



## **A Better Brew: COVID-19 and Sustainable Outcomes for Coffee Tourism in Ali Mountain, Taiwan**



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**ABSTRACT:** COVID-19 pandemic disrupted the global economy in an unprecedented manner, which includes the coffee industry. This paper seeks to provide insights as to how coffee farmers on Ali Mountain, Taiwan transitioned to sustainable futures as an outcome of the pandemic. A case study approach is adopted to explore how COVID-19 influences the coffee business and corresponding tourism implications, along with crisis management strategies for a post-pandemic era. Through a case study approach, the study revealed that the current pandemic has conditioned the perception of risk towards all actors of the coffee estate and thereby causing a shift in consumer preference. Despite the adaptive strategies employed by the business to establish some form of normality, the coffee estate operation in Ali Mountain remains reactive to crises and disaster in the absence of a strategic and holistic plan to deal with situations such as the COVID-19 pandemic. Theoretical and practical suggestions are provided to inspire coffee farm owners in terms of disaster management scenarios, sustainable anti-pandemic strategies, as well as the desire and quest for industry resuscitation and activation.

**KEYWORDS:** sustainable tourism; crisis management; resilience; coffee supply chain; agritourism

### **Introduction**

Societies around the globe have been seriously affected by the COVID-19 pandemic across all sectors (del Rio-Chanona et al., 2020). In fact, the current pandemic has been pictured as one of the deadliest impacts to the global economy after the Great Depression (Guido et al., 2020). The financial implications of the COVID-19 pandemic are monstrous, far-reaching, and are likely to affect commodity markets and individual livelihoods. This includes the agriculture sector with cash crops such as coffee, which are expected to be affected by the pandemic as well. Coffee, as a commodity, provides livelihood for numerous farmers in over 52 countries (Hiron et al., 2018). Moreover, it yields a multiplier effect in the form of livelihoods to laborers and other local establishments. According to the ICO (2019), 2017-18 coffee exports were valued at USD 20 billion (only a small fraction) and in the U.S, coffee retail value reached USD 87 billion (Specialty Coffee Association, 2018). However, the

impact of the COVID-19 has been seriously felt in most countries in terms of agricultural value chains (Morton, 2020).

Cafés and restaurants who source their materials from these affected sectors are also affected as they are compelled to strictly follow food and hygiene standards amid the pandemic. In spite of the absence of cases on COVID-19 transmission through food (Rizou et al., 2020), cafés and restaurants are directed to follow existing codes and newly developed COVID-19 health protocols to operate across different countries (Woolway, 2020). Complying to these new requirements have further exacerbated the economic impacts of coffee establishments, among other food and beverage entities as enunciated by many economists and commentators. For instance, the French statistical office indicated that the economy is currently around 65% of its normal level by March 26, 2020 in their analysis of the economy under lockdown (Baldwin & Mauro 2020). Clearly, the unprecedented impacts of COVID-19 have caused much distress to major industries such as tourism in the world.

These impacts have also been observed in coffee estates in Ali Mountain in Taiwan. The coffee industry in this area supports and complements tourism and hospitality businesses. Such has been significantly affected with risk perception and health protocols with outcomes such as lower café foot traffic and at-home consumption behaviors. Furthermore, the negative effects of this pandemic have already been felt globally with disrupted coffee supply chain as well as fluctuating prices (Hernandez, et al., 2020; Guido et al., 2020) to say the least. Coffee producers are likewise threatened with looming food insecurity caused by the pandemic (Hernandez et al., 2020). The presence of the impacts, therefore, warrant the development and implementation of a post-pandemic crisis management strategy in order to cope with the COVID-19 pandemic. Guided by the crisis and disaster management framework proposed by Ritchie (2004), this paper facilitates a case study approach which seeks to provide a proactive plan on how coffee estate owners can produce sustainable futures as an outcome of COVID-19. Furthermore, this study attempts to answer the two research questions:

1. How is the COVID-19 pandemic influencing the business model of coffee tourism in Ali Mountain?
2. How are Ali Mountain coffee estate owners responding to these impacts in terms of crisis management strategies?

## Literature Review

### *The impact of COVID-19 on the coffee industry*

COVID-19 has affected the value chains of agricultural countries such as Ethiopia, Zimbabwe, and India (Morton, 2020). According to RBN (2020), produce such as tea and coffee have been affected by low demand in world markets because of restrictions imposed by the government on public mass gatherings in East Africa. This was true in the case of Ethiopia where COVID-19 has affected vegetable trade, importation of agricultural inputs from China because gatherings at hiring points were impeded due to fear of the virus (Tamru, Hirvonen, & Minten, 2020). Movement restrictions, limited accessibility to agricultural inputs and closing of agricultural markets were also key issues affecting agricultural chain in Zimbabwe because of the pandemic (Scoones, 2020). Similarly, Lai (2020) maintained that the ban on harvesting equipment were a pitfall observed during COVID-19.

