Coffee Consumption and the Sustainability of the Coffee Industry in Malaysia

NASHATH ALI* & R. RAMANATHAN*

School of Applied Sciences, Faculty of Engineering, Science and Technology, Nilai University,
Nilai 71800, Negeri Sembilan, Malaysia
*Corresponding authors: nash-ath@hotmail.com; rahinivelayutham.rv@gmail.com

ABSTRACT

Malaysia's popular beverage has always been tea; however, current trends show an increase in coffee consumption among its population. The introduction of international coffee chains and the adoption of the coffee culture among the overseas educated has led to an increase in coffee consumption in Malaysia. Hence, the objective of this research was to determine the trend of coffee consumption in Malaysia; to investigate consumers' perception of drinking coffee and to study the efforts carried out to sustain the Malaysian coffee industry. The study was conducted via an online selfadministered questionnaire uploaded in Google Form. The results, obtained from 174 respondents, showed that 77.6% of participants consumed coffee. The main reasons for coffee consumption are "the taste" (69.6%); "to boost energy" (60.0%) and "to start up the day" (58.8%). 92.5% make their coffee at home or in the office. Low disposable income and restrictions imposed by the current pandemic has led to 62.7% of the respondents purchasing brewed coffee less than once a week. 55.5% buy their coffee from branded outlets (Starbucks, Coffee bean and tea leaf, McCafé) compared to 46.7% from non-branded outlets (*kopitiams*, office canteen). The survey has shown that Malaysian residents have become more discerning in their coffee consumption. Statistically too, total coffee consumption in Malaysia has been increasing since 2020, Covid-19 notwithstanding. Currently Malaysia only contributes 0.16% of the global coffee production; however, studies show that efforts are being carried out to improve the local coffee industry, especially with respect to coffee farming. This will lead to a twofold benefit to the Malaysian economy: firstly, local roasters will be able to source locally grown premium coffee beans, which could hopefully lead to a niche coffee brewing industry and secondly, coffee farming can serve as an alternative cash crop to the once lucrative oil palm industry.

**Keywords:** Coffee consumption, coffee production, Malaysia, sustainability

INTRODUCTION

Coffee is one of the most popular beverages in the world today. It has been estimated that over the period 2019-2020, around 164,487 (60 kg) bags of coffee were consumed globally (International Coffee Organisation, 2020). It is considered the second-bestselling product globally after petroleum products (BLLNR Singapore, 2020). People drink coffee because they like the taste (69%) and to boost their energy levels (62%) and only 10% drink it because of health benefits (MyFriendsCoffee, 2021).

Historically Malaysians have preferred drinking tea as their main beverage, however recently, the country has also started a strong culture of drinking coffee. The coffee culture in Malaysia started in the Colonial era with the Hainanese Chinese opening of *kopitiams* ('kopi' means coffee in Malay and 'tiam' is Hokkien/Hakka for shop) (Khoo, 2009, as cited in Khazanah Research Institute, 2019; The Sun, 2017). These *kopitiams* started as small stalls that are found in neighbourhoods or side streets that sell cheap coffee along with snacks (Khazanah Research Institute, 2019). The coffee is called *kopi* and it is a concoction of roasted Liberica coffee with mixture of sugar and condensed milk or evaporated milk. The beans are roasted with sugar and butter to create a more palatable drink (De'Longhi Coffee Lounge, 2019).

Additionally, coffee or tea is also served along with snacks by house owners to their guests to show appreciation for their visit (Countries and their Culture, 2021). Due to urbanisation and the introduction of Western culture into the Malaysian lifestyle, international coffee chains were introduced during the 1900s. The introduction of cafés like Starbucks and Coffee Bean and Tea Leaf has contributed to the upgrade of *kopitiams* to a more modern version like Old Town White Coffee (Khoo, 2009, as cited in Khazanah Research Institute, 2019; Lee, Rajaratnam, and Konar, 2018). These international chain cafés also caused a change in the trend of coffee consumption. Today, c offee is popular among the younger generation in Malaysia specially the Western style of coffee (Lee et al., 2018). They prefer the cafés because these places provide a range of reasonably priced coffees compared to the restaurants and bars. In addition, these places also provide a perfect ambience for patrons to socialise with friends. Prior to the pandemic, the popularity of coffee consumption was more common in these cafés rather than in the home (Lee et al., 2018).

