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TOURISM: AN ENGINE FOR EMPLOYMENT CREATION
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SESSION V: MEASURING THE ECONOMIC CONTRIBUTIONS OF TOURISM: FROM THE TSA TO ALTERNATIVE MODELLING TECHNIQUES



Chair
Ms. Anemé Malan

*Chief Director: Tourism Industry Development
Department of Environmental Affairs and Tourism, South Africa*

Anemé Malan joined the Department of Environmental Affairs and Tourism (DEAT) in June 2008 as the Chief Director: Tourism Industry Development. Her responsibilities include Tourism Business Development, Tourism Sector Regulation and Tourism Research and Information.

Before joining DEAT she spend more that 15 years at Statistics South Africa where her responsibilities included the construction of social accounting matrices, environmental-economic accounts and satellite accounts such as the Tourism Satellite Account.

She completed a Masters Degree in Economics (Cum Laude) at the University of Johannesburg and has presented various papers at national and international conferences.



Keynote speaker
Mr. Douglas Frechtling

*Professor of Tourism Studies, School of Business
The George Washington University*

Dr. Frechtling is currently Professor of Tourism Studies in the School of Business at The George Washington University in Washington, DC. He began his career as an economist for the Joint Economic Committee of the U.S. Congress, and later served as deputy assistant to the Secretary of the U.S. Treasury. He was founding Executive Director of the U.S. Travel Data Center in 1973 and served as its chief executive officer for 14 years.

Dr. Frechtling has also served as a consultant to the World Tourism Organization (UNWTO), Airline Economics, Inc., Travel Industry Association of America and other tourism organizations. He is a Director of the Travel Industry Association, a Certified Travel Marketing Executive, a Fellow of the International Academy for the Study of Tourism and of the Tourism Society of Great Britain, past Chairman of the UNWTO Education Council, a past president of the Travel and Tourism Research Association and a recipient of that organization's Lifetime Achievement Award. In 2001, he authored *Forecasting Tourism Demand: Methods and Strategies*, published by Butterworth-Heinemann, and is author of numerous papers on measuring the economic impact of tourism. Dr. Frechtling holds a Ph.D. degree in economics from The George Washington University.

Keynote session V "MEASURING THE ECONOMIC CONTRIBUTIONS OF TOURISM: FROM THE TSA TO ALTERNATIVE MODELLING TECHNIQUES"

Abstract:

This paper addresses the nature of product brands and branding, describes the TSA as a global brand and its pre-eminence for certain purposes, and the importance of protecting extending the TSA brand.

A brand is a set of associations linked to a product through its features, name, trademark, or symbols. Aside from indicating how the branded product is superior to others in the same category, a brand is also a promise by the organization to users about what goals the product will help them achieve.

The Tourism Satellite Account, or TSA, is a distinctive method of measuring the direct economic contributions of tourism consumption to a national economy. Its unique approach derives from employing the principles and structure of the internationally-adopted System of National Accounts 1993 to measuring the direct economic contributions of



tourism to a national economy. Through the efforts of UNWTO and partner organizations, the TSA has become a recognized and credible global brand among methods of measuring the economic impact of tourism. Moreover, the TSA brand may be extended through authorization of sub-national TSAs covering regional areas, and principles that such developers of such regional TSAs must follow are recommended herein.

Unfortunately, the TSA brand is under assault through misrepresentation and misappropriation. Misrepresentation of the TSA occurs when researchers describe the TSA structure and results in misleading terms. This raises false expectations among potential users and weakens the TSA brand. Misappropriation of the TSA brand occurs when reports are released based on methodologies purporting to "simulate" TSAs for countries and sub-national areas. These generally serve to exaggerate the direct tourism contribution to economies and can provoke conflicts between National Tourism Administrations and National Statistical Offices.

To protect the global TSA brand, I detail features of the TSA and goals it achieves that set it apart as a brand from other economic impact methodologies, and present a number of specific measures to build the TSA brand globally, to extend it, and to protect it from misrepresentation and misappropriation.

