

## **Managing God-given wealth: The need for inclusivity for sustainable EBN Industry**

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The edible bird nest (EBN) is a unique God-given valuable food of animal origin almost exclusively to South East Asian (SEA) countries. It is highly nutritious glycoprotein produced by salivary glands of swiftlets with crude protein as high as 62%, and carbohydrate at 27.26% (1). Off all the livestock products, EBN is the driest with moisture content of only 7.5%, thus this product may inherit quality of contamination risk approaching negligible level. With these properties, handling of the product is rather simple and no wonders it's has been market beyond SEA thousand years ago. The EBN is traded to China as early as 618-907 AD during Tang Dynasty of China (2).

Thanks to the early adventures and merchants who traded the EBN by projecting consumption of EBN as symbol of wealth, power and prestige and meant for the king and the elite group. In addition, their rarity, uniqueness, difficulties in harvesting and its medicinal value has position this commodity at very commanding price and is now considered as one of the most pricy livestock product available on earth. In mid 1990s producers received price of RM6,000-7,000 per kg (2) and currently may fetch at RM5,000 per kg. Together with minimal operational cost required, producing EBN potentially can become wealth creating livestock activity.

However, achieving full potential of EBN industry is a very challenging task and demanding an inclusivity and involvement of all parties and stakeholders. Currently, the EBN is produced from two "population of swiftlets"; cave and house (man-made cave). The former, is the original production premise. The caves are found mostly in Sabah and Sarawak. It is either governed by Government authority or local village community. Risks for sustainable production of EBN from caves are including: over-exploitation, uncontrolled nest harvesting, natural insects supply affected by forest clearing, change in land used from forest to mono-crop agriculture, mismanagement of nesting caves which lead to the declining in cave swiftlet population. To ensure a positive growth of cave swiftlet population all relevant agencies and parties such as Forestry and Wildlife Department, village community leaders and contractors awarded the tender of harvesting the nest and the nest collectors itself must understand that a minimum of one

complete nesting to fledging is required in a year. A stringent enforcement is necessary to ensure the condition is complied. Initiative of hand feed to the young until fledging and release it to the wild is an example of innovation that bring about positive growth of cave swiftlet population. Greedy and short term profit maximizing may adversely affect swiftlet population growth and thus depleted these valuable cave treasures.

Meanwhile, the house farming of swiftlet in Malaysia which was newly developed is expanding at a very fast rate exceeding growth of house swiftlet population. The expansion is facilitated by a bold policy change adopted by the Government. Since 2010, swiftlet *Aerodramus fusciphagus* (white nest producing swiftlet) have been excluded from the list of protected animal under the Wildlife Department law, Peninsular Malaysia. This change has attracted significant number of new players in EBN production. Similar to cave production, EBN produced from the house system also facing sustainable risks. Such risks include uncontrolled harvesting (especially new establishment), natural insect supply affected by reduction of vegetation land area, insecticide usage in plantation, prohibition farming in city and township areas, multiple authorities exerting their power and authority, complaint by surrounding residence associated with calling sound played all day and night by the operator. Since the harvesting of bird nest in the house is easily regulated, implementation of “no early harvest policy” at least to 20% of the nest built must be applied. The key theme for house swiftlet should be “let full fledging a standard practice”. In reality this practice is uncommon especially to the new farmers who impatient to cash the nest once it is completely built by the swiftlets. They see waiting period of 70 days (incubation-25 days and fledging-45 days) is too long at the same time the practice also reducing the nest quality. Since eggs are commonly remove for early harvesting, artificial rearing of the swiftlet is a potential option in ensuring positive growth of housed swiftlet population. In this contact the introduction of 1GP guideline by Government recently hopefully will ensure swiftlets population continuously growing, so much so the existing and the new comers are able to realize the wealth creating potential of EBN capable of.

In addition to production, quality of EBN is also important elements for profitability and consumer confidence. Adulteration to increase weight and altering colour of EBN should be discouraged and deterrent penalty should be imposed. A systematic processing system should be in place to guarantee the authentic and quality of the made in Malaysia EBN. In this contact, existing and the future processors must be exposed to aspect of quality assurance, good processing practice and certificate of compliance issued must be also regularly monitored.

Although innovations are noticeably present to resolve problems encountered by producers and processors, many areas still require detailed attention and research. Such areas include: suitable house design and building material, conducive internal micro-environment of swiftlet houses, status of natural insect population and its carrying capacity, enhancing insect production to cater to an increment in swiftlet population, shortening waiting period for nest harvesting (incubation and fledging), factors affecting grade and quality of EBN, mechanization of processing methods, creative products development, predators control and prevention, setting a good practice of swiftlet farming and public awareness and nuisance reduction. Specific budget must be allocated for active research by individual scientists or institutions.

Since the marketing system for this product has been established since a long time ago, streamlining and enhancement of the system may benefit the industry; however, the cost incurred should not be transferred to the producers. In response to the need and the expected future of the industry, the Government is allocating a substantial budget under the Entry Point Projects (EPP's) to further enhance the industry outlook, efficient in processing, traceable and improve in productivity to ensure sustainability of the industry. The EBN is expected to contribute significantly to the gross national income.

Clearly, proper management of the EBN industry requires sincere participation of all stakeholders. Firstly, all parties must ensure that swiftlets that are producing EBN are expanding in numbers, secondly, the relevant authorities must monitor that EBN products are duly processed and adulteration-free and thirdly, mechanisms to ensure markets are stable and the EBN price remains high must be in place. The Department is requesting all relevant authorities consider these factors when implementing regulations and procedures to ensure the sustainability of EBN production and so it remains a wealth-creating commodity.

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