Government Regulated Price Control Apllication

Abstract-This report proposes a technology-based solution to minimize price hike problems in the market. The proposed approach introduces a government-regulated app system that aims to monitor and control the prices of essential commodities in the market. A survey was conducted to gather insights on the feasibility and effectiveness of this proposed solution, and the results indicate that the app system is capable of solving the price hike problem in our nation. The report provides a detailed discussion on the background of price controls, the types of government-regulated price control apps, and the potential benefits and drawbacks of such apps. Additionally, the report presents the methodology used in conducting the survey, the analysis of the survey results, and recommendations for future research in this field. The proposed solution has the potential to significantly reduce the negative impacts of price hikes on consumers and improve market stability in our nation.

Index terms- price control, monitoring app, price hike, market, government

I. INTRODUCTION

A. Background information

Bangladesh has developed by relying on its agriculture industry. Nonetheless, the cost has significantly gone up during the past two years. Every aspect of our daily lives, from rice and daily necessities to oils and other staples, has recently been harmed by price inflation. The price of sugar was Tk. 80 (per kg) in 2022, lentils were Tk. 115 (per kg), broiler chicken was Tk. 155-165 (per kg), and eggs were Tk. 36-38. (4 pieces). In 2023, the cost of sugar is Tk. 120 (per kg), lentils are Tk. 136 (per kg), broiler chicken is Tk. 250–270 (per kg), and eggs are Tk. 45–37. (4 pieces) [1]

B. Overview

The study evaluates the significance of putting in place a government-regulated pricing control system. The supply and demand equation will be maintained by this price control application by adhering to fundamental economic principles like price ceilings and price flooring. In addition to the application, users can report any irregularities through the application. The report's main points center on the value of implementing new technology and how it might address the market's present problem of price increases.

II. METHODS

A. Description of the solution

The recent price increase of necessities in Bangladesh, particularly in the capital, has struck a double blow to the underprivileged and middle-class population, which is already severely affected by unemployment. Price increases are being brought on by several factors, including rising gasoline costs, smuggling, and illegal marketing [2]. Nonetheless, a few syndicates are mostly to blame for the price increase. The essentials are stocked, which raises market demand, after which the price is raised and the essentials are made available. In this situation, the application can regulate the pricing to preserve the balance between supply and demand, which is only one of the

many ways to address the issue. The proposed app system will have several functionalities, including real-time monitoring of prices of essential commodities in the market, setting price controls based on market data, and providing consumers with information on regulated prices through the app interface. The app system will also allow consumers to report any violations of price controls, which will be investigated by the government and addressed accordingly.

B. Methods Used

A survey was carried out by creating a questionnaire and learning more about the BSc students at different universities and the difficulties they were encountering as a result of price increases. This survey was carried out on a platform called Google Forms. The students were given a total of 11 questionnaires to complete to gather information. Participants may swiftly express their ideas on any problem because of the multiple-choice options and open-ended questions that were included. This poll has a participant pool of about 30 students. The survey's participants voluntarily participated, and it was kept completely confidential.

C. Rationate of selecting participants

The students were chosen for the survey because most of them are from middle-class families and they are unemployed. Due to their accessibility and responsiveness online, this group was given preference. They were each chosen separately through texting.

III. RESULTS AND DICSUSSIONS

A.Results

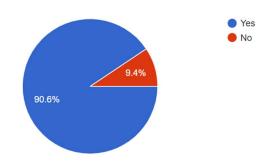


Fig. 1: Participants in the survey

Figure 1 shows the percentage of the participants of students od this survey. Most of the participants of this survey are students and they constitute about 90.6% of Fig. 1. The rest of the participants are not students.

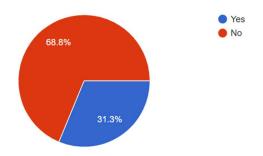


Fig. 2: Participants with an income source

Figure 2 tries to figure out the percentage of the participants who have an income source. The majority do not have any income source which is 68.8% of Fig. 2. The remaining 31.3% have an income source.

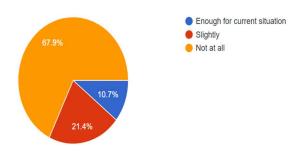


Fig. 3: Increment in monthly income

Figure 3 demonstrates the percentage of increment in monthly income in the past years of the participants. The majority which is 67.9% have no increase in monthly income. About 21.4% of participants' monthly income has slightly increased and the rest of the participants' income increased not at all.