Today, the coffee industry in Malaysia is booming and becoming more competitive. Coffee shops are expanding and growing, which includes both the international coffee chains as well as the local cafés. More people are consuming coffee, and it is becoming more of a regular drink specially among the young millennials. Malaysia is included among the top 50 coffee consuming countries (Rahim, Jin, and Fong, 2019). A statistical analysis on coffee consumption in Malaysia from 2013 – 2022 (forecast) (see Figure 1 below) shows that coffee consumption has been increasing from 635 thousand 60kg coffee bags in 2020 to 800 thousand 60kg coffee bags in 2021 and 2022 (Statista, 2021). This fact warrants a study into the current coffee consumption trend in Malaysia and the factors that contribute to these changes.
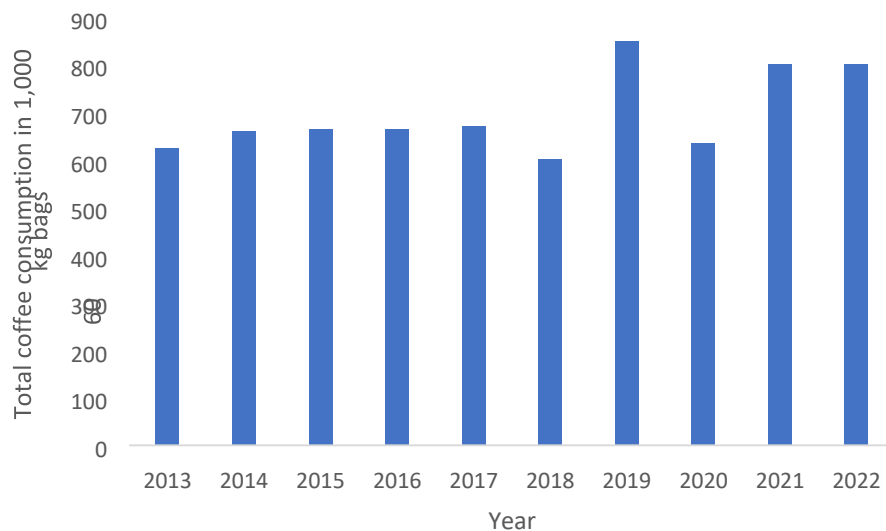
Figure 1. Total coffee consumption in Malaysia from 2013-2022 (Statista, 2021)

Past studies carried out on coffee consumption in the Malaysian context were limited to either a specific generation or to a specific city (Hashim, Mamat, Nasarudin, and Ab Halim 2017; Haque, Hashim, Rusal, and Haque, 2015). Other studies focused on factors (price, branding, quality, packaging) that influence the purchase intention of coffee (Harith, Ting, and Zakaria, 2014; Rahim et. al., 2019), or reasons that support the patronisation of specialty coffee shops (Lee et al., 2018; Lee, 2019). The main objective of this research was to determine the trend of coffee consumption in Malaysia, with the subobjective of investigating consumers' perception of drinking coffee and efforts being undertaken to sustain the Malaysian coffee industry. The uniqueness of the current study lies in the fact that it aimed to investigate the trend in coffee consumption (not purchase intention or health benefits) amongst all residents of Malaysia, aged 18 and above regardless of nationality, ethnicity, or locality.

Although coffee consumption in Malaysian is increasing, currently Malaysia only contributes to 0.16% of the global coffee production (Food and Fertilizer Technology Center for the Asian and Pacific Region, 2016). The low

prices that coffee beans fetch in Malaysia has made it unprofitable for farmers to invest in coffee farming. The second part of the study thus investigates the efforts being undertaken to develop the Malaysian coffee industry. With falling palm oil prices, it would be beneficial for Malaysia to consider an alternative cash crop to help stimulate its economy. Moreover, if local roasters can source locally grown premium coffee beans, this could lead to a niche local coffee brewing industry. Resulting in a more lucrative coffee farming industry. It is hoped that the findings of this study and the subsequent literature review will justify Malaysia's development of its coffee industry.

