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## MASTER'S THESIS

# BUILDING RESILIENCE FOR SUSTAINABLE TOURISM DEVELOPMENT IN A POST COVID-19 WORLD: AN INFORMED GROUNDED THEORY APPROACH



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# Abstract

Using an informed grounded theory approach, this study investigates how to develop sustainable tourism development in Mauritius through resilience building. In-depth interviews with tourism stakeholders were conducted based on the integrated sustainabilityresilience theory and data were analysed using the fundaments of informed grounded theory. Beside the core category predefined by the theory, sustainable management of resources, ten themes emerged from the analysis: understanding tourists behavioural change, developing a more inclusive tourism, increasing the engagement of the tourism industry in environmental practices, strengthening the cultural tourism, diversifying the market and the offer, adapting marketing strategies, adopting innovative practices, strengthening stakeholder collaboration and mutual understanding, developing contingency plans and risk assessment and developing appropriate policies. The themes suggest that the integration of sustainability and resilience represent a complex system whose components are interconnected in intricate ways and for which its practice requires actions within all economic, environmental, socio-cultural and political spheres. With respect to the principles of informed grounded theory, a conceptual framework synthesizing the themes covered by the stakeholders is drawn. The data are discussed with existing literature and challenges to the development of the suggestions within the context of Mauritius are noted. Similarly to what is claimed by the very few literature on the matter, the health crises context has facilitated the integration of resilience within sustainable tourism development which seem to be two highly complementary components for the survival and positive evolution of the industry.

**KEYWORDS**: sustainable tourism development; Covid-19 resilience ;tourism resilience; integrated sustainability-resilience theory; informed grounded theory

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List of Abbreviation:

AC: After Corona
AHRIM: Association of Hoteliers & Restaurants In Mauritius
BC: Before Corona
Co2: Carbon Dioxide
CEO: Chief Executive Officer
CSCP: Collaboration on Sustainable Consumption & Production
CSR: Corporate Social Responsibility
Covid-19: Corona Virus Disease 2019
EC: Earth Council
EPZ: Export Processing Zone
FTT: Fair Trade in Tourism
GDP: Gross Domestic Product
ICT: Information Communication Technology
IoT: Internet of Things
IRS: Integrated Resort Scheme
ISS: Interpretive Social Science
MCB: Mauritius Commercial Bank
MICE: Meetings Incentives Conferences & Exhibitions
MIDF: Maurice Ile Durable Fund
MSMEs: Micro, Small & Medium Enterprises
MTA: Mauritius Tourism Authority
MTPA: Mauritius Promotion Tourism Authority
-

CXI

NGO: Non-Governmental Organisation OECD: Organisation for economic cooperation and development PCR: Polymerase Chain Reaction SDGs: Sustainable Development Goals SES: Social-Ecological Systems SIDS: Small Island Development States SME's: Small & Medium Enterprises TALC: Tourism Life Cycle **TBL:** Triple Bottom Line **UN: United Nations** UNCTAD: first United Nations Conference on Trade And Development UNDP: United Nation Development Programme UNEP: United Nations Environment Program UNESCO: United Nations Educational Scientific & Cultural Organization UNWTO: World Tourism Organisation WHO: World Health Organisation WSNs: Wireless Sensors WTTC: World Travel & Tourism Council

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#### 1 Introduction

In 'The Art of Travel', Alain de Botton (2003, p.9) says, "If our lives are determined by a search for happiness, then perhaps few activities reveal as much about the dynamics of this quest – in all its ardour and paradoxes – than our travels". While de Botton refers to travel as a way to escape everyday life and to immerse in a culture and an environment different from one's own, "travel is by nature a consumptive practice, reliant on linking people, place and space, and enabling mobility through the development of infrastructure for travellers" (Cheer & Lew, 2017, p. 11). Declared as a pandemic in March 2020 by the World Health Organisation, the Coronavirus (Covid-19) outbreak has changed the fundamental nature of tourism.

Recent literature on the subject suggests that the current generation will come to think of BC and AC, which stand for Before Corona and After Corona (Friedman, 2020). To travel is a human right and it has been restricted in a manner that no one would have thought possible prior to the virus outbreak (Baum & Hai, 2020). Within a relatively short amount of time, Covid-19 has created a massive international impact on the tourism sector by drastically reducing global mobilities resulting in the worst crisis in the history of a.o. commercial aviation (Jamal & Budke, 2020).

Most countries have responded by imposing lockdowns, social distancing, closure of schools/universities and non-essential workplaces, cancelling or postponing events and the prohibition of the gathering of people above a certain number (Gössling et al., 2020). In undertaking these actions, governments worldwide are trying to strike a balance between keeping their economy flowing and preventing worrying levels of unemployment while responding to public health imperatives that are necessary to prevent the collapse of health systems (Higgins-Desbiolles, 2020).

Similarly to what happened following the terrorist attacks on September 11, 2001 and the global financial crisis in 2008, tourism is now facing a reset. This time, however, two schools of thoughts are predominant in recent literature addressing the future of tourism (Brouder, 2020). Some within the tourism academy have seen the pandemic as a reason to reflect on the lessons from this lapse in tourism activity and travel and to encourage transformation that would develop tourism in a more sustainable way (Nepal, 2020; Niewiadomski, 2020; Tremblay-Huet, 2020). Others suggest the development of recovery strategies to restart tourism enterprises and quickly come back to a 'business as usual' (Higgins-Desbiolles, 2020).

The geographer David Harvey (2020) described Covid-19 as being "nature's revenge for more than forty years of gross and abusive treatment at the hands of a violent and unregulated neoliberal extractivist". This is an opinion, strongly agreed, by Cave & Dredge (2020) in their call for the need for a regenerative form of post-Covid-19 tourism that is not uncritically inclined to exploitative capitalist economic models: "Rising concerns about climate change, overtourism, declining employment and labour conditions and resource degradation have all highlighted the inadequacy of the current capitalist system in addressing the failures of mass tourism. Now, under Covid-19, there are calls for tourism to move beyond 'business as usual'

and to find a pathway to regenerative tourism". Sheller (2020) adds that in addition to alternative non-capitalist forms of ownership, such regenerative tourism would embrace non-monetary exchange and beneficial community-based development. Sociologists and philosopher Bruno Latour (2020) share the same views and claim that the idea of restarting production as soon as the virus shows the first signs of weakening must be rejected.

Instead, Latour proposes taking advantage of this forced 'pause' in globalization to contest the modes of production favoured by the current socio-economic structure and to reflect on fairer wealth distribution and the establishment of a new economic system that includes positive transformation. The unexpected shift from "over-tourism" to fears of "non-tourism," claim Stefan Gossling, Daniel Scott and C. Michael Hall, designates an unprecedented crisis for tourism, which "holds important messages regarding the resilience of the tourism system, also with regards to other ongoing crises that are not as immediate, but potentially more devastating than Covid-19, such as climate change" (2020, p. 3). With tourism being one of the most important sectors of small island developing states (SIDS), these isolated parts of the world seem to be even more exposed (Leighton, 2020).

In previous years, SIDS have been subject to diverse external shocks such as natural disasters, climate change and global economic crisis (Becken et al., 2014; Hyman, 2014; Pelling & Uitto, 2001). SIDS are especially vulnerable to external shock due to their unique geographic characteristics. Human factors have also influenced these shocks to some degree such as limited capacity and resources and narrow internal market (Becken et al., 2014; Calgaro et al., 2014). The outbreak of Covid-19 has been different from any other global crises SIDS have had to go through, and small island destinations are more greatly impacted than the rest of the world (Walker & Yoo, 2021).

Tourism generates a large amount of the SIDS'GDP and is ackwoldged as one of the fastest development sectors and main economic activity for a number of SIDS such as Jamaica, Seychelles and Mauritius (UNWTO, 2020). If the pandemic is a challenge for tourism around the world, SIDS have been recognized as the most at risk due to their high dependence on international tourism for sustainable economic development and growth. Such extraordinary circumstances have brought about colossal jobs losses, a steep decline in foreign exchange and tax revenues hence restraining public spending capacity and the capability to support livelihoods through the crisis (Chummun & Mathithibane, 2020). Mauritius is a member of the SIDS and particularly relies on the tourism sector which represents a large part of the island's economy, contributing to 24% of its GDP (Worldometer, n.d.).

The shock engendered by the pandemic was added on top of a massive oil spill from a vessel off Mauritius's coast (Reuters, 2020) which forced the island to manage two crises at the same time. Covid-19 represent a major public health issue for the island of Mauritius (Stübinger & Schneider, 2020) and a state of emergency was announced both in March 2020 and in March 2021 wherein a lockdown was foisted to contain the spread of the virus (UNWTO, 2020; MTPA, n.d.).

The pandemic and simultaneous travel restrictions have generated a necessity for Mauritius to place considerable focus on the impact crisis events have on the island economy, along with the priority to act on sustainable tourism development (Walker & Yoo, 2021; Rogerson & Baum, 2020). The challenges that the tourism industry encounters with regards to sustainability introduces policy dilemmas (Walker & Yoo, 2021) and some scholars see the role of tourism in sustainable development as complex and sometimes contradictory (Hall et al., 2013). The reaction and preparedness of the tourism sector to the pandemic has intrigued scholars and influenced them in turning more into resilience study (Bosak, 2016; Lew, 2014; Cochrane, 2010; Hall, 2010; McKercher, 1999).

The tourism literature on the relationship between sustainability and resilience is still in its premature stage and scholars present different views on the role of resilience within sustainable tourism development (Prayag et al., 2017). Some define resilience as a measure of sustainability, which enable a system to survive a perturbation and gain a finer understanding of the interelation of these systems (Hall et al., 2017; Strunz, 2012). Others see resilience not only as a tool to survive a crisis but also to improve sustainability after a disturbance and provide a substitute to sustainable development (Cheer & Lew, 2017; Dahles & Susilowati, 2015; Lew 2014). The current context appears to be an appropriate moment for Mauritius to reconsider the trajectory of their tourism growth and to accelerate their sustainable tourism transformation through resilience (Gossling et al., 2020; Rogerson & Baum, 2020). Which led to the following research question:

# How can Mauritius build resilience to improve sustainable tourism development in a post-Covid-19 world?

In resilience studies, numerous work assesses how a destination adapts to ecology, climate and natural environment disasters. Nevertheless, disturbances are diversifying and political crises, sanitary disasters, terrorist attacks, industrial risks, digital economy and its impact on tourists' behaviors need to be seriously contemplated as disturbances (Paraskevas et al., 2013). On the other hand there is a limited amount of paper on the theoretical background behind the combination of sustainability and resiliency. The framework made a recent entrance in tourism studies and reflections on the matter are limited.

Therefore, the purpose of the paper is to contribute to the conversation on the role of resilience in the improvement of sustainable tourism development. Within the context of Covid-19 in Mauritius, the research aims at adding practical knowledge on how to build resilience for sustainable tourism development and to therefore re-adapt the existing sustainability-resilience integrated theory. To do so, this study uses informed grounded theory, a qualitative method to understand stakeholder's perspective on the role of resilience within their professional context. Informed grounded theory is based on the assumption that theories and new knowledge can be informed by existing research literature and theoretical framework (Charmaz & Belgrave, 2007). Although it shares the fundamental characteristics of qualitative research within the constructivism spectrum, informed grounded theory differentiates itself from most qualitative methods in its faculty to use pre-existing theories and research findings in the substantive field in a tactful, inspired and pliable way. Analysing data in-line with the principles of informed grounded theory can stimulate questions and propose areas for theoretical sampling (Thornberg, 2012). The inductive nature of grounded theory makes it an appropriate design for the present research, which aims to add knowledge to the existing integrated sustainability-resilience theory.

# 2 Theoretical framework

The following chapter presents the integrated sustainability-resilience theory and justifies its use and relevance to the study. The theory is first introduced by the concept of sustainability, touching upon its historical development, the latest trends associated with sustainable tourism development and debates present among the literature. As part of the debate, the concept of resilience theory in a tourism context is then discussed, before announcing the merge of both concepts. The chapter ends with an analysis of possible positive transformation and evolution of tourism in post Covid-19 times, relevant to the establishment of interview questions as well as to the understanding of the stage Mauritius is currently in.

# 2.1 The four pillars of Sustainable Tourism Development: History, model and debates

Despite its great contribution to economic development, travel and tourism have a significant impact on the environment and ecosystem (Chung et al., 2018). For example, the industry is responsible for about 8% of global greenhouse gas emission (Cross, 2019). Considering the amount of CO2 emissions from tourism-related transportation and the sharp growth rate of tourists, tourism has its share of responsibility in the climate change crisis (Pandy & Rogerson, 2018). Peeters and Dubois (2010) developed a 30-year projection model on an emission inventory made for 2005.

Their research concluded that technological improvements in the tourism industry alone cannot meet the consequent CO2 emission reduction required for avoiding dangerous climate change. But the environment isn't the only impacted dimension. Indeed, dissimilarities in cultural behaviour between tourists and locals can be the cause for the replacement of mutual understanding by hostility (Archer et al., 2005).

Sustainable tourism aims at reducing the adverse effects of tourism activities on the environment, society, culture and economy and at achieving an ecologically sustainable, economically viable as well as socially equitable tourism (Chung et al, 2018). UNEP and UNWTO (2005) defined sustainable tourism as the development of tourism activities with an appropriate equilibrium between the environmental, economic and socio-cultural dimensions, guaranteeing its long-term sustainability. It must fulfil the needs of the tourists and host

destinations while providing opportunities for further development in the future, as well as maintaining heritage and ecological integrity, biological diverseness, and life support systems. However, It is important to recall that in the late 1980s it was difficult to obtain clear opinions on sustainable tourism, and both conference speakers and academics talked disparagingly about the very concept of sustainable tourism. While this concept continues to be a subject of contentious debate, the field has progressed and tremendously matured since 1990 (Bramwell et al., 2017).

Concern over the natural and social environments gained importance in the beginning of the 1970s with George Young publishing his book "Tourism: Blessing or Blight" (Young, 1973) and with the tourism researcher Claude Kaspar calling for a "new dimension of the tourism debate" (Kaspar, 1973, p.139). Shortly after, Swiss ecologist Jost Krippendorf (1984) questioned mass tourism in his book "Vacation People" and initiated the exploration of alternatives. Formal acknowledgement of the importance of sustainable development dates back to the UN Brundtland Report which set forth to engineer a shift from market-driven economic strategies and unlimited economic growth (Young et al., 2015), to accommodate resource conservation and sustainability (Mitchell et al., 2013).

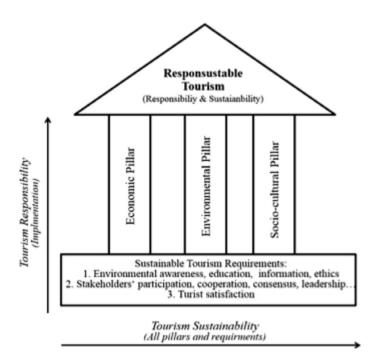
Shortly after, a first draft of the Agenda 21 was created by the United Nations (UN) during the Johannesburg plan, to be later developed in a joint collaboration between the UNWTO, the World Travel & Tourism Council (WTTC), and the Earth Council (EC) (Chung et al, 2018). Following this document, the principles of sustainable development, which highlight the importance of economic, socio-cultural and environmental accountability as the three pillars of sustainability, raise important questions regarding sustainable tourism (Espiner et al., 2017).

This theme evolved and challenged the ideology, discourse and hegemony of the UNWTO (Mowforth & Munt, 2008), which promoted tourism as a "smokeless industry" to more critical insights into the issues of environmental impact and social justice (McCool et al., 2013). These principles request steadiness with economic, socio-cultural and environmental purposes and allow tourism operations to maintain long-term competitiveness (Mihalic, 2016). Few academics attempted to integrate political sustainability as a fourth dimension (Ritchie & Crouch, 2003).

However, since it is argued that it is not directly connected to the impact of tourism, the fourth pillar of the sustainability concept was never embodied (Mihalic, 2016). Parallelly to this discussion, critics addressed the political dimension based on three preconditins, as shown in Figure 1, that must be fulfilled to make tourism sustainable: (1) Sustainable tourism is acquired from the awareness of sustainability and ethics, along with environmental education and information for all stakeholders on both supply and demand sides. (2) It also comprehend the political pillar as it requisit the informed participation of all pertinent destination stakeholders and powerful political leadership to allow its execution. (3) Sustainable tourism should preserve a notable level of tourist satisfaction, thus reaching market needs (Mihalic, 2013; UNWTO, 2004).

The three-pillar concept has inspired numerous sustainability research and has formed the basis of several strategy and policy documents in the tourism sector (Mihalic, 2016).





The concept has often been used on the destination level alternatively to the micro-level (Dwyer, 2005) and the economic performance remains the highest priority of private stakeholders in the hospitality industry (Mihalic et al., 2012; Blackstock et al., 2008; Bramwell et al., 2008; Bohdanowicz et al., 2005). Nonetheless, other sustainability notions much like the triple bottom line (TBL) or corporate social responsibility (CSR) represent easier topics to address and discuss for firms (Mihalic, 2016).

The triple bottom line approach (TBL), is built upon five dimensions, also known as the 5 P's, or five pillars of sustainable development, people, planet, prosperity as well as peace and partnerships. Through a holistic balance among all dimensions, these five pillars administer contemporary instructions for careful examination and inspections of any intervention addressing the development and societal challenges around the world (Sow, 2017).

From this point on, the relation between climate change and tourism was emphasized and the place of tourism in the passage to a greener economy and poverty alleviation was further developed (Chung et al., 2018).

The UN 2030 Agenda for Sustainable Development conceived 17 sustainable development goals (SDGs) to eradicate poverty, protect the earth and warrant prosperity for all by 2030. (UNDP, n.d.). Based on these Goals, the UNWTO recommended five central pillars to which tourism should stand to make a significant and lasting contribution to achieving sustainable development (UNWTO, 2016; 2017): (1) inclusive and sustainable economic growth, (2) social inclusiveness, employment and poverty reduction, (3) resource efficiency, environmental

protection and climate change, (4) cultural values, diversity and heritage, and (5) mutual understanding, peace and security.

Today, the SDGs are generally seen as adaptable to various contexts and changing circumstances over time.

They are also increasingly regarded as relevant for all forms of tourism, regardless of the scale of the business. Lately, it was also suggested that sustainable tourism entails making trade-offs between differing desirable goals, rather than suggesting balance among the goals. There is growing acceptance that interpretations differ on the scale of reforms needed and the extent to which it is being applied in practice. As a result of these dissimilar views, it is also considered that the idea of sustainable tourism serves as a useful focus for dialogue, conflict and negotiation in a complex setting often involving various stakeholders (Bramwell et al, 2017).

At the Official closing ceremony of the International Year of Sustainable Tourism for Development 2017, Talal Abu-Ghazaleh, Chairman of Talal Abu-Ghazaleh Organisation in Jordan was quoted as saying, "I personally believe that the future of tourism lies in enabling ICT capacities. Accordingly, we should harness those powers for smart tourism... I believe that the way forward in our journey to 2030, is smart tourism. I call on all of you to guide me and support me in this endeavor" (UNWTO, 2017).

