

E-Commerce for Community-Based Tourism in Developing Countries

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Abstract

Tourism is one of the world's largest industries, and it is a natural partner for the Internet, where it is also the world's largest on-line industry. Tourism is growing fastest in the developing countries, where it is a major component of most economies. Community-based tourism (CBT) has been shown to foster local development in developing countries, particularly in the poorer rural areas. At the same time, Information and Communication Technologies are being deployed within poor communities in developing countries and are beginning to demonstrate their potential for inducing local development. This paper describes an action research initiative for introducing electronic commerce for community-based tourism (e-CBT) in three Asian rural communities in order to reveal its potential for community development. e-CBT targets an important and growing market segment in the developing world, consisting of individual travellers for whom travel is an essential component of their life-style and who seek new and authentic experiences that are not directed towards a mass market. The proposal describes strategic partnerships between a University in Hong Kong and three other Asian universities who will work with local communities and tourism authorities for the eventual propagation of the development benefits of e-CBT among wider rural populations in their countries.

Introduction

Tourism is one of the world's largest industries, generating an estimated 11% of global Gross Domestic Product, employing 200 million people (Roe and Urquhart, 2001). Tourism receipts totalled US\$463.6 billion in 2001 (WTO, 2002). Between 1950 and 1998, international tourist arrivals increased 25-fold, from 25 million to 635 million. Approximately 2 million people currently cross an international border each day, compared with only 69,000 in 1950 (French, 2000). Tourism enjoyed exceptional years in 2000 and 2001. World tourism grew by an estimated 7.4 per cent in 2000, its highest growth rate in nearly a decade and almost double the increase of 1999. The fastest developing region in 2000 was East Asia and the Pacific with a growth rate of 14.7 per cent and some 14 million more tourists than 1999. Receipts from international tourism climbed to US\$ 476 billion in 2000, an increase of 4.5 per cent over the previous year. Worldwide the average receipt per arrival in 2000 amounted to US\$ 680 (WTO, 2001). However, in 2001 international arrivals declined by 0.6 per cent, the first year of negative growth for international tourism since 1982 (WTO, 2002). According to the World Tourism Organisation (WTO), the events of 11 September 2001 determined the results of international tourism in that year. Even so arrivals in Africa and East Asia and the Pacific saw increases of 4.3% and 5.5% respectively. Tourism and information technology and services are the two economic sectors that have experienced the fastest growth and expansion during the transition from an industrial society to a global information society (di Castri, 2002). International tourism is one of the indicators of growing globalisation.

The WTO forecasts that international arrivals are expected to reach over 1.56 billion by the year 2020. The total expected tourist arrivals by region shows that by 2020 the top three receiving regions will be Europe (717 million tourists), East Asia and the Pacific (397 million) and Americas (282 million). East Asia and the Pacific, South Asia, the Middle East and Africa are forecasted to record growth at rates of over 5% per year, compared to the world average of 4.1 per cent. By 2010, WTO forecasts that the Americas will lose its number two position, behind Europe, to East Asia and the Pacific, which will receive 25 % of world arrivals.

Tourism offers huge opportunities for developing countries to increase incomes from the growing number of arrivals that land on their shores. However, it has been recognized that many tourism policies developed from central governments without local involvement fail to cater for the sensibilities and aspirations of the communities that tourists visit. The conference on Community Based Ecotourism in Southeast Asia agreed that local communities should have the right to self-determination and to decide whether to accept or not accept the policies that affect their livelihood.¹ As tourism is essentially a micro-enterprise, tourism lends itself to local entrepreneurial activity, and community-based tourism has emerged as a mechanism for fostering locally based tourism operations, as opposed to those whose financial interests are often located away from the tourist destination. Moreover, as Information and Communication Technologies (ICTs) are beginning to be deployed in rural communities for the purpose of fostering local development, communities are able to implement electronic commerce in support of their CBT operations, and engage in e-CBT. Furthermore, it will be shown that the Internet is not only a natural partner for tourism, it also a natural partner for the market segment that e-CBT should target. With more than 600

¹ Community Based Ecotourism in Southeast Asia, Thailand, 27 February - 8 March 2002, Conference Report.

go beyond trickle down and multiplier affects by unlocking opportunities for the poor within tourism (WTO 2002). Success in poverty alleviation through tourism depends, says the WTO, partly on effective community-public-private partnerships that serve to reduce financial leakages and increase economic linkages to the local economy. Financial leakages occur where a disproportionately low percentage of tourism revenues stays in the local market, and they reduce the development impact of tourism. Linkages with the local economy foster revenue retention from tourism activities, and they depend on quality, reliability and competitiveness of local products. WTO suggest various steps that can be taken to increase the benefits to the local economy in tourist destination areas, by;

- facilitating local community access to the tourism market,
- minimising the financial leakages from the local economy,
- maximising the linkages of tourism to the local economy,
- building on and complimenting existing livelihood strategies through employment and small enterprise development,
- ensuring that tourism products contribute to local economic development not just to national revenue generation.

In March 2001, Ministers and Heads of Delegations of the 49 LDCs met in Gran Canaria, Spain to discuss the contribution that tourism might make to development. They concluded that for a large majority of LDCs, tourism development can be an avenue to increase participation in the global economy, alleviate poverty and achieve socio-economic progress (UNCTAD, 2001). The conference pointed out that in 18 LDCs, tourism is already a prominent economic sector, ranking first, second or third among all export sectors. In 10 other LDCs, tourism has been a less prominent but growing area of activity demonstrating significant progress over the previous decade. Overall, at least 6 out of 10 LDCs have placed international tourism at the heart of their development strategy, and they expect the sector to spearhead their economic re-specialization. The LDC representatives at the meeting identified international tourism as one of the few economic sectors through which LCDs have managed to increase their participation in the global economy, principally because of the comparative advantages that LDCs enjoy in the provision of tourism services. They recognised that tourism can be an engine for employment creation, poverty alleviation, reduction of gender equality, and protection of the natural culture and heritage (UN, 2001).

Tourism in Developing Countries

- Tourism is a principal export for 83% of developing countries and it is the principal export for one third of them.
- Developing countries had 292.6 million arrivals in 2000, an increase since 1990 of nearly 95%. The 40 least developed countries had 5.1 million international arrivals in 2000; they achieved an increase of 75% in the decade.
- 80% of the world's poor, those living on less than US\$1 per day, live in 12 countries. In 11 of these countries, tourism is significant and growing
- The developing countries are attracting an increasing share of global international tourist arrivals up from 20% in 1973 to 42% in 2000.
- The developing countries and particularly the LDCs secured a larger increase in the income per international arrival between 1990 and 2000 than did the OECD or the European Union countries. The LDCs secured an increase of 45% between 1990 and 2000 and the developing countries nearly 20%. This compares with 18% for the OECD countries and 7.8% for the EU.