METHODOLOGY

An online self-administered questionnaire was designed for this study. The platform for this survey was Google Forms. The link of the survey was shared via social media platforms like Facebook and WhatsApp. Prior to starting the questionnaire, the participants were briefed about the purpose of the study. This research was conducted in strict confidence, as respondents were not required to divulge their names on the questionnaire. The questionnaire consisted of nineteen questions, categorised into two sections. The sections included the demographic and the coffee consumption data. Demographic data included gender, ethnicity, occupation, income and age. Consumption data contained questions on the reasons for drinking coffee; if respondents made or purchased their coffee; and the frequency of their purchases. The questions were constructed based on the objectives of this research and the literature review carried out on previous studies (Hashim et al., 2017; Haque et al., 2015). The questionnaire was set entirely in English.

Random sampling method was employed in this study. This study was open to participants aged 18 years and above regardless of ethnicity and gender, with the only criteria being that they reside in Malaysia. Those who met the criteria were invited to participate after being briefed about the survey. Briefing consisted of an introductory page attached to the survey indicating the purpose of the study. Participation was entirely voluntary.

The results from the survey were retrieved from the database in the Google Form. The retrieved data was analysed using Microsoft Excel 2016. The data was filtered in Excel to find the demographic numbers and percentage of respondents who consumed coffee. In addition, the data was filtered to find out if there was a link between the reasons for drinking coffee and gender/age/income. Also, the spending power and home coffee consumption was linked with gender, age and income.

Analysis of the data obtained from the survey was used to address the first and second research objectives. The third research objective, based on literature review, was analysed for the activities being undertaken to increase coffee production in Malaysia to determine if they were justifiable and sustainable.

RESULTS & DISCUSSION

Demographic data

Out of the 174 respondents who completed the survey, 135 were coffee drinkers. Table 1 below shows the percentage according to gender, age, occupation and income of these 135 respondents.

Table 1. Demographics of respondents who consumed coffee.

Demographic characteristic		Percentage consuming coffee	Number of respondents
Gender	Males	32.6	
	Females	67.4	135
Age	18-30 years	70.4	
	31-45 years	20.7	

	46-55 years	5.2	
	56-65 years	3.0	
	66-75 years	0.7	135
Occupation	Government sector	2.2	
	Private sector	34.8	
	Self-employed	5.2	
	Students	49.6	
	Unemployed	8.2	135
Income	Below RM 1000	46.7	
	RM 1001 – 3000	25.2	
	RM 3001 – 5000	17.0	
	RM 5001 – 10000	9.6	135
	Above RM 10000	1.5	

Based on the data in Table 1 the highest percentage of coffee consumers are between the ages of 18 to 30 years (70.4%). Only 3.7% of the participated coffee consumers are above 55 years old. Most of the coffee consumers are either students (49.6%) or people working in private sectors (34.8%). 71.9% of the participants have a monthly income of below RM 3000. The Department of Statistics Malaysia (2020) reported that in 2019 the average household monthly disposable income in Malaysia was RM6,764. Hence, it can be said that most of the people who participated in this survey had low disposable income.