Within the future strategies for sustainable tourism development, the concept of "greening" the tourism chain has been discussed in a number of academic research (Pham et al., 2019; Caric, 2018; Gavrilović & Maksimović, 2018; Dustin et al, 2018; Iraldo et al., 2017). Numerous key elements, such as energy, transport, buildings, infrastructure, agriculture, and smart technologies, play imperative roles in achieving sustainable tourism. The latest technologies in the area of electronics and information and communication technology (ICT), like the internet of things (IoT) and wireless sensors (WSNs) have sped up the transition to a digital world and enhanced the appearance of information networks toward sustainable tourism. Smart technologies have been recognised as extremely important for economic development and business growth. Indeed, it continues to radically revolutionize all parts of conventional tourism to smart sustainable tourism (Chung et al., 2018).

Nevertheless, the above mentioned debates and trends must be accompanied by effective governance, policies, frameworks and tools to be put in practice and adapted to climate change (Weir, 2017). Furthermore, internationally recognized standards and criterias should be adopted and harmonised to provide awareness and consciousness about the practical aspects of sustainable tourism (UNWTO, 2018). This should go hand in hand with the elaboration of effective incentives to guide the practice of tourism activities and development in the direction of sustainability by-way-of changing the behavior of tourism practitioners, but also of tourists and communities (Chung et al., 2018).

Nevertheless, sustainable tourism development encounters a multitude of significant challenges for policy-makers and planners (Chung et al., 2018). In fact, on top of the Covid-19 pandemic, the large energy use and greenhouse emissions (Peeters & Dubois 2010), the extensive water consumption (Diaz et al., 2007), the inappropriate waste management and

treatment practices (UNEP & UNWTO, 2012), the loss of biodiversity and habitat destruction (Trave et al., 2017), the threats to heritage management and cultural integrity (Schmutz & Elliott, 2016) as well as the lack of communication channels and information platforms between different stakeholders of the tourism industry represent serious barriers for the development of sustainable practices in tourism (Sanches-Pereiraa et al., 2017).

Therefore they should be regarded as opportunities to include green investment in the economies and encourage sizing and growth of the sector, changing consumer behaviors and patterns, and addressing local development and poverty reduction in link with the SDG goals (Chung et al., 2018).

In addition, sustainable tourism is subject to compounding criticism, a major one being that it has "little true or effective implementation" (Butler, 2015) and in need of a rethink in order for tourism to become truly sustainable (Hollenhorst et al., 2014). Sustainability in comparison with profitability is another contested area as the tourism industry is often seen as prioritising maximization of financial returns over environmental concerns (Moeller et al., 2010). This is especially the case for cruise tourism for which ethical and social justice concerns are questioned due to controversial practices (Friends of the earth, 2021).

The impact on host communities from an intensified exposure to tourists is also considered contentious, especially when the ability to join and adapt the tourism economy is impeded by the lack of local skills and dominance of external investors and interests (Cheer et al., 2013). Another riddle is the extent to which marginalised groups are alienated, mostly in less developed and indigenous contexts, through mistreatment, displacement and disregard (Crick, 1989). In spite of the debates on the viability of sustainable tourism and its ability to induce positive economic benefits, the UNWTO emphasize on the transformative power of tourism's potential to make positive TBL impacts by suggesting that "1 billion tourists creates 1 billion opportunities" for the development of jobs, micro entreprises, and by enabling a greater empowerment of communities (UNWTO, 2016).

#### 2.2 Sustainability and Resilience

#### 2.2.1 The debate of resilience over sustainability

Despite the evolution and progress of sustainable tourism as a concept in more recent years, fundamental questions of spatial and temporal scale remain (Hall, 2007). McCool et al. (2013, p. 217) state that in the late twentieth century, models of sustainability were based on the assumption that the world was "predictable, linear, ultimately understandable and basically stable". These assumptions have been questioned by system complexity (McCool, 2015), global environment risks (Young et al., 2014) and natural disasters (Faulkner, 2001). According to Higgins-Desbiolles (2010, p. 116) "Despite its prominence for several decades, achieving sustainability remains as elusive as ever". Sharpley (2009) also points out that the principles of sustainable development continue to be "a morally desirable but fundamentally idealistic and impractical objective".

An opinion supported by Hall (2007) claiming that there is a pressing urgency to accommodate and address new spatial and temporal trajectories that extend far beyond a framework of steadystate tourism sustainability. The relationships linking tourism development and the global climate crisis has, for example, greatly challenged sustainability models, demanding to reframe the spatio-temporal boundaries (Karlsson, 2015; Bostrom, 2013) but also the very concept of sustainability (Peeters & Dubois, 2010; Becken & Schellhorn, 2007). Luthe and Wyss (2014) argue that tourism destinations need new strategies to address change and resilience offers a useful framework to develop novel ways of planning and operating in times of uncertainty. For the author, the ability of destination organizations and tourism enterprises to be reactive, proactive and adaptive in responding to rapid, unexpected change is one clear point of difference between the concepts of resilience and sustainability. Similarly, for Orchiston & Higham as well as McCool (2016; 2015), accommodating global catastrophic risks, which present the threat of total and irreversible system shifts, is fundamentally incompatible with steady-state sustainable tourism and a greater attention must be directed to complex socioecological systems. Recent interest in the relationship of tourism to the emerging fields of resilience thinking and development is seen as a plausible transition to address the shortcomings of sustainable tourism (Lew, 2014).

#### 2.2.2 Resilience in a tourism system

Resilience in the tourism sector has been an increasing focus of academic endeavour, including discussions and applications to tourism case studies (Bosak, 2016; Lew, 2014; Cochrane, 2010; McKercher, 1999). Resilience thinking encompasses system qualities of persistence, adaptability, and transformability, which are the dynamics that amplify a system's capacity to stay somewhat steady (Folke et al., 2010).

The underpinning of tourism resilience lies in the recognition that humans and the environment are an inseparable social-ecological entity (Folke, 2006). The basic principles are that systems evolve in a non-linear way, according to a cycle. The phases of the cycle may repeat, but the attribute of each stage may not be similar. It implies that the speed of recuperation from a weaken event relies on the system's adaptive capability, which in turn depends on numerous forms of capital assembled during previous stages (Cochrane, 2010). Similarly, tourism systems function in vigorous and complex ways, often succeeding irregular trajectories (Baggio, 2008; Schianetz & Kavanagh, 2008). In fact, a destination is a complex system that incorporates various stakeholders aiming to develop a set of natural, cultural, built and intangible resources within physical and administrative frontiers.

A destination is a network of actors more or less articulated, dependent on each other's in a political, economic, technological, environmental, cultural and social setting (Fabry & Zeghni, 2019), which lends well to resilience thinking when examining tourism destination sustainability (Meadows, 2008). Resilience acknowledges that the world's human and ecological processes are beyond simplification and are complex, dynamic systems, although

they can adapt within certain parameters and that if a stress event occurs, the elements will be reorganised into a different equilibrium (Cochrane, 2010).

The term was developed in 1973 by the ecologist C. F. Buzz Holling (Cochrane, 2010) in cultural ecological sciences, to describe the capability of social ecosystems to respond to and recover from a perturbation (Holling, 1973; Folke, 2006; Holling & Gunderson, 2002; Smit & Wandel, 2006). While definitions of resiliency differ across disciplines and across scholars (Tyrrell, 2008), the literature distinguishes four categories of resilience, from a disciplinary to a systemic one (Fabry & Zeghni, 2019).

The first resilience is referred to as engineering resilience. It seeks status quo preservation and aims at returning and recovering from a previous equilibrium without adaptation (Pisano, 2002).

The second definition is called ecological resilience and roots in ecology. It is associated with the regularity of the ecosystem and its capacity to prevent, manage, recover and absorb shocks. It measures the vulnerability of a place and is used a replacement to sustainable development (Pimm, 1984).

The third definition, social-ecological resilience, focuses on interconnectedness within a social system and its ability to repeatedly evolve. The system isn't in the necessity to return to an equilibrium anymore. In that sense, resilience is aiming at adaptive capability, as well as learning and innovation in a context of dynamic interactions (Berkes & Ross, 2013).

Last but not least, the forth definition, evolutionary resilience, concerns the social world and its capacity to survive in a complex and continuously changing environment. It is understood as the ability of adjustment and adaptation to tackle vulnerability such as conflict, terrorism, climate change, natural disasters, pandemics, financial imbalances, excessive urbanization, income gaps, aging populations or technological innovations (Davoudi et al., 2012).

Overall, the term can be referred to as the capacity of a system to absorb exogenous change, preserve its identity, adapt its fundamental structure and function to shape change via planning, culture, collaboration, and constant innovation and learning in the face of disturbance (Orchiston et al., 2016; Hudson, 2010). Resilience implies making choices, adapting, recovering, and renewing trajectories in a complex and unstable world (Folke, 2006). Progressively, resilience has been shifted from a pure ecological focus to climate and environment changes and sustainability (Luthe & Wyss, 2016; Scott et al., 2016; Tsai et al., 2016; Tsao & Ni, 2016; Lew et al., 2016).

When linked to tourism, resilience is the "ability of social, economic or ecological systems to recover from tourism induced stress" (Tyrell & Johnson, 2008, p. 14). Driven by natural shocks in highly touristic settings, the literature later analysed disasters, risk/crisis management at a community (Biggs et al., 2012; Hall, 2010) and at destination level (Cochrane, 2010; Larsen et al., 2011), by linking social-ecological systems (SES) in recognition of the interdependency and harmony of human and environmental systems, for which their change is inevitable (Cochrane, 2010; Walker & Salt, 2012; Adger 2000; Holling, 2001; Falke, 2006). SES is an

integrated "human-in-nature" perspective (Berkes & Folke, 1994), wherein environmental and social resiliencies are deeply connected (Tyrrell & Johnston, 2008).

According to Holladay & Powell (2013), understanding resilience requires the examination of resilience in the SES from economic, social, institutional and ecological dimensions. Lately, resilience has been used to guide local actors in planning tourism development (Simme & Martin, 2010) and to assist in the transition toward sustainably due to its ability to recognize the interdependent systems of society, economics and the environment (Fabry & Zeghni, 2019; Cochrane, 2010).

Resilience theories are also applied to organizations in tourism which rely on firms' adaptation and innovation abilities (Dhales & Susilowati, 2015). In his studies, Biggs (2011) found that enterprise resilience was deeply embedded in lifestyle identities and human capital. Orchiston (2013) added that business age, size and experience are also important factors in determining enterprise resilience.

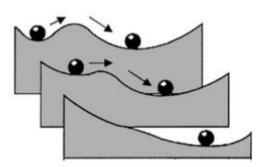
Meanwhile, the relation between resilience and tourism destinations is a noteworthy issue since crises are diversifying and not only connected to ecology, climate, and natural environment. According to Paraskevas et al., (2013), political crises, sanitary disasters, terrorist attacks, industrial risks, digital economy and its effects on tourists' behaviors such as knowledge development need to be solemnly regarded as "shocks" in any kind of tourism resilience theory.

#### 2.2.3 Resilience Theories

The starting point of resilience theory was the model proposed by Holling (1973) to explain that equilibrium is not required in the ecological system to ensure the persistence of species. Holling was among the pioneers to explain that systems can shift between relative stability through destabilization and back to near-stability without losing their essential function. The theory demonstrates that systems fluctuate within "domains" (Holling 1973), "valleys" (Gunderson, 2000) or "basins of attraction" (Walker et al, 2004).

The process is shown schematically in Figure 2 with the stability domain represented by the valley and the system by the ball (Gunderson, 2000). The bottom of the "basin" is the time at which systems are strongest and can fluctuate without losing their intrinsic purpose. If a perturbation occurs, it may cause the system to overflow and transit into a different state or stability domain (Gunderson, 2000; Holling, 1973). There is a tendency to assume that a shift from one state to another is negative. However, a negative outcome is not inevitable. A shift may simply represent an evolution in human society and its relationship with ecological systems. Using resilience theory as a framework enables to analyse which factors can enhance the ability of the systems to absorb disturbance and can help policy-makers and resource managers to avoid, manage or engineer them (Cochrane, 2010).

Figure 2: System States within Stability Domains or 'Basins of Attraction' (Gunderson, 2000)



Shortly after, Holling (1986) developed a four-phase conceptual model known as the Adaptive Cycle, first configured as an infinity loop to be later simplified by Walker and Salt (2006), as shown in Figure 3. The model was developed to stimulate thought within system dynamics on destruction and reorganization (Gunderson et al., 1995).

The first phase, "Growth" or also called 'Exploitation", is when new systems arise succeeding the changes produced in previous phases. New institutions, political, cultural and social relationships might emerge.

The second phase, "Conservation" represents the gradual establishment of a new linear state, in which structures are institutionalized and new capital is set. Structures may become increasingly interrelated, bringing about more inflexibility.

The third part of the cycle, "release", is a series of events which undermines existing systems, releasing the stiffness of structures and resulting in rapid changes. Finally, the last phase, "Reorganization", is a prompt change succeeding a destabilizing event, with reconstruction and renewal of societal structures (Gunderson et al, 1995). Although the cycles appear to repeat themselves, they may do so in their dynamics but not necessarily in their specific characteristics (Cochrane, 2010).

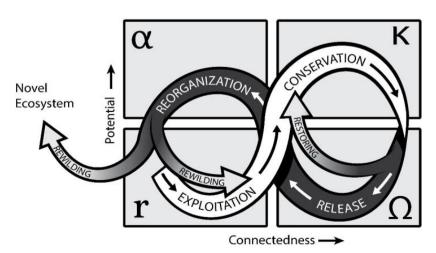


Figure 3: Adaptive Cycle (Holling & Gunderson, 2002)

According to Holling (2001), when considering the Adaptive Cycle model, the expansion and contraction of resilience throughout the cycle becomes evident. Gunderson (2000) points out that resilience tends to be very high during the "Growth" phase. Contrastingly, the "Conservation" phase has very low resilience and takes a prolonged period to return to its state following a disturbance. Resilience increases as the cycle moves back out of the "Release" phase into the "Reorganization" phase (Holling, 2001). This analysis drew Gunderson (2000) to conclude that resilience should be encouraged through the destruction and renewal of systems at a smaller and faster scale.

It is interesting to note that the phases of the resilience cycle matches with Butler's 1980 Tourism Life-Cycle (TALC) model. The 'reorganization' stage of the resilience cycle is equivalent to the 'exploration' stage of the TALC and the 'exploration' stage of the resilience cycle is comparable to the 'developmental' stage of the TALC. Similarly, the 'conservation' phase of the adaptive cycle concurs with the 'institutionalization' stage of the TALC as systems become stable but also somewhat rigid (Cochrane, 2010).

In his study, Holladay (2018) merges the first three steps of the TALC with the Adaptive Cycle model. From his integrated model, the author concludes that destination resilience within sustainable development is the highest between the 'exploitation' and the 'conservation' phase of the adaptive model. It is therefore during this phase that management should consider methods to hold tourism systems. He adds that setting short-term goals among social, economic, institutional, and environmental factors, while administering monitoring protocols and utilizing experimental adaptive management techniques, may help the tourism system to remain in the zone of highest resilience.

Indeed, monitoring enables reactivity and creativity to enhance elasticity in the tourism system. This process is supported by 'adaptive governance', which constitutes a coordination process of diverse actors acting at various levels in response to changes (Fabry & Zeghni, 2019).

According to the above mentioned authors, various external or internal perturbations can result in a drop of tourists arrivals, impacting income and livelihoods. Building destination resilience necessitates the strong commitment of each stakeholder. Actors need to comprehend the ways resilience-based governance develops reactive and proactive abilities to address changes instead of avoiding them (Fabry & Zeghni, 2019).

If management fails to address the perturbation between the 'exploitation' and the 'conservation' phase, they would need to realign the system components into a more effective trajectory in the 'release' and 'reorganization' phases (Holladay, 2018). However, Lepp (2008) argues that the loop of the adaptive cycle better encapsulates the complexity of the tourism system than the TALC, working as a multi-agent, multi-level, multi-dimensional social-ecological system.

All in all, a destination need to be resilient in order to increase inbound tourism, ensure flexibility, adaptability, innovation, and reshape the attractiveness or image if necessary. The resilience of a tourism destination is strongly linked to the ability of all stakeholders to accept disturbances, anticipate them and respond to them with agility. It is simultaneously a collective

response organised in a decentralized way, enabling several answers and flexibility for the development of the required capacity (Fabry & Zeghni, 2019; Becken, 2013; Adger et al., 2005).

For Fabry and Zeghni (2019), a resilient destination is a continuously learning destination. Resilience theory has not yet been widely applied to tourism, although since Farrell and Twining-Ward (2005; 2004) initiated a reflection about resilience and complex adaptive tourism systems, the theory has been increasingly used in practice, especially when merged with the principles of sustainable tourism development (Cochrane, 2010).

#### 2.2.4 The merge of sustainability and resilience

The tourism literature on the relationship between sustainability and resilience is still in its premature stage (Prayag et al., 2017). It is crucial to emphasize that sustainability and resilience are not synonymous concepts (Redman, 2014) even though closely related to each other (Powell et al., 2018; Herrera, 2017; Jones & Comfort, 2017). Cheer & Lew (2017) suggests that resilience planning has emerged as a complement to sustainable development to provide new perspectives on socio-ecological adjustments to a rapidly changing world.

In other words, resilience is primarily regarded as a way to improve sustainability after a disturbance and offers an alternative to sustainable development (Cheer & Lew, 2017; Dahles & Susilowati, 2015). While sustainability prevents change by keeping resources above a normative safe level, resilience adapts to change by building capabilities to go back to a desired condition following both anticipated and unanticipated perturbations where transformation and innovation are possible desired outcomes (Derissen et al., 2011). Understanding those changes is imperative to develop a resilient destination within the umbrella of sustainable tourism development.

Change includes interrelated factors essential for understanding how a tourism destination can enhance sustainable tourism development but also absorb disturbances such as an economic recession, and still function (Holladay, 2018). Calgaro et al., (2014) proposed an inclusive Destination Sustainability Framework for analysing destination resilience to multiple shocks and stressors. In suggesting this SES approach, the authors combine a range of contemporary perspectives on resilience-thinking and sustainability.

Nevertheless, they do not explicitly examine the relationship between the two concepts. With this objective in mind, the following subchapter will overlook the integrated sustainability-resilience theory developed by Cochrane (2010), which attempts to conceptualise the complex relationships within the tourism system and between the concepts of sustainability and resilience.

#### 2.2.5 Sustainability-resilience integrated theory

In his study, Cochrane (2010) attempted to conceptualise resilience as it relates to the concept of sustainable tourism. The model works as a framework to understand the circumstances needed in order to create a resilient tourism system, as shown in Figure 4 bellow:

Figure 4: The sphere of tourism resilience (Cochrane, 2010)



The model identifies and illustrates the main elements of a resilient tourism system, which, together, enable the sustainable management of resources.

The first one is represented by the awareness of the 'market forces' and the capability to harness them. According to the author, without successful engagement with the market, systems are not expected to survive.

A second essential aspect is 'stakeholder cohesion'. Stakeholders have different roles and strengths for which, when put together in a coordinated manner, they can enable resources to be exploited more fairly while bearing in mind the needs of future generations.

Finally, the third element is strong and consistent 'leadership' conveyed through clear vision and effective management, either from individuals or institutions. Strong leadership is expected to create structures to deal with conflicts over resource use, drive forward change and encourage cohesiveness among stakeholders. All three elements are incorporated into the 'triple bottom line' discourse of sustainability which lays on the three dimensions of economic, environmental, and socio-cultural success.

Broader contextual elements of the model are also essential to the functioning of a resilient and sustainable tourism system. 'Flexibility', 'adaptability', and 'learning' are significant to avoid over-rigidity which can lead to a lack of faculty in accommodating stress. This can be reached through the proactivity of macroeconomic policy shifts, the enhancement of technological advances, the ability to adapt to market trends or the creation of supply chain linkages (Cochrane, 2010).