- In 2000, tourism ranked third among the major merchandise export sectors for both developing countries and LDCs. If petroleum industry exports are discounted (and they are significant in only three) tourism is the primary source of foreign exchange in the 49 LDCs. (WTO, 2002)

Community Based Tourism

Community-based tourism is regarded as a tool for natural and cultural resource conservation and community development and it is closely associated with ecotourism, sometimes referred to as community-based ecotourism³. It is a community-based practice that provides contributions and incentives for natural and cultural conservation as well as providing opportunities for improved community livelihood. Community-based tourism provides alternative economic opportunities, which are in essence in rural areas. It has the potential to create jobs and generate entrepreneurial opportunities for people from a variety of backgrounds, skills and experiences, including rural communities and especially women. Community-based tourism has been implemented in many developing countries, often in support of wildlife management, environmental protection and/or development for indigenous peoples.⁴

Community tourism should⁵;

- Be run with the involvement and consent of local communities.
(Local people should participate in planning and managing the tour.)
- Give a fair share of profits back to the local community.
(Ideally this will include community projects (health, schools, etc).)
- Involve communities rather than individuals.
(Working with individuals can disrupt social structures.)
- Be environmentally sustainable.
(Local people must be involved if conservation projects are to succeed.)
- Respect traditional culture and social structures.
- Have mechanisms to help communities cope with the impact of western tourists.
- Keep groups small to minimise cultural / environmental impact.
- Brief tourists before the trip on appropriate behaviour.
- Not make local people perform inappropriate ceremonies, etc.
- Leave communities alone if they don't want tourism.
(People should have the right to say 'no' to tourism.)

Community based tourism occurs when decisions about tourism activity and development are driven by the host community. It usually involves some form of cultural exchange where tourists meet with local communities and witness aspects of their lifestyle. Eco-tourism also emphasises observation and learning by the tourist, alongside economic and cultural conservation, and the delivery of benefits that ensure long-term sustainability of communities and natural resources (Allcock, 2003).

³ Proceedings of the Conference on Community Based Ecotourism in Southeast Asia, Thailand, 27 February - 8 March 2002, http://www.recoftc.org/download/CBT_discussion/CBETconf_summary.pdf

⁴ See Outcomes of the Conference on Community Based Tourism in Southeast Asia, Regional Community Forestry Training Center for Asia and the Pacific http://www.recoftc.org/activity_CBFE_conference.html

⁵ Tourism Concern, http://www.tourismconcern.org.uk/travel_guide/community_what_is.htm

In Nepal, the Tourism for Rural Poverty Alleviation Programme began in 2001, jointly funded by the United Nations Development Programme (UNDP), the UK Department for International Development (DFID) with advisory services from SNV (Stichting Nederlandse Vrijwilligers) a Dutch development organisation. Operating in six remote locations, the programme employed social mobilisation and tourist awareness programmes in villages to empower local communities to manage their own tourism development. In Vietnam, the International Union for Conservation of Nature and Natural Resources (IUCN) or World Conservation Union, is operating a community based tourism pilot in Sa Pa, a highly visited area with colourful ethnic minorities. Funded mainly by the Ford Foundation, the goal of the project is to assist local stakeholders to achieve an environmentally, culturally and socio-economically sustainable form of tourism, establishing mechanisms that support the active participation of the community in tourism decision-making and implementation. The Nam Ha ecotourism project in Lao PDR uses community-based tourism as a vehicle to integrate environmental and cultural conservation with sustainable socio and economic development. Working closely with local villagers, limits were set on the number of trekking tourists allowed each year so as not to overwhelm the communities and to ensure that tourist incomes supplement rather than replace other economic activities.

Typically, with community-based tourism, the community runs all of the activities that a tourist engages in; lodging, food, guiding and craft sales. Benefits include; economic growth in rural regions; the distribution of tourism revenue, which can foster improved welfare and equity in the industry; improved resource conservation by local people; and diversification of the regional and national tourism product (Sproule, 1996).

Intertwined with community-based tourism in developing countries is the concept of pro-poor tourism. In most counties with high levels of poverty, tourism is a significant and/or growing component of the economy. Governments and aid agencies acknowledge that whilst economic growth is essential for poverty reduction, of itself, it is insufficient to ensure a significant reduction. Growth that is specifically pro-poor is a pre-requisite for significant progress towards agreed targets for poverty reduction. Tourism has many characteristics that make it potentially pro-poor;

- it is a diverse industry, which increases the scope for wide participation,
- the customer comes to the product, providing important opportunities for linkages (e.g., souvenir sales),
- it is highly dependent on natural capital (wildlife, scenery) and culture, assets that some of the poor have in abundance, even if they have few financial resources,
- tourism can be more labour intensive than manufacturing,
- a higher proportion of benefits (jobs, trade opportunities) go to women.

Pro-poor tourism is defined as tourism that generates net benefits for the poor. It maximises the potential for eradicating poverty by developing appropriate strategies in co-operation with all major groups, indigenous and local communities. Benefits may be economic, but they may also be social, environmental or cultural. Pro-poor tourism is not a specific product or sector of tourism, but an approach to the tourism industry. The core activity is to increase access of the poor to economic benefits. Pro-poor tourism strategies unlock opportunities for the poor; whether for economic gain, other livelihood benefits, or participation in decision-making. Early experience shows that pro-poor tourism strategies do appear able to 'tilt' the industry at the margin, to expand opportunities for the poor and have potentially wide application across the industry. Poverty reduction through pro-poor tourism can therefore be significant at a local or district level. Moreover, the poverty impact may be greater in remote

areas, though the tourism itself may be on a limited scale (Roe and Urquhart, 2001). Most examples of community-based in tourism in developing countries qualify as pro-poor tourism as they are designed to foster development at grassroots levels.

Sua Bali. A Community Based Tourism Project

The idea behind "Sua Bali" is to create a reasonably sized holiday resort for western tourists in a Balinese, setting - in such a way that the social and cultural aspects, and the ethnic-religious backgrounds respectively, are taken into account. The name "Sua Bali" means, "getting to know Bali". Sua Bali is a bridge between cultures, which enables people to get to know each other in a better way, something that is threatened by modern tourism. For this reason the holiday resort with six guest houses is situated at the outskirts of the village of Kemenuh and is arranged in the manner of a traditional Balinese farmstead. As a consequence the architecture corresponds to the local type of construction and fits into the surroundings.

