WILDLIFE TOURISM IN HURULU ECO PARK: AN APPLICATION OF TRANSACTION COST THEORY ON USD EXCHANGE RATE INCREMENT

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Abstract

The Hurulu Eco Park located in the Hurulu Conservation Forest at Habarana in the North Central Province of Sri Lanka, is a tourist destination from where seasonal elephant movement patterns could be observed throughout the year. Habarana currently serving as a tourism hub has the potential to attract more tourists and elevate Hurulu Eco Park to the top of the list of wildlife tourism destinations by the means of application of the Transaction Cost Theory (TCT) for USD exchange rate increment. This utilitarian value of TCT, a fundamental concept for cost management in any type of transaction, is important as wildlife tourism demand and transaction costs are particularly vulnerable to Sri Lanka's current increased USD exchange rates. This study looks at how stakeholders of Habarana-based wildlife tourism industry perceive the recent rise of the USD exchange rate, what variations in transaction costs have occurred as a result, and how to productively manage and mitigate transaction costs. The study's population included all stakeholders who had been involved directly in transactions in the Hurulu Eco Park. The findings point out that the increasing USD exchange rates had both positive and negative consequences on the transaction costs of the Hurulu Eco Park stakeholders between the years 2018 and 2022. Tour guides' transaction costs per tour have decreased by 64.5%, while hotels/homestays, foreign tourists, and safari drivers' expenditures have increased by 8.3%, 14%, and 281.2%, respectively. This scenario, nevertheless, had a contentious influence on the foreign tourist traffic load. When all other infrastructure factors are steady, an increase in the USD exchange rate is a stimulant for a boost in foreign tourist arrivals in Sri Lanka. The study has three key recommendations to keep transaction costs to a minimum; they are to retain the transaction channels of wildlife tourism with few intermediaries, to expand online transaction platforms, and to collaborate with international and private organizations for the effective maintenance of the wildlife tourism sector.

Keywords: Foreign tourist arrivals, Transaction Cost Theory, USD exchange rates, wildlife tourism

1.0 Introduction

The Hurulu Eco Park is a crucial location for wildlife tourism in Sri Lanka because of the elephants' seasonal migration patterns. It was a significant source of both foreign investment and income for the nation. The value of one nation's currency in relation to the currencies of other nations is known as the exchange rate, according to the Central Bank of Sri Lanka. The

United States Dollar (USD) is the formal unit of exchange in the United States of America, and it is recognized as a standard currency because it is the most broadly used currency in international trade (Chen, 2022). Transaction cost theory explains how the ideal industrial or organizational structure is attained through increased economic efficiency (Williamson, 1979).

The demand for wildlife tourism is influenced by a destination's economic, social, environmental, political, and health factors and is particularly vulnerable to crises (Duminduhewa et al,. 2020). The foreign tourist arrivals gradually recovered after two years of pandemic and 73.5% decrease in arrival rates in 2020 (SLTDA, 2020) However, the recent economic crisis led a rapid and ongoing changes in Sri Lanka's wildlife tourism industry operations and transactions. Wildlife tourism in Hurulu Eco Park has decreased by 52.14% in 2022 (Habarana Range Forest Office , 2022) because of the decline in foreign visitors brought on by USD exchange rate fluctuations and the economic crisis. Stakeholders who depend on wildlife tourism, employment opportunities, and other community-based benefits are consequently declining daily with no signs of recovery. Therefor this research aims to examine the changes in Transaction Costs in Wildlife tourism with the increment of USD exchange rate in Sri Lanka and to make appropriate suggestions to manage the transaction cost-effectively.