Panellist

Mr. Adi Lumaksono

Statistics Indonesia

No biography is available

No abstract is available



Panellist

Mr. Wardiyatmo

Ministry of Culture and Tourism, Indonesia

Secretary-General of the Ministry of Culture and Tourism (MoCT), Republic of Indonesia (since April 2008 up to now). The previous position was a Senior Advisor for Economy, Science and Technology, MoCT. He has become a government official for 30 years.

Abstract (Panellists: Mr. Adi Lumaksono and Mr. Wardiyatmo):

Bali, as one of most popular tourist destination in the world, is located between Java and Lombok island. This island is very popular with the cultural attraction and beautiful beaches that attracts tourist from both domestic and international. Undeniably, Bali has a huge potential in tourism activity. It is believe that tourism has played an increasingly important role in Bali economy, as a major source of Bali revenue, create job opportunity and improve people's welfare.

The development of Bali Tourism Satellite Account (BTSA) is an attempt to provide a clearer picture of relative importance of tourism as an economic activity and to trace its relationship with traditional industry sectors in national accounts. This TSA will show the impact of tourism activity to Bali's economy. Economically, the impact of tourism becomes a potential revenue of a regional economy through inbound tourist consumption on product of goods and services. Likewise, domestic/local tourists are also important in giving high share of regional economy.

The Input-Output (I-O) model has been implemented to measure economic impact of tourism. The impacts come from expenditure of domestic, inbound and outbound (pre+post trip) tourist, capital formation related to tourism made by government and private as well, and tourism promotion by government and private institutions. All these expenditures are treated as final demand in I-O framework. Each expenditure structure of those final demand should be reclassified following the sectoral I-O classification, and the impact is obtained by multiplying the Leontief multiplier coefficients (known as matrix A).

The highest revenue from tourism activity is obtained from inbound (foreign) tourist, followed by domestic/local tourist. Consequently, the inbound tourist consumption gave highest impact to macro economy in Bali. From BTSA, it is obtained that almost half of Bali GDP came from tourism activity. The sector that give the highest contribution is hotel.



Definitely, Bali is the province with the highest number of hotel in Indonesia. This relates to Bali as a main destination of tourist. The tourism activity also give significant contribution to indirect taxes, particularly from hotel and restaurant. Importantly, tourism activity in Bali gave opportunity in creating job, both formal and informal. Slightly different with the highest impact to GDP, the sector that absorbed highest employment was manufacturing industry, particularly wooden industry.

As a conclusion, the BTSA gave a clearer picture of impact tourism activity to Bali's economy, in this case in creating GDP, job opportunity and others. Furthermore, this BTSA gave detail information that can lead the government in making a policy in tourism industry and other related sectors.



Panellist
Ms. Mara Manente

Director, International Centre of Studies on the Tourism Economy (CISSET), Italy

Mara Manente is, since 1996, Director of CISSET, the International Center of Studies on Tourism Economics linked to the University Ca' Foscari of Venice.

She has over 20 years experience and is a project manager in the field of the macroeconomics of tourism, the economic impact of tourism, tourism demand analysis and forecasting, transport and tourism and tourism statistics.

She's been teaching tourism economics and regional economics at the University of Venice and she's also the author of many articles and books as well as of a "Manual on tourism economics" used in many Italian universities.

She is a member of AIEST (Association Internationale des Experts de Sciences Touristiques), of TRC (Tourist Research Centre) and of the World Tourism Organization Steering Committee on Statistics and Macroeconomic Analysis of Tourism and Tourism Satellite Accounts.

She is a consultant to many national and international tourism institutions in Italy and abroad. She has closely collaborated with ISTAT (National Statistics Office of Italy), Eurostat and other Commission Directorate Generals, UN World Tourism Organisation.

Abstract:

Comments on the Central paper will mainly focus on the topic of extending the TSA brand to sub-national areas, as a key step to reinforce the role of effective and credible tourism economic analysis for destination management.

Furthermore, the proposed initiatives to protect the TSA brand will act as a powerful instrument to disseminate information on the benefits of such a tool among the destination stakeholders, so that a bridge between statistical/analytical culture of technicians and the management mindset of policy-makers and private companies can be established. Finally, through the use of certified TSAs will be possible to give an answer to the overall huge request for co-ordination, homogenisation and control of economic tourism statistics, that means quality of information. Within this context, it is crucial, on one side, to adapt international standards to sub-national tourist destinations and then to embrace a common set of concepts and language, on the other, to favour the willingness to share information, solutions and best practices between private and public actors of the destination (collaborative vs competitive approach).

