

Bold Entrepreneurs and Uncommon Enterprises: The Malaysian Chinese Experience

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Abstract

The Chinese are well known for their hard work and enterprise. Self-reliant and resourceful, the Chinese in Malaysia have always pursued their interests in what they perceive as financially rewarding and personally fulfilling enterprises. This paper discusses two new enterprises that are distinctive for their uniqueness and boldness. These are the breeding of the Asian arowana and the keeping of swiftlets for their edible nests. These products are high-value items that have their respective niche markets. The history of both is of recent origin. Yet each is, in its own way and from the very beginning, a bold and innovative enterprise in its specialization and in the exploitation of local resources.

The foresight and innovative spirit of the pioneer entrepreneurs in these enterprises have exploited business opportunities that are, to the average person, generally beyond the range of commercial possibilities. More significant is that these entrepreneurs have shown that, with their unyielding spirit of enterprise and resourcefulness, it is possible to transform the unthinkable into thriving businesses.

Key words: Chinese entrepreneurs, swiftlet nest farming, arowana fish breeding, business insights

Introduction

The swiftlet or bird's nest is a high-value project that may be worked by Malay and other Bumiputera entrepreneurs. Another enterprise is the growing of seaweeds for export. Another industry is the Arowana fish that has been listed in the Stock Exchange.

(Datuk Seri Najib Razak, 29 March 2009)

The Chinese overseas determine their own future by trying endlessly to improve themselves, be self-reliant and resourceful in the spirit of *xiqiang buxi* or seeking self-advancement through unremitting efforts. In their desire to improve their livelihood, they would attempt what they perceive as financially rewarding and personally fulfilling endeavours. They have indeed accomplished much success in a variety of activities at different times and in different places. In the arena of commerce and trade, they have pioneered many traditional as well as totally new enterprises. In all these cases, the underlying factor has been

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the readiness to seize opportunities wherever and whenever they present themselves.

This paper discusses two types of unusual enterprises that have recently been pioneered by enterprising individuals in Malaysia. These are concerned with fish and birds that are found in Malaysia, one that is too exotic and the other too commonplace to be conceived as candidates for viable businesses. Yet the entrepreneurs have the foresight and conviction to turn them into uncommon products to stand as pioneers of new and thriving enterprises.¹ The paper will examine the special circumstances surrounding the development of these enterprises and the factors that lead to their subsequent transformation into new business undertakings. It will then discuss some general features concerning these new activities in order to gain a better understanding of the nature of business enterprise in general and that of the Chinese in particular.

The Chinese Overseas and Their Participation in Business

The Chinese give the impression of possessing a natural flair for doing business and Chinese communities overseas are often seen as the epitome of entrepreneurship. As merchants and businessmen, they have often been criticised for their “domination” of local economies and thus aroused resentment from quarters ranging from the local communities to international organizations.² Yet their role as founders of new enterprises has often been overlooked as they put their initiatives and resourcefulness to advantage in creating businesses out of unlikely quarters.

In the unfamiliar situations in different territories in which the average Chinese immigrant has settled down, often under difficult circumstances, the struggle for survival has indeed been a game of pitting self against the environment and competitors. Many early immigrants were forced into jobs pre-determined by their contracts as indentured labourers. Away from China, they were deprived of access to bureaucratic appointments and their most immediate task was to overcome various situational circumstances in the struggle for survival and to seize upon any opportunity that could secure their survival. Sociological factors and cultural background may ease the entry into business. The sociological factors include past experiences of the Chinese in commerce and trade and the handling of money. The positive traits of the Chinese such as being hardworking, resourceful and thrifty would come into play whenever new opportunities arise. Culture as a motivational force is manifested by such traits as the indomitable spirit and unremitting efforts of the average Chinese for self-improvement (see Voon, 2001).

Other than hired employment in the ports, mines and plantations, trade and commerce, and in the services, many early Chinese arrivals sought ways for self-employment of which the most common was in petty trade. Then as now, a simple way to earn a living was to

prepare food and various other edible items for sale. Southeast Asian cities abound with hawkers and peddlers who ply their wares in busy town centres, the streets and verandas of shop-houses, or by the many side lanes. Hawkers work from their ubiquitous stalls in coffee shop-houses offering an array of noodle, rice and other edible dishes. Their ranks are further swelled by itinerant peddlers of food or other goods and services. One writer (McGee, 1976) called this army of petty traders the “proto-proletariat”. They form a bloated “informal” sector comprising the self-employed and under-employed.

More specialized and capital-intensive than petty trade, but still with a relatively low barrier to entry, are the retail shops and stores. Retailing is simply the resale of new and used goods for personal and household consumption. This takes place in shops, department stores, stalls, auction and mail-order houses and co-operatives (DSM, 2003). In 2001, there were 153,660 retail establishments in Malaysia. Among them were 491 major stores owned by foreigners and 35 were Malaysian-foreigner ventures. All except the major ones are small family businesses. A quarter was run as a “one-man” show, while a third involved two persons and 17 per cent were worked by three persons. These small establishments provided employment to 76 per cent of the workforce in retail trade, involving 512,185 persons altogether or an average of 3.3 persons per establishment (DSM, 2003: 127). Total revenue of the entire sector amounted to RM71,651 million in 2001. After deducting the cost of goods sold and other expenditures of RM63,676 million, and RM3,149 million in salaries and wages, a balance of only RM4,826 million was left, which worked out as RM31,407 per establishment or RM2,617 per month (DSM, 2003: 130).³

The Genesis of Uncommon Enterprises

Besides ubiquitous businesses such as petty trade, there are a few less common ones. Among them are the breeding of the rare Asian arowana (*Scleropages formosus*) and the keeping of swiftlets (*A. Fuciphagus* and related species). Both are attempts to commercialize biological processes, one concerning the breeding of fish in captivity and the other in attracting swiftlets to nest in built structures.

