

An Experimental Comparison of Tourism Entrepreneurship : Impact Learning and Policy Implications from Meghalaya, India

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ABSTRACT :

The tourism sector is one of the most attractive and fastest growing economic sectors globally with socio-economic impacts that primarily manifest through tourism entrepreneurship. Accordingly, an inquiry into tourism entrepreneurship with a focus on entrepreneur's socio-economic outcomes in terms of impact learning and policy implications is most appropriate. The study is focused on Meghalaya, India and applies an experimental comparison methodology with the application of difference-in-difference (DinD) technique. As such, the sample size of 400 comprises of the experimental group (EG) and control group (CG) of 200 samples each covering socio-economic variables. The impact learning are inferred in terms of a DinD score which is the intra and inter variation between the EG and CG and is expressed symbolically as, $(E_1 - E_0) - (C_1 - C_0)$ where 1 = current year and 0 = base year. A positive score portrays a favorable impact and vice versa. The learning assimilated shows a positive impact of tourism entrepreneurship on the entrepreneur's socio-economic outcomes. It brought a positive change in the overall status of the entrepreneur. However, consistent with the potentialities and possibilities of tourism in Meghalaya, the policy implications derived exhibits the need for concerted efforts and serious initiatives on the part of the government, non-government organisations, local authorities and all stakeholders on branding and marketing, development of a holistic tourism destination, equipping entrepreneurs with hospitality and presentable behaviour, improvement of infrastructure like airport, checking the service quality gaps of tourism entrepreneurship and emphasis on sustainable tourism development.

Key words : experimental group, control group, tourism entrepreneurship, impact, socio-economic

I. EXPERIMENTAL COMPARISON OF TOURISM ENTREPRENEURSHIP

The tourism sector is defined as per the demand approach as 'the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes' (World Tourism Organisation [WTO], 1995). It is one of the most attractive and the fastest growing industry in the world (Othman & Rosli, 2011) encompassing a range of activities that have been in perennial existence with impacts on such as economic, social, political, cultural, overall national development and international relations (Ashley, 2000; Brida, Carrera, & Risso, 2008; Fayissa, Nsiah, & Tadasse, 2007; Goodwin, 2006; Vellas, 2011; WTO, 1995; World Travel and Tourism Council, 2012; Zortuk, 2009).

Globally, this impact primarily manifest through tourism entrepreneurship. Conceptually, the term entrepreneur is French and is derived from the verb *entreprendre* which means *to do* or *to undertake*. It is divided into two parts – *entre* meaning *between* and *preneur* meaning *taker*. Hence, an *entrepreneur* is a *between-taker* or a *go-between* (Filion, 2011). Moreover, the leading definitions define entrepreneur as one who predicts and acts upon change within markets and bears the uncertainty of market dynamics (Knight, 1921) and an innovator who implements change within markets through the carrying out of new combinations (Schumpeter, 1934). As such, entrepreneurship is the phenomenon associated with entrepreneurial activity (Ahmad & Seymour, 2008) and the ones focused upon tourist clientele and running operations accordingly are classified as tourism entrepreneurship. Contemporarily, the tourism sector is dominated by microenterprises and the self-employed (Oldbell, 2007). It comprises as the major form of entrepreneurship especially in the context of developing countries (Indian Institute of Tourism and Travel Management, 2010; Manyara & Jones, 2007).

Accordingly, the impact of tourism is primarily seen on the socio-economic domains at macro and micro levels (Coetzer, 2001/02; United States Travel Association, 2010). Its growth has an impact on employment, GDP, tax revenue, infrastructure, foreign exchange earnings, balance of payments and the overall economy (Fayissa et al., 2007; Flecha, Fusco, Damiani, & Amaral, 2010; Kim, 2002; Pao, 2005). It generates direct effects on expenditure, indirect effects concerning intermediate consumption for the production of goods and services and induced effects concerning expenditure by employees from wages paid by companies (Vellas, 2011). Hence, it exhibits change of socio-economic nature and primarily through tourism entrepreneurship (Ashley, Brine, Lehr, & Wilde, 2007; Jamieson, Goodwin, & Edmunds, 2004). The microenterprise contributes to economic growth through the primary and secondary pathways that go beyond job creation (Leegwater & Shaw, 2008). In India, they are well known for their contribution to industrial production, exports and employment (Ramarao, 2012).

