Chapter 13
Determination of Standard of Living for People Involved with Tourism in Digha by Ordinal Regression Analysis

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Abstract Tourism in India has evolved considerably during the last decade, and Bengal as a state has performed considerably well for the growth of tourism. Tourism in Bengal has not only contributed to the growth of the economy in the state of Bengal but has developed the state’s remote area which has now turned into a key tourist spot. One such area is the region of Digha in the Purba Medinipur district of West Bengal, and it has turned out to be the most popular sea resort in West Bengal. The Digha Sankarpur Development Authority has taken key measures to develop tourism in Digha. The basic objective of this paper will be to determine the standard of living among the people of Digha who are associated with tourism after the various schemes to promote tourism by the state government. We have used ordinal regression analysis as most of our data were qualitative in nature and interpretation was done accordingly for the results obtained. Through our findings, we have tried to bring out the various problems associated with tourism in Digha along with the suggestions to improve it.

Keywords Tourism · Development · Project · Income · Schemes

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13.1 Introduction

The growing influence of tourism on the economy and its share in improving the quality of people’s lives by creating diverse large-scale employment both directly or indirectly are irrefutable. It promotes diverse cultural heritage with unity in diversity, strengthens peace of living in harmony and nurtures values of nature and environment. To assess and implement the profile of international and domestic tourism, periodical surveys and researches are conducted. In the year 2018, 17.42 million\textsuperscript{1} international tourists visited India. During the period 2019, Rs. 2,10,981 crores (Provisional estimates) and US$29.962 billion\textsuperscript{1} (Provisional estimates) with a growth of 8.3\textsuperscript{1} and 4.8\%\textsuperscript{1} of foreign exchange earnings were recorded. According to the Tourism Satellite Account for India (TSAI), the estimates of the contribution of tourism to GDP during the year 2016–17 are 5.06\%\textsuperscript{1} (direct 2.63\% and indirect 2.43\%). The estimate of share in employment generated in the year 2018–19 is 12.75\%\textsuperscript{1} (direct 5.56\% indirect 7.19\%). Therefore, 87.5 million\textsuperscript{1} employments generated through tourism. Domestic tourism continues to be a major contributor to the sector. There were 1854.93 million\textsuperscript{1} tourists’ visits all over the country during the year 2018. This study focuses on the tourism sector of West Bengal. The diversified flora and fauna make West Bengal an attractive tourist destination. About 74.5 million\textsuperscript{2} domestic tourists visited West Bengal during the year 2016, i.e. 4.51\%\textsuperscript{2} of the overall domestic tourists. Foreign visitors are about 1.53 million\textsuperscript{2} i.e. 6.19\% of overall foreign tourists visited India. The government is identifying potential tourist spots to develop tourism infrastructure on the PPP model. As per the state budget 2018–19, the Government of West Bengal has allocated US$ 57.18 million for the development of the tourism sector. As per our convenience, we have chosen Digha, Purba Medinipur, West Bengal. It is the most popular tourist destination with beaches located south of Kolkata. It is described as ‘Brighton of the East’ best for a holiday. The main purpose of selecting Digha for the study is due to its popularity and tourism being the primary source of livelihood of the rural population. Our chapter which is based on a primary survey of 50 respondents which includes vendors, storekeepers, hotel workers and those involved in auto or toto driven mode of the passenger vehicle was carried on to understand the impact of tourism in their daily life. The main objective of our survey was to find out the change in the standard of living (SOL) after the growing scale of development in Digha by the West Bengal Government. The chapter is divided into five sections and following the introduction, we have the literature review of works done on this field. Next, we have a methodology which focuses on the survey and the area of study along with the specific technique adopted. The fourth section includes the model and its analysis. The fifth represents the final interpretation of the results, along with the conclusion obtained from this analysis.

\textsuperscript{1}From Annual Report 2018–19, Ministry of Tourism, Government of India.