In the Eighth Malaysian Plan 2000-2005, ornamental fish, seaweed and floriculture were identified as “new sources of growth” in the agricultural sector. This attention has been reiterated in the Ninth Malaysia Plan 2006-2010 which encourages the private sector to participate in these new businesses. The government is to provide extension service, incentives, basic infrastructure, marketing facilities, downstream processing, and to strengthen “marketing and global networking” (Malaysia, 2006: 86, 89-92). Strangely, edible birds’ nests did not feature in the radar screen of the broad official purview then.

The breeding and supply of ornamental fish and the production of birds' nests are unusual enterprises that fall outside the vision and consciousness of all but the bold and discerning entrepreneurs. Those who dare are individuals who realize the commercial possibilities and the market potential of these enterprises. Through perseverance and the belief in themselves, many have built up viable businesses to occupy special niches in the economy. Both are therefore the fruits of efforts that are independent of official assistance.

Significantly, the entrepreneurs regard these undertakings as the commercial production of highly-priced "commodities" for the local and export markets rather than new forms of farming. Yet, in having to deal with "wild" and endangered species found in nature, these enterprises involve "domestication" processes that differ radically from the manufacturing or the retailing of finished goods.

Ornamental Fish Breeding: A Success Story

Malaysia's trade in ornamental fish began in the 1950s with the marketing to Singapore of fish caught in the wild. This relatively new sector has experienced a healthy trend of growth since then. During the Eighth Malaysian Plan period, the sector produced 438 million tails with a market value of RM103 million (Malaysia, 2006: 86). With up to 600 varieties of ornamental fish to satisfy the interests of hobbyists worldwide, this is a trade that will grow in tandem with rising affluence. Malaysia is now the world's largest producer and second largest exporter of ornamental fish for which the major markets are the United States, Japan and the European Union. At the global level, the Food and Agricultural Organization has estimated that the trade is worth US\$15 billion (Loh, 2007).

The Malaysian ornamental fish trade has become a fast-growing business sector. In the 20 years to 2006, the industry enjoyed an annual rate of growth of 24 per cent (*Fish Farmer*, 2006). There are now about 500 aquarium shops in the country (San Sui, 2006). About 550 local and exotic varieties of ornamental fish comprising more than 250 species are bred in Malaysia. In 2006, more than 70 per cent of the production were exported to over 30 countries and was worth RM140 million (*Fish Farmer*, 2006). A local source stated that the world trade in ornamental fish was estimated at about RM8.06 billion in 2005, and Malaysia was ranked next to Singapore in global exports (*Fish Farmer*, 2006).

Among the most highly-priced ornamental fish is the Asian arowana, also fondly known as the Dragon Fish by the Chinese. The arowana is a living "fossil" that is known for its elegance and beauty. It is found only in a few localities but especially in Southeast Asia. In Malaysia, its sole natural habitat is the Bukit Merah lake in the northern part of Perak state.

The outstanding ornamental fish breeding and export enterprise of Malaysia is of recent origin. Its success story reveals an enterprise whose beginning owes as much to serendipitous

circumstances as its subsequent growth is due to the sheer drive and foresight of an unassuming man and a company called Xiang Leng that he founded in 1983. This company is now listed in the Malaysian stock exchange with the Asian arowana as its flagship product (XLH, 2003).

The origin of this enterprise may be traced to the founder's love for ornamental fish during his boyhood. Back in 1978, he had begun breeding ornamental fish as a hobby. In 1980 he converted a 0.4ha lot of vacant land in his village in the state of Johor into a fish pond and in the process transformed a hobby into a commercial undertaking. The increase in his fish stock from his breeding programme soon compelled the search for a market among local shops and dealers. In 1983 the establishment of an aquarium in a shop-house registered as Xiang Leng marked a milestone in his business career. The need to support the new business called for serious efforts in fish breeding. The company pursued this objective with undivided attention and at the same time built up a reputation as a reliable supplier.

The 1970s and 1980s coincided with the craze for the keeping of the Asian arowana as a household hobby. Fondly referred to as the "*feng shui*" (geomancy) fish among the Chinese, it was reputed to be a harbinger of good luck and fortune. It was this symbolic connotation that catapulted the fish into a hot favourite in the Chinese business community. Found only in a solitary location in the country, the Malaysian arowana is consequently a rare and almost priceless possession valued in the thousands of dollars each. Xiang Leng and its founder saw in this special fish very enticing potentials and began to seek supplies from Bukit Merah fishermen to add to its aquarium catalogue.

A number of arowana that Xiang Leng purchased at Bukit Merah lake had shown certain defects and were placed in its pond, in the hope that these defects might disappear as the fish grew in size. This well-intentioned move turned out to be a momentous event in the subsequent history of the company. Within 6-12 months it was noted that the arowana had spawned a brood of fry. Hitherto, all the arowana sold had been captured in the wild and the idea of breeding this rare fish had never entered the realm of reality. It was this amazing discovery that led to the idea of breeding the arowana in captivity.

Xiang Leng's farm was extended to 2ha by 1986, and it was soon followed by a much larger second farm covering 40ha (in Parit Sulong, Batu Pahat) for the specific purpose of breeding the Asian arowana. It soon became clear that the breakthrough in breeding arowana would have limited benefit as the fish could only be supplied to a limited local market. It was the market outside Malaysia that would give real meaning to the breakthrough. Yet the arowana is an endangered species that comes under the watchful eye of the Convention on International Trade in Endangered Species (CITES).