Mrs. Ida Ayu Agung Mas, the owner, has involved the population of Kemenuh in the planning and gradual realization of Sua Bali - in numerous individual discussions and in the "Banjar", the village council. This was done in order to make sure that the concept of Sua Bali is truly in line with the traditions and behavioural patterns prevailing in the village of Kemenuh. The staff of Sua Bali predominantly hails from Kemenuh or neighbouring villages. The same goes for construction workers and craftsmen who constructed the guesthouses. Building materials and furniture for Sua Bali were purchased locally. Commodities for the daily needs also come either from the village or from local markets. The village of Kemenuh reaps the benefits of around seventy or eighty percent of the employment impact and of purchases handled, the rest goes to neighbouring villages.

Each guest pays US\$1 extra per night, which Sua Bali gives to the village community. This helps finance various cultural and social tasks or measures to improve the village infrastructure. So far about 900 Sua Bali guests with 5000 overnight stays have contributed around US\$3,700 for cultural and infrastructural measures and around US\$4,500 for social concerns. Sua Bali is adamant in concentrating its efforts to shape its own tourist programmes in a ways that are distinctive of the country and its lifestyle.

<http://www.studienkreis.org/engl/wettbewerbe/todo/95bali.html>

Featured on BBC TV World news, 16 April 2003

For rural communities, community based tourism holds out a range of attractions;

- farming and tourism development are often complementary in scope,
- the conversion to services and tourism activities is easier for farmers, even smallholders and poor farmers, than for industry workers, as farmers worldwide have an independent and entrepreneurial capacity and a greater potential for personal initiatives,
- tourism can enhance human occupation or re-colonise rural spaces that now have easier access to information. In this way, tourism can decrease or stop the rural exodus by providing new economic and job opportunities in rural areas,
- tourism can bring empowerment and cultural revival to local, isolated and remote populations (di Castri, 2002).

Travel, Tourism and the Internet

The Internet is having a profound impact on the travel and tourism industry. The Internet is restructuring tourism distribution channels and the tourism industry itself (Sheldon, 2002). The use of the Internet in developed countries for purchasing tourism products is increasing dramatically. Of the total e-commerce sales of US\$64 billion in 1999, travel, transport and hotel reservations as a group represented the largest category of Internet transactions, accounting for 38.5 per cent of all online sales (UNCTAD, 2000). According to a report by the United Nations Conference on Trade and Development (UNCTAD, 2001), the tourism industry is among those sectors quickly adopting the Internet as a business medium. The hard reality in the tourism industry today is “that if you are not on-line, you are not on sale” (WTO, 1999).

Yet the value added by international tourism intermediaries, who are often no more than marketers and information handlers and who rarely own or manage physical tourism facilities, can be as high as 30% or more, thus controlling general terms and conditions throughout the whole value chain. Although it is the destination’s socio-economic, cultural and geographical content that forms the fundamental tourism product, it often happens that with each intermediary party taking a commission, little income remains for the destination at which the product is consumed.

The tourism product has a distinguishing feature that has thrust it into the forefront of the electronic commerce revolution: at the point of sale tourism is little more than an information product. Travellers pay up front for travel services and in exchange for cash, they receive yet more information; reservations, tickets, etc. Tourism is also a “confidence good”. While price and customer service during the booking procedure are increasingly competitive factors, tourism producers and intermediaries are increasingly competing on the confidence inspired in the customer directly through the quality of the information they provide. The Internet can satisfy this need for quality information far better than any other technology. More than any other medium, the Internet and its inherent interactivity empower people to find information quickly and precisely on any destination or recreation that captures their interest. Customers expect instant information and increasingly, the possibility to design or customise a tourism product they are seeking and to pay for it online. Tourism and e-commerce are natural partners. Electronic commerce for tourism (e-tourism) can disintermediate and deconstruct the tourism value chain driving income closer towards the actual providers of tourism experiences (UNCTAD, 2001). Even small or remote destinations and products with well-developed and innovative web sites can now have equal access to international markets.

The number of worldwide Internet users was estimated to be 605 million by the end of September 2002⁶. One estimate suggests that e-commerce would represent about 18% of worldwide business-to-business and retail transactions in 2006 (UNCTAD, 2002). Although Internet penetration remains low in developing countries, they accounted for almost one-third of all new Internet users in 2001. Asia and the Pacific is the region where e-commerce is spreading most rapidly among the developing countries. China’s population of Internet users is already the world’s third largest.

The change that the tourism industry is experiencing presents an opportunity for developing countries to improve their relative position in the international market. The Internet

⁶ Nua Surveys. http://www.nua.ie/surveys/how_many_online/

substantially alters the patterns of the tourism sector and potentially brings all participants to the market. Both its present income and future growth potential make tourism critical to an understanding of the likely impact of electronic commerce on the economies of developing countries. In addition, a significant number of developing countries have built comparative advantages in the tourism sector over recent years, and tourism has remained a traditional service activity in which, until recently, buyers, sellers and intermediaries were well-defined. Consequently, understanding the relationship between tourism and e-commerce will help in addressing at least three fundamental and broader questions related to the global diffusion of e-commerce;

- how do new ICTs, especially the Internet, affect the trade competitiveness of developing countries,
- how does the old economy (represented by tourism) combine with the new economy (e-commerce) in developing countries, and,
- how much of a margin of manoeuvre will the combination of existing practices and emerging opportunities leave to developing country stakeholders to create comparative advantages in global markets?

(UNCTAD, 2000)

Operators and providers of tourism products cannot ignore the Internet if they wish to thrive. Even small and medium sized enterprises, the predominance of which is a common characteristic of the tourism industry, can adopt sophisticated technologies through the Internet, and confront their markets with a professional interface that is capable of competing on equal terms with large global corporations. The conventional structure of the tourism industry is dominated by intermediaries that sit between the supplier and the consumer.

