
ECONOMIC IMPACT ASSESSMENT OF TOURISM : A CASE STUDY OF ORISSA

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ABSTRACT

This paper tries to find out the contribution that tourism makes for the development of a backward region like Orissa, through its linkage with other sectors. To study the contribution of tourism to the state; direct, indirect and induced effect of tourism income has been estimated in this study. To collect information relevant for the study, domestic and foreign tourists, hoteliers, service providers, retailers, wholesalers and others directly and indirectly associated with tourism activity were interviewed time and again following a structured questionnaire. From this exercise, it was found out that tourism not only benefits those who are directly associated with it but also those who are indirectly associated with it by contributing to their income. It was also observed that Induced effect of tourism on income is also significantly high. But this contribution could have been much higher had there been no leakages. This happens as the state depends on other states for meeting most of its tourist requirements.

KEY WORDS : Ratio Multiplier, Linkage of Tourism, Direct Income Effect, Indirect Income Effect, Induced Income Effect, Inclusive Growth.

Tourism today is widely regarded as a means of achieving development in destination areas. Indeed the justification for its promotion in any area or region within the industrialised world or less developed region is its alleged contribution to development. Regional governments, public organisations and other stakeholders in tourism are today increasingly interested in the economic impacts of tourism at national, state, and local levels. Tourism, like other traditional sectors, is increasingly subject to estimation of cost and benefits as investment on tourism today is no more a negligible amount as it was before. The decision of the community to promote tourism now involves debates between tourism's economic benefits and tourism's costs. Cost Benefit analysis and economic impact analysis are frequently confused as both discuss economic benefits. There are two clear distinctions between the two techniques. Cost Benefit analysis addresses the benefits from economic efficiency while economic impact analysis focuses on the regional distribution of economic activity. Assessing the impact of major investment projects would normally rely on conventional cost benefit analysis, whereas assessing the impact of a regular and diverse stream of tourist expenditure requires a rather different approach. While each type of economic analysis is somewhat distinct, different economic analyses are used for different kinds of problems. A variety of methods, ranging from pure guesswork to complex mathematical models, are used to estimate tourism's economic impacts. Studies vary extensively in quality and accuracy, as well as which aspects of tourism are included. A variety of economic analyses are carried out to support tourism decisions. Each type of analysis is identified by the basic question

it answers and the types of methods and models that are appropriate.

Mostly studies of the economic impacts of tourism emphasize only the positive benefits of tourism. Among the positive impacts tourism's role as a contributor to economic growth and as a catalyst of favorable structural changes within the local economy are important. In the light of this, an attempt is made here to study the economic impact of tourism on the economy of Orissa, a backward state having a very low Net State Domestic Product (NSDP) and per-capita NSDP, but a pioneer in accepting tourism as an industry. Government of Orissa has now recognised tourism as an activity generating income, employment, government revenue and foreign exchange and hence has come up to invest on tourism development. Economic growth trend of Orissa from 1950-51 to 1999-2000 shows that during 1980-81 to 1999-2000, the primary sector's share declined by 16% due to a steady decline in agriculture. However, the entire decline in the share of the primary sector is taken up by the tertiary sector whose share by 2000 has reached a high of 46%. The major component, however, has remained trade, hotels & restaurants whose share has increased steadily through the 1980s and 1990s to reach nearly 1/5th of the NSDP (Net State Domestic Product). The direct earning from tourism was 5.36% of the NSDP during 2002-03. Direct earning from tourism has become 8.32% of the NSDP during 2005-06. The trend shows that tourism sector has shown momentum over the years so far as its contribution to NSDP is concerned. But considering the huge investments in the tourism sector it is to be seen whether tourism should be promoted as a development strategy supplementing other sectors for development. The argument for tourism development lies in the multiplier effect of tourism on income and employment due to the linkage tourism has with other sectors helping these sectors to grow. This paper makes an attempt to study the contribution of tourism to other sectors due to its linkage with other sectors.