Prices of coffee have also felt unprecedented volatility and spikes over the past months, which is attributable to the COVID-19 pandemic (Hernandez et al., 2020). Coffee growers, farmworkers, and downstream value chain actors have witnessed an unparalleled shock to supply and demand from the COVID-19 pandemic affecting the global coffee sector. The COVID-19 is likely to affect the world's population, of which 25 million are coffee producers. The pandemic will, therefore, have serious consequences on their livelihoods that will trigger food insecurity and poverty (Hernandez et al., 2020).

COVID-19 is seen to accentuate the vulnerabilities that characterize the supply chains in coffee production (Guido et al., 2020). Significantly, since February 2020 the price has been fluctuating. A look at the ICO Composite Indicator (weighted average of all major coffee types and origin) price pinpoint to this volatility. For instance, there was an increase averaging 109.05 US cents/pound in March 2020; 108.91 US cents/pound in April (2019/20 third highest monthly average in the crop year) which is 15.3 percent higher compared to the previous year (Hernandez, et al., 2020). There have been more disruptions to the supply of Arabica coffee compared to Robustas. Consequently, Arabica, which constitutes 60 percent of coffee traded globally, has triggered these changes in spot prices. COVID-19 has equally affected operations of key infrastructure in the value chain such as warehouses and ports. The pandemic induced governments to implement measures, such as social distancing, to curtail the pandemic has also slowed operations at the ports. These disruptions have caused an incredible increase in trade costs and transaction. Delays have become rampant due to COVID-19 during post-harvesting and movement of crops especially to various harbors. Having said this, it is anticipated that income accrued from coffee production by farmers, state and governments would diminish significantly (Guido et al., 2020). This would consequently affect farmers who would not be in the appropriate position to manage their farms and could create a congenial ground for diseases and pests due to the COVID-19. The pandemic has also triggered labor shortage needed during harvesting of coffee. According to ICO (2020), labor has become a major concern for coffee exporting countries. This situation is epitomized by Guatemala and Columbia where is envisaged that about 100,000 and 135,000 people would be needed to facilitate coffee harvesting respectively (Guido et al., 2020).

### ***Coffee tourism business models before COVID-19***

Coffee tourism is defined by Jolliffe (2010) as a form of travel that can be related to activities concerning the history, production, and culture of coffee, which includes visits to coffee-producing destinations, experiences of coffee culture places, visits to coffee history sites, and the like. With the wide array of activities related to the leisurely consumption of coffee, literature points out several business models that encapsulates coffee tourism. These models are categorized as customer-based, management-based, and livelihood-based. Customer-based business models focuses on the demand-side of coffee tourism. These approaches favor the perspective of consumers in order to deliver quality services that yields positive benefits. One of which is focused on experiences which introduces an appreciation of both product offerings and the various methods of coffee roasting to the customers (Ferreira & Ferreira, 2018). This is in line with the third wave of the coffee industry (Manzo, 2010) which advances the conventional coffee-drinking experience by giving customers the appreciation of how coffee is produced (Setiyorini, 2019). Another is on branding and marketing which stimulates the customers' value perception and engagement of coffee (Kim et al., 2019). This approach reciprocates the notion of adapting to global connectedness and promoting culture embedded with coffee drinking (Strizhakova & Coulter, 2015). Similarly, satisfaction is often

given the spotlight when it comes to coffee business models. According to Kim et al. (2018), happy customers tend to become satisfied and therefore become loyal to the coffee destination.

The second category is focused on the management practices implemented by the various stakeholders in coffee destinations. A recurring theme amongst the reviewed business models were inclusive approaches that tend to engage market actors. This includes the strengthening of ties with different collaborators such as local communities that can contribute to the creation of meaningful coffee tourism experiences (Candelo et al., 2019). Developing linkages between coffee producers and consumers can also mutually benefit one another through inclusive partnerships (Sedana & Astawa, 2019). In the same light, integrating innovative and sustainable approaches were likewise an evident business model. Elmo et al. (2020) underscores the importance of embedding innovation in business strategies in order to showcase a resilient business model that can derive environmental, economic and sociocultural sustainability outcomes. In contrast, the use of digital technologies in coffee destinations have been widely adopted that ushered a more sustainable business model toward coffee tourism (Ongener & Ozkurt, 2019).