The first obstacle to attempts in exporting to foreign markets was the need to obtain the approval of the Malaysian Fisheries Department. The Department has to be satisfied that

the fish has indeed been successfully bred rather than captured. In the early 1990s, fisheries officials were invited to the farm to scrutinize the breeding programme and to confirm the scientific claims of the company. Winning the support of the Fisheries Department was crucial in preparing the next move to obtain the approval of CITES to export the fish to the world market. In 1994 the company founder became the first Malaysian, and one of only two persons in the world then, to receive recognition of CITES and the green light to trade in Asian arowana raised from captive commercial breeding (Xiang Leng Holdings Berhad website: www.xianleng.com.my, retrieved on 3 June 2009).

Obtaining the CITES permit was a ground-breaking achievement for the company. The permit comes with two highly significant implications. The first is that the breeding and sale of the arowana is transformed from being an “illegal” operation into a legal export enterprise of immense potential. The second is that the company’s business is transformed from being a local supplier into a global player in a growing market.

The award of the CITES permit opened the way for Xiang Leng to embark on the next phase of expansion. In 1998, it became the first company in the fisheries industry in Malaysia to be listed in the Malaysian Stock Exchange under the name of Xiang Leng Holdings (XLH) (XLH, 2003). Under its control in 2007 were four fully-owned subsidiaries specializing in the commercial breeding of the Asian arowana and other ornamental fishes, trading of aquarium accessories as well as in property holdings (XLH, 2008a). It maintains its leading position through a vigorous research and development (R&D) programme and by focusing on the arowana niche market. Japan is its major destination where the fish can fetch up to US\$17,000 each (XLH, 2008b). In 2001, Japan accounted for 65 per cent of worldwide sales of the fish (Loo, 2002).

Guided by its mission to be a first-class breeder and supplier of high value Asian arowana, XLH has since achieved a number of “firsts”. It was the first in the world to produce the Albino Malaysian Golden Arowana, the first to be given an additional Special Innovations Award by the Small and Medium Industries Development Corporation of Malaysia for pioneering the commercial breeding of Asian arowana on a commercial basis, and the first in the Malaysian fisheries sector to use microchips in tagging fish for permanent identification (XLH, 2003).

What began as a hobby a quarter of a century ago has blossomed into a thriving enterprise. Xiang Leng has since embarked on a path of expansion and technical excellence based on a business model driven by continuous research and development to maintain its leading position as a breeder and supplier of the Asian arowana and other ornamental fishes of unmatched quality (XLH, 2003). Its business now comprises two ornamental fish trading centres and four farms (XLH, 2008a and b). The third farm covers 15.4ha in area and the fourth extends over 100ha. This large farm is situated in a modern integrated agricultural

park covering 400ha in central Johor state. This park was developed in 2005 as a government initiative to showcase 20 outstanding enterprises in the breeding and production of poultry, livestock, vegetables, fish and other agricultural products. It is to serve as a one-stop centre to facilitate contact between producers and foreign importers (XLH, 2008b).

Since its listing, XLH has undergone impressive growth. Its annual turnover of RM16 million in 1998 has trebled to RM49.5 million in 2003 (XLH, 2003 and 2008a). In 2006, its turnover of RM45.43 million accounted for 44 per cent of the country's total of RM103 million (Malaysia, 2006: 86). However, turnover has been declining since and stood at RM32.89 million in 2008. Profit after taxation had dropped correspondingly from RM17.33 million in 2005 to RM1.73 million in 2008 (XLH, 2008a). The decline is attributed to reduced sales brought about by the "persistent aggressive price competition" mounted by a number of new entrants into the trade, and the company's high depreciation charges arising from investments in the new but still unproductive farm (*The Star Online*, 31 March 2008). In a business that XHL has pioneered, it now finds itself facing the inevitable competition of many other breeders and suppliers. As always, the reality of business can be harsh and the innovative entrepreneur has to keep a step ahead of his competitors with more innovations.

Swiftlet Nest Farming: A Dream Come True

Edible birds' nests had been an item of trade between China and Southeast since ancient time. A late Tang dynasty record mentioned this and other items such as ivory, spices and gems that were bought by Chinese traders in Santubong at the mouth of Sarawak river (周伟民、唐玲玲/Zhou Weiming and Tang Lingling, 2004: 87). Birds' nests also featured in the ancient trade between China and Brunei, Sulu and the Moluccas (Purcell, 1951:421, 451 and 612). An Englishman who visited Kedah in 1783 noted, among other things, birds' nests and sharks' fins in the trade with China (Purcell, 1951: 314). The birds' nests are therefore a highly-priced delicacy beloved of the Chinese up to the present. These nests were deemed to be a worthy gift to kings. In 1907, the Sultan of Sambas in West Kalimantan offered bird's nests as a gift to the King of England. This gesture had incurred the displeasure of the Dutch colonial masters who feared that it could be construed as a form of vassalage (Tagliacozzo, 1999: 70). Almost all the supplies of birds' nests have come from the work of skilful harvesters in the limestone caves of Southeast Asia. According to Warren (2001: 28), the demand for birds' nests from the late eighteenth century "shaped the destinies of thousands" in Southeast Asia. This was a time when radical economic changes were taking place globally and altered the course of cross-cultural trade and promoted economic development in the region.

Birds' nests are the strands of saliva of the swiftlets. They are wound into half-cup nests that bond to the cave wall. These swiftlets belong to the *Apodidae* family of which 24 species are recorded worldwide. In Malaysia, three of these species are known to build edible

nests in caves. The most valuable nests are those of *A. Fuciphagus*. It is claimed that the *A. Fuciphagus* is found only in Malaysia, Indonesia (Sumatra, Kalimantan, and Java), Thailand, Cambodia, Vietnam, Laos and Hainan Island (Lim, C., 2006: iii).

