

Change in Physical and Cultural Landscape for the Transformation of Ownership of Burdwan Raj Dynasty through SWOT Analysis

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ABSTRACT

Spatial pattern of human-environment interaction is more fashionably represented as a cultural landscape and its change over time with the complex interaction of traditional culture and modernity at present. That can well be understood taking a chronological enquiry of the transformation of ownership of Royal sites from the Royal family to the University Authority that has taken place since 1960. This study tries to focus on the historical importance and the nature of the transformation of the royal sites into different cultural, ecological and cognitive space at present reflected through SWOT analysis of Burdwan Raj Royal sites based on its present condition. Thus the aim of this paper is to highlight the different factors responsible for the functioning of the Burdwan Raj Dynasty as a multifunctional space in the present cityscape of Burdwan.

KEYWORDS: Spatial pattern, Royal sites, Cultural landscape, Multifunctional Space, SWOT analysis

Date of Submission: 07-05-2019

Date of acceptance: 24-05-2019

I. INTRODUCTION

Spatial pattern of Human-Environment interaction is more fashionably represented in cultural landscape and cultural dynamics. (Giannecchini, 2007) has emphasized on historical analysis of human environment interaction and cultural change in physical landscape. (Greider, 1994) studied Human beings as meaningful objects in the analysis of cultural landscape in the notion of physical landscape. (Long, 2008); (Reents-Budet, 1994); (Katriel, 1994) related cultural perspective with royal sites some focussing on the aspect of Royal tourism on Heritage sites. The Physical and cultural perspective of 'Historical Sites' with the legacy of Royal Dynasty developed over a distinctive geographical area can be analyzed as an aspect of Cultural Geography. In the Indian context, Royal administration now has lost its functionability but cultural legacy still persists. Therefore 'Royal Sites' with the legacy of dynastic cultural heritage developed over the distinctive geographical area are the important aspects of Cultural Geography which are not widely investigated especially in the context of landscape analysis. In the present discussion Burdwan Raj Dynasty is the point of attraction which have been investigate to answer few questions like- What is the cultural relevance of the imprints of Burdwan Raj Dynasty at present? What is the contemporary importance of these royal sites? How far the sites are maintaining the parity in the present ecological and economic landscape? What sort of change has occurred and what are the prospects of these sites?

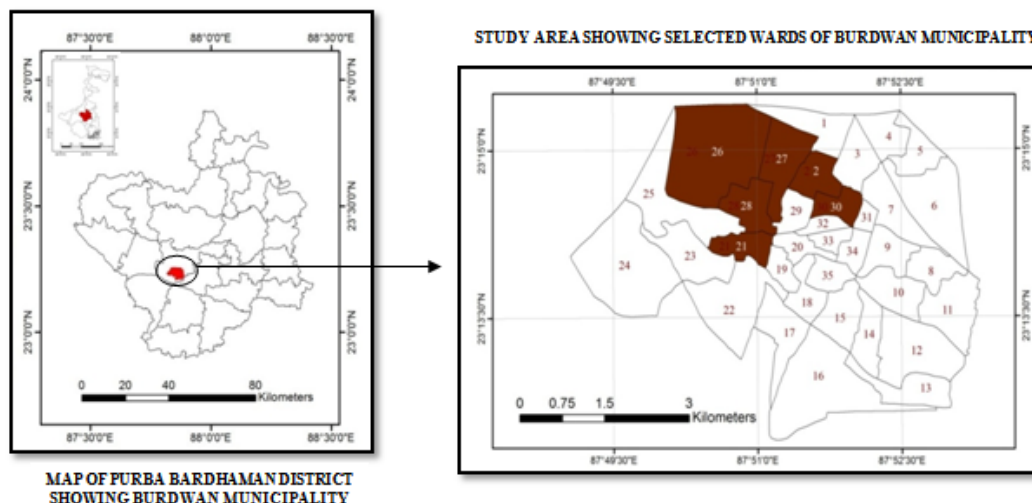
The whole enquiry has two major dimensions; first is the Historical perspective which takes into consideration, not only through historical events but also the ecological, social, cultural and emotional settings attached with Royal sites while the second is the advantages and threats of physical and cultural aspects of the Royal Sites due to authoritative functioning of the present stake holder(s). The history of Burdwan Raj states that it has both Medieval and colonial legacy. Burdwan Raj flourished from 1657 to 1955, first under the Mughal then under the British within the province of Bengal while after independence its authoritative functioning has changed from Raj Dynasty to Burdwan University Authority mainly with a small part still under the control of off-springs of royal associates with private ownership.

II. STUDY AREA

Although Burdwan is a medium sized town, it is famous for its historical background. This area is dominated by a large number of historical sites, mosques, tombs and temples. The historical sites of Burdwan Raj dynasty

include the Rajbati, Hawa Mahal and Dilkhusa Palace (Golapbagh Campus), Curzon Gate, Krishnasayar Park, Ramna Bagan including Bijoy Bahar etc. Since ancient times the Royal sites are influencing not only the cultural perspective of the town with a historical flavour, it also as justify a different kind of social space at present through the establishment of educational institution, ecological sites with a different kind of social value. To churn out the physical and socio-cultural change through historical episodes in relation to spatial pattern, processes the following ward numbers of 2, 21,26,27,28 and 30 under Burdwan Municipality are selected for the study as the major concentration of Burdwan Raj historical sites are found within these wards.