Lastly, livelihood-based business models deal with how the local actors were involved and empowered to capitalize on coffee tourism initiatives. For one, social entrepreneurship in a coffee producing destination was seen by Tan et al. (2018) to improve the quality of life of the local community by not only stimulating economic gains but also by reinforcing the identity of the community, inducing their participation, and facilitating human capital. Similarly, investing in human resource training and education is deemed by Battistella et al. (2017) to be an effective business model in coffee tourism. Sustainable livelihood was also an important theme. In the case of regional niche coffee tourism destinations, sustainable models should be applied by local actors in pursuit of conserving the environment so that future generations can reap the benefits of the coffee tourism development (Woyesa & Kumar, 2020). This can be achieved with the adoption of organic farming practices that can stimulate the growth of existing coffee tours (Hernandez-Aguilera et al., 2018).

In another study, Wang et al., (2019) analyzed the tourism experiences offered by coffee estates in Taiwan. The profiles of Taiwan coffee estates were examined in terms of the experiences provided to engage visitors and the results showed that they can be categorized into traditional, educational, and comprehensive coffee estates. Also, employing the memorable tourism experience scale (MTES) to ascertain visitors experience in selected coffee estates, the study revealed that Taiwanese visitors are overwhelmingly enthused and satisfied with the experiential activities and coffee tours offered by these coffee estates.

### ***Coffee tourism business models during COVID-19***

The spread of COVID-19 has struck the tourism industry including coffee tourism. In contrast to other health crises, the current pandemic has reoriented the entire paradigm of tourism beliefs and practices (Hall et al., 2020). Incidentally, nations have been facing economic recession, lockdowns, travel restrictions, and unemployment across the world (Nicola et al., 2020). While the spread of infectious diseases has been observed throughout history, the tourism industry is challenged with the urgency to respond with health and safety standards in order to ameliorate the impact this pandemic has brought about within the industry (Farnazegan et al., 2020). The COVID-19 pandemic has also exposed the vulnerability of the “gig” or sharing economy complementing the tourism industry and the

susceptibility of the labor market within it to succumb to economic pressures amid a global health crisis (Sigala, 2020). As such, Gossling et al. (2020) argued that despite impending financial crises, the tourism industry is given the opportunity to pivot its approach into transforming the current tourism system into a realm that is more responsive to sustainable development. According to them, the new focus should focus on recovery, resiliency, climate change mitigation, and international solidarity.

To mitigate the spread of COVID-19, measures such as social distancing were introduced in which tourists are challenged (Yezli & Khan, 2020). In order to address this, Sudiartini et al. (2020) echoed a potential business model for coffee tourism in a COVID world. For these scholars, strategic innovation and stakeholder cooperation are vital to capture the supply and demand of coffee tourism amid cut-throat competition. Likewise, this approach can guarantee an improved system in the distribution of the coffee tourism experience. One innovation can be through taking advantage of online resources such as website and mobile ordering (Baum et al., 2020). Another business model is by incentivizing takeaways and discouraging dine-ins for customers (Sharfuddin, 2020).

### ***Crisis and disaster management in tourism and hospitality research***

The impact of the COVID-19 pandemic has been felt tremendously in all facets of human lives and this lingers on. As Carr (2020) enunciated, “COVID-19 has negatively democratized health risks and the financial wellbeing of people worldwide - not just the oppressed, the indigenous nor the poverty-stricken are affected by the inequality of COVID-19, which does not recognize how powerful or wealthy or poor a person is” (p. 492). This is a clear call for effective, flexible, and socially acceptable approaches to ensure a restart or recovery from the impacts of the COVID-19 pandemic on the tourism and hospitality industry. Furthermore, this fact prompts scholars to focus on crisis management frameworks to make the tourism and hospitality industry resilient amidst the COVID-19 pandemic.

In a recent study, Hao, Xiao, and Chon (2020) suggested a COVID-19 management framework which comprises of anti-pandemic phases, principles, and strategies to address the Chinese hotel industry that underscores crisis management strategies that underpin phases for a strategic recovery process. These phases are the pre-event, prodromal, emergency, intermediate, long-term recovery, and resolution. Interestingly, other scholars have equally employed different crisis management theories within the field of tourism and hospitality. For instance, crisis management theory emphasizing information and communication among stakeholders (Jia et al., 2012), collaborative planning theory in the hotel industry (Nguyen et al., 2017), and the iceberg model highlighting the impact of belief and psychological factors on crisis planning (Wang & Wu, 2018). The United Nations (2004) has also designed a framework for disaster risk management and reduction. The core components comprise context, risk factors, awareness, risk assessment, knowledge development, public commitment, preparedness, early warning, response, recovery, and measures (United Nations, 2004). Wenzel et al. (2020) also propounded four crisis response strategies that include retrenchment (measures taken to reduce costs), persevering (ensuring the ongoing operations of the firm), innovating (strategic renewal of the business), and exit (possible alternatives if other strategies are unsuccessful). Kraus et al. (2020) in their application of Wenzel’s et al. (2020) crisis management framework reiterated in their findings that firms employ different approaches to address crisis during the COVID-19 pandemic. They observed that firms employ the three stages by Wenzel et al. except the exit stage. This is perhaps due to the early stage of the crisis. Their findings show that most firms utilize a combination of various