\textsuperscript{2}From https://www.ibef.org/download/West-Bengal-March-20181.pdf.
13.2 Literature Review

Ghatage and Kumbhar (2005) in their paper “Growth and Performance of Tourism Industry in India” takes into account the performance of the tourism sector in the Indian Economy and the level of growth experienced by the tourism industry. The growth attained has been examined by observing the Foreign Tourist Arrivals (FTA) rate as well as Foreign Exchange Earnings (FEE) earned by India. With the help of secondary data, this paper showed the growth in the tourism sector in India from 1997 to 2013. From this paper, it was found that India has developed in the tourism sector as we can observe an improved global ranking of India in terms of the tourism industry. India’s tourism sector has been ranked eighth among Asia and Pacific countries. This can be achieved due to the periodical review in tourism policy by the central as well as state governments. However, major issues are also there for which a consistent growth in FTA and FEE has not been observed. Dash et al. (2018) found out the effect of tourism on the economic growth of India. India has been presented as a case study to establish the linkage between economic growth and tourism. Many studies across the world have been referred to in this paper, and these studies show a multidirectional relationship between tourism receipts and economic growth. While conducting the research, the data of Foreign Tourist Arrivals in India and the contribution, both direct and indirect, of FEE to GDP has been taken into consideration. The time-series data has been taken from 1999 to 2015. The Augmented Dickey–Fuller (ADF) test and the Phillips–Perron test has been undertaken to prove that the time-series data are of stationery series in nature. Through the regression test on the Autoregressive Distributed Lag (ARDL) model, it has been found that the equilibrium relationship exists between different variables used in this study. Moreover, investments in human, as well as physical capital, are significant in tourism led to economic growth. On analysing various factors, it can be found that factors like exchange rate depreciation can cause only short-term economic benefits, while investments in physical capital have a positive impact on economic growth. Sharma (2018) explored how tourism leads to economic as well as the financial development of a country. The objective of this study was to show the economic growth caused by tourism development in a country. As far as Foreign exchange Earnings (FEE) was concerned, this study shows that, except in the year 2009, the FEE has increased considerably over the past concerning year between the period of 2007 and 2017. The time-series data of FEE and GDP has been used as the data to prove the fact that tourism leads to the economic growth of a country. An ADF test has been performed to prove that the GDP of India was stationary data which means it can indicate a possible future behaviour in the tourism sector of India. The cointegration between the two main data series, i.e. GDP & FEE, also does not exist. With the help of the Granger causality test, it has been established that tourism receipts in India are not affected by growth in GDP. However, tourism receipts do contribute to GDP growth. From this study, it can be concluded that like many other countries, India’s tourism sector was also attributed to economic development. It has been established that tourism leads to economic growth, and hence, the government should provide the required
assistance to the tourism industry by providing various infrastructural facilities. It was necessary to grow domestic tourism so that a wave of economic development can be achieved in various places within a country. Wang et al. (2014) estimated the satisfaction performance of Mainland China tourists who are travelling to Taiwan. The authors have used grey relational analysis in grey mathematics to analyse the satisfaction question items along with the predictive accuracy of the least mean regression model and each quantile regression model. For this, they have taken the first eight satisfaction items as independent items and the overall satisfaction level as the dependent variables. The empirical results from the paper concluded that gender, tourist attractions, hotel facilities, night fair culture and street cleanliness affected the overall satisfaction performance of the mainland tourists and had significant differences in both the high and low quantiles. Battour et al. (2017) aimed to test the relationship between tourist motivations and tourist satisfaction by using partial least square. The result shows that religion significantly moderates the relationship by using push and pull motivations which influence the overall tourist satisfaction. The study successfully develops a theoretical framework linking tourism motivation and religion (Islam) for a better understanding of Muslim tourist behaviour. Eygu and Gulluce (2017) tried to determine the factors that were relevant to the satisfaction of customers in conservative hotels, which were expected to have their incomes rise above 200 million dollars in the upcoming year. A survey was conducted on the guests staying at conservative hotels, and the data so obtained as a result of the study have been modelled using logistical regression method to process the results related to hotel satisfaction. It investigates whether the satisfaction of hotel enterprises is different according to the individual variables (gender, age, marital status, education status and monthly income) and sociocultural variables (nationality) for domestic and foreign customers staying in Islamic hotels in Turkey. The study shows that the customers who stay in conservative hotels are satisfied with the services provided as per the expectations of the customers. Although various studies have been conducted related to the tourism aspect in Digha, we were not able to find any relevant study based on the prospect of financial and change in the SOL for those associated with the tourism sector. As a result of which, we have decided to base our research on this front, to understand how certain factors can justify in influencing the SOL among those associated with the tourism industry in Digha. The main objective of our study is to determine the SOL among the people of Digha who are associated with tourism.