1. Conceptualisation of the Study

Although multiplier effect of tourism is frequently regarded as a separate identifiable economic impact of tourism and is often treated so in the literature it is very much linked to the direct economic benefits of tourism as a source of income, employment and government revenue. It also helps in the understanding and calculation of the indirect and induced economic impacts of tourism and is therefore, a useful tool in exploring the extent of tourism's role in economic development. The multiplier concept is based upon the recognition that the various sectors of the tourism destination economy are interdependent (Fletcher, 1994). It can be summarised as follows:

Tourism spending injects extra income into the economy, which may be the local community, a region within the country, or a country as a whole. This tourism expenditure includes spending on goods and services by tourists, tourism investment by external sources, domestic government spending (in a local community or region only) and foreign government spending such as aid, as well as export of goods stimulated by tourism (WTO, 1981). In this study only tourism expenditure has been taken into consideration. Tourism expenditure initially accrues to the 'first round' tourism recipients, such as hotels, other accommodation providers, tour and

travel operators and other direct tourism businesses. This is known as the direct effect of tourism consumption and is equal to the amount of tourism consumption (tourism receipts in the host country). However, because these first round tourism recipients use the income from tourism to make 'additional purchases from other sectors within the host economy to support their business, tourism consumption not only benefits the direct producer of tourism services, but also the tourism sectors suppliers, suppliers and so on.' This is referred to as the indirect effect. As a result of both spending on imports and saving, the amount of money re-spent in each subsequent round of expenditure reduces until the remaining income is spent on goods and services in the final round of expenditure in the local economy. At the same time, however, further effects are generated in the form of induced effects, caused by induced expenditure. This is increased consumer spending resulting from increased personal income of the local population, due to tourism expenditure. For example, tourism industry employees use their wages for the purchase of goods and services and generate induced income.

The sum of all these effects, viz. direct, indirect and induced gives total income which is generated in all rounds in a period of one year as a result of initial tourist expenditure. The ratio between the total income and initial tourist expenditure is known as the normal tourist multiplier (Archer, 1977). It represents the factor by which initial tourist spending is multiplied to equal the sum of direct, indirect and induced income.

2. Income Multiplier Estimation

An effort is made here to calculate the factors influencing the value of the multiplier. Leakages like import content of expenditure made on purchase of goods from abroad by hotels, other accommodation units, retailers, transport providers is calculated here while estimating the value of multiplier. Further, retention capacity of the tourist places is measured by capture rate which explains the capacity of a place or a region to retain income within itself. It is measured as follows:

Capture Rate = Local final demand/Tourism spending in local area

While measuring induced effect of tourist expenditure the leakages like expenditure on imported items, loss of income to other states due to sourcing of the products from these states and share of the tax going to other states is deducted from the total income. After making all such deductions, total income is calculated. We have used the following formula for estimating the income multiplier:

$$k = \{Y_d + Y_i + Y_c\} / Y_d$$

Thus

$$\text{Total Income} = \frac{\text{Direct Income} + \text{Indirect Income} + \text{Induced Income}}{\text{Direct Income}}$$

The purpose of giving emphasis on the leakages is that high level of leakages either through a dependence upon imported goods or a significantly low capture rate, reduces each subsequent round of expenditure and the value of the tourism

income multiplier tends to be lower. Similarly, where the tourism industry in the destination is owned by foreign capital, the subsequent repatriation of income reduces the value of the multiplier, whilst in a tourism sector dominated by expatriate labour or where a great proportion of salaries go to a more skilled labour force from abroad, the effect would be the same. Smaller regions with little diversification of production depends on other regions for purchasing goods and services required for the tourism industry. Orissa though a backward state has abundance of skilled labour. It has developed a good retail base during the recent years. But it still depends on other states for availing various manufactured goods required in the hotels and other tourism businesses. Even for availing some food ingredients though the local retail market is sourced, the production base remains in other states. Hence due to inadequate production and manufacturing activities a large part of the tourism income goes out to other states. But leakages due to import is negligible as besides construction and decoration materials used in luxury hotels, and very few food ingredients required for preparation of Thai and Continental food in some luxury hotels, dependence on imported goods for tourism is negligible in the state. Calculation of the multiplier is done in the following manner in this study.

