# Tourism Statistics and TSA Compilation Methods in Asian countries

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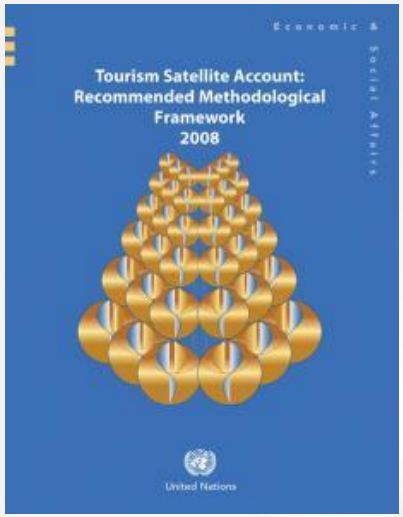
# Contents

- What is the Tourism Satellite Account?
- Results of our Survey
- Inbound Tourism GDP

# What is the Tourism Satellite Account?

- The TSA is a standard statistical framework and the main tool for the economic measurement of tourism. (http://statistics.unwto.org/content/tsarmf-2008)
- The common conceptual framework is provided by the TSA: RMF 2008.
- The TSA is one of the satellite accounts of the System of National Accounts (SNA).
- Therefore, the Tourism Direct GDP estimated in the TSA is comparable to the industry's GDP defined in the SNA.



# What is the Tourism Satellite Account?

- The TSA is composed of 10 summary tables.
- The tourism direct GDP is defined in Table 6.

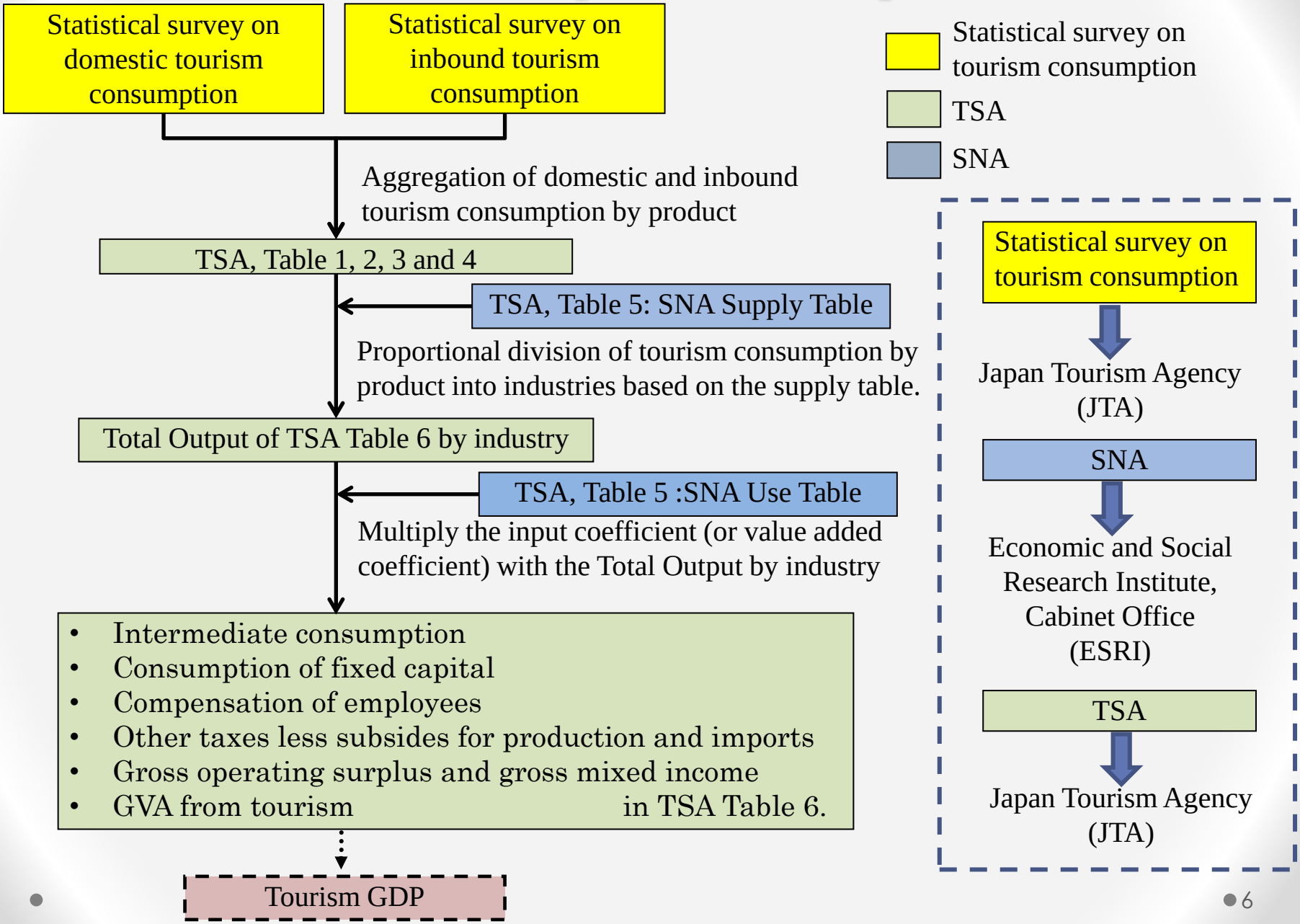
| | |
|---|---|
| Table 1 | Inbound tourism expenditure by products and classes of visitors |
| Table 2 | Domestic tourism expenditure by products, classes of visitors and types of trips |
| Table 3 | Outbound tourism expenditure by products and classes of visitors |
| Table 4 | Internal tourism consumption by products |
| Table 5 | Production accounts of tourism industries and other industries |
| Table 6 | Total domestic supply and internal tourism consumption |
| Table 7 | Employment in the tourism industries |
| Table 8 | Tourism gross fixed capital formation of tourism industries and other industries |
| Table 9 | Tourism collective consumption by products and levels of government |
| Table 10 | Non-monetary indicators |