2.0 Literature Review

2.1. Tourism Demand and Travel Behavior
The variables in international tourism can be divided into qualitative and quantitative elements (Peng, Song, & Witt, 2012). Tourist traffic has impacted by qualitative factors like sociopolitical unrest, cultural difficulties, and safety worries (Patsouatis, Frangouli, & Anastasopoulos, 2005). Although it can be challenging to measure the impact of such qualitative traits, one way to do so is to look at how tourists enter a destination(Mufeeth et al., 2021). In addition, quantitative factors that affect the demand for international tourists include disposable income, transportation costs, cost of living, and currency fluctuations (Dwyer, Forsyth, & Dwyer, 2010).

2.2. Exchange rate impact on Tourism
The exchange rate is a widely used metric for gauging international tourism flows in recent years (Patsouatis, Frangouli, & Anastasopoulos, 2005) (Song & Li, 2008). Exchange rate fluctuations force prospective travelers to change their plans or cut their vacations short, costing the economy money. This might necessitate changes to travelers' travel arrangements when going to a particular country (Webber, 2001). The World Travel and Tourism Council (2016) assert that effective mechanisms must be developed in order to monitor, track, and predict these exchange rate fluctuations. The introduction of a more flexible exchange rate system and the devaluation of the currency in the case of emerging Asian economies are drawing more foreign tourists (Chang & Mcaleer, 2009).

2.3. Transaction Cost on Tourism:

Transportation costs, currency rates, and the relative price level in origin and destination effects on cross-border tourist influx (Crouch, 1994) (Song & Li, 2008). Consumer Price Index (CPI) correctly represents the cost of travel and tourism (Martin & Witt, 1988).

3.0 Methodology

The research was carried out at Hurulu Eco Park, which is recognized as an elephant paradise and is located in Hurulu Conservation Forest - Habarana in Sri Lanka's North Central region covering an area of 25,217 hectares (Coordination: 8.081897, 80.7826253). Five major stakeholder types were directly involved in the transactions of Hurulu Eco Park's wildlife tourist business. They were government agencies, foreign and domestic tourists, accommodation suppliers, tour guides, and safari drivers. Accommodation suppliers can be divided into two categories: hotels and homestays. Hotels are large-scale lodging providers, whereas homestays are small-scale service providers. The research population consisted of all the people in these stakeholder groups.

A sample of 100 participants was chosen using the Snowball Sampling Technique to represent all of the specified stakeholder categories (Foreign Tourists – 30, Tour Guides – 22, Safari Drivers – 28, Hotel / Homestay Owners – 20). Only foreign tourists, who have visited Sri Lanka earlier, were considered for the data collection, as they are the category that directly deals with USD currencies. Primary and secondary data and information were employed to achieve the study goals and evaluated using Microsoft Excel and SPSS applications (One-way ANOVA, Descriptive Analysis, Mean Comparison and Graphs).

4. 0 Results and Discussion

4.1. Fluctuations in Foreign Tourists Arrivals from 2018 to 2022

Foreign tourist arrivals to Hurulu Eco Park su*rged when the USD exchange rate climbed in the 2018 - 2019 and 2021 - 2022 years. It reached up to 79,585 foreign tourist arrivals in 2019 remarking the highest among those years. The lowest tourist arrivals were in 2021 by an amount of 7,230 tourists. In these considering years, the domestic value of USD in Sri Lanka was increasing gradually. The decline between 2019 and 2021 has no direct association with USD exchange rates because the primary reasons were the Easter attack and the COVID-19 pandemic. After the post-effects of the pandemic, the tourist's arrivals were increasing at the end of 2021 and early 2022 even though the USD exchange rate is increasing dramatically.

4.2. Fluctuations in Foreign Tourists Arrivals in 2022

In the year 2022, large increases in USD exchange rates were observed. The peak was 15,967 foreign tourists in March when the average USD exchange rate was 294.00 rupees. After the peak of tourist arrival, the numbers are dropping massively up to July reaching a 1,172 tourist arrival in that month. The cause for this shift was a lack of essentials for survival in Sri Lanka, as well as in the wildlife tourism industry.

