

Review

## A Glimpse of Environmental Conservation at the Nanan-Walame Eco-tourism Route, Yushan National Park

Lan-sheng Kuo<sup>1</sup> Ching Lin<sup>2</sup> Ing-wen Sheu<sup>3</sup> Wen-chuan Chang<sup>4</sup>

論述

### 玉山國家公園南安-瓦拉米生態旅遊線環境保護面面觀

郭蘭生<sup>1</sup> 林青<sup>2</sup> 許英文<sup>3</sup> 張文娟<sup>4</sup>

【Abstract】 Yushan National Park(YNP), a much traveled part of Taiwan, is well-known for its scenery of natural beauty and historic relics. From eastern coastline of Taiwan to the subtropical rainforest, to the central part of Taiwan, Walame is one of Taiwan's most ecologically rich and diverse ecotourism destinations. The beauty of Walame with its 13.6 km forest trail and more than 3 different ecosystems is accented by its few tourists and well-conserved nature. Most tourists described this land(Nanan) as "Paradise on Taiwan" and modern day ecotourists and travelers who explore Walaame agree. As we understand, every road and every human development make the wild animals or birds a very challenging living at YNP. Due to well-protected environmental from Nanan to Walame, Formosan black bear and wild pheasants usually find a good habitat here. Protection of existing Formosan black bear and pheasants, restoration of bear habitat, and linking bear ecosystems to teach other are keys to the long-term ecological monitoring system. Of course, the continuation of the protected habitat undisturbed by travelers is also a concern for the ecologists. The data indicate the environmental deterioration is mainly human-caused. No large-scale propaganda on ecotourism was carried out at Nanan forest for the past years. Approximately, there are less than 50,000 tourists to be here yearly that is able to prove the truth of "Less tourists lead to less pollution". Provident foresters of Nanan subtropical forest with altitude of less than 1000 m lay aside recreation and facilities for their ecological conservation admirably. We conclude that the Nanan visitor center of YNP not only reach the goal of ecological conservation but also satisfy the tourists by government commitment to a new paradigm of environmental protection.

【key words】 Environmental conservation, Ecotourism, National park, Tourist, Habitat, Recreation.

---

1. Professor & corresponding author, Dept. of Environmental Resource Mangement , The Overseas Chinese Institute of Technology, 100 Chokwang Rd., 407, Taichung, Taiwan, ROC.

2,3. Director&Chief, Yushan National Park,300, Section 1, Chungshan Rd.; 553 Shuelee, Nantou county, Taiwan, ROC.

4. Instructor, Taiwan Hospitality&Tourism College, 974 Shofong country, Hualien county, Taiwan.

## Introduction

The Yushan area surrounding the mountain range in middle and partial eastern Taiwan has long been recognized, nationally and internationally, as one of the world's most spectacular landscapes. Over 407 square miles in size, this region harbors an outstanding biological diversity. Extremes of climate and topography create excellent habitats for a wide variety of flora and fauna. Broadleaf forests dominate the park's lower altitudes, giving way to coniferous and bamboo forests at mid-altitudes and finally, at the highest elevations, to arrow bamboo, conifers, and rocky outcrops.

Among the six hiking routes, the most popular is Yushan Peaks System, which allows you to reach up to six of Yushan's 11 peaks, including the Main Yushan peak. Over the last decades, the explosion in eco-tourism and Mt. Jade (Yushan) climbing has almost upset this delicate ecological balance. Its unparalleled attributes and the relative ease by which one could reach the top of Mt. Jade has made the Tataja region the number one trekking destination in all of Taiwan. The situation is further exacerbated by the fact that the majority of the trekkers tend to bottleneck in between April-September. Apparently, Yushan has been suffered from the overcrowded climbers trekking the main route frequently.

Due to the less population and natural scenery of east coast, luckily, Nanan Recreation Center (one of the branch of YNP) located in the middle eastern Taiwan about one hour drive down from Hualien (the largest city on the east coast of Taiwan) has a great potential to be an ecotourism destination. This area serves as an unforgettable point for trips to splendid Nanan-Walame forest trails (length: 13.6 km). The one-way trip takes about 5-6 hours.