# TSA Table 6 (Japan, 2012) (simplified)
# "Total domestic supply and internal tourism consumption"

| Products | TOURISM INDUSTRIES | | | | TOTAL tourism industries | Other industries | TOTAL output in serveces | TOTAL output in goods | Imports | Tariffs and taxes on imports | Margins | Internal tourism consumption |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hotels | Restaurants | … | Sporting and other | | | | | | | | |
| Specific products | 3,678 | 2,419 | … | 348 | 13,318 | 1,561 | 14,878 | 3,757 | 862 | 115 | 2,442 | 22,054 |
| Characteristic products | 3,677 | 2,419 | … | 295 | 13,265 | 1,459 | 14,724 | 205 | 53 | 3 | 8 | 14,993 |
| Accommodation services | 3,653 | 5 | … | 7 | 4,072 | 15 | 4,087 | 0 | 0 | 0 | 0 | 4,087 |
| Food and beverage serving services | 23 | 2,414 | … | 5 | 2,441 | 47 | 2,489 | 0 | 0 | 0 | 0 | 2,489 |
| Passenger transport services | 0 | 0 | … | 1 | 6,175 | 518 | 6,692 | 0 | 0 | 0 | 0 | 6,692 |
| Travel agency, tour operator and tourist guide services | 0 | 0 | … | 0 | 261 | 175 | 437 | 0 | 0 | 0 | 0 | 437 |
| Cultural services | 0 | 0 | … | 37 | 37 | 236 | 273 | 0 | 0 | 0 | 0 | 273 |
| Recreation and other entertainment services | 1 | 0 | … | 217 | 218 | 230 | 448 | 0 | 0 | 0 | 0 | 448 |
| Miscellaneous tourism services | 0 | 0 | … | 29 | 62 | 237 | 299 | 205 | 53 | 3 | 8 | 568 |
| Connected products | 0 | 0 | … | 53 | 53 | 102 | 155 | 3,552 | 808 | 112 | 2,434 | 7,061 |
| Non specific products | 1 | 1 | … | 2 | 6 | 1,788 | 1,794 | 13 | 0 | 0 | -1,377 | 430 |
| TOTAL output | 3,679 | 2,420 | … | 349 | 13,324 | 3,349 | 16,672 | 3,769 | 862 | 115 | 1,065 | 22,484 |
| Agriculture, forestry and fishery products | 143 | 146 | … | 2 | 292 | 47 | 339 | | | | | |
| Ores and minerals | 0 | 0 | … | 0 | 4 | 115 | 120 | | | | | |
| Electricity, gas and water | 260 | 97 | … | 12 | 602 | 64 | 666 | | | | | |
| Manufacturing | 705 | 932 | … | 32 | 2,875 | 890 | 3,766 | | | | | |
| Construction work and construction | 18 | 6 | … | 4 | 148 | 25 | 173 | | | | | |
| Trade services, restaurants and hotel services | 0 | 0 | … | 0 | 0 | 3 | 3 | | | | | |
| Transport, storage and communication services | 137 | 49 | … | 18 | 896 | 138 | 1,034 | | | | | |
| Others services | 288 | 163 | … | 53 | 1,391 | 384 | 1,775 | | | | | |
| Government services, private non-profit services to households | 14 | 10 | … | 1 | 167 | 10 | 177 | | | | | |
| Total intermediate consumption (at purchasers price) | 1,565 | 1,404 | … | 121 | 6,376 | 1,676 | 8,[illegible]52 | | | | | |
