Study on Green Supply Chain Management of Tour Enterprises in Western China

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Abstract Western region is the tourism resources treasury of China, but its ecological environment is fragile. Because of the characteristics of pollution-free and its great drive effect to relevant industry, tourism has already become one of the important pillar industries in Western China. This paper sets up a model of tourism green supply chain of Western China to illustrate the main links in this supply chain. This paper also sets up management system of tourism green supply chain, and from the main 6 links, accommodation, transport, food, excursion, shopping and entertainment, to analyze the process of green supply chain management. Energetically developing ecotourism and building tourism green supply chain will promote the sustainable development of western tourism and western economy.

Keywords tourism green supply chain, tour enterprise, Western China, tour operator, excursion

1 Introduction

Nowadays there are little experiences and studies on Tourism Supply Chain Management in China. Compared with us, European Tour Operators have more knowledge and experiences on Tourism Supply Chain Management, which focus on: how tour operators develop a coherent policy for improving the economic, environmental and social sustainability performance of suppliers, and for integrating them into existing company management systems, integrating environmental, social and economic criteria into suppliers, contracting and rewarding performance improvements by preferentially contracting suppliers that meet those criteria.

Recently, some Chinese scholars introduce the theory of supply chain management into Chinese tour enterprises and probe how to promote the development of Chinese tourism, for example: DAI Bao-ping(2002), YANG Liang(2004), LI Wan-li(2005) and ZHANG Hui(2004). However, there are no scholar who has study tourism green supply chain management. This paper learns lessons from Richard Tapper(2002) and sets up a model of tourism green supply chain of Western China.

2 Strategic orientation of tourism in Western China

<table>
<thead>
<tr>
<th>Regions</th>
<th>Strategy orientation</th>
<th>Development target * (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>Inner Mongolia</td>
<td>Tourist resort</td>
<td>4.5</td>
</tr>
<tr>
<td>Guangxi</td>
<td>Tourist resort</td>
<td>10.0</td>
</tr>
<tr>
<td>Chongqing</td>
<td>Tourist resort, major tourist city, famous city</td>
<td>10.0</td>
</tr>
<tr>
<td>Sichuan</td>
<td>Tourist resort, major tourist destination for nature, ecology, history and culture</td>
<td>10.0</td>
</tr>
<tr>
<td>Guizhou</td>
<td>Tourist resort</td>
<td>6.9</td>
</tr>
<tr>
<td>Yunnan</td>
<td>Tourist resort for Western China and South Asia</td>
<td>8.2</td>
</tr>
<tr>
<td>Tibet</td>
<td>International Tourist resort</td>
<td>8.0</td>
</tr>
<tr>
<td>Shanxi</td>
<td>Tourist resort, famous province</td>
<td>8.0</td>
</tr>
<tr>
<td>Gansu</td>
<td>Lanzhou is the central tourist city for Western China, and Gansu is the favorite tourist area for international and national tourists</td>
<td>4.0</td>
</tr>
<tr>
<td>Qinghai</td>
<td>Domestic highland eco-tourism destination, the biggest summer resort of China</td>
<td>5.3</td>
</tr>
<tr>
<td>Ningxia</td>
<td>Distinctive tourist base of north-western region</td>
<td>5.4</td>
</tr>
<tr>
<td>Xinjiang</td>
<td>Reserve tourist base of China</td>
<td>7.9</td>
</tr>
</tbody>
</table>

*The proportion of total value of tourism in GDP.
Tibetan Plateau is the cradle of our two mother-rivers, Yangtze River and Yellow River, so we should protect the environment when we develop the west in a large scale. As tourism is called “smokeless” industry and Western China has the greatest number of places of historic resort and natural landscape, so the 12 provinces, cities and autonomous regions in Western China all make tourism as their pillar industry and have drafted the development schedule as to reinforce their tourism development targets, which is measured by the proportion of total value of tourism in GDP (refer to Tab.1)[1].

3 A model of tourism green supply chain of Western China

The sustainability of western tourism mainly depends on environmental protection. Environmental aspects include sustainable transport development and sustainable use of resources; reducing, minimizing and preventing pollution and waste (e.g. solid and liquid waste, emissions to air); conserving plants, animals, ecosystems and protected areas (biodiversity); and conserving landscapes, cultural and natural heritage.

This paper uses Richard Tapper’s model for reference and sets up a model of tourism green supply chain of Western China (see Fig. 1)[2].

This supply chain comprises the suppliers of all the goods and services that go into the delivery of...
Tourism products to tourists. It includes all suppliers of goods and services. It should also be considered that some tourism goods and services are supplied direct to tourists and are purchased by tourists themselves and it should not be forgotten that tour operators can influence their tourists in this area too.

Tourism supply chains involve many components - not just accommodation, transport and excursions, but also bars and restaurants, handicrafts, food production, waste disposal, and the infrastructure that supports tourism in destinations. These all form a part of the holiday product that is expected by tourists when they purchase holidays - whether or not the suppliers of those components are directly contracted by a tour operator. Just as no tour operator would provide 1-star transport to take customers to a 5-star holiday hotel, the sustainability of a holiday, like quality, depends on performance at all the links in the tourism supply chain.

4 Management system of tourism green supply chain of Western China

Supply chain management in any sector, including tourism, covers all parts of a product’s “life cycle”: raw materials, processing, manufacture, distribution, retailing, customer use and final disposal. Green supply chain management introduces “environmental protection” throughout its whole process[3].