Tourism brings about a positive impact on the local economy and entrepreneurial development (Ashley, Roe, & Goodwin, 2001; Othman & Rosli, 2011). The poor are involved in all the initiatives as individual producers, employees, casual labourers and operators of microenterprises (Ashley et al., 2001). A high proportion of business enterprises come from the small sector (Awang, Aziz, & Samdin, 2012). As such, tourism creates opportunities for microentrepreneurs because start-up costs and barriers to entry are relatively low (Othman & Rosli, 2011; United Nations Economic and Social Commission for Asia and the Pacific, 2005). The tourism entrepreneurs contribute to raising productivity, dispersal of economic power base through industry ownership, creating employment, commercialising innovative products and creating new markets (Awang et al., 2012). On sustainable practice of microenterprise the impacts are mainly seen in socio-economic domains of the entrepreneurs (Kreag, 2001) amongst others. It provides employment, training, business skills and improves the socio-economic outcomes to family and community. It impacts upon the wages and earnings of entrepreneurs, livelihood strategies of local households, patterns of growth of the economy and the infrastructure or natural resource base of the destination (Ashley et al., 2007; Awang et al., 2012; Jamieson et al., 2004; Rola-Rubzen et al., 2011).

On this backdrop, an analysis into tourism entrepreneurship is most appropriate. In relation, the impact evaluation approaches in development studies have graduated and improved over time. This increases the validity and reliability of results and inferences manifold. Contemporarily, one such area is impact evaluations using the 'experimental comparison approach'. Thus, the present study aims to explore the 'impact learning and policy implications' from Meghalaya, India through an experimental comparison of tourism entrepreneurship with a focus on the entrepreneur.

II. METHODOLOGY:

In general, the impact evaluation approaches are classified into classical and modern. The classical approach encompasses impact evaluations which are stand alone i.e. they study the impact of an activity or intervention on the experimental group (EG). This approach is faced by the basic limitation of non-comparability of outcomes of the EG with the control group (CG) (the group which has no access to the intervention but they still develop outcome on account of their operations). Hence, the true nature and degree of impact may not be derived through such evaluations. Consequently and as an improvement, the modern approach features a comparison with the CG (Baker, 2000; Leeuw & Vaessen, 2009). In addition, the compared outcomes between the groups are calculated through difference-in-difference (DinD) (Chemin, 2006; Deininger & Liu, 2009a; Deininger & Liu, 2009b; Ghalib, Malki, & Imai, 2012; Islam, 2009; Love, 2003; Mangala & Chengappa, 2008; Owuor, 2009; Setboonsarng & Parpiev, 2008). DinD refers to the intra and inter

variation between the EG and CG and is expressed symbolically as, $(E_1 - E_0) - (C_1 - C_0)$ where 1 = current year and 0 = base year. Hence, DiD evaluates the impact of the said entrepreneurial activity by deriving a score. A positive score portrays a favorable impact (i.e. the outcomes of the EG>CG) and a negative score vice versa (i.e. the outcomes of the EG<CG). A 'zero' score depicts no impact (i.e. the outcomes of the EG=CG).

In addition, the main methods of impact evaluation under the modern approach are quantitative in nature and generally span ex ante and ex post design (Khandker, Koolwal, & Samad, 2010). In the present context, the modern approach and based on the ex post design where in analysis is done on pre and post data is applied. Overall, the analysis based upon this approach contributes enormously in the derivation of valid and reliable results on the subject matter of socio-economic impact learning and derivation of policy implications.

Further, the methodology covers a sample size of 400 and classified into 200 samples each for the EG and CG across retail, café, restaurant and accommodation microenterprises collected during November, 2015 to March, 2016. The variables examined encompass the socio-economic domains and impact learning spread over the period of five years. The economic classification includes impact on income per month, contribution to household expenditure per month, savings per month, household assets, living standard, household economic decision making, ability to make purchase decisions, contribution to household goals and so forth (Ashley, 2000; Ashley et al., 2001; Flecha et al., 2010; Jamieson et al., 2004; Tatoglu, Erdal, Ozgur, & Azakli, 2000; Wang, Pfister, & Morais, 2006). The social classification includes access to learning, access to health services, access to social amenities, mobility and travel, recognition and acceptance in community, social networks, self-confidence and self-esteem and so forth (Ashley et al., 2001; Jamieson et al., 2004; Tatoglu et al., 2000). The data analysis evaluates impact through absolute measurements for income, expenditure and savings and an equal interval scale of 'one' to 'five' for the other variables. They stand for 'no change', 'small change', 'visible change', 'extensive change' and 'enormous change' respectively. Statistically, t-test (two tailed) is applied for testing the significance level of impact.