Figure 1. Map of Study Area



III. HISTORICAL PERSPECTIVE

The Royal Dynasty had its earlier settling in Punjab and settled here as traders and ultimately gained its popularity as Zamindars to the title of Kings. It started ruling from **1657 to 1954** for nearly **350 years** in Bardhaman. The first person to establish its footprints in a village called Baikunthapur was **Sangam Rai** who was a **rich merchant** from Kotli region of Punjab and from his way back from pilgrimage at Puri resided here and gained the favour of the Mughals by supplying food and materials during the time of conflict between Pathan Sardar Sher Afghan and Qutubuddin Aibak. Afterwards with the passage of time they gained the title of Chowdhury in the year 1657 and later got renowned themselves as **Zamindars**.

Notable contributions were made **Ghanasham Roy** and **Krishnaram Roy** in the development of built up drainage system in Burdwan who established Shyam Sayer and Krishnasayar respectively.

Kiriti Chand Roy gained many zamindaries and established the royal status by gaining the title of Maharaja. The Nawab of Delhi presented the title of 'Raja' to **Chitra Sen** who was the successor of **Kiriti Chand Roy** and ruled from **1740-1744**. It was from that time that Burdwan Raj dynasty assumed the '**Maharajadhiraj**' title after been awarded by Shah Alam to **Tilak Chand**. Few other important kings of this dynasty included **Mahatab Chand** who led the establishment of charity hospital now named as Bijoy Chand Hospital, planted trees encircling Krishnasayar, Ranisayer and Kamal Sayer, and made the inauguration of Burdwan Rail Station(1854-55)etc.

Bijoychand Mahatab was also known for his widespread academic reforms established during his rule which included the technical college of Burdwan, Harisabha ladies college, Raj college hostel and so on. He was an admirer of literature and wrote many dramas, prose, and poetry. He established the Bijaynanda Bihar, Curzon Gate, Benson clock tower, reformed tomb of Sher Afghan and Qutubuddin etc.

However after the death of Bijoychand Mahatab, among his two sons Udaychand and Abhoy Chand, **Uday Chand (1941-55)** became the king and ended the generation of successors to Raj dynasty. Bardhaman was ruled by its last ruler Uday Chand Mahatab before the abolition of Zamindari till 1954. Uday Chand donated Bardhaman Raj Palace to the University authorities with an area of 323 acres and The Bardhaman University was established by means of the West Bengal Act XXIX of 1959 as a teaching and affiliating University on 15th June, 1960. At present though Burdwan University is the main stake holder of royal property (Fig.-1) but some portions of it is under other stake holders (Table-1).

Table 1. Present Stake Holders of Earlier Raj Dynasty

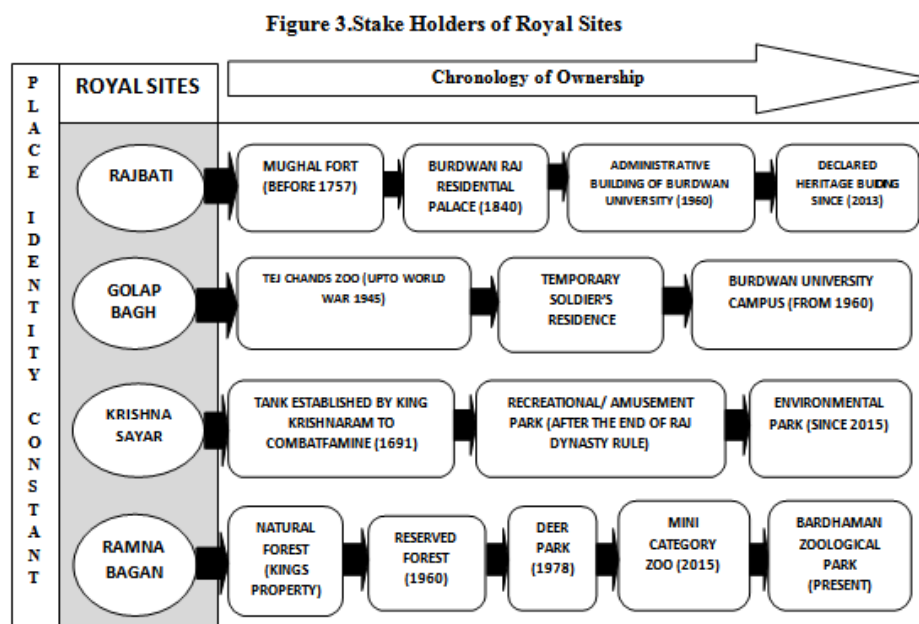
NAME OF THE SITE	LOCATION	EARLIER FORM	YEAR	PRESENT ALTERATION	AUTHORITY (After Independence)
1. Rajbati	23° 14' 20.23" N 87° 51' 05.69" E	Residential Palace of Maharaja	1840	Official Zone	The University of Burdwan
2. Ramna Bagan	23° 15' 09.86" N 87° 51' 01.11" E	Forest Area	1905 (Bijoyananda Bihar)	Ecological Zone	Directorate of Forests, Government of West Bengal
3. Krishnasayar Park	23° 14' 43.84" N 87° 50' 51.86" E	Historical Tank	1691	Environmental Park/ Recreational Zone	Krishna Sayar Unnayan Achhi Parishad, The University of Burdwan
4. University Campus	23° 15' 13.50" N 87° 50' 50.63" E	Tejchand's Zoo/ Royal Garden for Recreation	1809	Educational Zone	The University of Burdwan
5. Medical College and Hospital	23° 14' 57.03" N 87° 51' 13.18" E	Frazer Hospital	1907	Medical Institute	Government of West Bengal

