

THE SUSTAINABILITY OF TOURISM SUPPLY CHAIN: A CASE STUDY RESEARCH

Maria Teresa Gomes da Costa
University Lusíada

Luísa Margarida Cagica Carvalho
University of Évora

The dynamic environment and the globalization of the tourism sector accelerate the necessity to improve sustainable supply chain management. In tourism sector the supply chain is composed by a diversity of firms with higher heterogeneity and in general without trade alliances. These circumstances improve the complexity of this chain and difficult the study of the sector. The main object of this study is to analyse the sustainability of tourism supply chain through a case study research. This research tries to answer the question: Is the supply chain of Palmela village sustainable? This case study presents a sustainable diagnosis of tourism supply chain and suggests several proposals for its improvement.

Keywords: *Supply chain, sustainability, tourism*

JEL Classification: *L83, M1, O1*

INTRODUCTION

Tourism is an important driver for global development. Ensure the sustainability and the performance of regional tourism industry is vital to the sustainable development.

The aim of this research is to study the sustainability of tourism supply chain of Palmela village using a case study research.

The paper has two parts, the first part presents the conceptual approach and discuss the appliance of the Porter Model to tourism sector. The second part presents a case study applied to Palmela village-Portugal. Palmela is a region with a diversity of landscape, situate near Lisbon, and has an interesting natural and cultural heritage.

The paper concludes with the identification of some best practices related with sustainable management of supply chain to tourism sector.



CONCEPTUAL APPROACH: SUSTAINABLE SUPPLY CHAIN IN TOURISM

Sustainable Tourism

The development of the tourism sector justified the need to pass the traditional concept of tourism to sustainable tourism. Tourism as a scientific concept evolved from more specific concepts, for more holistic definitions. The previous, attempted to elucidate the nature of tourism as an activity (Burkhart and Medlik, 1974) and others attempt to more technical definitions (Schullard in 1910, or Picardin in 1971 quoted by Henriques, 2003) tried to incorporate the description of the type of tourists and the characterization of tourism. Among the more holistic definitions, Henriques (2003), refers the definitions of Hunziker and Krapf, for which travel and tourism is considered as a prolonged stay of individuals outside their area of residence, whose motivation involved is not related to any activity directly profitable.

The role of tourism in today's society had to be reassessed and sustainability must be a central issue in this process (Karmakar, 2011; Archer and Cooper, 1994). A long term view regarding the economic activity related to tourism and the guarantee of the balanced consumption of the existing tourist destinations were factors advocated by these authors as crucial to its preservation in the future.

Several approaches have been developed around sustainable tourism. Many authors refer to the importance of this activity to increase the welfare of the local community, to increase the economic aspects and preservation of cultural identity of communities, respecting not only the physical environment but also social values and community (Murphy, 1997; Middleton and Clarke, 2001; Dodds and Butler, 2010). Poon (1989) provides that the traditional tourism is replaced by a new emerging tourism.

The various conceptual approaches presented allow think about sustainable tourism as a model of development and not as a type of tourism. This model relies on a rich triangle, where the economic profitability is crucial, but must be combined with the preservation of ecosystems and social equity, or balanced distribution of wealth. May represent a tool for planning and setting of the population and encompasses various types of tourism, such as rural tourism, adventure tourism, cultural tourism, beach tourism among others, provided that the activity resulting from these follow the three-dimensional model.

Sustainable tourism requires a serious analysis and reflection on resources - natural, social and economic - regardless of market segments to which they are addressed and the types of supply.

Tourism value supply chain

This section pretends to study tourism supply chain through Porter (1985) theoretical model. According with Porter (1985) the breakdow of a firm value chain can be important to identify which activities are strategically relevant, in order to understand the behavior of cost and potential sources of differentiation.

Tourism sector have particular characteristics, several branches of the tourism industry (e.g. airlines, hotel chains, tour operators or car rental agencies) are highly concentrated and act as global players. However, small and medium-sized enterprises (SMEs) still constitute the bulk of the tourism industry (Weiermair, 2003; Dritsaki, 2009).