III. IMPACT LEARNING :

On collection of data from the field survey, an entrepreneur's profile (Table 1) in terms of gender, age, literacy level and marital status is compiled. It highlights the structural make-up of the entrepreneurs included in the study. Moreover, the objective of creating the profile is assessing the homogeneity of the groups for valid and reliable comparison. In the case of both the EG and CG, the majority of the entrepreneurs are females thereby corroborating to the sizeable prevalence of female entrepreneurship in Meghalaya. The

entrepreneurs are primarily in the age bracket of 26-45 and are under 10th pass in literacy level. The early (and in some cases young) initiation into entrepreneurship opens the field for more and bigger possibilities in terms of diversification, scaling and growth in future. In addition, most of the entrepreneurs are married. Overall, the entrepreneur's profile portrays a favourable degree of homogeneity between the two groups thereby adequately underlining the viability and feasibility of an experimental comparison.

Table : 1
Entrepreneur's Profile

Variable	Category	EG	CG	Total	Average	
					EG	CG
Gender	Male	69	74	143	Mode = Female	
	Female	131	126	257		
	Total	200	200	400		
Age	< 26	33	15	48	Median = 36-45	
	26-35	60	65	125		
	36-45	62	69	131		
	46-55	24	31	55		
	> 55	21	20	41		
	Total	200	200	400		
Literacy level	Illiterate	51	19	70	Median = < 10 th pass	
	< 10 th pass	110	94	204		
	10 th pass	16	43	59		
	12 th pass	16	33	49		
	Graduation and above	7	11	18		
	Total	200	200	400		
Marital status	Single	30	40	70	Mode = Married	
	Married	154	141	295		
	Separated	6	3	9		
	Divorcee	0	0	0		
	Widower	10	16	26		
	Total	200	200	400		

(EG = Experimental Group, CG = Control Group)

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The tourism entrepreneurship is the base and the platform upon which the impact learning is based upon. As such, its profiling (Table 2) portrays the degree of homogeneity between the EG and CG. This is important for experimental comparison studies as the greater the homogeneity between the groups, the more valid and reliable are the outcomes that are compared. In the case of both the EG and CG, the enterprise type are mainly in the order of retail, café and restaurant. The EG enterprises are those which are located inside or around the tourism resources and/or attractions and service the demands of the tourist. In addition, they also include enterprises which are specifically engaged in the provision of tourism-related solutions, irrespective of their location. Conversely, the CG enterprises are engaged in servicing non-tourism clients and are located at a distance from the tourism resources and/or attractions. In both the groups, retail is the major form of enterprise type. This highlights the entrepreneurial practice prevailing in the market. It is crowded on the same activity. However, this also throws possibilities of diversifying and initiation of other entrepreneurial practices. Moreover, the majority of the enterprises are sole-proprietorship in nature with family being the other. Such a nature of enterprise is advantageous on many counts like start-up, planning, decision making, operations, management and so forth. On the other hand, it presents many challenges particularly in terms of financing and expansion planning.

In addition, the majority of the enterprises have a current investment of ₹ 3001 to ₹ 5000 on equipments in both the groups. The current investment concerns the amount parked on equipments as defined for enterprises engaged in providing or rendering of services under the MSME Development Act, 2006. This is because tourism is a service sector and the tourism-related MSE are primarily engaged in the provision of services. Overall, the current investment is mostly of the range between ₹ 400 to ₹ 10000 with an average of ₹ 10980 and ₹ 3846.50 in the EG and CG respectively. The relatively low investment is an important indicator of the size of the enterprises. In particular and in keeping with the nature of the tourism sector, the EG have higher investments on equipments on account of greater need to spend on utensils and crockery, basic furniture and display racks, aesthetics and presentation and so forth. Moreover, the majority of the enterprises do not involve employment of others. The sole-proprietor is the owner, manager, employer and employee. A few enterprises engage employees with the numbers ranging between one and three. However, the majority of such employees are unskilled and/or semi-skilled with some being engaged only on a part-time basis.