Figure 2. Google Earth Image Showing Burdwan Raj Dynasty Sites and Its Alteration



IV. RATIONALE TO THE PROBLEM

Over the years the transformation of Burdwan Raj dynasty sites has taken place but yet it is holding an important position within the society. The Rajbati, Ramna Bagan, Krishnasayar Park, Golapbagh campus witnessed significant historical change over the years. Thus there is a constant change of space or mental acceptance of the same place into new identities but the place remains the same.



Under such a backdrop it is necessary to identify the:

- The historical importance of the place at present as well its contemporary importance which is actually different from ancient times and is facing constant change are studied.
- To identify the strength, weaknesses, opportunities and threats of these sites.

V. METHODOLOGY

The work is mainly based on primary data collected during field survey using questionnaire survey based on Likert types and in-depth interview the perception of respondents is gained mainly on the basis of purposive sampling though secondary sources are also very important. 100 respondents were purposively selected for the study from persons working within the royal sites and persons outside it. Out of which 50% were respondents who were attached to the royal sites and 50% were not attached to the royal sites of Burdwan Raj dynasty as a working place and were the local resident's. Participant observation and collection of data through Questionnaire survey was done to persons such as University teachers, students, scholars, local residents from the main study sites. The purpose was to identify the perception of respondents in regards to the functioning of the Burdwan Raj dynasty sites in the present context. Secondary data includes various books giving the historical dimensions of these sites, newspapers, documents etc.

In this study SWOT analysis have been carried out to find out the contemporary importance of the Burdwan Raj Royal sites not only from a historical point of view but also from a socio-cultural as well as ecological aspect; functioning together in a restricted zone. It also tries to highlight the obstacles faced in these sites as well as the opportunities available for its better functioning.

To critically analyze the ecological image as well as present functioning of the important sites of Burdwan Raj Dynasty SWOT analysis has been conducted to find a conclusion on the basis of overall observation and perception gained during field survey based on the advantages and disadvantages faced by the study site. For conducting the study four important sites that is Krishna Sayar, Golapbagh Campus, Rajbati and Ramna Bagan is considered.

A SWOT analysis is a method which evaluates the Strengths, Weaknesses, Opportunities, and Threats involved in any particular area of study and considers both the internal as well as external factors that are responsible for gaining a particular objective. Tu used SWOT analysis for the preservation of Changle Story which is a cultural heritage as well treasure for the entire world (Tu, 2017). Bin Jailanihas (2014) popularized his work on marketing strategies based on the external factors and internal strengths and weaknesses in relation to heritage tourism in Melaka World Heritage City using SWOT analysis. Gülersoy used SWOT analysis in analyzing the management of urban areas having rich historical and architectural values in Turkey (Gülersoy, 2009).

However in the year the 1960s and 1970s Albert Humphrey is credited for the idea of using a SWOT analysis. It has four important dimensions for the study which includes:

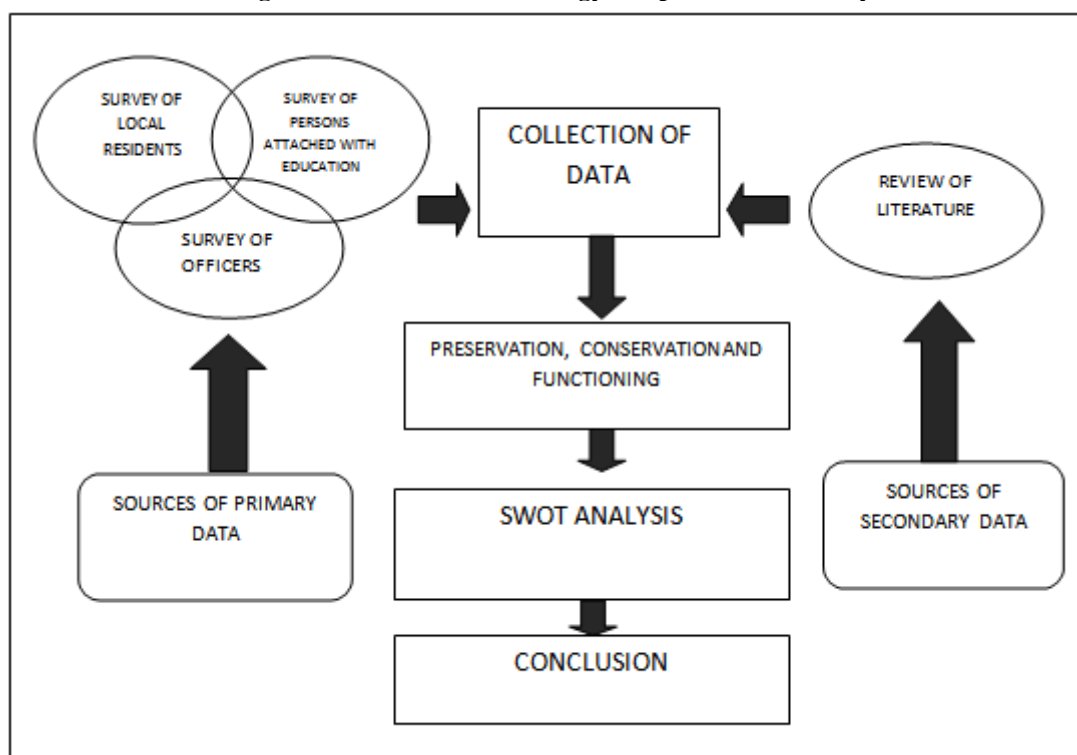
- **(S) Strengths:** It refers to the advantages within the area concerned for study.

- **(W) Weaknesses:** It includes drawbacks or difficulties.
- **(O) Opportunities:** It refers to the chances or possibilities.
- **(T) Threats:** Hardships or threats involved within the matter concerned.

Hausmann has tried to study the reasons for the development of cultural tourism in the German heritage sites from a trading view point (Hausmann, 2007). SOWT analysis has also been carried out in Tandooreh National Park (TNP) to know its tourism potentialities in a sustainable way (Sayyed, 2013). In the field of Tourism (A. J. Beeho, & Prentice, R. C., 1997), (A. J. Beeho, & Prentice, R. C., 1995), (Narayan, 2000), (Wickramasinghe, 2010), (Akça, 2006), (Reihanian, 2012) have conducted SWOT analysis considering it as an industry focussing on sustainable tourism, rural tourism and tourism on National Park.

Here the SWOT analysis is being conducted on the Royal Sites on Burdwan Raj Dynasty which has undergone transformation over the years and has established as an educational hub within an ecological boundary that is well known for research and scientific studies still retaining other values within it and acting as a multifunctional space living in symbiosis with each without effecting or harming each other in the process.

Figure 4. Research Methodology Adopted For the Study



SWOT analysis or (Strengths- Weaknesses-Opportunities-Threats) analysis considers both internal and external factors. The internal factors include strengths (S) or weaknesses (W) and the external factors includes opportunities (O) and threats (T). SWOT analysis tries to increase the opportunities and strengths by minimizing the external threats and alter the attenuations into creditable performances utilizing the advantage that come from the opportunities available and minimizing weaknesses (Karayev, 1987) and (Jaynutapong, 2010).

(Yüksel, 2007), (Sayyed, 2013), (Sevкли, 2012), (Arshadikhamsheh, 2013) have talked about internal and external factors are evaluated on the basis of (IFEM) Internal Factor Estimate Matrix and External Factor Estimate Matrix (EFEM). Internal strengths and weaknesses are considered as internal factors while opportunities and threats are considered as external ones. Each of these factors are calculated through grades ranging from one to five (1 = very low; 2 = low; 3 = median; 4 = high and 5 = very high). Again scores were given to the factors in terms of 1 to be having an indigent status and 5 to be having a strong one. PCA loading is used for demarcating the weights. The weighted score is then calculated by multiplying the scores with the weight of each factor. A value more than 2.5 indicates good strength in case of Internal Factor Estimate Matrix and good opportunities in case of External Factor Estimate Matrix.

VI. STUDY DESIGN

The important royal sites of Burdwan Raj dynasty at present has converted into an academic emblem. The Rajbati which was once the palace of Burdwan Maharaja is now the administrative building of Burdwan University. The Golapbagh campus along with Dar-ul-Bahar and Dilkhusa palace has converted into an educational hub but the historical architectures are not demolished rather it has been preserved and well maintained. The Krishnasayar Park has now converted itself into an environmental park as well as recreational zone and all of them are under the supervision of Burdwan University except Ramna Bagan which has converted itself into Burdwan zoological park is under the control of divisional forest officer, Burdwan Division. The study is based on 100 samples located within the study area that is attached to the royal sites either physically or emotionally. Nearly 50% of the sample size belonged to persons who are attached to the royal sites at present as a working place and the other 50% were the local residents who were not attached to the Royal sites as a working place. The study is based on purposive sampling and convenience sampling. Different target groups were surveyed based on the purpose of research and respondents who were most conveniently available and accidentally came in contact during the period of research were also surveyed. As qualitative researches require more time due to in-depth interviews and interactions with the respondents only 100 samples are taken into consideration. Moreover we find a similar type of responses from similar target groups in this type of study. A detailed overview of the collected samples is shown below.