Electronic commerce for tourism (e-tourism) can disintermediate and deconstruct the tourism value chain, driving income closer towards the actual providers of tourism experiences. But online payment possibilities, which are fundamental to closing sales, and a lack of local financial and technological infrastructure that is typical of rural and remote locations in developing countries, regularly force e-businesses to establish external subsidiaries and accounts, thereby perpetuating dependence on established intermediary operations. Marketing is a strategic tool for community-based tourism advocacy and sustainability. Marketing can enhance the success of community-based tourism by identifying market segments, defining the products based on the community-based tourism objectives and inputs from market studies, bring the products to a wide audience and help clarify what products are the most viable. The Internet is the ideal technology to handle the information and marketing aspects of community-based pro-poor tourism.

Jailoo Tourism, the Authentic Way to Experience Kyrgyzstan
The Times of Central Asia, 5 March/2001

Have you ever slept in a yurt (a Kyrgyz felt tent), drunk fresh milk in the early morning or listened to komuz music on a mountaintop? *Jailoo* (summer pasture in Kyrgyz) Tourism offers you all of these experiences. *Jailoo* tourism is part of a new approach to developing Kyrgyzstan's tourism industry, a strategy centered on Cultural Tourism. Cultural Tourism emphasizes the interaction and communication of tourists with authentic culture and the everyday life of local people, while encouraging multi-national cooperation and cross-cultural interaction. By taking the tourist into the mountains to spend time in the yurts of Kyrgyz nomads, *Jailoo* tourism gives the guest a chance to get a taste of Kyrgyz nomadic life.

Jailoo tourism is also focused on community-based tourism, helping local people benefit from the tourism industry while still living in remote villages. Local Kyrgyz nomads learn to offer a unique service to tourists, while gaining extra income during the summer, and participating in the economic development of his country. The nomadic Kyrgyz travel to the Son-Kul pastures in May to spend the summer. Dozens of yurts sprout like mushrooms around the lake. Each Kyrgyz family erects two yurts in preparation of anticipated guests. When tourists visit their encampment, the Kyrgyz empty one yurt and move themselves and their belongings to the second. They usually share all of their possessions with their guests, from dishes and oil-filled lamps, to blankets and mattresses.

Asel Karabakirova, an office assistant at NoviNomad Tourism Company, also a tour guide on the cultural tours, says, “What the locals do for tourists isn't a show. Its their life.” The NoviNomad Tourism Company takes great pains to ensure that the vulnerable life style is not endangered by tourism. Tourists are not allowed to pay the nomads directly. The Kyrgyz nomads, in turn, are encouraged to treat the tourists as guests in the traditional code of Silk Road hospitality. Jailoo tourism began with the initiative of Helvetas (www.helvetas.kg or www.tourism.elcat.kg), the Swiss development aid association and founder of NoviNomad Tourism (<http://www.novinomad.com/>).

Information and Communication Technologies for Development in Developing Countries

Governments and the international and bi-lateral aid agencies are becoming increasingly enthusiastic about the potential for ICTs to alleviate poverty. The United Nations Development Programme (UNDP) has led a global campaign to commemorate the International Day for the Eradication of Poverty, for which the theme in 2001 was the role of ICT in poverty reduction. UNDP has launched the Digital Opportunity Initiative (DOI), a public-private partnership to help developing countries put in place national e-strategies to tackle strategic bottlenecks, facilitate enterprise and community development, and address issues such as connectivity and human capacity. The report of the DOI suggests that experience around the world reveals ample evidence that, used in the right way and for the right purposes, ICT can have a dramatic impact on achieving specific social and economic development goals as well as play a key role in broader national development strategies (UNDP, 2001).

Among the lessons from experience for the role of ICT in development, UNDP includes the following:

- An export focus can produce significant economic benefits.
- It is imperative to use ICT to improve the competitive position of a developing country in the global economy, but this may fail to meet some development goals if it diverts attention from fostering local markets and businesses.
- An explicit focus on using ICT in pursuit of development goals allows countries to achieve a wide diffusion of benefits from ICT and contributes to both broad-based economic growth and specific development goals.

The DOI report also suggests that (ICT) initiatives that are properly conceived and implemented can have an impact that extends beyond the individual communities they are designed to serve. Model initiatives can be scaled nationally or even regionally, contributing

to the critical mass and the threshold levels needed to ignite a virtuous cycle of development (UNDP, 2001).

A common form of providing public access to ICTs in developing countries is the Multi-purpose Community Telecentre; also known as information kiosks, information centres or just telecentres. Telecentres are springing up all over the developing world, as grassroots projects driven by communities, non-government organisations or research bodies, or as pilot projects intended by governments as pre-cursors to wider infrastructure projects designed to close the digital divide between better off people in the cities who can more easily get access to the Internet than their poorer compatriots in rural areas. For example, the government of Nepal is implementing a project that will implement 15 pilot rural development telecentres in order to provide communities with shared access to ICTs. Mechanisms will be developed to ensure that rural communities are able to articulate and prioritise their own information requirements and to implement necessary strategies to meet those requirements. Arising from the pilots, suitable mechanisms and policy interventions will be designed for replicating successes and for achieving a national rollout of rural development telecentres⁷. Similarly, in China, the government is implementing a project for poverty reduction through access to ICTs in the form of telecentre networks, providing demand driven information services to rural communities. The initiative aims to develop an operating cost control model to facilitate management and cost control of village telecentres as well as creating revenue generation alternatives with suggestions and mechanism for attaining self-sustainability.

Village Information Shops, Pondicherry

A group of ladies in Kizhur village Pondicherry decided they wanted to start a small business enterprise manufacturing incense sticks. They began as sub-contractors but their confidence and enterprise grew as a result of utilising the local telecentre. As a result of some searches by the telecentre operators, they were able to develop the necessary skills for packaging and marketing their own brand name incense. The ladies were quickly able to develop local outlets for their products and they are confidently using the telecentre to seek out more distant customers. The centre in Villianur has generated a number of databases for local use, and all but one are in the Tamil language. The centres collect information on indigenous knowledge systems and are developing useful brochures in Tamil for display in their news bulletins. There are close to a hundred databases, including rural yellow pages, which are updated as often as needed. An entitlements database serves as a single-window for the entire range of more than 100 government programmes, fostering greater transparency in government. The centres use multimedia and loud speakers to reach out to illiterate clients, and publish a fortnightly Tamil newspaper called *Namma Ooru Seithi* (Our Village News), which has become so popular that Government departments such as the District Rural Development Agency, Social Welfare Board, and the Small Scale Industries Centre use it to publicize their schemes (Arunachalam, 2002).