Importantly, all the enterprises under study are of micro size. The investment on equipment does not exceed ₹ 10 lakhs across all enterprises in both the groups. This reflects on the status of tourism and tourism entrepreneurship. The entrepreneurs prefer

microenterprises in their practice of entrepreneurship which also depicts the limited vibrancy of the tourism sector. As such, scaling up is primarily seen as unfeasible on account of the nature of visits and demand by the tourists. Overall, the profile presents the two groups as being visibly homogenous across categories and thereby depicting the feasibility of a valid and reliable experimental comparison.

Table : 2
Tourism Entrepreneurship Profile

Variable	Category	EG	CG	Total	Average	
					EG	CG
Enterprise type	Retail	109	140	249	Median = Retail	
	Café	71	51	122		
	Restaurant	14	9	23		
	Accommodation	4	0	4		
	Others	2	0	2		
	Total	200	200	400		
Enterprise nature	Sole	144	150	294	Median = Sole	
	Family	47	49	96		
	Partnership	1	1	2		
	Self help group	6	0	6		
	Others	2	0	2		
	Total	200	200	400		
Current investment (‘)	400-1000	29	21	50	Mean = 10980 (Min = 400 Max 900000)	Mean = 3846.50 (Min = 400 Max 13000)
	1001-2000	31	42	73		
	2001-3000	29	41	70		
	3001-5000	61	57	118		
	5001-7000	27	16	43		
	7001-10000	10	14	24		
	10001-20000	4	9	13		
	20001-40000	5	0	5		
	40001-300000	3	0	3		
	300001-900000	1	0	1		
	Total	200	200	400		
People employed	None	146	143	289	Median = None	
	One	17	26	43		

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2-3	20	27	47
4-5	10	4	14
6 and more	7	0	7
Total	200	200	400

(EG = Experimental Group, CG = Control Group)

In specific relation to impact learning, the analysed variables are defined in Annexure 1 together with their respective codes. Here, E_1 , E_2 and E_3 are absolute measurements whereas the remaining variables (i.e. E_4 to S_{12}) are measured on an equal interval scale of 'one' to 'five'. The definition here refers to "a short description of how the variable used is meant, interpreted and applied in the study".

In continuation from the above, entrepreneur's economic outcomes are depicted in Table 3. The DinD figures show a positive impact of tourism entrepreneurship on the entrepreneur's economic outcomes, except in the case of three variables, namely, household economic decision making, ability to make purchase decisions and contribution to household goals. Tourism entrepreneurship brought a positive change in the economic status of the entrepreneur. The income and expenditure is statistically significantly more in case of the EG as compared to the CG. The savings is also favourable but of a lesser amount. In relation to DinD scores, the maximum score relates to access to markets and job creation with 0.28** and 0.23** respectively. On the contrary, household economic decision making records the highest negative impact with -0.19**. Overall, this highlights that the CG entrepreneurs also perform well and are exposed to relatively similar and in some case better impacts.

Table : 3
Entrepreneur's Economic Outcomes

Variable	EG (d)	CG (d)	D	(Average)
				T value of D
E_1 (')	2450.00	1426.00	1024.00*	2.28
E_2 (')	1926.50	1071.50	855.00*	2.55
E_3 (')	523.50	354.50	169.00	1.19
E_4	3.23	3.14	0.09	1.36
E_5	3.32	3.22	0.10	1.57
E_6	3.10	3.29	-0.19**	-2.80
E_7	3.02	3.18	-0.16*	-2.20
E_8	3.05	3.15	-0.10	-1.52

E ₉	2.64	2.48	0.16*	2.35
E ₁₀	2.56	2.45	0.11	1.53
E ₁₁	2.14	1.91	0.23**	2.75
E ₁₂	2.57	2.29	0.28**	3.97

(d = Intra difference, D = Difference-in-difference]

(Two tailed table value at 5% (df = 199) = 1.97, ** significant at 1%, * significant at 5%)

Table 4 portrays the entrepreneur's social outcomes. The DinD figures show a positive impact of tourism entrepreneurship across all the social variables. As in the case of economic outcomes, tourism entrepreneurship has a favourable impact on the social status of the entrepreneurs. It has uplifted them on to a different plane. Although the CG entrepreneurs also experienced a positive impact themselves, the change in the case of the EG eclipses their outcomes across the board. In relation to DinD scores, the maximum score is recorded by recognition and acceptance in community with 0.18** and self confidence and self esteem with 0.16**. In case of the least DinD scores, there is a situation of no impact (EG-CG = 0) as the EG outcomes equals the CG outcomes. This is in relation to team building skills and empowerment with a score of 0.00 in both cases.

