**School: : BRAZIL SECONDARY SCHOOL**

**Subject : PRINCIPLES OF BUSINESS**

**Centre number :**

**Territory : TRINIDAD**

**Candidates :**

**RESEARCH TOPIC**

An investigation into the effects of an increase in the price of gas on taxi drivers working the Arima to Brazil route.

**RESEARCH PROBLEM**

The price of gas has increase three times over the last 3 years. A difference of about $2.46 per liter over the last 3 years. This has directly affected the profitability and sustainability of a taxi driver who is a sole trader. Taxi driver who work the rural route of Arima to Brazil have not increase their fares over the last five years mainly because their customers are students and low-income earners. However, taxi drivers are finding is difficult to continue operations with the increase cost.

**OBJECTIVES/ RESEARCH QUESTION**

1. To determine the income profitability a taxi driver, driving a four {4} seater vehicle on the route Arima to Brazil.
2. To calculate the effect of an increase in the price of gas on the income of the taxi driver.
3. To examine/determine if an increase in fares are necessary/feasible in order to maintain his profitability.

**BACKGROUND**

 This research investigates the impact of changing cost, mainly gas on a taxi driver working the Arima to Brazil route. This taxi driver has been working this route for over 10 years. He drives a Nissan B14 vehicle which seats four passengers and used super gas. The vehicle is about twenty years old but is maintain monthly or as required.

 The above factors namely the age of the vehicle, size of the vehicle and the type of fuel it uses is significant because impact the income earning potentials of the taxi driver.

 As a result, this research is specific to this taxi driver because income may vary among taxi drivers based on the type of vehicle they use, the vehicle age, the vehicle’s size and type of fuel it uses.

 Five years ago, the price of super gas was about $2.51 per liter and the fare from Arima to Brazil was $5.00 one way. The distance of approximately 25kms. Since then the price of super gas has increase to $5.00 per litre . The Arima to Brazil taxi driver’s association tried to maintain the $5.00 fare because their customers consist mainly of students and low income earns from the rural communities. However, this almost double in price of super gas per liter has cut the income of taxi drivers by more than 50%.

 As a result, this research is necessary because an increase in taxi fares will impact the income and standard of living of members of the community and more than 1000 students who attend the 5 primary and 1 secondary school. The profitability of taxi driver will also affect the ability of taxi drivers to continue working. If drivers stop working this may increase unemployment in the country and hinder the ability of students to afford to go to school and to get home from school.

**Methodology**

DATA for the project was collected with the use of two data collection instruments. The first and major instrument was a questionnaire. The questionnaire consisted of 20 question, all questions was open ended and directed towards a Taxi driver on the Arima to Brazil route. A questionnaire was the best method to collect a large amount of data (quantitative) for the first time (primary). Questions were specific to that taxi driver and gathered data about him and his vehicle. The questionnaire allowed the driver to take the question home and at his leisure answer the question to the best of his ability and get assistance where needed. The second method of data collection was an interview with the taxi driver. The method was useful to get more in depth, specific data building on the questionnaire. This was necessary to clarify some answers given in the questionnaire. It also allowed us to generate a cash flow and income statement for the driver since does not keep accounts.

The major limitation of this type of data collection is the inaccuracy of data. This could be as a result of the limited education of the driver, a lack of willingness to give accurate data and his inability to keep and collect the data needed. There were no financial document or accounting record hence gathering historical data was difficult.

**Data Presentation and Analysis**

Bar chart showing the income of a taxi driver working the Brazil to Arima route for 2018

The bar chart above shows the average income of a taxi driver working the Arima to Brazil route for the year 2018. The average income has been the same since 2010 since the taxi fares have not been increased over the eight year period. The chart depicts the changes in income is directly related to the terms of school and vacation. During the vacation periods income falls significantly with the exception of December where there is an increase in travelling for shopping.

Bar chart showing the change in gas expenditure for a taxi driver working the Brazil to Arima route for the period 2015 -2018 compared to income.

The income of a taxi driver working the Brazil to Arima route is approximately $5 x 4 = $20 per trip multiplied by 15 trips a day is a total of $300 per day.

Gas is the only real working expense $200 in gas can give 375km. An average trip may be about 25 km one way. 375/25 is about 15 trips from a $200 tank of gas.

The graph above shows the significant impact which the increase in the price of gas has had on the profit of the taxi driver. In 2015 the average profit was $5350 as compared to 2018 where the average profit was $2617. This represents an average decline in income of 51%.

The average profit of a taxi driver on this route is about $100 a day. However this does not take into account vehicle maintenance and insurance which varies but can average about $50 a day. This leaves an overall profit of about $50 a day in 2018.

Before the gas price increase from $2.51 to $5.00 the profit of the taxi driver was double reflecting an increase in the price of gas by two.

**CONCLUSION**

In conclusion this research shows the significant impact that the increase gas price has had on the taxi driver, cutting his profit by about $2733 per month. After taking into consideration insurance of about $1500 per year and vehicle maintenance the taxi driver is barely breaking even and making little profit. This becomes critical because drivers will begin to change routes or stopping working all together, causing a major transportation shortage. Students will not be able to get to school and if so will have to wait long hours to get transportation. People will be unable to get to work and do business.

**Recommendations**

1. The taxi drivers along the Arima to Brazil route should increase their fares by at least $2.00 per person. That is $8.00 extra per trip by 15 trips equal $120.00 per day. This should equate to about $2880 per month. This would maintain the drivers standard of living as it was before the gas price increase.
2. Drivers could try to change routes to ones which are more profitable.
3. Drivers can invest in hybrid vehicles which use no gas.
4. Drivers can invest in 7 seater vehicles to increase their income per trip.

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**Bibliography**

Stimpson,Peter .Principles of Business for CSEC,2011. Nelson Thornes

Whitcomb,Alan Dr. Essentials Principles of Business for CSEC.2018. Holder Education Ltd.

**Questionnaire**

1. What is the cost from Arima to Brazil now?
2. Has the price increase over the last 5 years?
3. What was the price 5 years ago?
4. What is the distance from Brazil to Arima?
5. How many gas is used per trip?
6. What is the average cost of maintaince for the vehicle per month?
7. How many trips average is made daily?
8. How many kms can you get on a full tank of gas?
9. How many does it cost to full the tank?
10. How long have you been working this route?
11. What type of car do you work with?
12. What type of gas do you use?
13. How many times per day do you fill your gas tank?
14. How many liters does the vehicle use per day and per trip?