3. Methodology to compute Direct Income from Tourist Expenditure

Expenditure made by tourists during their stay in the hotels becomes the income of the hotelier, retailer, transport provider and other direct service providers. To compute this direct income, 29 hotels of Puri, Bhubaneswar and Cuttack were selected. 21 units of OTDC (Orissa Tourism Development Corporation) were taken together as one group. Out of a total of 50 hotels, 17 hotels have been classified as High spending group (H.S.G.) of hotels, 27 have been classified as Middle spending group of hotels (M.S.G) and 6 hotels have been classified as Low Spending group of hotels (L.S.G). Tourists spend their money on food, lodging, transport, entertainment, and purchase of retail products during their stay in a destination. Hotels were reluctant to provide information on the total income earned by them from tourists. Hence the following methodology was adopted to collect information on this. From the hotels information was collected regarding the total number of domestic and foreign tourists staying in their hotels during the year 2006 starting with April 2006 and ending with March 2006. However some of the hotels did not provide any information regarding the total number of foreign tourists staying in their hotels during the period in spite of constant effort. Excluding these the total number of domestic tourists staying in these hotels during the above mentioned period was 312,470 and the total number of foreign tourists was 28,170. The total number of tourists thus was equal to 340,640. Average room tariff of the hotels per day was calculated. Considering the percentage of discount that is given to domestic and foreign tourists, i.e. 25% and 10% discounts for domestic and foreign tourists in case of H.S.G. hotels, 10% discounts for domestic tourists only in case of M.S.G. hotels and almost no discount in case of L.S.G. hotels, the final calculation of average room tariff was made. Multiplying the average room tariff per day with the number of domestic and foreign tourists in a hotel the total amount of tourist expenditure on accommodation in different hotels was calculated. Tourist profile

survey taking 500 domestic tourists and 200 foreign tourists from the above mentioned hotels found out that domestic tourists here spend 29% and foreign tourists spend 35% of their total expenditure on accommodation on an average. On the basis of this, total expenditure on food which constitutes 18% of total expenditure in case of foreign tourists and 19% of the total expenditure of domestic tourists was calculated for different hotels. Similarly expenditure on shopping which is 15% and 22% of the total expenditure in case of foreign and domestic tourist respectively was calculated. For transport and sightseeing foreign tourists spend 32% and domestic tourists spend 30% of their total expenditure. Taking this in to consideration expenditure on transport and sightseeing of domestic and foreign tourists staying in these hotels was calculated. Average duration of stay of a domestic tourist in the state is 3.9 days and that of a foreign tourist is 12.7 days according to statistics of tourism department. However average duration of stay of tourists in the state includes their stay in different places and in different hotels. It was found out that average duration of stay of tourists in all the hotels is not uniform. Hence survey data is used to find out the average duration of stay of different tourists in different hotels. As most of the hotels have been taken from Bhubaneswar it has been found out that the average duration of stay of the tourists staying in these hotels is 2 days. The average expenditure of a domestic tourist was found to be Rs.2,689 per day and that of a foreign tourist was found to be Rs.4,852 per day. Though as per the statistics of the Department of Tourism the average spending of a domestic tourist per day is Rs.1,275 and that of a foreign tourist is Rs.1,944 per day, it was found out that tourists staying in the luxury hotels of Bhubaneswar, Cuttack and Puri spend much more than the average. The per capita daily expenditure on different heads by tourists staying in different hotels was also found out. The figure below shows that average expenditure of a foreign tourist is more than a domestic tourist. The total tourist expenditure on all the four heads is thus estimated to be Rs.195,38,92,960. This is the amount of direct income that the hotels, transport providers, retail outlets, catering units inside and outside the hotels earn due to tourist expenditure. The following table shows the average per capita expenditure of tourist per day in selected hotels of Orissa.