Cochrane's theory seems to relate to current discussions driven by the SDG goals and the UNWTO about the importance of 'partnerships' among different stakeholders as well as the

aspects of 'peace'. Indeed, strong similarities can be seen between the three elements of the model, 'harness market forces', 'leadership', and 'stakeholder cohesion' and the matters discussed in the 2030 Agenda for Sustainable Development.

The author of the research paper therefore considers the application of an integrated model between the concepts of resilience and sustainability essential to the analysis of the role of resilience to Covid-19 in the development of sustainable tourism development in Mauritius. It is strongly believed by the author of the research paper that the use of this model, based on the theories and models discussed in previous subchapters of the theoretical framework, can offer an integrated discussion on resilience, for sustainable tourism development in Mauritius. Similar to the notion of sustainability, resilience also remains a problematic concept in tourism literature (Folke et al., 2010). While sustainability and resilience may be compatible concepts, Espiner et al., (2017) argue that resilient destinations are not necessarily sustainable.

#### 2.2.6 Existing work on Covid-19, sustainability and resilience

In their research paper, 'Visions of travel and tourism after the global Covid-19 transformation of 2020', Lew et al (2020) approached the impact of Covid-19 on travel and tourism around the world. The authors reflected on the contribution of the pandemic on a possible positive transformation and evolution of tourism in post Covid-19 times. To do so, they applied the 'resilience adaptive cycle', described in 2.2.3, to Covid-19 for two purposes. The first one, to analyse the stage the world is currently in and secondly to forecast possible post Covid-19 pandemic scenarios.

Addressing their study in "Chapter 2" of this research paper seems necessary as it links three fundamental aspects discussed here, Covid-19, tourism and resilience. The work of Lew et al (2020) enables a clear understanding of the context this paper is written in and offers valuable knowledge to be used in complement to the integrated sustainability-resilience theory. In fact, understanding the phases in line with Covid-19 and having an overview of the stage the world is currently in can help the author of this paper to better identify the questions that should be asked during the interview and determine the stage Mauritius is currently in.

The Covid-19 pandemic event has caused a significant collapse of the human-earth system, particularly brutal on the tourism system. At the time the analysis of Lew et al (2020) was written (May 2020), the breakdown was still taking place and the system was barely beginning to enter its first stage, 'reorganization', phase of innovation and creativity. The stage can be seen in different ways people are aspiring to connect with one another in the context of social distancing policies implemented to control the spread of the pandemic.

The new forms of connecting are creating new pathways to knowledge, understanding and empathy across the globe (Lew et al, 2020). In the context of tourism, the stage can be seen in various ways, notably led by physical distancing and mobility restrictions (Lapointe, 2020) such as trends leading more toward domestic tourism (Altuntas & Gok, 2021) or virtual and

hybrid events, in an attempt to innovatively contribute to the reorganization of the tourism system (Ranasinghe, 2020).

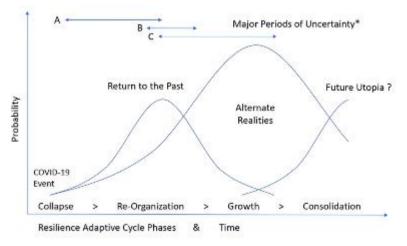
According to Lew et al (2020), what is necessary in the 'reorganization phase ' and to encourage innovation is to be open to all ideas and be willing to make mistakes. It is here required to acknowledge the potential value of neoliberal economics as well as sustainability. The second phase of the current system is seen by the author as being the stage of 'growth' or 'exploitation', in which many people have come to realize that practices need to change and there is a need for new directions, not just for tourism, but for the planet overall. The system will be based on the creativity of people directed toward more meaningful and less disruptive solutions for the evolving global society (Lew et al, 2020).

Lew proposes a prognostic of the way Covid-19 will evolve in the resilience adaptive cycle as shown in Figure 5. The author suggests that in the short term, effort will be directed toward 'returning to the past' by governments and the travel industry and many tourists will be anxious to travel again.

This seems to be occurring in China, which phases are several months ahead of the rest of the world. Once the virus becomes better understood and stabilized, domestic tourism might rise again (Lew et al, 2020). Ultimately, the values of the past will slowly be abandoned as new values nesting from Covid-19 start to build-up (Kruglanski, 2020). This phase will be followed by a rise of innovative and creative experimentation with 'Alternate Realities' including renewed business models and government policies as the 'reorganization' stage transitions toward the 'growth' stage.

As the resilience cycle moves from the 'growth' to the 'conservation', or also called 'consolidation' phase, people will adopt in their everyday lives the values that emerged in the previous phases, therefore creating a 'new normal', in line with new models developed for a better future (Lew et al, 2020).

Figure 5: Resilience adaptive cycle phases and possible post Covid-19 pandemic scenarios (Lew et al, 2020)



*Note:* A= Current Uncertainty (2+5 years); B= Abandoning to the Past; C= Alternative Experimentations (soure: Lew et al., 2020).

It should be mentioned that the analysis undertaken by Lew et al (2020) was applied to a global context and Mauritius Island might be moving at a different rhythm and therefore be placed at a different stage than the ones described in this study.

# 3 The Mauritian tourism industry

This part of the paper introduces the research by giving an overview of the available information about tourism in Mauritius. The chapter opens with the historical context of Mauritian tourism, followed by the debate on sustainable tourism development on the Island. In the third part of the chapter, external risks and previous crises impacting the economy of Mauritius are mentioned, and subsequently, the impact of the current pandemic on tourism in Mauritius is assessed. This chapter is judged relevant by the researcher in order to set a basis of knowledge about the context in which this study is written.

# 3.1 A history presentation

Tourism in Africa is dominated by 'the big four' destinations i.e. Egypt, South Africa, Tunisia and Morocco. These are followed by 7 'second-tier' destinations: Kenya, Zimbabwe, Botswana, Nigeria, Mauritius, Senegal and Swaziland (Rogerson, 2007). Mauritius is located in the Indian Ocean around 2,200 kilometers east of Africa with a land area of 2,040 square kilometers. It is a small and densely populated island with an ethnically diverse and highly literate population (Durbarry, 2004) coming from India, Europe, China and Africa (Carlsen & Butler, 2011). For more than 150 years, Mauritius has essentially had a mono-crop economy in which sugar dominated the economic activity, followed by textile (Dabee & Greenaway, 2001).

After the independence in 1968, the prospects for economic development seemed fragile and the sugar sector provided limited employment opportunities. Despite the adoption of a new strategy of import substitution, the scarcity of technical and managerial knowledge did little to increase the level of per capita income. The lack of success of this strategy prompted the government to try alternative approaches.

In 1970 it established the Export Processing Zone (EPZ) This was a particularly labourintensive program aimed at absorbing the high level of unemployment at the time. In the same period, the country became actively involved in the development of tourism (Kreishan & Fuad, 2010). In 2019, the tourist sector contributed to 24% of Mauritius GDP and accounted for 19.1 % of total employment (UNCTAD, 2020). This contribution is predicted to attain 26.1% by 2028 (WTTC, 2018). Tourist arrivals increased consistently from 74,597 in 1975 to 1,341,860 in 2017, mainly from Germany, France and Great Britain (Chummun & Mathithibane, 2020). Tourism earnings reached a record figure of around  $\in$ 680 million in 2017 compared to about  $\in$ 396,000 in 1975. The total hotel stock increased from 34 small hotels in 1975 to 111 hotels in 2017, representing 13.511 rooms indicative of enormous investments attributed to the sector over the years (Ministry of tourism, n.dd.).

The beginning of a formal tourism industry can be tracked back to the 1950s pushed by the appreciated assets of the island, the '3S' (sun, sand and sea). This accelerated the need for economic diversification and employment creation for locals (Prayag at al., 2011). The success of the industry originates from the first five-year development plan, 1971-1975 when the government issued numerous fiscal and other incentives to attract local capital (mostly from sugar producers) and foreign investment in tourism facilities. Both the government and the people generally view tourism positively as a source of jobs and economic growth. Mauritius makes a good impression on tourists and is seen as a well-organized place that offers ethnic diversity and with a low crime rate (Durbarry, 2001).

By the 1980s, tourism enclaves became the norm (Morpeth & Yan, 2015). Tourism Intelligence International (Gibson, 2002) defines enclave tourism as a prepaid vacation which includes all the services that are required by the tourist, such as transport, ground transfers, accommodation, food and beverage, entertainment and sports. The tourism development was focused on limiting the amount of visitors, air accessibility and the holiday offer as a mean to reduce the negative impacts of mass tourism but it also restricted linkages between the tourism industry and the local community (Morpeth & Yan, 2015). This form of tourism development persisted for about 20 years (1980-2000) and economic sustainability was the main focus of tourism development (Ministry of Tourism, n.da).

As the diversification strategy was reinforced over the years, Mauritius focused particularly on the service sector, and predominantly on tourism. In that advantageous environment, local and foreign investment was amplified, especially as there was a deliberate marketing strategy targeting middle and upper-income tourists (Seetanah et al., 2020). Since then, various policies such as the Hotel Development Strategy (HDS) of 2008, focussing on the construction of 4 and 5 star hotels, have been thought to reinforce the positioning in the luxury market (Ministry of Tourism, Leisure and External Communications, 2008). From 2009 to 2011, the island was awarded the top annual golden award *World's leading Island Destination*, for excellence in the tourism industry (World Travel Award, 2011) and now ranks in 54th position in the world in terms of competitiveness (Ministry of tourism, n.dd).

The success of Mauritian Tourism is based on a number of factors. First and foremost, the coast, comprising beaches, lagoon waters, and reefs, as well as the hospitality of the islanders which shapes the added value that has entitled hotels to sell their products to an uncommonly large part of the competitive international luxury market. This has brought them to rank 10th

on the list of densely populated countries (Chummun & Mathithibane, 2020). As the island is far from its main markets in Europe, the destination needs efficient air access to succeed. Whilst the destination created its own airline, Air Mauritius, it also developed strategic transnational partnerships with other large carriers, like British Airways and Air France. In that aspect, it has turned its distance from originating markets to an opportunity, making use of its remoteness as an indication of exclusivity (Christie et al., 2013).

Furthermore, the remoteness, strategic location, modern seaports and flexible air connectivity is also what has made the island a leading cruise tourist destination in the Indian Ocean region (Ministry of Tourism, 2018). In addition, Mauritius has among the best human rights records in Africa and many hotels are staffed entirely by Mauritians. High-quality personal service is one of the main priorities for the government and is representative of the brand. Furthermore, most hotels on the island, including the most luxurious, are locally owned as a result of the reinvestment of profits, made from sugar and textiles. Another asset is the importance given to partnerships between the public and private sectors, with the assistance of international strategic partners.

The Ministry of Tourism, Leisure, and External Communication is responsible for tourism and works closely with the Joint Economic Council. Private sector associations actively engage in policy dialogue and approval with the government (Kalinichenko & Novikova, 2019).

The Strategic Plan 2018 to 2021 aims at enhancing the global competitiveness of the destination through the incorporation of 84 projects and programmes to deal with the previously mentioned challenges. Up until 2018, Mauritius concentrated on attracting new markets, making Mauritius more appealing in the low season through the campaign "Mauritius 365".

Programs to improve air connectivity and competitiveness by widening the tourism portfolio have been implemented, f. ex. eco-tourism, wellness, spa, sports tourism and MICE to the 3s. Efforts include becoming a leading cruise tourism destination, development of a hotel classification system and amelioration of infrastructures and promotion of regional tourism. Today's strategy is based on the goals set in the Government programme 2015-2019 and the Vision 2030 statement, which is to attract two million tourists by 2030, increase tourism earnings and create 36, 000 additional direct jobs in the sector without eroding the carrying capacity of the destination and jeopardising the environment.

Currently, the discussions are concentrated on four main axes: accessibility, visibility, attractiveness and sustainability. Focus is on a skill-intensive and technology-driven model of development characterised by innovation and technology, high tech investment, product and market diversification as well as sustainable tourism (World Economic Forum, 2019).

The destination is though challenged by a number of internal and external factors.

Mauritius has always had an important market share in luxury tourism but may not retain this image due to the important increase in hotel rooms that are programmed. Indeed, a large number of tourists are characteristic of low-cost destinations since they lead to crowding and management problems that demand enormous investment (Kalinichenko & Novikova, 2019). Moreover, at the domestic level, the tourism industry is faced with 2 challenges: (1) a shortage

of skilled labour to sustain excellence in service delivery and (2) increasing indebtedness preventing further investments in hotel renovation and construction. Externally, the sector is exposed to fierce competition from similar island destinations such as the Maldives, Sri Lanka and the Seychelles.

Furthermore, the tourism sector remains vulnerable to the impact of climate change and Mauritius is threatened by tidal waves and surges as well as the deterioration of coral reefs through changes in sea temperature and beach erosion. In addition, as tourism is becoming more and more democratised, conflicts between hotel development promoters and the local community arise. There is a need to open up the sector and ensure inclusive tourism development (World Economic Forum, 2019). Other salient features of the tourism development are export and investment promotion, training, control of supply and airline policy (Kalinichenko & Novikova, 2019).

#### 3.2 Mauritius and sustainable tourism development

UNESCO advises sustainable development in SIDS, known as the 'Mauritius Strategy' (Prayag et al 2010), stating that if tourism is not developed in a sustainable manner, it can harm or even destroy the natural environment that attracts tourism in the first place. Small islands should monitor the impacts of tourism development to assure that tourism development and social and environmental priorities are agreeably supportive at all levels (UNESCO, 2010).

In response to the recommendations of UNESCO, the growth of tourism in Mauritius has been accompanied with important developments and visual transformations of the landscape and policies (Dabeedooal et al., 2019). The Environment Protection Act came into operation in 2002 to cement and reinforce the institutional and legal framework for the preservation of environmental resources. Consequently, hoteliers were asked to submit Environmental Impact Assessment results with their application for hotel development (Prayag et al., 2010). In 2008, the government launched 'Ile Maurice Durable', an initiative aiming at promoting sustainable development.

Two of the main objectives were to finance schemes for the protection of local natural resources as a mean to adapt to climate change and to finance projects to support attempts to protect the environment thanks to recycling, more efficient use of energy and increased utilization of renewable energy (Carlsen & Butler, 2011). In addition, tourism businesses were required to pay an annual Environment Protection Fee and Temporary Solidarity Levy, calculated at 0.85% of turnover. The latter was part the government's income to finance environmental and national social empowerment programs (Sharpley et al., 2010).

Next to environmental sustainability, social sustainability is also a challenging feature of tourism development for island destinations (Carlsen & Butler, 2011). In Mauritius, a variety of policies have been implemented over the years to transfer a part of the wealth generated to support poverty eradication and other social development projects (Sharpley & Naidoo, 2010). In the 'Mauritius Strategy' '05, it is stated that "there is a particular challenge to make

appropriate linkages between tourism and other sectors, including local service providers so as to retain resources within the country, and in particular to create synergistic linkages between tourism and the agricultural sector by promoting island foods and beverages supply chains, rural hospitality and agrotourism. In addition, they should implement community-based initiatives on sustainable tourism" (MIDF, 2010; UN, n.d). This aspect was first formalised in the 2002 Tourism Development Plan through the Tourism Poverty Reduction Strategy' recognising the necessity to intensify tourism's socio-economic contribution in Mauritius and identify unbalanced motives of ownership, poverty and unemployment (Deloitte & Touche, 2002). In the same period, the Employees Welfare Fund Act was to offer social and economic welfare for the employees and their families in tourism enterprises (Ministry of Tourism, n.db). In 2006, the Tourism Fund Act was enacted (Tourism Authority, 2006), with the aim that hotel developers contribute to this fund and enable infrastructural development and other associated schemes for the sake of the local communities.

Private-sector practices include hotel owners to implement CSR. Initiatives are, for example, building schools, sponsoring employees' children for tertiary education and promoting local arts and craft (Bissoon, 2018). A recent example can be Lux\* Resorts & Hotels, promoting CSR by setting up, among other projects, workshops for youngsters who have dropped out of the educational system (Lux\* Resorts & Hotels, n.d).

Another particular policy is the Integrated Resort Scheme (IRS), which goal is to promote foreign investment in the tourism sector, previously highly restricted, while minding the needs of the poor and disadvantaged local communities (Sharpley & Naidoo, 2010). However, the authors Sharpley and Naidoo (2010) concluded that if such schemes may bring short-term economic benefits to the poor, they are unlikely to offer a long-term sustainable contribution to poverty allievation.

Finally, Mauritian social workers are often called on to engage in sustainable development programs using community empowerment. For instance, a number of social workers are working with fishing communities to enhance their livelihoods and direct the coastal inhabitants towards marine protection and the conservation of coral reefs (Rambaree, 2013).

In the latest published Strategic Plan 2018-2021, the sustainable tourism development plans are summarized in four key points: 1) the incorporation of principles of sustainability and resource constraints in physical plans, 2) the adoption of standards by tourism enterprises to minimize impacts of tourism activities on the environment, 3) the adoption of an integrated approach to cultural heritage development and finally 4) the mainstreaming of sustainability principles in guidelines/codes of conduct/standards governing tourism activities (Ministry of Tourism, 2018).

These initiatives are incorporated into the 'SUS-ISLAND' project led by the Mauritius Tourism Authority (MTA) and aim at contributing to the development of a sustainable island and green destination with the use of tourism innovation. The goals of the project are to increase positive impacts, such as, social wellbeing, community development, responsible sourcing, cultural preservation, ecosystem quality, authentic experience and sustainable awareness while reducing negative ones like resource overuse, emissions, waste generation, water and social consequences.

To achieve these objectives, MTA and the Collaborating Centre on Sustainable Consumption and Production (CSCP) are developing a number of projects developed to encourage prohandprint innovation in the Mauritius tourism industry. Future possible projects include solar boat cruises, excursions to local farms, bike tours guided by local students or taxis reserved for women (CSCP, 2021).

As of now, hotels are paying an environmental tax as a charge on profit. The funds are distributed for environmental motives and are jointly ran by the hotels and the state. In addition, resorts also pay a levy for the use of the beach to help support the costs of beach protection and reengineering as well as their daily management (Kalinichenko & Novikova, 2019).

More recently, a smart city framework that offers fiscal and non-fiscal incentives for promoters that seek to convert green-fields into smart cities have been implemented (Dabeedooal et al., 2019; Allam, 2018; EDB, 2018).

Moreover, in addition to the impact of Covid-19 on Mauritian tourism, explained in the subchapter '3.4 Covid-19 and Tourism in Mauritius Island', the development of sustainable tourism faces a number of challenges. Indeed, the average expenditure per tourist outside of accommodation is quite low and growing at a slow pace.

Also, Mauritius is increasingly reliant on imported food. Furthermore, the tourism industry has to compete for qualified workers with other sectors and mainly the cruise industry. Finally, the lack of community participation in tourism development have narrowed the growth potential of the locals and have altered their wellbeing (EU, 2018).

#### 3.3 External risks impacting Mauritian tourism industry

Elahee (2011) claimed that "small island states face a unique challenge. Their natural beauty, an asset as a tourist attraction, hides the fact that they have fragile ecosystems, vulnerable to climate change" (p. 71). Climate variability and extreme weather have been pointed out as a source of concern for Mauritius (Mauritius Meteorological Services, n.d.) and may endanger the sustainability of the Mauritian tourism industry (Mahadew & Appadoo, 2019).

