

2ND RESEARCH MANAGEMENT & ADMINISTRATION SYMPOSIUM

Estimating Economics Multiplier of Agritourism: A Hybrid Concept for Rural Economic Impact Analysis

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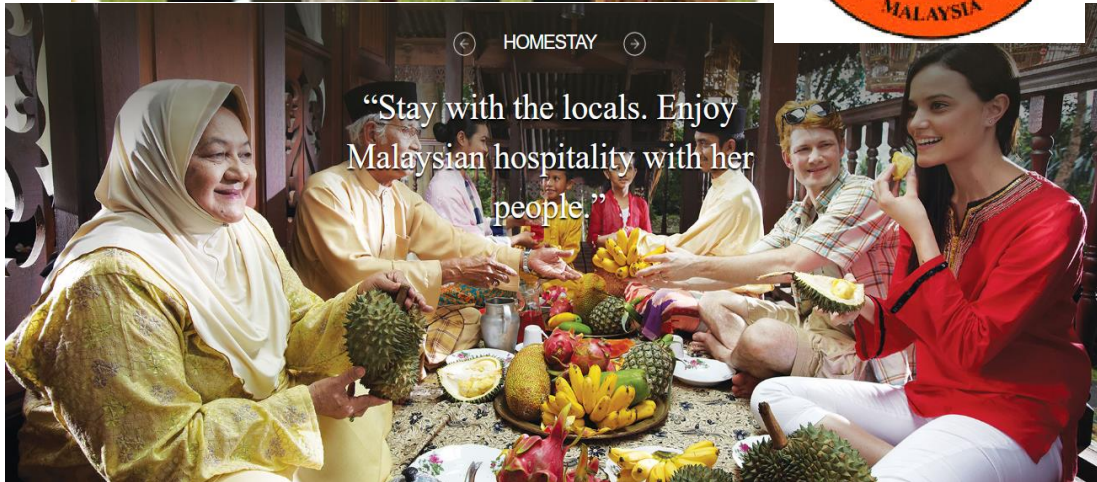
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Agritourism in Malaysia



- Agritourism offers tourists an assortment of activities relating to the agriculture sector (MOTAC).
- Agritourism activities that are well received are visits to orchards and animal farms, research centres and **homestays**.
- “Malaysian Homestay” is a **unique agritourism product** - native culture, lifestyle, nature and adventure aspect, emphasis on friendly hospitality to experience genuine Malay lifestyle at **reasonable price with full spectrum of village life**.
- **Community-based tourism**, introduced in 1998 as a government strategy to enhance local economic in the rural community through their involvement in tourism industry.

Agritourism in Malaysia



- Homestay is **not classified as accommodation facility**. It focuses on **lifestyle, culture & economic activities**.
- Homestay is an agri-tourism **hybrid concept** that merges two complex industries of **agriculture and tourism** for rural socioeconomic redevelopment.
- Lynch (2003), defined “homestay” as a type of accommodation that allows visitors or guests to pay and stay in a private home, with greater or lesser degree of interaction with the host or family members.
- This study attempts to estimate the **economic benefits of agritourism** in the selected rural area of Peninsular Malaysia.
- The intention is to establish a **robust evidence base**, identify potential economics impact and provide constructive insights for stakeholders.

Background of Study

MALAYSIAN HOMESTAY REVENUE PERFORMANCE & TOURIST ARRIVALS FOR THE MONTH OF SEPTEMBER 2023

NO.	STATE	TOTAL REVENUE	DOMESTIC TOURISTS	FOREIGN TOURIST	TOTAL TOURIST
1.	Perlis	7,490.00	226	0	226
2.	Kedah	110,169.00	2,271	0	2,271
3.	P. Pinang	75,058.00	4,275	797	5,072
4.	Perak	67,180.00	1,354	0	1,354
5.	Selangor	159,115.00	2,279	30	2,309
6.	Melaka	52,520.00	519	0	519
7.	N. Sembilan	170,059.00	917	375	1,292
8.	Johor	473,804.00	32,543	76	32,619
9.	Kelantan	35,110.00	682	2	684
10.	Terengganu	188,080.00	475	0	475
11.	Pahang	1,164,545.20	12,857	0	12,857
12.	Sarawak	363,370.85	2,361	124	2,485
13.	Sabah	846,761.83	11,361	4,335	15,696
14.	W.P Labuan	32,940.00	248	0	248
TOTAL		3,746,202	72,368	5,739	78,107