We had to face the following limitations during our course of the study:

- Unavailability of large-scale data due to Covid-19, which restricted our study to only 50 respondents as the whole nation went into lockdown after a week of our first phase of data collection.
- The dubious response of the respondent as they were biased on specific issues.
- Too much reliance on qualitative data as government reports for development was unavailable.
- The various assumptions associated with ordinal regression analysis.
13.3 Methodology

The study is conducted in India at the beaches of Digha which is situated in Purba Midnapore District of West Bengal on the coast close to Orissa border at a distance of 180 km from Kolkata. Digha is located at 21°38′18″N 87°30′35″E. Our respondents for the first study being the local people of Digha who have set up stall provided by the government to them, and also the various businesses and store owners that cater to tourism. The purpose of the study is to find the work done by the state government in the last 5 years in promoting tourism in Digha. Our objective is to see how their SOL changed in the last 5 years, and the effect in their daily and monthly income due to the policies adopted by the government and how effective these policies were in consideration to their SOL. We asked them individually venturing stalls and enquired whether the tourist arriving here increased due to the steps taken by government to make Digha a tourist hotspot. We asked them questions regarding the change in the footfall of tourist, how their income changed over the last 5 years, and about their livelihood as well, like whether they were getting the basic amenities or whether they were getting better SOL from the past. From the data-driven survey of 50 respondents across several sectors, numerous implications are evident. If we study the data thoroughly, we can see different important angles which make our study more interesting. We have based our study into two broad spheres, namely the present scenario and previous (5 years before). As observed, the mean income of 50 respondents previously is Rs. 11,728 and now present it is around Rs. 13,492. So, the respondents were better off as their income has increased over time by 15.04%. This can be neglected as we are not considering the general inflation rate over the years in our study. The average mean change in income is 55.11 and the standard deviation is 111.0748. Secondly, if we see the sector-wise classification, then presently, the shares of employment in sectors like the hotel, stores and transportation has increased significantly than before. The percentage share of employment in stores has got doubled than before from 32 to 64%. So, it can be seen that a large number of people are engaging themselves in business by setting up stores related to tourism than before. Interestingly the sectoral share of employment in agriculture before is 26%, but now presently, no such share in agriculture can be witnessed. So as per the Clerk–Fisher hypothesis of development, a structural shift in the pattern of employment of the local economy from primary (Agriculture) to tertiary (Stores, Transportation and Hotel related to tourism) sector is evident from the data. Now if we discuss the sector-wise classification of employment nature, then it can be seen that presently the percentage share of permanent employment has increased to 32%, which was just 10% before. The seasonal and temporary shares of employment have decreased from 22 and 20% to 12% and 8%, respectively. Moreover, a slight increase in the self-employed nature of employment can be seen from 42 to 48%, which shows us that a few portions of the mass tend to become independent and self-reliant. Indeed 6% of people among the respondents before 5 years or so were unemployed, but we simply cannot conclude from here
that unemployment has decreased as we exactly don’t have any data about their past work activities.

Variables Specification and Scale of Analysis

In this study, an ordinal regression is constructed to examine the relationship between the SOL of the respondent from the time of the infrastructural changes (IC) taking place which we have considered as the last 5 years since the new government has taken steps to rebuilt Digha as a significant tourist spot in West Bengal, from the period 2015 to 2020. The explanatory variable to explain the relationship being majorly the government role over these 5 years and the IC taking place in Digha within the study period. We have also considered certain factors like the use of luxury items (LI) which we felt would be a key to determine the SOL along with the use of loans to develop their business as a tool to enhance the living standards of the respondent.