Table-1. Expenditure incurred by Tourists in selected Hotels
Average Spending by Tourists of all the selected hotels

Expenditure Heads	No. of Tourists		Per Capita Daily Expenditure (in Rs.)	
	Domestic	Foreign	Domestic	Foreign
Accommodation	3,12,470	28,170	780	1,698
Food			511	873
Transport			807	1,553
Shopping			592	728
Total			2,689	4,852

4. Indirect Income

Expenditure pattern of the hotels, transport providers, other service providers meeting the needs of tourists was studied with the help of a questionnaire. Out of the entire tourist expenditure that accrues to the direct stakeholders as direct income, a part goes to the government as taxes. Savings constitute another leakage from the income of direct beneficiaries. Corporate saving and corporate tax constitute a negligible share of the total amount as most hotels report loss or break-even due to huge long term investment on fixed assets and heavy depreciation. Other taxes as applicable to most of the expenses incurred by the tourists are recycled into the system through various expenditure of the government. Therefore, amount of indirect income is calculated from the total tourist expenditure excluding visible outflow. Thus a part of the tourist expenditure goes to the indirect beneficiaries of tourism activities who provide various items to the direct beneficiaries. It was found out that all the indirect beneficiaries are not local people as many items of consumption of tourists are sourced from other states as these are manufactured there. A significant proportion of the total tourist expenditure goes out of the state for payment towards purchase of raw material for construction of the hotel, purchase of vehicles, decorative, equipments required for the kitchen, some food ingredients for preparation of food, toiletries, etc. But except the materials for construction of hotel a negligible proportion of income goes out as import cost towards purchase of food ingredients and other consumables of tourists. Taking all these things into consideration the leakages from the income stream and the capture rate was calculated. The capture rate is the percentage of money captured by the local community on various items of consumption of the tourist. Capture rate is calculated by collecting information from hoteliers, retailers, service providers about the source of the various items purchased by them, the distributor's margin and the retail margin. Out of every 100 rupee spent on each of the major four heads i.e. food, transport, accommodation and retail by the tourists, the expenditure on each items and their respective capture rate was calculated.

In this way the total amount of money captured from the tourist expenditure on transport, sightseeing, food, accommodation and retail purchase is Rs.89,43,49,801. This is the amount captured by the state as indirect income from tourist expenditure that goes to local people indirectly associated with tourism. A detail account of calculation of capture rate is given below.

4.a. Accommodation

Accommodation for tourists requires a number of materials which need to be purchased by hotels from retailers, or suppliers. However all these items are not sourced from the local market and a major part of income leaks out to other states. Leakages are more in case of construction, decoration, furniture and fixture but in case of recurring expenditures capture rate is higher. Out of the total income spent by tourists on accommodation the percentage of income captured by the state is only 45%. Accordingly, the amount of indirect income captured by the state from accommodation arrangements of the hotels for tourists is Rs.26,23,63,403.

Table 2.a.

Accommodation		100
Capital Cost		43
	Repayment (Construction),etc.	-12
	interior décor	-14
	Furniture & Fixture	-13
	Capture (labour cost)	4
Recurring Exp.		57
a	Salary wages	33
b	Maintenance-Local Payments for maintenance & Labour/retailer (Intrr+F&F)	12
c	Security/Insurance	4
	Outflow of funds (a+b+c)	(5+2+1) = -8
	Capture	41
	Total Capture on Accommodation	45

