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The Role of Adaptive Capacity in Supporting Resilient Livelihoods: an Asset-Based Approach at Umandawa Maha Vihara Monastery, Sri Lanka.

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Title picture: Umandawa Maha Vihara Monastery, Madahapola, Sri Lanka (photo: Explore Sri Lanka, 2020)

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Declaration

I, Chamari Dilmini Thilakarathne, declare that this thesis is a result of my research investigations and findings. Sources of information other than my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for award of any type of academic degree.

Signature: Chamari Dilmini Thilakarathne

Date: 15/03/2021

~This work is dedicated to the awakened one~

Acknowledgements

Abstract

The purpose of this study is to examine and understand the role of adaptive capacity and livelihood resilience as a pathway for building sustainable livelihoods in Sri Lanka. Using the Sustainable Livelihood Framework (SLF) as both conceptual and interpretive lens, this study highlights the importance of access (possession) to the livelihood capitals/resources of a) human, b) social, c) natural, d) physical and e) financial for building livelihood resilience. This study also shows how institutional processes and vulnerability can shape and influence a community if it has adequate access to those livelihood capitals to pursue resilient livelihood strategies, or not.

This is a case study of adaptive capacity and livelihood resilience in a Buddhist community called the Umandawa Maha Vihara Monastery (UMVM) in Sri Lanka. An approach of qualitative and explanatory study has been predominantly conducted in January 2020 by carrying out semi-structured interviews, participatory observations and focus group interviews.

The findings reveal a highly context-specific example of adaptive capacity that enhances the diversified livelihood strategies in achieving resilient livelihood outcomes at UMVM. By assessing the five capitals of UMVM, the study identifies the importance of strong leadership for fostering greater social capital through their social networks. In addition to these key asset-based aspects, trust within the community is equally important to the adaptive capacity in strengthening their livelihood resilience. As for the evaluation framework (SLF), it provides a useful tool for analysing the resource-base of livelihoods that can be tailored to different contexts.

Keywords: adaptive capacity, resilience, livelihood capitals, sustainable livelihoods, sustainable livelihood framework, leadership, social capital, social networks, trust.

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Abbreviations

CI	The Chief Incumbent
CEB	Ceylon Electricity Board
DFID	The Department for International Development
GML	Good Market Lanka
OECD	The Organisation for Economic Cooperation and Development
SES	Social-Ecological Systems
SLA	Sustainable Livelihood Approach
SLEF	Sri Lanka Ecotourism Foundation
SLF	Sustainable Livelihood Framework
SSA	Siri Sadaham Ashramaya (Monastery)
UMVM	Umandawa Maha Vihara Monastery

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Chapter One

1 Introduction

Sustainable development has been a popular concept in development paradigms since the World Commission on Environment and Development (WCED) issued *Our Common Future*, also known as *The Brundtland Report,* in 1987 (WCED, 1987). Its goal was to help direct different nations towards achieving sustainable development. The report established a definition of sustainable development as:

> *"...development that meets the needs of the present without compromising the ability of future generations to meet their own needs".* (WCED, 1987)

This definition of sustainable development has been widely applied in diverse organisations, including businesses and policy communities, as to support the three pillars of sustainability: social, economic and environmental. Thus, the idea of sustainable development aspires to lift those at the base of an economic phase to a higher level of living by decoupling environmental degradation and economic development (Kono, 2014). Further, as an alternative to conventional ways of approaching the natural environment, the concept of green growth gained support from environmental debates and was employed as one of the main themes in Rio Earth Summit 1992, Johannesburg summit 2002 and the Rio Earth Summit 2012 (Weaver & Lawton, 2014).

Contrary, the concept of sustainable development has been continuously challenged with the argument that it serves as an oxymoron (Redclift, 2005) due to the depletion of natural resources and a degradation of environment to achieve economic growth. Other scholars, such as Hunter (1997), regard sustainable development as an adaptive paradigm that responds to the complexities and diversity of sociocultural, economic and environment domains while accommodating both weak and strong versions.

Weak sustainable development: an anthropocentric and heavily altered environment context to achieve rapid economic growth over the conservation of natural resources and habitats.

Strong sustainable development: strategies that are ecocentric and concern existing stock of natural capital, which must be monitored and improved because its functioning cannot be duplicated by man-made capital.

The implications of the idea that sustainability (strong sustainability) requires maintenance of stocks of both human capital and natural capital has been debated. If these requirements are imposed at the ground level, it is likely to impede development, since it is unfeasible to do anything that damages the environment at all (Adams, 2009). On another note, Barbier at el. (cited in Adams, 2009) points out that weak sustainability involves attributes of trade-offs between losses to natural capital in one project, which is gained somewhere else as a replacement of either human capital or human-induced capital on behalf of lost natural capital. However, among the environmental economists who believe that sustainability demands maintenance of both human and natural capital, there is still concern about what kind of trade-off we should make in order to maintain sustainability. Some scholars like Buckley (1995), highlights that 'critical natural capital' refers to a natural capital that cannot be replaced when lost. Thereby it cannot be substituted or compensated with human capital by a positive project elsewhere due to its 'intrinsic value' (what an asset is worth). Thus, both weak and strong sustainability are therefore arguably considered as workable theoretical concepts (Adams, 2009).

As stated above, sustainable development and/or sustainability continues to maintain a dominant role in the development arena, yet there are some doubts that sustainability alone is an effective response (Fiksel, 2006) due to the growing challenges of human-driven environmental change (Steffen, Crutzen, & McNeill, 2007). With this concern in mind, the social and community resilience concept has rapidly gained attention since the mid –2000s.

In 'resilience thinking', some scholars argue that resilience and sustainability are two distinct concepts on the contemporary challenges of human society (Anderies et al.,2013; Juech & Michelson, 2011). However scholars like Derissen, Quaas, and Baumgärtner (2011) define them as one concept where the resilience approach is

generally concerned about adaptation to change by building capacities to return to a desired state following a perturbation (a deviation of a system or process), whereas sustainability mitigates change by maintaining resources beyond the normative safe levels. Similarly, verification from literature supports that resilience and sustainability are the same or that resilience is a key indicator of sustainability (Adger, 2003).

In that regard, sustainability is viewed as a process that needs adaptive capacity for societies to deal with change and uncertainties (Berkes et.al, 2002). Berkes et al. (2003), underline that resilience in social ecological systems (SES) successfully manages changes and uncertainties. In their opinion, this is the key to sustainable development. Despite the criticism that sustainable development serves as an oxymoron, Holling (2001, p.390) argues that the term explains a logical partnership, which is as follows,

> "Sustainability is the capacity to create, test, and maintain adaptive capability. Development is the process of creating, testing, and maintaining opportunity. Sustainable development thus, refers to the goal of fostering adaptive capabilities and creating opportunities''.

After the Brundtland commission launched the concept of sustainable development, the development approaches were nurtured by the 'livelihoods thinking'. The change came from an economic growth concern to human well-being and sustainability (De Haan & Zoomers, 2005; Solesbury, 2003). In practice, one way to achieve sustainability is therefore to consider 'livelihoods' as a means of supporting quality of life or wellbeing (Kono, 2014).

This aspect of livelihoods was influenced by Sen's perception on development as an expansion of human 'capabilities'. This refers to the "the set of valuable functioning that a person has effective access to'' (Sen, 1987). Functioning refers to the state of "being and doing'', such as being well –nourished and having shelter, which should be distinguished from the resources used to pursue them. Sen asserts that resources are recognised as an input, but their value is based on an individual's ability to convert them to valuable functioning, such as social norms and physical environment (quality of infrastructure). Thus, a set of human capabilities is the set of functioning that people have real access to.

Central to the idea of livelihoods and well-being, the sustainable livelihood approach gained prominence during the 1980s and 1990s. When combining resilience thinking with livelihood issues to assess livelihood ability, it is done so to cope with shocks and change whilst maintaining the capabilities and assets. This is the core idea of livelihood sustainability (Chambers & Conway., 1992). Hence, adaptive capacity in livelihoods can be described as entitlements to assets and social opportunities. This means that more entitlements to assets and social opportunities are considered as more capacity to adapt. Those who have fewer capitals are then considered as having the least capacity to adapt and are the most vulnerable to change and shocks (Engle, 2011; Vincent, 2007).

Consequently, it is vital to identify the importance of building adaptive capacity in achieving resilient livelihoods, specifically livelihood sustainability. Significantly, adaptive capacity in this research paper is defined as the peoples' ability to diversify or shift livelihood strategies by using livelihood resources/capitals: human, social, natural, physical and financial in order to absorb stresses and shocks (Thulstrup, 2015). This means that a resilience lens is defined as a means of examining how communities respond to social ecological changes and how they can build the capacity to adapt to such changes and shocks (Berkes, Coldding & Folke, 2003). This study therefore attempts to examine livelihood resilience by assessing the access to five key capital resources: human, social, natural, physical and financial. These capitals are combined in the pursuit of diverse livelihood strategies (DFID, 2001; Scoones, 1998). Moreover, livelihood outcomes are also enabled and constrained by vulnerability and institutional processes, which will also be taken into consideration in this research.

To serve this purpose, this study comprises a livelihood example from a religious community called the 'Umandawa Maha Vihara Monastery' (UMVM) located in Sri Lanka. Livelihoods in Sri Lanka are highly diverse due to the difference in topography, agro-climatic conditions and social-economic features (World Food Programme, 2014). In addition, following the 30 years of civil war, which ceased in 2009, the economy grew at an average 5.3% during the years 2010-2019 as a result of peace dividend and policy-remaking towards reconstruction and growth; although the economic growth has slowed down in the last few years (World Bank Org, 2020). Due to the history of climate related disasters, income sensitivities (World Food

Programme, 2014), security threats and political instability (Fernando & Moonesinghe, 2012), shocks are unpredictable. In some cases this means that livelihoods in Sri Lanka can lead to lower resilience. However, livelihood diversity, systems of knowledge, beliefs, customs, and norms that belong to a particular group or community has the potential to shape the adaptive capacity and strengthen livelihood resilience (Daskon, 2010). This study examines how such livelihoods in Sri Lanka contribute towards achieving sustainability.

1.1 Purpose and Objectives

When structuring the research question and objectives of this study, I have referred to the Sustainable Livelihood Approach (SLA) and The Department for International Development's (DFID) Sustainable Livelihood Framework (SLF). The SLF also makes up the theoretical framework that underpins this study.

The overarching research question of this study is,

> *In which ways does the adaptive capacity of the UMVM community contribute to the resilience of its livelihood?*

The SLF (DFID, 1999) identifies assets, strategies, outcomes and policies, institutions and processes as key fundamentals of livelihoods. It also stresses that these elements constantly interact with each other when pursuing sustainability. Based on those assumptions, the research has the following specific objectives:

- To assess the adaptive capacity of the UMVM community by examining the resources/capitals of its livelihood.

- To explore how social capital through social networks, norms, trust and leadership can enhance the outcomes of their livelihood strategies.

- To examine which institutional processes, livelihood strategies and vulnerability contexts are important in enabling or constraining the resilience of the UMVM livelihood.

1.3 Study Context

The research was conducted in the Kurunegala district in Sri Lanka. Kurunegala is the capital city of the North Western Province and the Kurunegala District. The district has a population of 1,618,465 and 30 divisional secretariats (Government Statistics, 2012). In historical perspective, the city of Kurunegala was the 5th kingdom ruled by the Sri Lankan King Buwaneka Bahu the 2nd in 1293-1302 A.D. Kurunegala was also an ancient royal capital during the 13th and 14th century, which was later invaded by the Portuguese in the 16th and 17th centuries. It used to be a centre for growing and collecting cinnamon and pepper under British rule in the 17th and 18th Centuries. It was also used as a main administrative centre (Urban Development Authority, 2019). In other words, the city has a great historical and cultural value.

In terms of livelihoods in Kurunegala, it is mainly focused around the production of rice and homestead gardening of vegetables and fruit crops as well as breeding poultry and cattle. As for irrigation, ancient irrigation tanks (reservoirs) created by the old kingdom of Kurunegala, which is a part of larger 'Mahaweli Irrigation Network', are used. During limited access to water availability in the 'Yala' season (dry cultivation season from May to August, as opposed to the 'Maha' wet monsoon season between September and March), both vegetable and fruit crops rely on groundwater aquifers (namely agro-wells) for irrigation. Flooding has also been identified as a critical natural hazard in these areas (World Food Programme, 2014)

This study is focused on a single case study of the community at Umanadawa Maha Viharaya Monastery (UMVM). The monastery is located in the near vicinity of a small rural village called Madahapola, which is close to a larger town called Melsiripura in the aforementioned Kurunegala district (Figure 01). Their territory is spread over a 70 Acre land located in between 10 village hamlets. Significantly, UMVM is a special community in the sense that it currently housing about 100 inhabitants, including Buddhist monks, nuns, resident volunteers, donors, and retired members.

H Housing
X Plantation
0 Rice Field
N Lake
R Road
P Pallegama Stream
S Retirement Houses
W Aquifer
E School
B Biogas Unit
V Private Forest
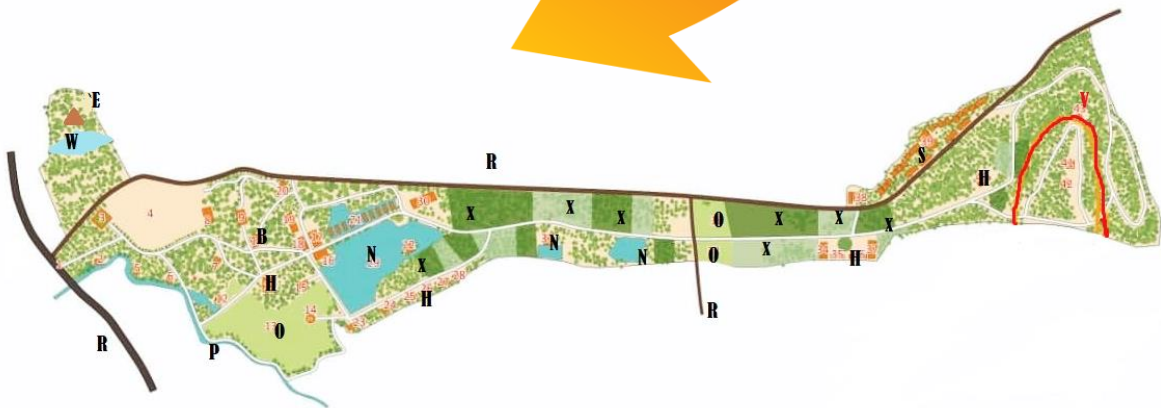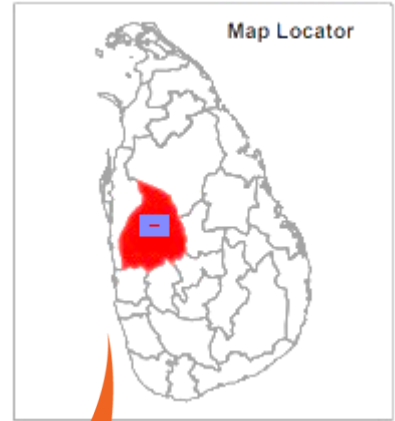
Figure 01: *Map of the UMVM Land (UMVM Org, 2020)*

UMVM owns its land and self-regulates its activities within the perimeter. It propagates and focuses on the connection between human life and the surrounding environment. The monastery is surrounded by a forest reserve (name unknown) and lush vegetation on one side and mountains on the other side. As for their livelihood portfolio, the community is focused on organic farming, spiritual and eco-tourism, renewable energy, and education and awareness. They also employ a social responsibility, which includes moral responsibility, environmental values and spiritual dissemination (Umandawa Org, 2019). Due to its successful approach in organic farming, environmental awareness, spiritual and eco-tourism activities as well as local empowerment, the UMVM has been recognised by the Sri Lanka Ecotourism Foundation (SLEF) as a community that promotes sustainable eco-tourism projects that are much needed during the COVID-19 pandemic (Sri Lanka Ecotourism Foundation, 2020).

Chapter Two

2. Literature Review and Conceptual Framework

This chapter provides a review of literature related to livelihoods, resilience and adaptive capacity to provide a theoretical understanding as well as some of its practical implications. The chapter further unfolds by describing the Sustainable Livelihood Framework (SLF), including series of sustainable livelihood determinants as the conceptual framework of this study.

2.1 Livelihoods

The concept of livelihood was influenced and expanded by early development approaches. In its simplest form, livelihood is signified as the "means of gaining a living". Often, livelihood refers to employment and activities generating income, which sometimes are synonymous and overlaps with terms such as employment and work (Daskon, 2010). Nevertheless, the various definitions of the concept of livelihood have emerged from the prevalent learning and practice that highlight the complexities in livelihood nature (International Recovery Platform, n.d).

As Chambers and Conway (1992) defines,

> "A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long term" (p,6).

This definition includes a focus on resilience and assets that people already have in their possession. Similarly, Glavovic, Scheyvens, and Overton (2003, p. 290) describes how,

"…a sustainable and vibrant livelihood system enables people to pursue robust livelihood strategies that provide, in effect, 'layers of resilience' to overcome 'waves of adversity'; enabling people to cope with and adapt to change, and even transform adversity into opportunity''.

By studying the scope of these definitions, some scholars argue that sustainable livelihoods relate to a wide set of issues. Those being, that establishing indicators of livelihood outcomes requires a precise understanding. As Carswell et al, (1997, p.10) assert, "…definitions of sustainable livelihoods are often unclear, inconsistent and relatively narrow. Without clarification, there is a risk of simply adding to a conceptual muddle.'' Further, in pioneering sustainable livelihood concepts, Scoones (1998) argues that there is no clear and simple process to assess the sustainable livelihood domains from the definition of Chambers and Conway (1992). Rather, the concept of sustainable livelihood comprises many ideas and interests in the interdisciplinary development debate. Yet, the sustainable livelihood term can be subject to negotiation "where conflicts are highlighted, choices then have to be made'' (Scoones, 1998, p. 7).

Changing focus from the concept to its practice, resilient livelihoods can be characterised as practical mechanisms of adaptation and coping (Davies, 2016). Adams (2009), argues that the livelihoods which are in high-risk or highly variable environments tend to have high adaptation to local natural resources and environmental change with considerable self-reliance and flexibility. Thus, for an example, farmers in severe drought-prone rural areas in Sri Lanka, such as Pimburuttewa are remarkably flexible and democratic in use of their fields and tanks (small reservoirs) in the face of dry season. The traditional knowledge of those farmers is integrated into the water management process and local decision making. This exhibits their local autonomy to adaptation (Burchfield & Gilligan, 2016).

Furthermore, livelihood diversity is also a major contributing factor to resilience. Livelihood diversity is defined as a strategy of households having diverse capacities, endowments and assets which are engaged in different activities to support their means of living (Care Org, 2019). For an example, the World Food Programme (2014) states that most diversified livelihoods in Sri Lanka are located in the dry zones that are most likely prone to drought. These households engage in various on-

farm and off-farm activities as coping mechanisms. In contrast, the least diversified livelihoods are in the coastal areas where households engage solely with their fishing activities, and are thereby more vulnerable to climate risks and uncertainties.

2.3 Resilience

The concept of resilience, as proposed by Holling (1973) in the ecological sciences, has increasingly been applied by natural and social scientists to study a diverse range of ecological communities (Gunderson, 2003), linked social ecological systems (SES) and institutional arrangements (Anderies et al., 2006; Berkes et al., 2003; Folke, 2006; Brian Walker et al., 2006). The key point here is that resilience thinking offers systematic approach in understanding system dynamics (Anderies, Janssen & Ostrom, 2004).

What are system dynamics? In order to answer that question, SES should be identified according to resilience thinking. SES "are neither humans embedded in an ecological system nor ecosystems embedded in human systems, but rather a different thing altogether. Although the social and ecological components are identifiable, they cannot easily be described for either analytic or practical purposes" (Walker et al., 2006.p. 13-14). To make it more comprehensive, social systems include those who 'deal with governance'. Governance, in this case is related to property, land rights, access to resources as well as environment and resource-related knowledge. Furthermore, governance includes political world views and ethics concerning the environment and its resources.

