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Regional supply of Eco-tourism and collective learning: An institutional perspective

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Abstract

Ecotourism covers a wide range of environmental, cultural and social criteria intended to improve the regional economic development in tourism regions. Most private and public instruments make use of certification programs to overcome information asymmetries between tourists and suppliers. The paper gives arguments why certification programs will not be sufficient to distribute necessary information. Ecotourism requires collective learning processes within tourism regions as well as between suppliers and consumers, as all of these affected groups have different interests and motivation of using information. Thus, information instruments do not have to be seen as stationary incentive schemes to allocate existing information, but to create incentives to generate and diffuse new experiential knowledge. By describing and comparing four case studies, the paper shows the limits of existing institutional approaches to improve collective learning and presents an outlook to future institutional developments.

1. Introduction

Despite the negative impact of terror attacks after September 11, 2001, tourism is still a fast growing sector. By 2000, worldwide spending on tourism had reached over $5 trillion, and the industry was generating, directly or indirectly, 11% of the global GDP. According to statistics of the World Tourism Organization (WTO), tourism and travel is the world's leading export-earning industry (WTO, 2003a). Thus, it can hardly surprise that tourism is seen as one of those future sectors creating development potential to poor countries favoured by climate, natural resources and cultural background. Simultaneously, environmentalists and national and international policy-makers criticise the increasing relevance of travel and tourism as source for several local and international environmental damages (WBGU, 2000; UNEP, 2003). As traditional industries changed their production processes and reduced negative environmental effects, climate change effects by energy use of tourism travel, ecosystem damages by tourism infrastructures and negative local health effects caused by insufficient wastewater and waste manage

ment of tourism facilities became more obvious. Starting in the 1970s, new forms of tourism have been developed to reduce the negative impact on the environment and indigenous culture (Cater, 1995; Honey, 1999). Firstly, these changes only attracted the attention of small groups of environmentalists and adventurers. But in the early 1990s, *ecotourism* including nature tourism was hailed as the fastest growing sector of the travel and tourism industry (Honey; Rome, 2002). The International Year of Ecotourism in 2002 accompanied by several regional forums and a World Ecotourism Summit in Quebec City, in May 2002 illustrated the attractiveness of this way to spend leisure time (WTO, 2003b). Despite these optimistic perspectives, uncertainties remain, whether ecotourism is really the key of reconciling environmental objectives and regional development needs in developing countries.

These uncertainties are caused by specific characteristics of ecotourism compared to other segments of tourism industry. Consumers need more explanation and awareness to understand the value added by ecotourism and to be willing to pay higher prices for these leisure goods (Font; Buckley, 2001). Including aspects of environmental sustainability and cultural integrity raises the complexity of supply structures and requires the compatibility between objectives and capabilities in countries of demand and destination. The following paper will discuss national and international strategies to achieve this compatibility and the role of collective learning in this context. The next section will describe some trends in the tourism sector and the specificities of ecotourism.. In the following, we will show, why collective learning might be a key concept to cope with these specificities. To do this, we will first present some general theoretical elements of the concept of collective learning based on different disciplines. Then, we will analyse why this kind of learning is crucial for the development and diffusion of eco-tourism. This analysis will give us some criteria to evaluate national and international strategies, which will be illustrated against the background of four examples. Finally, with some concluding remarks we shall discuss the directions of further research and policy initiatives.

2.   Major trends and players in the international tourism sector
As already mentioned, tourism and travel is seen as the major export-earning industry in the world. Within this industry, however, structural changes took place during the last decade. For a long time, domestic tourism was the dominating way of spending leisure time and doing business with tourism and this tourism was in general concentrated on

countries in North America and Western Europe. Estimations referred to nearly 90% domestic demand of all tourism (WTO, 1997; Petermann, 1999). Many argumentations on globalisation of tourism and its negative environmental and cultural impacts are based on recognitions of increasing numbers of far-distance travel and longer stays in countries hitherto not visited as countries of destination. Looking at the current ranking of major exporters and importers (2001), however, Western Europe and North America are still representing more then 60% of all travel services with Asia gaining importance (Chart 1a and b in the appendix). Within the Top 15 travel services importers, Asian countries like China, Hong Kong, Korea and Taipei show the highest growth rates in the last decade (1990-2001). Forecasts argue that South and East Asia will remain the regions with highest growth rates in international travelling with China being the dominating country of destination in 2020 (Chart 2).