Source: MOTAC (2023) ; Industry Development Division, MOT Malaysia

- In **2022**, the tourism sector in Malaysia directly contributed nearly 48 billion RM to GDP, a significant increase compared to the previous year.
- Until **Sept 2023**, Malaysian agritourism has shown an increasing trend upwards after the demand shocks that reverberating across the global economy.
- However, the **international tourist participation** is considerably low for this sector.

3RD HIGHEST STATISTICS

INTERNATIONAL TOURIST ARRIVAL RECORD

NO.	COUNTRY ORIGIN	TOTAL TOURIST
1.	Korea Selatan	30,141
2.	China, Hong Kong & Macau	4,514
3.	Eropah	2,483

NO.	STATES	TOTAL FOREIGN TOURIST
1.	Sabah	39,190
2.	Pulau Pinang	3,608
3.	Sarawak	2,298

**LAPORAN STATISTIK
PROGRAM PENGALAMAN
HOMESTAY MALAYSIA
(SEPTEMBER 2023)**

Homestay Visitors Arrival

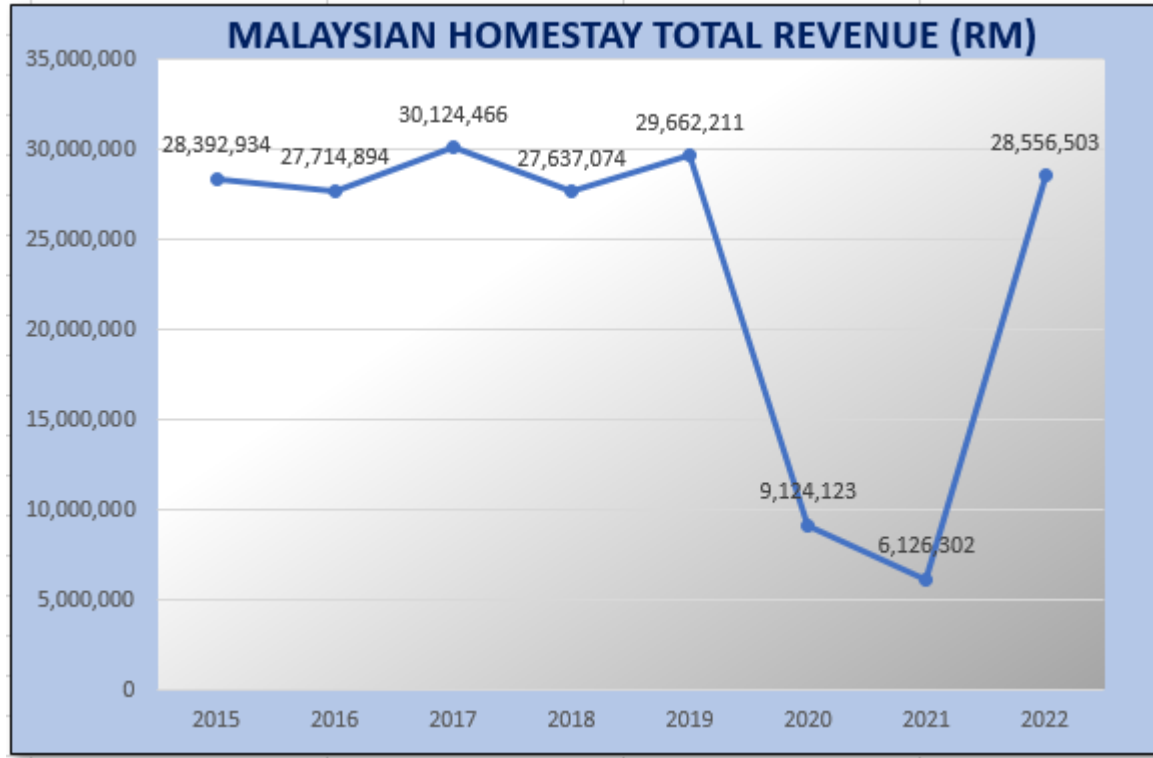
- ✓ The number of visitors has increased significantly, leads to **higher potential** economic impact and income generation on its community.
- ✓ There is a **great potential** for tourism homestay programme operators in remote areas - **revitalize rural tourism** (*12th Malaysian Plan, Gov of Malaysia, 2021-2025*).
- ✓ Homestay forms an **economic activity** in the rural area and is capable of creating **employment and income**.

