

Financial feasibility analysis of Implementing Improved Laid out Plans for Kodimatha Water Park in South India

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ABSTRACT

This examines the financial feasibility analysis for Kodimatha Water Park situated in South India. Even though Kodimatha Water Park is strategically placed between the nations prominent tourism destinations it has not witnessed the desired growth and hence a laid out plan for more investments to this park has been made by the District Tourism Promotion Council under the Green Carpet initiative of the Kerala Government. This study analyses the Economic Feasibility of implementing this plan along with its elements of investment. The cost benefit analysis of this is done using break even charts. Results shows that if this improved laid out plan is implemented in Kodimatha, the revenue collected from it will be much higher than that before. In this paper it is also proved that the investments made in each individual field will be collected back in a short period of time. Finally the average time required for return of investment is calculated to prove it to be financially feasible.

Key Words: Fixed cost, Variable cost, Return in days, Selling price per unit, Volume of output.

1. INTRODUCTION

India has always been one of the best tourist destinations and Kerala also known as the 'Gods Own Country' is one of the top ten tourists destinations [1]. Even though Kerala has the potential to be the best tourist destination in India, it is mostly inhibited by the lack of proper utilization and implementation. To bring a remedy to this, the government has launched the Green Carpet Initiative to seek technological institutions to study and develop proper improvisation and implementation plans. These plans are supposed to bring better financial profitability as well as improve the financial state of the tourism industry [2]. Ozerdem et al. investigated various cases to investigate the economic feasibility of a power project using internal rate of return (IRR) and Payback Period (PBP) criteria [4]. In this paper, the economic criteria of IRR and PBP are used to analyze the economic performance of different scenarios and thereby determine the optimal pathway.

2. STUDY AREA

Kodimatha Water Park situated at the heart of Kottayam town at 9°34'41.4" north latitude and 76°31'09.6" east longitude and is a place of enthrusting scenic beauty and numerous activities including boating and an adventure park. The DTPC (District Tourism Promotion Council) has also created a walk way here to promote local tourism. This adventure water park was opened to the public on 20th August 2016. The main attractions of this park include zorbing, pedal boating, Canadian canoe, banana rides and so on. The Kodoor River flows between the Kottayam and Alapuzha districts and has a long history of old connected trading routes between the coastal district of Alapuzha connecting the eastern villages of Kottayam. The River Originates from the beautiful hills in between Kottayam and Pathanamthitta districts further flowing into the Meenachill River. Kottayam has an average temperature of 28 Degree Celsius the annual Precipitation is 2978.9mm. Kottayam is just 13 Km away from the prominent Kumarakom tourist destination, it also neighbors other destinations like **Elaveezhaponchira (60 km), Wagamon (64 Km), Iillikalkallu and so on** [5]. It is important to mention that the Foreign Tourist arrival to Kerala during the year 2016 was **10,38,419** .It showed an increase of 6.23% over the previous year. Domestic Tourist arrival to Kerala during the year 2016 was 13172535. It shows an increase of 5.67% over the previous year. Foreign exchange earnings for the year 2016 were Rs. 7749.51 Crores. This recorded an increase of 11.51 % over the previous year. Apart from the existing technologies the proposed

improvements to be brought into this park include a Speed boat, Floating Dhaba, Wall Climbing Equipment, Coracle Rides, Water Archery, Commando Net, Zip Line, and Biogas Plant.

3. METHODOLOGY

3.1. Financial feasibility analysis

The Financial feasibility analysis of various proposed improvements that requires a high initial investment plays a very important role in the assessment of the viability of a project [6-8]. The financial metrics such as, Break Even Point (BEP) and payback period (PBP), are used in this study.

Break Even Point is the point where total cost and total revenue are equal and Payback period is the time required to recover the total investments by the profit gained. Both BEP and PBP are obtained using the Break Even Analysis Chart. Here payback will be completed once it crosses the breakeven point [9]. The below shows the Break Even Analysis of all the investments that are to be made.

3.1.1 Cost benefit analysis of Proposed Work Speed Boat.

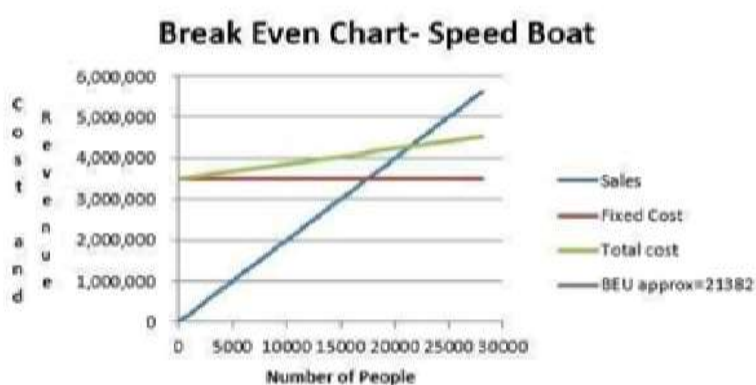


Figure1. BE Chart of speed boat.

Parameters	Values
Fixed cost	35,00,000
Variable cost	36.309
Volume of output (Q)	21382
Selling price per unit (S*)	200
Return in days	424

Table1.Calculation of BEP for speed boat.