coping mechanisms to mitigate the impact of the COVID-19 pandemic with ‘persevering’ used as a solely strategic response to the crisis. Having said this, a synthesis on the reviewed literature points out that different contextual strategies are employed to target different crises and disasters encountered in the tourism and hospitality industry.

### ***Conceptual framework***

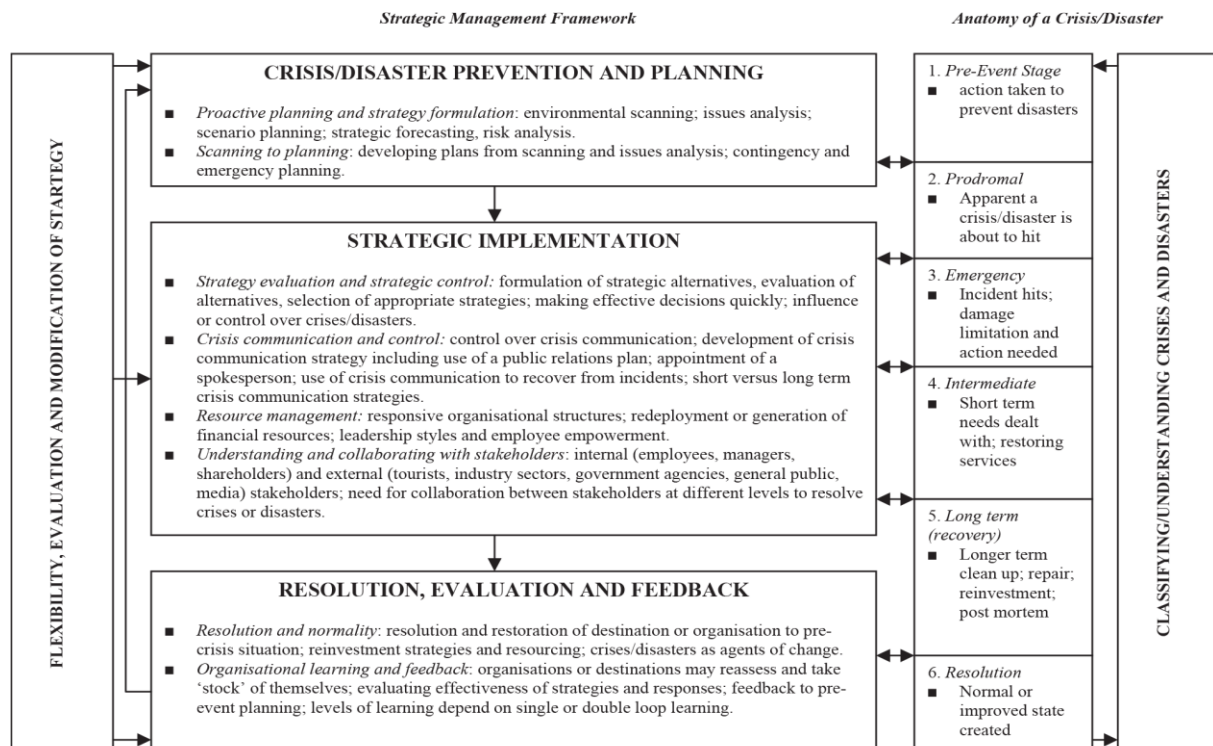
The study adopted the crisis and disaster management framework by Ritchie (2004) as the theoretical basis for the study. This model (see figure 1) provides public and private sector managers in the hospitality and tourism industry a proactive, instead of a reactive, approach in dealing crises. For instance, Fink (1986, p.7) argued that managers should show attitude of preparedness as chaos is inevitable and succinctly stated that “anytime you (i.e. manager) are not in crisis, you are instead in pre-crisis or prodromal mode.” Also, the framework was equally adapted by Hao et al. (2020) from Faulkner (2001) to explore the impact of COVID-19 pandemic on China’s hotel industry. Moreover, the theory is an appropriate fit to the context of health-related crisis, as supported by Henderson and Ng (2004).