Table 1 Products and services to supply a tourism package

Elements of a tourism product/service	Tourism activities
Accommodation	Hotel; bed & breakfast; self-catering; apartments; campsites; cruise ships
Transport to and from destination	Public transport (trains); airports; schedule air carriers; air charters; schedules sea passages; chartered sea passages; coaches; cruises
Catering and Food and Beverage (F&B)	Restaurants and bars; grocery stores; farmers; fishermen; local commerce/ markets; bakers; butchers; food wholesales
Ground Transport	Car rentals; boat rentals; fuel providers; gas stations; coach rentals
Ground Services	Agents; handlers or inbound operators in destination
Cultural and Social Events	Excursion and tours providers; sports and recreation facilities; shops and factories
Environmental, cultural and heritage resources of destination	Public authorities; protected sit managers; private concessionaires and owners

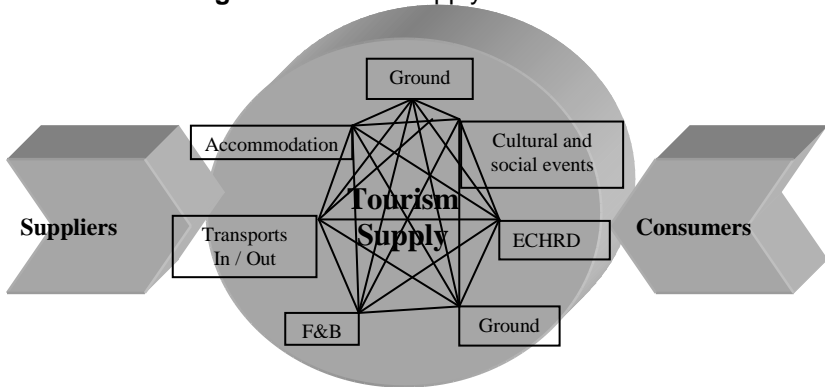
Source: CELB, TOI, 2004, adapted

Tourism supply chain involves a package of several services, including:

- ex ante services, such as travel agencies, travel operators, e-tourism;
- package of transports, accommodation, catering/F&B, leisure services (tours, cultural and sportive events, visits, sports activities, health services, and so on). (Table 1)

The cooperation and network/cluster (grouping of firms) relations inside the supply chain can represent a competitive advantage, especially to the small firm, more sensitive to the competition. According with Porter (1985) the competitive advantage, the vitality and competitiveness of tourism industry is essentially linked to the competitiveness of individual firms. So there are a correlation between the sustainability of tourism industry attractiveness and the relative competitiveness of each firm into the tourism industry. Figure 1, shows a tourism supply chain, with linkages between tourism sector firms and their relations with suppliers and consumers.

Figure 1 Tourism supply chain links



Source: Authors

Sustainable practices can also develop the existing business, attract new business and consequently increase the revenue of shareholder value. Furthermore contributes to a positive firm reputation. The firms that are worried with the quality improvement to better provide the costumers, contributes to an increase of customer satisfaction and loyalty, strength the brand value, enhance publicity and marketing opportunities, and are better acceptance by local communities.

Good performance and a high-quality, and others sustainable practices can reduce conflicts with suppliers, governments, staff and local communities, and make easier the relationship between stakeholders.

THE CASE STUDY RESEARCH

Methodology

This approach follows a case study methodology. According with Bell (1997), this methodology allows the investigator to concentrate on a specific situation in order to identify the concerned interactive process. A case study involve the empirical investigation, strong component of fieldwork appealing using many sources and documents, interviews, direct observations and physics artifacts, Yin (1994).

To analyze the sustainability of tourism supply chain in Palmela village it was used:

- documental analyses for conceptual approach;
- Direct observations and also documental analyses for Palmela village characterization;
- Fieldwork developed during the October to December 2008, supported by direct interviews to municipality, 3 tourism firms and 1 member of a local gastronomic association;
- Interviews to accommodation supply represent 88% of total population. The interviews to restaurants supply represent 26% of total population.

Palmela village characterization

Palmela is a small village centered around on fortified castle at an altitude of 1200 metros at the edge of the Arrábida mountain range.