Ecological systems define self-regulating organisms interacting with each other and living in their environment. Therefore, the 'human in nature' perspective (Folke et.al, 2010) that the SES looks through, is in fact synergistic and interlinked. This means 'that the delineation between social and nature systems is artificial and arbitrary' (Berkes et.al, 2002). As such, Holling (1973) proposes that SES is nonlinear and in a non-equilibrium. It is uncertain, and has the ability to adapt and self-organise.

Walker et al. (2006) delineates resilience as "the capacity of a system to experience shocks while retaining essentially the same function, structure, feedback, and

therefore identity". Resilience thinking addresses "the dynamics and development of complex SES" (Folke et al., 2010). Due to these system complexities, the majority of studies are reluctant to examine SES as a whole, integrating both social and ecological variables and their feedback loops (Jáuregui et al., 2018). This has also become a recurring issue in the use of natural resources and its management.

As for criticism, Brown (2014) argues that this problem is created because of a focus on natural systems in SES while ignoring the political and social dimensions of the SES. One response to this argument in livelihood literature is that Tanner et al. (2015) defines resilience as "the capacity of all people across generations to sustain and improve their livelihood opportunities and well-being despite environmental, economic, social, and political disturbances."

Despite criticisms, resilience is further provided and strengthened by a diversity of institutions, livelihood opportunities, and types of natural resources that an economy relies upon (Folke et al. 2002; Berkes et al. 2002). Thus, social change is crucial for SES resilience (Folke et al., 2010). This is where 'adaptability' plays a dynamic role in resilience. Walker et al. (2006) denotes that 'adaptability' is the "capacity of the actors in a system to manage resilience". Because human actions are often dominated by SES, adaptation of such systems is primarily performed by the managers and individuals. In other words, adaptability is described as "the capacity of SES to learn, combine experience and knowledge, adjust its responses to changing external drivers and internal processes, and continue developing within the current stability domain or basin of attraction" (Folke et al.,2010, p. 2). For example, homegardners in both Keeriyagasweva and Siwalakulma in Sri Lanka, are more prone to adapt to climate change while continuing to develop their livelihoods by using adaptation strategies such as changing their agronomic practices, water conservation strategies and technology (Weerahewa et al., 2012).

2.4 Adaptive Capacity

There is a growing body of research on adaptive capacity that (Mortreux & Barnett, 2017) establishes itself as a complex and 'fuzzy' concept in assessment (Engle, 2011; Hinkel, 2011). The term of adaptive capacity has been initially proposed by Sen's capabilities theory and developed by the Sustainable Livelihood Assessments (Scoones, 1998). As there are no single ways to assess adaptive capacity, studies apply different factors and measurements to capture the outcomes. In SLF there are five capitals: natural, physical, financial, social and human. These capitals are used as the basis for evaluating adaptive capacity, and are sometimes considered as the 'generic basis' of adaptive capacity required for building sustainable livelihoods (Eakin, Lemos, & Nelson, 2014). I will further elaborate on this under the SLF section below.

The concept of adaptive capacity has many definitions between and within different scholarly thinking (Hinkel, 2011; Mortreux & Barnett, 2017). Even though there is little literature that has been combined in a single conceptual definition of the term, it is generally understood that the adaptive capacity is closely referred to as the concepts of adaptability (as used in biology and natural science doctrines) and is related to capacity, capability and coping capacity (as used in disaster management) as well as resilience and vulnerability (as used in ecology and SES research) (Adger & Kelly 1999; Brooks, 2003; Füssel & Klein, 2006).

In resilience literature, the adaptive capacity is defined as the ability of the system to sustain and generate new outcomes through learning, generating and sharing knowledge as well as the response to feedback (Folke, Colding, & Berkes, 2003; Brian. Walker et al., 2002). Hence, adaptive capacity plays an important role in sustaining the systematic function in response to perturbations (Olsson et.al, 2004). Another often used definition of adaptive capacity by Folke et al. (2003) describes its four dimensions as follows:

01. Learning to live with change and uncertainty
02. Nurturing diversity for reorganization and renewal

03. Combining different types of knowledge for learning

04. Creating opportunity for self-organization

As these attributes provide a good starting point for understanding adaptive capacity, it is vital to emphasise that the resilience of SES holds the adaptive capacity of all levels in such social systems. However, Mortreux and Barnett (2017) claims that adaptation is a complex social phenomenon where there is little evidence to compare adaptation capacity with an actual outcome. This is due to its application across diverse, complex scales and risks. It may have some importance when applied to small communities and individual villagers, whereas very little relevance when applied to a whole country. This is further due to the failure of adaptive capacity in explaining the behaviour of individuals within households.

Recent literature of adaptive capacity has led to the use of 'social capital' as a way to examine the synergy of social networks and norms that strengthen adaptive capacity within and among communities and institutions (Pretty & Ward, 2001). Further, it has the potential to explore the influence of institutions with respect to the cultural and political changes that are necessary to facilitate adaptation (Adger, 2003; Smith, Klein & Huq, 2003).

In climate change literature, adaptive capacity is considered together with vulnerability reduction and as a development of coping strategies in terms of natural hazards and climate variants. Correspondingly, Smit and Pilifosova (2003) argue that reducing vulnerability to climate change alone; facilitates a greater adaptive capacity, a process that examines and defines the capabilities of actors. This determines their tendencies to positively respond to the change that a system undergoes. Thus, determining factors of adaptive capacity are complex and diverse, but contains the feature of access to economic resources, technology, knowledge, information, infrastructure and the capacity of resilience in institutions.

2.4.1 Social Capital

Several authors have viewed social capital as the adhesive for adaptive capacity and collaboration (Adger, 2003; Olsson et al., 2004; Pretty & Ward, 200), whereas others have challenged its empirically explanatory power (Sobel, 2002). The Organisation for Economic Cooperation and Development (OECD) defines it as "networks together with shared norms, values and understanding that facilitate co-operation within or among groups" (2001, 41). These indicators highlight how social capital is illustrated in figure 02.

Nature of indicator	Indicator	Operational definition
Objective or structural	Networks	Membership, participation, and/or contributions to informal or formal organizations. Composite measures may include stability, homogeneity, and/or volunteer associations. Bonding, bridging, and linking ties are particularly important. *Example:* Belonging to a local conservation organization.
Subjective or experiential	Shared values and shared understanding	Elements (psychological) that facilitate social transactions. Shared feelings as to what is important or valuable and why it holds prominence. *Example:* Importance of protecting ground-water for drinking.
	Social norms	Elements (behavioural) of acceptable, expected, or desirable behaviours that are generally understood. May involve sanctions if violated. *Examples:* Trustworthiness and reciprocity.

Figure 02: *Indicators of social capital (Armitage et al., 2007).*

Similarly, Adger (2003, p.389) argues that "at the core of social capital, there is a description of the "relations of trust, reciprocity and exchange; the evolution of common rules; and the role of networks". Social capital has been recognised in many literatures as a term to understand and value the importance of social

networks, trust and reciprocity. Thus social and human capital has an intrinsic value although it is not always measurable.

Further, social capital is viewed as having multiple forms, including bonding, bridging, and linkages. Bonding social capital occurs through kinship and friendship among family and friends. This also goes for close acquaintances through networking. Social capital occurs when bridging and linkages extends from close family and friends to other actors in the community. By other forms, linkages are reflected as issues of power; which relates to the ability of an individual/group/community to leverage resources (OECD, 2001; Woolcock, 2001).

"Trust may be viewed as both a source and an outcome of social capital as well as being a very close proxy for many of the norms, understandings and values which underpin social cooperation" (OECD, 2001,p. 41). Pretty and Ward (2001), refer to social capital as relations of trust, reciprocity, common rules, norms, sanctions, and connectedness in institutions. Therefore, building trust and collaboration to meet objectives in institutions are vital, whereas future obligations and expectations may arise from mutual trust in a system (Coleman, 1988). Lack of trust in the social network reduces resilience, resulting negative influences such as propaganda, threat, restriction of freedom and corruption (Walker et al.,2006). Sometimes social capital can create a negative outcome when marginalised groups are excluded by strong groups who are restricting their access to assets.

Another criticism to social capital is that the term 'social capital' does not meet the basic criteria to be a capital. Arrow (2000), asserts that 'capital' stands for a stock of produced or natural factors that facilitate production. Particularly, people accumulate capital with an intention to gain economic benefits in the future. However, social networks are built for reasons other than their economic value to the participants. Despite criticisms, social capital continues to highlight intrinsic and instrumental importance of social relationships for a comprehensive analysis of community capability (Inaba, 2013).

2.5 Conceptual Framework

The Sustainable Livelihood Approach (SLA) and The Sustainable Livelihood Framework (SLF) are used in this study to holistically assess the adaptive capacity. SLF is a flexible and very open analytical design that can be used in diverse local contexts even though it has repeatedly been used to evaluate the strengths and weaknesses of development initiatives. Using SLF, this study aims to identify the access and/or possession to five different types of livelihood resources/capitals; human, social, natural, physical and financial in UMVM as a livelihood analysis for assessing adaptive capacity.

Further, based on those livelihood resources, this study aims to examine how the vulnerability context and transformation of structures and processes influence the UMVM livelihood strategies to determine their resilience outcome.

2.5.1 Sustainable Livelihood Framework

The United Nations Development Programme (UNDP) was one of the early contributors and participants to SLF. DFID adopted SLF as a core theme of its development policy (DFID, 2001). It is important to note that the livelihood focus still remains in the ongoing strategic plan under the efforts on assets and vulnerability context.

According to SLF, and as mentioned before, livelihoods are conceptualised in a holistic way that helps to organise the determinants which constrain or enhance livelihood opportunities. Such a framework also shows how capitals relate to one another when achieving sustainability as illustrated in Figure 03. The SLF has been developed to understand and analyse poor livelihoods by aiming to assess the efficiency of existing poverty reduction endeavours. Since SLF is a simplified model of how livelihoods work, a qualitative and participatory analysis at a local level is the only way to understand the full diversity and richness of livelihoods (DFID., 2001). Nevertheless, Scoones (1998, p. 5) claims that "the framework can be applied at a range of different scales – from individual, to household, to household cluster, to extended kin grouping, to village, region or even nation, with sustainable livelihood outcomes assessed at different levels''.

The DFID framework conceptualises below livelihood concerns:

1. How people operate within a given vulnerability context shaped by bio-physical and social economic factors, such as seasonal changes, economic shocks and trends.

2. How they have access to the five capital assets (i.e. human, social, natural, physical and financial capital) which are influenced by the vulnerability context and a range of institutions and processes. Also, how they use their asset-base to develop a range of livelihood strategies to achieve desired livelihood outcomes.
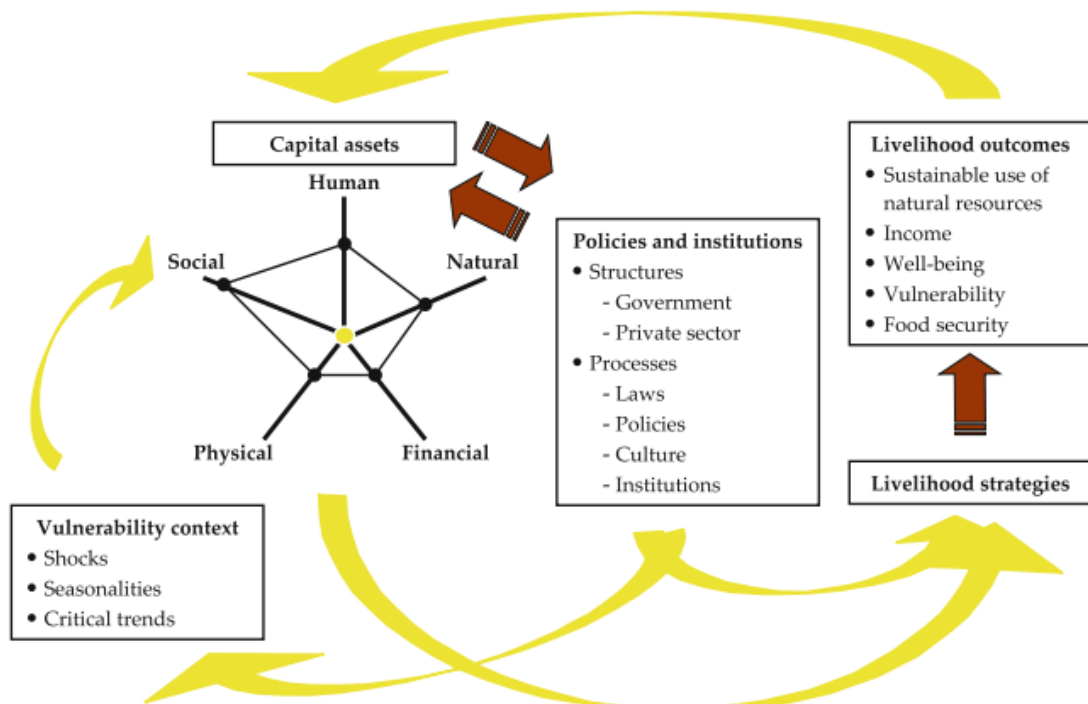
Figure 03: *DFID Sustainable Livelihoods Framework (Serrat, 2017).*

2.5.2 Elements of the Framework

2.5.2.1 Assets

As the sustainable livelihoods approach is focused on people, it seeks to gain a realistic understanding of people's strengths (here called "assets" or "capitals"). DFID proposes that the 5 most common assets are human, social, physical, natural and financial capitals, which is briefly explained in Figure 04. Scoones (1998), refers to these assets as 'livelihood resources' and suggests conceptualising them as 'the 'capital' base' from "which different productive streams are derived from, which livelihoods are constructed" (1998: 7).

Human capital:	Skills, knowledge, health and ability to work
Social capital:	Social resources, including informal networks, membership of formalized groups and relationships of trust that facilitate co-operation and economic opportunities
Natural capital:	Natural resources such as land, soil, water, forests and fisheries
Physical capital:	Basic infrastructure, such as roads, water & sanitation, schools, ICT; and producer goods, including tools, livestock and equipment
Financial capital:	Financial resources including savings, credit, and income from employment, trade and remittances

Figure 04: Livelihood Assets (Eldis org, 2021).

The ability to use different livelihood strategies is dependent on the assets/capitals that people have in their possession. Human capital refers to "the skills, knowledge, and ability to labour and good health that enables a person to pursue different livelihood strategies and achieve their livelihood objectives" (DFID, 2001, p.2). Thus, human capital is identified as the 'building block' or means of accomplishing livelihood outcomes. Social Capital refers what has already explained under chapter 2.4.1. Natural capital refers to resources found in nature that are essential in creating livelihoods as well as to sustain life. DFID (2001, p.2) also considers ecosystem flows and services (such as nutrient cycling and erosion protection) a part of natural capital. Physical capital refers to components of infrastructure (ex: a water filtration

system) that are usually essential for sustainable livelihoods. Financial capital denotes the financial resources that people use to gain livelihood objectives. DFID (2001, p. 2), states that financial capital is "probably the most versatile of the five categories of assets" since it can be "converted into other types of capital with varying ease depending upon transforming structures and processes". Therefore, assets/capitals are in fact resources that every individual, household and community can use, with some combination in order to create sustainable livelihoods.

2.5.2.2 Vulnerability Context

Vulnerability context refers to the external environment which is characterised as insecurity in the well-being of individuals, households, and communities. Vulnerability has two faces: 1. an external side of shocks, seasonality changes, and critical trends. 2. an internal side of helplessness caused by a lack of adaptive capacity to remain calm or cope with stresses and shocks (Serrat, 2017). Therefore, it is an important factor that determines the livelihood strategies. Vulnerability is defined slightly differently in different literature. Especially in resilience thinking, it is identified as "the key concepts of the exposure, sensitivity, coping, and adaptive capacity" underlining many dominant approaches (Adger, 2006; Gallopín, 2006).

Some examples that explain vulnerability are shown in the Figure 05.

Trends	Shocks	Seasonality
• Population trends	• Human health shocks	• Of prices
• Resource trends (including conflict)	• Natural shocks	• Of production
• National/international economic trends	• Economic shocks	• Of health
• Trends in governance (including politics)	• Conflict	• Of employment opportunities
• Technological trends	• Crop/livestock health shocks	

Figure 05: Vulnerability Context (DFID, 2001, p.2).

According to DFID (2001) not all the trends (as shown in Figure 05) are considered as negative or causing vulnerability. For example, some economic attributes can

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bring favourable outcomes. Diseases can be overcome and new technologies can be effective to livelihoods.

2.5.2.3 Structures and Processes

Livelihood strategies and outcomes are not just reliant upon access to assets or constrained by the vulnerability context. They are also influenced by structures and processes. Structures are organisations in public and private sector that set and implement policies and legislation; delivering services; making purchases, trading, and performing all manner of other functions that affect livelihoods. This influences access to assets and the composition of the livelihood strategy. It is important to notice that these structures operate in cascading levels with varying degrees of sovereignty and scope of authority. Therefore, analysis of livelihood should be sought to recognise these different scales of structures, which are the most important forces of livelihoods. DFID (2001, p.2) states that "structures are important because they make processes function. Without legislative bodies, there is no legislation". When developing sustainable livelihoods, it is vital to consider that these roles are not diminished. Understanding the local institutional framework before enforcing new legitimacies is the key to this strategy (March, 2002).

Processes determine the way in which structures and individuals operate and interact. They are important to every aspect of livelihoods. They provide incentives that stimulate people to pursue livelihood strategies. They grant or deny access to assets. They enable people to transform one type of asset into another via different markets. They have a strong influence on interpersonal relations regarding how to treat each other best to remain stable relationships. Analysis of processes should be selective and done in accordance with in-depth participatory exercises with diverse local groups. Processes embrace many transforming factors that are important to livelihoods. Some of them are shown in the Figure 06:

Figure 06: Processes (DFID, 2001, p. 2).

2.5.2.4 Livelihood Strategies and Outcomes

Livelihood strategies denote a range of activities and choices that people make or undertake in order to achieve their livelihood goals (DFID, 2001, p. 2). It should be emphasised as a dynamic process in which people combine livelihood activities to reach their livelihood goals. Similarly, the more choice and flexibility that people have in their livelihood strategies, the greater their ability is to cope or adapt to the shocks and perturbations (DFID., 2001). Livelihood strategies directly rely upon an assets-base as well as policies, institutions and processors. It is also shaped by an external and internal vulnerability context. Some examples of livelihood options are: agriculture intensification/extensification (Scoones, 1998), livelihood diversifications, commercialisation of traditional non-farm activities and engagement in new non-farm activities (Armitage, 2007; Bouahom, Douangsavanh, & Rigg, 2004).

2.5.3 Asset Pentagon

The asset pentagon is the core of the SLF. It lies within the vulnerability context and institutional structures and processes (Figure 07). The pentagon enables to visualise people's assets, thereby bringing to light inter-relationships between various assets. The notion is that "the centre point of the pentagon, where the lines meet, represents zero access to assets while the outer perimeter represents maximum access to assets" (DFID, 2001) Thus, the shape of the pentagon can be relatively large and well-balanced, indicating a relatively strong asset base. It could also be small and/or slanted due to an availability of few assets for different communities or social groups within said communities. The asset pentagon therefore, can provide a useful basic assumption for livelihood analysis (Messer & Townsley, 2003).
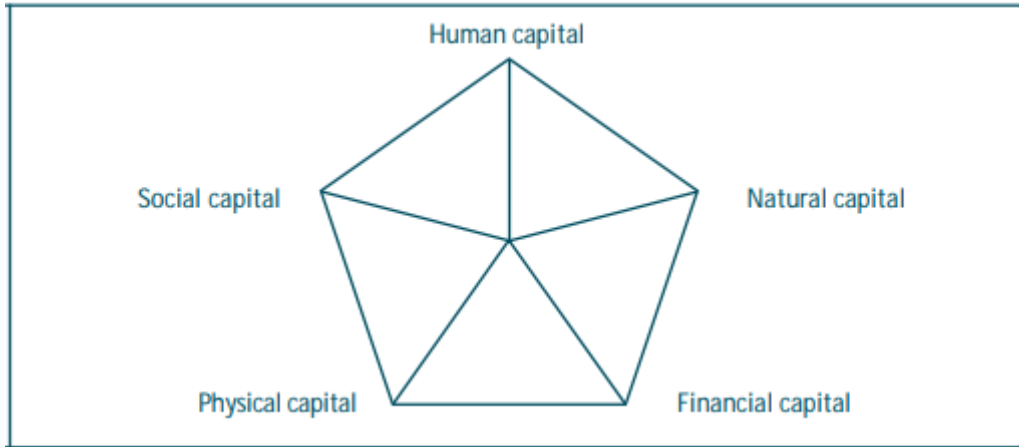
Figure 07: Asset Pentagon (DFID, 2001)

Chapter Three

3. Methodology

This chapter begins with a short description of the research approach. This is followed by an explanation of the research methods employed for data collection and data analysis. The chapter concludes with a validation and reliability of the results, including ethical considerations and some limitations of the study.