NO.	ITEM	2018		2019		2020		2021		2022	
		TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%	TOTAL	%
1.	Domestic Tourists	290,153	78%	373,558	81%	114,639	85%	82,704	99.9%	549,986	97.5%
2.	Foreign Tourist	82,322	22%	85,341	19%	19,378	15%	54	0.1%	13,915	2.5%
3.	Total tourist	372,475	100%	458,899	100%	134,017	100%	82,758	100%	563,901	100%
4.	Total Income (RM)	27,637,074.00		29,662,211.60		9,124,122.66		6,126,302.14		28,556,503.14	

NO.	ITEM	2022	
		TOTAL	%
1.	Domestic Tourists	549,986	97.5%
2.	Foreign Tourist	13,915	2.5%
3.	TOTAL TOURISTS	563,901	100%
4.	TOTAL INCOME (RM)	28,556,503.14	

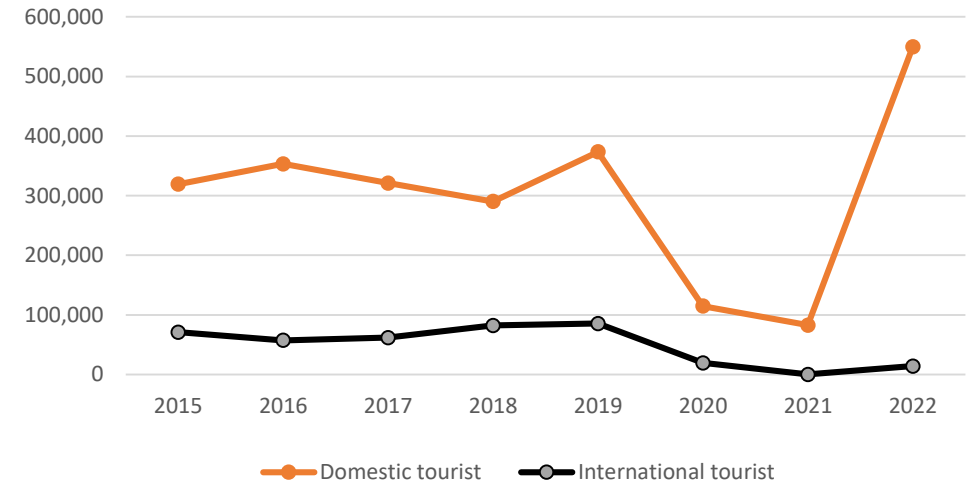
Source: MOTAC, 2022

Homestay Tourist Arrival and Revenue Generation



Source: MOTAC, 2023

MALAYSIAN HOMESTAY TOURIST ARRIVAL (2015 - 2022)



STATISTICAL BREAKDOWN OF HOMESTAY CLUSTER REGISTRATION BY STATES UNTIL 30 SEPTEMBER 2023

BIL	PERKARA	JUMLAH
1.	Number of homestay by cluster	215
2.	Total villages	477
3.	Total operator/Home	3,278

- The programme's fundamental principles are to generate **additional income while representing the local cultures** and actively contributing to the economic well-being of host communities.
- Each village could produce **similar or different** economy potential or impact on its community based on the availability of local culture and heritage attributes attached to the homestay itself.

Background of Study



interact & experience
the host daily lives +
Malaysian culture.

Research Problems:

- ✓ This study represents the **interdependency of tourist arrival** that correlates with rural **tourism income** in generating more tourists' arrival and profitability.
- ✓ The Economic impact analysis of agritourism is **limited** in its scope than other analyses.
- ✓ The significance of the economic benefits of homestay development in helping rural community or **rural tourism economy** has not been studied in detail.
- ✓ Majority of the existing Malaysian homestay research only focus on destination attributes and visitor satisfaction aspects.