Table 2. Sample Characteristics for Qualitative Study

Criterion	Target Group	Sample Size	Gender	Age	Identification
Attached to the Royal Sites	Officers	10	M(9), F(1)	35-57	R1-R10
	Scholars	10	M(2), F(8)	23-27	R11-R20
	University Teachers	10	M(8), F(2)	45-92	R21-R30
	Students	20	M(8), F(12)	20-25	R31-R50
Not attached to the Royal Sites (Local Residents)	House Wives	10	F(10)	25-62	R51-R100
	Businessmen	6	M(3),F(3)	29-65	
	Officers	5	M(2), F(3)	30-47	
	Teachers	7	M(4), F(3)	27-55	
	Others	22	M(9),F(13)	23-75	

VII. RESULTS AND DISCUSSIONS

The Internal Factor Estimate Matrix and of External Factor Estimate Matrix are calculated in the following tables (Table No. 3 & Table No. 4) based on field survey. The important Royal Sites of Burdwan Raj Dynasty has been studied here by surveying respondents who are attached to the Royal Sites as a working place as well as those who are the local residents but are not attached to the Royal Sites as a working place. The answers given by the respondents by various targets groups were noted down as well the personal observations were analyzed in respect of functioning of the Burdwan Raj Royal Sites at present. Both the internal factors (strength and weakness) and external factors (opportunities and threats) responsible for the present identity of the sites are studied here.

In this case three important perspectives are mainly considered for the study that is the Geo-Historical Perspective, Socio-cultural and economic Perspective and lastly the Ecological Perspective. The study aims to find out whether the present ecological image of the area under study can well be perceived through Geo-historical perspective.

Table 3. IFEM Showing Weighted Score of Strengths and Weaknesses of Burdwan Raj Royal Sites (IFEM: Internal Factor Estimate Matrix)

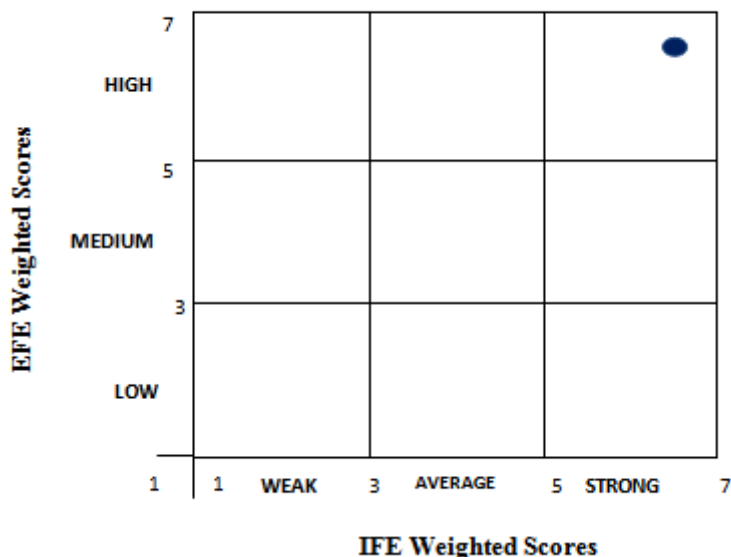
STRENGTHS		WEIGHT	SCORE	WEIGHTED SCORE
1	Historical Importance of the Area and its locational advantage	0.191502	4	0.766007672
2	Socio-Cultural and Educational Importance	0.227796	4	0.91118324
3	Ecological Importance and Aesthetic Beauty	0.155798	4	0.623192682
4	Recreation and social value	0.244025	4	0.976099144
5	Architectural Beauty, Philanthropic works and their Maintenance	0.180879	4	0.723517262
WEAKNESSES		WEIGHT	SCORE	WEIGHTED SCORE
1	Space for extension	0.200235	2	0.400469759
2	Lack of Basic Facilities	0.227246	3	0.681738109
3	Knowledge about local history and low involvement of local people	0.162948	3	0.488843218
4	Usage of Plastics	0.216383	3	0.649148561
5	Allowance of food items inside the campus	0.193188	3	0.579565473
TOTAL		1	-	6.79

Table 4. EFEM Showing Weighted Score of Opportunities and Threats of Burdwan Raj Royal Sites (EFEM: External Factor Estimate Matrix)

OPPORTUNITIES		WEIGHT	SCORE	WEIGHTED SCORE
1	Increasing Environmental Programmes and Afforestation Practices	0.308232	4	1.232929164
2	Human Resource Development	0.061264	4	0.245054244
3	Raising Awareness	0.189853	4	0.759412891
4	Renovation and Re-colouring	0.132419	4	0.529674537
5	Preservation and conservation	0.308232	4	1.232929164
THREATS		WEIGHT	SCORE	WEIGHTED SCORE
1	Disturbance from visitors	0.191189	2	0.38237739
2	Deforestation for expansion of zoo	0.200333	2	0.400665004
3	Negative cultural impacts such as visual pollution and Environmental pollution	0.208091	3	0.624272652
4	Lack of fund	0.220837	3	0.662510391
5	Entry fees to royal sites and disturbance from visitors	0.179551	3	0.538653367
TOTAL		1	-	6.60

If the weighted score value is above 2.5 in IFEM indicates good strength and if the weighted score value in EFEM values exceeds 2.5 it indicates good opportunities.