3.1 Research Approach

This research is motivated by two main factors. Firstly, I was interested in exploring eco-friendly communities and eco-tourism as a part of my Master's degree. Secondly, I was interested in bringing social-ecological resilience as a meaningful insight into the research. When I came across UMVM, the first thing came to my mind was whether or not it could be the case study where I could combine these two interests together to explore the practical implications of sustainability. It makes sense for me to do so, and as Janesick (2000, p. 382) states "…qualitative research begins with 'a question, or at least an intellectual curiosity if not a passion for a particular topic''.

Therefore, before my research work research began, it was decided that the research should be primarily qualitative due to the explanatory nature of the study. Explanatory research is used to describe the "forces and networks that cause and shape the phenomenon of interest" (Marshall & Rossman, 2014). In this case, it was to explore the capacity to influence resilience at the UMVM community. I also want this study to show how "…qualitative research techniques allow researcher to share understandings and perceptions of others and to explore how people structure and give meaning to their daily lives'' (Lune & Berg, 2017).

3.2 Sampling Approach

The sampling technique used in this research includes a non-probability character. This means that the convenience sampling of 'snowball character'. Meaning, that the sampling of data was employed as the people interviewed and observed were the ones most readily available (for example: villagers who live very close to the UMVM) (Bryman 2004).

As for the sample size, a relatively small group has been selected during my fieldwork. According to Huberman and Miles (1994), sample sizes are typically smaller in qualitative research, because as the study continues, pertaining more data does not necessarily lead to more new information. The reason for this is because one occurrence of a piece of data is all that is needed to ensure that it becomes part of the analysis.

However, it is true that small sample sizes are difficult to use in order to generalise the findings. But, qualitative results are not usually generalisable as they are not intended to be generalised (Denny & Weckesser, 2019). Usually, larger sample sizes do not permit the deep and inductive analysis that defines the quality of the inquiry in qualitative research (Huberman & Miles, 1994). A small sample size may provide insights that are useful to a specific sample population (Denny & Weckesser, 2019) such as in the UMVM community. This indicates an estimate of what people feel and do, together with a shared understanding of collective experiences.

3.3 Data Collection

I conducted my fieldwork between December 29, 2019 and February 6, 2020. Originally, the research question was structured to examine the ways how tourism strengthens the resilience of the UMVM community. However, during the first day of fieldwork, it was understood that tourism was a small operation among many other livelihood activities and strategies that influence their community resilience. Therefore, the interview guide was re-developed on-site according to the research flow after identifying the key actors and their roles. In this case, Marshall and Rossman suggest that "…questions are generated at every point in the process;

focus may change as the cycle progresses" in the flow of qualitative research. However, it was while figuring out what the UMVM livelihood activities were, what their use of resources was and how their social networks worked, that I figured out how to redevelop my research. The general idea at that time was to focus on the content of the interviews. Different questions kept coming up the more I learned about the place and its workers and residents. I tried to tie all these questions together as to how the economic, social, environmental and spiritual perspectives at UMVM were identified.

For the qualitative study, three techniques were mainly used. I did this through semi-structured interviews, participatory observations and focused group interviews (see the Appendix). The use and significance of each of these techniques is explained by the characteristics of the study context: a community with 100 members at the time of conducting fieldwork.

3.3.1 Interviews

The primary source of data collection in this research is done through interviews. 20 semi- structured interviews were conducted in my native language (Sinhala) during the fieldwork. 6 interviews were recorded in audio, while the rest were noted down during and immediately after the interviews. I conducted in this manner, because in such a small community, formal interviews were sometimes not practical. Contact with people was mostly sporadic and spontaneous. Conversations therefore became more frequent. It was also helpful to build a rapport between myself (the researcher) and the participants while being surrounded with people they trusted, being approached on such a short notice.

I prepared two semi-structured interview guides including one guide for participants of the UMVM community and another for participants of the surrounding villages (refer appendix A & B). In this type of semi-structured interview, the researcher and the interviewee do not always follow the interview script, as there was a great deal of flexibility (Bryman, 2016). All interviews facilitated a longer time for participants to drive the conversation, even though I used the interview guide to ensure the key questions were answered.

3.3.2 Participatory Observation

Bryman (2016, P. 422) describes participant observation as including the observing behaviour of the participant, listening to other people's conversations and asking questions (if possible) whilst engaging in a group. In this study, I was engaged in some voluntary work at the community by helping with their daily chores. My husband was also with me and acted as my assistant while he was there. In this regard, I had a second observer at the site who could verify most of my own findings. This provided me with a good opportunity to observe their livelihood activities, interactions between different actors and their collective work. This also helped me to build a good rapport between members of the community. The sampling used in observation was the same as used in interviews.

3.3.3 Focus Group

In addition to conducting interviews and participatory observation, I also conducted a focus group interview with 5 donors (as well as volunteers) who live in Italy, UK, and Sweden. The focus group interview was conducted online through a video conference on the Zoom platform. The focus group interview was done after the completion of my main fieldwork in Sri Lanka. This provided me with a good sense of how social networking and social capital play a role in the UMVM community, as all of the focus group members have been involved with UMVM and SSA for many years.

3.4 Data Analysis

3.4.1 Thematic Analysis

After the completion of collecting data from interviews, observations and the focus group, the data was transcribed and translated into English. The transcribing process was time consuming and daunting. After listening to the recordings several times, I was able to speed up the process. As for the initial data analysis, a 'thematic analysis' was used, which means that I analysed the ''examined data to extract core themes that could be distinguished both between and within transcripts'' (Bryman, 2016, P. 11). In other words, the thematic analysis allowed me to find patterns and

themes regarding the general functioning of the UMVM livelihood and their capabilities. To identify the main themes, this study used a coding method where ''the data is broken down into their component parts and those parts are then given labels'' (Bryman, 2016, P. 11). Then, as the analyst, I looked for recurrences of the sequence of coded text in the transcriptions and correlated this between different coded texts for interpretation. Coding helped to familiarise with the themes and interpretations related to the development in the research questions. In this way, the thematic analysis resulted in an analytical approach to help ascertain the capacity of the UMVM livelihoods towards its resilience.

Field notes also provided a rich context of information, which was useful for assessment and interpreting the meaning in the language that was used. The thematic analysis used in the analytic field notes were then typed down. This involved the same coding methods used to transcribe the interviews, which include the iterative process of open and focused coding

During the thematic analysis process, codes are grouped into clusters of interrelated ideas and concepts, which are then identified as categories. These categories and codes are arranged and presented narratively under the 'results' chapter. Usually these categories are closely and explicitly linked to the raw data, which helps the reader to make their own interpretation and theoretical interference that might differ from the researcher's.

3.4.2 Framework Analysis

It is important to highlight that being a qualitative research; this study constantly interplayed between data collection, analysis and theory by constructing iterative and integrated stages (as shown in figure 08). This is one of the advantages of qualitative research when compared to quantitative research, as it provides a great flexibility (Walliman, 2006). As a result, whilst handling data, I modified the research question several times with an emergence of themes and codes.
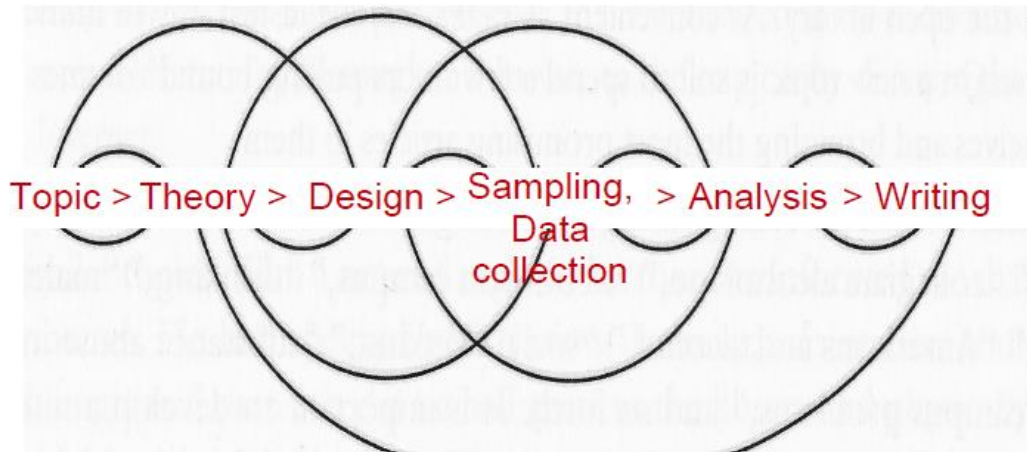
After the thematic analysis of this study, I adopted a framework method to further analyse the data. An analytical framework defines as a "set of codes organised into categories that have been jointly developed by researchers involved in analysis that can be used to manage and organise the data'' (Gale et al.,2013). The Framework of sustainable livelihoods (SLF) used in this study, created a new structure for the data (rather than the full original accounts given by participants), which obligates to summarize/reduce the data in a way that can support to answer the modified research questions. It is also important to highlight that indicators of the SLF covered similar topics and key issues, which were possible to categorize based on the thematic analysis.

3.5 Qualitative Assessment

According to Guba (1985 as cited on Bryman, 2016), qualitative study should be evaluated in terms of establishing and assessing the quality of the study. An alternative way of doing this is to maintain trustworthiness throughout the research process. In this study, trustworthiness is explained through credibility, transferability, dependability and confirmability.

3.5.1 Credibility

Credibility is the most important aspect in establishing trustworthiness. I believe this study contains enough credibility to confirm that it is genuine. This is because the study significantly serves the social reality in which the community lives in. I did my best in this study to follow good research practices and triangulation. This is done by

cross-checking the quality of data by using three different data collection methods: interviews, participant observation and focus groups. In terms of what I observed, it was helpful to reduce my own bias as much as possible while attaining a diversity of knowledge, views, opinions and perceptions of the participants. One of the most important dimensions of qualitative study is to be reflective and open (Desai & Potter, 2006). However, in terms of sampling size, I understand that there is a lack of credibility. Thus, the sampling does not generalise the findings.

3.5.2 Transferability

Transferability determines this research in the way that it includes the study of a small community (sample size) where the focus is on depth rather than the breadth of the data. Therefore, the findings are oriented around the contextual uniqueness and importance of studying the social realities at UMVM. In order to maintain the transparency of this study, I tried my best to use and share the details of most expressions used by the participants by providing un-theorising raw data as much as possible in the results chapter. This is considered as a thick description in qualitative study which used to minimise biases and enhance transferability (Lincolin & Guba cited in Bryman, 2016).

3.5.3 Dependability

Dependability is accounted for in parallel with its reliability. This study maintains records starting from establishing a research question to the sampling and analysis of the data. I have also included an interpretation of my findings and included future recommendations for UMVM - findings 'which are supported by the data as received from participants of the study' (Korstjens & Moser, 2018). This way the findings are dependable across all units and maintain consistency in all stages.

3.5.4 Confirmability

Confirmability regarding this research has been conducted in good faith, whereas any personal bias towards interpretation of the findings may still be present, but I have tried to avoid it to the best of my ability.

3.6 Ethical Considerations

Nygaard (2017) highlights the importance of making ethical considerations when doing research in social science, as social science is generally about studying people, whether it is as individuals or groups. Therefore, ethical principles were discussed when planning the research, and it was found important to make sure that the respondents knew that all the data collected from them would be handled confidentially and anonymously. At the beginning of the research, I acquired permission from the leader (the chief incumbent) of UMVM to conduct this research. During the data collection, the purpose of the research was explained to the informants/interviewees. This enabled them to participate based on informed consent. Some informants, who are mentioned in the results chapter, provided their consent (both verbally and written) to mention their titles at the monastery. The respondents were free to withdraw from participation at any time. They were also ensured that all the raw data would be kept confidential and deleted after the purpose of the research is completed.

3.7 Possible Limitations

The relatively short time spent in the field has resulted in selecting a smaller sample size, which has affected the study in terms limiting the number of interviews conducted. Especially not getting to interview that many villagers from the hamlets, forest officers (the Village Forest Reserve office was closed), village officials and monks from other religious communities nearby UMVM, was the most significant limitation to this study.

From a cultural point of view, I am Sinhalese and a Buddhist, which is the largest ethnic and religious group in Sri Lanka. This was one of the advantages of conducting this research, since I can understand the local context and culture very well. It is also at a disadvantage, since there may be a bias in my study towards living in such a culture and having the same religious beliefs. However, it was interesting to meet and conduct interviews, as I discovered that not all the members were Buddhists in the UMVM community. This helped in my study to look at the community from a multi-faith view. Some of the participants I interviewed were

Hindus and Christians. As for any potential cultural or religious biases I haven't detected any as such, but tried my best to maintain a transparency and validity of the findings, thereby strengthening the trustworthiness of this research.

Chapter Four

4. Findings

This chapter illustrates how the narrative of the research is based on the findings. As explained in the methodology chapter, all the findings were collected from qualitative research methods; semi-structured interviews, participatory observation and focus group interviews. Primary stakeholders were identified as Buddhist monks, nuns, volunteers, donors, and retired members. Secondary stakeholders were identified as visitors, guests, villagers and government officers. It is important to highlight that the experience and perception of the participants are showcased through themes and patterns using the thematic analysis. Descriptions of data (without any interpretation) are shared in this chapter to emphasise the transparency of this research. Thus, the next chapter comprises the discussion and interpretation of the findings through the lens of the SLF.

The Origin

4.1 Initial Concept and Goal of UMVM

This is the story about a spiritual leader and a Buddhist thero (monk) based in Colombo, the capital of Sri Lanka. The Chief Incumbent (CI), who is the founder and leader of the UMVM, envisioned inventing a spiritual and eco-friendly village sprung from a Buddhist community. Although he claims himself as an 'Arhat' (the awakened one), which to some is problematic, he does deeply care about spiritual values and nature. It can also be said that he has many followers both internationally and domestically, including prominent figures in Sri Lanka.

While talking to the Chief Incumbent for the first time, we were sitting outside the 'Kethumathi Prasadaya', which is the main residential building. The entrance of the building is very ornamental, which is where the first interview was held. He gestured at paintings and reliefs on the walls while answering questions regarding the initial project idea of UMVM.

"I travel all around the world. I hold vast knowledge about the world - many doctrines and subjects. I graduated in microbiology, but I follow a different path. Now, all these paintings on the wall… I draw the initial sketches, and t hen I pass them on to the mason who completes the work. (...) We wanted a land where our skills and competence can be brought to light. For that, this is the land that we found."

I had a similar discussion with monk #2, who told me that: "When our CI travels abroad, we too travel with him. He then collects ideas from every place we visit, reinvents them and advises us how to apply those ideas to our own context". In various other interviews since then, other informants have also spoken of how the CI visualized to them a master plan to create an aesthetically pleasing and environmentally friendly community village in a "walking monastery" - a place that you can stroll around in and let your mind wander off in tune with your legs.

When discussing the livelihood goal of UMVM, the CI explained that UMVM is a big project. It's a concept and a process where the goal is to build a place considering the necessity to answer contemporary world issues, such as global warming, environmental degradation, and increased use of artificial chemical fertilizers and how, in his opinion, our human qualities are fading away. The further goals are to decrease selfish acts of humans and promote an altruistic lifestyle.

As explained above, the livelihood goals of UMVM cover a wide of social-economic, environment and spiritual motivations. However, the findings from the interviews and participatory observations describe how spirituality has come to be the core value of its emergence. Their definition of spirituality, according to the CI and several other informants, is that spirituality has three emergent concepts: well-being and happiness, moral responsibility and serenity (mindfulness). In the words of the CI:

"UMVM is a centre for making people realise the importance of virtues and dhamma…It facilitates a platform to raise philosophical inquiries in   society.''

UMVM has also tried to set a moral example to society by creating a 'Model Village' that shelters many social, economic and environmental solutions. For example: it promotes a more organic and natural way of living by reducing the need for harmful chemical fertilizers used in agriculture production. The CI insisted that:

"We have excelled at using organic fertilizer. Sri Lanka is an agricultural country, if so, we need to develop the country through agricultural designs."

The CI also identified the values of travelling as a way to create awareness,

"On average there are thousands of visitors who come to see UMVM in a month. We advise visitors to borrow new ideas from here. A new vision! You should change your home, school, temple and church (to become as) beautifully as this".

Similarly, monk #2 confirmed what the CI said by adding that "We aim to deliver a results-oriented and pragmatic spiritual approach to society."

The CI highlighted how the serenity and nature at UMVM makes it a spiritual place:

"Now see, how calm the surrounding environment here is? The mind calms to zero. Then, there are these sounds of the birds. That's all. There is no hustle and bustle here! Everyone should come and then enjoy the serenity".

UMVM operates in a multi-faith atmosphere rather than holistically operating as a Buddhist monastery. According to the CI:

"This place is not created only for Buddhists. Christians, Hindus, Muslims or anyone else can come and stay here. There is a collective experience here. It is not a tourist project. This experience can be brought into your life. Becoming rejuvenated, with a refreshed mind - an enlightened person should go out (and experience nature). That's how the UMVM theme has been systematically created. We call UMVM "a sanctuary for intellectuals".

These understandings have been confirmed by several informants as well, such as volunteer #1: "I am not a Buddhist. I am a Hindu (Malayalam). I volunteer at UMVM as well as Siri Sadaham Ashramaya (SSA) whenever they need my help".

Similarly, monk #5 stated: "I am a Christian (Catholic). I have had a very troublesome youth. Now that I am here, I have learned to keep my mind occupied by working with others."

4.2 Sister Monastery: Siri Sadaham Ashramaya (SSA)

The UMVM community functions as a Buddhist Monastery and a non-profit organisation, which is registered under the brand name 'Umandawa Maha Vihara Monastery' and the company name 'Siri Sadaham Ashramaya' (Good Market Lanka, 2020). Both primary and secondary products that are produced at UMVM through Good Market Lanka (GML: a local market at UMVM, but operating within a domestically connected GML network in Sri Lanka) are also sold at SSA to raise funds for both monasteries. In this sense, they are financially beneficial to each other, as most donations come through SSA, while other goods and services are provided back from UMVM to SSA.

Therefore, it is important to highlight the role of SSA (which based in Dehiwala, Colombo) in relation to UMVM. The CI established SSA in 2004 to disseminate 'dhamma' for practical and spiritual benefits for the development all humans. Since then, SSA has been the hub for many followers of his teachings. Buddhist monks, nuns, volunteers and donors who follow the same path as the CI, comes to SSA to congregate and listen to sermons. This is where most of the fundraising, administration and marketing activities happen. SSA is led by the CI as well, in accordance with an executive committee. Every member of the committee is a paid member. The membership fee is Rs.5000 (USD $27) per month at the time of my research. As members of the committee, you get to decide on certain matters that happen at SSA and UMVM. However, most of the members are spiritual followers and devotees who pay and/or volunteer for the purpose of contributing to maintain both SSA and UMVM.

All the monks and nuns at UMVM are affiliated with its sister monastery (SSA). Before UMVM was founded, this is where the CI and his followers got the idea to establish a second monastery in a more natural and peaceful setting. The manager of UMVM (and previous engineer by profession) expressed that UMVM was established because there was a need for more contemporary, newer and progressive thinking. They felt this was needed for the betterment of all people through a larger scope of social, economic, environmental, spiritual and Buddhist services to the society at large; especially rural Sri Lanka. With that intention, they expanded and divided their operation from the sister monastery at SSA in Dehiwala (a highly populated suburb of Colombo) to the present location of UMVM.