The framework contends that it is ideal to employ strategic management and planning to crisis and disaster management (Ritchie, 2004). Significantly, the framework stipulates three main stages in managing crisis and disaster situations strategically. These stages are ‘prevention and planning, implementation, evaluation and feedback (Ritchie, 2004, p. 673). The framework explicates the first stage that is crisis and disaster prevention and planning, where managers need to develop strategies that could limit the impacts of a disaster or crisis. These strategies are ideal at the pre-event and prodromal stage of the crisis or disaster. According to Kash and Darling (1998), strategies needed at this include strategic forecasting, contingency planning, issues analysis and scenario analysis. The second stage deals with strategic implementation. This is when the crisis has entered the prodromal phase of the its lifecycle. Essentially, managers should have contingency plans at this stage and can implement them to mitigate the impact of the disaster or crisis. The final or third stage covers resolution, evaluation and feedback. At this stage, the destination or organization begins to recover from the repercussions of the crisis or disaster. The main objective of the organization or destination at this stage is to mitigate or reduce the severity or to curtail the crisis or disaster. Studies have shown crisis or disaster can also provide viable opportunities for destinations and businesses (Faulkner, 2001).

### **Methods**

A qualitative approach was employed for this study to explore the scant literature on coffee tourism impacts out of COVID-19. This study focused on “understanding the social phenomenon and the way in which people make sense of and extract meaning from their experiences” (Jones et al., 2013, p. 3). A qualitative research approach is deemed appropriate for studies that are under-researched in order to facilitate in-depth understanding (Brown et al., 2020). Furthermore, a case study design was adopted for this study in order to research questions and will explore on the coffee tourism context of “樂野鄒築園 Cou Garden.” This approach is appropriate to uncover and understand the complexity of the phenomenon while discussing the relationships among the actors in the research context in which the researchers have no control of (Massaro et al., 2019; Ridder et al., 2014; Yin, 2014). A case study research design is explained as “a method that uses multiple data sources to develop a contextualized understanding of the phenomenon with the intention of confronting theory by

comparing it with empirical data” (Hoorani et al., 2019, pp. 286-287). The study employed the case study research design through the unit of analysis consisting of individuals, organizations, social communities, and other stakeholders associated with Cou Garden (Flick, 2009; Yin, 2003). With the research question and context in mind, a case study research method was deemed suitable.



**Figure 1. The crisis and disaster management: strategic and holistic framework (Ritchie, 2004)**

Purposive sampling was used to select the respondents. This technique was employed because the researchers handpicked the respondents based on their length of experience and knowledge on the coffee industry. The use of pre-determined samples that are highly immersed with the case study is justified, and supported by the work of other scholars, see for instance Altinay et al. (2016). In this study, Mr. Fang Zhenglun, the owner of Cou Garden, was selected to be the respondent. A semi-structured interview was used as the data collection instrument based on the framework developed by Ritchie (2004). The interview consisted of three sections: pre-event and prodromal stage (disaster prevention and planning), emergency and intermediate stage (strategic implementation), and demography. An in-depth interview was conducted to elicit the narrative (Hollway & Jefferson, 1997) on his experiences managing the coffee estate amid the pandemic.

It is important to note that though the framework has three stages with the last stage being resolution, evaluation and feedback (long term recovery and resolution), the researchers did not include the last stage in the instrument because the COVID-19 pandemic is not over yet and most firms are still dealing and managing its implications. In order to ensure the validity and reliability of the instruments, three experts in the field of coffee tourism were asked to check the wording, meanings and verify whether the items could help to address the main research questions of the study. Related to this, the depth and scope of the interview as well as the application of laddering technique to elicit deeper responses from the respondents ensured the trustworthiness of the study (Abeele & Zaman, 2009).



Data was analyzed using thematic analysis (Attride-Stirling, 2001). The researchers commenced with open coding procedures (Charmaz, 2006) where responses from the respondent were classified on a spreadsheet. Consequently, this paved way for the second stage where categories were generated from the codes based on their connections. Themes were generated based on the literature review to facilitate analysis of the data.