International tourism is still concentrated to a few countries worldwide (the Top 15 importers represent more than 70% of the global market). This concentration is accompanied by sustaining dominance of intraregional travel. Those regions with highest share of travel and tourism show only low numbers of far-distance (interregional) arrivals, while for developing countries in Africa, Middle East and South Asia far-distance travellers are the most important demanders for tourism services (Chart 3). Nevertheless, the relevance of far-distance tourism does not have to be underestimated, as these data of WTO do not include duration of stays. Thus, tourism in regions with developing countries depends on demand for far-distance travelling from other regions. Despite the low global market shares, tourism is particularly for developing regions the dominating export sector within the fast growing commercial services (WTO, 2003).

Within tourism industry, vertical and horizontal integration (travel agents, promoters, carriers, agents in countries of destination, hotels) have been intensified dramatically during the last decade leading to transnational companies with headquarters in developed countries (Petermann, 1999 with further links). Integration enables companies to realise economies of scale and scope in organising tourism products and to build up diversified tourism portfolios and reduce dependence on certain target groups. This last aspect gained importance within the last years, as demanders increased their flexibility looking at last-minute offers and switching between different forms of tourism (WTO, 2003). Regardless of a persistently high market share of low-budget mass tourism, differentiation and separation between the other demand groups increased. One of these

differentiated demand patterns refers to groups looking for tourism services considering environmental issues and compatibility with cultural values within countries of destination, which we will follow in the next section discussing definitions of ecotourism. The realisation of economies of scale and scope requires increasing standardisation within the different segments of tourism companies. Thus, tourism services were standardised according to target groups' preferences limiting the scope of regional specificities. For suppliers in developing countries, this concept limits scope for autonomous growth and access to new models of services. Standardisation restricts the recruitment of local workforce to low-qualified jobs and concentrates value added to headquarter and R&D locations. For employees from developing countries in the tourism sector, adaptation to standardised patterns of comparatively low-qualified work remains the only option of participating in growth rates of tourism thereby restricting positive effects on the regional knowledge base and the inflow of foreign currencies. Besides this restriction of positive effects, even negative impacts are expected considering the cultural impact of standardised tourism products (Becker et al, 1996; Hudson; Townsend, 1993). Established cultural routines and norms have been adapted to be included into tourism services. Otherwise, tourism areas are separated from the rest of the country of destination illustrating the lack of compatibility between the two cultures.

3.   Characteristics of Ecotourism

The persistently high growth rates of tourism and the exploration of new hitherto unaffected areas as tourism locations caused two main criticisms (Honey, 1999; UNEP, 1998):

- *increasing negative effects on local, national, transboundary and global environment*

Travel and tourism require transportation leading to negative impact on the environment by infrastructures and emissions along the route. As many tourists look for recreation in areas far away from agglomeration, former natural ecosystems have been separated threatening the existence and habits of endangered species, and areas have been converted to anthropogenic utilisation. The concentration of tourists in certain areas causes problems of waste and wastewater management as well as increasing demand for energy. As a result, many tourism resorts face challenges of environmental scarcity (Gössling et al, 2002).

- *lack of positive impact of tourism for (developing) countries of destination*

As already mentioned, oligopolistic and integrated multinational companies from developed countries dominate international tourism markets. As many developing countries became more attractive as destinations for tourists, multinational companies built up new tourism facilities in these countries. Economic effects to these countries, however, are restricted due to the concentration of high-value segments in the value chain in developed countries and the isolation of many tourism resorts from the rest of the countries. As a result, only low-qualified workplaces are created, and the local content of demand by tourism companies and tourists remains low. Those indigenous groups interested in attracting foreign demand have to adapt to preferences for "staged authenticity" or imitations of Western culture endangering the cultural integrity (Cohen, 1988; Dearden; Harron, 1994).

Both criticisms came to the conclusion, that tourism in its conventional shape cannot be sustainable as it decreases available environmental resources for future generations and increases the economic gap and dependence between developed and developing countries. Ecotourism should be an answer to these deficits of conventional tourism. According to The International Ecotourism Society (TIES, 1991) ecotourism is "responsible travel to natural areas that conserves the environment and improves the welfare of local people" (Honey; Rome, 2002). In most cases, transport has not been included into ecotourism services, as the relevance for environment and people in the host countries is restricted. According to the Quebec Declaration on Ecotourism it "embraces the principles of sustainable tourism… and the following principles which distinguish it from the wider concept of sustainable tourism:

- contributes actively to the conservation of natural and cultural heritage,
- includes local and indigenous communities in its planning, development and operation, contributing to their well-being,
- interprets the natural and cultural heritage of the destination to visitors,
- lends itself better to independent travellers as well as to organised tours of small size groups." (UNEP, 2003).