The global travel industry, including many ecotourism and sustainable tourism businesses and projects, is reeling from what is being described as "Environmental friendly trip"? Now there is growing concern about yet another negative factor such as, too many tourists and facilities at National park. Staffs of national park issue travel warnings in order to advise tourists that travel must be under control for the sake of ecological conservation. Clearly tourist has a right to know how adjust themselves to the environmental conservation. One of the Yushan National Park role in Taiwan is using ecotourism as a tool for environmental deterioration alleviation, and advise the travelers following the environmental friendly rules for ecological conservation.

The purpose of this study is to investigate "Can the environmental preservation and ecotourism be coexistent in Nanan-Walame subtropical forest in terms of ecology, environmental impact, ecological education, mountain trip, forest trail maintenance and bring traveler's trash home? "

We also want to find ways for YNP to share what we found most conservative and attractive about the ecotourism. Due to all of the beautiful forest at Nanan area is government-owned, we may work with grassroots conservationist and ecotourism development association without scruple.

## Discussion

### Definition and Ecotourism Principles

Ecotourism can be defined as "responsible travel to natural areas that conserves the environment and improves the well-being of local people." This means that those who implement and participate in ecotourism activities should follow the following principles:

- Minimize impact
- Build environmental and cultural awareness and respect
- Provide positive experiences for both visitors and hosts
- Provide direct financial benefits for conservation
- Provide financial benefits and empowerment for local people
- Raise sensitivity to host countries' political, environmental, and social climate
- Support international human rights and labor agreements

#### **Ecological surroundings on the way to Walame**

The great animal is Formosan bear in YNP, along with 12 kinds of snakes and one kind of pheasant. My expedition begins at 7 a.m. far above us are grey Taiwan monkeys, looking in no way like the tortured creatures I have seen in zoos. A day trekking to Walame has its rewards, as I discover a wooden lodge with electricity-generated by solar energy that night. You lay down on a wooden bed instead of soft mattress at home for a wonderful rest. I was startled awake by birds' sound, the next morning. Walame, our destination, is more than 4 hours to walk from Nanan entrance. A village near Nanan visitor center is very rustic with aboriginal people's grey or red-tiled roof, charming folk art and roughly carved furniture, the architectures are anything but austere. Also you can see a fine Nanan waterfall view, 3 km away from Nanan visitor center, by the main road to Walame. The watershed came pouring down in a waterfall off the forest-covered mountain. Of course, plenty of water can be seen in summer than winter for Nanan waterfall view. Additionally, the major attractions here are the wildlife and various vegetations.

#### **Conserving natural ecology than developing strategy**

The YNP insisted on conserving than developing. Development programs, if incorporated within the conservation aspects, will be more sustainable. In other words, any eco-tourism must be carried out in a coordinated manner with the objective : the long-term ecological conservation and the environment that sustains it. Adopting proper conservation methods in tourism planning, such as: limited number of tourism can go climbing the mountain every day, only one-day trip program and few tourists can be lodged for the night, should generate more indirect benefit, which could contribute towards the development of sparsely populated eastern Taiwan.

The most important intruder for the environment of national parks in Taiwan is a traveler. Of course, one of the roles of national parks depends on sharing the beautiful scenery with tourists. National park is an activist organization pursuing a native environment. It is a resource of ecological information on travel that allows travelers to inform themselves and create their own opinions. In doing so, national parks become a conduit for travel, conservation and environmental information. Travelers coming to national park will find nature or knowledge in ecology or historic relics. The essential goal of national parks in Taiwan is to keep all the environments natural. Also it is to limit the number of travelers to the site that will fully meet the needs of the environmental conservation. Some of these will include its registered tourists every day and no overnight accommodations.

