists some evidence suggesting that inflation can exert a negative influence on consumption expenditure, particularly over the long term. This is primarily due to the capacity of inflation to erode consumers' purchasing power and diminish their confidence in prospects.

3. Finding and Analysis

The inflationary trend in Bhutan

The impact of inflation on the Bhutanese economy has far-reaching implications, including a decrease or increase in the purchasing power of Bhutanese consumers. The stability of the nation's economy is a considerable challenge for all governments worldwide.

The inflation rate in Bhutan increased drastically in 2021, reaching 7.35%, which was higher than the projected inflation rate. This was mainly due to increases in the prices of food and non-food items, at rates of 9.38% and
5.62%, respectively. Alcoholic beverages and betel nuts contributed 16.66% to the overall increase in food prices, while clothing and footwear contributed 9.13% to the overall increase in non-food prices.

However, in 2022, the inflation rate in Bhutan began to decline. This was mainly due to a decrease in the prices of food and non-food items. Additionally, the easing of global supply chain disruptions caused by the COVID-19 pandemic helped to reduce the cost of imported goods in Bhutan.

Based on Figure 2, it is evident that in the year 2017, the inflation rate increased, and final consumption expenditure also rose. This trend continued through 2019, with both inflation and final consumption expenditure experiencing growth until 2021. It's worth noting that in 2020, during the COVID-19 pandemic, the inflation rate increased by 106%, subsequently leading to a gradual increase in final consumption expenditure over time.
To explore the relationship between inflation and consumption expenditure, a correlation test has been conducted, as detailed below:

**Table 1: Correlation Test between inflation rate and consumption expenditure**

<table>
<thead>
<tr>
<th>Particular</th>
<th>Inflation Rate</th>
<th>Consumption Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Consumption</td>
<td>0.636</td>
<td>1</td>
</tr>
</tbody>
</table>

Correlation test results show a moderately strong positive correlation between the inflation rate and consumption expenditure from 2017 to 2022. This means that a 1 unit increase in inflation is associated with a 0.64 unit increase in consumption expenditure, and vice versa.

**Gross Domestic Product and Inflation**

As shown in below table, the intricate interplay between GDP fluctuations and inflation rates across the years 2017 to 2022. Notably, the percentage change in GDP and inflation reveals nuanced patterns in Bhutan's economic landscape. In the initial years, from 2017 to 2019, the economy demonstrated consistent GDP growth, outstripping the pace of inflation. This period denoted robust economic expansion relative to moderate increases in price levels. However, in 2019-2020, a divergence emerged as GDP growth markedly slowed while inflation surged substantially, indicating economic challenges amid a drastic rise in price levels and reduced output growth. The subsequent years saw fluctuations: a rebound in GDP growth in 2020-2021, exceeding the inflation rate, and a marginal decline in GDP growth in 2021-2022, albeit still outperforming the inflation rate. These dynamics emphasize the delicate balance between fostering economic growth and maintaining stable price levels, showcasing instances where economic challenges coincide with sharp increases in inflation, impacting Bhutan's overall economic performance.

**Table 2**

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>168,753.30</td>
<td>176,672.95</td>
<td>192,647.77</td>
<td>182,107.42</td>
<td>204,664.41</td>
<td>227,813.72</td>
</tr>
<tr>
<td>% change in GDP</td>
<td>105%</td>
<td>109%</td>
<td>95%</td>
<td>112%</td>
<td>111%</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>4.96</td>
<td>2.72</td>
<td>2.73</td>
<td>5.63</td>
<td>7.35</td>
<td>5.64</td>
</tr>
<tr>
<td>% Change in inflation</td>
<td>55%</td>
<td>100%</td>
<td>206%</td>
<td>131%</td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>

**Inflation and Household Consumptions expenditure in Current Prices**

Below table shown the relationship between the percentage changes in Households Consumption and the corresponding fluctuations in inflation rates across the years 2017 to 2022 in Bhutan. Throughout this period, Households Consumption exhibited a remarkable upward trajectory, consistently expanding at notable rates. Notably, the growth in consumer spending, reflected by the percentage change in Households Consumption, consistently surpassed the fluctuations in inflation rates. In the initial years, from 2017 to 2019, despite moderate
rises in inflation, households sustained robust consumption habits, showcasing an unwavering appetite for goods and services. Even during 2019-2020, a period marked by a substantial increase in inflation rates, households continued to exhibit strong spending behavior, demonstrating resilience in their consumption patterns amidst higher price levels. Subsequent years, including 2020-2021 and 2021-2022, underscored this trend as Households Consumption consistently surged, notably outpacing the inflation rates. This data suggests that Bhutan's households remained resilient, displaying an ongoing willingness to spend on various goods and services, contributing significantly to the country's economic activity despite inflationary pressures.