Palmela village have some services and infrastructure equipments supporting tourist activity (Table 2).

Table 2 Principal services and infrastructure equipments

Tourism office	Provide tourism information.
Handicraft center	Shows and sell regional hand made products
Palmela municipal museum	Contributes to the preservation of local cultural heritage
Wine house – Costa Azul	Costa Azul Region have five wine routes: I – Santiago route, II- Arrábida route, III – Terras

	Verdes route, IV – Colonos, ferroviários e antigas devoções route and V- Terras do Sado route. In Wine House its possible taste several wines of each route and regional products.
Gastronomy	Several regional specialties, including typical dishes like rabbit, fish and desserts as well wine and cheese.
Sportive Infrastructures	Equestrian Center – Lagoínha; Equestrian Center – Ferrador Farm; Montado Golf; Palmela Internacional Kart
Accommodation	4 accommodation firms (49 rooms)
Restaurants	4 restaurants (470 places).

Data analysis

In order to get answers to the initial question of our study some interviews were made to economic agents from accommodation and restaurants and to other local agents. These answers were collected, analyzed and resumed in Tables 3 and 4.

Table 3 Analyze to answers from interviews to accommodation and restaurants supply

Activity	Accommodation and restaurant
Characterization of the demand	Main demand segments: - National and International business tourism- NIBT- (during the week) -National and International leisure tourism –NILT- (weekends) Seasonability – Higher demand in months: March, September, October (Accommodation)
Transportation services	<u>From and to the destiny</u> Particular transport or rent car
	<u>Inside destiny</u> Particular transport or rent car
Destiny services	<u>Front office services and others</u> Not identified
Package	<u>How to concept a package?</u> NIBT: - Business Groups (Accommodation; Conference Room and coffee-break) NILT: - Promotion Package – three nights and fee two nights

	- Arrábida Package – including three nights, one dinner in Pousada de Setúbal; one dinner in Pousada de Palmela a visit to a Quinta da Bacalhoa Palace and painting a glazed tile in a Handcraft Regional Office – S. Simão Arte.
Distribution, marketing and sales	<u>How to deliver the service?</u> - Front Office - Reservation Call Center and online - Reservation through Travel Agencies <u>How to reach the client?</u> - Fidelity cards - Voucher sales and website
Customer service	<u>After sales service</u> Central quality department manage the complaints from customers
Human resources management	<u>Recruiting and training</u> - Recruiting inside community, mainly with laborer stability - Regular training in foreign languages, sales, ICT and clients communication
Technology development	<u>Development and implementation of technologies</u> - ICT support in operations
Sustainability tourism supply chain	<u>Sustainable supply chain</u> - Advertising in whole rooms to the correct use of the water and the reutilization of the towels - Waste selection (glass and paper) - Use of halogen lamps <u>Barriers to sustainability</u> - Lack of training in this subject

Table 4 Analyze to answers from interviews to Local Agents

General objectives	Palmela Municipally and Local Gastronomic Association
Determine the forces and debilities of the region and its contribution for the development of region	<u>Forces</u> <u>- Natural resources</u> Arrábida Natural Park - <u>Patrimony heritage and cultural</u> Castle Santiago Church; Santa Maria Church; Misericórdia Church; São Pedro Church and São João Church Pillory Gastronomy : Products Certification (regional desserts and cheese; regional specie of apple); - <u>Traditions and costumes</u> Festa das Vindimas (September) Monday Picnic <u>- Human resources</u> Informal linkages

	<p><u>Debilities</u> Lack of Strategic Planning/training sustainable issues/formal linkages/ promotion Seasonality Financing restrictions</p>
Determine the tourism contribution to de regional development	<p><u>Evaluate direct effects and indirect effects related with tourism activity.</u> Employment creation Preservation of local identity Regional economic growing</p>
Evaluate organizations barriers in tourism sector	<p><u>Analyze decision process. Analyze administrative process relate with tourism activity.</u> Burocratic barriers to the licensing Delayed of lead time to projects approvals</p>
Identify the tourism supply chain in Palmela	<p><u>Characterize the supply chain in Palmela</u> Municipally needs a Strategic Plan for Tourism. At the moment are disable to identify the supply chain.</p>
Identify the sustainable tourism supply chain in Palmela	<p><u>Characterize the sustainable supply chain in Palmela</u> <u>Identify best practices in supply chain</u> There some sustainable practices however not directed to the tourism sector Use of local products creating value to suppliers and consumers <u>Identify barriers to sustainability</u> Burocratic Lack of education and training (local agents in general) Financial restrictions Lack of Strategic planning considering sustainable issues</p>