| Consumption of fixed capital | 473 | 174 | … | 49 | 2,266 | 316 | 2,582 | | | | | |
| Compensation of employees | 690 | 359 | … | 99 | 2,976 | [illegible] | 3,945 | | | | | |
| Other taxes less subsidies on production and imports | 182 | 85 | … | 45 | 630 | 121 | 751 | | | | | |
| Gross Operating surplus and Gross Mixed income | 768 | 398 | … | 35 | 1,077 | 266 | 1,342 | | | | | |
| Total gross value added of activities (at producers' prices) | 2,114 | 1,016 | … | 228 | 6,948 | 1,673 | 8,621 | | | | | |

Tourism GDP by Industry

# Overview of TSA compilation in Japan



# Questionnaire Survey

*We conducted a questionnaire survey about the TSA compilation.*

## Target Countries

| | | | |
|---|---|---|---|
| Brunei | Cambodia | Indonesia | Japan |
| Korea | Lao PDR | Malaysia | Myanmar |
| Philippines | Singapore | Thailand | |

## Survey Items

1. Status of TSA compilation
2. Development status of primary tourism statistics
   - Domestic tourism consumption
   - Inbound tourism consumption
   - Number of accommodation guests
3. Development status of the SNA and I-O table
4. Organization responsible for TSA compilation

# Status of TSA Compilation

| | Brunei | Cambodia | Indonesia | Japan | Korea | Lao PDR | Malaysia | Myanmar | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Table 1 | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | ✓ | | ✓ |
| Table 2 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Table 3 | ✓* | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Table 4 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Table 5 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Table 6 | ✓ | | | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| Other Tables | 7,9* | | 7,8, 10 | 7 | 7,8, 9,10 | | 7 | 7,9 | 7,8, 9**,10 | | 10 |
| Compilation cycle | 14 months | | | 1yr | 4yr | - | | | 1yr | - | |

✓: compiled, *: in part, **: on going

# Development status of primary tourism statistics

| | Brunei | Cambodia | Indonesia | Japan | Korea | Lao PDR | Malaysia | Myanmar | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 Domestic Tourism Expenditure | | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| 2 Inbound Tourism Expenditure | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| 3 Accommodation Guests | | | ✓ | ✓ | ✓ | | ✓ | ✓ | | | ✓ |
| 4 TSA Table 1-5 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | ✓ | | ✓ |
| 5 TSA Table 6 | ✓ | | | ✓ | ✓ | | ✓ | | ✓ | | ✓ |

- Countries that conduct a domestic survey also compile at least TSA Tables 1 to 5.
- The inbound survey is conducted in every county except Brunei.