4.3. UMVM Land Ownership and Transformation

4.3.1 Purchasing the Land

The community of UMVM lives in an area owned and administered by the community itself. The land spans about 70 acres (28,328 hectares) and located on the outskirts of Madahapola village. The plot of land stretches roughly from 2 to 2.5 km in length (Figure 01). According to the CI, the land was mainly purchased from the initial financial support of a Buddhist monk (now deceased) - who previously was a doctor before entering monkhood. He and his wife donated Rs.45 million (243.998 USD) to purchase the land. Many other donors also contributed collectively to reach the final purchasing sum of Rs.50 million (271.109 USD).

The purchase of the land took place in December 2015. Before that time, the land used to be a privately owned coconut plantation named 'Sadheera Estate', which was abandoned for 15 years before the purchase. The land had been overgrown by thick shrubs and young trees, such as coconut, mango, cashews, jackfruit, wood apple, sacred figs and several other kinds. To quote the CI:

> "There had been no maintenance for the last 15 years. Only the coconuts had been plucked by the watchmen who looked after the place during the daytime."

Due to the mention of watchmen, I asked if there were any unwanted trespassers at that time. The CI further mentioned that there might have been outsiders who came to pluck coconuts as well, but that he really did not know exactly. However, the land was fenced. A UMVM resident (monk #2) further mentioned that he had heard that: "People used to be scared to enter the land, because it was overgrown with jungle, so they thought it brought bad luck… from evil spirits in this place"

As for the neighbouring land surrounding UMVM, the CI described that most of the surrounding land consisted (and still do) of plots ranging from 50-100 acres (20-40 hectares), which are owned by mostly wealthy people in Colombo (capital of Sri Lanka). Villagers in the surrounding area are settled in much smaller plots of land sized 15-20 perches (379-550 m^2).

4.3.2 Collaborative Work During the Transformation

According to interviewees at SSA, they said that the CI and the executive committee organised a programme at UMVM right after purchasing the land, which includes the work of 25 monks and nuns in accordance with many volunteers. This programme is called 'Shramadana', which means "gift of labour", and is a shared volunteering programme. The very first act of the group was to plant a "Bodhi tree" (sacred fig) at UMVM, which is a Buddhist custom, as most temple grounds have such a tree on the premises. By clearing the surrounding land from shrubs, they then maintained the land and prepared it further for other projects, such as planting of crops, and other trees.

4.3.3 Some Tension During the Transformation

It is important to consider that Buddhist monks and nuns in Sri Lanka are essentially viewed as religious leaders and not as farmers or labourers. Despite this social view, UMVM challenges some of the traditional Buddhist traditions, culture and norms while at the same time trying to keep a harmonious relationship with the locals.

In this section, I have included the immediate response to the UMVM resettling, which is evaluated from the perspectives of the UMVM community members, and not

the villagers who actually live surrounding UMVM. I was unable to verify some of these statements of UMVM residents from the villagers.

As monk #2 said in one of his interviews:

> "There were issues, because they (the villagers) did not know what was happening. Also, the villagers here are very traditional people. They thought that Buddhist monks should be looking down at the ground when walking, and shouldn't wear sandals. We shouldn't speak loud; we should meditate in the hermitage and only come out to have food. But as soon as we moved in (at UMVM), we started working, clearing (land), preparing food of our own, all from within (the temple grounds)."

He further stated that there were misconceptions among the villagers in the beginning:

> "There was much gossip roaming around the village; that not everyone can visit here, that only rich people can come and that the gate is so big that (they were afraid) nobody can come through… things like that."

According to monk #4:

> "There were small issues at the beginning. Villagers didn't understand the philosophical message that our CI was delivering. Later on, villagers started to visit after knowing what we do here. Some villagers have also changed their gardens like ours… started to grow. Even monks from other temples have started to grow (after visiting UMVM)''.

As for the issues that occurred with villagers, and of what happened at the beginning of establishing UMVM, they were not really addressed by the community. However, on another occasion of the participatory observation, a volunteer succinctly added, "At the very beginning, water pipes in UMVM were sabotaged by some people in the village.''

However, I didn't get a chance to clarify more details about this incident. Neither had I found any further evidence of possible tension between the village people and the monastery.

4.3.4 Environment and Other Challenges

4.3.4.1 Dry Climate

The climate of the Madahapola area mostly features a mixed climate with long dry and wet periods throughout the year. According to several interviewees, the soil in the land was very dry and hard when they purchased it, which was challenging for agriculture and labour. CI stated, "The environment was too hard, which quickly made our bodies dry and cracked the feet".

4.3.4.2 Water and Sanitation Issues

Upon purchase of the land, there was no access to clean water. There was an old well that had been dug for drinking water. "There was no water when we went there at the very first. We had to bring water from the well each time. We bathed in the stream nearby. There was only one old squat toilet", a volunteer (#1) recalls.

4.3.4.3 Financial Issues

After purchasing the land, there were challenges to raise funds to reshape the land, such as raising funds for constructing "ashramayas" (cottages) for monks to reside. According to the CI, it took four years to complete the construction of the "Suwanda Kutiya", which is the main ashramaya. "We were waiting a long time for funds to be collected. In the meantime, we started working on other areas (of the land), like gardening and farming. Funds were collected little by little. There were people who donated from Rs.20, Rs.50 and up", the CI informed me.

Since the beginning of construction, UMVM has had access to many volunteers who have the skills and willingness to help with daily work such as farming, construction and cooking. Most of the volunteers (devotees) from SSA contribute with labour in their own spare time. "There are people who have no money to donate. We asked them to come and volunteer with whatever they are capable of", the CI further informed. With that said, people who are capable of donating money also engage in volunteering work organised by the community at SSA. "The two wealthy ladies (donors) who own the land next to us also came to do work", the CI recalled.

Livelihood Activities, Capabilities and Vulnerability

Monks, nuns, paid workers, volunteers and retired members in the UMVM community equally engage in the daily activities; including organic farming, gardening, maintenance, repairing, preparing food, as well as tourism related work. They are thereby learning to be mindful by focusing on each activity. Monk #2, like several other interviewees, credited the Buddhist spiritual background of the community as the foundation for trying to live in a sustainable community. This does not only benefit themselves, but also the rest of society. He specifically said:

"Before considering spiritual development, people should have economic development in their life. Equally, they should have a better social background. Now, what we do here is; we are trying to make a system that is capable of providing our own needs: self-sustaining and environmentally friendly."

There are many sustainable projects that have been introduced in the community as a result of the diverse knowledge and common interests of its members. The below sections present some of those projects that I was informed about and engaged during the field work.

Any activity related to farming and gardening is carefully monitored and maintained by the members of that particular group. Some monks and nuns do more things related to farming and gardening more than others based on their self-interests as well as their skills and physical strength. A self-governed group is formed to monitor their own projects and tasks. Meetings are later held with other groups in which they compare notes and progress with. They also get help and advice from external sources, such as agricultural experts, specialists and volunteers. They also search on the internet for information that may help to reduce vulnerabilities and failure of farming. This type of monitoring is also the same for most other projects, so that the overall vulnerability of UMVM is minimised

4.4 Mindfulness Practice, Well-being and Happiness

With reference to the UMVM interviewees, it can be said for most of them that they are practitioners of "Mindfulness". To them, this means to have a conscious connection with the environment around them. They feel that being mindful brings freedom, wellbeing and happiness.

The CI described that "Vipassana (ancient Buddhist meditation) is not something you need to lock yourself in a room to practice. You can do Vipassana by removing weed from the lawn while being mindful in your daily activities. That is all."

During participatory observation, I experienced how mindfulness was given priority in all daily activities and chores. Their instructions are to remind yourself to be mindful throughout the day without forcing yourself to focus. This is done whether you are walking, eating, cleaning, farming or simply enjoying a cup of tea together or in solitude on your own.

As for aspects of spirituality, such as matters of wellbeing and happiness; this is practiced with all residents and visitors throughout each day, whether it is through meditation, work or counselling. As described by a monk #2: "Everybody has experience about their lives, and a desire for something ahead (in time)… to become less regretful and more happy".

He further elaborated, that "...while we are planting herbs, removing weeds in the vegetable gardens with the visitors; we are talking to them - then they respond with issues in their own lives (that they share with us). We then provide answers. We don't sermon in traditional ways. This is a more practical approach (to spirituality)".

4.4.1 The Practice of Altruism

By creating a community with a collective interest in helping others, UMVM practices and promotes altruistic attributes. Selfless acts and volunteering not only benefits the

community itself, but also the surrounding villages and society at large. According to the CI:

> "Buddhist spirituality is altruism. Altruism is spirituality. Both are binary - a reversible reaction. Spirituality cannot be practiced without being altruistic".

Similarly, Monk #2 also said this about spirituality and good deeds: "What we do for others stays for a long time", indicating that good deeds are drawn upon to help others.

4.4.2 Cultural Principles

Ancient Sri Lankan history, Buddhist culture and arts have influenced every aspect of the UMVM community. The CI told me that "Umandawa" was selected for UMVM from the name of a poetry book based on a Buddhist story called "Ummaga Jathaka- 'The Story of the Tunnel'.

The name of the place is not the only historical inspiration. The artwork, especially statues and mural paintings are reminiscent of ancient Sri Lanka. Various statues, moonstones (ornamental crescent floor stones in front of buildings), guard-stones and murals are seen on buildings, by the crossroads or out in the gardens. They are mostly replicas of older sculptures modelled after Buddha statues, cobra statues, traditional Sri Lankan motives (elephants) as well as Hindu gods (ex: Vishnu). There are also original works on display, as volunteers and guests are sometimes asked if they like to show their artistic skills; whether it be painting, decoration, dance or music.

4.4.2.1 'Kala Kavaya' - Art Curve

After my fieldwork, I was able to attend one of the yearly meetings of the UMVM executive committee, which was held at the SSA monastery in Colombo. It was there that I observed how they established a new team together called "Kala Kavaya" (Art Curve). The Kala Kavaya team was established to collect a group of people who are willing to participate in cultural events and perform their artistic skills. The manager informed me that UMVM organises many cultural and entertainment events throughout the year. This includes music, singing, dancing, drama, drawing, poetry,

debates as well as religious festivities. Instead of hiring external entertainers, they have decided to let existing members (donors and volunteers) bring forward their own talents.

4.4.3 Buddhist Spiritual Conduct and Norms

According to the interviewees, all monks and nuns at Umanadawa strictly adhere to the Buddhist spiritual procedures (meditations and chanting) and equally engage in day-to-day activities in the development of their community plans.

At UMVM, both monks and nuns reside and attend their daily chores together within the same territory of land. Even though the monks' chambers are about a kilometre away from nuns' chambers, this is not quite normative in Buddhist temples in Sri Lanka to accommodate both genders within the same premises. It seemed to me that both monks and nuns at UMVM are treated and accepted in an equal manner. However, during the meals are served to monks first before the nuns. I did also observe the opposite, but this was rare. When I questioned about this manner, informants replied that they have to follow some Buddhist traditions just for the sake of having traditions at all.

Further, as a Sri Lankan Buddhist norm, none of the members in UMVM engage in activities such as fishing, fish farming or the slaughtering/killing of animals. However, you are allowed to consume fish and meat. Most protein requirements in the daily diet are purchased from nearby villages. Alcohol consumption, drug abuse and smoking are prohibited on the premises as a code of conduct. It goes without saying that it is also discouraged in all other aspects of life.

Cleanliness and personal hygiene is also mandatory at UMVM. Everyone is also encouraged to maintain an environmentally friendly behaviour at all times.

4.5 Introducing Spiritual and Eco-Tourism

4.5.1 Primary Motivation

Introducing spiritual tourism is a rather new livelihood activity which has been added to the UMVM community, as it was not considered early in the project plans. Talking to the CI, it is clear that the primary motivation for introducing spiritual tourism was to add value to an already present tourist experience. The idea is to teach visitors and tourists about spiritual (altruistic) and cultural values.

> "There are foreigners who visit Sri Lanka at cultural heritage sites, for example "Sigiriya" - the Lion Rock (ancient rock fortress) and the ancient cave temple "Dambulla", who simply take photos and leave. They don't adopt the narrative behind those places and statues into their lives. What we do here is when foreign guests come, we add value to their lives", the CI said.

Another quote from monk #2 describes further:

> "Our land is in the centre of the country. People can come here easily. That's one thing. Then, since we have lots of land, we can do many projects. We didn't have a big plan before, but with our leader's competence and our own human capacity, we are capable of it".

4.5.2 Tourist Segmentation

When I was conducting the participatory observation at UMVM, I noticed two main types of tourist segments: visitors and guests.

4.5.2.1 Visitors

UMVM is open from 7 am to 5 pm at all days, for the whole week, throughout the entire year. The entrance is free for everyone. All visitors are welcomed by monks and nuns who are assigned as a welcome committee to deal with visitor and guest relations. They tend to all questions and inquiries, and also perform guided tours of the land. During my stay, there were different groups who came to visit. One day

there were classes from elementary and high schools visiting, and at others there were youth associations, volunteer organisations, as well as elderly associations and large family groups. Before the Covid-19 pandemic arrived in Sri Lanka, I was informed that there were about 1000 unique visitors.

4.5.2.2 Guests

UMVM provides a wide range of Buddhist spiritual programmes and accommodation options. This is within the community grounds for guests who wish to experience and learn about the lifestyle of the community. As a guest, you are welcome to practice the daily life of those who reside in the community. You are free to explore the grounds as you wish, join the monks and nuns in daily chores, which are embedded in the surrounding nature and local villages, or one can simply watch and talk with them.

4.5.3 Tourism Products and Services

4.5.3.1 Mindfulness

Visitors and guests are inculcated mindfulness through simple daily activities such as walking, gardening, picking fruits, vegetables and herbs, casually chatting with monks and nuns or serving food.

Further, visitor and guests can customise their spiritual tourism experience through philosophical discussions, meditation programmes, and Buddhist dharma discussions.

4.5.3.2 Happiness and Wellbeing

"Ravana Asapuwa" is an "Ayurvedic" (Hindu system of medicine) treatment centre located in the reception building. This is a treatment centre provided with herbal medicines that are able to soothe the body and mind. Herbs and spices are grown in the community, which are then used for treatments after consultation with a qualified Ayurvedic doctor (volunteer doctor) who is present at the premises most days. One may also get Ayurvedic massage here.

The 'Deegayu Cafe' is located in the 'Nandana' garden with a waterfront view of the 'Nandana' lake (Figure 10). Deegayu means long-lived in the Sinhala language. According to the UMVM interviewees, the cafe is named with the intention of providing herbal drinks and healthy snacks that are organically grown and produced by the community. It serves various types of healthy food and beverages; including tea, coffee, herbal drinks, fruit juices, refreshments and other snacks. There are organic drinks and snacks to be sold at their Good Market. Such items are for example: ginger juice, homemade vanilla ice cream (coconut cream) and lemon marmalade to name a few.

4.5.3.3 Excursions

According to community interviewees, visitors and guests can engage in boat rides in the Nandana Lake, as well as go bird- watching (peacocks and herons live around the lake), feeding fish and tending to livestock. They have also built a biking path for cyclists to easily ride around the community as an environmentally friendly commute. UMVM is also in partnership with a travel destination management company, with whom guests can go on guided excursions in National Parks to see elephants and other wildlife outside the community. The CI mentioned that they can connect visitors to tour guides in the village when organising hiking across the surrounding mountain range.

4.5.3.4 Food and Gastronomy

UMVM promotes a synergy between food, beverages and culture in the context of the local culinary cuisine. The CI explained that: "We try our best to provide all the meals that we prepare ourselves. Dishes like "maalu ambul thiyal" (local sour fish dish), "kiri hodi" (coconut milk gravy), "achcharu" (local pickles) are often served." He further said that:

> "We have also arranged an area surrounded by trees for guests to have lunch. Where we use reed mats to sit on the ground. Served with Srilankan traditional food, all the food utensils are made out of coconut tree by-products."

Most of their dishes are coloured by vibrant, organic, edible dye made out of herbal plants and flowers. For instance, they make blue rice using butterfly pea flowers, which is a herb grown on their land.

Guests and visitors are encouraged to engage in planting, harvesting and cooking food to get a better understanding of what they eat, how it is made and where it comes from.

4.5.3.5 Social Services

Visitors and Guests have the option to participate in the social service programmes given by the community to the surrounding villages. This facilitates an atmosphere where visitors and guests get to familiarise themselves with Sri Lankan rural lifestyle and culture. This is also to learn about altruistic practices and its benefit for the local livelihoods.

4.5.3.6 Environmental Awareness

UMVM provides knowledge and information on the surrounding environment and all sustainable projects that they conduct for everyone who comes to visit or contact them. Also, visitors and guests can engage in sustainable projects such as tree planting programmes.

4.5.4 Marketing for Tourism

As discussed with the CI, there is a necessity to further develop the concept of spiritual ecotourism in UMVM. UMVM seems to follow a carefully selected marketing approach for specific market segmentation, as the primary function for the community of UMVM is not the aspect of tourism.

In answering the interview question: *How do you conduct marketing for tourism as a community?* The CI replied,

"That marketing process is a bit difficult. It's not easy, because what Sri Lankan people have seen as tourism, and what we try to show them here, is literally as

different as the sky and the earth (Sri Lankan expression). Now we are creating an ongoing process. Let's see if it will succeed - not to market tourism, but to help people with changing their lifestyle".

He further expanded upon this by saying: "Once, there was a group of people who wanted to send some tourists here just to have lunch. We told them not to send them (here) just to have lunch, as this is not a hotel. Only send them (here) if they are willing to explore the environment and learn something from this place".

UMVM carefully considers the spiritual and environmental aspects of their operation in regards to Sri Lankan culture and tourism.

"Actually, the biggest issue is to provide them a service (at all). We need to give them a good service. We don't have enough finances to do that. So, what we do is... we set a fixed price (for the overall stay). Otherwise the guests do not know how much to pay. We don't take that money for teaching dhamma, but (we do it) by providing facilities like accommodation, food, water, electricity etc."

Upon answering the question '*Do you think spiritual and eco-tourism will be improved in the near future?*'

He said: "Oh... We don't have such big targets. We live for the day. If we think too much about those things, (then) it becomes a problem. If we do the right thing, nature will support us. That's it!"

4.5.5 Other Tourism related Challenges

4.5.5.1 Income from Tourism

According to the CI, the income from spiritual tourism is much less than the expenditure of UMVM at large:

> "Generally, the daily expenses are around Rs.100, 000 (510 USD) just to run UMVM without any external projects. Then, from tourism we receive around Rs.10, 000- 20, 000 LKR (a day) (51- 102 USD) which is not (nearly)

enough to cover the expenses. But, we need to provide a spiritual service (no matter what), so we keep it up (for the tourists)".

4.5.5.2 Lack of Manpower

As for expanding their livelihood strategies as a tourist destination, the community has its limitations. Although there are monks and nuns, resident volunteers, retired members and paid workers living and working (except paid workers) at UMVM at the time of this research, most of them have daily chores that are prioritised for running the community. The CI explained to me that: "Let's say that there are 10 guests coming to stay here. We don't have a proper system to clean the accommodations after them, because we can't afford to hire more people at the moment."

Another comment attached to the same issue,

> "Now, the volunteers who work in the kitchen have a lot to do during the day. There is no time to attend to other tasks. Those are the issues we have right now. It will take some time to solve those issues little by little."

4.6 Donations as Main Income Source

Being a Buddhist monastery and a non-profit organisation, I asked if donations are a key source of income for UMVM.

> "Yes, mostly donations. We continue to maintain this place from what people happily donate after visiting us", the CI told me when clarifying the issue.

"How uncertain is it to depend on donations as a community?" I asked him further.

> "Ah, as long as we believe in doing the right things, that the process is just and accurate, then everyone is welcome to help with whatever they can." He replied.

After an interview with a focus group (donors who live abroad) online in a video conference, I got to know that significant funding is collected. Donors, who live abroad from countries such as Australia, USA, Italy, Sweden and Norway, maintain a

virtual team online to raise funds. The funding goes mostly towards the development of UMVM as well as administrative work. As mentioned before, there are many other donors in Sri Lanka as well. All donations are collected systematically and put into a trust fund, which is called "The UMVM Development Fund" which generates a yearly interest income for the livelihood.