Therefore common characteristics of ecotourism refer to downscaled tourism, active conservation instead of protection of environment and the participatory involvement of local and indigenous people (see also Honey, 1999). The increased market share of ecotourism services and the observed willingness-to-pay for these services by tourists from developed countries raised the expectation that the assertion of those objectives

behind the term ecotourism could be achieved by private or public-private self-regulatory regimes (see for scientific methods Maille; Mendelsohn, 1993; Menkaus; Lober, 1996). During the last decade, a lot of different certification programs have been established on international, national, industry, or government levels to prove the achievement of ecotourism standards beyond compliance to public environmental and social standards (FEMATOUR, 2000; Synergy, 2000; UNEP, 1998; Honey; Rome, 2002). In general, these certification programs serve to overcome problems of asymmetric information in case of credence goods (see Karl; Orwat, 1999 with further links). Consumers are interested in ecotourism services but unable to evaluate the competitors according to ecotourism standards due to high costs of information. As the suppliers have superior knowledge they would be able exploit the demanders by pretending standards and requesting higher prices but not actually delivering the promised quality and thereby saving costs. Without additional information, consumers would not demand ecotourism services, and in the end all honest suppliers would be eliminated from the markets (Akerlof, 1970; Dixit, 1996). Certification programs serve as a signal for the consumers, which suppliers actually meet quality standards, and make it possible to separate between different qualities of tourism (Cho; Kreps, 1987). Despite the high number of certification programs and the intensity of research on ecotourism demand, there are still controversies on their contribution to the assertion of ecotourism objectives. Only 1% of consumers know of certification programs in the context of ecotourism (Synergy, 2000). Compared to other products where environmental labelling has been established, e.g. the Forest Stewardship Council (WBGU, 2000), certification of ecotourism causes further challenges:

- *the complexity of ecotourism quality*

For most environmental labelling schemes, consideration of complex environmental cause-effect-relationships has been a major (unsolved) challenge (Karl; Orwat, 1999). In the context of ecotourism, environmental and cultural criteria have to be included raising the complexity of interrelationships and the specificity of local impact by tourism. Therefore, differentiation of concrete certification schemes is needed making it more difficult for consumers to compare.

- *the involvement of the consumer*

For most products with international environmental labelling, production and consumption are spatially separated with labelling criteria only referring to production or product standards. In the case of ecotourism as a typical example of service sectors, there is geographical proximity of production and consumption and the behaviour of the con

sumers affect the achievement of ecotourism standards. Thus, consumers do not only have to be informed and motivated to select but also to adapt their habits, when travelling to host countries.

- *the persistent dependence of ecotourism qualities on spatially bounded assets with open access*

For most tourism segments, the quality of services is not only concentrated to single geographical points (Nelson, 1994). Instead, the availability of spatially bounded assets close to tourism resorts determines its attractiveness. In particular, demanders for ecotourism are interested in the existence of natural ecosystems and social communities with common cultural values. Many ecosystems have open access, thus single users cannot be (completely) excluded. Social communities depend on the loyalty of all members to common values. Otherwise they would need public regulation. Non-compliance of single persons can threat the availability of these assets for longer times, thereby causing negative effects on their neighbours. Thus, intense coordination within the affected area is needed (Ostrom, 1995).

- *the intensity of regulation by ecotourism standards in the host countries*

The utilisation of certification programs always means that consumers select different products and services according to their quality standards. In the case of ecotourism services, this means that selection will be made according to the consumers' perception and preferences of ecotourism. As already mentioned, intense coordination is needed within the affected areas in the host countries to meet those standards. Therefore, the impact of certification on suppliers is not only restricted to the production process itself, but also to standards for housing, social life, or cultural habits. This increases difficulties of compatibility between certification standards demanded by consumers in developed countries and persons in developing host countries.

As a consequence, utilisation of certification programs for ecotourism requires intense coordination between different stakeholders in demand and host countries. While multinational tourism companies are mainly interested in certification programs as a means to prevent public regulation schemes, assert high-price segments or reduce private environmental costs by standardisation, consumers are interested in getting the expected value added for their higher willingness-to-pay and -select, and environmentalists and NGOs are looking for ways to improve sustainability of environmental resources or cultural integrity. Those players mostly act in the developed countries and follow their interests and perceptions. In the host countries, other and competing interests can be

found, as tourism is only one sector in regions and has to compete with other estab-
lished or promising sectors in agriculture or industry. We suppose that this complex
coordination problem requires some kind of collective learning within and between re-
gions. This hypothesis will be explained in the next two sections.