Detail Analysis of Each Category

Standard of Living (SOL)—The dependent variable—This is our dependent variable, and it states the SOL of the respondent over the period of our study. The SOL of the respondent was taken based on ranks ranging from 1 to 5 (1: strongly disagree, 2: disagree, 3: undecided, 4: agree, 5: strongly agree). This estimate is taken to find out the impact of tourism on the lives of the vendors/store owners or the persons associated to cater the needs of the tourist. The change that tourism caused in their SOL is a key factor to determine the strength of association of being involved in this tourism sector.

Role of Government (ROG)—This is a relevant category that helped us estimate the view of the respondent in terms of the benefit they received from the state government. The support is mainly biased against the government as we found out that the respondents were expecting something even better in terms of the effort or compensation given to them by the government. The buildup of new stores in a location further away from the beach is the main reason for this dissatisfaction for the government added to that is the condition of the stores. This is followed in the considerable growth of competition as most of the vendors were selling similar items which included seashells to local items. The data obtained were ranked similar to SOL ranking and it has been considered an important factor that could determine the SOL of the respondent.

Infrastructural Changes (IC)—Digha has seen rapid growth in its infrastructural pattern over the years, once considered just a local tour spot, Digha now attracts tourists from all over India. Moreover, this has been possible mainly due to the IC, the newly developed Digha Railway Station, ropeways and water sports for tourists and the growth of new chains of hotels in the region have contributed to this rapid transformation in Digha. It now attracts tourists in thousands. Also, there is no specific season as people are piling up throughout the year, all this is possible due to the newly developed Biswa Bangla park which connects old and new Digha and gives an enormous view for the tourist. This is considered a great opportunity for the
respondent to enhance their income due to an unprecedented rise in tourists in Digha and thus we have considered it as a factor influencing the SOL.

**Loan Taken (LT)**—This category highlights whether the respondent has taken any loan either from Banks, Microfinance Institutions and Self-Help Groups. During the survey, it is found that most loans were taken from Self-Help Group, and people who took loans have mostly cleared their loans. This is also taken as a measure for the SOL as we wanted to observe the dependency of SOL on loan is taken and how much it influences a respondent’s business.

**Use of Luxury Items (LI)**—Living in a place like Digha where the vendors were mainly in mid-income range the SOL can have been estimated from the LI being used by the respondent. During our survey, we asked whether the respondent had a fridge, computer, TV, bike, proper electricity facility, water facility and proper houses. It is found that most respondents did not pose those basic amenities, so we classified certain items like Fridge, computer and bike for personal use as LI. Whether they had (1: YES) or they did not have (0: NO) was considered as an important factor to influence the SOL.

**Modelling Standard of Living of those involved with business associated with Tourism**

Various types of regression analysis are commonly used to model relationships between random variables. The use of a specific technique depends heavily on the level of data availability, spatial analysis and format and the specific questions to be answered (Norusis 2004, 2005). This paper focuses on the ordinal regression modelling technique that can be applied to the model SOL of those involved with business associated with tourism. Out of all the multiple regression techniques available, we have chosen this due to its advantages and after considering the various literature available on this kind of research. It does not assume that the response variable and the error terms are distributed normally (Norusis 2004). Secondly, it can take into consideration and introduce into the calculations some of that extra information in the ordinal scale of the response variable compared to logistic regression models. Finally, and most importantly, it allows investigating the influence and significance of all individual categories of categorical independent variables (Polyzos and Dionysis 2011).

The logit link takes the form link $\gamma_{ij} = ln(\frac{Y_{ij}}{1-Y_{ij}})$. The general model for ordinal regression is.