The Malaysian swiftlet nest business began more than a century ago. Traditionally, the business has consisted of two clearly defined components, namely, the work of harvesting by indigenous collectors of swiftlet nests in limestone caves, and the purchase of the nests by Chinese dealers. After years of the *status quo*, new avenues for business have since emerged. In the early 1980s it was observed that swiftlets were nesting in abandoned houses in some coastal areas in Peninsular Malaysia. The idea of “keeping” these swiftlets on a commercial basis, similar to the concept of bee-keeping, arose when it was found that swiftlets began to build nests in the vacant buildings of the lucky few. As swiftlets show strong nesting place fidelity, even after their nests are harvested, attempts to retain them to rebuild more nests became a distinct possibility (Lim, C., 2006: 6).

Swiftlet nest farming received a boost during the Asian financial crisis of 1997-98 as owners of abandoned buildings looked for ways to cushion losses incurred on their bad purchases (Hameed, 2007). The success of the early swiftlet farmers had a strong demonstration effect on neighbours and friends who also possessed unoccupied houses or shop buildings that were on the verge of bank foreclosure. As swiftlet nest farming became an attractive business proposition, the more enterprising investors even travelled to Indonesia, the leader in the business, to learn the “tricks” of the trade.

There were also other circumstances that worked in favour of swiftlet nest farming. It was found that the over-harvesting of swiftlet nests in caves had become unsustainable and the species was under threat.⁴ A working trip to Indonesia in 1996 organized by CITES provided the Malaysian Wildlife and National Park Department a clue in protecting the swiftlets through commercial farming (Lim, C., 2006: 7). “Domestication” of the bird was therefore treated as a viable alternative to natural conservation.

The diffusion of swiftlet nest farming for profit has since made rapid progress. Up to 1998, there was an estimated 900 odd swiftlet houses in Malaysia. By 2006, the number reached almost 36,000 (Hameed, 2007). The growth has been exponential since then. In 2008, one source put the number of swiftlet houses at 100,000 (Lim, D., 2002). It is estimated that four-fifths of the farmers are Chinese (*Sunday Star*, 31 October 2010).

Despite the “boom” in the new business venture in recent years, the entire enterprise has been likened to backyard poultry farms run by individuals trying to earn an extra income (Lim, D., 2002). Nevertheless, progress made so far has been entirely independent of any form of official assistance (Hameed, 2007). That this enterprise is able to thrive, and has spawned related services such as accessories and consultancies, points to the resourcefulness

of a community of individuals with the courage to challenge the odds in turning an untested business model into a success.

As swiftlet nests are a culinary delight of the Chinese, the business of swiftlet nest farming is firmly anchored on its potential for lucrative returns. The growing demand is derived especially from the rising affluence of Mainland Chinese and the world-wide trend of pharmaceutical and herbal products companies in using swiftlet nests as base materials for producing natural and organic extracts and products (Hameed, 2007). On the basis of 2-4kg of swiftlet nests from a standard shophot (6.1m by 21.3m/20ft by 70ft) per month, the yield would translate into a gross revenue of RM10,000 to RM20,000 (Lim, C., 2006: ii).

Realizing the prospects of swiftlet nest farming, the Malaysian government in 2010 has designated it as a high-growth sub-sector in the agriculture National Key Economic Area (NKEA). This activity has been earmarked as an “entry point project” under the Economic Transformation Programme announced in late 2010 with the aim to turn it into an agro-business to serve the export market and to create a viable form of livelihood. The government envisages the growth potential of the global market for swiftlet nests and their derivative products to reach RM29 billion by 2020, or almost three times the 2010 value (Pemandu, 2010: 528-529). The Veterinary Services Department is to allocate RM5 million to encourage 500 hardcore poor families to take up swiftlet nest farming. The official estimate is that Malaysia is expected to “capture” 30 per cent of the global market and to generate revenue amounting to RM4.5 billion by 2020 (Pemandu, 2010: 529; *Sunday Star*, 31 October 2010).

The attractive returns notwithstanding, swiftlet nest farming contains its fair share of risks to investment. Experience shows that there are several stages of growth and the initial hurdle to “success” is to attract the first pair of swiftlet to build a new nest in the birdhouse. If the swiftlet population increases to a sufficient number to yield a profit, the enterprise is considered viable. To imitate “natural” conditions to attract the swiftlets, an elaborate system of recorded swiftlet voice has been devised to “notify” and “invite” the birds to the new birdhouse. Under normal circumstances, the “gestation” period of trial and error may take three to five years. Upon achieving this initial success, the farm may take a couple of years or so to reach maturity to repay the relatively large investments that are required (Lim, D., 2002; Hameed, 2007).

However, many birdhouses have failed to attract any swiftlets at all. It is estimated that only 30 to 50 per cent of swiftlet farms are regarded as successful and most of these belong to the pioneers and early investors in the business. Late-comers have to contend with many birdhouses vying for a given colony of swiftlets and many are forced to abort their operation. As in other businesses, only the fittest will survive (Lim, D., 2002).

Some Insights

These case studies yield some insights into the nature of Chinese business enterprises. Although arowana fish breeding and swiftlet nest farming are minor players compared with more established enterprises, they are nevertheless significant in their own way. They have contributed to exports and created a fair amount of employment. More significantly, they symbolize the human spirit of making possible what are normally considered impossible. At the same time, both have contributed positively to the conservation of endangered species of wildlife.

The Family Business Model

Like many enterprises pioneered by the Chinese, the ornamental fish and swiftlet nest businesses are generally family operations that may be managed with available family resources. The degree of technical complexity and hence the investment in R&D involved in ornamental fish breeding will easily allow it to grow beyond the traditional family business model. Fish breeding for export requires a fairly large scale of operation that integrates breeding, the sale of fish and accessories, and exports to take advantage of the economies of scale. For leading breeding companies, the business may attain a scale that allows listing in the stock exchange.