### ***Fang Zhenglun and Cou Garden***

Ali Mountain is a popular sightseeing destination located in Chiayi county in the southwestern part of Taiwan (Figure 2). It is famous for tea production. Its climate and soil are also perfect for coffee plantation, so in recent decades, farmers started to devote themselves to grow coffee. After leaving the army in 2000, Fang Zhenglun returned home to assist his father in the cultivation of tea and orchids. He commenced the cultivation of coffee and performed a series of experiments such as roasting beans with frying woks and teapots after his father obtained 200 coffee seeds. Eventually, the original tea plants were turned into "Cou Tsingyuan" coffee shop after winning the 2007 Taiwan Specialty Coffee Bean Award. It consequently became a tourist destination for people, however, was short-lived. The newly opened "Cou Tsingyuan" after one week was hit by a typhoon in 2009 preventing tourists to visit the mountain. This natural disaster ironically propelled Fang Zhenglun to promote Ali Mountain coffee through coffee exhibition activities. The layman became a coffee competition champion including winning the top honor for farmers in Taiwan in 2017 as well as international coffee bean competitions.



**Figure 2. The location of Cou Garden**

He said: "I can tell the differences of the beans from high altitude or low altitude, so people will send different coffee varieties to me. I try to plant, observe, and then leave the most suitable ones for this land." Having 20 varieties of coffee on his farm, these are sent abroad for genetic identification to determine its source. Though coffee is not an important cash crop in Taiwan, Fang Zhenglun believes Taiwan's enviable agricultural reform technology and biotechnology could be harnessed to improve coffee varieties. The successful development of coffee beans with Taiwan characteristics and flavor can help Taiwan's specialty coffee in the international identification and positioning to attract international buyers. With this, he



devoted himself to the development of coffee varieties, trying to hybridize different varieties and hoping to cultivate a unique flavor belonging to Ali Mountain specialty coffee.

Amazingly, Fang is an enthusiastic and ardent teacher of coffee cultivation and has encouraged young people to involve in it with unique farming techniques. “I’m going to take the Yi (Indigenous) people along the coffee path to the world.” Let more people know, where is the best coffee in Taiwan? Ali Mountain, we Yi people planted it. This is Fang Zhenglun’s wish. He also took over the chairmanship of the Jiayi County Coffee Industry Development Association in 2019, holding a number of educational training, media meetings, exchange competitions, cup tests and other activities.

## Results and Discussions

### *The influence of COVID-19 pandemic on the business model of coffee Tourism in Ali Mountain*

The unprecedented impacts of the COVID-19 pandemic have conditioned the perception of risk towards all actors of the coffee business. Such risks are associated with the observed detrimental impacts on health, mobility, and the economy. As the numbers of confirmed cases globally continue to increase, Fang Zhenglun commented on the fear of infection for both the supply and demand side as prime factors in shaping changes to their business models. Similarly, the fear of transmitting the disease has affected travel behavior and thereby restricted the inflow of customers in their shops. In economic terms, the detrimental effects of the pandemic included the sluggish performance from similar industries have trickled down to their businesses. This was particularly true for the logistical and operational failure in sourcing raw materials and delivery of finished products. Their supply chain network has been significantly paralyzed with the risks associated with the COVID-19 pandemic. Needless to say, this has likewise impaired revenue streams and the nation’s gross domestic product as a whole.

These impacts have also disturbed the customers as a shift in their behavior was noticed. The pandemic has produced a decline in social interaction among patrons of coffee shops. Prior to the spread of the virus, customers were noticeably present in physical stores and seen freely socializing with one another as they enjoy coffee. However, the rise of COVID-19 brought significant tension and pressure to customers and making them rethink in-person encounters. This caused them to prefer alternative purchasing channels, particularly through online platform and home deliveries in order to overcome potential risks. Fang Zhenglun observed:

“Before the outbreak of the epidemic, consumers went to physical stores to buy goods. After the outbreak, most people chose to shop online..., in order to avoid group infections, many people reduce dining out and choose delivery service in order to reduce the likelihood of contracting COVID-19.”

This observation supports Guido’s et al. (2020) assertion that COVID-19 has affected all facets of human life. Its repercussion is likened to the global economy after the Great Depression affecting commodity market and individual livelihood. Analogous to this, Harnandez et al. (2020) also contended that COVID-19 has had devastating ramifications on livelihood which could trigger food insecurity and poverty. While the spread of COVID-19 remains, coffee shop owners remain optimistic and bullish to restore business as usual. This

outlook was shaped with the rapid and efficient response of the Taiwan government in mitigating the spread of the virus within their territory. As such, shop owners have likewise adapted quick strategies that would ameliorate the impacts mentioned above while complementing the changing behavior of customers following the outbreak of the pandemic. One, businesses implemented minimum health standards in order to reinforce confidence and minimize risk perception of patrons coming to physical stores. Fang Zhenglun decisively enforced hand sanitizing, wearing face masks, and social distancing in their stores. In the same manner, promotional activities were also conducted to entice customers to purchase online so as to generate and maintain revenue. Alternative promotions, such as mountain coffee tours were made available. This was specifically made to boost domestic tourism as the usual foreign market are barred from travelling. This focus on local travelers have proven to be a receptive and steady market that helped stimulate the positive business sentiments within the coffee shops. It could therefore be deduced that various innovative business models have been implemented by the coffee estate to survive and sustain their business during the COVID-19 pandemic. As espoused by scholars (see Elmo et al., 2020; Ongener & Ozkurt, 2019) integrating innovative and sustainable approaches are evident in business models in coffee tourism. There is the application of digital technologies in coffee destination according to Ongener and Ozkurt (2019) to ensure sustainable business and this finding supports this assertion.