\[
\ln\left(\frac{Y_{ij}}{1-Y_{ij}}\right) = \left\{ \begin{array}{c}
\beta_{ROG-1} \cdot ROG \cdot 1 \\
\beta_{ROG-2} \cdot ROG \cdot 2 \\
\beta_{ROG-3} \cdot ROG \cdot 3 \\
\beta_{ROG-4} \cdot ROG \cdot 4 \\
\beta_{ROG-5} \cdot ROG \cdot 5 \\
\end{array} \right\} + \left\{ \begin{array}{c}
\beta_{IC-1} \cdot IC \cdot 1 \\
\beta_{IC-2} \cdot IC \cdot 2 \\
\beta_{IC-3} \cdot IC \cdot 3 \\
\beta_{IC-4} \cdot IC \cdot 4 \\
\beta_{IC-5} \cdot IC \cdot 5 \\
\end{array} \right\} + \left\{ \begin{array}{c}
\beta_{LT-0} \cdot LT \cdot 0 \\
\beta_{LT-1} \cdot LT \cdot 1 \\
\end{array} \right\} + \left\{ \begin{array}{c}
\beta_{LI-0} \cdot LI \cdot 0 \\
\beta_{LI-1} \cdot LI \cdot 1 \\
\end{array} \right\}
\]
13.4 Empirical Analysis

We have conducted ordinal logistic regression to show how the SOL (dependent variable) has improved among the respondents based on the variables like ROG, IC by the government, LT and the use of LI. For this study, we have used a Likert scale with five variables (1: strongly disagree, 2: disagree, 3: undecided, 4: agree, 5: strongly agree) for the ordinal data which were SOL, ROG in improving tourism, IC by the government in Digha. For the nominal data like a loan, we asked the respondent whether they had taken a loan or not and ordered it accordingly (0: No, 1: Yes) and similarly LI based on average income are considered to be fridge, air conditioner, bikes, cars and personal computers. Any respondent having any of the items were ranked 1, and those who did not have were numbered 0. We ran our test on SPSS package 25 and based on the output, we framed our analysis and working research hypotheses were determined as follows:

H.1. There is a significant relationship between a respondent’s standard of living and the role of government in spreading tourism in Digha.

H.2. There is a significant relationship between a respondent’s standard of living and the infrastructural change in Digha.

H.3. There is a significant relationship between a respondent’s standard of living and the use of luxurious items.

H.4. There is a meaningful relationship between a respondent’s standard of living and whether they have taken a loan or not.

13.5 Findings

The model with maximum likelihood in which the independent variables given in Table 13.1 that influence the SOL can be obtained is the logit model. The analysis results of the predicted model are summarized in the table. Out of the 50 respondents who participated in the survey, it is found that 13 of them strongly disagreed, 12 disagreed, 5 were neutral, 12 agreed and 7 strongly agreed that their SOL changed in the last 5 years. The goodness of fit test of the model is given using Pearson chi-square and deviation statistics. The goodness of fit test of the model is given using Pearson chi-square and deviation statistics. The model’s suitability is determined using the difference between the observed and expected values of the model. Therefore, it is assumed that the model agrees with the assumption that $p > 0.05$ as statistically significant. The R square values of the model are calculated, showing how many per cents of the dependent variable is explained by the independent variables. For R square, we take the Nagelkerke R square, which is at 45.8% for our test. This explains that the independent variables express 45.8% of the variability in the dependent variable. In the model, there are four independent variables (ROG in improving
tourism, IC, LT and use of LI) that are found and the probability of these variables is examined. These probability values are the values of the Wald test to determine whether the parameters are meaningful. When the analysis results are examined in Table 13.2, the significance level is found to be statistically significant when \( p \) values of some variables were less than 0.05.