4.7 Organic Farming and Food Production

4.7.1 Polyculture Farming, Organic Pest & Weed Control and Crop Rotation

Agriculture has become the daily task that consumes the most time, resources and labour. The land has gone through a considerably large transformation since the purchase of it. The land now provides most of the vegetables, fruits, herbs, rice, grains, nuts, spices and oils that its residents consume. Everything is grown without chemicals, in an organic and environmentally friendly manner. The most recognized fruits, vegetables and spices in the crop fields were pineapple, mango, soursop, lime, star fruit, papaya, guava, cabbage, beetroot, cashews, carrots, onions, leeks, beans, eggplant, okra, tomatoes, basil, turmeric, tamarind, coconuts and more. Some lesser known tropical varieties were plants such as beli (Bael), moringa, wood apples and manioc (cassava).

Polyculture farming means that you grow varieties of different plants in the same crop field. For instance, banana and mango trees are grown on the same ground where peanuts are cultivated. As natural pest deterrence, strong smelling herbs and spices like Marigold and Bird's eye chillies are planted among most crops of ginger roots that I helped to harvest, as well as in between alliums such as onions, eggplants and bitter gourds. As for insecticides, they are making their own organic compound from seed extracts and "Neem" tree leaves. This concoction is not a pollutant to the environment, yet it helps to keep certain insects away from the crops. The CI stated in an interview, that "We now see in the cabbages that no chemicals have been sprayed, because there are tiny holes made by worms, which means this is a fully organic product".

As for a natural approach to weed control: crop diversification, crop rotation and the spreading of crop residue on field surfaces are all effective methods at UMVM. Crop

diversification simply means that there are various sorts of plants mixed together in the same area, and crop rotation means that a field is cleared after harvest to plant a different species to enrich the soil and increase yields.

4.7.2 Water Sources & Irrigation

At UMVM, I was guided around and shown all their various sources of water. According to informants there was a groundwater aquifer which has been turned into a large natural water reservoir called 'Nil Diya Pokuna'- 'Blue water pond' (Figure 10) for irrigation purposes and storing drinking water. They have artificially built a water storage tank where the water from the blue water pond is collected and stored systematically. This water storage tank can hold up to 100,000 liters.

The main lake called Nandana that was built by harvesting rainwater in the grounds of the community. It now mainly maintains a suffix flow of water for irrigation. However, the CI explained that water in this Lake is not directly used for farming. Whenever the water level reaches its banks, drains are dug and tubes are inserted to lead the water into the lower plane of the rice field.

Another method of irrigation being used is called drip irrigation, where hoses and tubes are connected to a pump and evenly placed within a crop field. This is done to save water use and to let nutrients from the soil drip slowly to the root of the plants. Plants watered by this method are plants like ginger, peanuts and turmeric.

4.7.3 Organic Fertiliser and the Plant Nursery

The community optimises the use of their organic waste by making it into fertilizer for their organic farming. All the leftover food and organic waste from the kitchen as well as any other food production is collected to the compost heaps. A liquid compost accelerator is then sprayed onto the heaps to accelerate the fermentation process of the compost into fertilizer.

Furthermore, there are 6 cattle (both cows and bulls) living at UMVM that also helps to enrich the soil. Informants mentioned that these cattle were gifted to the monastery by followers. The cattle are not raised for meat consumption or producing

milk. The primary function for the cattle is to produce dung which is used to fertilize the crops, making compost and biofuel.

A nursery for the plants is located next to the main entrance. It looks like a building from a distance, but it is like a giant tent with four walls and a roof. The material is a green nylon net that is draped over a very large frame. The net is there to cover the plants from direct sunlight. They maintain their own nursery to provide an environment for the seeds and plants to propagate and grow before transferring them to open fields. According to various interviewees, there are about 500 plants planted every day. Some plants are already grown elsewhere and given by the government and volunteering organisations as well.

4.7.4 Ecological Balance

As hinted at before, there are many animals that are attracted to the farming areas, as well as the lake and ponds. Peacocks live in the tall trees along the streams, along with monkeys and other birds such as owls and herons. The peacocks prey on poisonous snakes and insects such as cockroaches. Herons tend to live close to the lake or ponds, eating amphibians, snakes, insects and small mammals. The owls are also fond of mammals, such as mice. Monkeys are usually most fond of fruits and nuts, but they keep flocks of small birds away. In other words, the animals that are attracted to UMVM are part of a natural environment where they naturally control pests from consuming or attacking the crops.

4.7.5 Yield

About 70% of the food consumed at UMVM is produced on their own, according to volunteers in the kitchen. Rice is the main staple of food, which they are capable of producing on their own. They even give some of it away, as there is a surplus of rice. Each yield of rice is harvested 3 times a year, and lasts for about 4-5 months. Excess rice as well as other vegetables and fruits are sold in the Good Market. I helped to pick limes, chillies, okra, eggplants and jackfruit myself, along with my husband. The people who buy from the market are usually visitors who come for the day, but also tourists and local villagers.

4.7.6 Organic Food Products

The main kitchen is where all the organic food and beverages are produced and assembled. This is done by most of the nuns, monks and volunteers on a rotational basis. The building contains two floors, where each floor has its own very large kitchen.

The first floor is split into two parts. There is a large and modern kitchen inside, similar to a large restaurant kitchen with various appliances. Outside, there is a more traditional kitchen, where they make almost every meal of the day. There are three meals a day; the first is breakfast at 7 am, then lunch at noon and lastly an evening meal at 6 pm. The kitchen staffs have to prepare hot meals (even breakfast) each day, depending on how many visitors there are, this number can reach above 100. The modern stoves inside use biogas, but they are seldom used. All meals are cooked on open flames, where traditional cookers are fuelled by firewood. Dried coconut husks that have been burned into charcoal are also used. For this reason, the traditional kitchen is more open. It has a roof, but the walls are open to keep the air in circulation. The flames make for a warm environment in an already warm country. The traditional kitchen is also used for outsiders (visitors, tourists, guests) to get a look at how sustainable cooking can be done.The kitchen is being run according to the 5S system (Japanese system), which in English is translated as: Sort, Set in Order, Shine, Standardise and Sustain. Combinations of modern and traditional utensils are used to prepare the food.

The second floor kitchen is used for food production of products that are sold in the Good Market. The second floor also serves as a pantry for rice and other grains and dry foods. They usually make beverages and food products that are bottled, dried or pickled. These are secondary products that are made after having used most of the yields for daily meals. If, for example there, is a surplus of ginger; then ginger drinks are made, bottled and sold in the market. Herbs, fruits and flowers are used in beverages as sweeteners and for colouring. Herbs, spices and fruits are dried under the sun at most times of the day and some ingredients are dried in an electrical dryer. Other products that they make are jams, chutneys and marmalades from different fruits, as well as pickled fruits and vegetables which are all bottled in jars.

They also make jackfruit and manioc (cassava) flour, which is packaged and sealed. Furthermore; coconut butter, peanut butter, ice cream, toffees and various types of oils are made. The oils are made from either coconuts or pennyworth and are sold as hair oils and massage oils. The beverages range from ginger drinks, lemonades, hibiscus and butterfly pea drinks. They also sell dried hibiscus and moringa as teas. All these products are made for the consumption of the community outside of meals, but are also sold in the market. The sales revenue from these products is not enough to support the monastery at any significant level or for any commercial purposes. According to a nun #1, the products are made to provide knowledge and experience for any visitor who comes.

4.8 Conventional and Renewable Energy Sources

Most of the electricity requirement for UMVM comes through the national hydro power grid in Sri Lanka. The government has even erected a giant mast on their property, and they were working on constructing it when I was there. Their goal, however, is to maximise the use of renewable energy sources as mentioned below.

4.8.1 Solar Power

Walking the many paths and roads at night around UMVM is a bit magical. Whenever you walk near a lamp post or streetlight, it turns itself on as you walk by. There are about 200 of these motion-sensor lights placed along most of the roads and walkways. UMVM aims to increase this number to 500 units. The cost of each solar panel, including assemblage, is about Rs.7500 (40 USD).

4.8.2 Biogas

There is a biogas unit located at UMVM. The unit consists of two main components. One component is a cylinder cement tank embedded into the ground, while the other component is a biogas reservoir storage. The cement tank is filled with cow dung and biodegradable kitchen waste, which then emanates methane gas. The gas goes through a hose and a valve from the cement tank to the reservoir, which is located

close to the kitchen. The reservoir has another valve and several other hoses that are connected to gas cookers and stoves in the kitchen.

4.8.3 Firewood

There is an abundance of firewood at UMVM, which is literally scattered around their grounds. Branches, fallen trees and other flammable debris (such as coconut husks) can be found just about anywhere close to a tree. There are thousands of trees on the premises. Some areas can even be called jungles or forests, as some areas have dense vegetation. The firewood is mainly used for cooking and boiling water in the main traditional kitchen.

4.9 Onsite Water Treatment

There is no shortage of water at UMVM. The drinking water that the community consumes derives from sources of groundwater. A large and deep well is connected to pumps, which are connected to a filtration system. The pumps are located in a pump house right next to the well. The pipes go to another building housing a filtration system. Due to the hardness (minerals in the water) of the groundwater as well as contamination of chemicals from neighbouring farmland, all of the drinking water is treated and supplied by the community itself. Purified water is bottled in reusable glassware containers as well as new single-use plastic bottles, which are sealed like bottles sold in most convenience stores. According to monk #2, the filtration system is certified for ISO-14000 and GMP (Good Manufacturing Practices). This is to ensure the water is pure enough for consumption as well as an environmental consideration to minimize a negative impact on the local ecology.

4.10 Wastewater and Waste Management

4.10.1 Wastewater Management

Wastewater and waste management is a concern which is dealt with at UMVM, which is why there is also an onsite wastewater treatment system. It is common in rural Sri Lanka to have a septic tank system installed in their homes. These are not tanks that contain the septic and are emptied when full. The waste is not transported to wastewater management facilities. These septic tanks are usually cement cisterns

where the urine and faeces is stored and broken down in the tank. With time, the septic leaks through cracks in the cement into the ground. Since the UMVM has large grounds for storage space, the septic tanks are situated away from the groundwater sources to avoid any contamination. They are emptied and transported by the municipality when full.

However, according to CI, most grey water dries up faster in open space due to the dry climate conditions of the area, while the rest is used for farming as it contains nutrients for plants.

4.10.2 Waste Management

During my fieldwork, I noticed how the community at UMVM follows strict waste management instructions. All solid waste is sorted and separated in all buildings and facilities, which are picked up by the municipality. Paper and cardboard is recycled or composted. Plastic is recycled and biodegradable waste is converted to biogas as well as compost.

This is all very visible in the kitchen building, as the main rooms have separate containers that are labelled for different sorts of waste. Again, it was interesting to observe that they strictly adhere to the 5S strategy as mentioned before. Instructions are written on notice boards at every waste deposit so that everybody knows what needs to be done.

4.11 Environmental Concerns

Matters of environmental concern as well as the status of ongoing conservation projects at UMVM are evaluated from interviews with community members. Policies and practices are discussed without further investigations into these matters except regarding my own observations. Therefore, the results in this section are presented from the viewpoint of the UMVM community.

4.11.1 Lake Nandana - Harvesting Rainwater

When the CI and other community members first moved to the land, the climate of the area was hotter and drier than it is now. It was very harsh for living and farming. The first major project that was initiated was to find a way to reduce the temperature and increase humidity. The general feeling by the population is that the climate has dropped several degrees of temperature. While interviewing the CI about the origin of the Nandana Lake, he replied that: "The Lake was not made for its beauty, but to cool the environment. We started creating small ponds here and there". He then continued to explain how it took two years to dig the lake. They gradually filled the lake with mostly rainwater; however, it needs to be clarified further if they pumped water into the lake from the nearby stream (Pallegama Ela).

4.11.2 The Pallegama Ela Stream

As shown in the map (figure 01), Pallegama Ela borders the land of UMVM. The community of UMVM as well as local villagers have access to the stream for recreational and residential purposes. The stream is used for micro-irrigation by pumping water into rice fields and other crops. Harvesting rainwater in the Lake means that there is less runoff in the river than before, thereby reducing the risk of flooding over its banks and into neighbouring farmland.

4.11.3 The Breath Project

While conducting participatory observations at UMVM, the community had recently started a carbon sequestration project named "The Breath" project, in which I got to participate. The project was to plant about 100,000 'Sansevieria' plants in various locations of the land. The plants have the ability to improve air quality and aid in carbon sequestration. One area where they were planted is of particular interest, because they were conducting another experiment there. The top soil had been removed and replaced with a layer of coconut husk. Afterwards it was covered with the previous topsoil and mixed with compost. This area was called a 'rain garden', as the layer with the coconut husk stores more water than the dry and hard topsoil. Visitors and volunteers at UMVM are urged to purchase and donate a plant for the project. The price ranges from Rs.100-300 (0.5- 1.6 USD) for each plant. The person

who purchases it is also urged to plant it themselves as a memento of their visit. The plants are issued with a numbered token to identify the plant for future reference.

4.11.4 Private Forest Land

Nestled in a valley, UMVM is surrounded by a lush green and picturesque mountain range. A forest reserve by the name of Madahapola is not only surrounding the land, but also reaches into the land. Interviewees mentioned that the UMVM owns 7 - 10 acres of a forest called Vanamandaawa. The community at UMVM wants to conserve this forest region as well as planting more trees there to prevent it from diminishing. This area of UMVM is also the area where most wildlife has been spotted. Sambar deer, leopard, wild boars, peacocks, wild rabbits, monkeys, jungle fowl and giant squirrels reside there. Only the rabbits, squirrels and aforementioned birds have dared to venture into the farmed fields to feed on the crops.

When talking about Vanamandaawa, the CI said: "We don't cut any trees there. We make small foot paths so that guests can set up camps". In other words, eco-tourists are welcome to camp in the forest reserve.

When talking about wildlife in the reserve, the CI said:

> "Yes, there are some (wildlife there). We protect the animals. Some trees in that area have been cut down and destroyed by (unknown) people before we bought the land. Now, we plant more trees there - in patches (without trees). It's another project, which would cost around Rs.10, 000,000 (54.000 USD) to complete a forest. It's an environment where both humans and wildlife would be in harmony".

When answering my following question: "What is the reason for wanting to make such a large scale transformation at UMVM?" the CI said:

> "Why not? Otherwise, all the people (around here) would cut down trees and destroy nature (further). Just walk around (the neighbouring areas) and see. There are almost no trees in the house yards. At least, if we create these things (forests), then whoever sees it (a planted forest) may want to grow a small jungle, grow a vegetable garden or plant some chilli plants. After visiting

here, one may transform into a person who loves the environment and understands the world".

4.12 Future Livelihood Projects

4.12.1 Medical Clinic

During one of my talks with the CI, he mentioned that there is a need in the nearby villages for a medical clinic. The monastery is working to offer free medical examinations and consultation. There are already volunteers at SSA who are doctors and nurses. They have visited UMVM several times to do basic medical examinations, such as checking blood pressure, eye exams and optometry tests. Funding for a future clinic is in the works.

4.12.2 'Disapamok' School

The construction of a school for village children to learn computers and English has begun, although it has come to a halt some years ago. A foundation as well as support pillars for a roof has been constructed. The person who initially wanted to fund the project has stopped the donation for unknown financial reasons. Today the plot of the construction site is used for farming, and will be until additional funding is raised. The UMVM community is looking for other ways to raise the funds.

4.12.3 A Bookshop and a Library

At the time of my research, UMVM already has a gift shop that sells books as well as other items, mostly various food products, but also recorded sermons and speeches on CDs. A larger gift shop is now under construction, and is estimated to be finished this year (2021). Upon expansion, I was told that they would increase the number of books for sale. The next step of the plan is to build a library for all visitors and nearby villagers who wish to borrow books.

Figure 09: Livelihood in UMVM- (Left to Right) Monks & Nuns working together in the field, Two village women workers working in the vegetable plot, Freshly picked vegetables and fruits for sale in the Good Market. (1st photo from UMVM Org, 2020) (2nd & 3rd photos taken by the researcher during the fieldwork in 2020).

Figure 10: Livelihood in UMVM- (Left to Right) Artificially built Nandana lake, Nil Diya Pokuna-Blue water pond aquifer, A tree house for spiritual and eco tourists, Village school children visiting UMVM. (1st, 2nd & 3rd photos taken by the researcher during the fieldwork, 2020) (4th photo from UMVM Org, 2020).

4.13 Leadership, Management and Governance

4.13.1 Leadership

In this section, I will explain how leadership at UMVM is evaluated from the view of different stakeholders as well as the management.

According to the CI:

"I work first before others (monks, nuns and volunteers). I come and stay here at UMVM) only three days a week. I work all three days. Even though I am the chief, I should be able to do work."

This goes to show that leaders should be role models to others by initiating the work, and be able to do the same as others (as long as you are in good health).

"When we first prepared the land after moving here, we all worked together and helped each other", a monk (#2) told me. "Because of that collaboration and proper leadership, (the initial) things got done within a month. Our leader has the ability to make the most of everyone's capability", he added further.

I asked the CI further about his leadership role, for which he responded that rightful leadership under one man is significant in a community like UMVM.

"Literally, a leader is the one who knows how to do everything in a place, whereas others do not. Now, the leader who sits in this chair should be able to jump into that (pointing) tractor and do the hard work for them. I shouldn't be stuck with governing alone. A leader should be dominant when it comes to

decision-making, but he should also be a servant on other occasions. That is what we teach here."

Similarly, this was reflected in another talk with a monk #2:

"When we start to work as monks, we are sometimes in charge of a hundred or more lay-people (volunteers). They gather around us and we work with them until we get all the help we need. To lead by example, we need to know how to do the job." "We should also be able to come forward and do work when people hesitate. Otherwise, no point of being a monk", he added.

4.13.2 Working Committees and Decision- Making Power

The CI is considered the leader of both Umandawa and SSA. At UMVM, however, there are only two other levels of operation beneath him. There is a retired elderly engineer who is technically the manager and supervisor (also a volunteer and donor) of the community. There are five main committees who operate on their own, and mostly make decisions by themselves. They are however guided and supervised by the CI and the manager regarding bigger issues and overall project goals. As for day to day and weekly tasks, each committee has several meetings during the week where they talk about their progress and what to do each day. A representative or more from each main group also meet together at least once a week to talk about their current status. The main committees are: the agricultural committee, the maintenance committee, the accounting and finance committee, the welcoming committee and a special task force committee. There are also other committees, such as a communication and media committee, a food and kitchen committee as well as a decision-making committee. The five main committees are run by monks and nuns respectively, while the other committees include resident volunteers (as opposed to visiting volunteers), and retired elderly people.

All these committees are set up to make sure that the daily operations of the community are attended smoothly and promptly. In most committees there are two members who are assigned in charge of a specific committee. According to the CI, the system is made like that to minimise issues arising which needs to be addressed and decided upon quickly.

I attended a meeting where I observed how the manager allowed members to raise questions and ideas about establishing the Art Curve group for entertainment purposes. I have earlier spoken about this subject. The manager greeted the members with humour and raised the moral by saying:

> "Everyone should always be awakened like blossoms. Then everything will pass onto you (like sunshine), whether it is spirituality or entertainment".

He was basically saying that if you are open to everything, then it is easy for you to learn things. After he explained the requirement for making the Art curve group, he let the members self-organise themselves. Group fees were discussed and collected then and there. Finally, ideas for planning the events were proposed and seconded within the group.

4.13.3 Conflict Management

When I talked to monk #2 about committee meetings and how they are carried out, he said:

> "Every monk, nun and residing volunteer is assigned daily tasks. After our religious prayers are finished in the evening, we have discussions. We talk about what we have done, how it was done and what we should do further. Also, how others can help (another group). If we want to get a specific job

done, we have papers for job orders that we fill out." "We also criticise each other. If we have seen any troublesome behaviour from someone, we tell it directly to them. Our CI also attends these meetings (whenever he can)", the same monk said.

"Before starting a project, the CI discusses our opinions about it… and if we can do it. He explains the goals and deadlines. He also knows who can do the task best… (in regards) to their capabilities. If our energy is not good enough, he speaks to us and intervenes. He doesn't (necessarily) want us to work hard, but to challenge ourselves", monk #2 said.

In other words, the CI mainly attends the meetings to raise morale, make sure communication is good and to help with any issues that have come up.

On another occasion, I asked monk #6 if anyone had ever left UMVM. He then said:

"Yes, there are those who leave this place. Just like a student who has become a teacher, the teacher needs to teach others. When a person is no longer a student, it is natural to leave school." He also said: "Anyone can leave whenever they want, we don't force people to live here."