2. Floating Dhaba

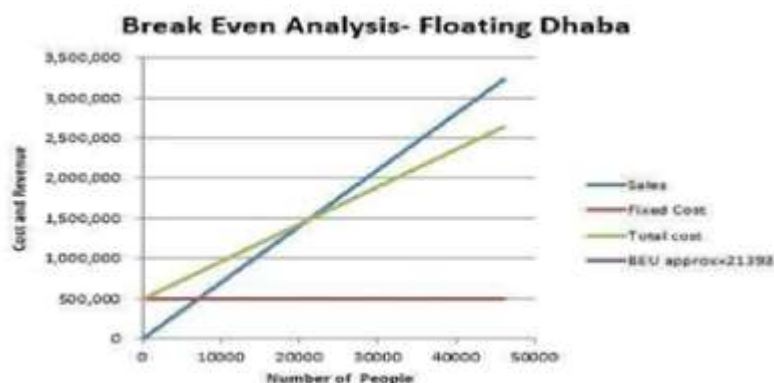


Figure 2. BE Chart of floating dhaba

Parameters	Values
Fixed cost	4,99,100
Variable cost	46.67
Volume of output (Q)	21392
Selling price per unit (S*)	70
Return in days	839

Table 2. Calculation of BEP for floating dhaba.

3. Wall Climbing



Figure 3. BE Chart of wall climbing activity.

4. Water Archery

Parameters	Values
Fixed cost	35,93,400
Variable cost	0.83
Volume of output (Q)	18748
Selling price per unit (S*)	60
Return in days	1041

Table 3. Calculation of BEP wall climbing activity.

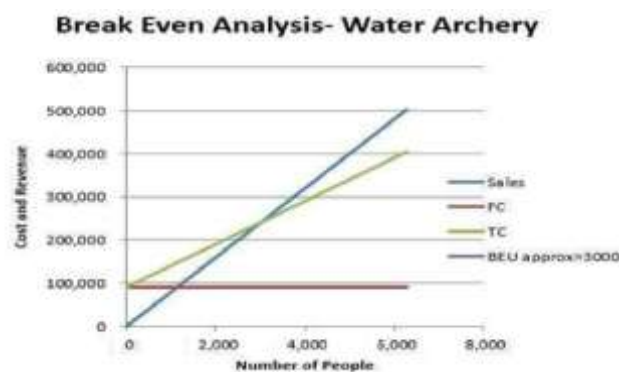


Figure 4. BE Chart of water archery.

Parameters	Values
Fixed cost	90,000
Variable cost	50
Volume of output (Q)	3,000
Selling price per unit (S*)	80
Return in days	333

Table 4. Calculation of BEP wall climbing activity.

5. Zip Line

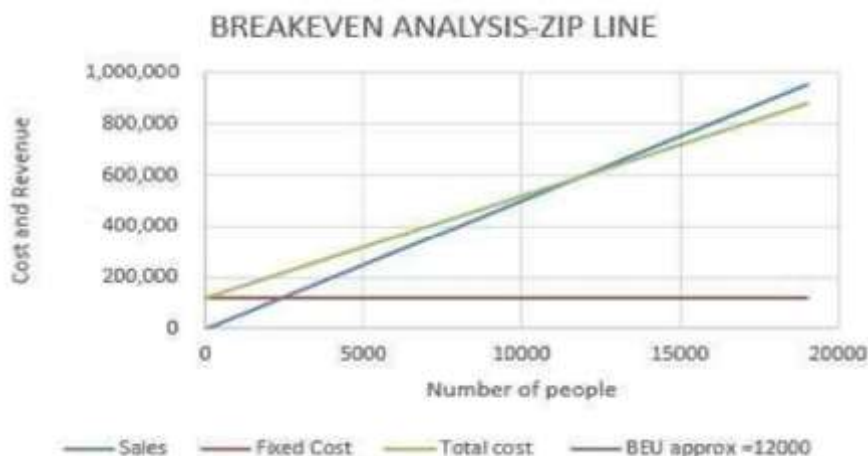


Figure 5. BE Chart of zip line.

Table 5. Calculation of BEP zip line.

Parameters	Values
Fixed cost	1,20,000
Variable cost	40
Volume of output (Q)	12,000
Selling price per unit (S*)	50
Return in days	1333

6. Biogas plant

Parameters	Values
Fixed cost	50,000

Table 6. Calculation of BEP biogas plant.

7. Commando Net

Parameters	Values
Fixed cost	7,000

Table 7.Calculation of BEP wall climbing activity.

8. Coracle Ride

Parameters	Values
Fixed cost	36,000

Table 8.Calculation of BEP wall climbing activity.

Overall fixed cost for the execution of this project is around Rs.78, 88,500/- only. And it can be retrieved within 2 ^{1/2} years.

Selling price per unit(S*): The cost is derived from the variable costs and fixed costs incurred by a production process, divided by the number of units produced.

Q = Break Even Points in units: The point of intersection of total cost line and the sales revenue is the Break Even Point.

4. CONCLUDING REMARKS

The study brought into the light the following conclusions. The firm should focus on getting of profits in coming year by taking care internal as well as external factors.

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