Background of Study



Research Objectives :

The focus of the research is on developing a **practical methodology** with which to place an **economic value on the benefits** that are produced. More specifically, the main objectives of the research were to:

- ✓ estimate the total **economic contributions** to the local economy from visitors spending through economic multipliers.
- ✓ estimate the **output and employment multipliers** from homestay expenditure to the local region of study.

- ✓ set a **hybrid concept** for a pilot approach in assigning a monetary value to the benefits from tourist expenditure.
- ✓ make recommendations to improve the appraisal and evaluation of economic benefits to enable **better quantification** of benefits and overall outcomes.

Why do the economic benefits of agritourism need to be valued?

Most researchers focus on interrelationships between

- destination attributes,
- tourist satisfaction,
- social media marketing,
- destination image and travel intention

- ✓ Essentially regeneration is **about closing gaps**.
- ✓ It is most concerned with **delivering impacts on targeted rural areas** (typically at the sub-district level) or particular groups in society (**e.g. those without work**) such that their prospects are enhanced.
- ✓ A central consideration is the extent to which the **outputs and outcomes** arising from activities are 'additional', i.e. how it has changed the quality of life than would otherwise have been the case.
- ✓ Estimating the **multiplier effects** is an essential part of the process whereby **gross outputs and outcomes** are translated into their **net additional gains**.

✓ **Economics impact /net benefits should be valued.**



Photo © Ivan Lim Yu Meng

Significance of Study



- ✓ Comprehensive information of economic impacts on the sector to predict the future impacts or sustainability.
- ✓ Agritourism is a unique product of rural tourism that produces high **economic impacts** on labor use, business ownership and local job creation in the local community involved.
- ✓ Assist the policymakers and MOT in **evaluating the progress** of income and employment in the region studied - “Travel Motivation” that significantly influences the economic impacts.
- ✓ The results of this study can facilitate stakeholders and the government to enhance some insight of the positive benefits by **utilising rural resources**.
- ✓ Perhaps, to increase higher spending capacity which **creates more opportunities** for the domestic tourism industry (DOSM, 2022).

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- ✓ Bhuiyan, M. A. H., Siwar, C., & Ismail, S. M. (2013). Socio-economic impacts of home stay accommodations in Malaysia: A study on home stay operators in Terengganu state. *Asian Social Science*, 9(3), 42.
 - ✓ Tiraieyari, N., & Hamzah, A. (2012). Agri-tourism: Potential opportunities for farmers and local communities in Malaysia. *African journal of agricultural research*, 6(31), 4357-4361.
 - ✓ Balasingam, A. S., & Bojei, J. (2019). Homestay owners' perspective of economic sustainability of the registered Malaysian homestay. *Pertanika J. Soc. Sci. Hum*, 27, 1367-1390.
 - ✓ Yacob, R. M. (2006). Valuation of Ecotourism Development in Marine Parks, Malaysia: The Case of Redang Island Marine Park. School of Architecture Planning and Landscape, University of Newcastle upon Tyne, UK.
 - ✓ Yacob, R. M., Shuib, A., Mamat, F. M. and Radam, A. (2007). Local economic benefits of ecotourism development in Malaysia: the case of Redang Island Marine Park. *International Journal of Economics and Management* 1(3), 365-386.
 - ✓ Willis, G., & Garrod, K. G. (1999). *Economic Valuation of the Environment. Methods and Case Studies*. Edward Elgar, Cheltenham.
 - ✓ Garrod, G., Pickering, A., & Willis, K. (1993). The economic value of botanic gardens: a recreational perspective. *Geoforum*, 24(2), 215-224.
 - ✓ Matheson, V. (2004). Economic multipliers and mega-event analysis.