Telecentres enable rural communities that sometimes have difficulty receiving newspapers to participate in the global information revolution spawned by the Internet. Although the developed world has grown accustomed to the model of one-on-one access to personal computers, in the developing world, telecentres allow even a single connected device to serve the same purpose for entire communities. Telecentres offer the opportunity for the delivery of a wide range of useful services to poor people, including health, education, employment and enterprise development, cultural enrichment, social communications and so on.

⁷ ICT for Development. The Rising Nepal (English Daily) 28 August 2002

Moreover, although rural communities in developing countries suffer from low and uncertain incomes and they lack many resources that are commonly found in urban areas, they are often rich in natural assets; scenery, climate, culture and wildlife. Such assets lend themselves to the development of local tourism, and can be exploited with the help of development oriented community telecentres with access to the Internet.

Communities that are able to mobilise themselves towards community-based tourism and are provided with access to the Internet can theoretically engage directly with global tourism markets, bypass the intermediary information-handlers to attract visitors and retain a larger proportion of tourism receipts. Electronic commerce for community-based tourism, or e-CBT, can become a pump-primer for introducing telecentres into rural communities, which can subsequently be used to foster the other forms of development that ICTs make possible. Moreover, there is a continuing debate concerning the financial sustainability of development telecentres (Harris, 2003). Telecentres that target income-generating opportunities from the outset are more likely to survive after the initial start-up funding dries up.

e-CBT represents a development oriented focus for the deployment of ICTs that is sometimes lacking in interventions that are more concerned with technology than with the benefits it can deliver. e-CBT becomes an explicit focus for using ICT in pursuit of development goals. Moreover, as CBT has a number of potential strengths in terms of development, benefiting a wide section of the community, especially women, e-CBT inherits those strengths and makes it attractive as a development goal to be pursued where the appropriate conditions exist. Tourism is the one sector where the concept of sustainable development can be better tested, proved or disproved in the field, with a variety of approaches as applied to different environments and cultures. The three pillars of such development are the modernity of information technology, the tradition of local cultures, and the strength of local participation and empowerment. Access to information technology even in remote places and at low cost, offers unique ways and means to promote the involvement of local populations and to facilitate the establishment, initiatives and activities of small-scale tourism entrepreneurs (di Castri, 2002).

The Target Market for e-CBT

The market for e-CBT is the same as that for CBT, but the introduction of ICTs is particularly suited to the marketing and management of CBT as it is well matched to an identifiable type of consumer. A growing area of consumer research has identified what is known as the neo-consumer. Australian Ross Honeywill, foundation director of the International Centre for Customer Strategy⁸ and managing director of the Neo Group coined the term. According to Honeywill, the neo-consumer is an emerging breed of consumer, one that represents only a quarter of the population in developed countries, but which controls half the discretionary spending power of the economy (Honeywill, 2002). The group was identified after consumer research using data from Australia, New Zealand, the US and the UK (Honeywill and Byth, 2001). The neo-consumer market segment possesses the following characteristics that make it relevant to e-CBT:

- travel more often than the average,
- spend more on travel than the average,
- are resilient travellers, for whom travel is an essential lifestyle component.
- Internet savvy, heavy technology users,

⁸ <http://www.customerstrategy.com.au/>

- independent travellers,
- looking for more experiential tourism,
- don't see themselves as tourists,
- quite likely to use a travel agent, but they want the agent to be their guide or coach,
- want to stay connected 24/7
- not after mass market information,
- seek encounters with the authentic,
- are willing to pay for services that will help them achieve their goals,
- like to research individual experiences,

(Honeywill, 2002)

Neo-consumers are very individualistic, but although they make up 24 per cent of the population in Australia and the USA, they do not fit traditional demographic or slice of life descriptions like Generation X, and Baby Boomers. They can be identified across all age and gender groups by a range of spending, attitudinal, behavioural and psychological characteristics including a desire to be in control of their own lives, a passion for authenticity, an urge for the edge, a desire for change, an appetite for technology and continuous, high-margin consumption (Honeywill and Byth, 2001).

The relationship between neo-consumers and tourism was further characterised at the Pacific Asia Travel Association (PATA) 8th Mekong Region Travel Forum⁹ in a keynote address by John Morse, Chairman of Tourism Victoria and former Australian Tourist Commission Managing Director. Morse characterises neo-consumers as follows:

- travel is a “must have” component of their life-style, not a luxury,
- they travel further and more frequently than the average,
- they do not purchase inclusive packages,
- they construct their own itineraries
- they value independence and choice,
- they are not interested in mass market products or pre-packages itineraries,
- they do not respond to advertising,
- they seek authenticity and uniqueness in their travel experiences, e.g., a street performer would be more interesting than a staged cultural performance,
- they determine their own pace of travel,
- they like to stay in villages,
- they appreciate nature,
- they take time to appreciate the history and culture of their destination,
- they like to visit places that local people appreciate,
- they tend to make travel purchases on the Internet.

Research by the Centre for Consumer Strategy also indicates that:

- neo-consumers are 10 times more likely, than others to travel frequently in the next 12 months,
- they are motivated by cultural experiences,
- they are inexpensive to attract and acquire if you know how to reach and motivate them,

⁹ March 28 – 30, Hanoi, Vietnam.

- they will reward someone who creates a partnership of equals, with high margin, high loyalty and high levels of referrals

(Honeywill, 2002)

CBT has the potential to satisfy many of the life-style needs of neo-consumers and e-CBT represents an appropriate form of engaging with them, for promotion, marketing and information exchange as well as for sales transaction processing. In its suitability for the neo-consumer market segment, e-CBT represents a potentially potent force in tourism development for the following reasons:

- the search for new and novel experiences is one of the major engines driving the tourism life cycle,
- neo-consumers seem to be in the vanguard of this search,
- CBT opens up new experiences that match those sought after by neo-consumers,
- e-CBT is enabled by the technology that is having the most impact on tourism, which is itself the most important business application for that technology,
- e-CBT is enabled by the technology that has been adopted most aggressively by the consumers that it targets.

As a platform for community development e-CBT has the potential for realising the fullness of the promise of a pro-poor approach to tourism for at least two important reasons:

- it reverses the prevailing pattern whereby much of the tourism industry is controlled by financial interests located away from tourist destinations (Heyendael, 2002),
- it fosters micro-enterprise tourism which acts as a catalyst to complement and promote; community fisheries, traditional agriculture, handicraft production, and conservation practices, as well as helping to enhance the quality of natural and cultural resource utilisation (di Castri, 2002).