The reference category in the study is made according to the interpretations determined as the last category. According to the ordinal logistic regression analysis in Table 13.2, the reference category is determined as the last category for each independent variable, and the interpretations were made accordingly. Three categories of the threshold values calculated in the model are significant. It is found that, when the independent variables explaining the SOL are examined, it is found that a meaningful relationship exists for one category in the case of infrastructure, two categories of government support and one category of LI being statistically significant at 5%. When the value of each of these significant variables increases by one unit, it is observed that the predicted rate of the dependent variable will also increase. In this category, it is observed that due to them disagreeing with the IC, there has been a reflection in their SOL. Similarly, disagreeing with governmental support which is significant for our test, we can conclude that their SOL has also been affected, as almost 25 of the respondents responded they disagreed with the change in the SOL over the 5 years. Also, the use of LI seems to affect the respondent as well (\( p < 0.05 \) for non-use of LI), which signifies that those who doesn’t have LI were not satisfied with the SOL, giving a reason to conclude that SOL and why it has turned out falling for this respondent is because of the lack of government support, lack of use of LI and the lack of IC as felt by some of the respondent. Thus, we can accept the hypotheses 1, 2 and 3, and we have to reject hypothesis 4 based on the test of significance.
| Threshold | Parameter estimates | Estimate  | Std. error | Wald   | d.f  | Sig      | 95% confidence interval | Lower bound | Upper bound |
|-----------|---------------------|-----------|------------|--------|------|----------|------------------------|-------------|-------------|
| d1        | (SOL) Standard of Living = [1] Strongly Disagree | −5.059    | 1.146      | 19.507 | 1    | 0.000*** | −7.305 −2.814          |             |             |
| d2        | (SOL) Standard of Living = [2] Disagree         | −3.615    | 1.06       | 11.622 | 1    | 0.001*** | −5.694 −1.537          |             |             |
| d3        | (SOL) Standard of Living = [3] Neutral           | −3.067    | 1.031      | 8.855  | 1    | 0.003*** | −5.087 −1.047          |             |             |
| Δ4        | (SOL) Standard of Living = [4] Agree             | −0.958    | 0.922      | 1.081  | 1    | (0.299)  | −2.766 0.849           |             |             |

| Location | Parameter estimates | Estimate  | Std. error | Wald   | d.f  | Sig         | 95% confidence interval | Lower bound | Upper bound |
|----------|---------------------|-----------|------------|--------|------|-------------|------------------------|-------------|-------------|
| IC       |                     |           |            |        |      |             |                        |             |             |
| X1       | IC = [1] Strongly Disagree | −0.609    | 1.444      | 0.178  | 1    | (0.673)    | −3.44 2.222            |             |             |
| −        | IC = [2] Disagree    | −3.037    | 1.439      | 4.452  | 1    | 0.035**    | −5.857 −0.216          |             |             |
| −        | IC = [3] Neutral     | −1.501    | 1.185      | 1.604  | 1    | (0.205)    | −3.825 0.822           |             |             |
| −        | IC = [4] Agree       | −1.1      | 0.675      | 2.661  | 1    | (0.103)    | −2.422 0.222           |             |             |
| −        | IC = [5] Strongly Agree | 0(a)      | 0          |        |      |             |                        |             |             |

(continued)
### Table 13.2 (continued)

Parameter Estimates

| Parameter Estimates | Estimate | Std. error | Wald | d.f | Sig  | 95% confidence interval |
|---------------------|----------|------------|------|-----|------|------------------------|
|                     |          |            |      |     |      | Lower bound | Upper bound |
| **ROG**             |          |            |      |     |      |            |            |
| X2                  | ROG = [1] Strongly Disagree | −2.693 | 1.073 | 6.301 | 1 | 0.012** | −4.796 | −0.59 |
|                     | ROG = [2] Disagree | −4.887 | 1.609 | 9.222 | 1 | 0.002*** | −8.04 | −1.733 |
|                     | ROG = [3] Neutral | −1.699 | 1.291 | 1.732 | 1 | (0.188) | −4.23 | 0.831 |
|                     | ROG = [4] Agree | −1.12 | 0.682 | 2.696 | 1 | (0.101) | −2.456 | 0.217 |
|                     | ROG = [5] Strongly Agree | 0(a) | 0 |  |  |  |  |  |
| **LT**              |          |            |      |     |      |            |            |
| X3                  | Loan Taken = [0] No | −0.297 | 0.616 | 0.233 | 1 | (0.629) | −1.504 | 0.91 |
|                     | Loan Taken = [1] Yes | 0(a) | 0 |  |  |  |  |  |
| **LI**              |          |            |      |     |      |            |            |
| X4                  | Use of Luxury Items = [0] No | −1.749 | 0.742 | 5.56 | 1 | 0.018** | −3.202 | −0.295 |
|                     | Use of Luxury Items = [1] Yes | 0(a) | 0 |  |  |  |  |  |

Link function: logit. (a) This parameter is set to 0 because it is redundant. Note * Significant at 10%, ** Significant at 5%, * Significant at 1%, () Not Significant.
13.6 Analysis of Findings

Model Fit Summary and Goodness of Fit

The final ordinal regression model includes the constant, all the tested variables and the statistically significant two-way interaction effect. The model uses the logit link function. Results about the strength of associations, the predicted ability of the model as well as goodness-of-fit statistics, are presented in Table 13.1. The location coefficients for all of the predictor variables in the model are zero; thus, the results helped us in the test of null hypothesis yielding a significance level of 0.001.