The breeding of and research on arowana and other ornamental fish, for example, are scientifically specialized areas of endeavour that are generally beyond the competence of the average family. Breeding and research go through a long drawn-out process from trial and error, to initial success, scientific breakthroughs, and even listing in the stock exchange. Both the leading arowana-breeding companies in Malaysia and Singapore are leaders in R&D and have achieved significant scientific advancements to stay ahead of their competitors (XLH, 2003; Fock, 2009).

Swiftlet nest farming is limited by its size and length of operation. The size of a swiftlet farm is dependent on the bird population and its fidelity to an extent that is beyond the operator's control. Given the size of the swiftlet colony in a locality, the larger the number of individual birdhouses, the greater the likelihood of a decrease in the number of "visitors" available for each. Also, swiftlets may abandon the birdhouse when its nesting spaces are fully occupied. This may take place within a few years.

The small operator accounts for an estimated two-thirds of all swiftlet farms. This is a typically trial-and-error attempt by enterprising individuals who rely on self-learning and exchange of experiences among peers. However, among those who enter the business without adequate knowledge, experience, capital or appropriate equipment, nine out of ten may meet with disappointment (Hameed, 2007). A small group comprising less than 30 per cent of

swiftlet-keepers enjoy a fair degree of success. They have sought the advice of consultants and advisors for a substantial fee. For their trouble, 70 per cent have established commercially viable farms. There is also a very select group, making up 5 per cent of the operators, that are large companies seeking to diversify their business. Backed by capital and with access to expert advice and superior equipment, they are known to enjoy a 95 per cent success rate (Hameed, 2007).

It is difficult to operate a single large farm because its swiftlet “stock” is made up of free-roaming birds that cannot be “tamed” in captivity. In addition, when a birdhouse is saturated within three to five years, the swiftlets would seek out new nesting places elsewhere (Lim, C., 2006: 39; Hameed, 2007). One way to overcome these problems, however, is to operate several “subsidiary” farms in localities with known swiftlet colonies.

Swiftlet nest farming requires investments in the basic infrastructure to accommodate a sizeable colony of swiftlets, the installation of essential electrical and electronic gadgets, and the labour to clean the birdhouse, to harvest the nests, and to undertake preliminary processing of the nests. The farm itself is cost-free in terms of feedstock and any research that is deemed necessary deals with aspects other than those concerning the swiftlets themselves. The successful operators are those who are able to lure swiftlets into their birdhouses. The harvest of nests may occur four to six times a year, and consequently capable of generating a “massive amount of passive income” (Lim, C., 2006: v). In such instances, the business model of swiftlet nest farming is the nearest to the Chinese saying of “one unit of cost yielding 10,000 units of profits”.

The growth path of a swiftlet nest business is different from that of fish breeding. The time from initial establishment to success may be as short as a few months. The growth path is determined largely by the rate of increase in the swiftlet population. It is this factor that eventually decides whether a farm is a resounding success or a dismal failure. But failure may more often than not be the bitter reward for efforts. In all, 70 per cent of all swiftlet farms in 2006 were uninhabited by swiftlets or yielded fewer than 20 nests in a month after five years of operation. These are considered clear cases of failure (Hameed, 2007).

Production for Niche Markets

The arowana and swiftlet nests are highly-priced products demanded by the urban middle class and the rich. Targeting their respective niche markets is the essential strategy of all arowana breeders and swiftlet nest farmers. The arowana is a fish of great antiquity, and the harvesting of swiftlet nests in caves goes back many centuries. The former has been likened to a living “fossil” but associated, especially among the Chinese business community, with auspicious connotations. The swiftlet nest has been a culinary delicacy of the Chinese for at least a thousand years. Both products cater to the expensive tastes of their clients: the

arowana among hobbyists and business people who consider the fish as a prized possession and the consumption of swiftlet nests as a desirable culinary habit that boosts the “feel good” factor especially among a growing number of health-conscious and age-shy women. Both are ideal items to satisfy the extra-biological needs of their clients for their personal well-being and self-esteem and to enhance their lifestyle.

The arowana is kept as a symbol of elegance and beauty. Among the Chinese and the business community, its association with positive geomancy influence is even more meaningful. In addition, the trend towards apartment and condominium living makes the fish a suitable candidate for the small indoor aquariums. While it adds colour to modern living, it also doubles as a symbol of wealth in today's highly competitive and status-conscious society.

The swiftlet nest is traditionally believed to have rejuvenating and anti-ageing value (Lim, C., 2006: 23). Chemical analysis of swiftlet nest soup at the Chinese University of Hong Kong confirms the presence of a water-soluble glyco-protein. But the cleaning process destroys the protein and much of the nutritive value of swiftlet nests (Mackay, n.d.). Nevertheless, as an up-market consumer item, its demand will rise in tandem with the growing prosperity and affluence especially among Chinese communities. The people in China, Taiwan, Hong Kong and Macao consume two-thirds of the world supply of 160 tons of swiftlet nests in 2006, with the affluent society of Hong Kong alone accounting for half the amount (Hameed, 2007). With rising income, the vast potential pool of demand in China is particularly enticing.

The strategy to expand the market for the arowana is through export. The global demand is large and expanding. Much of the Malaysian supplies are exported through Singapore which has traditionally acted as an air transport hub. Its excellent facilities and handling skills are essential in delivering supplies into the hands of foreign importers with a high degree of success and reliability. In the case of swiftlet nests, the concern of individual producers is to meet the demand of local collectors whose market outlets span across international borders. A major collector is Eu Yan Sang, a long-established Chinese medicinal shop of Malaysian origin that maintains a chain of outlets locally and in Singapore and Hong Kong (see *Singapore: The Encyclopedia*, 2006: 183; Fock, 2009). In both cases too, the commercialization process accords with, and is in turn encouraged by, the need for species protection. Both enterprises demonstrate the benefits of commercial development and its contribution to local and global conservation efforts.