4.   Collective learning – challenges and institutional prerequisites

With the increasing recognition of the contribution of knowledge and human capital to
economic growth and the generation and diffusion of innovation, the observation of
learning processes has attracted more attention, as learning is seen as a prerequisite for
extending knowledge stocks and flows. In a broad sense, learning refers to any kind of –
intended or unintended – processing of own or others' experiences. Learning psychol-
ogy and brain sciences show that this processing is not just a mechanistic and unspecific
utilisation of input (experiences) leading always to the same output (knowledge and its
use), but a highly context-specific and individual process (Bara, 1995; Anderson, 1995).
Any new experience is checked within the individual brain according to its compatibil-
ity with already existing patterns of experiential knowledge (Rizzello, 2000; Laughlin,
1996). These patterns are determined by genetic characteristics or socialisation and for-
mer learning processes. As a consequence, new experiences are individually framed and
filtered (McCain, 1992). Non-fitting experiences are rejected or stored and recycled in
completely different contexts (see for the concept of exaptation Gould, 1991). Thus,
individual learning processes have to be seen as path-dependent developments of the
knowledge base influenced by early experiences and patterns of recognition and inter-
pretation.

Due to these path-dependencies of interpreting and using new experiences, specific
challenges restrict the possibilities of transfer and processing of experiential knowledge
by other individuals (Kiwit, 1996; Witt, 1997). Different and non-compatible patterns of
framing and interpretation raise dangers of misunderstandings and misuses (Cohen;
Levinthal, 1990). Common communication codes are a necessary prerequisite to avoid
problems of missing compatibility. Such codes refer to language and methodology of
scientific disciplines, cultural norms, or habits. The developments of such codes is par-
ticularly difficult for "tacit knowledge", which means that experiences cannot be de-
scribed by means of codification and can only be recognised by participating in rou-
tines. From an economic perspective, these communication codes reveal characteristics
of collective goods in a sense of networks (Economides, 1996; Wink 2003). There is no

(limited) rivalry between the users of the codes, as only the increasing number of persons (network nodes) adapting their communication to this code enables the network members to realise benefits by communication. The exclusiveness of access to these networks depends on the specificity of the codes – the higher the costs of adapting to these codes are, or the more dependent the adaptation to these codes is on the cooperation by existing network codes, the easier it will be to control the exclusiveness.

The term "collective learning" refers to learning processes by several individuals enabled by the utilisation of common communication codes (Wink, 2003). It is not the collective, which actually learns. Learning is still an individual process, but the codes make it possible to transfer experiential knowledge and frames of interpretation between all members of the collective (network) and the utilisation of storage instruments – storage of contents and codes – raise the independence of this collective knowledge base from the individual. As for any problem of providing collective goods, institutional arrangements are needed to reduce transaction costs of securing exclusiveness of the codes and overcoming free-rider incentives within the network (Dixit, 1996; Tirole, 1999). The actual design of institutions depends on the context, the implementation of hierarchies in companies can be observed as well as contractual arrangements for communities-of-practice or informal cultural norms. The impact of these institutional solutions can be measured from a consequential or procedural perspective. From a consequential point of view, changes of strategies and habits and the resulting effects on outcomes, e.g. productivity, innovativeness, or environmental impact, are analysed (Wink, 2003). Here, problems of identifying the actual relevance of learning and single institutional arrangements to promote collective learning occur due to multi-co-linearity of cause-effect-relationships. Thus, learning effects can be overestimated and actual deficits of incentive compatibility within institutional arrangements might be overseen. To overcome these difficulties, procedural investigations of learning processes serve to get a closer look at cause-effect-relationships and bottlenecks. Within management literature on "organisational learning" four dimensions of learning on an organisational level have been distinguished by connecting institutional incentives, learning processes and outcomes (Argyris; Schön, 1978 and 1996):

- *formalistic learning*, which only pretends to process new experiential knowledge but actually does not change any habits, e.g. tourism companies, which formally implement environmental objectives, but do not change production processes,

- *single loop learning*, which describes processes of changing competencies and rules of communication due to adaptation to other organisations, e.g. tourism companies implementing new ("sustainable") management systems without reflecting further changes of qualifications, attitudes, or cooperation partners, and therefore without actual impact on individual routines,

- *double loop learning*, which describes processes of changing whole organisational systems leading to new distribution of resources, competencies, and objectives, e.g. tourism companies changing their organisational style and thereby creating incentives for their employees to develop new products reconciling economic, environmental and cultural objectives,

- *deutero learning*, which describes processes of learning how to learn, i.e. how to process new experiences and implement changes, e.g. tourism companies building up common learning networks with other organisations and controlling the actual effects on in-company processes.