**Table 3**

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Saving</td>
<td>80,229.89</td>
<td>86,304.45</td>
<td>92,481.34</td>
<td>106,679.58</td>
<td>110,108.41</td>
<td>131,108.41</td>
</tr>
<tr>
<td>% Change in National Saving</td>
<td>105%</td>
<td>107%</td>
<td>107%</td>
<td>108%</td>
<td>123%</td>
<td></td>
</tr>
<tr>
<td>Inflation</td>
<td>4.96</td>
<td>2.72</td>
<td>2.73</td>
<td>5.63</td>
<td>7.35</td>
<td>5.64</td>
</tr>
<tr>
<td>% Change in inflation</td>
<td>55%</td>
<td>100%</td>
<td>206%</td>
<td>131%</td>
<td>77%</td>
<td></td>
</tr>
</tbody>
</table>

**National Saving Vs Inflation**

Below table outlines the relationship between the percentage changes in National Savings and the corresponding shifts in inflation rates over the span of 2017 to 2022 in Bhutan. Analyzing this data reveals intriguing trends in how National Savings responded to varying inflation rates during this period. In the initial years, from 2017 to 2019, National Savings consistently surged at rates surpassing the moderate increases in inflation. This indicated a positive trend of heightened savings despite the relatively controlled rise in price levels. However, the year 2019-2020 marked a significant divergence as National Savings growth decelerated notably amidst a substantial surge in inflation rates, indicating a potential impact of heightened inflation on the growth of savings. Despite this, subsequent years, particularly 2020-2021 and 2021-2022, portrayed a resurgence in National Savings growth, outpacing or closely aligning with inflation rates, signifying a renewed effort towards savings despite persistently fluctuating price levels. This data reflects a nuanced interplay between inflation and National Savings, showcasing periods where savings growth responded to changes in price levels, illustrating Bhutanese propensity for saving amidst varying economic conditions.

**Table 4**

<table>
<thead>
<tr>
<th>Year</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Saving</td>
<td>52,661.93</td>
<td>53,664.10</td>
<td>62,938.40</td>
<td>42,181.12</td>
<td>48,881.67</td>
<td>53,734.83</td>
</tr>
<tr>
<td>% Change in National Saving</td>
<td>102%</td>
<td>117%</td>
<td>67%</td>
<td>116%</td>
<td>110%</td>
<td>110%</td>
</tr>
<tr>
<td>Inflation</td>
<td>4.96</td>
<td>2.72</td>
<td>2.73</td>
<td>5.63</td>
<td>7.35</td>
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<td></td>
</tr>
</tbody>
</table>

**Factors affecting to Inflation in Bhutan's Economy**

Bhutan, known for its commitment to Gross National Happiness, has also shown steady economic growth with manageable inflation. However, several factors can still contribute to rising prices, and incorporating sustainable green practices can offer powerful solutions. Here's a breakdown:

**Dependence on imports:**
Bhutan relies heavily on imports for essential goods like fuel, food, and manufactured products as shown in the below graph. Global price fluctuations and supply chain disruptions can directly impact domestic prices.

![Graph showing Export and Import of Goods and Services](image)

**Figure 3**

**Hydropower revenue fluctuations:**
Hydropower is a major export earner for Bhutan, but revenue depends on water availability and electricity demand in neighboring countries. This unpredictable income stream can affect government spending and inflation control.

**Domestic supply limitations:**
Bhutan's limited domestic production, particularly in agriculture, makes it dependent on imports for basic necessities. This lack of self-sufficiency creates vulnerability to external price shocks.

**Infrastructure bottlenecks:**
Inadequate transportation and distribution infrastructure can increase transportation costs and hinder efficient market mechanisms, pushing up prices for consumers.

**External Aid and Investments:** Bhutan depends on external aid and grant for certain development activities which can impact inflation. If there is a substantial inflow of foreign funds without a corresponding increase in productive capacity, it can lead to inflationary pressures.

**Climate change:**
Bhutan is already experiencing the effects of climate change, with extreme weather events impacting agricultural yields and hydropower generation. This can lead to food insecurity and energy price volatility.

**Green Sustainable Solutions to control Inflation in Bhutan:**
Inflation posed significant challenges to an economy, affecting the purchasing power of individuals and businesses. Bhutan, a country known for its commitment to Gross National Happiness and sustainable development, has leverage green sustainable solutions to mitigate the impact of inflation while fostering an
environmentally friendly economy. By adopting these solutions, Bhutan is promoting price stability, reduce reliance on imported goods, and create a more sustainable future.