Since foreign tourists are still barred from entering the country, deepening domestic tourists' understanding of Taiwanese coffee farms is seen as a potential area for expansion. Both the café operators on the island and general consumers agree that Taiwan has a premium coffee product and generate confidence in Taiwan's coffee beans to induce domestic travel to production areas for sightseeing. Having coffee-professional itineraries, such as teaching guides, has added unique insights to the tourism industry in these areas. The cafe needs an understanding of the front-end coffee planting and post-production process and engage highly interested participants in the respective itineraries. With personalized experiences, each coffee tour is capable of developing goodwill and confidence in Taiwanese beans. With the emotional connection, it is easier for the consumer to directly purchase raw beans from farmers, which increases the reach of Taiwanese beans. After the epidemic subsides, foreign tourists can be further educated about Taiwanese beans and create new markets. This observation supports Gossling et al.'s (2020) assertion that crises also provides a great opportunity for the tourism industry to be resilient and responsive to sustainable development.

### ***Crises management response strategies amid the pandemic***

At the pre-event and proactive stages, Fang Zhenglun admitted having no formalized crises plans and standard procedures toward disaster prevention. In fact, they have remarked that they handle different disasters as they happen. Findings show that the respondent utilized previous knowledge and experience on past disasters in an attempt to quickly adapt to the current pandemic as a result of lacking standard procedures. Their resourceful practices on mitigating typhoon disasters is an example of this. The owners commented:

“Before a typhoon comes, coffee trees will be pruned. Usually, some iron bars are used to tie the coffee trees. However, [when] a typhoon comes, iron bars will be added to [secure] them. Iron pillars will be erected around the coffee trees before the disaster comes.”

Interestingly, Fang Zhenglun acknowledged the limitation in merely relying on old practices. This particularly true on the rapid escalation of a health crisis such as the COVID-19 pandemic. They conceded that they have overlooked strategies from previous disasters to deal with this current pandemic. This can perhaps explain how the impacts of COVID-19 on economic, social, and health became a major concern for the coffee stakeholders. This finding vindicates Fink's (1986, p.7) contention that managers should demonstrate proactiveness to crises even though they are inevitable and unpredictable. Moreover, the finding also reveals that the application of crisis and disaster prevention and planning as enunciated by Ritchie (2004) is non-existent in coffee farm operations.

In the emergency and intermediate stage, the owners have responded to the situation by learning from different stakeholders, such as the government and the media. They currently follow precautionary directives communicated by these two stakeholders. This have significantly influenced their awareness on the current situation and have amended their response strategy. Fang Zhenglun stated:

“I watched the news and then looked at how to deal with it... it was obvious that the severity of the epidemic was understood. We just follow the standard instructions announced by the government, and we are afraid that if there is a case in the coffee shop, the business of the coffee shop will be severely affected.”

Specifically, the coffee farm business took governmental health protective initiatives on COVID-19 seriously so as to minimize the risk of infection and the spread of the virus. This was noticeable in their move to reinforce public health protocols such as physical distancing, wearing face masks, and hand washing to guests. As they narrate:

“The coffee shops will take body temperature of the customers in accordance with government policies, perform alcohol disinfection, and strictly enforce the wearing of masks, including staff and guests to take relevant measures.”

Arguably, this finding reveals that the coffee estate partially implemented some strategies recommended by Ritchie (2004) in the second stage of the conceptual framework by collaborating with key stakeholders, such as the government agencies and the media. Furthermore, coffee owners have implemented their own sanitary and hygienic measures. They began employing health preventive measures by ensuring that disinfection of the environment is maintained and monitoring the physical condition of guests. They have also especially enforced a protocol in their coffee production which was particularly useful during the cupping process in the coffee farm. To illustrate:

“...hygienic cupping is currently used. The previous method was to [pour] coffee in the same cup. Everyone took the [same] measuring spoon and scooped the coffee for cupping. For hygienic cup testing, [one should] use [their own] cup and spoon to scoop coffee [in] testing to reduce the chance of group infection.”