Negative signs denote outflows

4.b. Food and Beverage

Food and beverage is a significant item on which the foreign tourists spend about 18% and the domestic tourists spend 19% of their total expenditure according to the survey result. Thus the total direct expenditure on food of the tourists staying in these hotels is equal to Rs.36,85,06,191. A part of this amount constitutes the indirect income of suppliers of food ingredients (groceries, vegetables, non-vegetables, bakeries and confectionaries) to the hotel, soft drinks, bar, fuel etc. Data was collected with regard to the expenditure made by hotels on salary and wages of staff in the kitchen, other costs like maintenance, power, fuel etc. Food cost of the hotels is usually 25% (in case of big budget hotels) to 45 % (in case of small hotels) of the total food sale. This amount goes to the suppliers of various food ingredients, both local and outsiders. Taking the major food ingredients it was found out that Rs.29.6 is captured out of Rs.37 spent on food ingredients. Similarly in case of overheads that include salary and wages of staff, power/ fuel, Rs.38 was calculated as capture rate as most of the staff members are locals. In equipment purchase and its maintenance, the capture rate is only Rs.2.25 out of Rs.9 spent on it. Miscellaneous expenditure include expenditure on publicity, food festivals etc. to promote the products of a hotel. From the miscellaneous expenditure of Rs.9, R is spent locally. In this manner, it was estimated that out of the total income earned by the suppliers of food ingredients and staff of the hotels in food preparation, 74.85% goes to local suppliers and local staff. The rest goes outside the state. In this way, the total indirect income from food captured by the state comes to Rs.27,58,26,884.

Table 2.b.

Food		100
Raw Materials		37
	Local Produce	29.6
	Outside State	-7.4
Machinery Equipment		9
	Local (maintenance/retail/etc.)	2.25
	Outside State	-6.75
Overheads		45
	Salary/wages	38
	power/fuel	-7
Misc.		9
	Local	4
	Outside	-5
	Capture	74.85

Negative signs denote outflows

4.c. Transport and Sightseeing

Transport and sightseeing constitutes an important segment of the tourism activity. Foreign tourists spend 32% (on an average) and domestic tourists spend 30% (on an average) of their total expenditure on transport and sightseeing. Some of the hotels have their own transport arrangements. Some others have contractual agreements with other travel agencies/tour operators at the regional level. The total amount of tourism expenditure spent on transport and sightseeing is Rs.59,16,34,831. Out of the total amount spent on transport by hotels and tour operators, a part goes to the petrol pumps and service centers, auto-spare shops, automobile dealers, insurance agents and a part goes to the staffs who work in the transport department of the hotels and travel agencies. Here again an effort is made to compute the capture rate due to purchase of vehicles or spares for transportation, fuel, insurance etc. from outside and a major part going out as railway outflow. Railway outflow constitutes a major segment of leakages as besides salary, wages and local maintenance all the income generated from railways goes to other states. The total indirect income from tourism expenditure on transport and sightseeing captured by the state is Rs.14,25,83,994 which constitutes only 24.10% of the total tourist expenditure on transport and sightseeing. Tourists spend a major part of their expenditure on transport and sightseeing. However, much less of the tourist expenditure on transport and sightseeing remains within the state due to leakages.

4.d. Shopping

Shopping or retailing constitutes another important segment of the tourist's expenditure. It was found out that foreign tourists spend 15% and domestic tourists spend 19% of their total expenditure on shopping. This amount goes to various

local retailers, vendors and wholesalers. However all the money spent by tourists on shopping do not circulate in the local economy as retailers and wholesalers buy some of the retail products from producers staying outside the state. The kind of purchases made by the tourists is usually handicraft items, handloom items, factory made items /other retail items like cloth, shaving kits, medicines, sanitary items etc. Out of every 100 rupees, money spent on handloom is 33 rupees, on handicraft 39 rupees, on other retail items 19 rupees and the rest on miscellaneous items. As handicraft items are basically made locally the capture rate in such cases is more. For handloom items the capture rate is also large but it is not as large as the handicraft items. But for factory made items capture rate is much less. Thus the average capture rate comes to 52% for shopping and the indirect income from shopping is Rs.21,35,75,519.

Table 2.c.

Local Transportation & Sightseeing		100
	Bus	57
	Taxi	19
	train	21
	Water Transport	0.1
	Local Transport (Rickshaw/Auto)	2.9
Total Outflow		-75.9
	Railway Outflow	-18.9
	Fixed Cost Capital(-)	-34.2
	Recurring Exp(Fuel, Spares) (Excl. local payment) (-)	-22.8
Capture	(Salary/wages/profit)	24.1

Negative signs denote outflows

Table 2.d.