In every part of the world, including the most remote and isolated, tourism operations have been made cheaper and more widely accessible by the new tools of information technology (di Castri, 2002). However, viable alternatives to traditional mass-scale tourism that tends to destroy the environment and displace local people must be found (Urquico, 1998). As a barrier to the negative impacts of mass-tourism, Pauline Sheldon suggests that destinations with highly sought-after natural resources may eventually use IT to restrict their visitors, by choosing from a database visitors with a profile that promises to fit the destination well (Sheldon, 2002). Communities that wish to develop e-CBT need to be mobilised towards both the use of ICTs for their own strategic development and to the requirements for providing satisfying tourism experiences to their target clients. Whilst there is research in each of these areas, there is little (none) into the combined technology and tourism aspects of e-CBT.

Research Proposal

Godde (1998) points out that web sites promoting community tourism ventures are becoming increasingly common, largely because of the information they can supply tourists that travel agencies often cannot. However, few, if any, sites incorporate interactive or transactional capabilities with the community. Although Internet promotions have the advantage of wide international exposure at low cost, for communities without technical access and support, promoting a community-based web site may require outside assistance (Godde, 1998).

Accordingly, this is a proposal to implement action research within suitable communities for testing the development potential of e-CBT.

The following types of CBT interventions are said to yield the most significant returns;

- projects that are focused on a single component or geographical area,
- where there is a specific focus on SMEs,
- where there is sufficient attention to training, marketing and enterprise viability,
- where there is meaningful local community involvement and participation,
- where there is demonstrated tourism potential within the local context, a “destination focus”,
- when the tourism sector is growing,
- where there is sufficient attention on socio-cultural issues.

(Bennett, Roe, and Ashley, 1999)

Accordingly, the research will engage with communities and institutions in such a way that each of these factors will be properly addressed. Also, the research will take into account the characteristics of ICTs that are said to be relevant to the following aspects of tourism development:

- as a completely new opportunity for isolated and often fragmented peoples to enable them to accord greater value to their natural and cultural heritage through highly specific tourism activities in their ecological, cultural, ethnographical, archaeological, and adventure aspects, and also to progressively develop their entrepreneurial capacity,
- as a facilitator of local initiatives and small entrepreneurs, making their operations more viable by eliminating the middlemen, and bringing local operators to their market by reducing their dependence on international business chains,
- as a means of empowering tourists to organise their trips *à la carte*, without the additional costs of a travel agency, offering a greater choice of destinations, enabling them to find their niche,
- as a means of offering visitors to a site the use of hand-held devices and global positioning systems to provide and improve interpretative information of the site, in particular by making it possible to display audio, text or video information,
- as a means of raising public awareness of bio-diversity and conservation, allowing tourism to shed its image as an activity that degrades the environment and culture, to emerge as a catalyst for investment in biodiversity enhancement and in the revival of local cultures.

(di Castri, Sheldon, Conlin, Boniface and Balaji, 2002)

The proposal is to test the ability of e-CBT to generate incomes and foster local development within rural communities in Asia, using the method of socio-technically informed action research. Ideally, the research will be able to test e-CBT in three scenarios:

- a community that already has tourism, but without ICTs,
- a community that already has ICTs but without tourism,
- a community that has neither tourism nor ICTs.

In each case it is proposed to collaborate with suitable partners to conduct the research, as follows:

- a rural community, to;
 - provide tourism experiences,
 - verify outcomes.

- a local university, to;
 - work with the community,
 - assist with research,
 - translate and support software,
 - provide technical assistance.
- a local tourism association (state/provincial tourism body), to;
 - provide training to the community,
 - promote the replication of successes.

Three such sites are proposed.

A community that already has tourism, but without ICTs. The Bai Yang Gou Valley Tourist Region, Xinjinag Province, China.

The Bai Yang Gou nature reserve in north Tian Shan Mountains near Urumqi, the capital city of Xinjiang province in western China is the home of a nomadic Kazak shepherd community who travel into the surrounding hills during the summer to feed their animals on the lush high summer pastures. During this time they live in yurts, the traditional style of rounded tent and they herd their animals on horseback. The area is one of outstanding natural beauty and the people constitute an ethnic minority with their own traditions and culture. Tourists already visit the Valley, but they are bussed in for an afternoon to witness a few horse riding displays by the Kazaks, then bussed back to the city. Previous attempts to develop tourism based on longer stays have resulted in an abandoned concrete hotel that mars the otherwise pristine location. The community has yet to develop opportunities for mountain trekking, on foot or by horseback, or to provide opportunities for close encounters with their life-style and culture, through for example homestays or escorted tours further into the mountains. Surprisingly, during a visit by the authors in October 2002, the area was well served with telecommunications. A working model for the type of CBT envisaged in Xinjiang exists in the form of an organisation in neighbouring Kyrgyzstan called Novinomad, a Kyrgyz-Swiss joint venture specialising in community based eco-tourism, trekking and horse-riding that was established with the assistance of Helvetas, the Swiss development agency¹⁰. The research proposes to partner with Urumqi University, arising from an initiative, an e-Commerce Study Tour to the People's Republic of China, September 26 - October 9, 2002, by a group of researchers who came together at a panel called "The New Silk Road" during the 15th Bled Electronic Commerce Conference¹¹ (Davison et al., 2003). It is anticipated that the Xinjiang Tourism Bureau will also partner with the research team.

A community that already has ICTs but without tourism. Bario, Sarawak, Malaysia.

Bario is a remote rural community in the Kelabit Highlands of the Malaysian State of Sarawak, on the island of Borneo. It is the homeland of the Kelabit people, one of the smallest indigenous Sarawakian ethnic minorities. Bario is one of the centres visited by the indigenous Penan tribe, constituting the last remaining nomadic and semi-nomadic peoples living in the rainforest. Bario is also the site of a pioneering international award-winning rural ICT project, e-Bario, which involved the establishment of a development telecentre. This proposal seeks to utilise e-commerce to promote community based pro-poor tourism in Bario in order to raise incomes and to construct a model for doing the same with other rural and remote communities in Asia. The Kelabit Highlands of Borneo are rich in natural assets;

¹⁰ <http://www.novinomad.com/index2.htm>

¹¹ "e-Reality: Constructing the e-Economy", Bled, Slovenia, June 17-19, 2002.

climate, mountains, rainforest, wildlife and local indigenous cultures. Bario, is an isolated farming community accessible only by air. The Bario population has been dwindling and the economic viability of the community is threatened. The new telecentre brings opportunities for local development with ICTs. Bario already enjoys a steady trickle of tourists, but so far the community has done little to promote the area for tourism, although it is eager to do so in order to create jobs, provide enterprise opportunities and raise incomes. The surrounding mountains provide opportunities for trekking in pristine rainforests and cultural encounters with the indigenous peoples who still live very much to their long-established customs and reside in their traditional community longhouses. The research will partner with Universiti Malaysia Sarawak, which was instrumental in introducing the telecentre, and the Sarawak Tourism Board.