The Element of Serendipity

Adding to the enterprise of the people behind the growth of arowana breeding and swiftlet nest farming as thriving businesses is the presence of fortuitous circumstances. Serendipity, or what Deepak Chopra (2003) would term as “sychro-destiny”, is inseparable

from the spontaneous development of the trade in arowana and swiftlet nests in Malaysia. The keeping of arowana had begun as a hobby that supported a small-time aquarium business. The first swiftlet nests were harvested outside the natural setting of caves only because swiftlets visited some abandoned structures to build their nests.

That arowana breeding has evolved into a thriving business that put Malaysia on the world map is due to a chance encounter with the spawning of the fish in captivity. The encounter was experienced by a hobbyist rather than someone armed with a prepared plan of a business model. It is this particular hobbyist's acumen to seize upon this ground-breaking "discovery" as a commercial possibility that initially helped to build up the foundation of a viable business (XLH, 2008b). In the case of swiftlet nest production, commercial farming is further justified by the general need to protect the endangered swiftlets from the over-harvesting of their nests and the potential threat to their survival. In the trade in arowana, commercial breeding has now assumed significance as a conservation practice. In both instances, commercialization has enhanced the links between man and nature.

The Supremacy of Private Initiatives

In the development of arowana breeding and swiftlet nest farming, private initiatives have overshadowed those of the bureaucracy. Despite signs of an emerging trade in ornamental fish from the 1960s, no sign of official encouragement was evident. It was in the Eighth Malaysian Plan that reference to the ornamental fish trade was made. As for swiftlet nest farming, it was the demonstration of the potentials of this activity by ordinary folks that subsequently aroused official response in 2005 in the publication of *Good Animal Husbandry Practice for Edible-nest: Swiftlets Aerodermus Species Ranching and Its Premise* (Department of Veterinary Service, 2005). By early 2009, both businesses have achieved such significance that the Prime Minister designate drew special attention to them in an important address (see the opening quotation).

That the private sector has been more alert to the commercial possibilities in exotic species of fish and swiftlets speak volumes about the keen business sense of discerning individuals. This has much to do with their boldness to embark on new and unproven ventures and to back them up with an indomitable spirit until the first glimpse of success appears. These are pioneer innovators whose foresight, perseverance and convictions have helped to open up completely new business opportunities for the benefit of the country.

The leading ornamental fish breeder and supplier in the country originated from the individual efforts of a private citizen. A remarkable instance of "taming" a rare and ancient fish species that has survived in Malaysia has provided the immediate impetus to the transition from keeping to breeding the fish. That this is the work of a hobbyist rather than that of the long-established and large fisheries and research bureaucracy of the state has given added

significance to the supremacy of private initiatives.

The development of swiftlet nest farming has not been a smooth process. Private sector efforts have to encounter initial official indifference and even objections. Until today, Sarawak state is still vehemently opposed to swiftlet nest farming (*The Star Online*, 15 February 2009 and 21 February, 2009a and b). The potential investor is dependent on his own resourcefulness in learning and experimenting with ways of keeping the swiftlets. The private sector has undertaken some amount of R&D and dissemination of basic information concerning swiftlet nest farming in the form of books (see Lim, C., 2006 and Hai and Lee, 2009), reports (see Lim, D., 2002 and Hameed, 2007), and by conducting special courses, lectures and seminars. Christopher Lim is a medical specialist who, by adopting a scientific approach to swiftlet nest farming, has become a fine example of success entirely on his own efforts (Lim, C., 2006). David Lim is another “industry-insider” who has been prompted by the lack of reference materials to share his experience in a report. Hameed's report was commissioned by the Association of Small and Medium Enterprises of Penang.

Swiftlet nest farming is very much a “do-it-yourself” business. Any person with the urge for profits within a reasonable period of time may venture into swiftlet nest farming. Diffusion of the enterprise is effected by word of mouth, personal observation, and through learning. A popular channel of acquiring information about swiftlet nest farming is by attending specialized seminars and workshops. Some of these are costly, especially in Indonesia which is the leading producer of home-bred swiftlet nests. Charges may approach RM3,600 for a two-day course covering theory and field practice (Lim, C., 2006: 46). Another method of entry is to engage a swiftlet farm consultant from a growing list of practitioners. Consultation services may cost up to RM25,000, or a portion of the revenue up to as much as 75 per cent.

Other than the successful individual swiftlet farmers, various companies have ventured into related activities. One of the earliest is an importer and distributor of edible swiftlet nests that is based in Penang and incorporated in 1975 (Crystal Swiftlets website). It has grown into an integrated swiftlet nest specialist dealing with the manufacturing, packaging, marketing and exporting of products and consultancy service in swiftlet-keeping in Southeast Asia. In 2009, two of its board members published an introductory guide to swiftlet nest farming in digital format (Hai and Lee, 2009).

Reward for the Enterprising

Like all business undertakings, rewards are reaped by the bold entrepreneurs who succeed in guiding their business to meet production and marketing requirements. These are more demanding in arowana breeding than in swiftlet nest farming. The former is much more knowledge-intensive and requires large investments in R&D. The latter too is knowledge-based but more in the nature of a “do-it-yourself” application of a set of ready-made packages

(see Lim, C., 2006).