Tourism, like all other supply chains, operates through business-to-business relationships, and supply chain management can be applied to deliver sustainability performance improvements alongside financial performance, by working to improve the business operations of each supplier in the supply chain. The main differences between tourism supply chains and those of other sectors, are that tourists travel to the product, and the product that they buy has a particularly high service component - in other words, it involves a higher proportion of people in the immediate production of the holiday experience[4].

In order to address environmental impacts, a tour company should analyze the sustainability of its products going right back to the raw materials from which they were produced, through suppliers, suppliers’ suppliers, and so on, right back to source, as well as ensuring that the tour company meets environmental criteria in its own internal operations[5]. The management system of tourism green supply chain can be illustrated in Fig. 2.

4.1 Accommodation

The emphasis of sustainable tourism activities is on the environment, mainly focusing on the reduction of costs from energy, water and waste.

Action on some environmental issues, such as energy efficiency should be widespread in larger hotels and more use should be made of renewable energy technologies, especially in remoter areas. Some can use water saving devices, and recycle wastewater (“grey water”) for irrigation. Large hotel should include training on environmental issues as part of staff training programs[6].

Many of these actions help to reduce operating costs as well as improving environmental performance. Furthermore, attention should be given to the site and design of hotels to minimize their environmental impacts. There are abundant resources of solar and wind energy in Western China, so, these hotels can use solar and wind energy, especially in remote areas.

4.2 Transport

Tour operators have some choice over mode of travel, and over the operation of ground transportation that they use. They can promote a modal change towards use of forms of transport with lower environmental impacts.

Ground transportation operators can promote greater fuel efficiency by ensuring that their fleets are well maintained, and by requiring drivers to switch off engines when vehicles are stationary. For example, in the Pantanal region of Brazil, World Horse Riding has supported its suppliers to replace environmentally unfriendly two-stroke boat engines with cleaner four-stroke engines and small solar-powered electric motors. Another example, in the Luguhu Lake of Yunnan province, the excursion boat is pig trough boat rowed by Mosuo people (local ethnic minority)[7].

4.3 Food

Food can generate considerable profits for the local population, when volume production and delivery at set quality standards can be met by local producers. Key issues for local sourcing of food
supplies in the tourism sector are quality, reliability and quantity of supply. Promotion of local sourcing therefore requires training and technical support and investment - for example in storage and distribution facilities - to meet quality and reliability standards, as well as the development of production and distribution networks to gather supplies from different local producers into the quantities required by hotels.

Fig.2 Management system of tourism green supply chain of Western China

Tour operators always use local food as one of the tourist attractions of their packages. There is also scope for tourists to visit local bars and restaurants to experience local produce and cuisine.

Tour operators should work with their local suppliers to promote local sourcing of food and encourage local production at the standards they require. This generally requires constant supervision and commitment, and success is often linked to championing of local sourcing by hotel chefs.

4.4 Excursion

Destination training on environment protection, both for the operators’ own representatives and those of its suppliers, should be encouraged. In particular, it is important that tour guides and local representatives are trained in minimization of environmental impacts, and maximization of local economic benefit and educating customers on the social workings of a region so as to maximize positive local impact, so that they can play their part in implementing company policies.

A variety of practical measures are available to address environmental quality issues. Some tour operators are working with their customers and local suppliers to reduce the amount of waste generated by their tours, and most adventure tour operators take home all waste materials to prevent litter in the sites they visit. Some tour operators set standards for key excursion and activity suppliers operating in protected or sensitive areas. For example, in the ancient city of Lijiang in Yunnan province, that is listed in 《Catalog of world natural and cultural heritage》, the using of plastic bag is forbidden, and the
substitute is environmentally friendly bag, which needs paying.

Government should invest in environmental infrastructure in the destination, especially for management of solid and liquid wastes\textsuperscript{[8]}.

4.5 Shopping

In many cases, tour operators use local crafts as one of the tourist attractions of their packages. Local sourcing and production will usually improve the contribution of tourism to the local economy, both financially and in terms of employment, and may also help to preserve local skills in craft production, provide a source of diversification and reduce seasonality in employment.

Local crafts retail outlets are often key to the holiday experience, many destinations open craft-makers’ workshops to visitors, and some destinations use the production of traditional textiles or local food as a tourist attraction. Tour operators and representatives can play an important role in suggesting tourists to appropriate places through the holiday information they provide to customers when they book, and at destination meetings. Tour operators are in a tremendous position to educate their customers about local food and crafts and to encourage their appreciation, which can help to make a real difference to the preservation of local skills and jobs\textsuperscript{[9]}.

4.6 Entertainment

A further aspect of the tourism supply chain is the entertainment activities of tourists while on holiday in destinations. Tour operators are marketing the whole holiday experience to customers, and this includes opportunities to experience a destination’s local products and services. Tour operators can play a significant role in providing appropriate advice to their customers about local products and services, and in ensuring that local producers and service providers have access to tourists on a fair basis.

Almost every destination in Western China has its entertainment items with distinctive characteristics. For examples, when you visit Inner Mongolia, you must ride a horse in the beautiful grassland; when you come to Xinjiang, you can ride a camel sightseeing in the desert; when you visit Tibet, you should dance with Zang people—Guozhuang; and when you come Chengdu city of Sichuang province, you had better to play Majiang in the tea house.

5 Conclusion

Western region has abundant tourist resources—the amount of its natural landscape and human view has accounted for over half of the whole country. Tourism is environmentally friendly industry, so the 12 provinces, cities and autonomous regions all have drafted their development schedule as to reinforce their tourism development targets. In order to realize the harmonious development of economy and environment, we should build tourism green supply chain in Western China.

References