Literature Review

Methodology - Homestay Economic Impacts



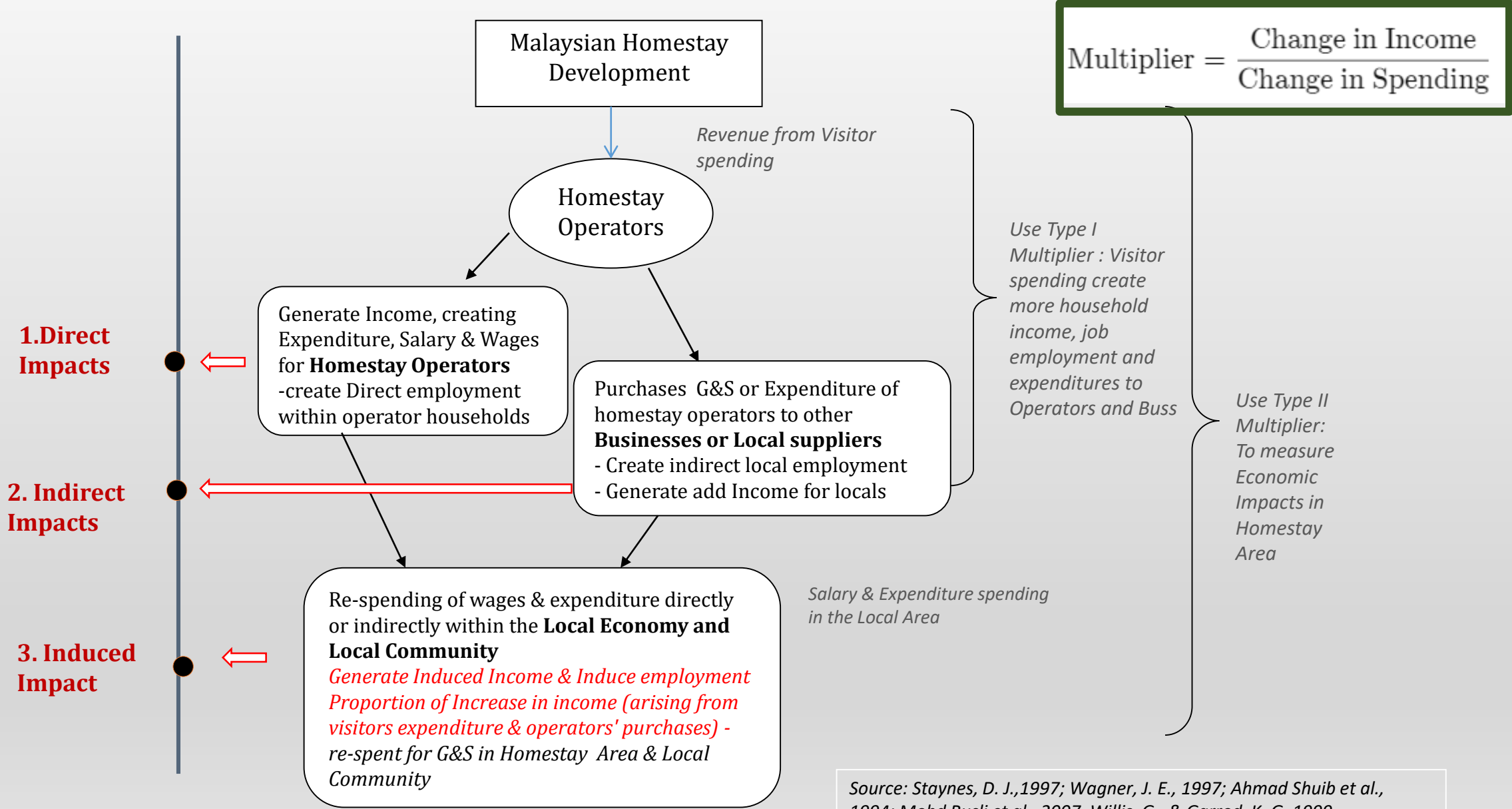
Banghuris Homestay



- ✓ Research approach **combines visitor, homestay operators and local community survey** to provide maximum credibility and to ensure no component of homestay tourism activity is overlooked.
- ✓ This provides a comprehensive view of agritourism benefits in Peninsular Malaysia.
- ✓ The important area of study is to measure the following:
 - ✓ **Direct** - Direct tourist expenditures for goods and services
 - ✓ **Indirect** - Re-spending of tourism expenditures, such as payments to employees, payments to suppliers.
 - ✓ **Induced Benefits** - Additional income spending from extra job creation within a destination - increase in consumption of employees, development of local & SME businesses and image imposed by tourists on the site.