The second part of the presentation will focus on the need to adopt an operative definition of local tourist destination which is right for the objective to strengthen the relationship between economic analysis and destination management/planning.

The focus, then, is on the importance to measure, monitor and interpret tourism as an economic phenomenon through reliable tools, the main reason being that the sub-national level is the suitable dimension for tourism plans and decision making. This is why it seems relevant to stimulate the debate towards the opportunity to develop monitoring systems for local tourist destinations. They should be characterised by an increasingly closer relationship between planning, management and control, on one side, and by a flexible structure able to be relevant to any development or management plans, on the other.



Panellist
Ms. Huang Yaping

*Deputy Division Director of Statistics Division
China National Tourism Administration*

Education:

Master of Economics

Shanghai University of Finance & Economics

Major: Applied Mathematical Statistics

Working Experience:

2008-Present, Deputy Division Director of Statistics Division, China National Tourism Administration

2003-2008, Deputy Division Director, Department of External Trade & Economics Statistics, National Bureau of Statistics, China.

1991-2003, Statistician, Department of External Trade & Economics Statistics, National Bureau of Statistics, China.

Abstract:

1. Brief introduction

In China, Jiangsu, Zhejiang and Beijing have completed the study of regional TSA project respectively. The main result of National TSA project has been worked out too.

Jiangsu: As the pilot, 2002 as the year of reference for compilation, lasting 3 years (from July 2001 to Sep. 2004)

- Tourism Value-added making up 4.2% of GDP;
- Proportion of tourism employment 8.54%.

Zhejiang: the second compiling province, 2004 as the year of reference for compilation, lasting 2 years (from May 2004 to Jun. 2006)

- Tourism Value-added making up 4.81% of GDP;
- Proportion of tourism employment 5.37%.

Beijing: 2004 as the year of reference for compilation, lasting 2 years (from May 2004 to Jun. 2006)

- Tourism Value-added making up 6.7% of GDP;
- Proportion of tourism employment 11.7%.

National study: 2004 as the year of reference for compilation, major tables have been compiled, Tourism value added made up 4.05% of GDP, more detailed data has not been released.

2. Devotion and renovation

We followed the rules of combining criterion with innovation. Fully considering the situation of China, we made relevant adjustment to the referred conception, system of classification of industries and products, system of tourism statistics and investigation.

Classification of industries: comprehensively considered the combination of GB/T4754-2002 and the classification of industries in Input-output table formats.

Classification of products: In view of the fact that there is not CPC in China, classification of products almost learned from classification of industries.

List of tourism characteristic industries:

- a) Hotels and similar establishments
- b) Second homes services on own account or for free
- c) Restaurants and similar
- d) Railway passenger transport industry and supporting activities
- e) Road passenger transport industry, urban public transportation and supporting activities
- f) Air passenger transport industry and supporting activities
- g) Vehicle rental
- h) Travel agencies
- i) Culture and Art industry
- j) Entertainment Industry
- k) Environmental Industry



Tourism Connected industries

Wholesale and retail trade industry

A complete TSA will provide the following three aspects:

- a) Aggregate Indicators: Tourism consumption, Tourism Value Added, Tourism employment
- b) Detailed data of tourism consumption
- c) Productive account in tourism industries

3. Mode of work

Both regional and national TSA projects were carried out on the basis of the cooperation between tourism administration and statistics administration. The main reason is that statistics administration could provide the techniques assistance and rich data.

4. Main problems

- the difference of tourism statistics basis
- the difference of accounting method
- the difficulties in data collection
- lack of data on tourism input-output

5. Further efforts

- strengthen the research on TSA methodology
- make a great step forward in practice



Panellist
Mr. Chris Jackson

Chief, R&D Projects and Analysis Section, Statistics Canada

Mr. Jackson has worked in national accounts research and development at Statistics Canada since 1990. For the past 6 years, he is in charge of the R&D Projects and Analysis Section, which produces macroeconomic statistics in tourism including the Canadian Tourism Satellite Account, the quarterly National Tourism Indicators, the Human Resource Module of the Canadian TSA, the TSA Module on Government Revenue Attributable to Tourism in Canada, and other projects related to tourism.

