

Research Assessment Exercise 2020
Impact Case Study

University: [The Education University of Hong Kong |

Unit of Assessment (UoA): [26 Geography |

Title of case study: [Promoting Sustainable Tourism Development for Wolong National Nature Reserve, Sichuan Province, and Hong Kong |

(1) Summary of the impact

[The UNESCO-listed Wolong National Nature Reserve, famous as the prime habitat for the endangered panda, was badly damaged by the devastating Sichuan earthquake of 2008, being located just 20km from the epicenter. Restoring normal life to the isolated area's more than 5,000 residents was of paramount importance. It was equally important to rebuild the reserve into an ecologically sustainable area. To help accomplish this Dr Lewis CHEUNG Ting-on, Associate Professor of EdUHK's Department of Social Sciences (SSC), lead a research team to evaluate the best way to develop sustainable tourism for the reserve and devised two unique accreditation systems for its ecotourism industry (Eco Certification for tourism businesses and for ecotour guides), as part of the regulation for the tourism development in the ecologically sensitive reserve, funded by the Government of the Hong Kong Special Administrative Region (HKSAR). In 2016 the local administration in Wolong accepted and implemented the recommendations and systems in full. So far 8 businesses out of around 20 (local farmhouses operating as sustainable farms and hotels) have achieved the resulting Bronze and Silver Panda Ecotourism Certification Awards. The project has achieved significant environmental impact through ecological conservation and education; and economic impact for the 5,000 residents by identifying new sustainable tourism services and products, putting in place a management system for sustainable tourism that provides new businesses opportunities, balanced with the need to protect the ecology and panda habitat. From the knowledge and experiences gained through the project, Dr. Cheung advises hotels and hostels in Hong Kong to improve sustainability of their operations while impact reach is extended through his leadership role on the Global Sustainable Tourism Council and regional training activities |

(2) Underpinning research

[Dr Cheung's research focuses on sustainable tourism with particular emphasis on nature-based tourism in protected areas, environmental education, and environmental conservation **[R1]**. He completed his PhD in the field of ecotourism and has published extensively in the field. As a result of his expertise, he was commissioned in 2014 by the Development Bureau of the HKSAR government to lead, as Principal Investigator, a 20-month research project on the sustainable tourism development for the Wolong National Nature Reserve in Sichuan Province, China, as part of its support for reconstruction of earthquake stricken areas.

The aims of the project, involving researchers from EdUHK, University of Hong Kong and Chinese University of Hong Kong, were to: (1) investigate the ecotourism resources of the Wolong National Nature Reserve, (2) formulate an ecotourism development guideline for the reserve, (3) provide a series of trainings and public forums for residents and government officials and (4) design two ecotourism accreditation systems for tourism businesses and ecotour guides. The project was completed in June 2016. Dr Cheung was principal investigator, responsible for the study design, from data collection to formulation of the developmental guidelines, ecotourism accreditation systems and implementation. The EdUHK team conducted a household survey to assess residents' post-quake situation. It organised two forums to introduce the ecotourism development plan and certification systems, and glean local views for the ecotourism development guidelines.

The project began with an evaluation of the potential impacts of tourism development and environmental conservation in an ecologically sensitive site. It used various visitor management, protected areas planning and management, ecotourism and sustainable tourism theoretical frameworks as the research backbone for tourism development of the heritage site [R1, R2]. For the certification systems, the Global Sustainable Tourism Criteria, which are arranged in four pillars, namely Sustainable Management, Socioeconomic Impacts, Cultural Impacts, and Environmental Impacts, were developed to become the Ecotourism Accreditation and Certification System for the reserve [R5]. The articles published in leading journals also investigated the impacts of relocation of local residents [R5]; their resilience on natural hazards and disaster [R3, R4]; and preferences and supportiveness on post-disaster ecotourism development [R6]. Together, this expertise informed the ecotourism development planning for the reserve. The success of the project resulted in Dr Cheung being awarded the EdUHK President's Award for Outstanding Performance in Knowledge Transfer in 2016/17 and being invited by international and local organisations to take up advisory roles on sustainable tourism. |