5. Collective learning and ecotourism

The previous two sections gave definitions for the terms "ecotourism" and "collective learning". Linking these two concepts together, two main needs for collective learning with different framing conditions can be identified: (1) a collective learning process within the affected tourism region in the host country, and (2) a collective learning process between stakeholders in host countries and other countries.

(1)   *within the host region*

The attempts of defining ecotourism show that the main characteristics – environmental sustainability and cultural integrity – refer to spatially bounded assets, which depend on coordination between different persons within the affected host regions. The broad approach to ecotourism requires, that even single accommodation facilities need coordination with local communities on maintenance and protection of natural habitats and the achievement of social and cultural objectives like programs on qualification, economic empowerment or protection of social norms. Within local communities, good prerequisites for the development and utilisation of common communication codes exist due to common socio-cultural background, language and experiences (Gilly; Torre, 1999). The successful implementation of ecotourism projects in terms of attracting targeted demand groups and extending regional income and endogenous growth potential, however, would require compatibility with expectations by consumers and with marketing chan

nels. Thus, nodes are needed between local or national communication codes and international tourism markets.

(2)   between stakeholders in host and other countries

Certification programs are a reaction to information asymmetries between consumers and producers. They serve to enable consumers to select between suppliers of different (ecotourism) qualities. Which qualities are demanded, depends on the preferences and information of the consumers. But these preferences and information patterns are not necessarily compatible with the attitudes of other stakeholders. It is observed that consumers look for visible environmental conservation, are a diversified group to be integrated into programs of education on environmental and cultural issues, and are uncertain on cultural authenticity in particular when confronted with atavistic cultures not necessarily integrated into daily life (Schaller, 1995). The complexity of ecotourism requires a high amount of information, while consumers are interested in reducing information costs by looking at well-known and broadly used logos. Tourism industry tried to meet these preferences by developing certification programs based on criteria already established in other sectors (like ISO 14001 or EMAS) to standardise management practises or certification programs restricted to few criteria, which are achievable by single accommodation sites. Only within industrialised countries, where consumers and host regions have similar cultures and patterns of experiences available, advanced programs have been introduced for single segments of tourism, like natural protected areas, or beaches (FEMATOUR, 2000).

Thus, utilisation of certification programs as a tool to overcome information asymmetries might not be sufficient to distribute information between consumers and suppliers (in multinational companies or host countries), as their communication codes and motivation are different. Additional institutional arrangements are needed to increase compatibility of expectations in demanding and host countries and to build up prerequisites for actually using certification programs. In the following section, four examples of ecotourism projects serve to illustrate these challenges and possible solutions. By looking at learning outcomes and procedures, shortcomings and institutional needs will be presented.

6.   Ecotourism in practice – solutions to collective learning problems?

First ideas of ecotourism came up three decades ago and were driven by changing consumption patterns of single tourists. Only with increasing recognition of the international dimension of environmental problems and deficits of social equity and cultural integrity in the 1980s, ecotourism was connected to larger segments of tourism markets and seen as a possible growth option for regions in developing countries. The following examples describe programs, which started at different time within this process and with different objectives. They serve to illustrate the challenges of collective learning and the diversity and limits of the approaches used.

(1) The Rio Blanco Project in Ecuador

Within this region in Ecuador, indigenous groups (Quichua) migrated from Andean regions needed an alternative to agricultural cash crop production due to high rates of population and persistent degradation of environmental resources (Schaller, 1995). Groups of Quichua from different regions built up a common network of expertise to develop tourism project independent from international tourism companies. Within Rio Blanco, in 1995 first small-scale tourism projects were initiated in cooperation with a biological field station nearby. Most of the tourism consists of visits to primary forests, which otherwise would have been converted to agricultural land. Rudimentary feedback analysis of tourists and local providers reveal that there is only few transfer of information between consumers and suppliers, tourists do not learn about cultural norms and agricultural business in the tourism regions. Local suppliers learn by their own experiences and the exchange with ecotourism providers of the same cultural origin. Thus, within this early and small-scale local example, we have collective learning on needs for coordination within indigenous groups, even double loop learning, but most of new information for providers is coming from own experiences (Bebbington, 1993). There is low interaction with consumers or other stakeholders. Therefore, definition of criteria and content is determined by the suppliers' recognition of tourists' expectations. As a consequence, short-term regional impact of ecotourism is limited to small additional income and incentives to protect primary forests. In the long term, these experiences might increase general local capabilities of commercialisation needed also for trade in other sectors.