He is a member of the International Travel Survey Working Group, the Travel Survey of Residents of Canada Working Group, and the Research Advisory Committee of the Canadian Tourism Human Resource Council. He has also served as co-secretary of the National Accounts Advisory Committee at Statistics Canada.

He has conducted and participated in studies in several areas in national accounting including on the measurement and valuation of household non-market production, rebasing of national accounts aggregates, analysis of statistical revisions, and capitalization of software.

Mr. Jackson emigrated to Canada from the U.K. in 1971. He holds undergraduate and graduate degrees in economics from Dalhousie University in Halifax, Nova Scotia. He undertook post-graduate studies in economics at the University of Michigan prior to joining Statistics Canada.

Abstract:

This paper considers measurement of supply in the Tourism Satellite Account (TSA) framework. It draws on experience gained in several compilations of the Canadian TSA over the last fifteen years. As there is already a well-developed set of input-output or supply-use tables for Canada, the paper will focus on aspects of the measurement of supply that are unique to the TSA.

The supply-side of the TSA is fundamentally important in linking tourism into the core system of national accounts and in highlighting how visitor demands for goods and services translate into jobs, production and value added as industries respond to directly satisfy these demands. From a more practical perspective, estimates on the supply-side of the TSA play an essential role in the validation of the estimates of tourism demand, and this is the primary focus of this paper.

Specifically, after briefly describing the measurement framework, the paper considers the following issues; the



identification of tourism commodities and industries, use of the commodity by industry details from the Input-Output tables to refine the measure of tourism domestic supply, special aggregations of commodities and industries for the TSA, confrontation of the supply and tourism demand for tourism commodities and their reconciliation, and finally the valuation of tourism outputs.



Panellist
Mr. Tad Hara

Japan Tourism Agency
Associate Professor at Rosen College of Hospitality Management
University of Central Florida

For the 5th UNWTO International Conference on Tourism Statistics, Tad Hara, PhD represents Japan Tourism Agency, which was inaugurated October 2008. Tad Hara is an Interim Associate Dean, Associate Professor at Rosen College of Hospitality Management, University of Central Florida (UCF), which is the largest hospitality and tourism program in the USA with 2,600 students. He is also appointed as a full-time Senior Research Fellow at Dick Pope Institute for Tourism Studies. He received PhD, M.S in Regional Science, and MPS in Hotel Administration from Cornell University, NY, USA, MBA from University of Glamorgan, Wales, UK, and B.S in Law from Sophia University, Tokyo, Japan. He worked for Industrial Bank of Japan (currently Mizuho Corporate Bank) for 17 years as a senior manager, and served as Assistant Director at Near Eastern Bureau of Japanese Foreign Ministry.

He contributed in total of over 120 refereed, invited papers and refereed standup presentations, since he moved from global banking/foreign services to current academic field.

He is the single author of "Quantitative Tourism Industry Analysis - Introduction to I-O/SAM modeling and Tourism Satellite Accounts" by Elsevier (2008) based on his teaching materials at Cornell and UCF. He has been a Visiting Researcher of Waseda Hospitality Research Institute, Tokyo, Japan since 2002, and he taught finance courses at Lausanne Hotel School, Switzerland.

Abstract:

While it has not been acknowledged until recently, Japan has experimented with multiple series of the construction of the national TSA with seven annual updated versions, all published only in Japanese. Due to strong fundamental statistical infrastructure of Japan with approximately 100 regional level Input-Output tables available in the nation, Japan has been at a unique position to be able to develop regional TSAs.

At least two prefectural governments claimed to have developed experimental regional level TSAs, together with a couple of other research projects incorporating regional TSA structures to quantify economic activities associated with regional impact of tourism. Again, all those were published and disseminated only in Japanese, and that might be the main reason for non-recognition of their work by the broader audiences outside of Japan.

