

Malaysia's Edible Bird Nest (EBN) Industry

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Introduction

Edible bird's nests (EBN) are bird nests made from the saliva of swift. It is particularly prized in Chinese culture due to their rarity and supposedly exquisite flavor. They are among the most expensive animal products consumed by humans, with an average nest selling for US\$2,500 per kilogram. The EBN has been traded in Malaysia for the past 500 years. It was traded between the Malay Archipelagos and Mainland China since 16th century (Sankaran, 2001). The nest is produced by two common subspecies, the white-nest and the black nest swiftlets. Traditionally, the nest is collected in lime stone caves in Borneo Island, such as Niah Cave in Sarawak, Mandai and Guamantong Cave in Sabah (Ismail 1999 and Lim and Cranbrook, 2002)

The demand for EBN is increasing every year, thus, the growth in trade is progressing. For example, the only around 26,000 kg of EBN was traded in Malaysia in 1900. However, Malaysia exported more than 100 metric tons of EBN valued at RM500 million in 2009. The price of raw clean EBN was around RM20,000/kg in China retail markets, at that time. There are various factors that increased the demand and thus, the price of EBN products. The Chinese community believed that EBN has a special traditional and exotic value. These special and exotic value create the demand for EBN products. The supply of EBN from its natural habitat led to the low production of EBN especially those demanded by consumers, especially from China markets. This situation created a great opportunity for Malaysian farmers. They started to build commercial building that would attract swiftlet to nest in this imitation habitat. The new farming system was successful. Generally, at present, there are more than 3,000 commercial bird houses from emptied buildings such as old factories and shops and dedicated bird houses in Malaysia. Dedicated bird house is a special building made of concrete and developed in specific areas.

Policy to support edible bird nest industry

The Malaysian government recognized the economic potential of the EBN industry. This industry is expected to contribute more than RM5.2 billion to the Gross National Income (GNI) in 2020. Hence, the government has established a comprehensive master plan for the development of EBN industry. This master plan is stated very clearly in the Economic Transformation Program (ETP) and the National Agro-Food Policy (NAP). The Malaysian government has established four strategies to support the development of the industry, as follows:

- Increase the production of EBN to reach 860 metric tons by 2020
- Introduce and enforce the industry development guidelines
- Introduce the good production practices, and industry standard
- Concerted efforts in research and development activities.

One of the strategies for the development of a competitive EBN industry is the introduction of Malaysian Standard of Edible Bird Nest (MS 2334:2011). The standard was established to regulate and monitor the marketing effort of EBN for domestic and international markets. One of the regulations established in the standard is the grading system. The EBN is graded into three categories the A, B and C based on the size and the curve angle of the nest. The grade A is a better quality, followed by B and C. The grading system standardize the quality measurement and determines the price of EBN. The higher the grade, the more expensive the EBN.

Marketing practices of EBN

In understanding the issues of marketing of EBN in Malaysia, a study involving 423 owners of EBN premises throughout Peninsular Malaysia was carried out in 2013. The data were collected using structured questionnaire. The interviews were conducted by the staff of the Veterinary Service Department. The questions encompassed four important industry development characteristics: the production, marketing, regulations and economics indicators. However, this article focuses only on the production, grading practice and prices of EBN.

Production

Generally, the majority of EBN producers in Malaysia are of the small-scale type. At present, there are more than 3,000 registered commercial bird houses in Malaysia. In average, the space area of a commercial bird house is around 1,800 square foot for shop house and 5,270 square foot for a dedicated house. The average annual yield is around 1.kg for shop house and 11 kg for dedicated house (Table 1).