A community that has neither tourism nor ICTs, Tri Ton District, An Giang Province, Vietnam.

An Giang province is located in south Vietnam, in the Mekong Delta region, and shares a 95-km border with Cambodia. The province is criss-crossed by many rivers and canals, which make a convenient water transport system and tourist attraction. Tri Ton is a centre for the Khmer minority in Vietnam who make up 5% of the population of An Giang Province. Tri Ton District is largely rural, with a small town and many villages that would make attractive locations for CBT. The district enjoys 300,000 – 400,000 domestic visitors each year who arrive in tour busses from Ho Chi Minh City and visit the two or three principal mass tourist attractions; Soai Lake scenic area; Tuc Dup Hill American war battle location; and Ba Chuc memorial to victims of a Cambodian massacre. These visitors stay for less than a day in the district and they bypass the local cultural attractions of the area that are of interest to foreign visitors; the Khmer villages, temples and the local waterways. The District People's Committee has a plan to construct a traditional Khmer house for visitors' accommodation in order to entice them to stay longer and to spend more locally. Tri Ton town is well served with communications, with two cyber cafés, each with around 10 computers. All the surrounding villages have telephone access but not computers and the Internet. An Giang Province is the site of an Asian Development Bank project to promote CBT as part of the Greater Mekong Sub-region Tourism Development Project which has the objective to support pro-poor community-based tourism projects in rural areas. The project will ensure that the poor benefit from increased tourism, that current levels of tourism will be effectively managed, cultural traditions and natural habitats preserved, and environmental degradation mitigated. It will develop pilot ecotourism and village-based tourism projects, foster the conservation and improvement of the natural and cultural heritage of selected areas, monitor social impacts, promote the role of women, and establish measures to minimize negative impacts of increased tourism (ADB 2003). However, this project has not included any ICT component that would empower village communities to manage and promote their own CBT projects.¹² The proposal for e-CBT will partner with An Giang University, which is already training village cadres in computer literacy and delivering agricultural information to farmers via the Internet, and with the An Giang Service of Trade and Tourism.¹³

The research will be comprised of the following principal components;

¹² Mr. Le Minh Hung, Director, Angiang Province Tourism Project Management Board, Long Xuyen City, personnel communication, 25 March 2003.

¹³ Verbal agreement in principle with Ms. Bui Hong Ha, Vice Director of An Giang Trade Promotion Centre, Long Xuyen City, 25 March 2003.

- social mobilisation in the participating communities towards the development of consistently high quality tourism products that are sensitive and complementary to the local environment and culture,
- construction and deployment of e-commerce technologies capable of marketing the destinations for appropriate tourists and for transacting payments for such products,
- empowerment of the participating communities through the deployment of ICTs in the form of a telecentre with the means to operate and manage the e-commerce facilities in support of local tourism,
- monitoring and evaluation of the activities in the participating communities to provide feedback on performance and outcomes.
- construction of a workable modality for e-CBT that can be adopted by other communities in the developing world,
- dissemination of the experiences and knowledge gained to the wider development community.

Community interactions will be directed towards mobilising them into creating and sustaining suitable tourism products, in the form of accommodation, catering, guiding, handicraft production and cultural encounters such as displays, shows, lectures and so on. It has been pointed out that social mobilisation with communities through community-based organisations is an excellent (perhaps essential) entry point to prepare community level stakeholders for the development of tourism. It has been demonstrated that the poor possess huge untapped potential for economic activities but are hindered from doing so through the lack of organisation.¹⁴ Social mobilisation overcomes this lacking by helping communities to;

- become organised, for pooling resources, reducing overheads, and achieving economies of scale,
- identify leaders from among themselves,
- identify and prioritise actions that people are willing to undertake,
- assess the feasibility of identified opportunities in terms of peoples' capacity, willingness, equity, sustainability, and resource demands
- arrange, secure and facilitate the flow of required resources to the community,
- monitor, lobby and establish linkages between themselves and other agencies.

(Sah, 2000).

E-commerce technologies will be based on the concept of web services. Web services are dynamic, flexible, interchangeable, network accessible software components that reside on the Internet. Web services encapsulate business processes and data that can be published in a directory, found by a user (human or machine) and combined with other web services to create more complex applications that can be customised at run time for each user (Pollock and Benjamin, 2001). Some of the important features of web services and their applicability to e-CBT are as follows:

- they give customers direct access to the information, data, and functions they need in order to interact with suppliers, without requiring these customers to log onto the supplier's web sit,
- they enable teams of developers to work independently on systems that will interact, because they are working toward a common set of interfaces rather than having to synchronize processing.

¹⁴ South Asia Poverty Alleviation Programme, Regional Progress Report 2000, United Nations Development Programme.

Web services solve business and technology problems such as:

- companies that need to respond quickly and reliably to special requests from customers and to special offers from suppliers,
- business processes that need customized tweaks for various situations, customers, suppliers, and changes in the market place,
- business processes that need to interact automatically, across organization and enterprise boundaries.

(Seybold, 2003)

A web services approach to e-CBT allows the assembly and/or construction of a range of software components that will perform the transactions necessary to enable participating communities to promote and sell their CBT products to tourists anywhere on the Internet. Web services are customisable and therefore they can be adapted to the specific and unique requirements of each community, whilst retaining common underlying processes, such as responding to enquiries, offering alternate bookings and pricing, and making reservations and receiving payments. Accordingly, under the proposal, the Information Systems Department of City University of Hong Kong will carry out the following;

- develop a collection of web services capable of effecting the business processes required for each participating community to manage its e-CBT operations,
- provide facilities for their translation and customisation by the participating universities,
- coordinate their packaging and organisation for use by additional communities as they become interested in implementing their own e-CBT operations.

The Department of Information Systems at City University of Hong Kong conducts research that emphasises the practical application of innovative information systems theories, methods and techniques to business and organisational problems within an Asia-Pacific context. Their focus is on action-oriented research that optimises technology within the socio-business environment into which it is introduced. The Department is in the process of forming an area of excellence in e-business, which will expand the industry-academic partnership established by this proposal. It is already engaged in research into the adoption of e-commerce by Hong Kong's small and medium-sized Travel Agencies, and the development of electronic business practices to assist them.