Table : 4
Entrepreneur's Social Outcomes

Variable	EG (d)	CG (d)	D	(Average)
				T value of D
S ₁	3.20	3.09	0.11	1.54
S ₂	3.19	3.10	0.09	1.45
S ₃	3.12	2.98	0.14*	2.41
S ₄	2.66	2.57	0.09	1.06
S ₅	3.59	3.41	0.18**	2.77
S ₆	3.05	2.98	0.07	0.89
S ₇	3.01	2.85	0.16**	2.77
S ₈	2.91	2.77	0.14	1.95
S ₉	2.44	2.44	0.00	0.00
S ₁₀	2.58	2.45	0.13	1.83
S ₁₁	3.21	3.14	0.07	1.03
S ₁₂	2.77	2.77	0.00	0.00

(d = Intra difference, D = Difference-in-difference)

(Two tailed table value at 5% (df = 199) = 1.97, ** significant at 1%, * significant at 5%)

I. CONCLUSION AND POLICY IMPLICATIONS :

The entrepreneur's profile and tourism entrepreneurship profile portrays a favourable degree of homogeneity between the two groups thereby adequately underlining the viability and feasibility of an experimental comparison.

The impact learning as depicted through the DinD scores primarily shows a positive impact of tourism entrepreneurship on the entrepreneur's economic outcomes. It brought a positive change in the economic status of the entrepreneur. The DinD scores also show a positive impact across all the social variables. As in the case of economic outcomes, the tourism entrepreneurship has a favourable impact on the social status of the entrepreneurs.

The policy implications derived from the study exhibits the need for concerted efforts and serious initiatives on the part of the government, non-government organisations, local authorities and all stakeholders. This holistic intervention at the macro level is critical as it is related and affects the functioning and performance of tourism entrepreneurship, both as a sub-sector and at the unit level. Firstly, there is an urgent need for branding of tourism Meghalaya. This will contribute to better marketing of the destination. In the absence of branding, effective marketing suffers. Branding gives a 'unique identity' and 'differentiation' to the destination and 'distinguishes' it from the available competition in the clientele mind. It represents value, utility, strength and reputation. It is an 'absolute competitive advantage' and highlights this 'advantage' as a 'unique selling point'. Secondly, if Meghalaya is to be presented as a holistic tourism destination then there must be a concerted effort towards an even spread of tourism resources and attractions. To date, around 45% of the tourism spots are confined to east khasi hills district alone. The share of the other districts is poor with only west garo hills district coming close with 16% share of the tourism spots. Thirdly, we talk about the 'four P's' in marketing. For the tourism sector, the 'fifth P' is crucial. This 'P' concerns 'people'. As such, hospitality and presentable behaviour is at the center of everything tourism. The clientele now are more demanding and have huge expectations. They are more health and hygiene conscious. All of this calls for adequate attention on the experience factor of the clientele whereby giving them a great tourism experience is the key to having them back and in more numbers. Fourthly, one of the factors that determine tourist arrivals is an airport. The absence from the airport map of the country is equivalent to losing of clientele. Thus there is a need for policy efforts towards having a fully functional aviation service. Fifthly, 90% of the tourism business the world over is micro and small in nature. This is more so in the case of Meghalaya. However, there are serious gaps in the quality of services provided by such

tourism entrepreneurship. This calls for a serious policy intervention for redressal of the limitations. Sixthly, tourism development should be based on the platform of sustainability. This is more so as tourism Meghalaya is predominantly nature based. Hence, sustainability should be at the center and destination planning and development must be sensitive to the environment and its 'carrying capacity'. The stated policy measures calls for a sustained investment over a period of time. Hence, proper feasibility analysis and blueprint of the same before execution is a must.