(2) Bhutan

Bhutan is a small mountainous country in Himalaya. Until the 1980s, only few external contacts (13 research expeditions during 300 years) exist (Schwotzer, 1997). From

1974, government decided to use tourism as a tool for economic development. Negative experiences in Nepal with high numbers of tourists leading to environmental degradation, cultural alienation and low marginal profit of single tourists raised interest in ecotourism as a way to restrict the number of tourists, assert high-price levels, control and the negative impact of tourism (TA of Buthan, 1995). The main form of learning in this case study refers to adaptive (single loop) learning within or with the help of hierarchies. Government launched tourism programs, and worked closely together with international tourism companies and international organizations (WTO, 1993). Challenges of intercultural learning were reduced by longer stays of Bhutan employees for qualification in Western tourist countries. As a result, Bhutan created an exclusive branding dominated by central management. This branding was determined by adaptation to preferences of high price level tourists and the wish to limit the environmental or cultural impact of tourism by concentrating interaction between domestic population and tourists to business interaction.

(3)   Costa Rica

Due to its biological diversity, attractiveness of landscapes and beaches, and geographical proximity to US, Costa Rica had good preconditions as an exporter of tourism services. With the increasing awareness on ecotourism, guidebook authors cooperating with environmentalists developed a ranking system for all lodges pretending to provide ecotourism in Costa Rica and first published their results in 1992 (Blake; Brown, 1992). These criteria heavily rely on investigations of environmental impact and the economic and cultural consequences for the local communities. The ranking followed two objectives: firstly to use the popularity of a then-leading guidebook on Costa Rica to influence consumption decisions of tourists and increase the market share of locally-owned lodges, and secondly to use the ranking as an instrument to discuss improvements with the lodge owners thereby initiating a learning process of best practises between the lodge owners. Limits to this approach were caused by decreasing popularity of the guidebook restricting the influence on consumption, restricted resources for surveys and marketing, and the restricted numbers of lodge owners involved, as most internationally-owned lodges and all beach resorts have been excluded (Honey; Rome, 2002). In 1996, a new certification programme was developed at the government's tourism agency aimed at surveys on environmental, cultural and social impact of all hotels in Costa Rica (CST, 2003). This certification system – Certification in Sustainable Tourism (CST) – based on 153 criteria in four categories has been seen as successful insofar

as most tourism resorts applied for certification and many of the key stakeholders participated in a National Accreditation Committee. In 2001, six Central American countries agreed to promote a regional certification programme based on CST. By using a rating system with a scale up to five, appliers got opportunities and incentives to improve according to CST criteria initiating a learning process within the certification program. The impact of this system is however low for consumers and locally owned lodges. The certification is mostly unknown by tourists and not actively supported by multinational tourism companies. For locally owned, small-scale lodges some of the criteria are hard to achieve. As a result, internationally owned big hotel resorts with huge systems of energy efficiency got the same rating as small-scale resorts particularly concentrated on compatibility of their services with protection of primary forests. As the transfer of experiences heavily depends on the auditors and employees of government's tourism agency, this leads to distortions of originally tacit knowledge at the lodges and a mainstreaming of learning content not compatible with the diversified preconditions at the single lodges. Therefore, double loop learning can only be achieved if the certification process would lead to small communities-of-practice within the total groups of applicants (Brown; Duguid, 1991), and if consumers from importing countries would be actively involved into the certification process.

(4)   Green Globe 21

Green Globe has been launched in 1994 by the World Travel and Tourism Council (WTTC), an international association of the tourism association (WTTC et al, 1995). As the tourism industry got under increasing pressure to reduce negative impact on the environment and culture by NGOs as well as by intergovernmental agreements, WTTC introduced a programme of voluntary self-regulation stressing the intentions of participating companies to implement environmental reforms to prevent public regulation (Honey; Rome, 2002). Green Globe offered a logo to all participating companies and information on environmental reform options. Due to heavy criticisms by environmentalists and other NGOs, structure and strategies changed in 1999. Green Globe 21 became a private for-profit organisation offering an independent audit of companies on criteria, which were initially oriented to environmental management systems based on ISO 14001 and then developed towards performance criteria (Green Globe, 2003). By forming partnerships with tourism organisations in all industrialised countries and comparatively high marketing budgets, it gained an international industry and consumer name recognition, which exceeds the recognition of other certification systems. The