Telecentres will be set up within participating communities with a minimum of one computer with Internet access. Specific designs and implementation will be subject to local conditions and arranged between the communities themselves and the local research partners. Continuing research into the effectiveness of the e-CBT installations will be conducted by all the participating universities in collaboration with each other and with the local tourism authorities.

Conclusions

Both tourism and ICTs represent considerable potential for local development in rural communities in developing countries, bringing unusual and experiential forms of cultural encounters to a market of high-spending, frequent travellers in a manner that is wholly congruent with their lifestyle. The proposal described here presents a valuable opportunity to validate this promise and to gain an authoritative insight into an area of pressing need.

References

ADB. Asian Development Bank. Signing for Tourism Project in Viet Nam. http://www.adb.org/Media/Articles/2003/1855_Viet_Nam_Signing_for_Tourism_Project_in_Viet_Nam/default.asp. March 2003.

Allcock, A, Sustainable Tourism Development in Nepal, Vietnam and Lao PDR, SNV Netherlands Development Organisation, 2003.

Bennett, O., Roe, D. and Ashley, C., Sustainable Tourism and Poverty Elimination Study: A report to the Department for International Development, April 1999. http://www.propoortourism.org.uk/dfid_report.pdf

Davison, R., Vogel, D., Gričar, J., Harris, R. and Sorrentino, M., Electronic Commerce on the New Silk Road: Rejuvenating a Historical Trade Network, The European Conference on Information Systems June 19-21 Naples, Italy 2003.

di Castri, F., Sheldon, P., Conlin, M., Boniface, P. and Balaji, V., Introduction: Information, Communication and Education for Tourism Development, in Tourism, Biodiversity and Information, di Castri, F. and Balaji, V., (eds.), Backhuys, Leiden, The Netherlands, pp. 423-429, 2002.

di Castri, F., Tourism, Biodiversity and Information, di Castri, F. and Balaji, V., (eds.), Backhuys, Leiden, The Netherlands, 2002.

French, H. Vanishing Borders: Protecting the Planet in the Age of Globalization Washington, Worldwatch Institute, 2000.

Godde, P., (ed.) Community-Based Mountain Tourism: Practices for Linking Conservation with Enterprise Synthesis of an Electronic Conference of the Mountain Forum, April 13–May 18, 1998 http://www.mtnforum.org/resources/library/cbmt_01.htm

Harris, R.W., Kumar, A., Balaji, V. Sustainable Telecentres? Two Cases from India. ICTs and Development: New Opportunities, Perspectives and Challenges, Ashgate Publishers, forthcoming, 2003.

Heyendael, A., Sustainable Tourism Within the Context of the Ecosystem Approach, in Tourism, Biodiversity and Information, di Castri, F. and Balaji, V., (eds.), Backhuys, Leiden, The Netherlands, pp. 25-44, 2002.

Honeywill, R. and Byth, V. I-Cons: The Essential Guide to Winning and Keeping High-Value Customers, Random House, 2001.

Honeywill, R., Cash in on the Neo Consumer, Traveltrade, June 5 2002, http://www.maryrossitravel.com/whoweare/news/pdf/traveltrade_jun2002.pdf

Honeywill, R., The Global Neighbourhood, The New-Consumer Challenge for Tourism, <http://www.customerstrategy.com.au/The%20New-Consumer%20Challenge%20for%20Tourism%20ATEC%20May%202002.pdf>

Patricia Seybold Group, An Executive's Guide to Web Services: How to Optimize Web Services Investments to Improve Your Customer Experience. www.psgroup.com. <http://www.psgroup.com/vm/ws/request.asp> 2003.

Pollock, A. and Benjamin, L., Shifting Sands: The Tourism Ecosystem in Transformation, DestiCorp Limited, 2001. <http://www.desticorp.com/whitepapers/TourismEcosystemwhitepaperWTM.pdf>

Roe, D. and Urquhart, P., Pro-Poor Tourism: Harnessing the World's Largest Industry for the World's Poor, IED, UK and Khanya, South Africa, 2001

Sah, J., Social Mobilisation Manual, Based on Syangja Experience. Social Mobilisation Learning Centre, Institute of Animal and Agriculture Sciences, Tribhuvan University, Ranpur Campus, Nepal, 2000.

Sheldon, P., Information Technology Contributions to Biodiversity in Tourism, in Tourism, Biodiversity and Information, di Castri, F. and Balaji, V., (eds.), Backhuys, Leiden, The Netherlands, pp. 449-456, 2002.

Sproule, Keith W. Community-Based Ecotourism Development: Identifying Partners in the Process. The Ecotourism Equation: Measuring the Impacts. Bulletin Series Yale School of Forestry and Environmental Studies, Number 99. New Haven CT: Yale University, 233-250, 1996.

UN. The Third United Nations Conference on the Least Developed Countries. UN General Assembly A/CONF.191.BP/4 5 April 2001. Reprinted as the Canary Islands Declaration on Tourism in the Least developed Countries, 2001.

UNCTAD, E-Commerce and Development Report 2001, United Nations, New York and Geneva, http://r0.unctad.org/ecommerce/docs/edr01_en/edr01pt0_en.pdf.

UNCTAD, E-Commerce and Development Report, 2002, United Nations, New York and Geneva, 2002.

UNCTAD, Electronic commerce and tourism: New perspectives and challenges for developing countries, 2000. Expert Meeting on Electronic Commerce and Tourism Geneva, 18-20 September 2000. <http://r0.unctad.org/ecommerce/docs/ecomtour.pdf>.

UNCTAD, High-level meeting on Tourism and Development in the Least Developed Countries, Maspalomas Convention and Exhibition Centre, Las Palmas, Gran Canaria 26-29 March 2001. <http://r0.unctad.org/conference/preconf/tourism.en.htm>.

UNDP, Creating a Development Dynamic Final Report of the Digital Opportunity Initiative July 2001. <http://www.opt-init.org/framework/DOI-Final-Report.pdf>

Urquico, C., Community Based Sustainable Tourism: A Handbook, ASSET, Philippines, 1998

WTO, World Tourism Organization, "Marketing tourism destinations online", p.4, 1999.

WTO, World Tourism Organisation Tourism Highlights 2001

WTO, World Tourism Organisation, Tourism and Poverty Alleviation, WTO, 2002