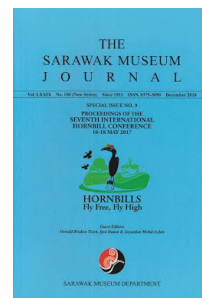




The Sarawak Museum Journal

Vol. LXXIX No. 100

December 2018



ISSN: 0375-3050  
E-ISSN: 3036-0188

**Citation:** Victor Luna Amin and Semilan Ripot (2018). From Pre-Brookes to Hot, Flat and Crowded World: Are Changes in Indigenous Knowledge, Beliefs and Practices Seriously Affecting Hornbills Conservation? Sarawak Museum Journal, LXXIX (100) : 261-286

## FROM PRE-BROOKES TO HOT, FLAT AND CROWDED WORLD: ARE CHANGES IN INDIGENOUS KNOWLEDGE, BELIEFS AND PRACTICES SERIOUSLY AFFECTING HORNBILLS CONSERVATION?

**Victor Luna Amin\* and Semilan Ripot**

Sarawak Forestry Corporation, Lot 218, KCLD, Jalan Tapang, Kota Sentosa,  
93250 Kuching, Sarawak, Malaysia

\*Corresponding author. Email: [vluna@sarawakforestry.com](mailto:vluna@sarawakforestry.com)

### ABSTRACT

In the island of Borneo, the forests ecosystem, rivers and wildlife prior to the pre-Brookes era have notably influenced the evolution of their indigenous knowledge, practices and beliefs system, known as the traditional ecological knowledge. Such influence has, over time developed into acceptable cultural and traditional identity of indigenous people. Today, changes in the political and socio-economic development, driven by the flattening, crowding and warming of the world have devoured open space and tropical rainforest of the world. The impacts, in turn to some extent had disrupted ecosystems and depleted species that has been perceived increasingly impacting the dynamic nature of the beliefs and cultural system of many indigenous communities. This paper elicits some factors and conditions that maintain or undermine indigenous communities' ability to adapt, generate, transmit and apply the traditional knowledge, beliefs and cultural systems with respect to the species of hornbills and its conservation in the face of changing environmental and socio-economic conditions.

**Keywords:** traditional ecological knowledge, indigenous knowledge, hornbill, biodiversity conservation, culture, beliefs



# FROM PRE-BROOKES TO HOT, FLAT AND CROWDED WORLD: ARE CHANGES IN INDIGENOUS KNOWLEDGE, BELIEFS AND PRACTICES SERIOUSLY AFFECTING HORNBILL CONSERVATION?

Victor Luna Amin\* and Semilan Ripot

*Sarawak Forestry Corporation, Lot 218, KCLD, Jalan Tapang, Kota Sentosa,  
93250 Kuching, Sarawak, Malaysia*

*\*Corresponding author. Email: vluna@sarawakforestry.com*

## **Abstract**

In the island of Borneo, the forests ecosystem, rivers and wildlife prior to the pre-Brookes era have notably influenced the evolution of their indigenous knowledge, practices and beliefs system, known as the traditional ecological knowledge. Such influence has, over time developed into acceptable cultural and traditional identity of indigenous people. Today, changes in the political and socio-economic development, driven by the flattening, crowding and warming of the world have devoured open space and tropical rainforest of the world. The impacts, in turn to some extent had disrupted ecosystems and depleted species that has been perceived increasingly impacting the dynamic nature of the beliefs and cultural system of many indigenous communities. This paper elicits some factors and conditions that maintain or undermine indigenous communities' ability to adapt, generate, transmit and apply the traditional knowledge, beliefs and cultural systems with respect to the species of hornbills and its conservation in the face of changing environmental and socio-economic conditions.

**Keywords:** traditional ecological knowledge, indigenous knowledge, hornbill, biodiversity conservation, culture, beliefs