Based on the results obtained from the current survey, the percentage of young females (67.4 %) consuming coffee is higher compared to males (32.6 %). This data is slightly skewed as most of the participants were young females. The reason for this could be the fact that females respond to online surveys more often compared to males (Culture Counts, 2020). Furthermore, the participants are mainly from the younger generation. This could be because older people are less aware of internet-based surveys and have less accessibility to the internet (Remillard, Mazor, Cutrona, Gurwitz, and Tjia, 2014). According to statistics obtained from the European union, people aged 65 years and above are under-represented among internet users (Eurostat, 2014). Moreover, surveys that rely only on the internet can have significant biases due to non-response and under coverage (Neves, Fonseca, Amaro, and Pasqualotti, 2018).
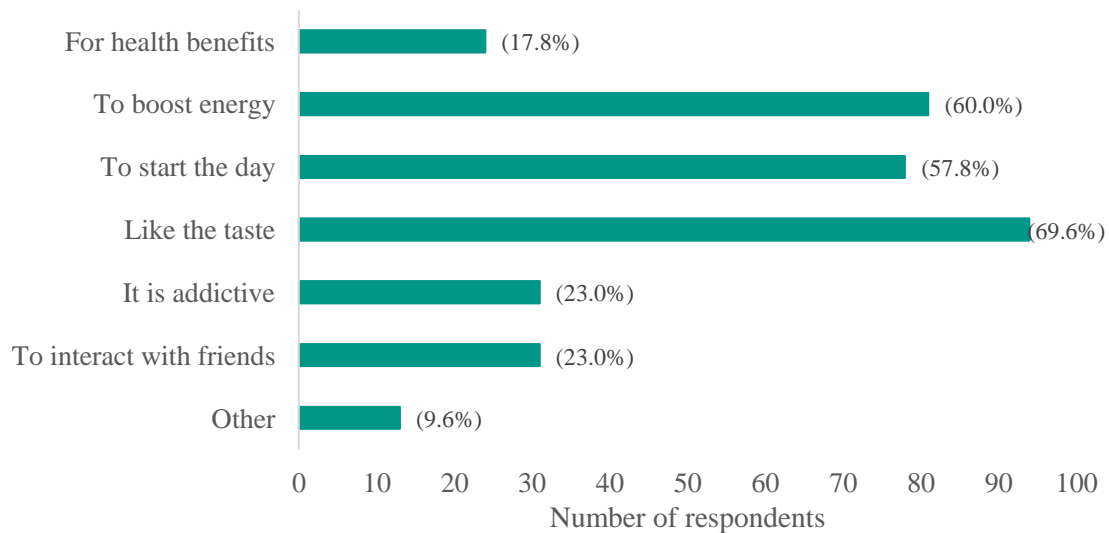
Consumption data

As can be seen from Figure 2 below, the most consumed beverage is coffee (77.6%) followed by tea (76.4%) and malt drinks (60.3%). This collaborates the findings that coffee has now become the most popular beverage of Malaysians, especially among the young (aged 18-30) (The Malaysian Reserve, 2018) and is further substantiated by statistical data that shows that total coffee consumption in Malaysia has been increasing since 2020, the Covid19 pandemic notwithstanding (Statista, 2021). The findings meet the first research objective.
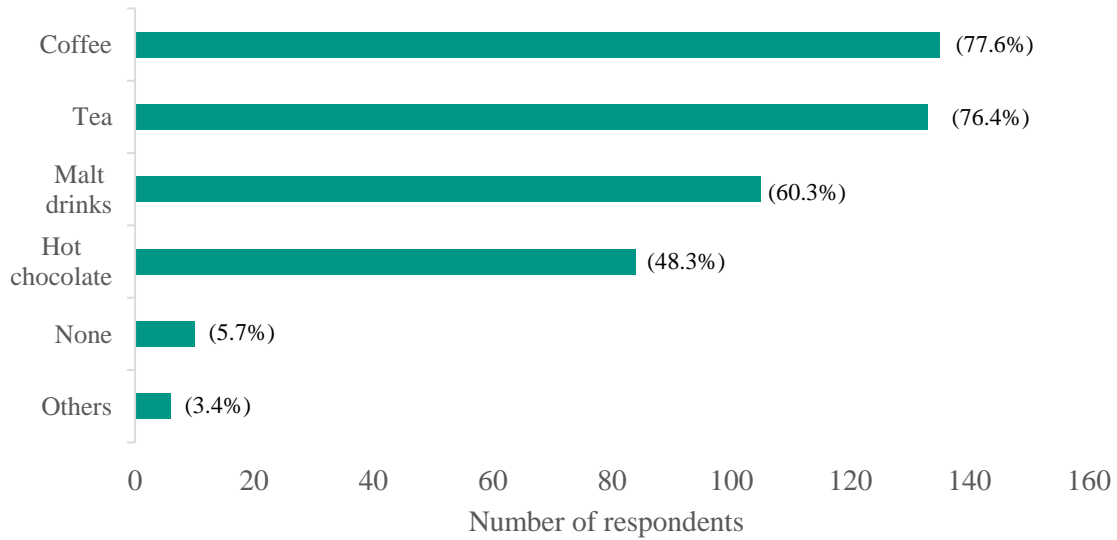
**Figure 2**. Types of beverages consumed by respondents