Figure 5. Plotting of EFE and IFE Weighted Scores



The point of incidence of both internal and external factors of Burdwan Raj royal sites indicates strong internal factors estimate and high potentiality from external factors estimate clearly indicating the strength and potentiality of the site.

Table 5. SWOT Analysis of Burdwan Raj Royal Sites

	Strengths	Weaknesses	Opportunities	Threats
Geo-Historical Perspective	<ul style="list-style-type: none"> -Historical Identity -Geographical Conditions -Architecture - Services and Philanthropic works are done by Raj Dynasty -Maintenance by Respective Authorities - Proximity to centre - Restriction zone 	<ul style="list-style-type: none"> -Problems related to maintenance 	<ul style="list-style-type: none"> -Increasing Preservation of Heritage -Increasing Renovation and Re-colouring of old buildings - Raising people knowledge about local history - Increasing Visitors and providing a historical guide 	<ul style="list-style-type: none"> -Lack of proper knowledge among all visitors -Lack of funds sometime
Socio-cultural and Economic Perspective	<ul style="list-style-type: none"> -High Social Value -Recreational Value -Economic Importance -Educational Value - Development of Human Resource -Cultural Development, integration or mixing of culture Preservation of Past Culture 	<ul style="list-style-type: none"> -Limited Space - Syllabus oriented study lack of knowledge regarding local history 	<ul style="list-style-type: none"> -Increasing Public awareness -Increasing Place Identity -Increasing more Scope for Human Resource Development 	<ul style="list-style-type: none"> -Disturbance from outside Environments such as noise pollution and other issues
Ecological Perspective	<ul style="list-style-type: none"> -Rich Biodiversity -Green Space -Floral and Faunal diversity -Aesthetic Beauty -Species Richness -Ecological Recreation -Not exploited for the purpose of economic benefit -Recreation 	<ul style="list-style-type: none"> - Use of plastics and Throwing of Plastics 	<ul style="list-style-type: none"> -Increasing more Conservation and Protection -Increasing Sustainable Management -More Environmental Programmes - Raising more Awareness -Increasing Afforestation 	<ul style="list-style-type: none"> -Lack of Awareness Among visitors -Entry fees -Lack of funds -Mixed functioning -Lack of time

VIII. MAJOR FINDINGS

STRENGTHS OF ROYAL SITES:

The Royal sites of Burdwan Raj Dynasty after the transformation of ownership have made their own identity and have their respective importance for the people of Burdwan even today. The spatial image has changed from time to time but the place has remained the same without getting ruined. In this case we find that the royal sites of Burdwan Raj dynasty have not only preserved its historical legacy but with the passage of time have led to socio-cultural production of space functioning as an educational hub. As such we do not find the economic gain or materialistic production at a large rather human resource development is seen within a restricted zone. These areas are restricted in the sense that they are protected and maintained by the Burdwan University such as Krishna Sayar, Golapbagh Campus and Rajbati.

Ecological conservation and preservation are done and within the area use of plastics and smoking is restricted. Moreover no one is allowed to harm the ecology. No heavy vehicles are allowed within the campus. Eco-friendly vehicles such as Rickshaws are allowed within the campus. Within Krishnasayar no vehicles are allowed and are well maintained as an environment friendly park. Even the fair that used to get conducted within the park for 10 days with the beginning of the year was stopped to preserve the biodiversity within the area. Within Rajbati the architectural heritage of the Raj Dynasty is under regular functioning and is maintained by them. Ramna Bagan under the forest department which has now turned into a zoological park is not only rich in floral diversity but also rich in faunal one. The entry of food item is completely restricted by the forest authority within the park. It also restricts the usage of plastics and looks that the visitors do not disturb the animals in any way. Thus the greatest advantage of the major important royal of Burdwan Raj dynasty is its regular usage. As the area is used regularly for educational and scientific research purposes and well used as a place of recreation they are regularly cleaned and properly maintained. It has the advantage of being touched to the educational system where the behaviour of the students and teachers are restricted in the sense they are aware to a certain extent that the environment should be preserved.

The Shallow ecological approach is seen in the functioning of these sites. As if an Eco-Sensitive zone is used by corporate sector then under the corporate mode the ecological purity would have been distorted for the benefit of the corporate sector but when it functioning under a statutory body with the aim of socio-cultural and educational development of the society without harming the environment its works in symbiosis with each other. The work place goes under the shadow zone at night with no human interference while during the day it acts a socio-cultural production space which is open to all and even the poorest of the poorest individual is getting the opportunity to be a part of it without harming the ecology of the area. Here human resource development and progress of the society is given more priority than individual economic gain.