Table 1. Production of bird nest

Type of premises	Average area square foot	Average yield/square foot	Average Annual yield (kg)/house	Quarterly sales volume	Lowest Production volume (% population)	Highest production Volume (% population)
Shop house	1,800	7.28g	13.10 kg	4 kg	< 0.5 kg (50)	> 10 kg (5)
Dedicated house	5,268	2.06g	10.85kg	3.5kg	<0.5 kg (40)	> 10 kg (5)
Average		4.67g	11.97kg			

Grading practices

The government has established the Malaysian Standard of Edible Bird Nest (MS 2334:2011) to ensure the products from Malaysia are quality assured and safe for consumption. However, the industry players are generally reluctant to abide by the standard. The study found that more than half of the farmers do not follow the grading system. Table 2 indicates that only 44.2 % of farmers used the grading system, while around 33% used the traditional measurements.

Table 2. The application of edible bird nest grading system by producers

	Responses frequency	Percentage
Bulk buying(not grading)	80	22.66
Used the grading of the Malaysian Standard (A,B and C)	156	44.19
Used traditional grading system (colour, shape, curve.	117	33.14
Total	353	100

Price

In general, the price of EBN is determined by market forces - the supply and demand. The grading system is used as guidelines in determining the right prices. Furthermore, many industry players use their own grading systems, such as the color, shape and curve of EBN. The study also found the price of EBN ranges between RM500 and RM8, 000 per kilogram, depending on the negotiation between producers and buyers (Table 3).

Table 3. Grading and pricing of Raw Bird Nest

Grade	N	Minimum Price (RM/kg)	Maximum Price (RM/kg)	Average Price (RM/kg)
Not grading (Bulk buying)	80	600	4,500	2,433.82
A	74	1,500	8,000	2,808.38
A,B,C	21	800	3,700	2,461.90
A (White)	3	2,400	3,000	2,600.00
A,B and C (White)	2	1,200	1,500	1,350.00
B (Yellow and White)	2	1,800	1,800	1,800.00
B (White)	1	2,000	2,000	2,000.00
B	50	900	7,000	2,424.00
Normal	1	2,300	2,300	2,300.00
D	18	500	2,300	1,838.97
Yellow	5	1,000	2,500	1,660.00
Mesh	1	1,000	1,000	1,000.00
White	27	1,000	3,200	2,107.41
Grey white	13	1,500	2,000	1,792.31
Yellow white	1	3,000	3,000	3,000.00

Policy implication

In spite of its importance as a source of income, EBN is still a fragmented industry. The government has recognized the issues and challenges faced by this industry and set new strategies as follows:

- Strengthen the enforcement system to ensure the standards and guidelines established by the government is implemented fully.
- Improves the communication and networking system to ensure all government rules and regulations are adopted by industry players in the value chain

- establish the EBN centre of excellence to disseminate new knowledge and information on the activities across the industry value chain through dialogues, seminars and conferences.

Conclusion

The EBN is an important industry and has been recognized as a new source of wealth and will contribute to the GNI. However, this industry is still fragmented and needs the government interventions such as new set of policies that monitor the whole activities in the supply chain. The stringent enforcement is critical to ensure industry's sustainability. The awareness programs should be enhanced to educate industry players about good production and marketing practices. The establishment of trading house would overcome the issues on pricing system and weaknesses of the grading practices. This trading house can be used as reference point on the Malaysian Standard of Bird Nest and market price.

References

- Crankbrook, Earl of (1984). Report on the bird's nest industry in the Baram District and at Niah, Sarawak, *Sarawak Mus. Journal*. 33(54): 145-170.
- Ismail, M.I. Social Control and bird's nest harvesting among the Idahan a preliminary observation, *Southeast Asian Studies*, Vol. 37, No. 1, pp 3-18.
- Lim, C.K. and Earl Crankbrook, Earl of (2002) Swiftlets of Borneo builders of edible nests, Natural History Publication, Sabah, Malaysia.
- Sankaran, R. (2001) The status and conservation of the Edible-nests Swiftlet (*Collocia fuciphaga*) in the Andaman and Nicobar Islands, *Biological Conservation* 7, pp 283-294.