(3) References to the research

- [R1] Cheung, L.T.O. (2013). Improving visitor management approaches for the changing preferences and behaviours of country park visitors in Hong Kong. *Natural Resources Forum*, 37(4), 231-241.
- [R2] Cheung, L.T.O. & Jim, C.Y. Ecotourism service preference and management in Hong Kong (2013). *International Journal of Sustainable Development and World Ecology*, 20 (2), 182-194.
- [R3] Cheung, L.T.O. (2015). Seismic risk perception in the aftermath of Wenchuan earthquakes in southwestern China. *Natural Hazards*, 78(3): 1979-1996. (Co-Author with Alex Y.H. Lo)
- [R4] Lo, A.Y. and Cheung, L.T.O. (2016). Geographies of social capital: Catastrophe experience, risk perception, and the transformation of social space in postearthquake re-settlements in Sichuan, China (2016). *Annals of the Association of American Geographers*, 106 (4), 874-890.
- [R5] Lo, A.Y., Cheung, L.T.O., Lee, A.K.Y. & Xu, B. (2016). Confidence and trust in public institution natural hazards management: Case studies in urban and rural China (SSCI). *Professional Geographer*, 68(3), 475-484.
- [R6] Liu, S., Cheung, L.T.O.*, Lo, A.Y. & Fang, W. (2018). Livelihood Benefits from Post-Earthquake Nature-Based Tourism Development: A Survey of Local Residents in Rural China, China. *Sustainability*, 10(3), 699-718

Sources of funding: Research on Resilience and sustainable tourism development in the Wolong National Nature Reserve, by the Trust Fund in Support of Reconstruction in the Sichuan Earthquake Stricken Areas (HK\$1.6 million) administered by the Development Bureau, HKSAR government. |

(4) Details of the impact

Cheung's research has had multi-faceted impacts on the ecotourism development of Wolong-National Nature Reserve and other areas of China and the wider region. The main long-term impacts include: i.) *impact on local policy and professional practice*; ii.) *impact on knowledge of ecotourism and environmental awareness*; iii.) *economic impact for the local economy*, through the development of sustainable tourism, and iv.) *environmental impact* by ensuring ecological conservation of the area.

i.) *Impact on local policy and professional practice*

The Ecotourism Development Guideline (EDG) prepared by Cheung included holistic recommendations and suggestions for ecotourism planning, activity designs, infrastructure development, marketing etc.. It was adopted in full by the reserve's administration [See Section 5, C1] and the resulting voluntary Ecotourism Accreditation and Certification System (EACS) and

Ecotour Guide Accreditation System are now fully implemented. This is the first regional ecotourism certification in protected areas of Mainland China which is recognized and implemented by the local government and is providing a positive influence on the ecotourism development of other protected areas, as evidenced by Cheung now liaising with other protected areas in the Mainland and Taiwan. The reserve's administration affirmed the contribution for Wolong: *"The project has promoted the tourism development plan and offered a clear direction for sustainable development of tourism"* [C1]. As a result of the policy initiative, as of December 2018, 8 farmhouses and hotels out of around 20 have been certified to receive Bronze Panda and Silver Panda awards for their effort in operating sustainable businesses in the reserve and significant economic and environmental impact has been achieved (see iii. below). Cheung's success in Wolong resulted in further impact on policy and professional practice, through his appointment as advisor to other policy bodies and other organisations in Sichuan Province and Hong Kong, including programme director of the Global Sustainable Tourism Council (GSTC) for Sustainable Tourism Development in the Greater China region; chairman of the Assessment Committee for EcoGuide Australia Certification of the Greater China region [C5] as well as overseas expert of the Assessment Panel of Ecotourism Accreditation and Certification System of the Wolong National Nature Reserve [C4]. In March 2017, GSTC appointed him as the lead trainer for the regional training entity, Infinity Service Holding, the first GSTC training programme on sustainable tourism in Hong Kong. Around 15 participants joined the 3-day course. In June 2017, a similar training session was held in Taiwan for more than 25 government officials of scenic sites [C7,8].

ii.) Impact on ecotourism knowledge and environmental awareness.

Ecotourism can only be developed with the understanding, input and support of the local community. The EdUHK team organised two public forums to glean residents' views for the ecotourism development guidelines; and to introduce the development plans and certification systems for businesses and guides. These forums, attended by over 100 residents and officials, increased local understanding of the plan [C1]. The team also organised a two-day training workshop on the development guideline and the accreditation systems, attended by over 20 local residents (including several hotel owners) and 20 government officials, including those in charge of tourism development in the reserve. The official noted: *"There is now greater awareness of saving water, electrical power and waste segregation. Hostels' use of disposable items has been greatly reduced. The sewage management has also been greatly improved."* Reflecting a significant shift in attitudes and awareness, residents accepted development should no longer proceed through *"destructive"* and *"vicious competition"*, but should cater for visitors who appreciated the eco-tourism approach [C1].