Conceptual Framework

Economic Multiplier Concept for Agritourism Development



Economic Benefits Valuation

- ✓ The study adopted a quantitative approach involving 158 operators in 6 states, 210 tourists, 50 local communities via hardcopy survey forms.
- ✓ Snowball convenience sampling - where researchers were able to reach a population with diverse socio-cultural backgrounds.
- ✓ The questionnaire collects the necessary demographic information of the respondents and measurement of **total expenditure, and travel intention** with items adopted or adapted from prior studies.

158 Operators
210 Tourists
50 Local communities

APPENDIX A1: VISITORS QUESTIONNAIRES

ID				
DATE				

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ECONOMIC BENEFITS OF AGRITOURISM DEVELOPMENT IN
SELECTED AREAS OF PENINSULAR MALAYSIA

QUESTIONNAIRE/ BORANG KAJI SELIDIK
VISITORS/ PELAWAT HOMESTAY

APPENDIX A2: OPERATOR QUESTIONNAIRES

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ECONOMIC BENEFITS OF AGRITOURISM DEVELOPMENT IN
SELECTED AREAS OF PENINSULAR MALAYSIA

QUESTIONNAIRE/ BORANG KAJI SELIDIK
HOMESTAY OPERATOR/ PENGUSAHA

APPENDIX A3: COMMUNITY QUESTIONNAIRES

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ECONOMIC BENEFITS OF AGRITOURISM DEVELOPMENT
IN SELECTED AREAS OF PENINSULAR MALAYSIA

QUESTIONNAIRE/ BORANG KAJI SELIDIK
LOCAL COMMUNITY/ BUSINESS
PENDUDUK SETEMPAT/PERNIAGAAN

Analysis on Homestay Revenue & Expenditure (RM)

A.	Total Output of Homestay Operators		1,515,282	
B.	Total Input (within the local economy)		1,097,612	
TE	Salary, wages and benefits	578,838		52.70%
TE1	Nondurable goods (e.g. soap, towers, newspapers, etc)	66,934		
TE 2	Food and beverages (e.g. food supply)	81,707		
TE6	Other services (e.g. housekeeping service)	54,881		
TE7	Maintenance & Facilities Repair (e.g landscape, plumbing)	23,636		
TE8	Marketing & Public Relations (advertisement, signboard, etc	1356.8		
TE9	Homestay activities (e.g. Cultural activities, farm visit, etc)	40,191		
TE10	Miscellaneous Expenses (e.g. training, travel cost)	37,144		
	Sub Total (B2)	305,849		27.90%
TE3	Communication (e.g. internet, Astro, telephone)	42109.2		
TE4	Utilities (e.g. water,electricity, Astro, etc)	105,854		
TE5	Land/House Rent & Loan Interest	64,962		
		212,926		19.40%
C.	Net Profits (A – B)		417,670	27.60%
D.	Total Output spent locally (B+B2)		884,687	80.60%
E.	Percentage output spent locally(D/A)			58.34%
F.	Additional Income generated locally (D*Regional Multiplier)		952,542	
	Regional multiplier =1.0767			
G.	Number of additional jobs created if each job is RM14,400/years(F/RM14,400)			66.14
H.	Type 1 Output Multiplier (A+D/A)			1.62
I.	Type II Output Multiplier (A+D+F/A)			2.21



80.6% of the total expenditure accrued within the local area, however only 19.4% of the total expenditure “leaks” out from the region studied.

Analysis of Output Multiplier

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- ✓ Cost of labour/wage salary of employees approximately about 52.70%.
- ✓ The **operators expenditure** amounted to **72.4%** from revenue collected.
Thus, the **Net Profit** to operators was **27.6%**.

- ✓ Type I Output Multiplier (**1.62**) -Direct & Indirect Economic Impact.
- ✓ Type II Output Multiplier (**2.21**) - Total Economic Impact as REVENUE from the total costs of operation spent within the local area studied.