With that said, some members of the monastery had to leave due to disobedience which I don't have much information to mention.

4.13.4 Employment and Training

At the time of my research, there were 15 paid workers from the nearby hamlets and villages. Each worker gets paid according to their work at the end of the day by a monk or a nun. The name, payment and work hours are noted in a logbook.

When a committee hires a daily-paid worker, they consider their competence and skills. A written logbook, as mentioned before, is mainly kept to track their payment and salary, but it also contains their personal information and skills.

> "We monitor things. Everything should be done according to the law. Workers should sign in and out on time. They should perform their daily targets and take their work seriously. Otherwise, the daily payment will be deducted", the CI informed me.

Similarly, monk #2 had this to say about the workers:

> "There are poor village women who don't have much money. We give them jobs. We only keep good people here, because we don't have time to go and check on them all the time".

In other words, most staffs (paid workers) are not supervised as long as the management (committee members) feel that they are to be trusted. I further asked the CI about the daily payment system, to which he replied:

> "It's the normal system in Sri Lanka for masons and other manual labourers. Usually, in this area, the daily wage for a manual labourer is about Rs. 1500 to Rs. 2500 (8-13 USD) a day.

In addition to that, I can mention that all paid workers and volunteers are trained according to community standards at UMVM. They are provided with knowledge and values required to maintain their standards and environmental goals.

4.13.5 Innovation and Novelty

All members, residents and workers at UMVM have different competence and skills required for a community to self-govern, and thus operates as a diverse knowledge hub. For example, the CI has a degree in microbiology, a monk is a previous bank manager, another monk a professional sports athlete, the retired manager was previously an engineer, and so the list goes on. All members of the community as well as temporary non-resident volunteers are free to provide their skills, opinions and recommendations regarding their current work and future projects. During my research, two volunteers from SSA came to work on a project about hydroponic farming that they had come up with on their own. In other words, the community rejuvenates itself with new ideas and concepts each day.

4.13.6 Employee Perception

During one day of fieldwork, I had a casual discussion with five paid workers who were weeding and planting crops. They were shy at first, but were happy to talk to me as I helped to work. I asked them: "What is it like to work at UMVM?", upon which a lady replied cheerfully: "[Laughter] We are very happy to work here". Another lady added: "Before, we have worked in other places too. They didn't pay us properly. But here, everybody treats us very well". The other 3 workers seemed to agree. I can't speak for all workers at UMVM, but that seems to be the general consensus, and not just among the paid workers alone.

4.14 Stakeholder Perception, Motivation and Benefits

4.14.1 Key Stakeholders

The primary stakeholders were identified as Buddhist monks (including the CI), nuns, volunteers, donors, and retired members from the semi-structured interviews, participatory observations, and a focus group interview. Significantly, other than the residing monks, nuns, volunteers and retired persons; some volunteers and donors are not only followers of the monastery, but also executive committee members of the SSA. For example; some donors who are also followers of the UMVM monastery live in Europe, Australia and North America. They visit the community during their holidays and work as volunteers. The same thing can be said about volunteers, who are donors as well. In this section therefore, highlight the primary stakeholders' perception, motivation and personal benefits.

4.14.2 Stakeholder Motivation and Benefits

All the community members (including monks, nuns, volunteers, retired people, paid workers and donors) I interviewed and casually talked to during my fieldwork, had very positive perceptions towards the UMVM leadership and the community. What I can tell from the interviews and observations is that the members illustrate that they are motivated by spiritual, cognitive, physical and emotional factors either prior or after joining the UMVM. After becoming members of the community, they have all expressed gaining experience which has benefited them positively one way or another. Some motivations and benefits are presented as follows:

The manager said that:

> "I am a retired engineer and a general manager of a private company. I was quite stressed during my service period, which urged me to search for

Buddhist spirituality and arts. Now I have learned from the community how to balance the mind by being mindful, which is quite important to me."

He further included:

"I think this is the best place to learn (for me). The CI is very knowledgeable and understandable. He is very flexible, open minded... everything. I have also improved a lot personally by associating with him. I was inspired to start up a social services forum in my (home) village called 'Nagena Tharu' (Rising Stars)."

Monk #2, like several other interviewees, insisted on self-realisation and moral responsibility as motivation for his commitment to the UMVM community. Although hesitant to use the word "motivation", this is what he said, as stated below:

"It was (actually) not motivation (that drove me). It was self-realization, understanding... right? So if we understand ourselves, we know what we should do otherwise. Motivation can be lessened. This is not motivation. This is known as the real thing we have to do. Our responsibility (is) about ourselves - as a human."

As for personal benefits, he said: "Now, if somebody stays here for 6 months, that person gets to learn (how) to do everything - (to learn) all the skills. I improved a lot after coming here… I now know how to delegate work, which I didn't do before.''

Volunteer #1, who is a follower of UMVM as well as a donor, had this to say:

"Since I was a child, I was looking for a spiritual leader through (participating in) different religious activities. I have read all (kinds of) religious scripts and followed all (kinds of) religious principles. Previously, in my university life, I was mentally down because of the "ragging" (initiation rituals) at university.

Then there were also relationship issues. Regardless of all that, I started listening to the CI's motivational sermons about mindfulness.''

Volunteer #1 further reflected on his personal benefits of staying at UMVM:

"Being mindful in my career (as an agricultural teacher) has helped me to worry less, and face conflicts with a balanced mind. Now, I feel comfort. I'm a lot happier than before. I used to be very nervous and weak. I had performance anxiety. Now, with these practices of mindfulness, I have improved my self-confidence and presentation skills. This has helped me a lot in my career."

4.14.3 Stakeholders' Perception

According to interviews and casual discussions with residing monks, nuns, volunteers and retired persons (hereby known as community members), it can be stated that a vast majority is willing to contribute to the community with their time, labour and other skills. In most cases, they are quite satisfied with their life in UMVM and the work that they do, which show a sign of reciprocity. Some of their comments are as follows:

Monk #2 said: "I ultimately enjoy being here. If you are satisfied, then (why) won't you do something for this place? Sometimes, if you are fully satisfied, then you can spend your entire life here. Right. Like that. So, with that message, everybody is willing to give their support to the system here."

Nun #1 spoke to me about how she felt regarding her daily routines:

"I (usually) wake up at 3:30 in the morning. Then the day starts by cleaning, followed by religious activities, and then breakfast at 7. Today I make food products such as fruit jam, butter and oil. I am mindfully occupied with work,

but not forcefully so. Then, when the day is over, I have quite a lot to do... but hobby and relaxation comes from keeping myself busy. I have no need for a special hobby. My daily chores become a hobby."

Several monks, nuns and volunteers, as well as the manager, described that being a self-governed community generates a tremendous amount of work to do every day. I noticed how important labour is to the community to maintain self-sufficiency and sustainability. Some of them commented that the demand for labour has sometimes made previous members leave the community because of the hard work.

"There is quite a lot to do. Very difficult. Now, we work from 7 am in the morning to 8-9 pm in the night. We live in the retirement village at UMVM. I was requested during the meeting today if someone (a retired person) can come and give a hand to cut onions in the kitchen, as it is also a big help. Labour is very important here'', the manager told me.

Another comment from monk #5 suggested how a heavy workload has made him felt leaving the community once:

"Well, I am very tired. All day I have to attend to visitors and provide information while walking back and forth. It's very exhausting to the body. One time, I almost left the community." he said while talking about his many guided visitor tours around the compound each day.

On another note, volunteer #1 stated: "When I do volunteering, there are times I feel tired or bored. There are times I feel like going home. Then I leave things behind and go home. That's how our mind works here. But... my overall motivation towards contributing to UMVM is never reduced."

4.14.4 Focus Group Perception

After the field work in Sri Lanka, I interviewed a group of donors through a video conference meeting. All five interviewees are Sri Lankans who live in Italy, Sweden and the UK.

They told me that they are followers of SSA as well as UMVM, and have been so for more than five years. They together with many other followers of the UMVM maintain a virtual team online to raise funds for the monastery. They shared quite similar experiences about things that motivated them to join the monastery. They spoke about difficult life situations in their past, a quest for searching for one's self, a want to help people, curiosity for spiritual guidance beyond religions, busy lifestyles, depression and stress. All those factors made them listen to online sermons of the CI. They have since joined the monastery as volunteers and donors as well.

Everybody I interviewed expressed that SSA and UMVM benefit them in many ways. Some people in the focus group have become quite close with each other. They also feel that they have started to pay attention to nature more than before. More importantly, they also feel they have improved their self-confidence, patience, tolerance, generosity, focus, communication skills and technical skills.

As one group member #1 said: "People thought I would commit suicide, because I was depressed with life-traumas. But after practicing the mindfulness taught by UMVM, I understood how to accept life (as it is) with a balanced mind."

Another member #2 added: "I was quite selfish before. I had everything I needed in my life, but I felt there was something missing. I was looking for answers beyond religion."

He further stated that: "Being mindful of what is happening around (me)... I don't worry If things don't go according to the plan anymore. I have learned how to

optimise time by being busy, which has also helped me to balance my mind. On the other hand, my generosity has improved as well."

Similarly, a third member reflected: "I was looking for happiness all my life. After joining UMVM, I learned that happiness is within us... and how to welcome both good and bad. Before I joined the community, I was not able to talk like this in front of anyone. Now that I have self-confidence, I have improved my communication skills."

Group member #4 also said: "I followed all religious practices before, but I (still) had unanswered questions about life. After listening to the motivational sermons from the CI, I became very close to nature. I started to admire nature and accept the unforeseen. That has helped me to live in the moment and to help the needy."

4.14.5 Stakeholders' Contribution

As mentioned earlier, monks and nuns contribute daily with their labour, skills and knowledge towards achieving the shared goals and vision for UMVM. Other contributors, such as volunteers and donors, contribute with finances as well as labour. They also share their own personal skills and knowledge according to their capacity. Some contributors are members of the UMVM Development Fund as well, where each member pays Rs 5000 every month. None of the interviewees said that they are persuaded or forced by the monastery towards any kind of contribution. Some interviewees expressed gaining some physical and or psychological benefits by being a member of the monastery. The same people also felt like returning the favour. Volunteer #1 said that "I have gained more benefits from UMVM in my life than what I have contributed to them".

Some visitors (secondary stakeholders), who were present at the time of my fieldwork, came to see UMVM for the first time. They ended up helping out with the

monastery's daily routines during their stay. A few visitors I talked to during the fieldwork mentioned that they wanted to help the monastery's endeavour, as they felt that what is done at UMVM is for the betterment of society and nature.

4.15 Vulnerability Context

4.15.1 Floods

According to interviewees, UMVM was affected by heavy rainfall during 2019. The area close to the lakeside was flooded and most of the farmed fields were submerged under floodwater.

Regarding questions about the flooding that occurred at the monastery, the CI replied, "It happened due to heavy rainwater which we couldn't control. This was our very first experience. The damage was around Rs. 500,000-1,000,000 (2500- 5105 USD)."

When asked if he thinks that climate change is the reason for the sudden heavy rainfall, he said: "No, it's normal in this area. Every 5-6 years it rains heavily (here) and washes away as floodwater." When asked further if they have made any plans to stop the flooding, he replied: "Yes, small plans. We can't stop the natural phenomena. We have to face it. Afterwards, what we can do is to replant trees and crops to fix the damage. That's all we can do."

During the participatory observation, I was shown their rain gardens by the paddy field area which was built to capture run off during heavy rains.

4.15.2 Social Criticisms

UMVM is a very liberal monastery, which is reflected in its community. They are trying to break traditional rules and make communal living more accessible and open to the public. Some traditional Buddhists norms can sometimes be a problem for

UMVM, as I was told that they are often met with scepticisms regarding their livelihood and spiritual views.

I asked the CI about his thoughts on this matter. He first highlighted the point that UMVM is not a traditional Buddhist temple. "What we have here is a novel philosophical process. The reasons why people shame us, is because we do not follow a traditional and corrupted system. That is the main issue. People who view the world through the lens of novelty are the ones who are interested in novel philosophical initiatives."

He further insisted that a temple should always be helpful to the village. His only criticism was "There is an older forest monastery on the other side. They seldom venture out of it. They don't bother to know if villagers get to eat or not. No matter what, they (the monks) receive meals twice a day'', the CI said with a hearty smile and a soft laugh.

The manager of the UMVM similarly touched on the subject of criticism: "Monks drive tractors and collect garbage (here). For some people, that is like magic, because it is not seen in other Buddhist temples in Sri Lanka.

4.15.3 Covid -19

During my fieldwork, the global pandemic Covid-19 had begun to spread to the rest of the world. I asked a monk (#3) what he felt about the outbreak in China. He explained to me how they prepared to face unforeseen events, such as the virus outbreak, both mindfully and physically. He was confident that their self-sufficiency of food and energy would sustain them. He insisted: "We now have enough food that would last us for a year".

Similarly, the CI stated: "We have been preparing ourselves for unforeseen catastrophes like this for the last four years. We've worked as bees. We made this farm and started growing, created lakes to become an example to society".

During the lockdown, the community has operated as usual within its territory. They consider Covid-19 as an opportunity to progress by being productive. For example, the CI mentioned that "We have used our (spare) time to plant sandalwood trees and paint rocks in the garden."

Social Cohesion

4.16 Relationship With Nearby Villagers

UMVM is surrounded by 10 hamlets. According to informants from the monastery as well as some nearby villagers, UMVM has been very charitable for the people of these 10 hamlets, as well as for larger villages further away, such as Gokarella.

4.16.1 Educational Services

The community of UMVM maintains a close relationship with villagers of the aforementioned 10 hamlets. In my participatory observation I got to experience and see how nuns offer English and Computer classes to village children. This takes place every weekend. A nun invited me to help her teach English to a group of children while we were sitting on the grass, outdoors in the shade of a tree. Although it is idyllic and nice to learn in the open like this, it is also quite hot. This is one reason why the community of UMVM wishes to construct a building dedicated to education. During the lectures, the children are usually offered food or snacks. As mentioned before, a school is in the making, but stopped because of lack of funds. Nevertheless, the classes will continue as long as there is a need for it in the hamlets.

The CI mentioned to me that they have given away stationary items (pens, notebooks, crayons) in backpacks for about 200 village children every three times a year. The backpacks would also be filled with dry food packages and vegetables for their parents to cook with. An adult health camp with medical services at UMVM would also be held, which took place after I conducted the fieldwork.

4.16.2 Social Services

In English there is an expression that says: "When it rains on the priest, it drips on the clerk". Whenever a donation is given to UMVM, no matter what it is intended to be used for, a portion of it is saved for charity (like giving spectacles to villagers), another for future building projects (such as a medical clinic) and a third for social services. According to a volunteer I interviewed, the community of UMVM built a house for a poor widow with two children who lives close to their land. About Rs.2, 000, 000 (10,856 USD) was used from previous donations and spent to build the house. Although I don't know the cost of it, I was also told that UMVM had given money to buy a much needed MRI machine at a hospital in Kurunegala.

These social gestures of the UMVM community sometimes result in a lasting reciprocity, or rather a relationship of mutual benefits with the locals. Upon mentioning this event (told to me by a villager) to the CI, he said to me: "That lady who we built a house for is volunteering here today."

4.17 Villagers' Perspective

During my field work, I enquired several random villagers who owned small restaurants, shop owners, guest house owners and rickshaw (three-wheel taxi) drivers about their opinions and perception regarding the UMVM community.

4.17.1 Villagers From Nearby Boutiques and Restaurants.

An outdoors restaurant and two shops have opened (since the establishment of UMVM) along the road that passes by the main entrance of UMVM. Considering the rate of development at UMVM, and the increasing number of people who are attracted there, this is a very strategic business location, which may grow further in the years to come. According to the owners, they get many customers on days where there are large events or religious festivities at UMVM. Sometimes, buses full of people from Colombo stop by.

Another villager (shop owner) further down the road, has somewhat of a more humble approach to his business. His shop is made from wattle and daub, which is basically a hut constructed of wood, clay and straws. His main franchise was to sell boiled peanuts and hot tea. He also sold a few king coconuts as well as betel leaves and areca nuts for chewing, which is similar to chewing tobacco leaves. Although his prices were low and his business limited, as well as being a humble and quiet person, he felt sorry about his financial situation regarding the responsibilities he had taking care of his family. When asked if he is capable of offering to sell more varieties of goods and offer meals for breakfast (as that is when most of his customers stop by), he replied: "Ah, I can't do that, miss. My friend next door sells breakfast meals in his boutique. It is not nice to do the same. He will lose his customers." With that explanation, my next question was if he had heard about UMVM and if he could maybe receive some social help from them. He further answered: "Umm, it is not a place for poor people like us. They have a huge gate. I heard only rich people with vehicles go there. We go to our small village temple."

Although being one of the closest businesses to UMVM, and practically a short walk away in distance, he was reluctant to visit UMVM because he was afraid to upset the community there. Same can be said about his feelings for his closest neighbour.

4.17.2 Three-Wheel Drivers

While commuting back and forth to UMVM from the hotel I stayed at in Melsiripura (20 minute drive), I got to briefly interview four three-wheel (local name tuk- tuk) drivers. All of them were middle-aged or elderly men. Three of the men I met work out of Melsiripura town, who can all be hailed from the main three-wheeler parking lot in town. Another man was from Pansiyagama village, which is also very close to UMVM.

The first and second drivers were very positive that they got to meet and drive an increase of both local and foreign customers in and out of UMVM. The driver who lived closest to UMVM seemed to benefit the most from this increase of customers. This is because members and staff of UMVM had gotten his phone number, and called him when they had a guest who wished to travel. Both drivers have families that have attended social campaigns at UMVM; received free books, stationery items for their kids as well as food to bring home.

The third driver who lived in Melsiripura said he does not get that many hires to and from the UMVM community, but he did get an increase of foreign customers traveling through Melsiripura from elsewhere, some of whom visited UMVM on the way. Regarding his personal view about the community, he said: "As long as whatever they do stays inside their land, we have no issue with it".

There is another forest monastery close to UMVM as well. This monastery is in the opposite direction of Melsiripura. The fourth driver from Pansiyagama often gets customers from this forest monastery. The elderly man said something which is stereotypical to Buddhist view regarding monkhood. While driving to UMVM, he said: "You should not go there." "Why not?" I asked. He then replied: "They are farming there with their robes on. Buddhist monks are not allowed to farm or work. Also monks and nuns work side by side and live in the same temple. It is not allowed".

As the way he describes what monkhood should be like, that is exactly how monks live in the other forest monastery where monks keep to themselves to meditate and live in seclusion in small dwellings in the hillside of a forest. None of them work and they sometimes venture to nearby villages to 'Pindapatha' (a Buddhist custom of begging for food & alms). I do not know if there is a competing relationship between this forest monastery and the UMVM, as I never experienced one. I also visited them, but didn't get interview anyone there, as most of them were occupied with meditation. However, I do suspect there is competitiveness between different religious sites in the area, which needs to be clarified further.

4.18 Community-Society Relationship

4.18.1 Vocational Training Programmes

The UMVM community organise vocational training programmes at their premises, which is mostly for youth and women. During my fieldwork, I was informed that 300 women from different parts of Sri Lanka attended a vocational training programme, which was held in January 2020. The purpose of this training programme was to empower women to become entrepreneurs by providing technical support and motivational speeches. During the day programme; monks, nuns and volunteers demonstrated how they make food products such as herbal drinks and healthy snacks. Cooking and sewing lessons were also held.

4.18.2 'Sanda Sewana' Retirement Village

The community has vested an area for retired people who have contributed to UMVM throughout their lives. There is no measurement or standard that decides whether or not you are certified to earn a plot of land at UMVM. It is decided among the community who is allowed to retire there. This is decided on a case by case

basis. The houses are newly built and located across the road from the retirement area. The very first of the two houses were built by the current manager (and a former engineer) of UMVM and his wife. Noticeably, there is also a cemetery within the community, where former members (such as the original two donors of the land) of the community are buried.