Cheung was a keynote speaker in the Workshop on Conservational Research Collaboration at Sichuan Wolong National Nature Reserve in October 2016, joined by delegates from Hong Kong. A public forum of the same topic was organised in EdUHK, with more than 150 participants. These events raised public understanding in Hong Kong of the reserve's reconstruction and how the HKSAR Government's donation was used. Cheung's work has also changed public perceptions through extensive media coverage. In total, 238 media clippings have been gathered, including 142 from mass media in mainland China and 10 in Hong Kong, the rest elsewhere in the region, reaching audiences of millions [C3].

Extending the reach and significance of the impact on knowledge of ecotourism and environmental awareness, Cheung was appointed adviser of the Environmental Group of the YMCA's HarbourView Hotel and for hostel services of the Hong Kong Federation of Youth Groups, offering advice on enhancing the environmental performance of their hotels and organisations [C9, C10]. Suggested advices have been implemented in the HarbourView Hotel to substantially enhance environmental sustainability of the hotel, as reported in its annual report [C11].

iii.) *impact on the local economy and environment, through sustainable eco-tourism development and environmental impact* and iv) *environmental impact*

Cheung's Ecotourism Development Guideline for Wolong, accepted in full by the reserve and with suggestions adopted by the reserve. The guideline helped identify new tourism services and products, benefiting the local economy through the increased income generated for individual businesses and local residents. Once the new policy was implemented the number of tourists visiting the reserve surged from less than 1000 a year before 2014 to over 350,000 annually by 2017, with over 19,000 during the October golden week in 2018 [C1]. The Wolong official noted the project "*helped the Nature Reserve to gain economic growth without damaging the environment. Instead, it has improved the economic growth through environmental protection in ecological tourism. The sustainable development approach has brought huge benefit to the Nature Reserve region*". The accreditation system boosted business for individual hotels and farmhouses by attracting more tourists than other hotels, and benefited the local community because criteria include that they hire local staff and use local products, and contribute to a conservation fund. WAN Fugui, manager of Wolong Memory Hotel, affirmed his hotel made savings of RMB 5,000 a month by eco-friendly practices such as reducing disposable products and had attracted more visitors, including new overseas groups, through ecotourism [C2]. This contrasted with the previous "unhealthy" approach to development [C1, C2]. The official added that tourism income of 3 hostels that pioneered the certification "is the highest in the sector". Further economic and environmental benefits include reduced costs through reduced energy and water consumption, and waste reduction. Timothy Ng, Parks Operations Director, Ocean Park, which administered the project, affirmed Cheung's "*contribution to the sustainable tourism development*" of the reserve, and its social, economic and environmental impacts. He wrote that the accreditation systems "*do play an important role in governing the sustainable development of tourism in the flagship national nature reserve*". They "*not only can generate economic and social benefits to the local people but also help regulate inappropriate tourism development which may possibly cause degradation to the invaluable habitats* [C6]."

(5) Sources to corroborate the impact

[C1] Impact testimonial, from the Administration of the Wolong National Nature Reserve

[C2] Impact testimonial, from a certified farmhouse in the Wolong National Nature Reserve

[C3] **Media Coverage about Dr. Cheung's work**

[C4] Appointment Certification from the Administration of the Wolong National Nature Reserve

[C5] http://www.ecoguidecert.com/?page_id=17

[C6] Letter of appreciation, from Timothy Ng, Parks Operations Director, Ocean Park

[C7&8] "First GSTC Training in Hong Kong Concludes with a Great Success"

- [C7] <https://www.gstcouncil.org/first-gstc-training-hong-kong-concludes-great-success/>;

- [C8] <https://www.gstcouncil.org/gstc-training-sustainable-tourism-training-taiwan/>

[C9] Letter of appreciation from Harrison Leung, General Manager of The HarbourView

[C10] <https://www.theharbourview.com.hk/en/eco-hospitality>

[C11] 2015-16 Green Report of The HarbourView,

[https://www.theharbourview.com.hk/uploads/files/2015-](https://www.theharbourview.com.hk/uploads/files/2015-2016%20The%20Harbourview%20Green%20Report_Final%20version.pdf)

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