Arowana breeding has developed beyond the trial-and-error stage and is a highly scientific enterprise in which R&D is a key capital-intensive operation. Competition is growing in intensity and is contested through efforts in in-house as well as collaborative research. XLH has set its corporate mission to become a first-class breeder and supplier of high-value and high-quality Asian arowana and other ornamental fish, to be achieved through commitments to R&D (XLH, 2008). Scientific research is concerned with more than the rates of success in breeding but also in pioneering hybrid breeding, raising productivity, improving resistance to diseases, or overcoming transport and packaging problems.

XLH has to date achieved some impressive successes. It was the first to breed the Albino Malaysian Golden arowana and the first in the fisheries sector in Malaysia to use microchips in tagging fish for identification (XLH, 2003). Recent successes include improving the quality of the Malaysian Golden variety ranking it as the best among Asian arowana species; breeding “new” variants of the major varieties through genetic selective breeding; enhancing the colour of fish scales with intense hues and brilliance; improving the physical appearance and robustness of fish through proper priming and careful nurturing of the fry; perfecting environmental and fish management practices; and improving feed quality and culture systems (XLH, 2008: 3).

The scope for improvement through research is vast. In Singapore, this is demonstrated by research through active collaboration between fish breeders and the government. The leading ornamental fish breeder, Qian Hu, has consolidated its status with recent successes that include *in vitro* fertilization and selective breeding of arowana in its attempts to produce “tailor-made arowana”, and the development of an oral vaccine to prevent common diseases; the development of a method to screen for a killer disease which eats away at the bodies of koi; the use of DNA testing to double the rate of production; and the improvement in packing techniques that raises the survival rate of exported groupies to a near-perfect level (Chua, 2009; *Fish Matrix*, 2009; Fock, 2009).

Swiftlet nest farming has emerged as a sustainable business with a phenomenal rate of diffusion in recent years. Despite the relatively standardized guidelines and procedures, the risks to new-comers, however, are ever present (Lim, C., 2006: iv). Those who adopt the more “professional” approach have been amply rewarded with “windfall” returns. Yet the business prospects of each farm are determined by the quantity and quality of its harvest and the market price. The bright side is the demand that is fuelled by rising affluence. The market in China and advanced countries is still small but its potentials are immense.

In its attempt to transform its economy, Malaysia is waking up to the possibility of exploiting the immense potentials of the trade in swiftlet nests. The latest call for Malaysians,

especially targeting the non-Chinese, to take advantage of the growing market worldwide comes from the Associated Chinese Chamber of Commerce and Industry Malaysia (ACCCIM), a body that comprises the captains of “mainstream” business. Swiftlet nest farming has finally been seen as a viable small-scale enterprise that is capable of yielding attractive returns. In 2010, ACCCIM organized a seminar to encourage Malays and Indians to take up swiftlet nest farming (*The Star*, 24 September 2010).

Conclusion

The success in the commercial breeding of arowana and swiftlet nest farming amply demonstrates that business opportunities are present even in the least likely quarters. Both have been pioneered by the select few who are armed with the foresight to tap the latent prospects in commercial operations. Through years of single-minded and painstaking efforts, these pioneers have been able to nurture and to realize the potentials of these enterprises and hence to create new sources of wealth.

The emergence of these new businesses shows that the efforts of the private sector are well ahead of those of the bureaucracy. Despite the solid backing of advanced infrastructures and personnel, the bureaucracy can be bogged down by the deadweight of administration or routine research to give sufficient thought to issues that might well lead to breakthroughs to commercial possibilities.

Commercial arowana breeding and swiftlet nest farming stand as successful enterprises that open the way to the effective exploitation of unlikely environmental resources. More important, they are the result of the initiatives of individuals bold enough to take the road less travelled. This is a boldness anchored on a sharp perception of the immense opportunities that are hidden from the purview of the larger society as well as the bureaucracy. In a matter of a few decades, the foresight and perseverance of these individuals have collectively nurtured entirely new business enterprises that have brought considerable economic benefits that may increase many times yet in the near future.

Notes

- 1 An “entrepreneur” is here defined as one who invests capital to start and manage a commercial concern and to bear risks.
- 2 The latest involves the looting of Chinese businesses and other anti-Chinese acts in Papua New Guinea. Academics such as Amy Chua (2004) blame immigrant minorities for the poverty of local communities. International groups such as Greenpeace have launched scathing criticisms on timber logging companies and have singled out Malaysian Chinese as the target of their wrath (see Greenpeace, 2004 and 2005).

- 3 The family store is under the constant threat of competition from foreign-owned mega-stores that are sprouting in suburban areas of major cities. The family stores have always relied on a captive market of local households, but few are able to withstand the intense competition. The appearance of a large supermarket is known to divert 20-30 per cent of the business away from the neighbourhood retail shops, mini-markets as well as the fish-monger and vegetable sellers (《星洲日报》/ *Sin Chew Daily*, 29 May 2009). The viability of the traditional provision shops is increasingly tenuous and many have ceased operation. According to the estimate of the Chinese Retail Trade Association of Malaysia, there were about 50,000 traditional retail shops, chain stores, and mini- and super-markets in the country in the 1950s. By the 1970s, the number had declined to around 40,000 outlets. Today only about 20,000 outlets or so still survive of which the traditional retail outlets might number only a few thousand (《星洲日报》/ *Sin Chew Daily*, 24 May 2009). Only a handful have been able to “re-invent” themselves by setting up their own network of outlets in new suburban neighbourhoods.
- 4 The Niah Caves of Sarawak house the largest complex of caves for black-nest swiftlets. But excessive collection has led to a sharp decline in their population from an estimated 1.7 million in 1935, to 200,000 in 1996 and 65,000 in 2002 (Lim, C., 2006: 6).