**Carbon-Neutral Policies and Robust Forest Protection:** Bhutan's Constitution mandates the state to maintain a minimum forest cover of 60%, and as of the National Forest Inventory Report, 2023, it proudly stands at 69.71%. This steadfast commitment to extensive forest protection forms the bedrock for implementing carbon-neutral policies, positioning Bhutan as the world's first Carbon-Neutral Country since its declaration at COP 15 in 2009.

Carbon-neutral policies primarily target the reduction of carbon emissions and the promotion of renewable energy sources. Bhutan's embrace of clean energy alternatives, such as solar and wind power, can significantly diminish its reliance on costly fossil fuels. This transition not only contributes to a greener future but also aids in stabilizing energy prices, thereby positively influencing inflation control. Moreover, investments in renewable energy infrastructure present opportunities for job creation and economic stimulation.

The safeguarding and expansion of forest areas play a pivotal role in mitigating inflation. Forests, serving as carbon sinks, absorb and store carbon dioxide, mitigating climate change. Preserving these forests not only fosters a healthier environment but also offers economic advantages. Revenue generation through sustainable forestry practices like eco-tourism, showcasing the country's biodiversity and landscapes, contributes to economic growth. Additionally, the sale of carbon credits presents an additional income stream while supporting global efforts against climate change.

Through the adoption of carbon-neutral policies and robust forest protection, Bhutan can effectively manage inflation while fostering a more environmentally sustainable and resilient economy. These green solutions align with Bhutan's dedication to environmental conservation and enhance the well-being and prosperity of its citizens. Moreover, the government's initiatives, such as providing free electricity in rural areas to reduce reliance on fuel and firewood, alongside the efforts of corporations and NGOs like the Green Corporation of Bhutan and Bhutan Life, further underline Bhutan's commitment to environmental protection.

**Sustainable Transport:** The emphasis on electric vehicles (EVs) and the promotion of public transportation in Bhutan holds the potential to significantly reduce fuel consumption and carbon emissions. According to the Electric Vehicle Road Map 2035 (Kuensel, dated 9th, 2022), the ambitious goal of replacing 70% of vehicles with EVs by 2035 is set. Additionally, as reported by Bhutan Today in 2023, the government aims to transition 50 percent of the country's vehicle fleet to clean and eco-friendly technology by 2030.

This strategic shift not only addresses concerns related to inflation in transportation costs but also plays a crucial role in fostering a cleaner and more environmentally friendly atmosphere.

**Promote local production:** The day of the government is encouraging organic farming, agroforestry, and small-scale manufacturing can reduce reliance on imports, stabilize prices, and create jobs. The government of Bhutan has started providing Chain-link fencing to support local production. For example, in certain rural communities, people savor their meals on plates made from wood or leaves, fostering self-sustainability while simultaneously combating inflation and reducing reliance on imported goods.
Green Building Practices: The day of the government is encouraging the use of eco-friendly materials and energy-efficient designs in construction can reduce energy consumption and lower maintenance costs in the long run. This can help control inflation related to housing and infrastructure development.

Investment in Green Technologies: Encourage businesses to adopt eco-friendly practices and technologies to reduce production costs and environmental impact. As of now, Bhutan already started in investing in Bitcoin mining.

Supporting Circular Economy Practices: Encouraging the reuse, recycling, and repurposing of materials can reduce resource consumption, waste generation, and production costs. This can lead to more affordable goods and services and contribute to controlling inflation.

Promoting Renewable Energy: The day of the government is investing in renewable energy sources such as hydropower, solar, and wind that can reduce reliance on fossil fuels and mitigate the impact of fluctuating global oil prices. This can help stabilize energy costs and reduce inflationary pressures related to energy expenses. However, diversifying Bhutan's energy mix beyond hydropower, focusing on solar, wind, and other renewable sources, can lead to energy independence and price stability. The Department of Energy (DoE) is set to initiate 500 megawatts (MW) of RE projects across the country in the next five years as per the Kuensel (dated 23rd, 2023).

Encouraging Sustainable Agriculture: Supporting sustainable farming practices, organic agriculture, and promoting local food production can enhance food security and reduce dependence on expensive imported food. This can help in reducing the impact of global food price fluctuations and reduce inflation in the food sector.

Supporting Circular Economy Practices: The day of the government is encouraging the reuse, recycling, and repurposing of materials can reduce resource consumption, waste generation, and production costs. This can lead to more affordable goods and services and contribute to controlling inflation.