Unlike most Royal Sites that have either turned into hotels or tourists spots and face exploitation from the public during their visit. However Burdwan Raj Dynasty sites are free from such exploitation. Even picnics are not allowed inside Krishna Sayar or Ramna Bagan during the winter season for economic gains.

Local people can protect their traditional and cultural practices in case of celebrating festivals based on the norms introduced by the Burdwan Raj dynasty. They are happy with the present functioning of the Royal sites and agreed to have high social value. From the same sites different values could be generated by different target groups such as educational value, socio-cultural value, ecological value, recreational value, aesthetic value, historical value and to some extent economic value. To the elderly people and many others Krishna Sayar Park also serves a medical value as most people use it as a place for morning walk and yoga. The freshness of air and calmness of the environment acts as a cure for ill health and makes their day.

In spite of all these we cannot say that the royal sites of Burdwan Raj dynasty are harmed rather it has the advantage of functioning well within a boundary of ecological space maintaining its legacy even today.

WEAKNESSES OF ROYAL SITES:

Although the royal sites of Burdwan Raj Dynasty have several advantages but side by side it has some notable weakness which it has to face. The very problem is of expansion of the site. As the area is a limited expansion of the area is not possible. The major sufferer in this case is Ramna Bagan Sanctuary, where the reserved forest is restricted to a certain level and recently when the area was declared as Burdwan Zoological Park the park has to expand the zoo within the limited boundary only. In spite the fact that Alipore zoo was built in 1875 much later after the Tejchand's zoo was closed and it was even hard that the king gifted the animals to Alipore zoo. According to respondents view Ramna Bagan being built up in the king's area in an area of 14.3 hectares only will not be able to reach the level of Alipore zoo due to lack of space for its expansion.

Another weakness of the site is visual pollution caused by few visitors which recently became a part of Krishnasayar as well as Ramna Bagan especially during the noon hours. Moreover some visitors are ignorant they try to feed the animals in the zoo and in spite of repeated warnings by the respective authority as well as

throw plastics or carry food inside the park by various means or make noise. However the respective authorities take adequate steps against those violating the norms and the situation is controlled.

Another problem is being ignorant of the fact that the area is part of local history such as specially for those who are coming from outside to Burdwan they are less aware of conserving and maintaining the beauty of the area rather than those who are already aware or came to know about the local history of the place as said by the respondents.

OPPORTUNITIES OF ROYAL SITES:

A number of opportunities for the betterment of the royal site are available and some of which are already being practiced. Sustainable management of sites along with increasing environmental programmes is required. Planting of trees along the road side should be done. Apart from that increasing awareness programmes among students, teachers and local residents should be done. Proper use of dustbins and fine for using plastics should be done. The campus along with Krishnasayar and Ramna Bagan should be under the surveillance camera so that no one could dare to do illegal works or break the norms. Fine should be introduced for improper works or harming the environment.

Regular monthly cleaning by the students should be organized for a particular day and everyone should be allowed to participate apart from regular cleaning of the authority.

Moreover renovation and re-colouring of the old buildings should be done but holding the earlier legacy and guide to be provided to the visitors who are eager to know the local history of the place.

The present functioning is very well but it will be much better if these opportunities of making it much better could be utilized.

THREATS TO ROYAL SITES:

Though Burdwan Raj Royal sites are functioning quiet well and have a lot of opportunities for its improvement there are some major threats faced by it. Firstly, although it acts a multifunctional space the main aim is the development of education as such always it's not possible for the respondents attached to the site to organize environmental programmes. As both the persons working within and outside the royal sites are blocked by busy schedule as such regular of direct involvement is not possible for most of them.

Majority of them want to indirectly participate in the events by providing funds where physical participation raises awareness is fewer in number.

A competition for the betterment and improving and developing the University has also to be given more priority as such the authorities try to their best in maintaining the ecological legacy of the site but could not fully indulge them in one particular aspect rather has to give attention to all spheres of its functioning as whole rather than a part.

Some other threats involve noise pollution from outside, lack of awareness among some visitors, lack of knowledge and awareness, lack of availability of funds sometimes etc which create threats for the functioning of the site.

IX. CONCLUSION

It can be said that the present landscape of Burdwan Raj Royal sites is depicting a systematic change after independence which has set a new physical as well as cultural landscape where ecology is preserved as well as maintained properly and cultural landscape is tuned with the modernity.

The main stake holder that is Burdwan University is taking proper attention, management and strategies for conservation as well as development of wetland ecosystem as well as green space. Another advantage of the preservation of ecology that main ecological zones face human interaction during peak period (10am to 5pm) with a regulated behaviour and in the off peak period (5pm to 10am) it almost becomes shadow zone. Similarly the cultural landscape is basically guided by educational functions where rules and regulations are so strict that apart from educational perspective no other performing activities like trade, manufacturing, market operations are not allowed. Burdwan Raj royal sites in spite of some threats and weaknesses, it has evolved into a new physical and social space where the positive externalities are getting more priorities.