Figure 4.1: Annual foreign tourist arrival changes and USD exchange rate fluctuations
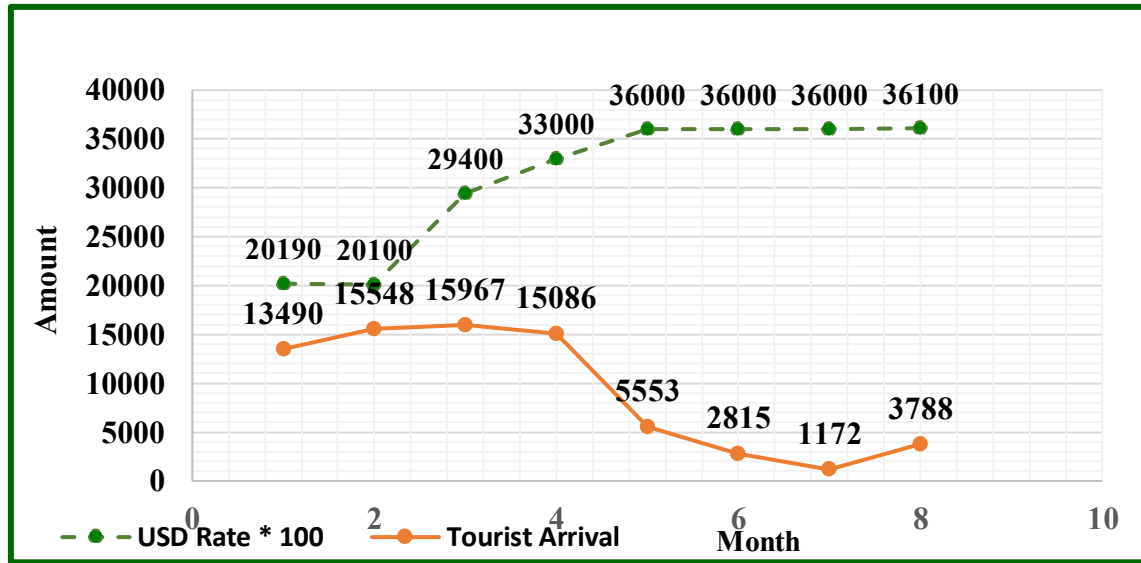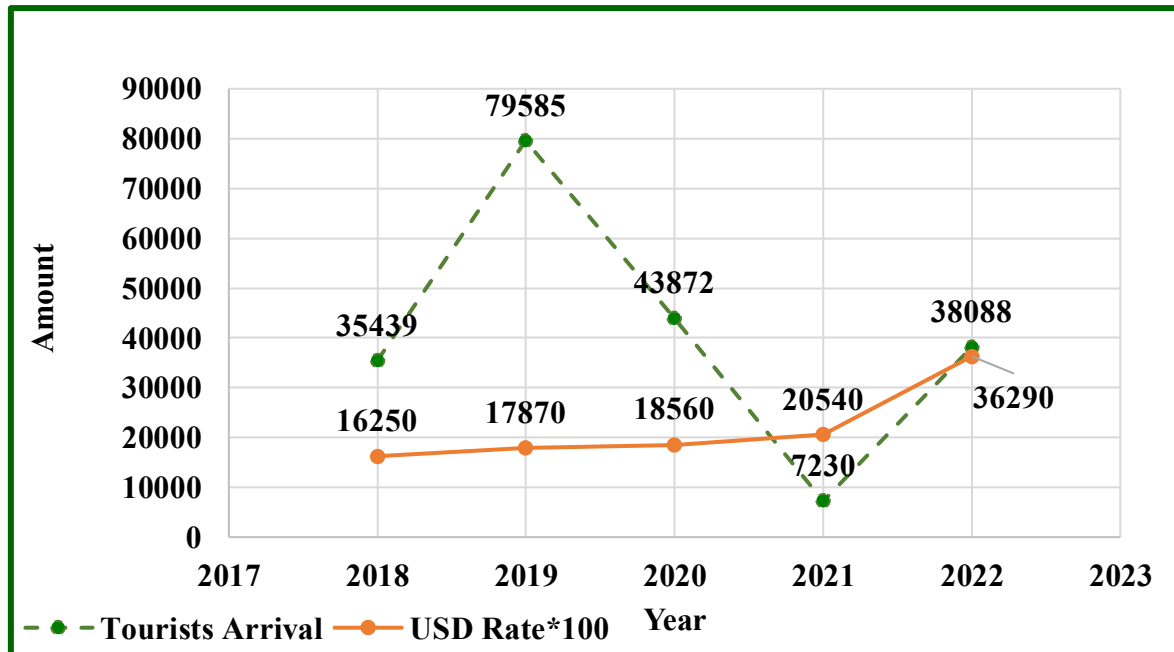