# Development status of the SNA and Input-Output table

| | Brunei | Cambodia | Indonesia | Japan | Korea | Lao PDR | Malaysia | Myanmar | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SNA Supply Table | ✓✓ | – | | ✓✓ | – | – | ✓✓ | – | ✓✓ | ✓ | ✓ |
| SNA Use Table | ✓✓ | – | | ✓✓ | ✓✓ | – | ✓✓ | – | ✓✓ | ✓ | ✓ |
| Input-Output Table | ✓✓ | – | ✓✓ | ✓ | ✓✓ | – | ✓✓ | – | ✓✓ | ✓ | ✓✓ |

✓✓ : Compiled and Applied for the compilation of the TSA
✓ : Compiled and Not Applied for the compilation of the TSA
– : Not Compiled

# Organizations in charge

| | Brunei | Cambodia | Indonesia | Japan | Korea | Lao PDR | Malaysia | Myanmar | Philippines | Singapore | Thailand |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Statistics on domestic tourism expenditure | - | T/S/B (3) | S (2) | T (3) | T | - | S (6) | T/B/S | T/S (8) | - | T (9*) |
| Statistics on inbound tourism expenditure | - | T (3) | T/S (4) | T (3) | T | T | T (47) | T | T (4) | T (10) | |
| SNA | E (4) | S (4) | S | E (63) | B | - | S (51) | - | S (13) | S (13) | E (35) |
| Input-Output table | E (4) | T/S (5) | S | S (5) | B | - | S (18) | - | S (13) | S (13) | E (4) |
| TSA | T (5) | T/S/B (7) | T/S (15) | T (3) | T | - | S (7) | - | T/S (8) | - | T |

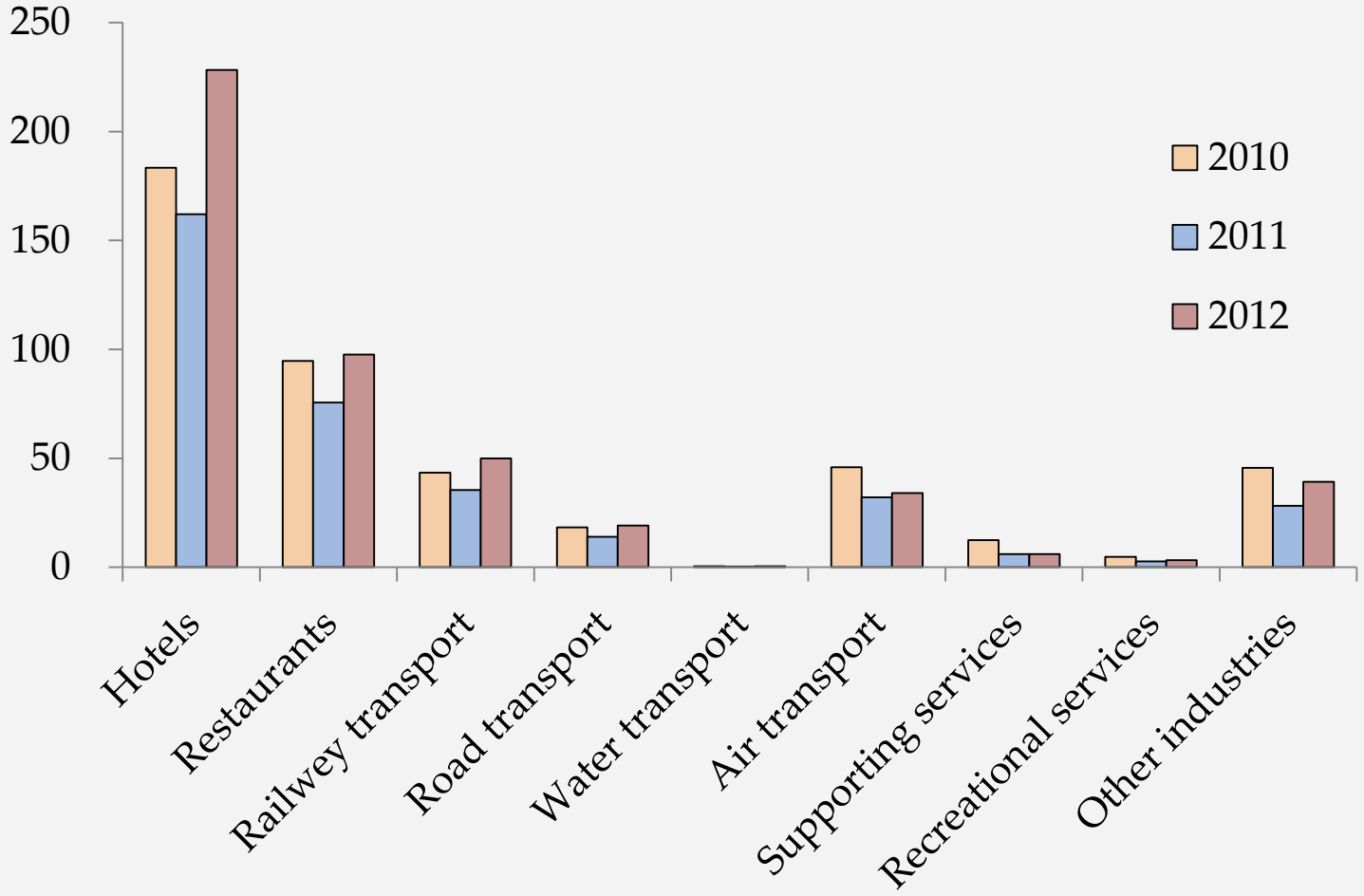
T: National Tourism Organization, S: National Statistical Organization,
E: Economic Planning Organizations, B: Central Bank
( ) = Number of persons in charge
*: including persons in charge for the TSA