REFERENCES

- [1]. Akça, H. (2006). Assessment of rural tourism in Turkey using SWOT analysis. *Journal of Applied sciences*, 6(13), 2837-2839.
- [2]. Arshadikhamsheh, A., & Fazayeli, M. . (2013). A fuzzy analytical network process for SWOT analysis (Case study: Drug distribution company). *Technical Journal of Engineering and Applied Sciences*, 3(18), 2317-2326.
- [3]. Beeho, A. J., & Prentice, R. C. (1995). Evaluating the experiences and benefits gained by tourists visiting a socio-industrial heritage museum: An application of ASEB grid analysis to Blists hill open-air museum , the Ironbridge Gorge museum, United Kingdom. *Museum Management and Curatorship*, 14(3), 229-251.
- [4]. Beeho, A. J., & Prentice, R. C. . (1997). Conceptualizing the experiences of heritage tourists: A case study of New Lanark World Heritage Village. *Tourism management*, 18(2), 75-87.

- [5]. Giannecchini, M., Twine, W., & Vogel, C. (2007). Land-cover change and human–environment interactions in a rural cultural landscape in South Africa. *Geographical Journal*, 173(1), 26-42.
- [6]. Greider, T., & Garkovich, L. . (1994). Landscapes: The social construction of nature and the environment. *Rural sociology*, 59(1), 1-24.
- [7]. Gülersoy, N. Z., Özsoy, A., Tezer, A., Yiğiter, R. G., & Günay, Z. . (2009). Strategic quality planning in historic urban environment. *ITU A|Z*, 6(1), 109-125.
- [8]. Hausmann, A. (2007). Cultural Tourism: Marketing Challenges and Opportunities for German Cultural Heritage. *International Journal of Heritage Studies*, 13(2), 170–184. doi:10.1080/13527250601121351
- [9]. Jaynutapong, S. (2010). Sustainability Ascertainment for CDM:: The case study of renewable energy projects in China.
- [10]. Karayev, R. A., Andrews, K. R., Ansoff, H. I., Balston, B., Wilson, I., Beverton, R. J. H., & Garcia, S. M. . (1987). EAF planning and implementation tools. SWOT (strength, weaknesses, opportunities and threat) ANALYSIS. *Journal of Fisheries and Aquatic Science*, 10(1), 132.
- [11]. Katriel, T. (1994). Sites of memory: Discourses of the past in Israeli pioneering settlement museums. *Quarterly Journal of Speech*, 80(1), 1-20.
- [12]. Long, P., & Palmer, N. J. (Eds.). . (2008). *Royal tourism: excursions around monarchy (Vol. 14)*: Channel View Publications.
- [13]. Narayan, P. K. (2000). Fiji's tourism industry: a SWOT analysis. *Journal of Tourism Studies*, 11(2), 15.
- [14]. Reents-Budet, D., Ball, J. W., Bishop, R. L., Fields, V. M., & MacLeod, B. (1994). *Painting the Maya universe: royal ceramics of the Classic period*. Durham, NC: : Duke University Press.
- [15]. Reihanian, A., Mahmood, N. Z. B., Kahrom, E., & Hin, T. W. . (2012). Sustainable tourism development strategy by SWOT analysis: Boujagh National Park, Iran. *Tourism Management Perspectives*, 4, 223-228.
- [16]. Sayyed, M. R. G. (2013). SWOT analysis of Tandooreh National Park (NE Iran) for sustainable ecotourism. *Proceedings of the International Academy of Ecology and Environmental Sciences*, 3(4), 296.
- [17]. Sevkli, M., Oztekin, A., Uysal, O., Torlak, G., Turkyilmaz, A., & Delen, D. . (2012). Development of a fuzzy ANP based SWOT analysis for the airline industry in Turkey. *Expert systems with Applications*, 39(1), 14-24.
- [18]. Tu, W. a. Z., J. (2017). The SWOT Analisis of the Intangible Cultural Heritage Changle Story. *Advances in Computer Science Research (ACSR)*, 73, 672-677.
- [19]. Wickramasinghe, V., & Takano, S. E. . (2010). Application of Combined SWOT and Analytic Hierarchy Process (AHP) for Tourism Revival Strategic Marketing Planning. *Journal of the Eastern Asia Society for Transportation Studies*, 8, 954-969.
- [20]. Yüksel, İ., & Dagdeviren, M. . (2007). Using the analytic network process (ANP) in a SWOT analysis–A case study for a textile firm. *Information Sciences*, 177(16), 3364-3382.

Koyel Sarkar "Change in Physical and Cultural Landscape for the Transformation of Ownership of Burdwan Raj Dynasty through SWOT Analysis" *International Journal of Computational Engineering Research (IJCER)*, vol. 09, no. 5, 2019, pp 80-90