Chapter 85
Green Digital Enterprise and Chaos Theory in Tourism Development: The Case of Eco-Tourism in South Africa

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ABSTRACT
This paper examines how eco-tourism can be regarded as a change agent in the tourism economy in developing countries. By using conceptual contributions from chaos theory, the authors illustrate how eco-tourism might give competitive advantage, using South Africa as the empirical setting. Destinations focusing on chaos theory when organizing their efforts within eco-tourism may be able to tailor make services to well-defined market segments through the use of tacit knowledge. Future research may benefit from using untraditional approaches found in the business literature.

TOURISM DEVELOPMENT IN SOUTH AFRICA
The economic geography of the post-industrialized world is characterized by fundamental processes of restructuring, an increased mobility of capital and a pursuit for new economic growth activities, particularly in the service sector (Binns & Nel, 2002). Traditional means of investing, conducting marketing and work within political networks have undergone dramatic changes. In recent years, the service sector has become more important worldwide, for example when it comes to consumer preferences, wealth mobility and location mobility (Hudson, 1995). One sector that has performed well in this context is the tourism industry, which has become one of the critical forces shaping the economy of many countries (Williams, 1998). In parallel, there is a debate concerning the potential of tourism development in promoting community development and sustainability (Wahab & Pigram, 1997; Elliott et al., 2001).
In order to attract foreign investors, firms in developing countries can lack the superior technology and supporting infrastructure that are necessary when trying to reach global markets (Porter, 1998). Because small-to-medium sized enterprises (SMEs) are common in developing countries, entrepreneurs are plagued with severe scale constraints on investments in productive assets, and in the development of international channels (Sengenberger et al., 1990). A possible way to circumvent such limitations in scale and infrastructure is to move into new market-product combinations, since existing knowledge has a tendency to become outdated, particularly in complex business environments.

Tourism has long been considered an effective catalyst of rural socio-economic development and regeneration. Throughout Europe tourism have been widely promoted and relied upon as means of addressing the social and economic challenges facing peripheral rural areas, primarily those experiencing a decline in traditional agrarian industries (Cavaco, 1995; Hoggert et al., 1995; Williams & Shaw, 1998). Rural tourism development programs have also become increasingly evident elsewhere, although not to the same extent as in Europe. In the United States, for example, 30 states have developed tourism politics specifically targeting rural areas, whilst a further 14 have included rural tourism within their overall tourism development plans (Luloff et al., 1994).

We use South Africa as the empirical setting in this article. Parts of the South African economy are advanced with a well developed infrastructure based on sophisticated technology and know-how. The FIFA World Cup in Soccer in 2010 illustrates that the country is a serious player in international event management. If the mentioned World Cup becomes a success, it can be used as a benchmark as to how Europe can arrange similar events, for example the summer Olympics taking place in London in 2012. However, the South African society is still economically and socially divided in the post-apartheid period. The violence in the country may have negative effects on international trade, for example in the contact with foreign investors. HIV/AIDS may also have a significant negative effect on investments and working conditions. It is estimated that over six million South Africans are infected with HIV/AIDS (AICC & SOBSCOHA, 2005).

For generations a narrow, economic individualistic view of business has been the norm in South Africa (Magner, 2008). The prevailing paradigm has been an increased western individualistic outlook when it comes to corporate behavior. Fukuyama (1995) calls this phenomenon “loss of community behavior” resulting in loss of trust between segregated groups of people. On the other hand, there is an increased concern to include environmental and social aspects in corporate reporting in South Africa. Newton-King of the Johannesburg Stock Exchange comments on an increasing awareness of and a need to measure sustainable business practices using triple-bottom line practices (Johannesburg Stock Exchange, 2004). The industry charters, supporting black economic empowerment, have influenced the ways in which businesses share their equities. The Sector Education and Training Authorities require that a part of corporate revenues are allocated to funds supporting grass-root capacity building (Magner, 2008).

**CHAOS THEORY AND THE TOURISM SECTOR IN SOUTH AFRICA**

Eco-tourism has its own dynamics seldom described by academics. Eco tourism is new enough, chaotic enough and in the past unregulated enough so that insights from chaos theory may be used with a certain degree of justification. However, in recent years Chaos has become a buzz word in the popular press and management literature. We must therefore use the concept with care.