reference to management and performance criteria should allow a standardisation of production aiming at reconciliation between mass tourism with high economies of scale and standardisation and ecotourism with its environmental and socio-cultural objectives. In practice, however, few incentives are given to the companies actively changing their production processes, as management criteria do not audit actual changes of habits and performance criteria are concentrated on environmental effectiveness (water or energy consumption), not including socio-cultural aspects (Synergy, 2000). High costs of certification (up to $50,000 for destinations taking years to complete the auditing process) prohibit the involvement of small-scale and peripheral providers. For consumers, the repeated changes of logos and criteria leading to the display of logos by companies actually not fulfilling the current criteria as well as the inclusion of all tourism sectors worldwide cause confusion. Thus, learning was concentrated to international tourism providers. As these companies already had their own standardisation programmes to increase environmental effectiveness, participation with the Green Globe 21 programme mainly serves formalistic learning without actively changing habits or strategies.

Table 1 presents a summary of the four examples. It became obvious that the diversity of preconditions and context of the single programmes led to different objectives, instruments and outcomes. Despite the already described deficits, it should also be important to consider the strengths of the programmes for different types of learning and different groups involved. The Ecuadorian example shows the options for double loop learning within groups of cultural similarity by implementing communities-of-practice with face-to-face contacts. The Bhutan example stresses the effects of international stays for adaptive learning, while in Costa Rica ranking systems have been used as instruments to diffuse experiences of best practise by intermediates creating prerequisites for double loop learning. The industry and consumer name recognition of Green Globe 21 illustrate the relevance of international partnerships and marketing to expand participating groups within learning processes. These partnerships can be important tools to raise awareness and motivation to learn more on ecotourism criteria, which would then require additional learning instruments like F2F-contacts with intermediates, communities-of-practice, codified knowledge, or international stays. Therefore, all programs offer different opportunities to learn, thereby creating single nodes of a network. To connect these nodes, however, additional arrangements and intermediaries are needed to develop common communication codes and to improve the compatibility of the single systems.

7. Conclusions

Ecotourism covers an ambitious range of objectives by connecting environmental and social aspects with economic implications of tourism markets. The hitherto most common approach to promote ecotourism – the introduction of certification schemes and private self-regulation – reached limits of effectiveness, as implicit prerequisites like common communication codes, coordination of interests between stakeholders, and transparent definition of content of certifications were missing. The different examples show that they offered only limited contributions to the availability of these missing prerequisites. For the future, progress can be expected, if the following steps can be developed:

- concentration to a target group of ecotourists and main segments of ecotourism,
- development of credible international intermediaries connecting single nodes of certification, and
- processing experiences with existing communities-of-practice on regional or sectoral level.

From a methodological perspective, we tried to show the value of analysing collective learning as a necessary prerequisite to successful implementation of certification programs. These interdisciplinary approaches are still at their beginning as tools for institutional evaluation. For the future, however, improvements to more quantitative indicators even for procedural criteria might sharpen the profile of these investigations.

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Appendix

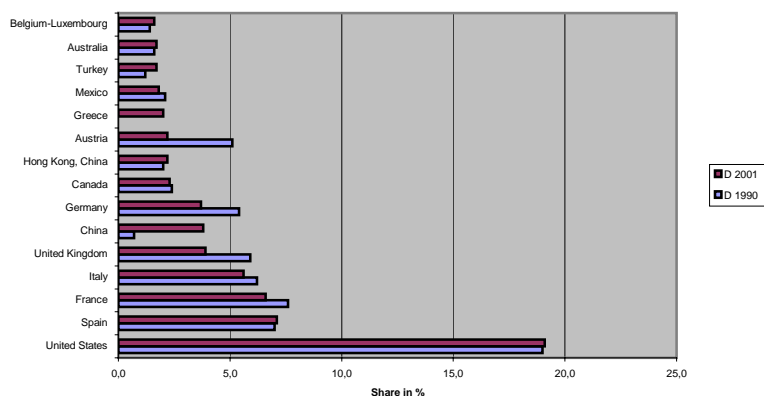Chart 1a: Top 15 Ranking of Tourism Exporters (WTO, 2001)