It is therefore imperative that all stakeholders in the tourism industry know and understand the changes that will have to be brought about as a means of mitigating but especially adapting to the impact of climate change. Regrettably, external factors are not the only cause of climate change and the tourism industry also has its share of responsibility (Ladkoo, 2019). As reported by Seetanah and Snassee (2011), Mauritius is strongly dependent on fossil fuels. As such, the carbon dioxide emissions associated with fossil fuels have risen. According to the Ministry of Finance and Economic Development (2017), figures on per capita carbon dioxide emission reached 3.3 tons in 2017 compared to 2.8 tons in 2010 (Central Statistical Office, 2010). At the same time the island has registered a growth of 6.6% in tourists arrivals from 2016 to 2017 (Ministry of Tourism, n.dc). According to Durbarry and Seetanah (2015), related tourism

activities such as air travel, inland traffic, food production and construction may have aggravated per capita carbon dioxide emissions.

Given the location of Mauritius far away from its main tourism market, the island is strongly dependent on fossil fuels, bringing about higher carbon dioxide emissions and thus an increased challenge for the Mauritian economy. In their study, Durbarry and Seetanah (2015) found that a 1% increase in tourist arrivals is associated with a 0.08% increase in CO2 emission in the long run. Although the impact may seem relatively small, it is significant. Additionally, Durbarry & Seetanah (2015) analysed in their study the economic impacts of climate change on the tourism demand in Mauritius and concluded by claiming that climate change may push away tourists due to the rising sea level, biodiversity loss, increased natural hazards and increasing incidence of diseases, adversely impacting tourism.

Consequently the island has taken major steps toward integration of climate change adaptation across various sectors (Mahadew & Appadoo, 2019). A prime development is the establishement of the Climate Change Unit under the Ministry of Environment, in charge of the adoption of a national climate change adaptation programme and for the collection of implementation funds (The Ministry of Environment, Solid Waste Management And Climate Change, n.d.). Other noted efforts are through travel philanthropy, carbon offsetting programs, tourist sensitization measures, workshop education in universities but also from professionals of the industry and last but not least the use of technology such as smart hotels (Ladkoo, 2019). Contrary to Covid-19 which is a temporary crisis, climate change is ongoing and set to be around for a long time, and maybe even indefinitely. However, both crises share common points. Indeed, they are both global and they both strongly affect the tourism industry. But these aren't the only challenges the Mauritian tourism industry has had to go through.

If we look a little bit back in time, Mauritius suffered a series of shocks including the outbreak of the chikungunya fever and the global financial crisis in 2008-2009, which hit the tourism sector particularly hard (Imam & Kohler, 2010). The crisis, which was provoked by the collapse of the US housing market and the rapid increase in global oil prices, appeared to be the longest and the most serious recession since the great depression of 1930.

A considerable number of economies were severely affected, including tourism in Mauritius (Solarin, 2016) which recorded negative growth of 7.6% in tourist arrivals in 2009 (Imam & Kohler, 2010). The behaviour of international tourists affected the hotel sector which saw a fall in occupancy rates. The economic crisis shifted purchase behaviour and urged tourists to adjust their spending habits as they preferred to replace large hotels for the benefit of smaller self-catering accommodation (Naidoo et al., 2010).

In response, the government announced a countercyclical package to try to mitigate the effect of the financial crises and stimulate the economy. The plan was to take necessary actions to alleviate the short-term adverse impacts of the crisis by developing several strategies (Solarin, 2016). One of them was through the marketing mix method to strengthen the image and positioning of the destination.

To fend off the economic crisis and increase occupancy rate, organisations were providing complimentary gifts to clients and were adopting different pricing strategies such as promoting specialized packages and setting up discriminatory prices to offer tailor-made offerings to specific markets (Naidoo et al., 2010). Other strategies were the improvement and diversification of the tourism markets and product portfolio and the encouragement of flexible air connectivity to the country during the transit period.

These actions can be found in all the strategic plans of the Island since the period of the financial crisis (Solarin, 2016). Smeral (2009) notes that in economically difficult times, consumers are more likely to choose domestic or closer destinations which are easy to reach and less costly. Travelling to closer destinations also provide the opportunity for day-tripping which is not possible when travelling to Mauritius.

#### 3.4 Impact of Covid-19 on Mauritian tourism

The outbreak of Covid-19 represents one of the biggest public health challenges Mauritius has gone through in many years (Stubinger & Schneider, 2020). In view of the rapid increase of cases affecting the social and economic aspects of the island, a state of emergency was declared in March 2020 and a lockdown was foisted on 19 March 2020 to control the spread of the virus (UNWTO, 2020).

The pick of cases was registered in the month of April 2020 and, as of the time where this thesis was written, Mauritius is considered as a level 2 (moderate) Covid-19 zone with an average of 2 cases per week (GitHub, n.d.; Centers for Disease Control and Prevention, n.d.). The Island plans to open for international visitors following 2 phases. On the 15 of July 2021 Mauritius will open up for visitors under the condition that they are vaccinated or can present a negative PCR test. The guests will be able to access all hotel capacities including beaches but are confined within the perimeter of the hotel unless they stay for a period of min. two weeks.

In phase 2, from October 1, 2021, travellers with a proof of vaccination are allowed entry without restrictions (MTPA, n.d). The early recovery of the outbreak is attributable to prompt action by the authorities, legislated in the Miscellaneous Provisions Covid-19 Act 2020 and Quarantine Act 2020 introduced in May 2020 (Chammun & Mathithibane, 2020).

The acts were categorised under a 3 stages plan scheme (1) Prevention strategy, (2) Outbreak management strategy, and (3) Communication strategy (Chan Sun & Lan Cheong Wah, 2020). The plan enabled the implementation of a nationwide lockdown, the proactive increase of provision of healthcare through quotidian testing and screening for early detection, the availability of quarantine centres for those infected as well as sensitization awareness initiatives such as physical distancing, sanitization and safe shopping protocols (Mamode Khan et al., 2020).

But, a growing warning from the unavailability of nutritious food and food security systems as a result of the loss of income, decreased agricultural activity, closed ports of entry and imposed restrictions on imports is believed to become an important social threat for the country, encircling the tourism sector. As such, the long-term effects could be an increase in poverty for the vulnerable part of the population (Chammun & Mathithibane, 2020).

In the last couple of months, close to 17% of Mauritian households have missed a meal (Statistics Mauritius, 2020). Because tourism is primarily centralized on leisure, social issues are expected to increase. The crisis is also likely to create major disruptions in the economic activity of the island since 60% of international firms operating in Mauritius stipulated having shortages in supplies of goods and raw materials from both national and international suppliers (Economic Commission for Africa, 2020).

Indeed, Mauritius is currently facing a critical economic downturn (Seegolam, 2020). In April and May alone, tourist industry foreign-exchange losses were estimated at \$300 million. In October 2020, the government was forecasting a contraction of -13% in the GDP ensuing losses of employment and reductions in government revenues from taxes, including foreign exchange earnings (Njiraini, 2020).

On average, Mauritian service-orientated companies are operating at 50% of their normal capacity with a decline in revenue of between 41 and 50%. The depreciation of the local Mauritian currency against the US Dollar and EURO is expected to translate into an hastened inflationary price increase for imported goods and decrease in foreign investment. The island has got a high external debt of 72% with reserves for 5 months only (MCB, 2020).

The tourism sector, which was already undergoing slow growth in 2019 (AHRIM, 2019) is at an absolute stop and income from turnover was announced as zero in July 2020 (Economic Commission for Africa, 2020). Reduction in tourism is having a negative repercussion on employment and net loss to the economy is expected to continue until the pandemic is over (UNCTAD, 2020). According to the minister of finance, the unemployment level in Mauritius could rise by up to 150%, consequently affecting the quality of life (CNBCAfrica, 2020).

All of these factors have direct and indirect negative consequences on the accessibility of resources for infrastructure and capital spending to continue developing the island, attract more tourists and offer a superior leisure experience. The unpredictability caused by the pandemic might affect not only national government infrastructure programmes but also foreign direct investment, which was an extremely valuable asset for the island (MCB, 2020).

To shield the effect of the virus on the livelihood of locals and entreprises, the Mauritian government has embraced a responsible and proactive approach which has led to the foundation of a solidarity fund to issue financial aid and financing for future plans (Government of Mauritius, 2020). The government has also established fiscal incentives in the form of increased financial assistance to businesses, wage support schemes and social welfare. Furthermore, a reduction in employee taxes has been introduced for those who work remotely (KPMG, 2020). The Mauritius Investment Corporation is also accelerating economic development and supporting and encouraging innovative driven initiatives for future generations (Seegolam, 2020).

# 4 Methodology Framework

In the following chapter the methods used to conduct the research are discussed. First and foremost the chapter informs the reader about the set of beliefs this thesis was written on. These include the question of ontology, epistemology and methodology. In a second phase the research design is described, as of which type of approach and data collection was chosen, followed by a thorough explanation of the way data were analysed. Finally, limitations of the chosen research method are exposed.

## 4.1 Paradigm considerations

A paradigm is a set of beliefs that guides action and, in the case of research, disciplined inquiry. Paradigms can be distinguished by the way they answer to three fundamental questions: the ontological, the epistemological and the methodological questions. The response to these questions is the starting point that determines the lense of the research and how it should be conducted (Guba, 1990; Jennings, 2009). The following subchapters justify the use of the constructivism paradigm and enable the reader to understand by which construct the researcher was driven while proceeding with the research.

The end of the twentieth century was accentuated with drastic social, cultural, technological, economic and political change together with a profusion of natural and human-induced disturbances, significantly contributing to global instability, uncertainty and unpredictability (Jennings, 2015). Most recently, the Covid-19 pandemic is a perfect example of a disaster that has given a consequential impact on worldwide economic development. The global spread of the virus is hovering uncertainty and seriously impacting people's business confidence (Ghosh, 2020). The complexity of the resultant interactions and their distributions across global contexts, principally for tourism economics and management, have demonstrated that western-based epistemologies and a positivist and postpositivist primacy no longer represent an illegible tourism research agenda in the current unpredictable world (Jennings, 2015).

Constructivism is an interpretive social sciences paradigm (ISS) (Jennings, 2004) which reflects that "... human beings do not find or discover knowledge so much as we construct or make it. We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience. Furthermore, there is an inevitable historical and socio-cultural dimension to this construction. We do not construct our interpretations in isolation but against a backdrop of shared understandings, practices, language, and so forth" (Schwandt, 2000, p.197).

Therefore, the lens of constructivism has been judged more relevant than positivism and postpositivism in later studies (Jennings, 2015). Guba (1990) defines constructivism as the basis for discovering "how things really are" and "really work". "Reality" only exists in the context of a mental construct. There exist a large number of theories aiming at "explaining" a

given body of "facts". Thus, no definitive conclusion can be drawn. There can be many constructions, explanations, and each theory has its own "reality". He adds that objectivity is non-existent and inconsistent within the constructivism paradigm.

The results of a research are always shaped by the interchange of the researcher and the researched subject. This makes the result of a research, not a report of what is "out there", but the residue of a process that creates them. It portrays knowledge as a human construction, in other words, as the outcome or consequence of human activity, never guaranteed to be ultimately true but problematic and constantly changing (Guba, 1990; Hollinshead, 2006). The research paper is written following the constructivism paradigm, whose proponents, and how they informed this research, will be discussed in the following sub-chapters.

#### 4.1.1 The ontological question

Ontology is the study of the nature of reality. It includes, among many other things, what entities exist and how these entities are related (Jennings, 2009). Ontologically, under constructivism, there always exist many possible interpretations that can be made in research (Guba, 1990) and multiple realities subjective to different actors participating in the research (Jenning, 20015). Thus, rather than producing generalizable and result oriented findings, constructivist studies focus on interpreting relationships between or across viewpoints and on the potential replicability of the study (Hunter, 2015). Ultimately, there is no alternative but to take a position of relativism. Relativism is what enables openness and the ongoing search for deeply informed constructions.

Realities are numerous and they exist in people's minds (Guba, 1990). Following this line of reasoning, it is acknowledged by the researcher of this paper that there might be infinite explanations of the researched phenomenon and not just one theory or model to explain it (Jennings, 2001).

Thus, the purpose of this research is not to uncover a universal theory that would explain how resilience can improve sustainable tourism development in Mauritius in a post-Covid-world. Instead, by interacting with industry stakeholders the goal of this research is to discover the multiple realities and the different perspectives that would ultimately enable the researcher to construct an informed knowledge and in-depth understanding of the researched topic (Creswell, 2003).

Nevertheless, if there are as many realities as there are people, the knowledge produced in this research paper, as well as the answer to the research question, should not be considered as final but relative (Tribe et al., 2015) since it is based on the perspectives of the participants of this research. This is not seen as a limitation of the paper since, as previously mentioned, the purpose of the research is not to uncover the truth but to generate knowledge and assess different stakeholder perspectives on how resilience can improve the sustainable tourism development of Mauritius in a post-Covid-19 world.

Furthermore, according to Guba (1990), knowledge and understanding, which are produced as a result of the interaction between the researcher and the researched, can scarcely ever be considered entirely reliable since realities regarding the phenomenon under study can change over time. This is especially true for the case of a study regarding Covid-19 since the crisis is constituted of various cycles constantly changing over time (Holladay, 2018).

## 4.1.2 The epistemological question

Following up on the notion of how the world is perceived, epistemology looks at the relationship between the researcher and the participants or object of research. It is the study that overlooks the necessary and sufficient conditions of knowledge (Jennings, 2001, 2009, 2015). Epistemologically, the constructivist takes a subjectivist position since the knowledge created as a result of the interaction between the researcher and the 'researched' is most likely shaped by personal belief and preconception from both sides (Creswell, 2003). Indeed, constructivism emphasizes that researcher and participant will reflexively and mutually influence each other (Hunter, 2015).

In this research thesis, the personal interaction with the research participants enables the researcher to identify multiple points of view in order to create knowledge and better understand how subjective viewpoints work in the studied dynamic systems (Meethan, 2011). Nevertheless, it is important to notice that the participants of this research are not representative of the wider population. The findings of the study are specific to those studied (Jennings, 2009).

Once a researcher has submerged himself in the ontology and epistemology foundations of a paradigm, its methodological proponents may be discussed. This means that, principally, paradigms provide a context for the research process in order to inform the methodology (Crotty & Crotty 1998, Jennings, 2009). The following sub-section provides an explanation of the methodology proponent under constructivism.

#### 4.1.3 The methodological question

Methodology is defined by Crotty & Crotty (1998, p.3) as "the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of methods to the desired outcome". Methodologically, the constructivist aims at identifying the variety of constructions and bringing them together for comparison. This process has two facets: hermeneutics and dialectics. The hermeneutic facet comprise depicting individual constructions as correctly as possible. The use of hermeneutics demands a thorough understanding of the context in which the analysed process takes place also called 'thick descriptions' (Geertz, 1973). Geertz was the first to use this notion to explain how the researcher collects data which, once analysed, is a "construction of other people"s constructions" (Geertz, 1973, p. 9).

Thus, this type of methodology aims at developing informed constructions and at keeping channels of communication open to enable sophistication of the information (Guba, 1990). Using an informed grounded theory approach, the researcher of this study adopted the hermeneutic method as the research seeks to understand the opinion of all studied social actors, valued equally, and depict them as correctly as possible. The paper starts with a 'thick description' of the notions of the research, sustainability, resilience and Mauritian tourism, and then identifies multiple realities (Fetterman, 1989) through the lens of a variety of tourism actors which are later interpreted, discussed and reflected upon (Jennings, 2009).

In addition, the constructivism paradigm assumes an inductive approach to research and begins the study in the empirical world so as to develop clarification of the phenomena. Their generalisations form the foundation of 'theory building' and generation commencing with 'theory' to later test it in the empirical world (Jennings, 2001). This research paper is using an informed grounded theory approach, which follows the inductive proponent of the constructivism paradigm.

As such, the paper uses the 'sustainability-resilience' integrated theory, obtained through secondary research, to form the structure of the interviews and guides the questions toward the topics of sustainable tourism development and Covid-19 resilience in Mauritius. The secondary research was conducted through the literature review of academic articles and books collected on google scholar and on educational online libraries. The following chapter thoroughly discusses the research design and method used to answer the research question.

## 4.2 Research design

## 4.2.1 Approach: Informed Grounded Theory

Under the constructivism paradigm, researchers most commonly make use of a qualitative methodology in order to successfully gain in-depth knowledge from the study setting (Jennings, 2009). Within this qualitative research method, two key questions must be addressed: What kind of research design is utilized and which methods and tools should be utilized to gather and analyse empirical data (Jennings, 2009; Walliman, 2006).

Informed grounded theory is defined as a research strategy whose purpose is to generate theory from data but, unlike grounded theory, uses literature as a possible means of inspiration, creative associations and multiple lenses (Thornberg, 2012). Kelle (1995, 2005) recognises that pre-existing theories and research findings can be used as 'heuristic tools' that help the researcher to focus the attention on a social phenomena as well as see beyond data.

It challenges the idea of delaying the literature review, proposed by the grounded theory, based on the belief that a researcher cannot 'unlearn' what is already learned (Schreiber, 2001) and that, on the contrary, the mandate might force the informed researcher to pretend to be a 'theoretical virgin' (Clarke, 2021), which subsequently could mask preconceptions.

It approaches the constructivism paradigm (Annells, 1996) and is 'both a way to do qualitative research and a way to create inductive theory' (Backman & Kyngäs,1999, p.147). Qualitative research is used to discover the potential antecedents and factors about which little has been known and examined (Corbin & Strauss, 2014). To conduct this study, the informed grounded theory was deemed suitable, since the aim was to uncover new knowledge from the analysis of stakeholder's perspective on the effect of Covid-19 resilience on sustainable tourism development.

The research problematic was chosen based on the gap in the literature, as identified by the researcher, within the practicability of the use of resilience linked to sustainable tourism development. Hence, to conduct the study, the researcher uses some knowledge about the research phenomenon but intends to explore this knowledge even further by analysing the perspective of tourism stakeholders rather than just the work of other researchers.

Therefore, the theoretical framework does not pursue to approve or negate the integrated sustainability-resilience theory, but endeavours to create outlines, stabilities and significance of the topic by collecting data (Gray, 2013).

#### 4.2.2 Data Collection: In-depth research

In this research paper, the method of empirical material collection chosen is in-depth semistructured interviews. Within this data collection approach, sampling does not have to be drawn from samples of specific groups and units of time but can be selected in terms of their concepts, properties, dimensions, and characteristics (Corbin & Strauss, 2014; Olshansky, 1996; Glaser, 1978; Glaser & Strauss, 1967).

Hence, the selection of participants was guided by a purposive sampling technique. This form of sampling strategy enabled the researcher of the paper to select respondents prior to the data collection and based on her own judgement of who would best answer the interview questions and meet the objective of the study (Saunders et al., 2003). Yuksel et al., (1999) suggest that sampling of participants should vary between stakeholder groups.

In addition, Nunkoo & Ramkissoon (2016) note that a review of existing literature proposes the classification of tourism stakeholders into three categories: (1) public sector/governmental officials (2) private sector, and (3) nongovernmental organizations/interest groups.

As such, participants were selected to represent these categories of stakeholders based on their knowledge, role, experience and influence in tourism development in Mauritius (Nunkoo & Ramkissoon, 2016). This classification was also favored to ensure that all stakeholders involved in the sustainable tourism development of the island were represented (Getz & Timur, 2012; Byrd, 2007), in line with the focus of the study, as shown in Table 1. Half of the participants were found online and approached on their email, the email of their organisation or on linkedin, while the other half were found through personal connections, enabling research access to be achieved without too many difficulties.