Strategically implementing these protective measures, complemented with the subsidy policy of the national government, have reaped economic benefits for coffee farm owners as domestic tourism in coffee mountains increased.

The operational recovery of the coffee farms post-COVID-19 pandemic remain a top priority for Fang Zhenglun. Following the measures from the prodromal and intermediate stages,

farm owners are poised to critically respond to the current crisis with long-term recovery and solutions in mind. However, they are challenged with the restrictive circumstance of the current health crisis and independently mitigating the negative impact by themselves can only do so much. As they mention:

“Due to the current epidemic, many of [our plans] cannot be implemented, but now we have to think about many measures. When the epidemic is over, we can implement them with peace of mind.”

As they believe that waiting for the pandemic to subside is counter-intuitive, the strategy they posit is most plausible in achieving long-term recovery is by mixing previously known experiences and current practices from institutional bodies while collaborating with various stakeholders. This complements with the theory set forth by Ritchie (2004) in the framework presented in this paper. For the respondents, unity and close cooperation is crucial for long-term recovery. Coffee farm owners argue that they can thrive sustainably through the institutionalization of a disaster prevention mechanism crafted by the combined wisdom of industry professionals, government, media, and locals.

### **Theoretical Implications**

Literature on disaster and crisis management with special application to the coffee industry would enable coffee estate and shop owners and tourism stakeholders to be equipped and resourced to plan well today and live better for tomorrow. As such, this study advances the framework proposed by Ritchie (2004) by applying the model in the context of the current COVID-19 pandemic. This paper argues that a strategic and holistic crisis management plan would equip coffee estate stakeholders the capacity to mitigate crises and disasters in the foreseeable future. Moreover, having such a targeted strategy is poised to foster crisis-proof scenarios, sustainable post-pandemic strategies, as well as the desire and quest for industry resuscitation and activation.

### **Managerial Implications**

There are enormous lessons to be learned from this study by stakeholders in the coffee industry and tourism. The study unraveled and unpacked that respondents utilized previous knowledge and experience on past disasters in an attempt to quickly adapt to the current pandemic as a result of lacking standard procedures. Therefore, stakeholders could localize their disaster and crisis management practices by learning from previous pandemic peculiar to their context. There is the need to eschew the ‘all fit all approach’ depending on the nature of the crisis.

In addition, owners of coffee farms should have formalized crises plans and standard procedures toward disaster prevention. The non-existence of such a plan have made the ramifications of the COVID-19 pandemic harder to mitigate. There is also the need for stakeholders' approach to ameliorate crisis and disaster management. In the case of Ali Mountain coffee farm owners, the role of the media and governmental agencies were important agents to inform a consistent response during these difficult times. This has significantly influenced coffee farmers' awareness of the current situation and has influenced their response strategy. The study has highlighted the need for a multi-faceted approach to

crisis and disaster management. In this regard, stakeholder's collaboration, implementing lessons from the previous disaster, innovative marketing strategies, leveraging on utilizing online platforms, and among others could help coffee industries to stay in business.

## Conclusion

In conclusion, this study has emphasized the impact of COVID-19 pandemic on a coffee farm and its corresponding tourism with specific reference to the case of Cou Garden in Ali Mountain. The findings revealed that the coffee estate has been struck by risk perception and shift in consumer behavior brought about by the current pandemic. This is highly attributed to the observed and felt economic, social, and health impacts across both coffee tourism suppliers and consumers. Because of this, adaptive measures in the coffee estate were facilitated as a quick response to the pandemic. It was evidenced that coffee owners were employing promotional activities to entice customers to transact online to sustain and remain resilient in their operations. Other innovative measures included mountain coffee tours that were primarily aimed at restarting tourism at the domestic level. Despite the attempt to offset the negative impacts of the pandemic, findings of the study showed that Cuo Garden remains reactive in dealing with crisis and disaster management. This is associated with the lack of formalized crises plans and standard procedures toward disaster prevention. Having said this, this paper illuminates theoretical and practical suggestions to grow the current body of knowledge surrounding coffee tourism.

## Limitations and Future Studies

One of the limitations of this study is not having fully applied the framework of Ritchie (2004) by incorporating the last stage of the framework (i.e. resolution, evaluation, and feedback), an area that future studies could explore this when the COVID-19 is over. Such would complement this study and build the knowledge base on crisis and disaster management strategies for coffee farms and tourism. As this study uses only a single case, it is therefore suggested that future studies probe the effect of COVID-19 in other locations to advance the understanding of other coffee farm estates during this pandemic.

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