Figure 4.2: Foreign tourist arrival change with USD Exchange Rates

Tourist arrivals were decreasing with the stakeholder disengagement in wildlife tourism due to the sudden increament in CPI and the country's economic instability. This situation was further exacerbated by several tourist cautions and bad worldwide media coverage of Sri Lanka. In July when the USD exchange rate was relatively stable at 360.00 rupees per USD, the rate of foreign visitor arrivals increased once more. This is with the regrowth of the economic condition in Sri Lanka. The Pearson Correlation between the USD exchange rate and Tourists Arrivals is (-.741) and its significant values are 0.035 where the correlation is significant at the level of 0.05 (2-tailed). Therefore, the USD exchange rate and Tourists Arrivals have a significant relationship.

4.3. Changes in transaction cost of foreign tourists in Hurulu Eco Park

A foreign tourist visiting Hurulu Eco Park for wildlife tourism has a variety of transaction costs (Table 4.1). When considering the cost per day at Hurulu Park, the highest proportion (52.66 percent) of the total cost per day has been occupied for accommodation.

Table 4.1: Average transaction costs of foreign tourist per day in Hurulu Eco Park

Transaction Cost per Day	Planned Budget	Cost of Accommodatio	Cost of Food	Cost of Transport	Cost of Entertainment	Cost of Tips	Cost of Beverages	Other Cost	Total Cost
Average (USD)	1.56	5.78	.75	.99	.75	.65	.42	.61	7.95
Percentage out of total cost per day (%)	-	2.66	4.35	1.76	.93	.43	.50	.37	00

Before 2018, the average daily cost was 59.60 USD, while the current daily cost is 67.95 USD. The transaction cost of foreign tourists has increased by 14% with the increment of USD exchange rates. However, in terms of monetary worth and international tourists' impression, the cost increase was negotiable as their planned budget is higher than the actual cost