Maccoby & Maccoby (1954) described the interview as 'a face-to-face verbal exchange, in which one person, the interviewer, attempts to elicit information or expression of opinion or belief from another person or persons' (p.449). Under the constructivism paradigm, there is a focus on the situational practice of interviewing and a distrust for discourses of data. The interviewer is rather portrayed as a "traveler", undergoing the co-construction of whatever knowledge comes up from the conversation with the interviewee (Kvale & Brinkmann, 2008). Hence, the study relies on data collected from conversations with industry stakeholders. As suggested by Brinkmann (2007), the research makes use of semi-structured interviews as it

produces potential dialogues, make a more efficient use of knowledge and create room for following-up on angles which are deemed important by the researcher. Semi-Structured interviews also give the interviewer a better chance to produce knowledge in the process itself. Finally the interviewer has a finer say in directing the conversation on a topic that he/she deems more important (Brinkmann, 2007).

Participant No.	Stakeholder Group	Organization	Interview Lenght
1	Public sector/ Governmental officials	Mauritius Promotion Tourism Authority	20min
2		Polytechnics Mauritius Ltd	40min
3	Private sector organisation	Sun Resorts	45min
4		Sun Resorts	30min
5		Veranda Resorts	50min
6		Tourism Intelligence Mauritius	60min
7	Non-governmental organisation	Environmental Protection and Conservation Organisation	45min
8		Mauritian Wildlife Foundation	50min

Table 1: Interview Participants

The aim of the interviews was to get stakeholders' perspectives on the role of resilience in the sustainable tourism development of Mauritius in a post Covid-19 world. To do so, the interview guide is composed of open-ended questions categorized following the components of the integrated sustainability-resilience theory. The theory identifies three components, which, within the spheres of sustainability, and based on flexibility, adaptability and learning, should be incorporated by destinations in order to revive and/or transform the tourism industry after a disturbance.

In this research paper, the three components, namely 'harness market forces'(1), 'leadership'(2), and 'stakeholder cohesion'(3) as well as the broader contextual factors,

'flexibility'(4), 'adaptability'(5), and 'learning'(6), forms the six themes identified to structure the interview questions, as shown in Table 2. This categorization was judged relevant by the researcher since it includes all the principal themes that are necessary for a destination to be resilient, while covering all four principles of sustainability. Hence, the answers of the interview participants enabled the researcher to link resilience and sustainable tourism development in the context of Covid-19 in Mauritius. The questions were then re-organised to ensure that the interview follows a 'natural flow' and can be seen in Appendix 1.

Themes	Questions
Harness Market Forces	
	How can you/the destination regain tourists confidence?
	In your opinion, what will tourists expects from Mauritius as a destination after covid-19?
	How do you intend to meet tourists's needs in the near future?
Leadership	
	How does covid-19 affect the leadership of your institution?
	Do you expect the tourism industry and its actors to be working differently in the future?
	How do you foresee that your employee's enthusiasm can be regained?
Stakeholder cohesion	
	Is covid-19 impacting your relationship with other industry stakeholders? If yes, in what way?
Flexibility	
	What are the new (tourism) legislative initiatives, put in place due to covid-19, that are impacting you direclty?
	What innovations have you planned taking into consideration covid-19?
Adaptability	
	What transformation the industry/your organisation is going through because of covid-19?
	Which areas of actions are currently prioritised by your institution?
	Presently, what is the involvement of local communities in tourism/your initiatives?
	How do you see this involvement evolving in the future?
Learning	
	What are the most valuable lessons you have learned from Covid-19?
	How do you prepare for similar perturbation in the future?

# Table 2: Interview guide

According to Cochrane (2010), without successful engagement with the market, systems are not expected to survive.

The questions under category (1) 'Harness Market Forces' enabled the researcher to get stakeholders perspectives on the market's, here tourists, expectations, needs and confidence to travel to Mauritius in a post Covid-19 world.

The category (2), 'leadership', aims at identifying possible changes in the leadership of the interviewee's organisations due to Covid-19 since the integrated theory conveys that clear vision and effective management is essential to the survival of a system.

(3) 'stakeholder cohesion' looks into the impact of Covid-19 on stakeholder's relationship since, when coordinated, can enable a more sustainable development of tourism. Category

(4) 'flexibility', (5) 'adaptability', and (6) 'learning' all look at the different ways the interviewed organisations adapted to Covid-19 whether it is through policy shift, innovation, adaptation to market trends, the creation of supply chain linkages or valuable lessons learned that can be used in future practices (Cochrane, 2010). The focus of the interviews were to identify potential emerging themes linking the two concepts of resilience and sustainable tourism development, and to therefore understand to which extent and how resilience is improving sustainable tourism development in Mauritius.

Data collection took place during the months of March and April 2021. Interviews lasted between 40 and 60 min and were conducted through face to face online meetings. A total of 8 in-depth interviews were conducted and analysed because theoretical saturation was achieved with the 8th participant.

The data gathered afterward neither provided valuable additional knowledge nor revealed new properties of the sustainability-resilience theory (Glaser & Strauss, 2017; Charmaz, 2006; ). From this point on, the insights needed to code the data appeared to be sufficient, which enabled the researcher to come to the conclusion that the theoretical saturation was reached (Lincoln & Guba, 1985). All along the process, theoretical sensitivity, a key concept of grounded theory, was applied to produce concepts from data and to relate them to the core theoretical themes. Interviews were conducted with a few predetermined ideas so that the researcher could remain sensitive to the data and avoid pre-existing hypotheses and biases (Glaser, 1978).

#### 4.2.3 Axiology

Once the three questions, etymology, ontology and methodology were answered, the author should address the question of axiology and reflect its values and ethical consideration in regard to the research (Jennings, 2009; 2015; Guba & Lincoln, 1994).

Axiology is the study of values and ethics (Jennings, 2009). Looking through the lens of constructivism, values need to be included and formative, while ethics should have an intrinsic focus and lead the research process toward revelation of specific problems (Jennings, 2015; Guba & Lincoln, 1994). As we get to evaluate the world, we construct the system of our knowledge in link with our preferences and values. They become the driver of our decision making, which is the sense of our life.

Depending on the direction we choose to take, we cause changes to the world as well as in us. The constant re-construction of the world around us and of ourselves is therefore managed by our value system (Antlová et al., 2015). Tribe (2004) also explains that human inquiries are motivated by interests, and in line with constructivism the main interest is to seek understanding. As the value-laden focus of this research paper is to understand the various perspectives of different tourism actors, when it comes to resilience as a means to improve sustainable tourism development, the axiology of the research can be considered being within the constructivism paradigm.

Goodson & Phillimore (2004) adds that the indexicality of knowledge, in other words the contextual position, is valid and reliable because it is connected with a specific temporal, geographical or social moment. Therefore, by choosing a specific location, Mauritius, the researcher wants to align with the axiological question of the constructisvism paradigm and emphasize that the knowledge created cannot be generalized, not only because knowledge is

proper to the respondent, but also to a specific location, in a world with many other realities and findings.

Lastly, when it comes to in-depth semi-structured interviews, the ethical discussion was met when the interviewees were informed about the topic and the purpose of the conversation. The respondents were aware their participation would be anonymous, and all volunteered to take part in the research. The interviewees were well informed of the need to record, transcribe and analyse the content and meaning of their answers.

# 4.4 Data Analysis

Like the grounded theory (Thornberg, 2012), the informed grounded theory method is based on two data analysis principles, namely scanning over the collected information to obtain an overview of the data and identifying interesting findings, and the coding of the data to isolate significant incidents, events, issues, processes, and relationships (Corbin & Strauss, 2014). The data analysis of the research was based upon the above mentioned stages. Firstly, the researcher carefully read several times the interview transcripts and underlined core words and sentences.

Informed grounded theory is inductive at its core (Thorberg, 2012) and Charmaz (2006) suggests that inductive studies proceeds with analysis by comparing data with data (developing codes), comparing data and codes (developing tentative categories), and developing categories into identifying emergent concepts that are compared with other concepts. To do so, and proceed with the second stage of the analysis, the researcher used the three phases recommended by Corbin & Strauss's (2014), open coding, axial coding and selective coding. The third phase, selective coding, was not judged relevant by the researcher since the core theme is already defined by the sustainability-resilience integrated theory under 'sustainable management of resources'.

Furthermore, it is important to remind the reader that the aim of the study is to add practical knowledge and discover new contents to the existing components of the sustainability-resilience integrated theory and not to create nor modify a theory. Open coding, or also called initial coding, is often used as a process to "break down, examine, compare, conceptualize and categorize data" (Strauss & Corbin, 1990, p. 62). It helps the researcher to discover participant's views rather than assuming that researcher and participants share views and world (Charmaz & Belgrave, 2012).

Line-by-line coding is a method to conduct open coding and was used to break down segments of data into parts. These segments contained words and phrases that were abstracted under conceptual headings. The data were coded for similarities and differences and implicated continuous comparison of indicators and concepts with new data, which consecutively derived to new concepts (Foley & Timonen, 2015).

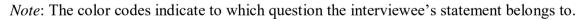
Table 3 provides an example of how the open coding was applied using the line-by-line method. The right column contains the interview statements and the left column underlines the initial codes extracted from the raw data. The transcript of each participant was read and analysed individually in order to pinpoint the emerging ideas and opinions mentioned by each respondent.

Within each transcript, every line was analysed to extract specific information and interviewees general perspective on tourism resilience within their own context. For example, a respondent's view that "we should always diversify wherever we are doing projects…Not always dependent on tourism or external funding…we need to prepare like several projects that are ongoing on the local market where the products and services can be sold to the local market' was coded as "diversifying projects", "reducing dependence on tourism and external funding", " entering the local market".

All along the process, the coding tries to remain 'close to the data' so that the researchers do not make any interpretations that are drifting away from the participant's (Charmaz, 2006). Since the research is informed by the sustainability resilience theory, the codings were already pre-categorized under the different themes of the integrated model, following a color code. A total of 356 initial codes that summarized the data were identified and from there on, the axial coding of the data was undergone.

Table 3:	Sample	of open	coding
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Themes	Open-coding	Interview Statement
Learning Q1 Q2	Diversifying projects; Reducing dependence on tourism; Entering the local market; Diversifying product/market for risk prevention; Reducing dependence on external funding; Reducing dependence on tourism to avoid other project to be affected	And what we have learned from this is that we should never put all our eggs in only one basket. So we should always diversify wherever we are doing projects. For example, the project that was depending on the tourism, we should have been doing other projects that we did in the past. So that you know when the tourism will stop, we can also sell it to the local marketSo the most valuable lesson learned for us is to diversify and not to only depend on things that can be affected with the virus, not only COVID-19 but I am sure there will be other viruses that can come up anytime in the future. And in terms of the NGO, I think what we need to do is, you know, we need to diversify our projects. Not always dependent on tourism or external funding etc we need to prepare like several projects that are ongoing on the local market where the products and services can be sold to the local market to sustain the NGO in
	Sensitizing to value nature; Rethink economic models, consumption patterns; Increasing frequency of pandemics	terms of financial needs. This would be like an ongoing project because the main in haven project was sustaining the office, was sustaining the people employed, but then when it stopped completely, because there was no tourism. It's really bad because we have found ourselves in a very big, difficult situation to sustain our workers and the project and everything else. So yeah, this is how I think we should be prepared for the future.
	Developing contingency plans; Increasing development of risk management exercises in the future	Most valuable lesson is to value nature. And I think it's if we come out of this, and it's business as usual, we would have missed the whole point of COVID-19. The message of COVID-19 is you have to protect the Earth, you have to restore the earth, you have to relook at the economic models, we look at the consumption patterns, all of thisAnd also, this is not going to be the last pandemic. You look at the incidence of pandemics around the world SARS and all of that and coming up to COVID-19. So the frequency is getting more Ebola Zika you name it. All of those pandemics and all these problems, is just telling you that, you know, we have to really look at our relationship with the earth. Unfortunately, I



While open coding enables the breaking down of data into discrete parts, axial coding aims at drawing connections between codes (Corbin & Strauss, 1990). With axial coding, the purpose is to organise the codes developed through initial coding. According to Dey (1999), the process of grouping concepts reaches a higher and more abstract level than the initial categorization of raw data. To do so, the researcher carefully went through the highlighted raw data and the initial codes created in the previous stage, to then regroup the relevant categories into subthemes.

For example, initial codes derived from the open coding process, such as "concentrating on domestic tourism", "lowering prices", "increasing interest in event planning", "Focusing on long term tourists " and so on were grouped together to form a subtheme labeled as *Diversifying the market and the offer*. Or "leading to transformation of tourists expectations", "leading to transformation of hygiene and safety measures", "changing guests desires to reconnect with nature", "changing guests desires to be closer to local communities",

"increasing anxiety to travel" and so on were grouped together to form a subtheme labeled as *Understanding tourists behavioral change*. With the use of axial coding, it was possible to get a more general view of stakeholder's perspective on the role of resilience within sustainable tourism development in the context of Covid-19.

A total of 10 sub-themes were identified namely: (1) Understanding tourist behavioral change, (2) Developing a more inclusive tourism, (3) Increasing the engagement of the tourism industry in environmental practices, (4) Strengthening the cultural tourism, (5) Diversifying the market and the offer, (6) Adapting marketing strategies, (7) Adopting innovative practices, (8) Strengthening stakeholder collaboration and mutual understanding, (9) Developing contingency plans and risk assessment and (10) Developing appropriate policies.

Table 4 is sample of the axial coding and exemplifies how the connection between the initial coding and the axial coding was done in practice.

Open-Coding	Axial Coding (sub-themes)	
Encouraging local consumption; Concentrating on domestic tourism; Lowering prices; Increasing interest in event planning Reviewing operation strategies; Creating different transformation phases;	Diversifying the market and the offer	
Hotels converting in quarantine facilities; Focussing on long term tourists; Focussing on health and safety		
Uncertainty being a transformation in the tourism industry; Leading to transformation of tourists expectations; Leading to transformation of hygiene and safety measures; Changing guests desires to reconnect with	-	
nature; Changing guests desires to be closer to local communities Increasing anxiety to travel; Creating risk to travel; Pushing hotels to turn to the local market; Creating promotional packages to attract locals;		
Adopting different pricing strategy; Opening of the tourism offer for locals; Creation domestic tourism in Mauritius		

Table 4: Sample of axial coding

The initial and axial coding uncovered clear themes enabling the understanding of the role of resilience within sustainable tourism development in practice and in the context of each respondent. At that stage, the researcher particularly tried to notice and understand interrelationships by diving even further into the coded statements. The use of the literature on resilience and sustainable tourism development in the data collection was further exploited during the process of the data, in order to help build internal validity and deepen theoretical awareness (Eisenhardt, 1989).

# 4.5 Limitations

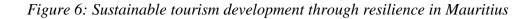
As mentioned in "4.2.1 Approach: Informed Grounded Theory", to conduct the study the researcher used some knowledge about the research phenomenon prior to the collection of the data. This approach forms the basis of the informed grounded theory method but, nevertheless,

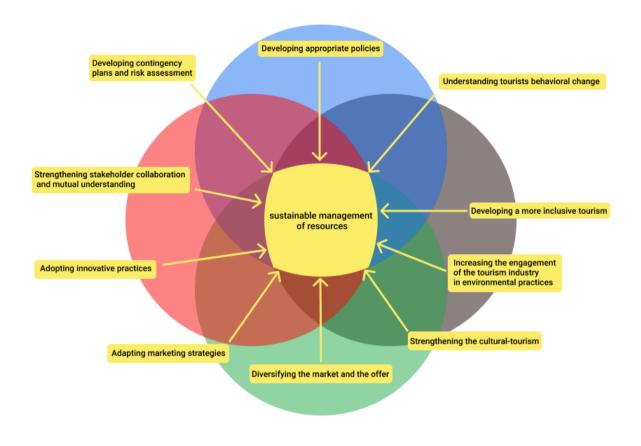
can be seen as a challenge as previous knowledge may direct the research and make it more difficult to uncover new information (Olshansky, 1996).

With travel restrictions closing the borders, the researcher could not be physically present in Mauritius to conduct face to face interviews. It is argued that the viewing perspective, referred to by Weller (2015) as the "talking heads' perspective" may limit visibility to body language (Cater, 2011) as well as reduce the interviewer's ability to reassure the interviewee when in distress (Sedgwick & Spiers, 2009). In addition, the interview questions were sent prior to the participants to allow reflection before response. However, this practice is also debated as it may reduce spontaneity and fail in getting the "unfiltered truth" (Hamilton & Bowers, 2006).

5 Findings and discussion on resilience for sustainable tourism development in a post- Covid-19 world

The presentation of the findings is organized around the ten sub-themes that emerged from the analysis: : (1) Understanding tourists behavioral change, (2) Developing a more inclusive tourism, (3) Increasing the engagement of the tourism industry in environmental practices, (4) Strengthening the cultural tourism, (5) Diversifying the market and the offer, (6) Adapting marketing strategies, (7) Adopting innovative practices, (8) Strengthening stakeholder collaboration and mutual understanding, (9) Developing contingency plans and risk assessment and (10) Developing appropriate policies. The findings are then critically discussed in consideration of the broader academic literature. The views expressed by the 8 participants suggest that Covid-19 is a many-sided disturbance that affects the economic, socio-cultural, environmental and political pillars of the destination. Participants implied that Covid-19 pushed them into thinking critically about new ways of approaching tourism, confirming the transformation mentioned by existing literature (e.g. Lew et al., 2020; Brouder, 2020; Cheer, 2020). The data demonstrate that Mauritius seems to be in the second phase of the system, discussed in "Chapter 2" and described by Lew et al., (2020), in which different stakeholders have come to realize that tourism practices need to change. Findings suggest that new values are nesting from Covid-19 and directed toward a more environmentally and socially conscious future. Using an informed grounded theory method, the findings of the research respond to the research question on how Mauritius can build resilience to improve sustainable tourism development in a post-Covid-19 world. The answer to the research question is modelized in a framework, as shown in Figure 6. According to the findings, if incorporated together, the ten subthemes mentioned above can enable a more sustainable management of resources within the economic, environmental, political and socio-cultural spheres.





#### 5.1 Understanding tourists behavioral change

During the interviews, participants described the change of tourists behavior. Two aspects of this behavioural shift stand out from the findings as key criteria when choosing a destination, namely the importance of health and safety measures and an increase in social and environmental consciousness. Participant 6 mentioned that tourists will be expecting excellent health and safety conditions. Notably, "they will be very mindful of the level of hygiene, quality of life...sanitary protocols" and "behavior of the host population". Participant 2 and 3 argued the same and mentioned that "tourists will rely on the safety of the country" and will be "more conscious of these aspects". Several participants also described the ways in which tourism organizations will have to adapt to meet tourists consciousness for health and safety issues. Participant 3 claimed that the focus in safety issues do not only imply guests but also employees and associates. Participant 2 and 8 stated that businesses "will be having more strict protocols" and will be constantly controlling "temperature, sanitization and distances". Finally participant 4 claimed that having "a proper guideline, protocol in place...can reassure the guests". According to the interviewee, this is to be done through the vaccination of all staff members, the sanitization of every used amenities and the adoption of a certification which ensure that

hygiene and sanitary protocols are being respected by the business. So far, the majority of studies on tourism transformation after Covid-19 have confirmed the above mentioned statements. For example, Nepal's (2020) study on adventure travel and tourism after Covid-19 concluded that hygiene, sanitation, access to quality health services, and trustworthy health and safety information are going to be critical for tourists. Similarly, the World Travel Tourism Council (2020) also stated that trust, substantial communication and the transparency of accurate information between travellers and employees, businesses and suppliers, visitors and local communities will be a key factor in the recovery of the sector. Thus, it can be suggested to Mauritian businesses to closely collaborate with their extended value chains to ensure readiness and implementation of protocols for tourism resilience (WTTC, 2020).