 Values depicted in brackets in Figures 3, 4 and 5 below represent the percentage of respondents who consume coffee (n=135). According to Figure 3, the main reasons for coffee consumption are "the taste" (69.6%) followed by "to boost energy" (60%) and lastly "to start up the day" (57.8%). Only 17.8 % drink coffee for its health promoting benefits. For coffee drinkers, coffee is a great way to get them up and going and prepares them to begin their workday (Samoggia & Riedel, 2019).

Figure 3. Reasons for drinking coffee
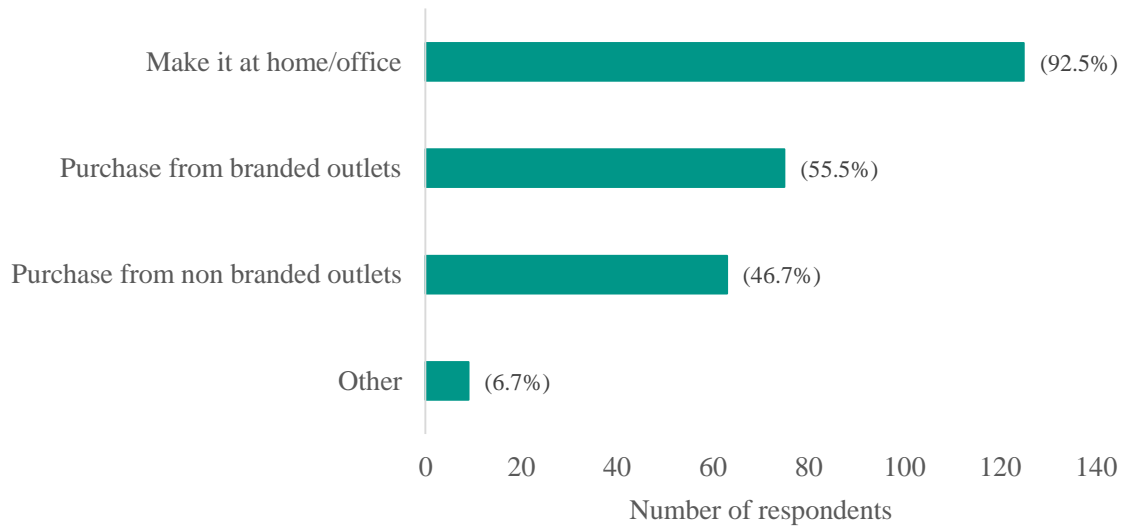
Figure 4. Location of coffee consumption
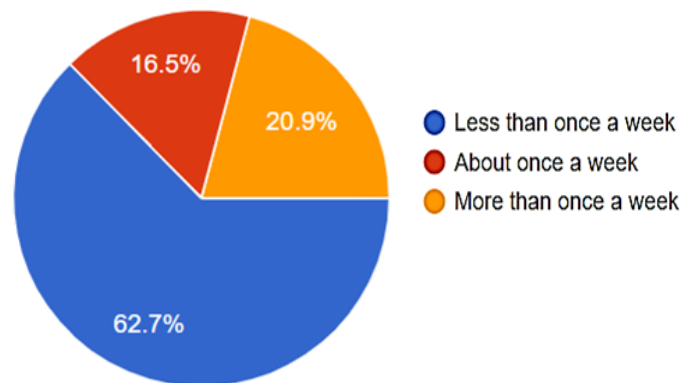
Figure 5. Frequency of purchasing a cup of coffee