4.19 Relationship with Public Officers and the Government

4.19.1 Public Officers Involvement

As informed by the management at UMVM, they told me that they have a good relationship with the public officers in the nearby village. For example, the village officer helps with charitable initiatives by providing information regarding low income families that are in need of help in their lives. Currently, there are also army soldiers stationed at UMVM, who have been accommodated together in a house that they use as barracks. They are trained at UMVM in agriculture, cooking and other civil activities that they may learn to use in their lives after their service in the army is over. However, I have not been able to speak to any of the soldiers, as this is a recent event after my fieldwork. I have included more information about it further below.

As an initial response to Covid-19 lockdowns, the monastery, the police and army from Gokarella village (with the help of donors and volunteers) have actively helped to distribute emergency rations containing bags of vegetables, fruits and rice which prepared and grown by the monastery. This was done at three stages during periods of lockdown for various reasons. According to monk #4, 250 packages were distributed to five hamlets in need.

4.19.2 Government's Influence and Interaction

4.19.2.1 Development of Infrastructure

According to various interviewees, the government has developed infrastructure in the area as a result of construction and development at UMVM. For example, UMVM has allowed the government to construct a giant power mast on their land, which is connected to the national grid. The power grid in the area is under development for the growing demand of electricity around Melsiripura. UMVM has come to an agreement with the Ceylon Electricity Board (CEB) which provides an easier payment plan for them to pay their monthly electricity bills in small instalments such as Rs. 5000 (27 USD) a day. However, the information regarding this agreement needs to be clarified further. Their goal, however, is to maximise the use of renewable energy sources.

Furthermore, the dirt roads surrounding UMVM, connecting to several farms and homesteads nearby have been developed by the government. According to a villager:

> "The road that connects to other villages (nearby) used to be in poor condition. The road was not this wide then. Now it's much better - after the UMVM monastery was built".

4.19.2.2 Training Programmes and Counselling for the Army

Talking to a monk (#3), UMVM receives 40 soldiers from the Sri Lankan Army for a 2 week straining programme on a rotational basis. The training is provided to the soldiers by monks and nuns. The skills that they are taught range from organic farming, cooking healthy food, gardening as well as an insight into mechanical maintenance of agriculture machines and building construction. The main aim is,

however to improve personal development and facilitate psychological assistance and counselling during their stay while working with the monks and nuns.

4.19.2.3 Access to Clean Water for Villagers

Another major social project concerning UMVM, is to build a larger water filtration system and water filling station for the wellbeing of neighbouring villagers. According to the informants; most of the villagers in Madahapola- Melsiripura are suffering from lack of access to clean drinking water. There are many villagers diagnosed with kidney diseases due to the high Calcium in the ground water and heavy use of pesticides and other chemicals in the agriculture land which contaminate the drinking water sources. The total project would cost around Rs. 5,000,000 (25,528 USD).

This project has been initiated with the help of The National Institute for Nephrology Dialysis & Transplantation (NINDT) and the Sri Lankan Navy. The Reverse Osmosis (RO) plant is capable of purifying 15.000 litres of water per day, which I was told would roughly cover the need of 15 hamlets in the UMVM area.

4.19.2.4 Tax Exemptions

I was informed by the CI that the UMVM is a religious and non-profit organisation that is tax exempted. However, in terms of tourism and their GML activities, they comply with all applicable laws and pay all required taxes (Good Market Lanka, 2018).

Chapter Five

5 Discussion

This research study has set out to examine the ways in which adaptive capacity at the UMVM community strengthens its livelihood resilience. A capital–based approach called SLF was used to analyse the adaptive capacity that determines their livelihood resilience. This implies that the existing access to capitals determines the extent to which the community is able to withstand and cope with shocks and changes. In the first chapter of the discussion, I have therefore exemplified the implications of adaptive capacity with five capitals, which are; human, social, natural, physical and financial key findings. The second chapter of the discussion interprets the key findings in regards to institutional processes, livelihood strategies as well as a vulnerability context. These findings are important in enabling and constraining the resilience of the UMVM livelihood.

5.1 Analysis of Human Capital

5.1.1 Skills, Knowledge, and Labour

In the SLF approach, human capital is defined as the combination of skills, knowledge, labour and health that allow actors to follow different livelihood strategies to gain livelihood outcomes (DFID, 1999). Human capital is strong where there is an abundance of knowledge held by individuals as well as a diversity of knowledge held by people with diverse experiences (Resilience Alliance, 2007). The study shows how a widespread presence of human capital enables the adaptive capacity at UMVM. The community relies upon both traditional and modern knowledge, where

various skills have been utilised in their daily activities. Both local and modern knowledge (scientific and technological) have been combined in their organic farming, energy harvesting and food production. This is due to the availability of diverse knowledge, skills and innovative thinking of different actors. Significantly, the monastery has created cross-scale mechanisms to share and combine different knowledge. In particular, all the monks, nuns, volunteers (resident and non-resident) as well as paid workers are provided with education, training and further knowledge, which is required to meet the community's daily operations.

5.11.1 Health

UMVM has the capabilities to implement projects that enhance health and education of its members with the support of technical and medical expertise. Thus, the community has a greater capacity to reduce health issues. Access (possession of) to water purification and sanitation system is the main environmental health benefit of the community. Secondly, the use of organic farming provides them with access to a healthy. Furthermore, the findings from the stakeholder interviews show that members of the UMVM gain some psychological health benefits by practicing mindfulness practices and altruism.

5.2 Analysis of Social Capital

Social capital is strongly linked with human capital. This study identifies connections between individuals and social networks in regards to social values and the norms of reciprocity and trustworthiness (OECD, 2001; Putnam, 2000) bonded in the UMVM community. Informants noted that a strong sense of identity, well-functioning leadership and well-structured collective efforts are some of the features of social capacity they use to face change and uncertainties. These findings support the claim that social capital is the glue that holds the adaptive capacity of a collaborative

community together (Adger, 2003; Olsson et. al 2004; Pretty & Ward, 2001). While an increase in human capital can be considered as the outcome of social learning, social capital can be identified as the process itself, and the prerequisites that enable it. Hence, this study shows how social capital is used as a building block together with other capitals of livelihood framework to build the structural foundation of the UMVM community. Aligned with literature in social capital, this shows that good communication and confidence are key attributes that form vital networks in a resilient system (Berkes, & Seixas, 2005).

5.2.1 Shared Values, Trust and Networks

In the UMVM community, experiential (subjective) components of social capital; shared values, norms and understanding (OECD, 2001) appear to be the strongest aspects of their social relationships. The community places high value on Buddhist philosophy as the fundamental value of their establishment. The strong sense of identity represents their urge to create an atmosphere that serves their spiritual values of mindfulness, happiness and wellbeing. These shared values of the UMVM have created an understanding among the actors that facilitate social transactions. Further, respondents highlighted that a sense of collective understanding, in addition to benefits of spirituality are important to them, and it holds a prominence in their lives.

Trust in the UMVM community is the source as well as the outcome of their access to social capacity (OECD, 2001). All the informants mentioned that they hold high trust in the leader and his vision. Trust seems to make social life at UMVM predictable, and it creates a sense of community atmosphere by making it easy to collaborate and work together. Also, trust developed through shared values and understanding reduces the level of conflict among key actors from different stakeholder groups, and increases the legitimacy (Schneider et al., 2003).

At the same time, trust builds social influence, as it is easier to influence someone who is trusting (Cook, 2003). For example, followers of the monastery are inspired and influenced to work as volunteers and donors. Trust in their social networks enhances livelihood resilience, resulting in positive influences such as reciprocity. Furthermore, interviewees from the focus group interview mentioned how they gained physical and psychological benefits from practicing mindfulness and Buddhist spirituality. It made them want to contribute to the monastery. This appears to be the case where mutual trust and reciprocity lowered the cost of working together and increased other capitals, such as finances (further donations) (DFID, 2001).

Social norms are crucial in the operation of UMVM as "shared norms and values enable people to communicate and make sense of common experiences as well as divergences in some norms and values" (OECD, 2001). As to set an example, UMVM adheres to follow traditional Buddhist norms whilst diverging away from them at the same time. For example, the monks and nuns at UMVM live as most monks and nuns in other monasteries by attaining religious practices, but the difference is that they live and work communally, which is not the norm in any other Buddhist monasteries in Sri Lanka. The general norm is to live and work separately with the same gender.

The act of reciprocity is also considered as an internalised social norm, as "people feel good about themselves when they "do the right thing" and return favours" (Burger, Sanchez, Imberi, & Grande, 2009). Further, desirable behaviours (norms) are generally accepted and understood within the UMVM community. Members who don't follow certain rules and norms are excluded from the community. Therefore, as the literature I'm referencing points out: Building trust and collaboration to meet objectives in communities are vital, whereas future obligations and expectations may be arising from mutual trust in a system (Coleman, 1988).

Social networks as the structural elements of social capital entail memberships, participation and/or contribution to a group. UMVM has a strong membership base, many donor partnerships, and there is lots of contribution among like-minded actors who share similar interests, values, understanding and identity. In social capital literature, this kind of networking is called 'Bonding' - which usually arises within a group of "high levels of similarity in demographic characteristics, attitudes, and available information and resources" (Claridge, 2018). Strong bonding in social networks facilitates innovation, development of knowledge and sharing of that knowledge. There is, therefore, a close synergy between social and human capital (DFID, 2001).

In this study, the term "bridging" represents outward looking while promoting relationships and networks among other individuals, groups and communities (Putnam, 2000). UMVM extends their social acts among other religions, races and communities by sharing their resources, knowledge and opportunities. This attribute of bridging can improve employment, economic development and growth. For example, UMVM provides job opportunities for poor women from the surrounding villages.

'Linking' social capital refers to extended "bridging-networking" among different levels of societal power hierarchy, such as among individuals and groups, but also between governmental, legal and religious organisations (Claridge, 2018). The findings support the fact that UMVM makes strong links between the government and police, the army and private institutes as well as other religious organisations. This enhances their ability to leverage resources related to the ability of an individual/group/community to leverage resources (OECD, 2001; Woolcock, 2001)

Hence, this study supports the claim that social networks and norms (social capital) contribute to the successful implementation of sustainable livelihood projects that

intend to improve the quality of life of beneficiaries and their surrounding communities.

5.2.2 Strong Leadership

UMVM has a leadership where The Chief Incumbent (the community leader) envisions a goal that is shared among most followers. The initiatives of the leader have established a resilient community, which has developed through a flexible and collaborative approach. The internal functioning of the UMVM social network (and the community at large) is driven by key leadership figures and committees. Fabricius et al. (2007) describes how leaders build trust, organise actors towards a common goal, create cohesion among actors and avoid inefficient management. Almost every informant at UMVM stated that they trust the leader's (the CI's) vision and leadership, which has created a shared understanding in the community to function towards a shared goal.

The leader has identified the importance of social networks, shared values and trust in strengthening livelihood strategies to achieve livelihood goals. According to my findings, the leader holds vast traditional and scientific knowledge as well as inhabiting a spiritual knowledge that creates an environment ideal for learning (Folke et al., 2005; Olsson et al., 2006). Literature regarding resilience studies, points out that there can be no resilience unless diversity is not nurtured for reorganisation and renewal. Thus, an accumulation of social memory is important in resilience (Berkes & Seixass, 2005). The UMVM leadership catalyses conflict resolution, channels of negotiation, participation and mechanisms of collaboration to help coping with change and uncertainty regarding the accumulation of a social memory. Therefore, the leadership in UMVM is one of the fundamental factors that enhance the resilience of the UMVM community. In other words, this study disclaims what Walker and his co-authors (2006) argue, which is that "a single, well defined leader is

unlikely to be able to maintain a resilient system", since the findings of this study explain otherwise.

5.3 Analysis of Natural Capital

Natural capital refers to the natural stocks (soil, forest, water, air, land) and environmental services such as the nutrient cycle and air purification. These are mainly natural processes that are essential or useful for livelihood. The most prominent and secure natural resource in this study is the ownership of 70 acres of private land. The land comprises soil, water (surface and groundwater) crops, trees and a forest - all which members of the community draw benefits from. UMVM is located at the feet of hills and mountains, where clouds are forced to create precipitation. This helps to keep the climate relatively cool and the nearby forest reserve to thrive. The surrounding nature attracts biodiversity and wildlife such as sambar deer, leopards, wild boar, peacocks, wild rabbits, jungle fowl and giant squirrels into the UMVM land. This in turn has recreational value for both residents and tourists.

 The Pallegama stream, which flows along the boundary of the UMVM land, brings benefits such as flood control and the accumulation of groundwater while also being a source for irrigation. According to respondents from the monastery, the villagers living on the other side of the stream also have access to it and use it for irrigation. Thus, it is hard to make any conclusion about the ecological status of the Pallegama stream without having to interview those villagers due to the weakness in the data sampling size.

Clearly, the natural capital of the UMVM land is important for their resource and service-based activities, and such as organic farming, biogas collection, firewood extraction, solar power harvesting, tourism (recreation value of nature), and spiritual

practices (serenity of nature). The community identifies the importance of its natural capital, thus they put efforts not to compromise their cultivated land, nor their private forest and water resources. Some of the tree species in their private forest called Vanamandaawa have been cut down illegally by intruders in the past, when the land was not owned by the monastery. On a more cheerful note, a reforestation project by UMVM has started at the time of this research, which will hopefully rejuvenate the forest.

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However, a concern I have regarding the findings of this research, is how and at what proportion of Vanamandaawa will remain as a forest before the rapid ongoing expansion of physical capital (infrastructure, housing) starts to affect the surrounding nature. Another limitation of this is, if (or maybe it already has) Vanamandaawa connects to the nearby forest reserve, in what ways would such a development impact the forest reserve? Nevertheless, such questions can only be revealed in the future research, and are purely hypothetical at this point.

Most of the livelihood activities that have been implemented in the UMVM community tend to focus on organic farming, planting trees and improving water sources. Respondents mentioned that when they bought the land, the soil was not cohesive, and the climate was dry and harsh. The quality of soil has improved. Crop rotation, agriculture, land rotation and a proper irrigation system seem to work strategically to enhance the soil quality. Hence, the abilities of the community have adapted to changes in the micro-climate, such as building an artificial lake to increase moisture in the air of the previously dry climate, thus improving the resilience of the land.

While afforestation is encouraged by UMVM, they prioritise agriculture production, as that is what strengthens the community resilience in the long run. Their portfolio of natural capital makes their livelihood more resilient. This is because they focus more

on activities that are not vulnerable to specific shocks and uncertainties (DFID, 2001). Therefore, their livelihood diversity - enhanced by natural capital owned by UMVM, gives the community more opportunities for their capacity to absorb shocks and adapt to environmental changes (Folke et al. 2002; Berkes et al. 2002). Moreover, their sustainable use of natural resources impact positively upon the natural capital stock when achieving livelihood outcomes.

5.4 Analysis of Physical Capital

DFID (2001) defines physical capital as the basic infrastructure (transport, roads, vehicles, secure shelter and housing, water supply and sanitation, energy, communications) that people need to make a living, as well as the tools and equipment (tools and equipment for production, seed, fertilizer, pesticides, traditional technology) that they use to become more productive.

It is important to consider that UMVM purchased the land when they had limited access to water, electricity, housing and sanitation. Within four years, the community managed to build adequate housing for all the monks, nuns and volunteers. The UMVM community was connected to the national electrical grid during my field research, which increased their access to capitals, thus strengthening their resilience and adaptive capacity. The provision of renewable energy sources, such as a biogas plant unit and solar power units have ensured a reduced reliance on firewood in their daily tasks. Firewood is still used for cooking as well as to showcase their style of traditional cooking.

Access to a water purification system has been paramount to the UMVM community, as the local drinking water has a high concentration of calcium. In addition to the purification system, an on-site wastewater treatment system and waste sorting system were added gradually by the community to mainly improve the human

capital, but also to invest their financial capacity to secure the health of its community members. Infrastructure can be very expensive. As DFID (2001) explains, it requires the commitment of financial and human capital to meet the operational maintenance costs in the long run. Appropriate infrastructure enables the community to achieve their livelihood outcomes by providing simultaneous support to human skills and capacity development. Currently, UMVM manages to ensure the well-being of the members by increasing possession and ownership of physical resources that may strengthen their adaptive capacity.

5.5 Analysis of Financial Capital

Financial Capital refers as financial resources which is essential to achieve livelihood objectives. It includes cash, savings, regular inflows of income and remittance (DFID, 2001). UMVM, being a religious and non-profit organisation, has been granted a tax-exempt status by the state because it furthers a social cause and provides public benefits. The monastery fulfils its financial requirements mainly through donations. As already discussed in the findings chapter (under 'main income sources'), the community frequently receives donations from its' members. These are both regular cash inflows and various sums of remittance. Other than that, they are setting up a trust fund called The Umandawa Development fund, which may have the capacity to generate an interest income for long term financial stability. Other minor income earnings derive from tourism and the products that they sell at the Good Market. These earnings are also accounted for in their financial capital.

It is hard to say that the monastery is financially independent at the moment. This is due to the uncertainties of the donations flow as well as meagre tourism earnings. But, according to my findings, it appears to me that their resilience thinking prepares them for learning to live with constant changes and uncertainties. In the UMVM community there is always a vigilant attitude towards innovation and novelty, which

may develop their coping strategies (Berkes & Seixas, 2005). In line with ideas of Adams (2009), this study concludes that livelihoods which are in high-risk category (refers to financial uncertainties in this case) tend to have high adaptation to social-ecological change with considerable self-reliance and flexibility.

5.6 The Asset Pentagon

The findings show no single category of assets that can maintain range of livelihood outcomes. As a result, they have to seek ways of nurturing and combining what assets they have in creative ways of nurturing to ensure the resilience of their livelihoods within the context of vulnerability. It is important to consider that a single asset can generate multiple benefits for other assets. For example, UMVM has strong social networks (social capital) that generates human capital (free labour for farming activities) while at the same time generating financial capital (funding) to gain (purchasing) physical capital (a tractor). However, livelihoods are complex. For a wider understanding, prevailing institutional structures and processes as well as vulnerability context should also be considered as they also shape and influence assets for achieving goals to secure livelihood outcomes.

Assets are constantly changing. Therefore, the shape of pentagon is also constantly fluctuating. The shape of the pentagon shown in Figure 06 can be used to visualise the variation in UMVM's access to assets. The idea is that the centre point of the pentagon illustrates zero access to assets while the outer border indicates maximum access to assets (DFID, 2001).
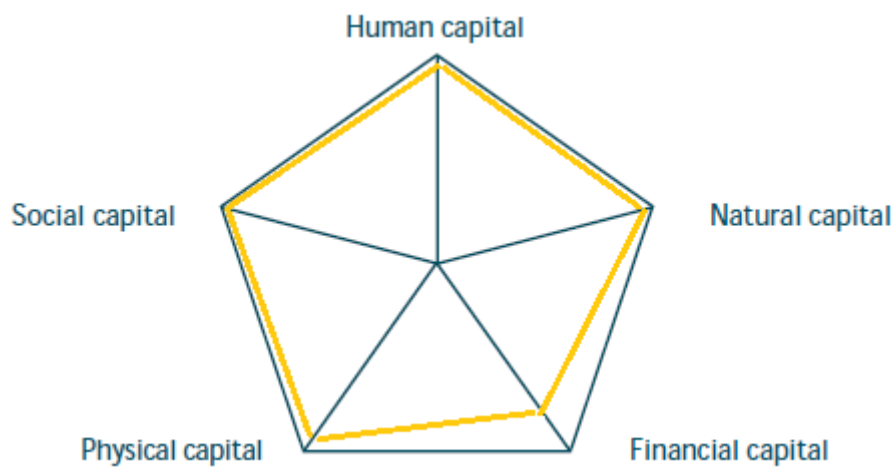
Figure 11: *The researcher's own clarification of the UMVM's asset pentagon. The yellow pentagon shows slightly declining access to physical and financial capital at UMVM. The blue pentagon shows the situation after receiving support from social networks, which then has improved the financial and physical capital.*

5.7 Assessing Structures and Processes

In this section, I discuss what structures and processes regarding livelihood strategies in a vulnerability context are important in enabling or constraining the resilience of UMVM. As shown in figure 3, the processes I will discuss include laws, policies, cultural (social norms) and institutional processes (operational arrangements, agreements). These processes determine the way in which structures (government, private sector) operate and interact (Serrat, 2017). However, relationships between them are rather dynamic and complex (DFID, 1999).