In regard to the increased in environmental and social consciousness, Participant 2 and 4 mentioned that tourists will "seek for places where they don't have much contact with the crowd". "More and more guests talk about wanting to reconnect with nature, wanting to be more aware, wanting to connect more with the communities and do something that will have an impact". A view defended by Stankov et al., (2020) claiming that there has been an apparent change in consumer behavior and that the post Covid tourism industry could benefit from more conscious consumers that are more aware of their unconscious behaviors and purchasing patterns.

Additionally, in a study on the future of tourism behavior conducted by Wachyuni & Kusumaningrum (2020), 66% out of 128 respondents answered that nature tourism would be their preferred type of tourism. Skwachàys Lodge in Vancouver, Sakau Rainforest Lodge in Borneo and 3 Rivers Ecolodge in Dominica are good examples of hotels that might attract the post-Covid-19 tourist as they enable guests to participate to both the protection of the local environment and the wellbeing of communities. Skwachàys Lodge (n. d) is a social enterprise featuring indigenous artwork in their gallery but also in every single room of the hotel. The organisation provides the funding for 24 living and local work studios, pay the artists for each purchased craft and provide housing for local artists whenever a guest stays overnight.

Sakau Rainforest Lodge (n. d) runs a non-profit research and development centre to manage community and environmental programs, funded by 36% of the hotel's profit. On their website the hotel portrays the following slogan: 'Impacting the world together, giving back while you travel' and informs guests in which ways their stays help to fund the community and social projects in Malaysian Borneo.

Last but not least, 3 Rivers Ecolodge (n. d) define themselves as a 'sustainable living education centre' offering the guests a range of voluntary and adventure activities as well as sustainable living property tours and workshops.

Furthermore, One Seed Expeditions (n. d) and Jumbari Safaris (n. d) are two tour operators (TO) reinvesting a part of their profit in local entrepreneurs and conservation initiatives. It can therefore be suggested that Mauritian travel and tourism businesses should further develop partnerships with local communities to design authentic experiences (WTTC, 2020) and develop a more sustainable tourism through resilience initiatives.

The concept of authenticity though is far from new and has been persistently criticised for its tendency to objectify and exoticize the 'other'. According to MacCannell (2002, 2008), as soon as tourists express the desire to travel more consciously searching for 'authentic' interactions, those interactions themselves become prone to commercialization and commodification. It is therefore crucial to find ways for host communities to represent themselves in ways that they judge appropriate and dignified (Scheyvens & Biddulph, 2018). Furthermore, Moscardo & Pearce (2019) point out eco-fatigue in relation to demand for, and responses to, sustainable tourism. The authors argue that if tourists may be supportive of sustainability practices, their psychological exhaustion from continued media exposure may also bring about a negative backlash to tourism products marketed with too explicit a focus on eco-consciousness. Therefore, Mauritius should be precautious when marketing the destination.

#### 5.2 Developing a more inclusive tourism

Participants further described the necessity for the post-Covid-19 Mauritian tourism to better involve local communities and MSMEs with regard to a circular and inclusive economy. Participant 1 and 8 argued that "Because of Covid-19, the tourism industry is going through a rethink of the whole supply chain to adopt best sustainable practices... tourists will also expect Mauritius to offer sustainable product and inclusive tourism after Covid-19". "The message of Covid-19 is that you have to...relook at the economic models and consumption patterns". Participant 1 and 2 mentioned that "in the future, the involvement of local communities will be reinforced in regards to a circular and inclusive economy" and that it is also the role of the government to "involve the people in the decision making process". At the global level, inclusion is among the main principles behind the SDGs (Rogerson & Visser, 2020). As stated by participant 2 and highlighted by the United Nations Development Program (UNWTO, 2018), inclusive tourism requires all voices to be heard and all stakeholders to contribute to the creation of opportunities and the share of benefits. Scheyvens & Biddulph (2018, p. 592) define inclusive tourism as a "transformative tourism in which marginalized groups are engaged in ethical production or consumption of tourism and the sharing of its benefits". Thus, the authors imply that it is not only limited by economic growth but also influenced by ethical concerns for people. This definition can be associated with social development objectives embedded in SDGs, including human dignity and how to overcome inequalities (Scheyvens & Biddulph, 2018).

Participant 6 blamed this unequal distribution of wealth from tourism on all-inclusive resorts, accused of creating profit for large companies and developing exclusive enclaves for the rich (Jamal & Camargo, 2014; Gibson, 2009; Harrison, 2001).

"The private sector in Mauritius...keep saying that they will offer all-inclusive packages...And this is something that I don't like. And I have been saying it in the press that all-inclusive packages must stop because it is damaging the nation, the local population is not getting any benefits, there is no equitable distribution of wealth from tourism. Only a couple of people are

getting the benefits of tourism and the rest of the population has been reduced to mere spectators of tourism development. This must change with the new situation. There has to be a reconfiguration of tourism... I think we have to pay lots of emphasis on MSMEs because these are the real job creators in the society, and it also helps keep the social stability"

This is also confirmed by the academic literature mentioned in "Chapter 3", stating that the social efforts developed by the private sector are not enough to redistribute the wealth gained from tourism. Hence the necessity to develop a more inclusive tourism. So, innovative inclusive business must be put into place allowing better employment and entrepreneurship opportunities for low income people (Ghosh, S., & Rajan, 2019). A movement that has already started with f.ex The Fair Trade in Tourism (FTT) which actively defends the unfavorable deals some producers get from bigger tourism organisations (Scheyvens & Biddulph, 2018).

In practice, the Slovenian Tourism Board f.ex is actively working on connecting tourism with local food producers through the development of policies aiming at creating links between family farms and catering and hospitality facilities (Jukić, 2019). Tren Ecuador is another good example of business aiming at improving the quality of life for local communities. As such, instead of separating tourists from locals, they encourage them to eat at restaurants and buy crafts along their journey across Ecuador (Monge & Perales, 2016). These two examples demonstrate that marginalised people can be transformed into tourism producers and could be more widely followed by Mauritian tourism organizations. Unfortunately, the power of larger companies in the tourism sector is becoming ingrained, making it hard for those wanting to start their own businesses. In fact, 15% of organisations which are internationally branded chains have 52% of the business, thus being dominantly present in the industry (Niewiadomski, 2014).

Several participants also explained how the private sector intend to become more inclusive by collaborating with local artists to display handicraft in the hotels and with local farmers to provide seasonal products. Participant 2 explained "we have many hotels encouraging artisanal. People having their business in our artisanal, crafts, are invited to craft markets which hotels organize... they have the opportunity to talk to tourists and explain how the products are being made". Participants 3 and 5 described "Now I will be more focused on the local suppliers...we need to make everyone contribute.... And with Covid I think it is essential that the people know where the products come from" and "We are going to see how self-sufficient we can be using more local products in our food and beverage. Because with the limited supply we've experienced during Covid... we're trying to see...if we can have seasonal vegetables and fruits". But other ideas to better include communities have recently blossomed in tourism businesses around the world. In Jamaica for example, an online platform was developed to allows buyers in the hotel industry to directly purchase goods from local farmers. An initiative that does not only enable a more inclusive tourism but that also allows investment in non-tourism sectors by increasing cooperation between tourism and locally produced agriculture, manufacturing, and entertainment (Rada, n.d.). A strategy that if followed by Mauritius could create employment of income-generating opportunities as well as meaningful and sustainable impact for the local population (OECD, 2020).

# 5.3 Increasing the engagement of the tourism industry in environmental practices

This sub-theme highlights participants' view that the tourism industry should increase its engagement in environmental programs to develop tourism sustainably in a post Covid 19 world. Participant 8 mentioned his dissatisfaction with the engagement of the private sector in environmental programs, judging them too weak. He claimed:

"To be honest, the hotel industry in Mauritius has not supported conservation of the environment enough...Hotels pay a tourism tax. A green tax. And very often the hotels say we've already paid our tax and we're not giving any more. So this has been one of the problems with the hotel industry, even when they are making money, first of all, they keep saying they're not making money, although we had 1.3 million visitors, they keep saying we are making losses. And secondly, they were saying, we've already paid our taxes. We're not giving any more. I very often blame the hotel sector for not having played its role in environmental protection."

A point supported by a number of academic literature arguing that business actors are mostly driven by self-interest, reputation and brand value when it comes to their relation with the SDGs. The focus is mainly on voluntary change versus regulation, accompanied by soft practices to limit environmental impacts rather than transformational changes in production and consumption (Pingeot, 2014; Scheyvens et al., 2016; Lu et al., 2021). Some participants explained adopting a range of "soft" environmental practices such as plastic free usage, waste and water management, solar panels and green labels. One of the participant additionally described the implication of his hotel in marine conservation through funding and the desire to "extend the green labels to all the hotels of the chain".

Interestingly enough, nearly all participants listed the value of "nature" as the most important lesson they gained from Covid-19 and the necessity of the industry to be more in line with the environment. Participant 6 and 8 argued that lifestyles must be changed "the biggest lesson is we have to live in harmony with nature...we have to change our way of life" and "if we come out of this, and it's business as usual, we would have missed the whole point of Covid-19... we have to look at our relationship with the earth. Unfortunately, some people are not thinking along those lines." Participant 3 added that Covid-19 has enabled the earth to regenerate, awakening environmental awareness of tourism industries "in our marine research center we realised that during Covid-19 this past year, the coral has doubled the growth while it usually takes 2 years... we can see that nature is recovering and regenerating. And it's making us more conscious". Values put into practice by the Living Building Challenge, recognised as being among the most rigorous sustainability standard guidelines and designed to guide organisations to redistribute energy and use the least amount of energy as possible (International Living

Future Institute, n.d). For example, listed as one of TIME Magazine's "World's Greatest Places" (Wunderman, n.d.), Camp Glenorchy (n.d) in New Zealand uses 50% less energy and water than comparable resorts and generates 105% of the energy they use onsite over the course of a year. Such guidelines could be followed by resourceful Mauritian tourism organisations to make a real environmental impact.

However, SMEs which represent 40% of Mauritius's GDP and 54.6% of total employment (Minister of Business, Enterprise and Cooperatives, n.d), frequently struggle with implementing green operation practices despite their potential positive impacts on the environment that could be decisive and valuable (Lu et al., 2021). Barriers such as high maintenance and implementation cost, scarcity of sufficient knowledge on green initiatives and resources, lack of will from the hotel industry owners, lack of a sense of urgency and ambiguity of environmental protocols and guidance, lack of qualified consultants, lack of government regulations and enforcement and difficulty in managing a green hotel have been discussed by several studies (Cantele & Zardini, 2020; Verboven & Vanherck, 2016; Yusof & Jamaludin, 2014). A simplified framework about how to implement green initiatives and appropriate funding for both the implementation of earth-friendly initiatives and staff training could encourage SMEs in achieving positive environmental impacts.

## 5.4 Strengthening the cultural- tourism

Interviewees mentioned the necessity to strengthen relationships with the community in an attempt to meet guests' expectations for cultural enrichment and interaction with locals. As mentioned by participant 5 and 6, "people want to be educated as well, they want to learn about the culture". Tourism in a post-Covid-19 world will be focusing on "experiencing life, interacting with other human beings, understanding their way of life, understanding their customs, their history, their culture, their religion, their faith. I think the tourism of tomorrow will be more about experience". Hence, the findings implies that Mauritius should be more aligned with its culture and provide experiences enabling more interactions with communities to attract the post-Covid-19 tourist. An opinion supported by Higgins Desbiolles (2020) claiming that responsible practices within tourism will not offer sufficient capacity to enable the reset of the industry's sustainable development after Covid-19.

Indeed, such an aim demand a community-centred tourism framework that transforms and reorients tourism taking into consideration the rights and interests of local communities. Kato (2020) added that community-based sustainable tourism should be conceptualized as part of resilience planning. Cultural tourism is a form of community tourism and is one of the fastest growing segments of the industry, accounting for about 40% of all tourism worldwide. It is considered by many countries to be an important pillar of employment in tourism markets. In addition to be considered as a driver of inclusive community development to encourage resiliency, inclusivity, and empowerment (UNESCO, 2021) it has the capacity to attract high

spending visitors, boost up attractiveness and competitiveness of the destination and enhance the culture of the host country (Pudaruth, 2017).

Pudaruth (2017) argues that few efforts has been made in recent years to develop the cultural tourism offer in Mauritius. While participant 5 discussed about reorganizing old activities lost with the mainstreaming of the tourism offer "it was so traditional to do a Mauritius cooking class 10 years ago. And then all of this disappeared but now we need to think about all of this again" participant 3 evoked his desire to innovate "we are looking towards creating new attractions or new features that the guests will be visiting...Some of these could be with the local committee or visiting one person within the community and leave the daily life of that community". Participant 4 gave a few examples of cultural tourism activities that could be adopted by his hotel post Covid-19 "We're wishing for the guests to communicate to the local community next door, like visiting the local gardens, the local plantation, cooking with the fruits and vegetables they would have picked up themselves guided by a local chef". Moreover, the director of a consultancy firm explained that the government has a vital role to play to encourage more the development of cultural tourism. He stated:

"The local community will have new opportunities. But government must facilitate the process, government must create the conditions for tourists to go and meet the locals, you know, and that will come through training of the locals, through the behavior through code of practice code of conduct, but at the same time, the private sector must be able to, to release a bit of their greed...So we have to create the facilities and set the platforms for harmonious cultural relations with foreigners. So the government has a major responsibility, the private sector must turn down their greed about tourism. And at the same time, they must...let the locals and the tourists come together. And the hotels will also be a platform for meeting the population".

A policy strategy that has been adopted by diverse countries such as Panama, Australia or Abu Dhabi which have seen their cultural tourism strongly affected by the pandemic. In their master plan for sustainable tourism development 2022-2025, Panama seeks to position themselves as a worldwide benchmark for cultural tourism with the development of heritage routes (Tourism Authority of Panama, 2020). In Australia, the 'Strategy for Culture and the Arts 2022' aims at aligning cultural policy more directly to support tourism and cultural tourism. The plan focuses on celebrating aboriginal culture and supporting engagement from a local audience to establish a broader footprint to build place identity and creative economy (Flew, & Kirkwood, 2021). Abu Dhabi also bet on cultural tourism for economic growth and diversification. As part of Oatar's National Vision for 2030, US\$27 billion have been allocated to the creation of a cultural district comprising museums, and cultural and educational institutions to reinforce the culturebased industries, composed of calligraphy, handicrafts and living heritage practices, as well as to attract tourism and talent to the city (General Secretariat for development Planning, 2008). Other organisations such as Lokafy (n.d), eatwith (n.d) or withlocals (n.d) have made cultural tourism their only selling point. These three online organisations are an example, among many others, of companies providing a platform to enable tourists to have a tour of the destination with a local or to share a traditional meal at a local's home.

It can therefore be suggested that Mauritius makes use of its heritage and culture to attract the post Covid-19 tourist, foster economic growth and sustainable tourism development and create competitive advantage. Such effort could be realised through the expansion of the 'social eating' and 'visit with a local' concept, the creation of cultural trails in nature or the development of cultural infrastructure highlighting both the heritage and local artisana.

But the director of a resort, participant 5 also pointed out a contradiction between the visitors' desire to engage with locals while respecting social distancing requirements "We had what we call the dinner at the inhabitant where guests went to the locals' place to eat...But now with the Covid-19 and the social distancing, can we still do that?... this is sad because it could have given us points, and differentiate us from the other destinations". Indeed, the essence of cultural tourism lies in this interaction between guests and locals (Seyfi et al., 2020), which might stay limited with regards to health and safety regulation in the near future. Virtual City Tour (n. d) is an organisation offering interactive online guided tours. The company transformed its way of working and developed technological innovations to survive and adapt to an emerging online market. A strategy that could also be followed by Mauritius to engage with travellers in an innovative way.

#### 5.5 Diversifying the market and the offer

Another common denominator among nearly all participants was their mention of Mauritius dependency in international tourism markets, and their Eurocentric offer limiting tourism expansion. The project coordinator of a governmental institution argued for the need to diversify the tourism market to be resilient and develop a more sustainable tourism in a post-Covid-19 "It's mandatory for the tourism industry to be working differently as we shall not be receiving our 1.4 annual tourists for some time...We need to go for a higher market to compensate for the loss while focusing on sustainable tourism". Similarly, participant 7 stated "The most valuable lesson we have learn from Covid-19 is that we should never put all our eggs in the same basket. We should diversify because I am sure there will be other viruses in the future". The tourism academic and the director of a tourism consultancy firm explained the role that Covid-19 played in the emergence of a domestic tourism market, "which was a bit scarce in the past". Both participants mentioned that with the cease of international flights, hotels had to "concentrate on domestic tourism" and therefore "lower their prices" and "offer very interesting packages, especially during weekends" to make their offer attractive and affordable to locals. Participant 6 provided the example of the island of Rodrigue, part of Mauritius, which proposed free stays for senior citizens hoping that they would bring their family for whom the stay is payable. Participant 2 also claimed that hotels were recently organizing events in the hope to attract locals interest "hotels are focusing on the organisation of all sorts of events depending on the population's needs. For example we recently had many concerts". A strategy also adopted by Fidji several years ago to enable Fijians to come and enjoy the resort's facilities (Scheyvens & Russell, 2012). Another very recent example is CostaRica which has temporarily moved national holidays to mondays and extended weekends to boost domestic tourism during Covid-19 (Goretti et al., 2021). The tourism board of Antwerp in Belgium thought of something different and more innovative and created an online eshop bringing shops and restaurants to people at home. The concept is based on the belief that destinations are the new resource hubs and locals who are sourcing shopping, gifts and amenities online should be the main market to satisfy (Visit Antwerpen, n.d.). Antwerp tourism provides a good example of how to bring domestic tourism further but also online. According to Mawdsley (2009) and Scheyvens & Russell (2012), such domestic tourism brings both economic and socio-cultural benefits. F.ex. It helps to break down barriers between different ethnic groups, it revives social ties between extended family and community groups, it encourages local servicing of tourism demands and spreads economic benefits to areas not frequented by outbound tourists. Therefore, the development of domestic tourism in Mauritius should not only be a solution for the survival of their businesses during Covid-19 but should subsist in a post Covid-19 world to ensure a more sustainable development of tourism through resilience.

Participant 6 also mentioned another strategy recently adopted by the Mauritian government and directed toward long-stay tourism "the government has come up with a concept of a premium visa. So instead of the tourists coming to Mauritius to stay for about 10 days, they are being encouraged to come for more than a year". Interestingly enough, numerous destinations such as Barbados (Barbados Welcome Stramp, n.d.), the Cayman (Visit Cayman Islands, n.d.), Antigua (Antigua Nomad Digital Residence, September 2020), Anguilla (Select Anguilla, n.d.), Bermuda (Go To Bermuda, October 2020), Georgia (Georgia Travel, n.d.), Croatia (Expat in Croatia, July 2021) and so on have recently launched long-stay tourist visas in response to the drop in tourism and the millions of people who started to work remotely (Web. Work. Travel, n.d.). In his book, Morrison (2013) listed a number of benefits that long-stay tourism can have on a destination such as clear future directions for long term tourism planning, clear vision and goals, easier identification of opportunities, shared plan ownership between the various stakeholders and easier implementation and evaluation guidelines. Thus, it might be relevant for destinations to reflect on whether such long-stay tourism strategies could offer the possibility for longer tourism planning and resilience building in a highly unpredictable and uncertain future.