Japan Tourism Agency is honored to have an opportunity to make short presentation on those regional TSA works in Japan at the 5th UNWTO International Conference on Tourism Statistics, incorporating the insightful and critical aspects presented by Dr. Douglas Frechtling of George Washington University at the UNWTO Malaga Conference in November 2008 and in his keynote paper for this conference.

With the inauguration of the "Tourism Agency" in October 2008, together with existence of tens of sub-regional I-O data covering all across the nation down to a city-level, more contributions from Japan are expected to be disseminated to the advancement of discussions on regional TSA experiment which has been defined as an important research subject at UNWTO.



Panellist
Mr. Ray Spurr

Director, Sustainable Tourism Cooperative Research Centre, Australia

Ray Spurr is a Senior Research Fellow at the University of New South Wales (UNSW) in Sydney, Australia, and Director of the Sustainable Tourism CRC Centre for Economics and Policy (STCRC CEP). As CEP Director he leads a team of economic modellers based at three Australian universities (UNSW, Monash, and University of Queensland) who produce annually updated Tourism Satellite Accounts for each of the Australian states and territories. The CEP is currently engaged in a project to extend these state and territory TSA to estimates of tourism's contribution at the regional (sub-state) level across Australia. The CEP have also developed computable general equilibrium models for use in estimating the effects of changes in tourism demand, economic conditions, or government policy settings on the tourism industry and on the national and state economies. It is currently developing an integrated suite of these models for use across the Australian and state economies. Examples of recent and current modelling work include analysis of indirect effects of tourism, tax revenues from tourism, tourism's economic yield, its carbon footprint, and the prospective impacts of Climate Change.

Prior to joining the UNSW Ray was a senior official in the Australian Department of Tourism from 1989-1996. He is a former Chairman of the OECD Tourism Committee (1992-95) and member of the Leadership Forum of Advisers of UNWTO (1996-1999) and is currently Policy Adviser Asia /Pacific to the World Travel & Tourism Council (WTTC) representing them on the APEC Tourism Working Group

Abstract:

This paper reports on work being done in Australia in two separate projects to extend the principles and methodology of the national TSA down to the state and regional levels in Australia. The work has been funded by the Sustainable Tourism Cooperative Research Centre in Australia (STCRC) and carried out by the STCRC's Centre for Economics and Policy (CEP). The first Project, which has now been fully implemented, involved the development of an integrated set of TSA for each of Australia's six states and two territories. Under the second project, these state level TSA are to be extended to develop estimates of the contribution of tourism at a regional (sub-state) level using methods, definitions and data sources which are consistent with the national and state TSA and across all of the regions to be studied.

The first set of state and territory level TSA were completed in 2008 for the year 2003-04. They have subsequently been updated for the year 2006-07. It is intended that they will now be updated annually. This will entail a major update every three years and extrapolated summary estimates to be produced for the intervening years. The TSA reports follow the same structure as the national TSA (ATSA) which is prepared by the federal government's Australian Bureau of Statistics. These in turn follow closely the internationally agreed methodology for TSA.

This paper outlines the processes adopted for deriving TSA for the Australian states and territories and proposed for use in developing regional tourism economic accounts.

Data on visitor expenditure is obtained from the two major Australian tourism surveys (the International Visitor Survey and the National Visitor Survey). This is used to allocate the national visitor expenditure to the state and territory level. Regional Input-Output tables for each state or territory are used to derive the relationship between regional state/territory demand and state/territory tourism supply. These sets of state level TSA provide the economic contribution of tourism for each state in a manner which is consistent with tourism and economic data for the state, and which reconciles with the national TSA.

To extend this process to the regional (sub-state) level a feasibility study was carried out on the development of estimates for the tourism contribution to the economies of nine regions in the state of Queensland, one of Australia's primary holiday states. These estimates will again follow a similar, although scaled back, approach to that taken in the national and state level TSA. The results are also to be consistent with those higher level estimates. The paper presents the results of the feasibility study on the development of these estimates and sets out the technical procedures which have been identified as most suitable given the available data. Although set in the context of regional Queensland, the approach is intended to be applicable to other regions across Australia.