Shopping		100
	Handloom	33
	Handicraft	39
	Factorymade/Retail	19
	Misc.	9
Outflow		48
	Raw Material (Handloom) (yarn, colour, etc.)	-14
	Raw Material (Handicraft) (metals, cloth, etc.)	-9
	Factory-made/Retail (All Materials)	-17
	Misc. (medicine, etc.)	-8
Capture		52

Negative signs denote outflows

Summing up all these captured indirect incomes we found out that the aggregate indirect income generated inside the state due to tourist expenditure is Rs.89,43,49,801. This is 45.77% of the initial total tourist expenditure.

Table 2.e.

Capture Rate		Total Expenditure (in Rs.)	Capture Amt (in Rs.)
Accommodation	45.00%	58,30,29,786	26,23,63,404
Food	74.85%	36,85,06,191	27,58,26,884
Transport	24.10%	59,16,34,831	14,25,83,994
Shopping	52.00%	41,07,22,152	21,35,75,519
Total		1,95,38,92,960	89,43,49,801
		Capture (total)	45.77%

5. Induced Income from Tourist Expenditure

For studying the secondary effect of tourism expenditure, it is imperative to study the induced income from tourism expenditure. Induced effect is measured by calculating the expenditure incurred by both the direct and the indirect beneficiaries like the employees, contract workers, retailers, suppliers and service providers who experience an enhancement of their income due to tourism activities in the state. 600 employees from the selected hotels, retailers and service providers were contacted and information on their salary, income and their expenditure on different heads were collected. It was found out that hotels mostly recruit local people and the percentage of employees from other states is on an average 2% of the total employee's strength. As 90% of the employees and their family members stay inside their state, the leakages that could have occurred due to repatriation of money from the place of employment to their home state are negligible. It constitutes 0.1% of the total income of these employees. The percentage of salary / income of 600 employees / service providers / contract workers from different categories of income that goes to savings are given below:

From the total number of respondents 137 belonged to the category whose average income per month was Rs.3,000. They save on an average 2% of their income per month. 314 respondents belonged to the category whose income per month was Rs.7,500 per month. Their savings was 7% of their income per month on an average. Respondents having average income Rs.15,000 per month were 89. Their average savings is 14% of their income per month. The above three categories do not come under the tax net. 41 respondents have average income of Rs.25,000 per month and they save and pay tax to the extent of 29% of their income. Similarly, 19 respondents having average income Rs.35,000 per month save 37% of their income. All the three categories make compulsory saving in order to avoid tax. Deducting the savings from the total income of the employees we get

Rs.5,87,94,060 as income after tax and saving. This is the amount of money which is spent by the respondents on various items of consumption. The capture rate on various items of consumption has been calculated and then the induced income from tourist expenditure is calculated as follows.

Table – 3. Income, Savings and Expenditure

Income/salary per month	Average Monthly Income	No. of Respondents	Savings & tax as a % of Income / salary	Income after saving and tax (% of Total Income)
Up to Rs.5000	Rs. 3,000	137	2	98
Rs.5,000 to Rs.10,000	Rs. 7,500	314	6.5	94
Rs.10,000 to Rs.20,000	Rs. 15,000	89	14	86
Rs.20,000 to Rs.30,000	Rs. 25,000	41	29	71
Rs.30,000 to Rs.40,000	Rs. 35,000	19	37	63
Total		600		