Additionally participant 6 argued that there is a necessity for Mauritius to move away from their Eurocentric offer and aim at a wider market to survive. He stated:

"We have to welcome anyone. We cannot simply create a product that will be attractive to Europeans only. We have to be able to offer the Chinese, the Russians, the Koreans, the Africans, the Arabs, the Indians, all of them. They must be able to find Mauritius attractive both in terms of food but in terms of culture, in terms of meeting with the population history, you name it environmental tourism, everybody should be able to find attractions in the country".

The Covid-19 has highlighted the dependence in the Eurocentric market and underscored the unsustainability of this approach to tourism. Thus, in order to improve its resiliency, the tourism industry in Mauritius should consider diversifying and restructuring its tourism market by attributing greater interest in domestic tourism, maintaining its traditional market and expanding into other international markets besides Europe (Scheyvens & Biddulph, 2018).

Accordingly, the director of a consultancy firm added that to attract another market there is also the necessity to diversify the tourism product to "something that is in line with their expectations". A statement supported by Vargas (2020) who pointed out that for tourism markets to awaken from the lethargy inflicted by Covid-19, tourist destination managers should be reshaping the offer in the light of the new social reality emerging from the pandemic. As reported by the Schumpetarian theory of economic development, innovation and product diversification are interdependent strategies for growth (Weidenfeld, 2018). Romão et al., (2017) also explain that diversification strategies lead to a more sustainable development of tourism when it comes to protection of natural resources, value-added products and services as well as strengthened relationships between tourism and other regional sectors. Clavé (2012) also stated that diversification can be used as a component for recovery.

But diversification strategies might fail unless the areas and markets that have the best potential to stimulate the economy of the destination (while maintaining sustainable social, economic and environmental outcomes) are identified (Weidenfeld, 2018; Erkus-Öztürk, 2016). In the context of Covid-19, the tourism industry in Mauritius must understand the needs of the new market but also the global trends that have arisen from the pandemic.

## **5.6 Adapting marketing strategies**

Participants stated that following the change in consumer behaviour, Mauritius had to adapt their marketing strategies in order to remain attractive. The tourism academic pointed out that "governmental organisations and the private sector will have to work on different marketing strategies after Covid-19 because it will be more difficult to attract tourists". Similarly, the director of a resort shared that "the marketing will most likely be really aggressive since the Maldives and the Seychelles are in front of Mauritius". Three key aspects came up from the findings:

(1) the necessity to use digitalisation in order to keep up with the industry.

(2) the importance of highlighting aspects of the destination that the traveller of tomorrow will be searching for.

(3) the requirement for Mauritius to promote itself as a "Covid-19 safe island" to gain visitors' trust and confidence.

As highlighted by participant 1 and 2 "The tourism industry in Mauritius will have to adopt digital marketing and position Mauritius as a Covid safe island with up value supplies to regain

tourists' confidence". The director of a consultancy firm shared his views of which direction should the marketing take to ensure the resilience of the tourism industry. He explained:

"We have to market ourselves differently. And here I have two points. One is we have to use digital marketing, which is more efficient these days. But when we talk of marketing, we need to know what the markets are so far...So this is where I think the government should look at the whole world as a market, not simply one part of the world...Today the world is a market without frontiers...So this is where marketing will have to change, we have to look at the whole world as a big market, not just one part of the world".

Statements that are supported by a number of literature on the subject. For example, Naidoo (2010) mentioned that marketing innovations could help firms survive disturbances and build resilience. Marketing campaigns should promote a safe destination when it comes to public health with low risk of contagion and offer a 'value for money' product (Maristany, 2020). Hoyos-Estrada & Sastoque-Gómez (2020) also mentioned that following the changes in marketing processes due to the pandemic, digital marketing has become a key strategy for companies to gain competitiveness in the market. Kim (2020) added that companies have to adapt and make use of digital technology in their sales to turn the crisis into an opportunity, following the substantial growth in online shopping. Strategies that were also indicated in the UNWTO in their "Global guidelines to restart Tourism" such as the creation of campaigns to incentivise domestic tourism and the promotion of new products and experience targeted at niche markets such as nature and special interest.

As demonstrated in "Chapter 3", the suggestions in link with product and market diversification as well as marketing strategies were already mentioned in the Strategic Plan 2018-2021 and Mauritius Strategy 365. However, at the time, domestic tourism was not a priority. Consequently, these strategies are not new in the debate of sustainable tourism development in Mauritius but the pandemic has forced the industry to react quickly and focus on other directions that were only briefly explored prior the crises.

# 5.7 Adopting innovative practices

The interviews with the participants have proven that the quest of the industry for innovation is an integrated part of resilience building for sustainable tourism development and might shape the tourism post-Covid-19. Interviewees mostly mentioned the integration of new technologies related to health and safety to trace the virus early and limit guests contact with high touch point during their stay. Participant 2 claimed "in terms of innovation, I would say that maybe the stakeholders will be working on implementing technologies more towards health and safety". The sustainability manager of a resort described the innovational practices to be implemented in the hotel "We're working on pre-registration by the guests before coming to the hotel…we're reviewing the ways that rooms are going to be cleaned by the housekeeping

team". The manager of another hotel likewise said "We have to facilitate the process instead of them coming to the hotel to fill in the checking form. Now, they can do the online booking...we have an in house app where they can order food, book a cab". Comparably, the hotel director explained working toward the integration of "contactless technology" where everything can be done from the guests' phone such as "checking in, opening the room, book a restaurant and so on". Starting from the arrival at the airport with biometric verifications and e-gates, mobile check-in and access of all aspects of a hotel room through a phone, contactless payment, digital menus in restaurants or virtual and hybrid events, the recovery of Mauritian tourism will inevitably require the latest integrated digital solutions (WTTC, 2020).

For a number of academics, Covid-19 is a driver for technology and innovation in tourism (Ivanov et al., 2020; Zeng et al, 2020; Sharma et al., 2021). It has proved to enable flexibility in the tourism industry (Hall et al., 2020), increase efficiency of work, the quality of services and reduce the financial costs (Ivanov & Webster, 2019). Especially during the pandemic various technologies have played a major role in helping to maintain tourism activities, social distancing, replacing people at the workforce, or forecasting Covid-19 spread (Zeng et al., 2020; Assaf & Scuderi, 2020; Thomas & Chopra, 2020). According to Zeng et al., (2020), technology will play an even bigger role in the post-Covid-19 tourism.

For the authors, professionals of the industry should cease this opportunity to enhance the quality and sustainability of their offer. Among other things, technology could enable better monitoring and protection of fragile natural and cultural resources.

In the interview, participant 8 mentioned a similar future practice and explained working toward innovative monitoring processes to reduce the level of visitation in protected areas "we're thinking about how we could get the same levels of information about our programs and our species by reducing the amount of time that we actually spend monitoring". In addition, the future of tourism might also include crowd control technologies, personalised concierge services to spread the economic benefits of tourism more equitably and public informational systems that trace improper behavior and educate tourists on culturally acceptable behavior (Zeng et al., 2020). Examples that could be followed by tourism organisations in Mauritius to develop a more sustainable tourism through resilience in a post Covid-19 world.

If some studies demonstrate the sudden public's trust in technology and an increased tolerance in privacy issues (Zeng et al., 2020; Stankov et al., 2020), other concerns could challenge Mauritian tourism. During the interview participants mentioned the loss of personal touch and interaction caused by technologies. According to the participants, Mauritius is particularly known for its hospitality symbolised by the "Mauritian smile". A competitive advantage that maintains customer loyalty and could be impacted with the arrival of contact-less technologies. Mauritian tourism professionals will therefore have to find ways to deliver high-touch interactions while balancing personal touch and technology (Noonan, 2017).

The participants also mentioned organisational innovation as essential for resilience and sustainable tourism development as mentioned by participant 5 "I think the hotel industry has to be resilient, and we're learning from that, and we are really reinventing ourselves, and how

we do things". Notably, a number of participants noted changes in the leader's role. The conservation director of an NGO argued that "in these times, you actually have to step up even more" and be "proactive". In his opinion, "Covid reinforced the need for good leadership". The sustainability manager of a resort mentioned the necessity for the leadership to be flexible and easily adapt to change "we need to have a leadership that is ready to change and ready to adapt, because if you don't change and if you don't adapt, we will be at a loss". The implication of Covid-19 in organisational transformation is being widely discussed by scholars (Foss, 2020; Renjen, 2020). Giustiniano et al., (2020) supported the statement of the interviewees suggesting that resilient leaders play a crucial role in resilience. They answer crises through a dynamic combination of "preparedness and improvisation, clear direction-setting and flexibility" (p.2). Thus, their capacity to develop innovative norms is vital to the survival of the organisation (Dansereau et al., 2013; James et al., 2011; Williams et al., 2017). According to (Lombardi et al., 2021), to cope with the consequences of Covid-19, leaders should understand the unique environment that surrounds them and should look at the pandemic as an opportunity to acquire new knowledge.

More importantly, resilient leaders can exert their influence over employees, shaping their behaviour toward the achievement of specific goals (Dansereau et al., 2013) such as being resilient, green or socially conscious. A similar approach to resilience leadership can be suggested to Mauritian tourism leaders in order to build resilience for sustainable tourism development.

However, extreme concern for resilience may induce employees to become excessively tolerant to adversity (Giustiniano et al., 2018) or suffer from the "false hope syndrome", a phenomenon according to which overconfidence and overoptimism can lead to employees wasting energy on unintelligible tasks (Polivy & Herman, 2000).

Another important point mentioned by the participants was the shift from a traditional operational structure to a flatter one and from the specialisation of employees to more polyvalent ones. Participant 3 claimed:

"Strategically, the leadership has to shift focus from the traditional operational side to survival matters... So we had our team, our crisis team, which we started meeting from there on, on a weekly basis to review decisions...We try to see how we can be more leaner as an organization. So we might have a structure, we have several levels, let's say general manager then front office manager, front office controller, guest services for example, we're trying to review that structure to see how leaner and more fluid it could be. Multitasking is one of them, looking for people that are more polyvalent".

Heath (1998) noted that a flat structure enables the organisation to deal more efficiently with crisis management since it facilitates quick interactive communication and decision making. Furthermore, employee flexibility is recognised by a number of scholars as being crucial to tackle turbulent environments (Beltrán-Martín & Roca-Puig, 2013; Camps et al., 2011; Beltrán-Martín et al., 2008; Svetlik et al., 2007). Three components form this flexibility, known

as polyvalence, anticipation and adaptation (Van den Berg & Van der Velde, 2005; Bhattacharya et al., 2005; Dyer & Ericksen, 2005; Pulakos et al., 2000). These new behaviors can be suggested to Mauritian Tourism organisations to help to not only tackle Covid-19 but also meet future rapidly evolving market needs (Eisenhardt & Martin, 2000).

Organisational changes can though become additional sources of stress and therefore need to be handled cautiously, following principles of change management (Humphreys & Nappelbaum, 1997).

#### 5.8 Strengthening stakeholder collaboration and mutual understanding

This sub-theme highlights the participants' views that Covid-19 have impacted their relationship with partners for the better and the worst. Nevertheless, all interviewees describe how signs of tolerance and mutual understanding had to be shown by the stakeholders given the extenuating circumstances. These shows favorable signs to a post Covid-19 stakeholder collaboration driven toward a more sustainable management of resources.

Participant 4 described the help of the private sector to the local community during Covid-19 to maintain trust and enthusiasm among workers "the hotel wants to support and provide basic food to the local people... this is building enthusiasm and trust within that organization that we are at least making an effort to help the communities in need". This exemplifies the statement of Eccles et al., (2014) who argued that to build mutual respect, trust and cooperation with stakeholders, organisations must demonstrate the commitment to balance the needs of different stakeholders. Similarly, several scholars agree that building and maintaining trust, commitment and negotiation are essential factors in a process that is inclusive by nature, since each stakeholder brings valuable resources to the whole, enabling a more distributed leadership (Hristov & Zehrer, 2019; Hristov et al., 2018; Kozak et al, 2014; Pechlaner et al, 2014). In relation to the example mentioned by participant 4, Garcia Ferrari et al., (2021) conducted a study about collaboration between the private sector and communities. They concluded that the current Covid-19 has resulted in the appearance of alternative forms of collaboration with communities which might help shape a more economically diverse and sustainable future. According to the authors, such collaboration could enable a more sustainable management of resources. The tourism private sector in Mauritius could therefore be encouraged to maintain such relationships with surrounding communities, facilitated by the public sector.

Respondents also claimed that the impact the pandemic had on the profit of all tourism organisations, encouraged them into showing mutual understanding and coming up with compromises to limit the loss of all parties. Participant 3 pointed out:

"When we had a complete lockdown, we had no revenue and a major cash flow problem. And our suppliers had to review their quotes and activities. Especially tour operators...We had an open discussion with all our suppliers locally, and we explained the situation. It was a fair open discussion where we put everything on the table and discussed. And we all understand that we are all in the same situation. And we set the plan and stopped services that had to be stopped and reviewed those that had to be maintained".

Participant 5 was found in the exact same situation "I had to reduce the activities on the hotel. We had to sit together and find a win-win situation for both of us to reduce the damages". The director of a hotel explained that despite their tiredness, one of the most positive aspect that came out from the pandemic was the regular meetings held by various stakeholders in order to find solutions on how to restart the tourism industry and to include tourism services in the recovery of the island "It's crazy we have meetings all the time...Everyone is a bit on the edge... we are finding solutions together and the positive thing about that is that everyone is working together, no matter if we are competitors or not". The participant also explained how important communication among different stakeholders is necessary to build resilience "We are trying to find solutions together to tackle this challenge... I am proud to see the tourism industry supporting the country... we need to be agile, resilient, listen to one another and communicate. We need to adopt strong values". The director of a consultancy firm also described the mutual understanding showed by the employees "We're all in the same boat. We're all in the same situation. So, I believe that everybody understands the situation very well. We have to compromise on many things. Even the staff understood the situation".

Respondents also noticed an increase in collaboration between the public and the private sector, described as poor prior Covid-19. Participant 3 highlighted that the public sector was particularly involved in those meetings, strengthening collaboration with the private sector and non-governmental organisations "there is a lot of interaction between the government and other stakeholders... the private and public sector work hand in hand to come up with solutions... I believe that this collaboration will be maintained in the future". The tourism academic described in which way did Covid-19 increase the collaboration between the government and other stakeholders. She explained:

"Before the pandemic itself, I think that there was no such strong collaboration between those different stakeholders. But now the small medium enterprises get support from the government... I think the government will keep on helping the small medium enterprises in the future because we are experiencing a pandemic situation and it is something that we cannot avoid...Plus, in the future, it will take time to restore the tourism industry here, especially in an island whereby we are over dependent on the on the tourism industry but we will surely evolve because I can see that this will be also a situation which will help the government to continue implementing that sustainability approach. Mostly toward the society that is improving the quality of life, and also the environment".

Crisis management, including all concerned stakeholders, is of greater importance for decisionmaking and enables the elaboration of creative ways to overcome challenges (Archer & Archer, 1995; Posner et al., 2011). Effective collaboration, sharing information and creation of knowledge among stakeholders during crises is widely discussed by academics as being one of the key determinants for destination resilience and sustainable tourism development (Brown et al., 2021; Jamal & Budke, 2020; Peleg et al., 2018; Morakabati et al., 2017; Byrd, 2007; Ritchie, 2008; Coppola, 2006). It can be suggested that strong relationships between the private and public sector as well as with non-governmental organisations should be maintained in order to sustainably develop Mauritian tourism.

Participants also mentioned that recently the collaboration between the tourism industry and other stakeholders are facilitated through corporate social responsibilities (CSR). A trend that, according to participant 8 will be widely adopted in a post Covid-19 world. The same participant gave the example of the bank of Mauritius giving paid leaves to its employees to participate in CSR activities. The literature states that CSR is a key element of a strong and enduring relationship between stakeholders and of the sustainable development of organisations (Berger et al. 2007; Smith 2003; Waddock & Smith, 2000).

Furthermore, Lv et al., (2019) empirically support that the level of CSR adopted by institutions affect organisational resilience. This is confirmed in a recent study by Mao et al., (2020) who illustrated the positive impact of CSR on self-efficacy, hope, optimism of tourism employees and resilience in China during the pandemic outbreak. Collaboration through CSR could therefore facilitate resilience building, strengthen the relationship between stakeholders of the Mauritius tourism industry but also with stakeholders outside the industry, widening relations and bringing new knowledge and perspectives (Gill, 2014). Yet, there is historical evidence that collaboration for working with CSR is difficult to implement in practice (Soundararajan & Brown, 2016).

#### 5.9 Developing contingency plans and risk assessment

Nearly all participants mentioned the necessity to develop better contingency plans and risk assessment in order to build resilience and maintain businesses activities during potential future crises. Participant 2 stated "we have to know how to prepare ourselves. This is the lesson to learn which framework to follow if ever, we are facing another pandemic situation. Instead of stopping everything and people losing their job". Similarly, participant 1 said "to prepare for similar perturbation in the future, we will need to learn from the past, which is the current situation right now with Covid-19, and to prepare better contingency planning". Participant 7 explained that the pandemic pushed various stakeholder from the industry, such as the private sector, non-governmental organisations and the district council, to meet during "workshops on disaster risk reduction". For the respondent, many of these meetings are yet to come since "Mauritius is prone to all sort of disasters". Participant 8 also claimed that an increased emphasis will be put on the "development of risk management exercise" in the future, already becoming "standard operation procedures". Participants 4 and 5 noted how the pandemic is changing their way of planning "most of the time we were working for a five-year plan...we should also have an immediate plan and be prepared for the business continuity in the worstcase scenario...We should have a fallback" and "risks assessment will allow us to better identify similar risks and how to anticipate measures in order to overcome a crisis". Crisis management

has become an important concern in tourism studies, with a specific focus on creating plans to protect tourists, businesses and destinations from crises (Hadi & Supardi, 2020; Niewiadomski, 2020; Wang et al., 2008). Studies often suggest proactive crisis responses based on the development of strategic plans to build resilience (Jamal & Budke, 2020; Mair et al., 2016; Mansfeld, 1999; Ritchie, 2004). Participant 6 claimed that in order to build resilience, it is imperative to "learn how to live with the pandemic" and "prepare ourselves". According the respondent, a way to do this is through operational readiness and contingency plans. Operational readiness is crucial for the identification of first priorities and high risks for which mitigation and imminent response actions should be undertaken (Lanyero et al., 2021). WHO defines operational readiness as the outcome of preparedness actions such as planning, training, allocation of resources to sustain and improve operational capabilities through risk assessment (WHO, 2017). Strategically planned and proactive risk management measures are also part of sustainable tourism development (Jamal & Budke, 2020; Mair et al., 2016; Mansfeld, 1999; Ritchie, 2004). In the context of Covid-19 these might include drastic decisions to ensure public health and safety as well as economic measures such as equipping industry professionals with the necessary funds to maintain their activity and pay their employees (Quang et al., 2020). This is especially relevant for Mauritius, where in 2015, 99% of establishments operating in different sectors of the economy were SMS's (Statistics Mauritius, n.d.). Most measures mentioned by the participants were as stated by Quang et al., (2020), financial help, detection of cases at points of entry and responsiveness with appropriate public health requirements such as quarantine. Thus, the creation of a crisis fund for sustainable and resilient tourism development should be key elements of forthcoming risk management strategies.