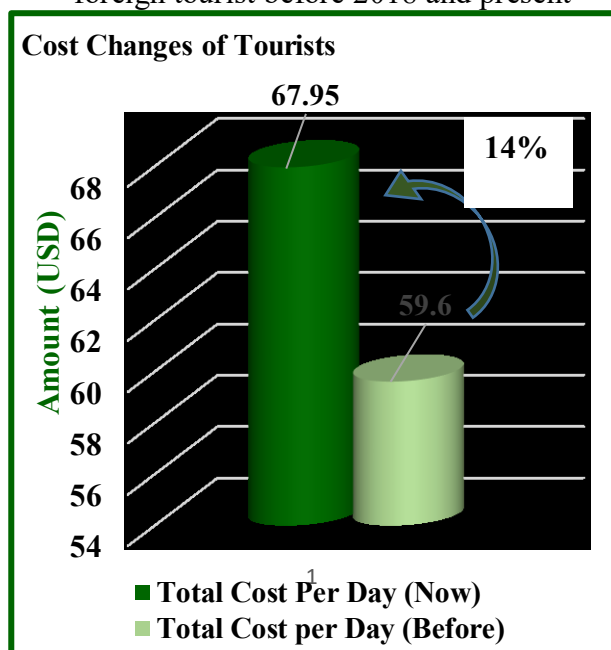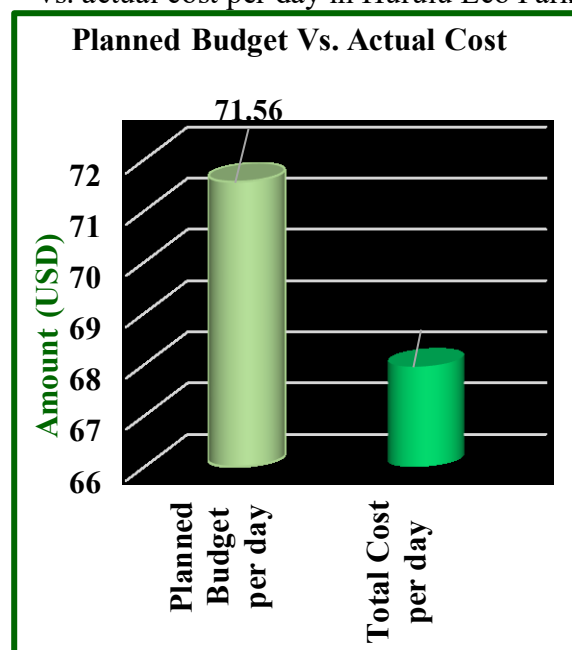Chart 4.1 : Changes in Transaction Cost foreign tourist before 2018 and present

Chart 4.2: Foreign tourist planned budget vs. actual cost per day in Hurulu Eco Park

4.4. Changes in transaction costs of safari drivers in Hurulu Eco Park
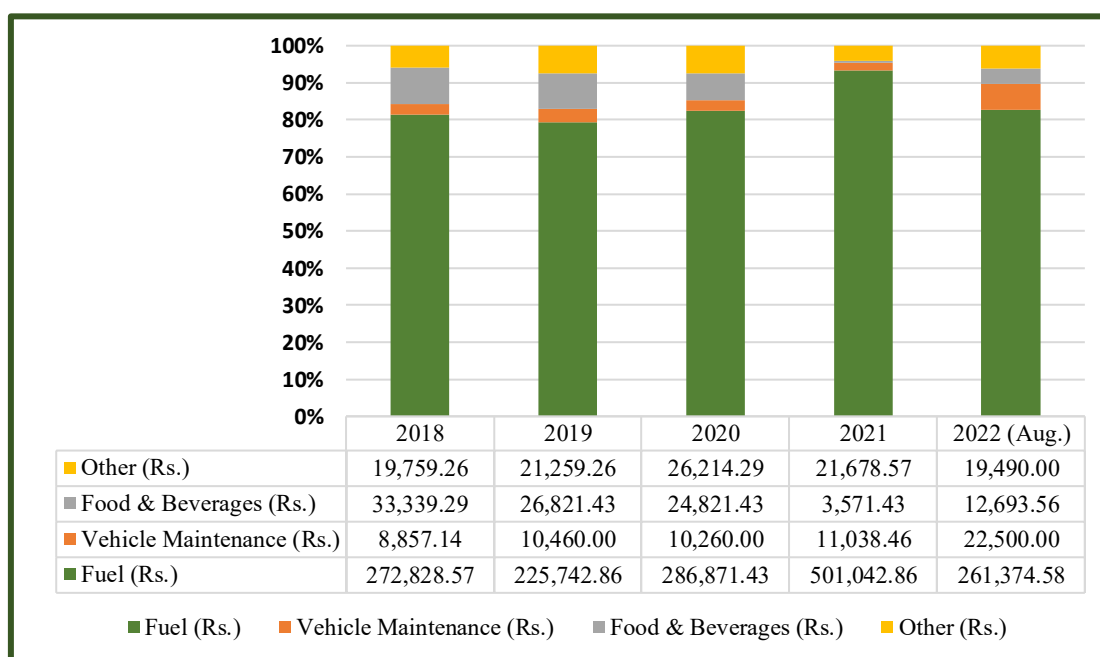
Vehicle fuel was the most expensive category for a safari driver in Hurulu Eco Park. Even though the number of excursions reduced, the highest average cost of fuel could be seen in the year 2021 In 2022, the transaction cost of fuel was Rs.261,374.58 (up to august). This demonstrates that the cost of fuel is skyrocketing due to high USD exchange rates, while the