RESULTS



Analysis of Employment Multiplier

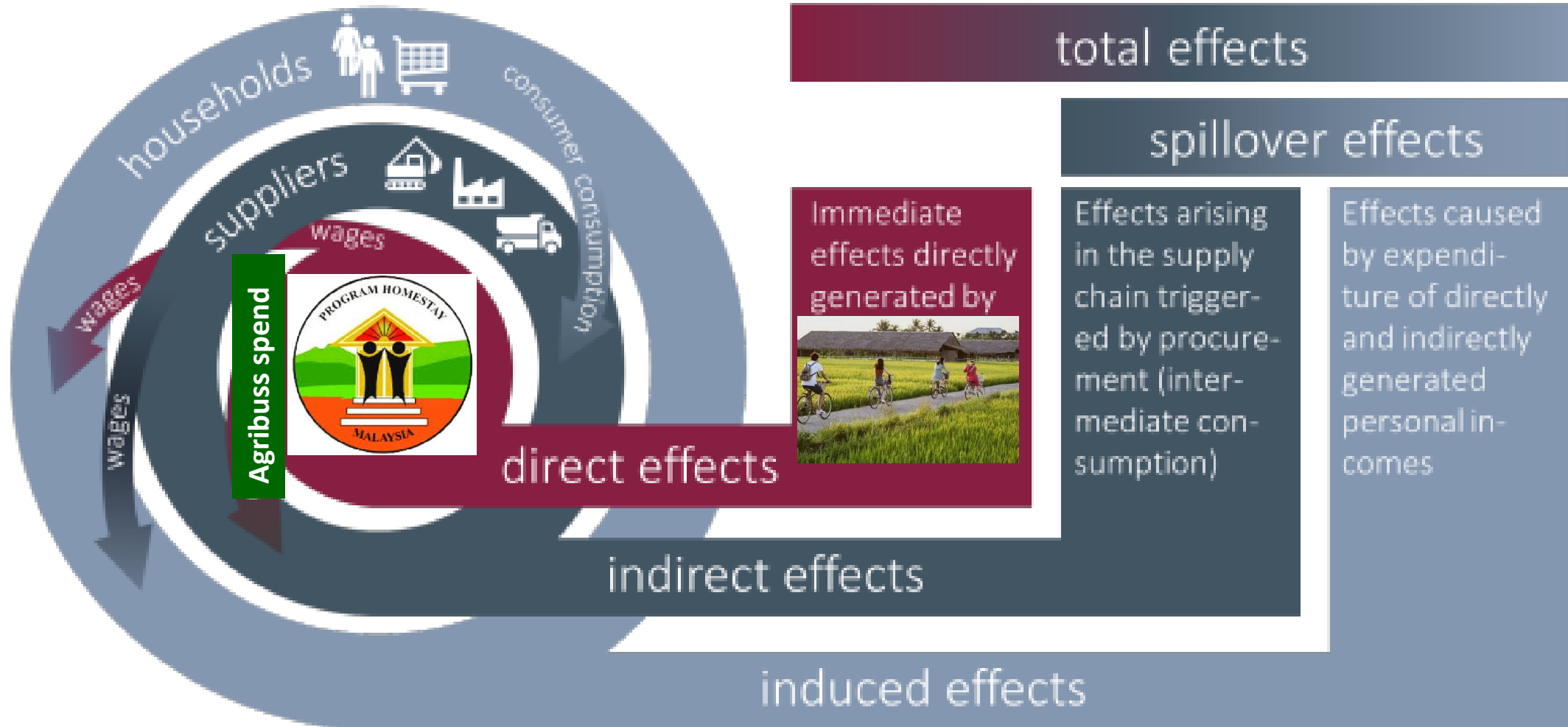
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- ✓ **66 employment opportunities** were created directly and indirectly from agritourism spending and re-spending of employees, for each job created in the area.
- ✓ Employment multiplier shows significant impact on **Potential Job Creation** (66 jobs created from indirect & induced employments).

RESULTS



- **Sub-theme 3:
Research Impact**



Conclusion & Implications

Who benefits: the boundaries of economic impact study

- ✓ A central element in valuing the expenditure and benefits - which is **not always straightforward**.
- ✓ To improve the physical and environmental quality
- ✓ The strengths of impact analysis and the relationships over which the benefits have received **little attention among researchers**.



BELONGING

INCLUSION

DIVERSITY

EQUITY

IDENTITY

Allowing for impacts on different groups in society

- ✓ **Distributional impacts** on a diverse range of villages.
- ✓ **Multiplier effects** should be identified explicitly and quantified as far as possible.

Thank You

