

Alternative Index of Carrying Capacity in Nature Tourism: The Relationships between Stakeholders' Emotional Labor and Carrying Capacity of Community-Based Nature Tourism in Atayal Smangus Tribe, Taiwan.

Chih-Liang Chao¹, Hsin-Hang Wang²

Providence University, Taiwan

¹clchao@pu.edu.tw

²examshinhan@yahoo.com.tw

Keywords: Recreational Carrying Capacity, Emotional Labor, System simulation, visitor management.

The demands of increasingly affluent consumers for 'remote', 'natural' and 'exotic' environments have created an upsurge in ecotourism ventures (Scheyvens 1999). As many governments have encouraged public investment and made economic development programs more dependent on economic viability, nature tourism has been seen as a major element in the economic redevelopment of many aboriginal tribes located in recreational and protected area in Taiwan. Training in hospitality, servicing in meal and accommodation, has become the majority skill for indigenous tourism and consistent with the emphasis, the terms ecotourism and indigenous cultural tourism often being used merely as marketing tools (Thomlinson & Getz 1996, Butler & Hinch 1996). Moreover, with the growth of such efforts, lack of production capacity makes the locals more dependent upon the tourism economic system and turns away the resource-based philosophy from ecotourism. Many ecotourism researches have raised the similar problems; the locals become more dependent upon tourists, emphasize service and are merchandise oriented and gradually turn to high impact tourism.

The major concerns related to sustainable development is that of limits to numbers of tourists. However, the issue of carrying capacity of destinations, in both human and environmental terms, has received little consistent attention in the tourism field (Butler 1999). Much excellent research has been conducted on carrying capacity in wilderness areas in which few or no people live, but relatively

little has been done in popular tourist destinations, where large numbers of permanent residents live and mix with large numbers of tourists, especially for the development of indigenous tourism. Therefore, application of carrying capacity in nature tourism ultimately requires more judgments from the interdisciplinary managers, based on natural resource, social and managerial considerations. Moreover, from the empowerment perspective in the indigenous community-based nature tourism, it seems by nature to make the stakeholders be part of the managers.

As noted above, this paper considers ways in describing a framework which has been designed for an explorative study of the female stakeholders' social psychological value, emotional labor, as the index of carrying capacity toward the tribe-based nature tourism (Stankey 1973, Shelby & Heberlein 1984, Hochschild 1993, Vincent & Thompson 2002). For the research site, an Atayal Smangus Tribe, famous for nature resources tourism and the first co-management example in indigenous communities of Taiwan, was chosen. As for the nature of the communities' co-management, they cooperate in all the responsibility of tourism resources management and share all the economic generation from nature tourism. However, the only tourism service is the meal provided in the tribe chophouse. Therefore, survey data will be drawn from 120 sections during lunch and dinner preparing for tourist flow in May and June, 2006. Interviewing and observations will be involved in the

variables, including female stakeholders' emotional labor, service performance, tourists' satisfactions, the number of visitors per days.

The purpose of this study includes

1. To examine the relationships between aboriginal women's emotional labor and service-performance in community-based indigenous tourism.
2. To probe aboriginal women's emotional labor toward the impact of tourist satisfaction.
3. To establish the relationships between carrying capacity and tourist satisfaction.

The analysis in this research will apply computer system simulation to compute the number of visitor and waiting time about the meal services by Arena 3.0 program (Kelton et al 1999). Queuing theory will be deal with the relationship between female stakeholders' social psychological value and nature tourists or reservationists' experiences. Pearson-Correlation analysis, ANOVA, and multiple regression analysis will be applied to test the statistical hypothesis. Research implications and management applications are discussed for community development in nature and recreational tourism resources.

References

- Butler, R. (1999). Understanding Tourism. In: E. L. Jackson and T. L. Burton (Eds.) *Leisure Studies: Prospects for the Twenty-First Century*, p 235-251. State College.
- Butler, R. & Hinch, T. (1996). *Tourism and Indigenous Peoples*. International Thompson Business Press, UK.
- Hochschild, A. R. (1983). *The managed heart*. Berkeley.
- Kelton, W.D., Sadowski, R.P. & Sadowki, D.A.. (1998). *Simulation with Arena*. McGraw-Hill, U.S.
- Scheyvens, R. (1999). Ecotourism and the empowerment of local communities. In: *Tourism Management* (20), p 245-249.
- Shelby, B. & Heberlein, T. A. (1984). A Conceptual Framework for Carrying Capacity Determination. In: *Leisure Sciences* (6/1), p 433-451.
- Stankey, G.H. (1973). Visitor Perception of Wilderness Recreation Carrying Capacity. USDA For. Serv. Res, Pap. INT-142.
- Thomlinson, E. & Getz, D. (1996). The Question of Scale in Ecotourism: Case Study of Two Small Ecotour Operators in the Mundo Maya Region of Central America. In: *Journal of Sustainable Tourism* (4), p 183-200.

Vincent, V. C. & Thompson, W. (2002). Assessing community support and sustainability for ecotourism development. *Journal of Travel Research* (41), p 153-160.