number of excursions has declined. The transaction cost of safari drivers is rising year after year whiles the number of tours decreasing.

Table 4.2: Average Transaction Cost per Tour of Safari Drivers from 2018 to 2022 in Hurulu Eco Park

Year	2018	2019	2020	2021	2022 (Aug.)
Transaction Cost per Tour (Rs.)	1105.49	1246.86	1554.31	1919.04	4214.11
Percentage of Cost Increment (2018 – 2022)					281.2%

Chart 4.3 Safari Driver's Cost

	2018	2019	2020	2021	2022 (Aug.)
■ Other (Rs.)	19,759.26	21,259.26	26,214.29	21,678.57	19,490.00
■ Food & Beverages (Rs.)	33,339.29	26,821.43	24,821.43	3,571.43	12,693.56
■ Vehicle Maintenance (Rs.)	8,857.14	10,460.00	10,260.00	11,038.46	22,500.00
■ Fuel (Rs.)	272,828.57	225,742.86	286,871.43	501,042.86	261,374.58

■ Fuel (Rs.)   ■ Vehicle Maintenance (Rs.)   ■ Food & Beverages (Rs.)   ■ Other (Rs.)
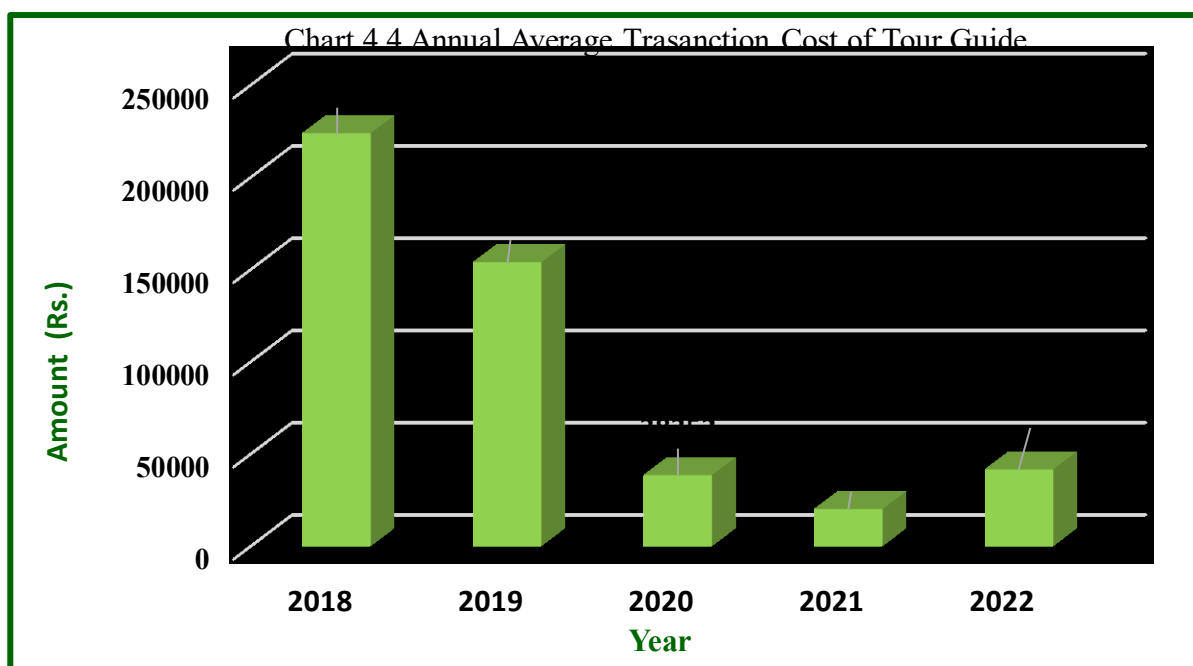
4.5. Changes in transaction costs of tour guide in Hurulu Eco Park

