

A vibrant tropical waterfall scene with lush green ferns and red flowers. The waterfall flows over several rocks, creating white foam. The background is filled with dense tropical vegetation, including large green leaves and bright red flowers. The overall scene is bright and colorful, with a blue decorative border at the top.

# **ESTIMATING A VISITATION DEMAND FUNCTION FOR VICTORIA FALLS**

# Introduction

- The Rain Forest which contains the Victoria Falls (one of the world's seven natural wonders) is a unique national park in Zimbabwe
- It also compares well with premium national parks in Kenya and Tanzania in terms of raising international interest but park fees are considerably lower at the Rain Forest
- In Tanzania elderly foreign visitors pay an entrance fee of not less than US\$20 for the least attractive parks such as Katavi, Mikumi, Kitulo, Mkomazi, Udzungwa and Rubondo, among others; of which international interest is not as much as that with the Rain Forest.

# Introduction continued .....

- The major attraction in the Rain Forest is the Victoria Falls which extends to Livingstone in Zambia
- The falls are also viewed from the Zambian side
- Much of the tourist activities such as elephant riding, game viewing, canoeing, including camping facilities, among others, available in the Zimbabwean side are also present in the Zambian side
- There is high probability that the Rain Forest and Livingstone National Parks are close substitutes.
- It is against this background that pricing policies should not be independent of the nature of the relationship between the two parks.

# Relating Zim Park Fees to SADC and East African Countries

- Entrance fees for adult foreign visitors at national parks in Southern and Eastern African for 2011

Country	National Park System	Entrance fee (International visitor)	Entrance fee (Regional visitor; SADC or East Africa)
<b>Zimbabwe</b>	Rain Forest	US\$30	US\$20
	Mana Pools	US\$30	US\$20
	Other Category I	US\$20	US\$15
	Gonarezhou (Category II)	US\$15	US\$12
<b>South Africa</b>	Kruger	ZAR 180 (about US\$25)	ZAR90 (about US\$12.50)
	Kgalagadi Transfrontier	ZAR 180 (about US\$25)	ZAR90 (about US\$12.50)
<b>Namibia</b>	Etosha, Fish River Canyon, Naukluft	N\$80	N\$60
	Others	N\$40	N\$30
<b>Botswana</b>	All	P120	P120
<b>Zambia (2007)</b>	Category A	US\$25	US\$20
	Category B	US\$10-US\$15	US\$10-US\$15
	Categories C and D	US\$5	US\$5
<b>Swaziland (2009)</b>	Premium	E150	E150
<b>Kenya</b>	Premium Parks: Nakuru and Ambosell	US\$60-US\$75	500-1000Kshs
	Wilderness Parks: Tsawo East, Tsawo West, Meru	US\$50-US\$60	300-1000Kshs
	Mt. Kenya	US\$55	400-750Kshs
	Least valued Parks	US\$10	US\$2 or 150Kshs
<b>Tanzania</b>	Serengeti	US\$50	
	Kilimanjaro	US\$60	
	Gombe	US\$100	
	Mahale	US\$80	
	Least valued Parks	US\$20	

Note: All prices are for 2011 except for Zambia (2007) and Swaziland (2009). Fees are per day.

# **Relating Zim Park Fees to SADC and East African Countries continued.....**

- The 2011 tariffs for Zimbabwean national parks are comparably the same with those of the fellow member countries in the SADC region
- However, the East African countries such as Tanzania and Kenya have considerably higher park entrance fees than those in the SADC region
- Camping fees are also higher in East African countries. In Tanzania camping fee per person in public campsites is US\$30 except for Kilimanjaro National Park which has a camping fee per person of US\$50

# Relating Zim Park Fees to SADC and East African Countries continued.....

- Premium campsites reach a high of US\$100 in Tanzania
- Foreign visitors to Ambosell and Nakuru National Parks in Kenya pay a camping fee of between US\$25 to US\$40 while the rest of all the other parks charge a camping fee of between US\$15 to US\$30
- In most SADC countries foreign visitors pay camping fees averaging between US\$10 and US\$25

# **Problem Statement and Hypothesis**

- PWMA is under budgetary pressure to raise its own conservation funds
- This can be eased through increasing park fees for the premium parks such as the Rain Forest which is as attractive as some of the premium parks in East Africa which are charging more than twice its entrance and camping fees
- But there is lack of knowledge on whether fee increases at the Rain Forest relative to Livingstone park fees will significantly drive away visitors to Livingstone
- The study intends to test the hypothesis that changes in the relative prices of the two parks significantly influence visitation to either park

# Research Questions

- Do the Rain Forest and Livingstone National Parks exhibit strong substitutability?
- Can park fees for the Rain Forest be increased without taking into consideration Livingstone park fees?
- What policy implications on the Rain Forest park pricing can be derived from the research?
- Does collusion in fee setting benefit both parties?

# Objectives

- To determine whether there exist a significant cross price elasticity of demand for national park products between the Rain Forest and Livingstone national parks
- To derive a policy recommendation on whether the PWMA can raise park fees at the Rain Forest independent of fees at Livingstone national park
- To determine whether collusion in price setting is beneficial to both parties

# Methodology

- To apply an econometric methodology
- A time series model to be applied
- To effectively collect data from the two parks, the research needs to be done as a joint research work by researchers from Zimbabwe and Zambia
- Data provided by National Park Authorities but at a cost

# Data Requirements

- Data on annual foreign visitors to the Rain Forest
- Annual entrance, lodging, camping, and miscellaneous fees, among others required from both parks
- Annual average expenditure by tourists in both parks
- Annual data on other factors affecting visitation such as travel cost, wild life variety and quantity, tourist activities variety, annual tourist arrivals, etc
- Total tourist arrivals will capture variables such as political stability, economic stability, crime rates

# Expected Results

- Increasing fees in one of the two parks significantly increases visitation in the other park



**THANK YOU!!!!!!**