R Square—The pseudo $R^2$ statistics measure the success of the model in explaining the variations in the data, which is an indication of the strength of associations between the dependent and the independent variables. The pseudo $R^2$ for Cox and Snell (0.437) and Nagelkerke (0.458) can be considered slightly below satisfactory as it is below 0.50. The pseudo $R^2$ for McFadden (0.185), which is least satisfactory is a measure of entropy reduction between the intercept-only and the final model. The goodness-of-fit measures of Pearson and Deviance are reliable since it has a significance value of $p$ (0.813) and (0.996) which is higher than (0.05).

Parameter Estimates—The results are displayed in Table 13.2 and considered whether they are statistically significant or not. The estimate indicates that the variables have a significant influence on the SOL of the respondent. The variable IC has a negative coefficient for all the categories. Furthermore, the statistical significance is satisfactory only for the second category. The negative sign of all the categories indicates that the IC were less likely to attract increased income sources for those associated in tourism as a result than where the state predicated that growth in tourism due to infrastructure would lead to a higher level in tourism. Hence, we see that SOL has not been better due to the added infrastructure in Digha. Also, the second factor being significant shows that disagreeing IC has contributed to the fall in the quality of living among the respondent, whereas the higher ranks being insignificant suggest that respondent are not satisfied. Although the provision of incentives to tourism due to massive changes in infrastructure may be of great significance to the tourist its result is not reflected in the growth of livelihood of the people who generate income from tourism-related activities leading to serious disadvantages found in some locations. This is logical since an area to be suitable for tourism development of people is prior important along with the tourist spot and local government must look into this matter to improve the condition of the place. Coming to the ROG, we find a similar negative coefficient for all the categories. In this case, we have a statistically significant result for the first and second categories only, rest all being insignificant. Thus, we can say that the respondents were strongly dissatisfied and disagreed with the support given to them by the local government. While the survey is going on, they expressed this quite vocally and it is reflected in the test result as well. The major shift in their business from the beachside to a concentrated zone along with the lack of diversity in the items for sale by this vendor was a major reason why they were not able to earn much from their business. And for this, they have held
the local government responsible along with signifying the government’s inability to attract tourists. Next, the two binary variables representing the LT and use of LI out of which the former is statistically insignificant, while the latter is statistically significant at 5%. The variable concerning LI facilities has a negative sign for code [0] (absence of LI) meaning that the prefectures without LI have led to the fall in the quality of living than those with such facilities. The significance of LI can be critical as in rural Bengal possession of LI is often considered as a symbol of status, and people observe their standard based on the number of LI one has. The one who has such LI behaved to be in a better position than the one who did not have during our survey. In regards to LT, we see it too has a negative coefficient for the loan not taken [0] but had an insignificant result which states that respondents were not that certain whether LT could have significantly influenced their SOL. This loan is a source of funding for them which they take at a higher interest rate from the Self-Help Group who urges them for this loan so they consider it more as a liability than a significant tool for investment generation. This could be improved by proper training by the Microfinance Institutions who are working at those locations who can improve the financial literacy levels among the vendors and thus help in improving their SOL.

13.7 Conclusion

This empirical research helped us in understanding the views of the respondent and to determine the factors influencing their SOL, the grievances and the expectations of the respondent were also highlighted during the research and proper steps must be taken to address this issue. According to the primary response, the government did everything to renovate Digha and make it attractive to the tourist by making artificial beaches and cemented pavements, but it had led to the demise of their hard-earned business which they had set up all these years and had put on the hard work, they are still waiting for the government to provide the “real” development which they had hoped for which were reflected in the result. Consequently, this should be taken into consideration by the relevant authority and there is a need to better certain factors which would benefit both the tourist and the people associated to this sector, especially in hotspots like Digha.

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