The annual expenditures of a tour guide have fallen annually. The highest average annual cost was Rs. 223,689.60 in 2018. Later, transaction costs decreased as the number of tourists arriving decreased from 2019 to 2021. In 2022, it has again started to grow with the increasing tourist arrivals. With each escalation in the USD exchange rate, their revenue and gross profit have climbed because the local monetary value of gratuities from travelers has climbed dramatically. When comparing the revenue and cost of a tour guide from wildlife tourism, the increment in costs can be neglected as the revenue has grown massively with the increasing USD exchange rates.

Table 4.3: Average Transaction Cost per Day of Guides from 2018 to 2022 in Hurulu Eco Park

Year	2018	2019	2020	2021	2022 (Aug.)
Transaction Cost per Day (Rs.)	1669.33	784.35	684.85	1425.00	591.86
Percentage of Cost Increment (2018 – 2022)					64.5%

Chart 4.4 Annual Average Trasanction Cost of Tour Guide

4.6. Changes in transaction costs of hotel/homestays in Hurulu Eco Park:

A hotel/homestay near Hurulu Eco Park has several types of transaction cost categories namely Cost of Sanitary Facilities, Cost of Food and Beverage Supply, Cost of Utility Bills, and Cost of Maintenance. The highest costing category is Hotel Maintenance and it has increased annually.

Table 4.4: Average Transaction Cost of Hotel/Homestay for wildlife tourism from 2018 - 2022

Transaction Cost (USD)	2018	2019	2020	2021	2022 (Aug.)
Sanitary Facilities	583.50	652.50	655.50	593.50	278.80
Food and Beverage Supply	423.50	447.50	456.00	551.00	187.96
Utility Bills	147.25	166.25	158.75	184.25	67.5.
Maintenance	1,401.00	1,443.00	556.25	1,534.00	2,234.10
Average Annual	2,556.25	2,709.25	1,826.50	2,862.75	2,768.36
Percentage of Cost Increment (2018 – 2022)					8.3%

4.7. Stakeholder Average Annual Transaction Cost Fluctuations according to USD Exchange Rates:

The average annual transaction cost of hotels/Homestays has increased according to USD exchange rate increments. The transaction cost of hotel/homestay has decreased for a particular range of USD exchange rates (Rs. 180.00 – 200.00), because when the tourist arrivals was high, hotels/homestays had the potential to increase their revenue while decreasing costs. However, after the value of 200.00 rupees per USD, the transaction costs of hotel/homestays are massively increasing. The main reason is the high prices of local goods and services, shortages of goods, and poor arrival of foreign tourists in that period.