Despite the breakthrough and advantages of experimental comparisons, the comparison of the EG and CG in general and at random without a sound base which is built upon a systematic and scientific technique presents as a major challenge and a limitation. Hence, there is a need for balancing the EG and CG in terms of certain variables (i.e. these variables take the form of covariates) thereby assisting in the derivation of a 'matched sample set'. This matched sample set is basically the EG entrepreneurs and CG entrepreneurs which are matched on the applied covariates and consequently the DinD technique is applied in order to derive the impact. Conversely, the application of Propensity Score Analysis comes to the forefront. It is primarily a contemporary impact evaluation technique which comprises of a quasi-experimental research design called Propensity Score Matching and DinD. Hence, it is basically a more systematic, scientific and solid base for matching and comparison of outcomes of the EG and CG.

REFERENCES :

- Ahmad, N., & Seymour, R.G. (2008). Defining entrepreneurial activity: Definitions supporting frameworks for data collection. Retrieved from [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=std/doc\(2008\)1](http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?doclanguage=en&cote=std/doc(2008)1)
- Ashley, C. (2000). The impacts of tourism on rural livelihoods: Namibia's experience. Retrieved from <http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2754.pdf>
- Ashley, C., Brine, P.D., Lehr, A., & Wilde, H. (2007). *The role of the tourism sector in expanding economic opportunity*. Cambridge, MA: Kennedy School of Government, Harvard University.
- Ashley, C., Roe, D., & Goodwin, H. (2001). *Pro-poor tourism strategies: Making tourism work for the poor*. London: Overseas Development Institute.

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- Awang, K.W., Aziz, Y.A., & Samdin, Z. (2012). The growth of small hotel enterprises: The roles of the state. *International Proceedings of Economics Development and Research*, 38, 145-49.
- Baker, J.L. (2000). *Evaluating the impact of development projects on poverty*. Washington, DC: The World Bank.
- Brida, J.G., Carrera, E.J.S., & Risso, W.A. (2008). Tourism's impact on long-run Mexican economic growth. *Economics Bulletin*, 3(21), 1-8.
- Chemin, M. (2006). The benefits and costs of microfinance: Evidence from Bangladesh. Retrieved from <http://matthieuchemin-research.mcgill.ca/research/microfinance2.pdf>
- Coetzer, J. (2001/02). *Micro enterprises: To evaluate and understand tourism and micro-sized enterprises in a perpetually changing environment*. PhD. Bournemouth University.
- Deininger, K., & Liu, Y. (2009a). *Economic and social impact of self-help groups in India*. Washington, DC: The World Bank.
- Deininger, K., & Liu, Y. (2009b). *Long-term economic impact of self-help groups in India*. Washington, DC: The World Bank.
- Fayissa, B., Nsiah, C., & Tadasse, B. (2007). The impact of tourism on economic growth and development in Africa. Retrieved from <http://capone.mtsu.edu/berc/working/TourismAfricawp.pdf>
- Filion, L.J. (2011). Defining the entrepreneur. In L. Dana (ed.), *World Encyclopedia of Entrepreneurship* (pp. 41-52). Cheltenham, UK and Northampton, MA: Edward Elgar.
- Flecha, A.C., Fusco, J.P.A., Damiani, W.B., & Amaral, H.F. (2010). The economic impacts of tourism in Ouro Preto, MG, Brazil. *Brazilian Journal of Operations and Production Management*, 7(2), 29-46.
- Ghalib, A.K., Malki, I., & Imai, K.S. (2012). Microfinance and its role in household poverty reduction: Findings from Pakistan. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2088196