 According to Figures 4 and 5 above, 92.5% of people prepare their own coffee, either at home or in the office, with most (62.7%) purchasing from outlets less than once a week. The data is justified when considering the fact that most participants had low disposable income. The majority (71.9%) of the participants earn less than RM 3,000 per month, with 57.8% being still at school or unemployed (Table 1). Thus, most respondents cannot afford the luxury of purchasing coffee. Buying coffee from outlets also affords consumers a place to socialise but with the pandemic most food and beverage outlets, cafés, restaurants and even coffee shops were closed with people being restricted to having their meals and beverages at home. This has thus led to more people (92.5%) preparing their own coffee at home. It has been found that in the US, 85% of coffee consumers have at least one cup at home (up 8% since January 2020) (PR newswire, 2021).

For those people who do occasionally buy their coffee, 55.5% purchase their coffee from branded outlets (Starbucks, Coffee bean and Tea leaf, McCafé) compared to 46.7% from non-branded outlets (*kopitiams*, food court, office canteen). The price of a cup of coffee can range anywhere from RM 6 -15 in branded outlets to RM 2 -3.50 from the *kopitiam* (Khazanah Research Institute, 2019). This shows that for those respondents who do purchase their coffee, albeit less than once a week, they do not mind splurging out on the occasional cup of branded coffee, thus

indicating that young Malaysian residents have become more discerning in their choice of coffee. Figures 3,4, and 5 have addressed consumers' perception (reason, location and frequency of purchase) of coffee consumption thus meeting the second research objective.

Efforts undertaken to sustain the Malaysian coffee industry

In its Third National Policy (NAP3, 1998-2010)(Federal Agricultural Marketing Authority, nd), Malaysia identified coffee as one commodity that deserved to be developed (Food and Fertilizer Technology Center for the Asian and Pacific Region, 2016). Some of the objectives of this policy include increasing productivity and competitiveness of the sector (coffee farming) by deepening linkages with other sectors (brewing and roasting of coffee), to create new sources of growth for the sector and to conserve and utilise natural resources on a sustainable basis (Federal Agricultural Marketing Authority, n.d.). The above finding has indicated that there is an upward trend of coffee consumption in Malaysia, and it would benefit the country to start increasing its coffee production from the current to 0.16% of the global coffee production. This would not only lead to an alternative cash crop for struggling farmers but would also encourage the entrepreneurship of locally brewed speciality coffee, which would ultimately benefit the Malaysian economy.

The main challenge faced by Malaysian farmers is selling their coffee beans at a suitable price to the local buyers. Coffee beans are non-perishable and requires less capital than vegetable farming. It is believed that farmers are willing to plant coffee if they can sell their beans at a premium price. Moreover, sharing the positive feedback from the downstream players can boost the farmers' confidence and enable them to sell high quality beans to the downstream players (like local roasters). The local roasters face issues in buying high quality coffee beans as they have to import beans from other countries, which is costly, so buying premium coffee beans from the local farmers can be a solution. In order to improve the local coffee industry, Sabarica , producers of Sabah's Arabica coffee species, is trying to create awareness among the local roasters about the availability of Arabica coffee beans in Sabah (The Edge Markets, 2020). As of January 2020, with the help of Sabarica there are 40 local farmers growing Arabica coffee plants. Moreover, Sabarica is trying to grow different varieties of Arabica coffee plants in Sabah such as Gesha coffee. Arabica beans has high market demand and can fetch farmers a better price (The Edge Markets, 2020).