# Inbound TSA Table 6

| Products | TOURISM INDUSTRIES | | | | | | | | | TOTAL tourism industries | Other industries | TOTAL output in serveces | TOTAL output in goods (at producers' price) | Imports | Tariffs and taxes on imports | Margins | Internal tourism consumption |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Hotels and similar | Second home ownership (imputed) | Restaurants and similar | Railwey passenger transport | Road passenger transport | Water transport | Air transport | Transport supporting services | Sporting and other recreational services | | | | | | | | |
| **Specific products** | **397** | **0** | **232** | **83** | **28** | **1** | **137** | **9** | **5** | **893** | **23** | **916** | **182** | **74** | **9** | **112** | **1,293** |
| **Characteristic products** | **397** | **0** | **232** | **83** | **28** | **1** | **137** | **9** | **5** | **893** | **23** | **916** | **9** | **2** | **0** | **0** | **927** |
| **Accommodation services** | **395** | **0** | **1** | **0** | **0** | **0** | **0** | **0** | **1** | **396** | **2** | 398 | **0** | **0** | **0** | **0** | **398** |
| Hotels and other lodging services | 395 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 396 | 2 | 398 | 0 | 0 | 0 | 0 | 398 |
| Second homes services on own account of for free | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Food and beverage serving services** | **2** | **0** | **232** | **0** | **0** | **0** | **0** | **0** | **0** | **234** | **5** | **239** | **0** | **0** | **0** | 0 | **239** |
| **Passenger transport services** | **0** | **0** | **0** | **83** | **28** | **1** | **137** | **4** | **0** | **253** | **2** | **256** | **0** | **0** | **0** | **0** | **256** |
| Interurban railway | 0 | 0 | 0 | 83 | 0 | 0 | 0 | 0 | 0 | 83 | 0 | 83 | 0 | 0 | 0 | 0 | 83 |
| Road | 0 | 0 | 0 | 0 | 28 | 0 | 0 | 1 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 0 | 29 |
| Water | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Air | 0 | 0 | 0 | 0 | 0 | 0 | 137 | 0 | 0 | 137 | 0 | 137 | 0 | 0 | 0 | 0 | 137 |
| Supporting services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Transport equipment rental | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 2 | 6 | 0 | 0 | 0 | 0 | 6 |
| Maintenance and repair services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Travel agency, tour operator and tourist guide services** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **4** | **0** | **4** | **3** | **7** | **0** | **0** | **0** | **0** | **7** |
| Travel agency | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 3 | 7 | 0 | 0 | 0 | 0 | 7 |
| Tourist information and tourist guide | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Cultural services** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **1** | **7** | **9** | **0** | **0** | **0** | **0** | **9** |
| Performing arts | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 2 |
| Museum and other cultural services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 0 | 0 | 0 | 0 | 6 |
| **Recreation and other entertainment** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **3** | **3** | **3** | **6** | **0** | **0** | **0** | **0** | **6** |
| Sports and recreational sport services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Other amusement and recreational services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 6 | | | | | |
| **Miscellaneous tourism services** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | **0** | **1** | **1** | **2** | | | | | |