Through the interviews made to economic agents related with accommodation and restaurants supply it was possible to characterize the tourism market in what concern the demand (the main segments and the seasonability), the transportation services. It also allows us to know the offer namely how the agents work the conception of tourist package, as well as they are organized in terms of distribution, marketing and sales, customer service, human resources and technology.

The interview applied to local agents attempt to characterize tourism Palmela village, understanding the forces that allows the development of the region supported in the tourism activity, the debilities and possible organizational barriers to the sustainable development of tourism.

CONCLUDING REMARKS AND PROPOSALS

The case study allows the sustainability diagnosis of tourism supply chain of Palmela. Concerning to the main question of the research: Is the supply chain of Palmela sustainable? it was possible to conclude:

1. Mainly, the linkages appointed are informal, and with short term objectives;
2. Municipally emphasises the necessity of a major involvement of all agents, however financial restrictions are one important limitation;
3. The local agents don't have a clear awareness of the supply chain. This situation difficult the identification of differentiation sources, and synergies to minimize costs and consequently to create competitive advantages;
4. The lack of training, particularly concerning sustainability issues is visible. There are no information about these issues and their potentialities to a long term tourism policy.

In order to improve the sustainability, we present some proposals (some of them are best practices identified by TOIS, 2003), whose could be applied in Palmela, without significant cost to the agents and added value to services offered (see Table 5).

Table 5 Sustainability Proposals

Proposals	Local Agents			Promoters		
	M	AR	LA	M	AR	LA
Improve tourism planning, monitoring and controlling Destiny Management	x	x	x	x		
Internal Management with sustainability rules		x			x	
Contracting with suppliers, by integrating sustainability principles into the selection criteria and service agreements of suppliers	x	x	x	x	x	x
Customer relations, by guaranteeing privacy, health and safety standards, and providing customers with information on responsible behaviour and sustainability		x			x	

issues at their destinations						
Promote the goals of sustainable tourism and protect the environmental and cultural resources	x	x	x	x	x	x
Supply chain management, to develop a common framework for the integration of sustainability criteria into the selection and contracting of service suppliers. Common tools such as a guide for good practice in the hotel sector and sustainability purchasing guidelines are also developed and used by all local agents	x	x	x	x	x	
Organise multi-stakeholder dialogues in region to identify a shared way forward for promoting sustainable tourism, maintaining economic and business viability for all stakeholders	x	x	x	x		
Proposals	Local Agents			Promoters		
	M	AR	LA	M	AR	LA
Sustainability reporting, to develop and test reporting guidelines and performance indicators on sustainable development.	x	x	x	x		

Source: Authors

Inscription:

Municipally: **M**

Accommodation and Restaurants: **AR**

Local Association: **LA**

This proposals results from a cross-section of stakeholders, and we privileged a diversity of perspectives including local authorities, private sector and NGOs. The sustainability could get better efficiency and efficacy of the sector.

Further investigation, can use a broad approach, enlarging the study to other stakeholders, customers, external environmental, linkages with other regions.

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SUBMITTED: OCT 2009

REVISION SUBMITTED: FEB 2010

ACCEPTED: MAR 2010

REFEREED ANONYMOUSLY

Maria Teresa Gomes Costa (teresa.costa@esce.ips.pt) is Professor at the Department of Economics and Management, Setúbal Polytechnic Institute, Campus do IPS Estefanilha, 2914-503 Setúbal – Portugal.

Luísa Margarida Cagica Carvalho (luisa.carvalho@esce.ips.pt) is Professor at the Department of Economics and Management, Setúbal Polytechnic Institute, Campus do IPS Estefanilha, 2914-503 Setúbal – Portugal.