#### **Educating the travelers to be responsible for ecology**

The other goal of national park is to create a well-educated, responsible traveler. By doing this, national parks add value that will positive impact on the way people think about travel. Following

this concept, Nanan of YNP boasts over various biodiversities. Approximately 85 % of its national territory is protected land. Its awe-inspiring beauty, varied ecology and diverse native vegetations make Nanan a natural destination for a possible ecotourism activities such as bird watching, hiking, and wildlife viewing. For a long time, the Nanan visitor center has not actively promoted Walame as an ecotourism paradise. But most tourists hope this is about to change. Promoting ecotourism or not?

We are extremely pleased that thus far, Nanan has been so well keep a model of ecotourism in Taiwan. After all, Nanan has such incredible biodiversity when comparing to other national parks in Taiwan. Most employees of National Parks with a mission to promote tourism to the national park that would help preserve Taiwan natural wonders, many of which are threatened by the pressure of population and economic growth. The other popular ecotourism destinations such as Yushan (Mt. Jade), Meishan recreation center, unlike Nanan center, until recently the Yushan national park has not actively promoted Nanan as an ecotourism destination. . As such YNP has remained a largely unexplored ecotourism paradise at Nanan. Tours travelers may stay in near-by communities or home-stay on farm, enjoy indigenous cuisine and hot spring, and intimately interact the native tribes of Nanan such as Taiya and Arnei. YNP's employees also encourage some members of these tribes to serve as guides and share with tourists their deep knowledge of the plants, flowers, birds and other wildlife of Nanan, as well as their myths and legends.

Interestingly some tourists rave about the natural wonders of Nanan, echoing YNP declaration that this land truly is paradise on Taiwan. Is this national park in Taiwan? Yes, the world's best kept secret! For now!

### **Bring travelers' trash home**

In order to free from dirt or impurities around the Mt. Jade area, the staffs of YNP enforce the tourists to bring all the litter down to garage can near the entry. Apparently, this policy has already supported from most tourists, the routes to Walame eventually become cleaner than before. What is truly unique to protect the environment at Nanan, a travel document issued by the local police station must be applied for the travelers prior to his tour. "Bring your trash home" slogan can be seen everywhere and has been conducted for many years. With the understanding of the different behaviors and needs of travelers, the staffs of Nanan visitor center also map the environmental conservation notice onto web and put the interpretation post along with trailside.

Two eco-toilets, a sanitation facility with biodegradable human excreta and toilet paper, situated on the half-way to Mt. Jade illustrates keep cleaning everywhere as it's original for YNP. The first author was startled for unable to find the trash while stayed at Paiyunshan lodge, which is close to Mt. Jade in April of 2004. Additionally, there is a modern sanitary flagstone toilet at Jiasing, which is on the way to Walame, for travelers' use and clean purpose.

### **Outdoor ecological education**

Research has shown that taking ecological tour at Nanan can bring significant personal experience rewards, as does time spend in nature. Although most trails at Nanan are less traveled, ecological tour is to intentionally go beyond one's normal known knowledge from books, seeking genuine environmental conservation experiences, which are unfamiliar.

The Ecological Exhibition Room with various species of local vegetation and wildlife, located on

the office of Nanan visitor center, is well equipped. Of which the travelers could better understand the contents and services to suit the environmental conservation needs.

#### **Well-maintained forest trail**

One day, the first author was extremely surprisingly to see a narrow trail (< 50 cm width), which is about 1.5 km away from Walame destinations, surrounded by poisonous plants. It is really a well-conserved natural deciduous forest. Of course, it is a lot better than school.

Most of the forest trails at Nanan are gentle slope (< 10 degrees), so tourists can walk easily in width of 1-1.5m trail no matter how old you are. Additionally, you can make round trip in one day long for a 13.6 km Nanan-Walame trail. If you are interested in a self-serve Walame's wooden lodge with solar energy to generating electricity, you can stay in Walame overnight for enjoying a serene atmosphere and fine view.

You don't need to climb high at Walame area; fun and satisfaction come from viewing well.