- Goodwin, H. (2006). Measuring and reporting the impact of tourism on poverty. Retrieved from <http://www.bidnetwork.org/sites/default/files/measuring.pdf>
- Indian Institute of Tourism and Travel Management (2010). *Analyzing the factors responsible for slow-down in tourist arrivals in India*. New Delhi: Ministry of Tourism.
- Islam, A. (2009). Medium and long-term participation in microfinance: An evaluation using a large panel dataset from Bangladesh. Retrieved from https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=FEMES09&paper_id=136
- Jamieson, W., Goodwin, H., & Edmunds, C. (2004). Contribution of tourism to poverty alleviation: Pro-poor tourism and the challenge of measuring impacts. Retrieved from <http://haroldgoodwin.info/resources/povertyalleviation.pdf>
- Khandker, S.R., Koolwal, G.B., & Samad, H.A. (2010). *Handbook on impact evaluation quantitative methods and practices*. Washington, DC: The World Bank.
- Kim, K. (2002). *The effects of tourism impacts upon quality of life of residents in the community*. PhD. Virginia Polytechnic Institute and State University.
- Knight, F.H. (1921). *Risk, Uncertainty and Profit*. Chicago: University of Chicago Press.
- Kreag, G. (2001). The impacts of tourism. Retrieved from <http://www.seagrant.umn.edu/tourism/pdfs/ImpactsTourism.pdf>
- Leegwater, A., & Shaw, A. (2008). *The role of micro, small and medium enterprises in economic growth: A cross-country regression analysis*. Washington, DC: United States Agency for International Development.
- Leeuw, F., & Vaessen, J. (2009). *Impact evaluations and development: NONIE guidance on impact evaluation*. Washington, DC: NONIE.
- Love, T.E. (2003). Propensity scores: What do they do, how should I use them and why should I care? Retrieved from <http://www.chrp.org/love/ASACleveland2003Propensity.pdf>
- Mangala, K.P., & Chengappa, P.G. (2008). A novel agribusiness model for backward linkages with farmers: A case of food retail chain. *Agricultural Economics Research Review*, 21, 363-70.

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- Manyara, G., & Jones, E. (2007). Community-based tourism enterprises development in Kenya: An exploration of their potential as avenues of poverty reduction. *Journal of Sustainable Tourism*, 15(6), 628-44.
- Oldbell3. (2007). *Research into the skill needs and requirements of the hospitality, leisure, travel and tourism sectors*. Report to Department for Children, Education, Lifelong Learning and Skills, Welsh Assembly Government, Wales, UK.
- Othman, P., & Rosli, M.M. (2011). The impact of tourism on small business performance: Empirical evidence from Malaysian Islands. *International Journal of Business and Social Science*, 2(1), 11-21.
- Owuor, G. (2009). Is micro-finance achieving its goal among smallholder farmers in Africa? Empirical evidence from Kenya using propensity score matching. Retrieved from <http://ageconsearch.umn.edu/bitstream/51470/2/%20Owuor%20Visual%20Paper%20Reference%20Number%2012%20on%20Micro%20Finance%20in%20Africa.pdf>
- Pao, J.W. (2005). A review of economic impact analysis for tourism and its implications for Macao. Retrieved from http://www.amcm.gov.mo/publication/quarterly/Oct2005/Econ.impact_en.pdf
- Ramarao, R. (2012). Competitiveness of India's micro and small enterprises through functional competencies: Role in nation's development. *Vikalpa*, 37(1), 97-111.
- Rola-Rubzen, M.F., Gibbs, J., Gabunada, F., Burritt, R., Altangerel, D., Fung, L., Rubzen, B., & Carter, A. (2011). *Growing businesses in the desert: Case studies of Australian desert micro, small and medium enterprises*. Alice Springs: Ninti One Ltd.
- Schumpeter, J.A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest and the business cycle*. Cambridge, MA: Harvard University Press.
- Setboonsarng, S., & Parpiev, Z. (2008). Microfinance and the millennium development goals in Pakistan: Impact assessment using propensity score matching. Retrieved from http://www.khushhalibank.com.pk/resource_center/pdf/article_070508.pdf
- Tatoglu, E., Erdal, F., Ozgur, H., & Azakli, S. (2000). Resident perceptions of the impact of tourism in a Turkish resort town. Retrieved from <http://www.opf.slu.cz/vvr/akce/turecko/pdf/Tatoglu.pdf>

- United Nations Economic and Social Commission for Asia and the Pacific (2005). *Major issues in tourism development in the Asian and Pacific region: Enhancing the role of tourism in socio-economic development and poverty reduction*. Bangkok: UNESCAP.
- United States Travel Association (2010). *2009 travel economic impact on Georgia State, counties and regions*. Washington, DC: USTA.
- Vellas, F. (2011). The indirect impact of tourism: An economic analysis. Retrieved from http://dtxtq4w60xqpw.cloudfront.net/sites/all/files/111020-rapport_vellas_en.pdf
- Wang, Y., Pfister, R.E., & Morais, D.B. (2006). Residents' attitudes toward tourism development: A case study of Washington, NC. *Proceedings of the 2006 Northeastern Recreation Research Symposium*, 411-18.
- World Tourism Organisation (1995). *Collection of tourism expenditure statistics*. Madrid: WTO.
- World Travel and Tourism Council (2012). *Travel and tourism economic impact*. London: WTTC.
- Zortuk, M. (2009). Economic impact of tourism on Turkey's economy: Evidence from cointegration tests. *International Research Journal of Finance and Economics*, 4(25), 231-39.