Another avenue that is being investigated is in improving the public perception of Liberica coffee (coffee variety that is most widely grown in Malaysia). According to the Perfect Daily Grind (2019), Earthlings Coffee Workshop is trying to regrow Liberica plants in Kuching, Sarawak, and as such, public cuppings are held in their specialty coffee shop so that their customers can learn more about the Liberica flavours. In addition to being a specialty coffee shop, they also act as a training centre where roasting and processing techniques are trialed to improve the flavour of Liberica. In 2019, the Earthlings Coffee held the world's first Liberica roasting competition which acted as a pilot study to explore the different flavour potentials with different roasting techniques (Perfect Daily Grind, 2019). Additionally, the Earthlings Coffee Workshop's also aims to improve the potential of Sarawak grown coffee. They believe that choosing Liberica could be a sustainable choice when there is the threat to wild coffee diversity due to climate change. Additionally, this could also improve the local economy (Perfect Daily Grind, 2019).

In addition to Earthlings Coffee, My Liberica Coffee in Johor is working on improving the Liberica coffee. My Liberica has been planting Liberica in Kulai, Johor since 2009 (ThirstMag.com, 2018). It is believed that Robusta and Liberica are considered of low quality due to mishandling by farmers and traders during processing (ThirstMag.com, 2018). As of September 2018, there are 4 outlets of My Liberica in Johor and one outlet in Kuala Lumpur which serves Liberica of specialty graded coffee (ThirstMag.com, 2018). My Liberica cafés not only continues to introduce new recipes to keep up with the coffee trend but they also utilise every part of the plant such as the cascara (shell of coffee cherry), leaves and flowers to prepare drinks and fertilizers (ThirstMag.com, 2018). This is yet another avenue in which sustainability is being achieved in the coffee farming industry.

In 2019, Nestlé launched a program called "Nescafe Grown Respectfully" to improve the livelihood of local coffee farmers in Kedah and revive the local coffee industry (Nestlé, 2020). They initiated this program with the support of local partners to ensure that 100% of their coffee beans are responsibly sourced and sustainably certified by 2025 (Nestlé, 2020). With grafting technology, they have replicated the mother plant, grown since the early 1990s, to provide seedlings to farmers. They also provide trainings and technical assistance to the farmers to improve the productivity

and yield; this involves guiding farmers with best agricultural practices, optimising cost of production and post-harvest treatments. Nestlé also help farmers improve their livelihood by purchasing the beans that meet their stringent quality requirements. This also benefits Nestlé as these beans are used for their Nescafe products. Furthermore, it improves Nestlé's sustainable coffee supply chain. Nestlé target is to buy 100 metric tonnes of coffee beans by year 2022 through this program (Nestlé, 2020).

CONCLUSION

The findings of the study have indicated an upward trend in coffee consumption especially among the young. The millennials are more discerning of the coffee they drink and are willing to spend on quality. The authors therefore believe that there is a justifiable need for Malaysia to improve coffee farming to meet this demand. Moreover, this would not only increase the livelihood of the farmers, but also contribute to a sustainable economy.

Malaysia identified coffee as one produce that has the potential to be promoted and developed in its Third National Agricultural Policy (NAP3, 1998-2010) (Food and Fertilizer Technology Center for the Asian and Pacific Region, 2016). This study has shown that there are various activities being carried out to develop the coffee industry in Malaysia. Companies like Sabarica, Earthlings Coffee and Nestlé are helping to not only promote coffee farming but also to improve the quality of coffee beans using sustainable agricultural practices. The third and final objective of the study has thus been satisfied.

The finding of this research was limited by the online questionnaire employed in the methodology and hence is not a true reflection of coffee consumption amongst the general Malaysian population. The data is instead restricted to the respondents who were from the younger (aged 18-30) generation. The survey did however provide evidence that coffee consumption is increasing, and the subsequent literature review indicates that the Third National Agricultural Policy is being acted on. Coffee looks promising as a viable alternative crash crop for farmers. Moreover, coffee roasters would also be able to create quality local coffee brands which would meet the demands of coffee connoisseurs in Malaysia (and hopefully abroad). In Malaysia the current trend lies in specialty coffee. Specialty coffee is different from other coffees in that the quality is the main priority. To maintain quality, work is done at each process of the chain from the seed to the cup (The Specialty Coffee Company, n.d.). Future studies could look at consumer coffee preference and ways to improve the downstream processing of coffee beans.

ACKNOWLEDGEMENT

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