References

- CHOPRA, Deepak 2003. *SynchroDestiny: Harnessing the Infinite Power of Coincidence to Create Miracles*, London: Rider.
- CHUA, Grace 2009. Fish central, *Straits Times*, 30 May.
- Crystal Swiftlets. <http://www.crystalwwiftlets.com>
- Department of Statistics Malaysia (DSM) 2003. *Census of Distributive Trades 2002*, Putrajaya: Department of Statistics Malaysia.
- Department of Veterinary Service 2005. *Good Animal Husbandry Practice for Edible-nest Swiftlets aerodermus Species Ranching and Its Premise*, Ministry of Agriculture Malaysia.
- Fish Farmer 2006. Malaysia: ornamental fish output to rise. http://www.fishfarmer_magazine.com
- Fish Matrix: A Group Newsletter of Qian Hu Corporation Ltd, April 2009. <http://203.116.88.76/content/phase1/Newsletter/files/QHNewsletter>.
- FOCK Siew Tong 2009. *Dynamics of Family Business: The Chinese Way*, Singapore: Cengage Learning Asia.
- Greenpeace 2004. *The Untouchables – Rimbanan Hijau’s World of Forest Crime and Political Patronage*, Amsterdam: Greenpeace International.
- 2005. *Partners in Crime: The UK Timber Trade, Chinese Sweatshops and Malaysian Robber Barons in Papua New Guinea’s Rainforests*, London: Greenpeace.
- HAI Kuan and LEE, Jannette 2009. *The Complete Introductory Guide to Swiftlet Farming*, marketed as eBook by Perfect Trading Sdn. Bhd. of Penang under the trademark of Crystal Swiftlets (<http://www.crystalswiftlets.com/cs4.html>)
- HAMEED Sultan Merican 2007. *The 2007 Malaysian Swiftlet Farming Industry Report (Summary and Synopsis)*, Penang: SMI Association of Penang.
- MacKAY, Jeanine (not dated). Swifts and trade, <http://www1.american.edu/ted/swift.htm> (Retrieved on 29 June 2009).
- LIM, Christopher 2006. *Make Millions from Swiftlet Farming: A Definitive Guide*, Kuala Lumpur: TrueWealth Publishing.
- LIM, David Y.C. 2002. *Report on the Malaysia Swiftlet Nest Industry Issues* (revised in 2008). <http://worldofswiftletfarming.blogspot.com>
- LOH, Errol 2007. Xian Leng shows that ornamental fish is big business, *The Star Online*, 29 December (<http://biz.thestar.com.my/bizweek/story>).

- LOO, Terence 16 October 2002. Company visit: Xian Leng Holdings Bhd, RM2.69 @ 14 Oct 2002. <http://articles.wallstraits.net/articles/279>.
- Malaysia, Government of 2006. *Ninth Malaysia Plan 2006-2010*, Putrajaya: Economic Planning Unit.
- McGEE, T.G. 1976. The persistence of the proto-proletariat: occupational structures and planning of the future of Third World cities, *Progress in Geography*, 9: 1-38.
- NAJIB Razak, Datuk Seri 2009. Speech by Malaysian Prime Minister, Y.A.B. Datuk Seri Najib Razak in the recent UMNO Convention. Utusan Online, 29 March 2009.
- Performance Management and Delivery Unit (Pemandu) 2010. *Economic Transformation Programme: A Roadmap for Malaysia*, Putrajaya: Prime Minister's Department.
- PURCELL, Victor 1951. *The Chinese in Southeast Asia*, London: Oxford University Press.
- WARREN, James 2001, The birds' nests of Borneo. In *The Encyclopedia of Malaysia: Early Modern History 1800-1940*. edited by Cheah Boon Kheng, Singapore: Editions Didier Miller: 28-29.
- San Sui Trading Tropical Fish website 2006. http://www.sansuimy.com/contact_us.html
- Singapore: The Encyclopedia*, 2006. Singapore: Editors Didier Millet and National Heritage Board.
- Sunday Star* 31 October 2010. RM5mil for swiftlet farming: Govt allocates funds to get hardcore poor into industry.
- TAGLIACOZZO, Eric 1999. *Secret Trades of the Straits: Smuggling and State-formation Along a Southeast Asian Frontier, 1870-1910*, Yale University, unpublished Ph. D. dissertation.
- The Star Online* 15 February 2009. Illegal Sarawak bird nest entrepreneurs want Taib to help (<http://tiroks swiftlet.webs.com>)
- 21 February 2009a. Sarawak crackdown on illegal swiftlet breeders (<http://tiroks swiftlet.webs.com>)
- 21 February 2009b. Raids conducted on illegal rearing (<http://tiroks swiftlet.webs.com>)
- 31 March 2008. Xian Leng FY net profit falls 75% to RM1.7m (<http://biz.thestar.com.my/bizweek/story>).
- 24 September 2010. Bird's nest trade open for all: Non-Chinese urged to join industry with global demand.
- VOON Phin Keong 2001. The Chinese merchant then and now: their emergence and position in and outside China", *Journal of Malaysian Chinese Studies*, 4: 79-112.
- Xian Leng Holdings Berhad (XLH) 2003-08. *Annual Reports*, 2003-08a.
- 2008b. *Company Profile 2008*, digital video disc.
- 《星洲日报》2009年5月24日。杂货变法 (*Sin Chew Daily* 24 May 2009. The changing retail business).
- 2009年5月29日。霸市入侵生意大减 (*Sin Chew Daily*, 26 May 2009. Mega-store enters, big drop in business).
- 周伟民、唐玲玲2004。《中国和马来西亚文化交流史》，海口：海南出版社 (Zhou Weiming and Tang Lingling 2004. *History of China-Malaysia Cultural Exchanges*, Haikou: Hainan Press).