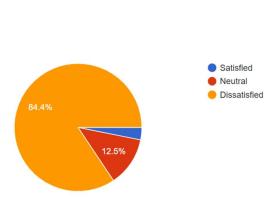


Fig. 4: Satisfaction with the current market situation

Figure 4 tries to figure out the percentage of satisfaction with the current market situation. Most people are not satisfied with the current market situation which is 84.4% of Fig. 4. About 12.5% are neutral and 3.1% are satisfied.

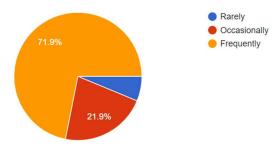


Fig. 5: Experience of price hikes

Figure 5 tries to find out how often participants experience price hikes in goods and services they purchase. It is a matter of concern that about 71.9% frequently experience price hikes. About 21.9% occasionally experience price hikes and the rest 6.3% rarely experience that.

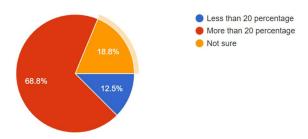


Fig. 6: Increase in monthly expenditure

Figure 6 shows the increased monthly expenditure of the participants on essential items in the past years due to rising prices. About 68.8% of participants' monthly expenditure has increased by more than 20%. About 18.8% of participants' monthly expenditure has increased not more than 20% and the rest 12.5% are not sure.

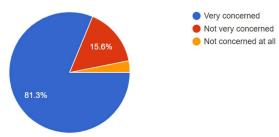


Fig. 7:Perception about rising prices

Figure 7 focuses on the participants who are concerned about rising prices and inflation affecting their financial well-being. About 81.3% of participants are very concerned and 15.6% are not very concerned. And the rest 3.1% are not concerned at all.



Fig. 8: Importance of government role From Figure 8 it is be seen that most of the participants, about 96.9% agreed that the government should play a role in controlling prices. And 3.1% are not sure.

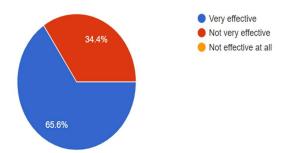


Fig. 9: Effectiveness of government-regulated price control app

Figure 9 shows what our participants think about the effectiveness of a government-regulated app system that would be controlling price hikes in the market. Most of the participants about 65.6% think that it will be very effective and the rest 34.4% think that it will be not very effective.

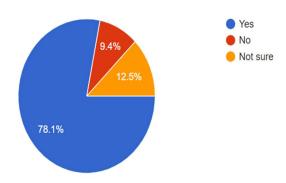


Fig. 10: Willingness to download the application Figure 10 tries to find that if people are interested in using such kinds of applications. About 78.1% of participants are interested to download and use such applications. About 12.5% are not sure and 9.4% are not interested.

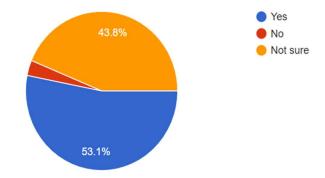


Fig. 11: Benefit of low-income households

Figure 11 takes the opinion of the participants that they think the proposed solution would benefit low-income households the most. About 53.1% of people think it would but almost the same number of people are not sure which is 43.8%. And the rest 3.1% disagreed.

B.Discussion

The information in the results section indicates that the introduction of a government-regulated price control application will have a great impact on the problem of price increases. One of the key findings is how much people's income increased along with their monthly expenditures increased. About 66 percent of respondents believe that if a government-regulated pricing control application is deployed, it will be highly effective.

Since the majority of respondents supported the introduction of a government-regulated application, it is likely that price increases would be minimal and that low-income households will stand to gain the most from this.

IV. CONCLUSION

The main goal of this project is to set up a real-time monitoring system for price increases combined with a system for consumer complaints, both of which help consumers get the right price for everyday items. The government keeps an eye on the market and sets goods pricing while "consumer rights protection" officers check to make sure the prices are guaranteed. Database and application servers are the main sources of compromise for the developed system. The prices are regularly updated everyday by the system. To find out what the public thought and to spread awareness of the application, a survey was commissioned. To get the desired result from this project, a number of technological systems are needed, which is a worrying economic move. The prospect of price increases in Bangladesh is rather alarming, and it is safe to assume that the application will be crucial in making people aware of any provocations as well as in assisting them in pleasantly purchasing their goods. In addition, as more people get acclimated to using the internet and other technological tools, the world will eventually resemble our vision.

V. REFERENCES

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