Additionally, participant 1 and 5 both mentioned capacity building as being an essential part of contingency planning. This is supported by a number of literature highlighting the importance of investing in staff training to improve the quality of management processes and of human resources operations and therefore better handle the market of the post-Covid-19 world (Lanyero et al., 2021; Quang et al., 2020). In the context of Covid-19, risk knowledge management can be implemented through early virus detection, training of staff, isolation, prevention and responses measures as well as communication to travellers (Lanyero et al., 2021).

Since the aim of the research is to understand how resilience can improve sustainable tourism development in a post Covid-19 world, in practice, it is interesting to relate to the example of Vietnam. As part of their first risk contingency plans within tourism, the Vietnamese government predicted three potential scenarios for the end of the pandemic and suggested possible responses the industry should undertake for each scenario.

In the first scenario, the pandemic ends in Vietnam alone. In this context, the tourism industry would focus on stimulating domestic tourism through the program "Vietnamese people travel Vietnam". The campaign communicates about tourism activities and promotes tourist products at attractive prices and localities that are ready to safely welcome guests. Strategy adopted by Mauritius during the cease of international flights.

In the second scenario, the pandemic ends in Asia only. Under this scenario, the industry would promote the destination online through the "Safe Vietnam" tourism campaign, reconsider visa exemption policies and build a smart tourism control centre to analyse digital transformation on tourism for effective and adaptable responses.

In the last scenario, the pandemic has stopped in the whole world. Under this circumstance, the industry would install insights from data collection and policy packages (Lanyero et al., 2021). Such contingency plans seem essential to the destination of Mauritius in order to develop flexible and competitive advantages in the post-pandemic world.

But the development of contingency plans and risk assessments are often faced with some challenges linked to the difficulty in establishing multi-sectoral coordination. This may be attributed to a limited understanding of the nature of the crises (Wilhite et al., 2000) or to the lack of efficiency of multi-sectoral platforms bringing together various government sectors and industry professionals. A high-level political leadership and commitment could facilitate such coordination and ensure the readiness and early response intervention from technical, strategic and operational perspectives (Lanyero et al., 2021).

## 5.10 Developing appropriate policies

This sub-theme highlights participant's description of the role of governmental policies to build resilience and develop in a sustainable direction in the future. During the interviews, respondents described a number of legislation to contain the virus, put in place by the Mauritian Government, which forced them to change a number of their practices. The project manager and the conservation director of two NGO's explained that the number of people gathering for the implementation of environmental, restorative or educational projects had to seriously decrease and that these limitations could potentially last for a while. Additionally, participant 7 explained that the cease of international flights and unemployment have increased the proportion of local volunteers, primarily international before the pandemic outbreak. The director of a consultancy firm described how the "work access permit" transformed their ways of working and pushed them to work remotely. He also described how the government facilitated the processes to dismiss employees "there is another piece of amendment to the legislation regarding employment, where employers are being allowed to... dismiss their employees within one month without the normal compensation... it's what we call the 'force majeur'. In the hotel sector, the sustainability manager of a resort described how the hotel industry had to adapt and become quarantine facilities "we have to work differently also because of the legislation...the post Covid legislation is changing our way of operation". The respondent also explained that the processes of reopening are based on the legislations:

"we are planning the stage of reopening. We will need to have a maximum occupancy most probably, a limit of the number of people authorized in the pool, how we are going to promote social distancing in the restaurant, how we're going to have the self-service rather than the service by the kitchen staff...".

According to Baraero-Era (2020), tourism resilience is dependent on the policies adopted by the government as its actions and decisions are critical in dealing with the crisis. For the author, travel policies will shape the people's travel behavior when it comes to health, safety and security.

Additionally, participants claimed that a part of their budget was allocated to the health and safety training of employees. Participant 3 stated "Another change is the health consciousness of employees.... For the training on health and safety, we have developed a full set of health and safety protocols for the post- Covid reopening and this has to be obeyed to". Participant 5 also said "I am very worried in regard to the re-opening. I think I've kept a good budget for retraining and for the engagement process". The same recommendations have been advised by a number of scholars. Robina-Ram et al., (2021) and Baraero-Era (2020) stated that the health and sanitation practices which arise from this health crisis such as Covid-19 depiction, social distancing, frequent hand washing, and living a more healthy lifestyle will probably be the new norm post-COVID19. Robina-Ram et al., (2021) and Romao (2021) argued that training measures of high skilled labor need to be undergone by both public authorities and the private sector to ensure that tourism employees acquire health and safety knowledge and meet new regulated requirements. Nhamo et al., (2020) and Rueda Lopez et al., (2021) recommended that coordinated health, safety and quality certification and policies must be put in place to ensure the safety of travellers and reinforce trust in the tourism sector. However, the applicability of the latter measures will be mainly dependent on the 'good will' of professionals of the industries whose decisions on whether or not to implement these measures is likely to be dependent on the access of adequate resources (Filimonau et al., 2020).

Another important point stated by the interviewees was the need for the government to maintain the support of the tourism industry through employment security and financial support to MSMEs. The tourism academic argued that:

"The government will have to work on a new strategy to get people going and doing jobs in those tourism organizations. If not, they will be afraid to take a job there because other pandemic might arrive... I think that to get students enrolling in tourism, a diploma or degrees will be quite difficult because their parents will be afraid. They will think about prosperity and the prospect of getting a job".

Participant 2, 4 and 6 claimed that the priority of the government and tourist organisations was the safeguard of jobs for the survival of the industry. Participant 3 also claimed

"there were both measures from the government and from the organisation...to avoid the social crisis, the government has been assisting the private sector, the hotel being the highest hit, with

wages schemes to maintain employment, one of them is that the government is partially paying the wages of the employees so that employment can be maintain and to avoid redundancy"

Similarly participant 1 explained the actions undergone by the government to secure employment in the tourism industry:

"Decisions are taken mainly to secure employment where possible... The government has been proactive in initiating the Government Wage Assistance Scheme for the formal sector and the Self Employed Scheme for the informal sector. This was to make sure that all employees were paid for the month of April 2020. The same was applied for the full month of April 2020.... It is noted that the big players in the Industry are implementing measures to safeguard employment while reducing costs on budgeted renovations, new CAPEX purchases or extensions. The Covid-19 Support Measures Series: issued by the Bank of Mauritius, has the ambition to alleviate the Cash Flow pressure on Enterprises thereby allowing for the preservation of employment".

Finally, the director of a consultancy firm argued that the government must priorities financial help to MSME's which are the most impacted by the pandemic. The data shows that the industry will suffer from the impact of Covid-19 for a couple of years to come and it will be especially hard for MSMEs to get back on their feet and for the tourism industry to attract a workforce. This is confirmed by Filimonau et al., (2020) explaining that recruitment of a tourism workforce is predicted to become challenging in a post-Covid-19 world due to reduced attractiveness of the hospitality sector. The authors argue that current policies to reduce the harmful effect of Covid-19 on the sector and any upcoming policies may influence the attractiveness of the sector and positively affect perceived job security of the tourism sector, as defended by participant 2. In relation to MSMEs, Shafi & Ren (2020) argue that the best support that can be given by the government is to allow them to maintain their activity regardless of the evolution of the pandemic, while ensuring the respect of basic health and safety measures. This can be done through the digitalisation of their services. The authors add that disaster assistance loans with low interest rates should still be distributed until organisations are "back on track" to make these businesses more resilient to disease-related economic disruptions. Besides, the repayment of loans must also be extended for a longer time to relieve the tourism industry. Senz (2020) and Bartik et al., (2020) points out that MSMEs can be reluctant to apply for loans due to distrust in the government and concern for administrative complexity. Other policy suggestions were given such as payroll overdraft, unemployment benefits and suspension of commercial property rent or subsidies (Shafi & Ren, 2020). Such policies could be maintained by the Mauritian government to support the tourism industry and hence ensure the resilience and sustainable development of the sector.

Finally, the participants from non-governmental organisations pointed out a couple of interesting facts which might need to be regarded and reflected upon by the Mauritian government. Participant 3 explained that during the period of the pandemic, the coral reefs

have doubled in one year only while it usually takes two to three years to see such evolution. Hence, the cease of tourism and other activities at sea have enabled nature to undergo a faster recovery cycle. The latter have attracted the interests of a number of scholars mentioning the improvement of air and surface water quality (Monteiro et al., 2021; Agarwal et al., 2021; Jephcote et al., 2021; Wang et al., 2021; Zangari., 2021; Pacaol, 2021; Yunus et al., 2020; Arif et al., 2020; Patel et al., 2020) and the reduction of greenhouse gas, waste generated by tourists and noise as a result of social distancing policies (Čurović et al., 2021; Zambrano-Monserrate, 2020; Liu et al., 2020; Lecocq et al., 2020).

Supported by academics (Chen et al., 2021; Zambrano-Monserrate et al., 2020), participant 5, 7 and 8 also highlighted some negative environmental impacts, caused by the pandemic such as the reduction of waste management in the hospitality industry as well as medical waste from masks and vaccines "in the Environmental Protection sector, I think maybe some regulations that might come in place is regarding those masks. Some people are throwing them and it's getting entangled in the birds feet, and the birds getting stuck cannot fly" and "now they have started the vaccination of the Covid-19 in Mauritius, like mass vaccination for the whole population. So there will be lots of chemical medicinal waste that will be created". Participant 5 also mentioned "now with the pandemic we had to reduce our waste management because the trucks are not coming so often to pick up the waste as a result of reduced work in the waste management station". Rousseau & Deschacht (2020) argue that public support for environmental policies will play a role of utmost importance in a post-Covid-19 world. Based on the findings of the authors and on the newly adopted 2030 biodiversity strategy of the European Union, it can be suggested that the Mauritian public sector communicates about climate adaptation strategies, encourage the decarbonization of transport systems and emphasize more on co-benefits of environmental policies in relation to nature and biodiversity conservation (Rousseau & Deschacht, 2020; European Environment Agency, 2020).

As societies recover from the crisis, behavioural transformation in link with nature awareness, discussed earlier in the chapter, may be of short term and reverse. Therefore it is important for the Mauritian government to act quickly and incentivize long-term changes such as building green infrastructures and livable environments (Rousseau & Deschacht, 2020).

# 6 Conclusion

The purpose of this study was to understand how resilience can improve the sustainable development of Mauritian tourism in a post-Covid-19 world and then conclude with suggestions. Data were collected from in-depth interviews carried out with heights stakeholders from the Mauritian tourism industry. Informed grounded theory was used as a means to analyze the data.

The research is based on the integrated sustainable-resilience theory developed by Cochrane (2010) which pre-defines the 6 main themes of the research. Eighteen sub-themes emerging from the data were synthetized to form a reviewed version of the integrated sustainability-resilience theory adapted to the case of Mauritius. The themes showed few contradictions between stakeholders who were naturally impacted by the pandemic and who shared opinions. The findings nevertheless suggest the complexities that may exist when researching Covid-19 resilience for sustainable tourism development. These complexities are demonstrated by the generality and the global coverage of the themes, covering all economic, political and socio-cultural pillars of sustainable development and adding new perspectives on already existing debates with the concept of tourism resilience in mind.

The informed grounded theory approach used in this research proved valuable as it enabled a more-detailed and practical comprehension of the relationship between sustainable tourism development and resilience, in the context of Covid-19. In addition, challenges and barriers to resilience building for sustainable tourism development emerged from the data providing useful discussions for further research. Results of the study are helpful for tourism planners who work with the current dilemma of addressing the economic, environmental and socio-cultural impacts of the pandemic while transforming the industry for a more sustainable tourism development in a post-Covid-19 world.

Contrary to existing strategies adopted by organisations to return to "business as usual" (de Caro et al., 2020; Yap, 2020), this study suggests that Covid-19 offers the tourism industry the opportunity to re-shape and transform their business model to a different growth path with a focus on resilience, sustainability and well-being.

Galvani et al., (2020) believe that "true sustainability can only occur when it is valued in the daily life of individuals and cultures across the world" (para. 4). Interviewees' statements suggested that the pandemic triggered a change in tourists and practitioners' behavioural awareness of environmental and social related matters which could aid/force Mauritius to rethink its tourism offer. In particular, the research implies that to build resilience for sustainable tourism development, it is necessary to understand the change in tourists behavior. Existing studies affirm that the hygiene, health services, trustworthiness of information and the nature and adventure offer will be the main factors affecting the travellers decision when choosing a destination (Nepal, 2020; Wachyuni & Kusumaningrum, 2020; Stankov et al., 2020). Similarly, the findings highlight the change in consumer behaviour in relation to social and environmental consciousness as well as their change in desire for more interactions with local communities and cultural enrichment.

Following insights from interviewees and the literature, it is suggested that tourism professionals ensure the readiness of health and hygiene protocols to meet tourists requirements. In addition, it is also recommended that tourism professionals strengthen partnerships with local communities to design authentic experiences and thus meet tourist's changing desires while developing a more sustainable tourism.

However, such resilience initiatives should be achieved without triggering 'eco-fatigue' (Moscardo & Pearce, 2019) or falling within commercialization and commodification of

interactions between travellers and locals (Scheyvens & Biddulph, 2018; MacCannell, 2002; 2008). Furthermore, the possible restrictions in terms of social distancing forces Mauritius to come up with innovative ideas involving new technologies.

Farrell and Twining-Ward (2005) stated that sustainable development must "be viewed as an evolving complex system that co-adapts to the specifics of the particular place, and especially to the aspirations and values of local people" (p. 110). The data of this research also suggest that an important part of building resilience for sustainable tourism development goes through the creation of a more inclusive tourism.

The data further highlighted Mauritius's Eurocentric tourism offer and the lack of diversification in tourism products, jeopardizing the sustainable development of the industry. The Mauritian tourism sector reacted proactively to the cease of international flights and developed diverse strategies to make the tourism offer more attractive to locals in an attempt to save the industry.

Results and academic literature suggested maintaining domestic tourism in a post-Covid-19 world through the use of innovative practices putting locals at the epicenter of the market. Additionally it was also recommended to diversify the offer in order to attract an international market outside Europe but also to adapt to a new social reality. Thus, the aim of diversification would be to bring economic, environmental and socio-cultural benefits through a better management of natural resources, value-added products and services and strengthened linkages between the industry and other regional sectors (Weidenfeld, 2018; Romão et al., 2017; Erkus-Öztürk, 2016; Mawdsley, 2009; Scheyvens & Russell, 2012). Accordingly, findings also pointed out the necessity to adapt digital marketing strategies to build resilience and gain competitive advantage (Kim, 2020; Hoyos-Estrada & Sastoque-Gómez, 2020; Naidoo, 2010).

The results of this study shows that the pandemic has been a driver to the implementation of technology and to innovation, in particular to trace the propagation of the virus but also to encourage the use of contactless services and the flexibility of organisational structures. Interestingly, data suggest that technology and innovation might play a transformational purpose in a post-Covid-19 world by enhancing the quality and the sustainability of the offer (Zeng et al., 2020) as well as incorporating resilience, green and social values within leadership (Lombardi et al., 2021; Dansereau et al., 2013).

But data also uncovered related potential future challenges such as the loss of personal touch and negative impacts on employees effectiveness (Giustiniano et al., 2018; Noonan, 2017). Results further indicate that the pandemic have given rise to the appearance of different forms of collaboration between Mauritian stakeholders.

In particular, data highlight an increase in trust and mutual understanding between the private sector and communities, as well as a regularity of meetings between the public and private sector. If maintained in a post-Covid-19 world, the latter is believed to enable a more sustainable management of resources (Garcia Ferrari et al., 2021), a better distributed leadership (Hristov & Zehrer, 2019; Hristov et al., 2018; Kozak et al, 2014; Pechlaner et al,

2014) and the development of creative ways to overcome challenges (Archer, 1995; Posner et al., 2011).

Findings show that proactive crisis response strategies and risk management measures are essential to build resilience and develop Mauritian tourism sustainably (Jamal & Budke, 2020; Mair et al., 2016; Ritchie, 2004; Mansfeld, 1999).

Notably, data identified that efficient contingency planning goes hand in hand with financial support and capacity building to enable organisations to have the required resources for operational readiness and to ensure the quality of post-Covid-19 management processes (Lanyero et al., 2021; Quang et al., 2020).

Meanwhile, a committed political leadership is essential to facilitate multi-sectoral coordination, necessary to effective contingency planning (Lanyero et al., 2021).

Besides, the societal change imposed by the pandemic "will need to rely on cross-fertilization between economic and social recovery programs, environmental policies such as climate actions and biodiversity conservation programs such as the recently adopted EU biodiversity for 2030" (Rousseau, & Deschacht, 2020, p. 1156).

Indeed, data lastly underline that tourism resilience is dependent on the mix of economic, environmental and socio-cultural policies (Baraero-Era, 2020). Notably, findings suggest that health and safety regulations, for example under the form of certifications, will highly influence tourists' travel behaviour in the near future. Further, policies such as financial support to MSMEs and public support for environmental policies are most likely to determine the resilience and sustainable development of Mauritian tourism.

The research advocates that sustainability and resilience are complex systems composed of economic, environmental, socio-cultural and political concerns that are interconnected in intricate ways and dependent on many other factors to be effectively built in times of crises. These factors are namely stakeholder cohesion, leadership, people's willingness to change as well as the tourism industry's flexibility, adaptability and capability to learn from disturbances. Studying such a compound topic pushed the researcher to 'superficially' touch upon a wide range of subjects, all judged essential for a global understanding of the integrated sustainability-resilience theory. Moreover, the study identified a number of barriers to developing resilience for sustainable tourism development in Mauritius which first indicate that the results are viable for the case of Mauritius only but also that the theory is difficult to put in practice. Notably, the study underlined the tense relationship between large tourism related companies and MSMEs which seem to be seriously compromising the sustainable development of tourism in Mauritius and offer an interesting perspective for further research.

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## Appendix

## **Appendix 1** - *In-depth Interview Guide*

Below is shown an example of one of the interview guides used during the in-dght semistructured interviews. Each interview was slightly readapted to fit the profile of the participants.

- 1. What are the new legislative initiatives, put in place due to covid-19, that are impacting you directly?
- 2. How does covid-19 affect the leadership of your organisation?
- 3. What transformation, if any, the tourism sector is going through because of covid-19?
- 4. Do you expect your organisation to be working differently in the future?
- 5. Is covid-19 impacting your relationship with other industry stakeholders? If yes, in what way?
- 6. Which areas of actions are currently prioritised by your organisation?
- 7. What innovative practice(s), if any, have you planned taking into consideration covid-19?

- 8. How do you foresee the destination of Mauritius to regain tourists' confidence?
- 9. In your opinion, what will tourists expect from Mauritius as a destination after covid-19?
- 10. How does the destination of Mauritius intend to meet tourists' needs in the near future?
- 11. How do you foresee that the enthusiasm of employees from the tourism sector can be regained?
- 12. Presently, what is the involvement of local communities in tourism initiatives?
- 13. How do you see this involvement evolving in the future?
- 14. How can Mauritius prepare for similar perturbation (covid-19) in the future?
- 15. In a few words, what are the most valuable lessons, if any, you/the organisation have learned from covid-19?