| Financial and insurance services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Other good rental services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | | | | | |
| Other tourism services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| **Connected products** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | | | | |
| goods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | | | | |
| services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| **Non specific products** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **56** | **56** | | | | | |
| goods | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 56 | 56 | 0 | 0 | 0 | -56 | 0 |
| **TOTAL output** | **397** | **0** | **232** | **83** | **28** | **1** | **137** | **9** | **5** | **893** | **78** | **972** | **182** | **74** | **9** | **56** | **1,293** |
| Agriculture, forestry and fishery products | 15 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 1 | 31 | | | | | |
| Ores and minerals | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | [illegible] | | | | | |
| Electricity, gas and water | 28 | 0 | 9 | 6 | 0 | 0 | 1 | 0 | 0 | 45 | 1 | [illegible] | | | | | |
| Manufacturing | 76 | 0 | 89 | 11 | 3 | 0 | 46 | 1 | 0 | 227 | 21 | [illegible] | | | | | |
| Construction work and construction | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 6 | | | | | |
| Trade services, restaurants and hotel services | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | |
| Transport, storage and communication services | 15 | 0 | 5 | 3 | 2 | 0 | 31 | 0 | 0 | 57 | [illegible] | 60 | | | | | |
| Others services | 31 | 0 | 16 | 11 | 3 | 0 | 16 | 2 | 1 | 80 | [illegible] | 89 | | | | | |
| Government services, private non-profit services | 1 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 0 | 12 | 0 | 12 | | | | | |
| **Total intermediate consumption (at purchasers** | **169** | **0** | **135** | **33** | **9** | **1** | **103** | **3** | **2** | **455** | **39** | **494** | | | | | |
| Consumption of fixed capital | 51 | 0 | 17 | 26 | 2 | 0 | 24 | 2 | 1 | [illegible] | 7 | 130 | | | | | |
| Compensation of employees | 75 | 0 | 34 | 23 | 17 | 0 | 23 | 3 | 1 | [illegible] | 23 | 199 | | | | | |
| Other taxes less subsidies on production and | 20 | 0 | 8 | 4 | 2 | 0 | 6 | 0 | 1 | [illegible] | 3 | 43 | | | | | |
| Gross Operating surplus and Gross Mixed income | 83 | 0 | 38 | -3 | -2 | 0 | -19 | 1 | 1 | 99 | 6 | 106 | | | | | |
| **Total gross value added of activities (at** | **228** | **0** | **98** | **50** | **19** | **0** | **34** | **6** | **3** | **439** | **39** | **478** | | | | | |

Inbound Tourism GDP by Industry

# Japanese Inbound Tourism GDP by Industry



# Conclusion

| About Domestic tourism consumption statistics |
| --- |
| • Countries that do not conduct the domestic tourism consumption survey tend not to compile the TSA.<br>• A new method that enables the compilation of the TSA using a household consumption survey or a simple tourism consumption survey is needed for some countries. |

| About Inbound tourism consumption surveys |
| --- |
| • Most countries conduct an inbound tourism consumption survey, as they are heavily interested in inbound tourism.<br>• The number of countries that try to compile the TSA may increase if a new TSA format (or table) describing inbound tourism GDP is developed. |

| About Organizations responsible for compiling TSA |
| --- |
| • A new framework to exchange ideas about TSA is required in Asia. |