By the way, well-maintained forest trail have the advantages of safe tour and keeping tourists away from treading on the abundant ecological surroundings for nature conservation.

#### **Mountain trip**

Staying in the confined cities, you may see that the island sky is covered in a perpetual cloud of darkness, gloomy and very depressing. But there are amazing destinations out in YNP, rustic, rugged and pristine. About one hour drive from Hualien city, en route to the famous Nanan visitor center truly conjures up the image of a lost Shangri-la.

The intricately designed information center and ecological exhibition hall are indications enough of the natural forest resources. The YNP, with most support from government, have

transformed the region into a promising center of eco-tourism, building on its bountiful natural resources, trees being the foremost. There are no "hotels or home-stays" here; instead they have only a wooden lodge with solar energy at Walame, run uniquely by the YNP. Except of water and local sight seeing, they offer no comfortable accommodation and food just for ecological conservation purpose.

And this heaven has been tirelessly emphasize in their nature and forested land all the time. Walame's mountains are natural, and to succeed one must recognize the environment. The mountain trips are for "a mentally ready and physically fit body" to carry loads from 10-20 kgs and to travel 5-6 hours in good weather. Established in 1983, YNP offers interpretation signs along the trail to educate the climbers some characteristics of local plants- so called ecological education. For Nanan-Walame trail, YNP used wood and metal combinations to bridge the stream. Up to now, there are six suspending bridges along the main ecological trail.

The authors proudly notes the moment they reached the Walame's 2008 " from Taiwan government, the staff of YNP found that ecotourism was hard to deliver its promise in many situations. Many tourists used to trek the low-altitude (< 1000 m) Nanan natural hardwood forest trails during weekend or holidays.

In order to preserve the natural subtropical forest, the NYP has no propaganda on website and media for the promotion of eco-tourism for Nanan-Walame route. Tourists from Taiwan have begun recognizing the role of forest preservation. They seem nice enough, but no one likes guests arriving uninvited. So every tourist must report to the police station before their trekking at Nanan-Walame ecotourism route. Under the stringent

management, the ecotourism seems to do nothing harmful to the Nanan-Walame nature forest. So the stress on the eco-system of Walame will be dwindling.

Additionally, ecotourism also brings ecological education and scenic viewing to the tourists, so no one would have to destroy natural forest. And then ecotourism at Nanan-Walame area will preserve the forest and wildlife for good.

## References

1. Conference Proceedings (2004) Forest and Environmental Change, National Chung Hsing University, Taiwan, R.O.C.
2. Botanical Gardens (2005) Taiwan Forestry Research Institute.
3. Paul T. Anastas and John C. Warner (1998) "Green Chemistry, Theory and Practice", Oxford University Press, pp. 1-6.
4. Conference Proceedings (2005) Health , Recreation and Tourism, Leader Management College, Taiwan, R.O.C., p 28.
5. Lan-sheng Kuo and Chih-perng Fang. (2005) The Short-Medium-Term Plan (2004-2007) of Biodiversity Facility in Yushan National Park, Headquarter of Yushan National Park, Taiwan, R.O.C.
6. Kuo-tee Chen and Chan-lian Shieh (2003) The Study of Bio-toilet in Yushan National Park, Headquarter of Yushan National Park, Taiwan, R.O.C.
7. Wen-Ya Lu and Hwei-lian Wang (2003) The Biodiversity Sustainable Management and Use in Yushan National Park, Headquarter of Yushan National Park, Taiwan, R.O.C.
8. Kurt Wolff, Amy Marr, David Lukas and Cheryl Koehler (2002), Yosemite National Park, Lonely Planet Publications, USA.
9. Phil Macdonald (2004) Traveler Taiwan,

National Geographic, USA.

10. Joel A. Tickner (2004) The Precautionary Principle Stimulus for Solutions- and Alternatives-based Environmental Policy, Elsevier, 24:801-824.

## 【Acknowledgement】

The authors would like to thank Mr. Ing-wen Sheu, Chief of Nanan Visitor Center, YNP, for his invaluable assistance on this project.