## INTRODUCTION

This paper emerges from the significant evidence in the literature and through personal observation of the increasing erosion of indigenous knowledge, traditional beliefs and practices, popularly acknowledged as traditional ecological knowledge (hereafter TEK) as a result of direct and regular contact with hornbill species prior to the Brooke Era and beyond. Although there is no universally accepted definition of TEK in the literature, the most commonly quoted definition of TEK is defined by (Berkes *et al.* 2000) as “a cumulative body of knowledge, practice and belief, evolving

through adaptive processes and handed down through the generations by cultural transmission". Likewise, in many parts of the world, significant beliefs have developed in relation to bird species that are developed through a process of social interaction, which in turn, these beliefs give rise to a variety of practices and behaviours that centered around these bird species (Coetzee *et al.* 2014). These practices and behaviours range from actual uses, such as hunting and consuming certain bird species for its meat, to using birds in cultural practices, such as rituals, ceremonial development, driven by the flattening, crowding and warming of the globalized world (Friedman 2005 & 2008; Stiglitz 2006) have devoured open space and tropical rainforest which in turn had disrupted ecosystems and deplete some species and as consequent have increasingly perceived impacting the dynamic nature of the beliefs and cultural system of many indigenous communities. Much research on wildlife conservation has centered in ecological and behavioural studies, but little emphasis is put in understanding particular changes in indigenous knowledge, practices and belief as adaptive responses to new environmental, social, or economic conditions that are perceived to affect the status of hornbill conservation. In this paper we reviewed literature on the traditional use and beliefs, and some factors and conditions that maintain or undermine indigenous communities' ability to adapt, generate, transmit and apply the existing traditional knowledge, beliefs and cultural systems with respect to the species of hornbills and its conservation in the face of changing environmental and socio-economic conditions in Sarawak, Borneo.

### HISTORICAL PERSPECTIVES

Borneo (745,000 km<sup>2</sup>) is the world's third largest island that comprises three countries: Negara Brunei Darussalam, Indonesia and Malaysia; with an estimated population of 17 million people. The island is home to almost one million indigenous peoples, whose heritage and traditional knowledge have helped to sustainably manage the forest of the Heart of Borneo (Ariaini *et al.* 2007). The strong interdependence between indigenous people of this Island is correlatively linked to the availability of natural resources as well as ecosystem services the forest provides (Ariaini *et al.* 2007; Whitmore 1990). Malaysia's states of Sabah and Sarawak are located to the north and west of the island, while Negara Brunei Darussalam is located on the northwest coast. Sarawak, a state within Malaysia, situated within the belt of tropical rainforests region is considered a physically diverse and complex ecosystem, socio-economically unequal, culturally and religiously diverse state that ascribed to high tolerance among

many indigenous groups of peoples. In order to understand the changes of the indigenous knowledge, practices and beliefs of the people of Sarawak, it is equally imperative to understand the important historical eras that have shaped these development and changes. The eras are Pre-Brooke Era (1540s–1600s), Brooke Era (1841–1941), Japanese Occupation Era (1941–1945), British Colonial Era (1946–1963) and Sarawak and Malaysian Era (1963–present).

### **Pre-Brooke Era (1540s–1600s)**

During this era, there was a massive migratory expansion of indigenous communities, particularly the Ibans from Kapuas Basin of Kalimantan, Indonesia into Sarawak in search of new areas (Padoch 1982). At this era, warfare, head-hunting and the concept of Iban migratory expansion to other river basins was considered predominantly as integral part of Iban culture. There was lack of proper and legislated laws and orders to govern and restrict the socio-economic activities of people in Sarawak. During the process of such migratory expansion, vast natural resources were exploited for the purpose of shifting cultivation and gathering of non-timber forest produce. With being closed to nature, engaged in shifting and gathering activities and headhunting marked the beginning of the development of their indigenous knowledge, practices and beliefs systems, which over time, assimilated into their acceptable cultural and traditional identity. During this era, the Dayaks, particularly the Ibans believed in spiritual world populated by good and evil spirits where they need some guidance to foretell them in their precarious farming, in gathering of forest produce, hunting and fishing, in plying the dangerous rapid of the river system. Messages from the spirit world were conveyed through dreams and by certain augury birds and animals, and the state of the livers of the slaughtered pig during ceremonial rituals (Jabu 1989).

### **Brooke Era (1841–1941)**

During the Brooke Era, the three Rajahs of Sarawak globalised Sarawak purportedly for its resources and imperial conquest. They expanded their territory right from *Tanjung Datu* at southern tip right up to *Lawas* at the north region of Sarawak, while also introducing market economy to the state (e.g., export of rubber, pepper, etc). Christian missions, with Anglican Mission was first introduced to the natives and Christian schools in 1848, followed by the Roman Catholic in 1881 and the Methodist in 1901 during the Brooke Era where many of the Dayaks and other communities embraced Christianity (Huat