Table - 4 Induced Income and Employment

Income Range	Avg. Income	Re-spondents	Total Income in '000s	Sav-ings	Exp. Pm Pf	Consumption Pattern									
						Avg. Exp. p.m.	Food	Accom / HR	Cloth-ings	Convey-ance	Enter-tainment	Edu-cation	Travel	Misc	Total
Up to Rs.5000	3000	137	4932	2	4833	2940	1490	450	260	180	100	260	125	75	0
						%	50.68	15.31	8.84	6.12	3.40	8.84	4.25	2.55	100
Capture %			*	73	3207	66.36	33.36	15.23	2.94	3.13	2.61	6.37	1.70	1.02	
Rs.5,000 to Rs.10,000	7500	314	28260	7	26423	7013	2180	1500	450	1000	300	700	350	533	0
						%	31.09	21.39	6.42	14.26	4.28	9.98	4.99	7.60	100
Capture %			*	412	18130	68.61	20.13	21.23	2.54	6.73	2.96	8.20	1.23	5.61	
Rs.10,000 to Rs.20,000	15000	89	16020	14	13777	12900	3160	3250	1150	2000	600	1000	500	1240	0
						%	24.50	25.19	8.91	15.50	4.65	7.75	3.88	9.61	100
Capture %			*	220	9693	70.35	16.74	25.00	4.36	7.29	3.07	6.09	0.99	6.82	
Rs.20,000 to Rs.30,000	25000	41	12300	29	8733	17750	3430	4750	1400	3500	800	1350	1000	1520	0

						%	19.32	26.76	7.89	19.72	4.51	7.61	5.63	8.56	100
Capture %		*	138	6093	69.77	13.60	26.61	3.81	9.27	2.95	5.93	1.65	5.96		
Rs.30,000 to Rs.40,000	35000	19	7980	37	5027	22050	4530	5500	1600	4500	1000	1700	1500	1720	0
						%	20.54	24.94	7.26	20.41	4.54	7.71	6.80	7.80	100
Capture %		*	79	3497	69.55	15.29	24.80	3.42	9.93	2.94	5.87	1.73	5.57		
Total		600	69492	923	58794										

Total amount spent by the respondents 58794 84.61%

Total Capture amount 40620 58.45%

Calculation of capture rate on the induced income from tourism gives the actual amount of money that circulates inside the state due to a growth of income of the indirect beneficiaries of tourism. From a total income of Rs.6,94,92,000 of the 600 respondents 84.61% i.e. Rs.5,87,94,060 is the income spent on various items of consumption and services. From this the amount which is captured by the state is equal to Rs.4,06,19,727. This is 58.45% of the total income of 600 stakeholders. This is the amount of induced income generated from an income of Rs.6,94,92,000. Computing the induced income from a total indirect income of Rs.89,43,49,801, we get Rs.52,27,68,736 as induced income. Now this amount is added to the total direct and indirect income and the whole is divided by the total direct income.

Table – 5. Summary of Incomes from Tourist Expenditure

(Amount in Rs.)

	Domestic	Foreign	Total
Direct Income (A)	1,68,05,45,834	27,33,47,126	1,95,38,92,960
Capture Rate	45.77%		
Indirect Income (B)			89,43,49,801
Capture Rate	58.45%		
Induced Income (C)			52,27,68,736
Total Income (A+B+C)			3,37,10,11,498
Multiplier Effect	(A+B+C) / A		1.73

Direct Income

(Amount in Rs.)

Type of Expenditure	Total Income	Capture Rate	Indirect Income
Accommodation	58,30,29,786	45.00%	26,23,63,404
Food	36,85,06,191	74.85%	27,58,26,884
Transport	59,16,34,831	24.10%	14,25,83,994
Shopping	41,07,22,152	52.00%	21,35,75,519
Total	1,95,38,92,960	45.77%	89,43,49,801

Induced Income	Indirect Income	Capture Rate	Total Induced Income
	89,43,49,801	58.45%	52,27,68,736
Multiplier Effect	(Direct + Indirect + Induced) / Direct		1.73

6. Conclusion

The above analysis reveals that tourism has a high linkage with other sectors for its survival and growth. This linkage also helps in distribution of income among various sections of the society resulting in inclusive growth. However, the underdeveloped condition of industrialisation in the state lowers the capability to capture the income causing leakages from the income generated from tourism. This is the reason why income multiplier in this case is only 1.73. For increasing the value of income multiplier and thus providing greater benefit of tourism to other sectors, diversification in the production base of the state is to be made thereby reducing the dependence of the state on other states for meeting the requirements of the tourists.

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