Figure 4.3: Transaction Cost Fluctuations of Stakeholders in Hurulu Eco Park with USD exchange rates
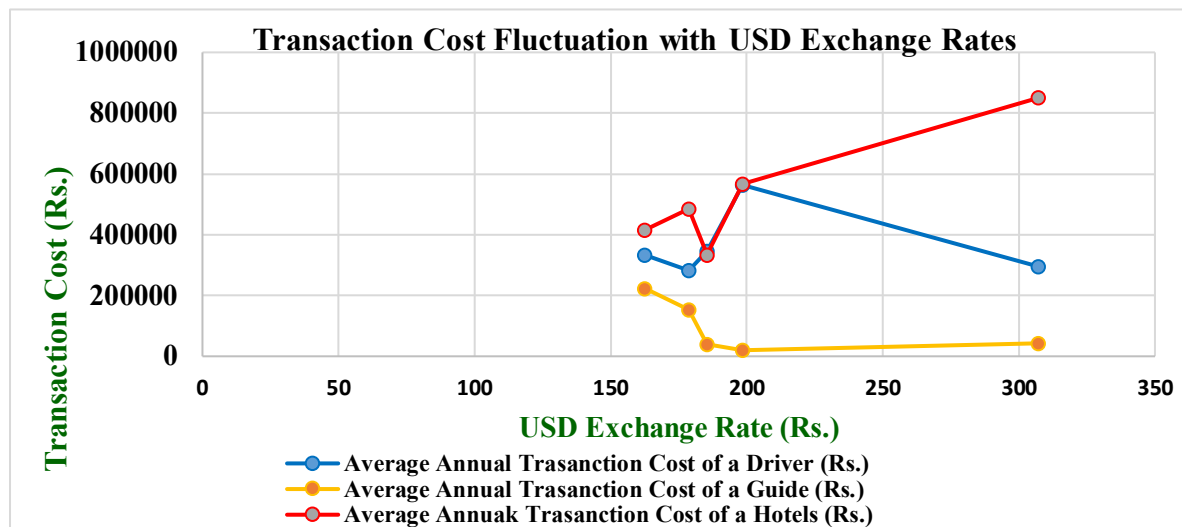
When considering safari drivers' transaction cost fluctuations with USD exchange rates, it also increased up to 200.00 rupees value per USD. After that, the average transaction cost line shows a decreasing pattern. This decreasing trend has been caused because the number of tours for safari drivers' has decreased massively. Based on discussions with safari drivers', those who hired around 25 to 35 tours per month had decreased to 3 to 10 tours per month after the USD exchange rate increased vastly.

The transaction cost of tour guides has decreased when the USD exchange rate is increasing between 150.00 – 200.00 rupees. As mentioned earlier, this period was a pleasant tourist arriving period. Therefore, even though the USD exchange rate is increasing, tour guides' transaction cost is decreasing. After that, their transaction costs are increasing slowly with USD exchange rate increments. When compared with the other two stakeholders amount of costs, tour guides' cost increments are very low.

The research results illustrate the factors, which should be monitored and evaluated to minimize the transaction costs in wildlife tourism. All the other infrastructure facilities such as transportation, fuel supply, essential goods, health, etc. should be maintained in flawless condition. Highest costing factors in different stakeholders should be negotiated accordingly.

5.0 Conclusion and Recommendations

With the growth in the monetary value of the US dollar in Sri Lanka for a particular level, foreign tourist arrivals for wildlife tourism increased. This has to lead wildlife tourism as a profitable and revenue-generating sector. Safari Drivers' transaction costs have risen in tandem with the USD rate hike, but their transaction volume has declined. Therefore, their revenue has decreased. Foreign tourist transaction cost for wildlife tourism has increased compared to the previous visit. However, the present status of the USD exchange rate increment is favorable for them. Accommodation suppliers' transaction cost has increased massively with increasing USD exchange rates causing an unfavorable situation for them. Tour guides' transaction cost has increased by a negotiable amount.

Application of transaction cost theory can be elaborated as follows to minimize the transaction costs and grow the wildlife tourism sector profitably with increasing USD exchange rates. Collaborate wildlife tourism sector with International and Private Agencies to supply essentials and infrastructure facilities. In terms of Foreigners, establish fixed prices

and formulas for them in the Wildlife Tourism sector for fair transactions and prevent corruption and introducing more online transaction platforms for all the products and services in the wildlife tourism sector and maintaining a direct transaction procedure with the service provider and buyer is another suggestion while reducing the number of intermediary channels. Finally, the USD exchange rate increment is a stimulator to boost foreign tourist arrivals and develop the wildlife tourism sector as a profitable economic industry with effective application of transaction cost theory.

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