Strengthening Environmental Regulations: Implementing and enforcing robust environmental regulations can encourage sustainable practices and discourage activities that contribute to inflationary pressures, such as overexploitation of natural resources or pollution. This can promote a more sustainable and stable economy.

Recommendations and Suggestions:

Encourage Sustainable Consumption: Highlight the importance of sustainable consumption practices to mitigate the impact of inflation. This could include promoting the use of eco-friendly products, reducing waste, and adopting renewable energy sources.

Promote Local Production: Emphasize the significance of supporting local industries and producers to reduce dependence on imported goods. This can help stabilize prices and contribute to the country's overall economic sustainability.

Raise Awareness on Green Practices: Educate the public about the benefits of adopting green practices, such as recycling, composting, and using energy-efficient appliances. Encourage individuals and businesses to incorporate these practices into their daily lives.
Develop Green Entrepreneurship: Encourage the growth of green businesses and startups by providing support and incentives. This can help create employment opportunities while promoting sustainable practices in the economy.

Strengthen Policy Frameworks: Advocate for the implementation of policies that support sustainable consumption and production. This could include tax incentives for green businesses, regulations on single-use plastics, and the promotion of renewable energy sources.

Collaborate with International Partners: Foster partnerships with other countries and international organizations to share best practices and learn from their experiences in sustainable consumption and green practices.

Regional cooperation: Bhutan can collaborate with neighboring countries to develop a regional green economy, ensuring stable markets and resource sharing.

Technology adoption: Embracing digital technologies for agricultural monitoring, weather forecasting, and market access can improve efficiency and resilience in the face of climate challenges.

Knowledge sharing: Bhutan can become a global leader in showcasing the economic benefits of green practices, inspiring other countries to adopt similar sustainable approaches.

By implementing these green solutions and recommendations, Bhutan can not only achieve its inflation control goals but also build a more resilient, prosperous, and environmentally sustainable economy in alignment with its Gross National Happiness philosophy. Remember, the transition to a greener economy is an ongoing process, requiring constant adaptation and improvement to ensure long-term success.

4. Conclusion

This study examined the relationship between inflation and consumption expenditure in Bhutan, using secondary data from various sources, including the Royal Monetary Authority of Bhutan, the Ministry of Finance of Bhutan, the National Statistics Bureau of Bhutan, the IMF, and the World Bank. The findings of the research revealed a moderately strong positive correlation between inflation and consumption expenditure in Bhutan over the period from 2017 to 2022. This unexpected correlation challenges conventional wisdom and may be attributed to the unique characteristics of the Bhutanese economy, which is still in a developmental phase and relies heavily on imports. The positive correlation suggests that as inflation rises, consumption expenditure tends to increase as well. Possible explanations include consumer behavior aimed at avoiding future price increases and government policies fostering economic growth.

The research further explored the impact of inflation on different economic indicators in Bhutan. The analysis of GDP and inflation dynamics highlighted nuanced patterns, showcasing the delicate balance between economic growth and stable price levels. Similarly, examining the relationship between inflation and household consumption expenditure indicated that Bhutanese households remained resilient, maintaining robust spending habits despite inflationary pressures.

To address the challenges posed by inflation, the paper recommends a set of sustainable and green practices for Bhutan. These recommendations include carbon-neutral policies and extensive forest protection, promoting local
production, adopting sustainable transport, implementing green building practices, investing in green technologies, supporting circular economy practices, promoting renewable energy, encouraging sustainable agriculture, and strengthening environmental regulations.

The implementation of these green solutions is crucial not only for controlling inflation but also for fostering a more resilient, prosperous, and environmentally sustainable economy in line with Bhutan's commitment to Gross National Happiness. Policymakers are urged to consider these recommendations to mitigate the negative impacts of inflation on consumption spending, particularly among low-income households. Simultaneously, consumers are advised to adopt prudent financial management practices, including careful budgeting, and avoiding unnecessary purchases, to safeguard themselves from the effects of inflation.

In conclusion, this research paper underscores the importance of sustainable and green practices in shaping inflation rates and consumption patterns in Bhutan. By shedding light on the potential positive impacts of these initiatives, the study aims to inform future policy decisions and strategies that prioritize economic stability, environmental conservation, and sustainable consumption practices in Bhutan's evolving expenditure landscape.

**Limitations and Future Research**

This study has some limitations. First, the study is based on secondary data, which may not be as reliable as primary data. Second, the study only examines the relationship between inflation and consumption expenditure in Bhutan. Future research could examine this relationship in other countries and compare the findings across countries.
References


BBC News. (2022, March 17). Inflation: What is it and why is it so high in 2022?.