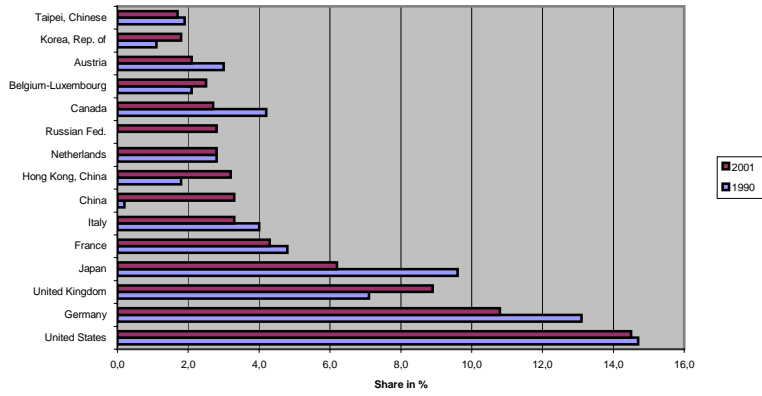**Chart 1b: Top 15 Ranking of Tourism Importers (WTO, 2003)**

Legend: 2001, 1990

X-axis: Share in %

Countries (top to bottom): Taipei, Chinese; Korea, Rep. of; Austria; Belgium-Luxembourg; Canada; Russian Fed.; Netherlands; Hong Kong, China; China; Italy; France; Japan; United Kingdom; Germany; United States

Chart 3: World Market Share od Host Countries in 2020 in % (Petermann, 1999)

Categories: China, France, USA, Spain, Hong Kong, Italy, UK, Mexico, Russia, Czech Rep.
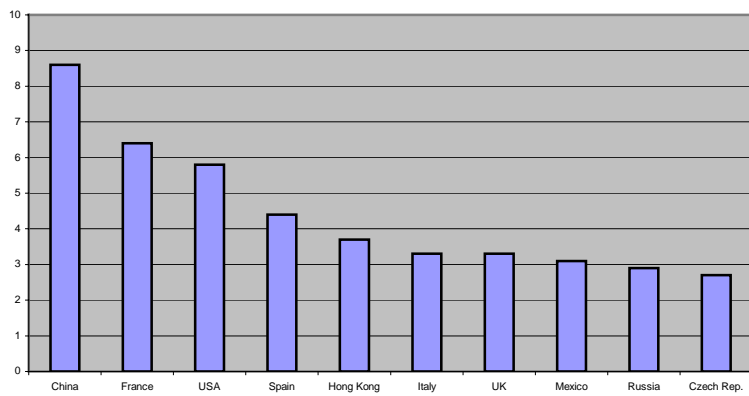
Chart 4: Share of far distance arrivals in all arrivals of foreign tourists in % (Petermann, 1999)

Legend: 1985, 1996

Categories: Europe, America, East Asia/Pacific, Africa, Middle East, South Asia, Total

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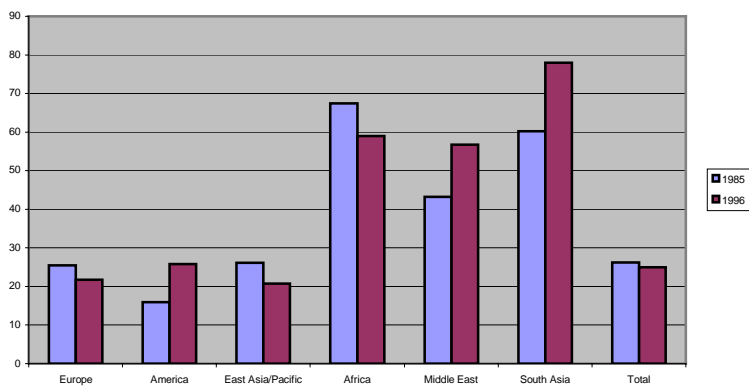
	Ecuador	*Bhutan*	*Costa Rica*	*Green Globe 21*
Preconditions	regional indigenous groups under economic pressure	Small, poor country without openness for centuries	International tourism boom, increasing tourism facilities	Political and consumer awareness on environmental criteria causing pressure on industry
Objectives	Implementation of new income source	Profit maximisation while limiting impact on domestic culture and environment	Commercialisation and sustainability of environmental endowment	Standardisation and improvement of mass tourism image
Instruments	Communities-of-practice	International stays for qualification, seminars by foreigners, cooperation with international providers	Ranking and benchmarking schemes, diffusion of experiences by auditors serving as intermediaries	Certification and auditing, codified information
Impact	Double loop learning within indigenous groups, no interaction with external groups	Single loop learning, few learning effects for external groups	Single loop learning of ranking criteria, double loop learning by intermediaries, few impact on international groups	Formalistic learning, single loop learning by standardisation, weak involvement of NGOs and developing countries

Table 1: Examples of ecotourism projects and collective learning in practice