Access to various forms of capital can increase the opportunities for influencing and interacting with structures and processes, which directly or indirectly shape the capacity to manage and respond to stresses and changes. Findings confirm that high levels of social capital at the UMVM, including their ability in bonding and

bridging their social networks have increased the level of positive interaction with the government and other organisations. For an example: Army troops are receiving personality development training as well as personal counselling at the monastery.

The findings also support the claim that processes implemented through their structures have the ability to influence or create livelihood capitals. For example: the government has developed infrastructure (paved roads as physical capital) in the Melsiripura area as trade for training their troops at UMVM. These interventions have had a positive impact on the livelihoods of UMVM and other communities in the area. Another example of how structures strengthen physical capitals is indicated by an operational agreement between the CEB and UMVM, which provides an easier and lesser payment plan for monthly electricity usage at the monastery. This has been beneficial to both parts, as UMVM has agreed to let the CEB construct a giant electricity mast on their land as well. This has also enhanced the monastery's capacity to fulfil their additional energy requirement. In this sense, the adaptive capacities of the UMVM livelihood (as well other livelihoods), have been increased to face future shocks and changes due to the positive intervention of the government.

It is also worth discussing how culture influences the vulnerability context of the monastery. This includes some existing social norms in Sri Lankan Buddhist culture. For an example; both monks and nuns are not "allowed" to socialise or work together (farming) in other temples, which have created a tension between the villagers and UMVM, since villagers in general find it shocking. I speculate that this might be one of the reasons behind the sabotage done to UMVM's water pipes in the beginning of its establishment. However, because of the lack in the data sampling size of this research, these speculations need to be clarified further for more concrete conclusions. For this reason (among others), however, the monastery has currently been strengthening a healthy relationship with local communities, which increases their capacity to cope with any future social shocks.

5.8 Vulnerability Context

In the perspective of SLF, vulnerability can be understood within the access to certain assets. The study summarises that adaptive capacity is strengthened in many ways by several capital options available at UMVM for a resilient livelihood. Adaptation measures to prevent floods and drought have already been undertaken based upon their access to human, physical, social and financial capitals. For example: by combining traditional and modern knowledge (human capital), they have created rain gardens (physical capital) to reduce heavy runoff of surface water. They have also increased their irrigation capacity and soil fertility by harvesting rain water using man-made lakes. As mentioned earlier under financial capitals, the monastery has shown multiple ways in which they have the capacity to raise finances to address adaptation to natural hazards. This may help to understand how their social capital (social networks, trust, shared values) is the foundation that helps to withstand and cope with vulnerability.

Furthermore, this study demonstrates how access to a diversity of food sources reduces crop diseases and pests by growing different plants in the same fields. Also, the community has the manpower and resources to treat the crops timely. They have greater capacity in human capital (knowledge, skills and labour), physical capital (farming equipment, storage facilities, and water filtration system) and natural capital (abundance of land, water and vegetation). Subsistence of crops from organic farming and access to purified ground water enhances their ability to face human health related diseases (kidney failure from water pollution etc). Although still ongoing at the time of research, the UMVM has successfully managed to adapt to the current Covid-19 pandemic. The monastery's excess crops and foods have been distributed among other vulnerable communities in the Melsiripura area, which indicate their self-reliance and flexibility in dealing with difficult events and their ability

to adapt to changes and shocks. Thus, these findings support the assumption that systems with high adaptive capacity will adapt better whilst with low adaptive capacity tend to face vulnerability (Folke et al., 2003).

5.9 Livelihood Strategies and Sustainable Livelihood Outcomes

This section discusses the ways how the livelihood strategies of UMVM are important when enabling resilience and accomplishing livelihood outcomes. Livelihood strategies comprise the range and combination of activities and choices that people make or undertake in order to achieve their livelihood goals (DFID, 2001). The key findings of this research reveal how the UMVM community's livelihood goals can make them become a self-organising and sustainable community and a village driven by intellectual development as well as social, economic and environmental development.

The monastery undertakes diverse livelihood strategies to meet their needs at different times, contributing towards their livelihood resilience. Some of the identified livelihood activities from my findings were: organic farming (crop diversification, crop rotation, organic pest/weed control) spiritual and eco-tourism (guided tours, accommodation and cooking classes), disseminating spiritual and moral values, environmental conservation as well as operating social projects (education for village children, employment opportunities and providing health services and facilities to other local communities).

Livelihood diversification as (Ellis, 1998) defines, is the process by which people construct a diverse livelihood portfolio of activities and social support capabilities in order to improve their livelihood standards. Such diversification in livelihood activities brings many advantages: including enhancing adaptation and resilience by

improving the capacity to withstand and cope with natural and human-made shocks and change. In accordance with the literature on diversification of livelihoods, it is clear that the UMVM community has created a more diverse and potentially more secure livelihood.

The ability to pursue different livelihood strategies is derived from the capital assets by which people have in their processions (Scoones, 1998). Thus, access to different levels and combinations of assets has a major positive influence on the choice of livelihood strategies (DFID, 2001). The UMVM community has the ability to choose from a range of options from their assets base. This helps to maximise their accomplishment of positive livelihood outcomes rather than being forced to have one single or very few livelihood strategies. Therefore, identifying what livelihood capitals are required for different livelihood strategies is a key step in the process of analysis (Scoones, 1998). For example: intensification of organic farming combined with access to natural capital (land, water) and physical capital (equipment, storage) in concert with human capital (traditional and modern knowledge) and social capital (social networks associated with labour activities), increases their capacity to reduce the impact of crop disease or dry climate. All of these aspects determine their resilience.

Moreover, such a level of assets can increase opportunities for influencing and interacting with institutional structures and processes (which I explained in chapter 5.7) According to DFID (2001) and their reflections on the SLF, this can shape the long term livelihood strategies that are pursued by UMVM. The specific livelihood strategies that are pursued can also influence institutional processes, like government laws and policies. The findings provide evidence that the monastery is tax-exempted by government laws as a religious organisation (except for their tourism and business related activities). This has created a positive impact on the subsistence-based operations in their livelihood.

Therefore, this study shows how UMVM has been able to undertake a range of livelihood strategies, activities and choices based on their assets - all of which are influenced by a vulnerability context and transforming structures and processes. This increases their livelihood resilience and ultimately determines their livelihood outcomes; such as more income, increased wellbeing, reduced vulnerability, improved food security, and a more sustainable use of their natural resources base.

Aligning research findings with the prior literature (Armitage et al., 2007; Barrett & Swallow, 2006; De Haan & Zoomers, 2005), it is vital to consider that livelihood outcomes may be sustainable and lead to lower levels of economic hardships for a given set of actors in a given time period. However, episodic events and enduring social, ecological and environmental challenges on multiple scales can trigger a livelihood return into an unsustainable status. Thus, a "recognition of change, uncertainty and complexity in livelihood systems highlights their dynamic nature and the subsequent responses." (Armitage et al.,2007).

5.10 Spiritual & Eco - Tourism as a Livelihood Diversification

In the UMVM community, introducing spiritual tourism was quite a novel approach in its conception, which has further added to their livelihood diversification. Subsistence of financial income usually derives from donations. Therefore, the findings indicate that including tourism to their portfolio of livelihood activities can become a means to enable income accumulation and help to reduce risks of a failing economy. Tourism operations combine access to human capital (knowledge, skills), physical capital (accommodation, sanitation) and natural capital (recreation, air quality). Such activity (as opposed to farming) aims at coping with temporary adversity or more permanent adaptation of livelihood activities when other livelihood strategies are failing to provide a positive livelihood outcome. It also helps to better cope with environmental stresses.

Consequently, tourism in UMVM directly and indirectly contributes towards the social and economic development of other local communities. For example: small boutiques, shops and restaurants have opened business near the monastery to attract both local and foreign tourists. Therefore, tourism as a livelihood strategy has the capacity to strengthen the resilience of the UMVM livelihood as well as in other communities.

5.11 Local Livelihood Development as a Livelihood Outcome

"Livelihood is not only food security! Livelihood is not only about money! We cannot talk about livelihood as a sector of intervention, but rather about interventions that protect, support and reinforce people's livelihoods'' (Solidarites Org, 2017, p. 3)

In general, and particularly in a religious community, we should not speculate that people are entirely committed to maximising income. Rather, we should view and seek to understand the richness of potential livelihood goals. This, in turn, shall help to understand the community's priorities - why they do what they do and where the major limitations lie (DFID, 1999). At this stage of understanding, the findings help to emphasise that the UMVM community's livelihood goal is not just to maximise income or food security but also to protect, support and reinforce livelihoods of others by the deeds of their actions and moral guidance. Some of the identified livelihood activities that have been implemented by UMVM are generally for the wellbeing of other local livelihoods. I have mentioned some of these activities before, but they are health services, employment opportunities, education opportunities, environmental awareness and counselling services. Thus, the implication of these findings confirms that enhancing the resilience of livelihood for one community or group has the ability to strengthen those of another. In other words, a resilient livelihood that "maintains or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes

net benefits to other livelihoods at the local and global levels and in the short and long term" is considered as a sustainable livelihood (Chambers and Conway, 1992).

Chapter Six

6 Summary and Conclusion

The empirical studies of the UMVM community illustrate the highly context-specific nature of adaptive capacity in its livelihood. The findings propose that human, social, physical, financial and natural capitals are the most important elements of the UMVM community's adaptive capacity. In fact, this high adaptive capacity of capitals are shaped and influenced by structures and processes in a vulnerability context that enables the UMVM to undertake a range of livelihood strategies to achieve its livelihood goals (DFID, 2001).

Social capital features prominently in the UMVM community. The identified indicators are social networks, social values, norms and trust. Among those, experiential components of social capital; such as shared values, norms and understanding, appeared to be the most powerful aspects of their social relationship. The Buddhist philosophy, as the fundamentally shared values of the monastery's establishment, has created a strong sense of identity among its members. Hence, the shared understanding of spiritual values (mindfulness, wellbeing, and happiness) along with community trust and social networks is what is truly important and why it holds prominence at UMVM. As a result, the act of reciprocity increases the human and financial capital of the community. Furthermore, community members are very keen to contribute their knowledge, skills, labour and finances. UMVM maintains a strong attribute of bonding and bridging social networks with many actors from different homogeneous and heterogeneous groups. This further enhances their adaptive capacity and livelihood resilience (Claridge, 2018; (Putnam, 2000). Thus, findings of this study confirm that social capital in UMVM is the glue that bonds their adaptive

capacity and collaboration among different actors (Adger, 2003; Olsson et. al 2004; Pretty & Ward, 2001).

The key leader (the CI) at UMVM plays a catalytic role in building trust and organising social networks towards a common goal. The leader also creates cohesion among actors and actively tries to avoid mismanagement (Fabricius et al., 2007). The type of leadership also creates an attitude among actors in UMVM to learn to live with uncertainty and change. They nurture diversity and social learning, while at the same time building the capacity to self-organisation and conflict management. This indicates the importance of strong leadership and vision in initiating assets and processes that can lead to building resilient livelihoods.

Significant diversity in livelihood strategies facilitates secure and positive livelihood outcomes. Based on strong adaptive capacity (which is already assessed through five different types of capitals), influence through a vulnerability context and transforming structures and processes, UMVM has been able to make a range of livelihood strategies that enhances their livelihood resilience. As for sustainable livelihood outcomes, the monastery has been able to generate more income, increase wellbeing, reduce vulnerability and improve food security through more sustainable use of their natural resources-base.

The findings of UMVM conclude that their social capital (leadership, social networks and trust) is the key to tackle asset-based constraints and to enable the adaptive capacity of their livelihood to build resilience. By considering what the UMVM's resilience livelihood strategies are and what outcomes they bring, this study draws the conclusion that resilience livelihood of one community has the ability to strengthen those of another.

6.1 Limitations of the Sustainable Livelihood Framework, and Future Recommendations

The sustainable livelihood framework which has been used to analyse the resource-base at UMVM has proved a useful tool for the evaluation of their adaptive capacity. The approach of analysis through five capitals, functions as a systematising tool which can be applied to different contexts. The strength of the framework and its livelihood approach is precisely the indicators that help to clarify which capitals are the most important and achievable in pursuing sustainable livelihoods. At UMVM, most of their emphasis is directed through their social capital and human capital, which in turn makes use of other capitals. The SLF paints a realistic picture of how sustainability plays a part in a relatively different (religious) livelihood context.

However, there are some limitations of the livelihood approach and the SLF itself. For example, SLF is unable to take deep power dynamics and inequalities into consideration even if some dynamics are included. Because this critical dimension is not strongly considered in the framework, it significantly weakens its role as an analytical approach. For example, considerable attention is given to the examination of assets within a vulnerability context. Although, structures and processes (e.g., policies, laws culture, institutions) that influence livelihoods are identified, the complex issues of power relations influencing those structures and processes are not addressed in the framework (Ashley & Carney, 1999; Ellis2000)

Therefore this study lacks some important insights, such as how individuals exercise power over others and how those individuals influence members in and out of the UMVM. This has not been explored and it constitutes a gap in this study. Even though members from different religious and ethnic groups were identified as social inclusion, the SLF doesn't address the conflicting interests that exist between these differences in groups, race, gender, language, ethnicity, origin or religion (De Haan &

Zoomers, 2005). Finally, most livelihood analysis (including the SLF), are not explicitly concerned with the dynamic of ecological and social context in which they are embedded. Such concern of this study mystifies how further expansion and intensification of subsistence activities (farming, housing, tourism) at UMVM may impact on the environment and how that leads to difficulties in predicting livelihood outcomes. Therefore these might be some of the same aspects worth studying in a future research. Another significant aspect that was left out of this study is how (as chapter 5 reveals) implications of spirituality impact on sustainable development. Some of the informants were motivated by this aspect, which could also be interesting to go deeper in future studies.

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Appendix A

Semi-Structured Interview Guide 1

**General questions for Participants of UMVM

Interviewee Number: Gender:

Background & History/Origin of Umandawa

1. What is the origin of Umandawa? How was it founded? Whose initial concept made it happen?

2. What are the goals of Umandawa as a community?

3. What made you choose to settle in the Kurunegala district for this project?

4. What is the size of the land belonging to UMVM?

5. How much did the land cost? Who purchased it? How did you fund the purchase?

6. What was the land like before you started to build on it or started to develop it?

7. What was this place like in the past? What was the land used for and why was it abandoned?

8. Was the land fenced at the time of the purchase? Were there any signs of intruders, squatters or trespassers?

9. What are the reasons for transforming Umandawa to its current state?

10. Was there any tension between you and the local villagers before and/or after purchasing the land? Have you had any conflict with the villagers or other locals?

11. After you moved here, have any local people lost access to any public resources (for example: access to the stream).

12. What kind of challenges and struggles (economic and environmental) did you have when establishing and developing this land?

13. When you first moved to this area, what kind of infrastructure existed here that was available to you?

14. After you developed this place, has there been additional development to the infrastructure surrounding you? Who did it and what was built?

15. Has the government supported you to build infrastructure? If not, have they influenced you somehow?

Community Management and Governance

1. What is the organisational structure of Umandawa? Is it registered as a business or something else?

2. Can you explain the hierarchy of Umandawa? What is the form of governance and management?

3. What is the relationship between SSA and UMVM?

4. Who are the people that work and/or live here, and what are their roles?

5. As religious leaders, do you lead by example? If so, how do you lead?

6. Who gets to make decisions at UMVM?

7. Do you collaborate during decision-making? If so, how do you make it work?

8. What is the role of the leader and/or leadership of members?

9. What are the rules, norms and regulations of this community? And has anyone broken those rules and regulations?

10. Have you taken any actions regarding disobedience? Has anyone been punished? What have been the outcomes of such actions?

11. Do you value the opinions of everyone? How are they valued? Does everyone have a say in what goes on here? Does everyone get to pitch in?

12. How important are the skills and knowledge of the community members to UMVM?

13. How do you build trust among the community?

14. How do you motivate different actors?

Relationship with the Villagers, Public Officers and Society

1. What kind of job opportunities does UMVM provide to communities outside of UMVM?

2. In what ways do you contribute and collaborate with the surrounding villages and villagers? How do you finance your social projects?

3. What is your relationship with the village officers and other public officers like? Do you get any support from them?

4. How has the public and/or Srilankan society responded to your activities at UMVM?

5. Do you collaborate with the government in any way?

Environmental Concerns

1. Has the site undertaken an Environmental Enhancement Project to improve the land at the site or within the community?

2. Have there been any disturbances with nature or wildlife since establishing Umandawa?

3. Do you make the members of the community aware of the environmental values and concerns?

4. I heard there has been flooding at UMVM. What was the damage, how was it rebuilt and were there any costs or losses?

5. Is flooding recurring on this land? Has it happened before, and do you think it will happen again? Have you done anything to prevent it?

Tourism Activities

1. Why did you introduce spiritual tourism in your livelihood? What aspects of spirituality do you present to the visitors?

2. What are your tourism products and services? Who are your customers?

3. What are the reasons for introducing tourism? Is it for financial reasons or for the good of the community?

4. What is the income from tourism at UMVM? Is it enough for the maintenance costs at UMVM?

5. How do you market tourism? What is the level of your marketing? What media do you market through?

6. Do you think that spiritual tourism might benefit UMVM financially in the future?

7. How important is the surrounding environment as an aspect of tourism?

Livelihood Activities and Resources

Farming/Agriculture/Food Production

1. What kind of crops do you grow? Why do you grow different varieties of crops together in the same fields?

2. What kind of farming methods do you use?

3. How do you water the crops, what is the irrigation system like? What are your water sources?

4. What kind of fertilizer do you use?

5. Do you take the environment into consideration when you farm?

6. How do you control pests and weed?

7. What kind of equipment do you use for farming?

8. Do you have any animals or livestock?

9. Are you able to sustain yourself with the food you grow? Are you self-sufficient when it comes to food?

10. Besides growing food, what other food products do you make? Do you generate any income from it?

11. Do you use local knowledge in farming?

Resources

1. Where does your drinking water come from?

2. How do you fulfil your energy requirements? Do you use any renewable energy sources, like solar panels or biogas?

3. How do you treat your wastewater and other waste in general?

4. What are your financial resources in general?

5. What kind of infrastructure do you have in your community?

6. Do you have any challenges pertaining to resources?

Buddhist Activities

1. How does your Buddhist practice integrate with your work/chores?

2. To what level do you follow Buddhist principles in your life?

3. Can people of other ethnicities and religious beliefs live and work here?

**Relevant Questions for Participants of UMVM

1. What is your name, age and religion?

2. How important is spirituality to you?

3. What is your work, role or position in Umandawa or Siri Sadaham? Are you a resident monk/nun, devotee, volunteer or paid member?

4. How did you come to work In Umandawa? How long have you been working at UMVM?

5. In what ways do you contribute to Umandawa? Do you contribute with money and/or labour or in any other way?

6. Have you improved any skills (innovation, cognitive, technical) after joining UMVM for work opportunities?

7. What motivated you to help and contribute at UMVM? How do you feel about it?

8. What do you think about your act of altruism at this place? How important is it to you and to society at large?

9. Do you think that you, your ideas and skills are always welcome at Umandawa?

10. How is it like working with monks and nuns at Umandawa? How is it like working with other volunteers? What do you feel when you see monks and nuns working together? Does it motivate you in some way?

11. Have you experienced any conflicts? Any misunderstandings?

12. What is your perception about the Chief Incumbent and the management? How about his/their leadership? Do you follow his/their vision?

13. As a member of the community, do you feel that you are allowed to make changes in the way things work at Umandawa?

14. What do you think about the villagers? Do you have any close contacts?

15. What is your perception about this place? What differences do you see within UMVM compared to other similar places?

16. What do you like the best about Umandawa, and what are some things that you do not like? Do you think that there are some things that should be improved?

Appendix B

Semi-Structured Interview Guide 2

** Questions for Participants of Villages

Interviewee Number: Gender: Location:

1. What is your name?

2. Where are you from?

3. What do you do for a living?

4. What is your religious background?

5. Have you heard of UMVM? If so, what is your opinion about the place?

6. Have you been at UMVM? What is your relationship with them?

7. Have you benefited from anything that happens at UMVM?

8. Do you have any conflict or negative opinions of UMVM?

9. Do you know anything about the land before they purchased it, moved in and developed it?

10. Have you noticed any improvements to the infrastructure in the surrounding area of UMVM?

11. Any other comments?