ANNEXURE

Annexure : 1 Difference-in-difference Variable Code

The following refers to the 'd' in the economic (E) and social (S) variables of the EG and CG over the period of five years				Difference-in-difference (D)
Experimental Group (EG)		Control Group (CG)		
Code	Variable	Code	Variable	
EGE ₁	Income per month in rupees	CGE ₁	Income per month in rupees	DE ₁ = EGE ₁ - CGE ₁
EGE ₂	Contribution to household expenditure per month in rupees	CGE ₂	Contribution to household expenditure per month in rupees	DE ₂ = EGE ₂ - CGE ₂
EGE ₃	Savings per month in rupees	CGE ₃	Savings per month in rupees	DE ₃ = EGE ₃ - CGE ₃

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EGE ₄	Household assets	CGE ₄	Household assets	DE ₄ = EGE ₄ - CGE ₄
EGE ₅	Living standard	CGE ₅	Living standard	DE ₅ = EGE ₅ - CGE ₅
EGE ₆	Household economic decision making	CGE ₆	Household economic decision making	DE ₆ = EGE ₆ - CGE ₆
EGE ₇	Ability to make purchase decisions	CGE ₇	Ability to make purchase decisions	DE ₇ = EGE ₇ - CGE ₇
EGE ₈	Contribution to household goals	CGE ₈	Contribution to household goals	DE ₈ = EGE ₈ - CGE ₈
EGE ₉	Access to other credit sources	CGE ₉	Access to other credit sources	DE ₉ = EGE ₉ - CGE ₉
EGE ₁₀	Diversification of economic activities	CGE ₁₀	Diversification of economic activities	DE ₁₀ = EGE ₁₀ - CGE ₁₀
EGE ₁₁	Job creation	CGE ₁₁	Job creation	DE ₁₁ = EGE ₁₁ - CGE ₁₁
EGE ₁₂	Access to markets	CGE ₁₂	Access to markets	DE ₁₂ = EGE ₁₂ - CGE ₁₂
EGS ₁	Access to learning	CGS ₁	Access to learning	DS ₁ = EGS ₁ - CGS ₁
EGS ₂	Access to health services	CGS ₂	Access to health services	DS ₂ = EGS ₂ - CGS ₂
EGS ₃	Access to social amenities	CGS ₃	Access to social amenities	DS ₃ = EGS ₃ - CGS ₃
EGS ₄	Mobility and travel	CGS ₄	Mobility and travel	DS ₄ = EGS ₄ - CGS ₄
EGS ₅	Recognition and acceptance in community	CGS ₅	Recognition and acceptance in community	DS ₅ = EGS ₅ - CGS ₅
EGS ₆	Social networks	CGS ₆	Social networks	DS ₆ = EGS ₆ - CGS ₆
EGS ₇	Self confidence and self esteem	CGS ₇	Self confidence and self esteem	DS ₇ = EGS ₇ - CGS ₇
EGS ₈	Communication skills	CGS ₈	Communication skills	DS ₈ = EGS ₈ - CGS ₈
EGS ₉	Team building skills	CGS ₉	Team building skills	DS ₉ = EGS ₉ - CGS ₉
EGS ₁₀	Leadership skills	CGS ₁₀	Leadership skills	DS ₁₀ = EGS ₁₀ - CGS ₁₀
EGS ₁₁	Participation in development programmes	CGS ₁₁	Participation in development programmes	DS ₁₁ = EGS ₁₁ - CGS ₁₁
EGS ₁₂	Empowerment	CGS ₁₂	Empowerment	DS ₁₂ = EGS ₁₂ - CGS ₁₂

d = Intra difference within the group over the period of five years

Difference-in-difference (D) = Inter difference between the EG and CG