Destination Risk and Resilience Manual

Presented by Sustainable Tourism Services (Pvt) Ltd Badulla, Sri Lanka

"Sustainability is no longer about doing less harm. It's about doing more good…"

- Jochen Zeitz

Team of Contributors

Prof. J.P.R.C. Ranasinghe
Director/ Sustainable Tourism Services Pvt. Ltd, Head/Professor at the Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka
Chairman/ Tourism Promotion Bureau-Uva Province

Dr. R.S.S.W. Arachchi
Senior Lecturer/ Department of Tourism Management, Sabaragamuwa University of Sri Lanka

Mr. Sampath Nissanka
Chief Executive Officer, Uva Provincial Tourism Board

Ms. W.G.S.R. Wijesundara
Senior Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. A.C.I.D. Karunarathne
Senior Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Mr. A.M.D.B. Nawarathna
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. C.P. Danthanarayana
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. U.G.O. Sammani
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. W.M.A.H. Bandara
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. P.G.S.S. Pattiyagedara
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. R.A.D.D.N. Ranathunga
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Mr. A.M.N.M. Gangananda
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. G.H.V. Harshani
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Ms. H.N. Jayawardena
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Mr. W.T. Hansaka
Lecturer, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Photo Courtesy: Mr. M.L.C. Sayuranga
Demonstrator, Department of Tourism Studies, Uva Wellassa University, Badulla, Sri Lanka

Manual Designing: Mr. S.S. Rosa
Department of Export Agriculture, Uva Wellassa University of Sri Lanka

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Executive Summary

Tourism has been growing continually as an economic activity in the global context and Sri Lanka has recognized tourism option for economic development since independence in 1948. However, many destinations in the country are not planned properly with needed risk analysis and resilience building plan to ensure long-term destination sustainability. In the recent years tourism industry has become the primary sources of economy in Ella though it faces a number of hazards and risks, including natural disasters and man-made hazards. Such issues should be addressed immediately and developed into comprehensive risk management strategies to build resilience and ensure sustainable development in Ella tourist destination. Amidst this background, the DKKV of Germany has come forward to develop risk assessment, and resilient building plan in Ella to ensure long-term sustainable tourism development in the area. The DKKV, the German Committee for Disaster Reduction, and Futouris, the sustainability initiative of the German travel industry, are collaborating on a project that aims to build destination resilience and promote sustainable development in emerging economies and the project is implemented by the DKKV an Futouris with support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

Through a competitive bidding and proposal evaluation process, the initiative to the project activity was awarded for a team of experts from "Sustainable Tourism Service (Pvt) Ltd of Sri Lanka. As the first project deliverable, this manual was prepared to present a comprehensive overview on the risks and hazards of selected destination. Accordingly, "Ella" as the destination will be particularized based on desk research, focus group discussions, site visits and based on the experience of the project team. The report also explains the current situation of Ella as a tourist destination, destination analysis that includes stakeholder mapping, destination value chain, as well as report comprised with a risk inventory visible at a glance based on the literature and focus group discussions. Background of the project and objectives are illustrated at the outset followed by conceptual underpinnings of destination risk and resilience building. The last section of chapter one elaborates on the methodology followed in this manual predation process. Tourism system, actors and governance structure is elaborated in chapter two while chapter three of this manual particularizes on risks and hazards together with their impacts on tourism. Risk response strategies are illustrated in chapter four while resilience building techniques are detailed in chapter five.

Preface

by DKKV and Futouris

The COVID-19 pandemic has had a devastating effect on economic and social systems globally and uncovered underlying vulnerabilities and inequalities. Besides COVID-19, a steady increase of climate-related disasters worldwide can be observed which are felt directly through loss of lives, livelihoods and assets, and indirectly through damage to economic production, welfare and society.

These issues are particularly demanding in a cross-cutting industry such as tourism, which is highly dependent on intact ecosystems, global business activity and socio-cultural experiences. While tourism is a particularly vulnerable industry influenced by many external factors, it is an indispensable source of income for numerous communities worldwide, particularly in regions with difficult accessibility, remoteness from economic markets and limited industry. Thus, addressing these complex and interconnected risks has become an urgent priority for tourism destinations.

In light of these developments, resilience has evolved as a key concept for dealing with risks. It emphasises anticipatory action and encompasses not only short-term coping measures, but also medium- and long-term aspects of learning, adaptation and transformation. Contrary to common belief, resilience does not conflict with sustainability but plays an important part to ensure continuous progress in achieving the Sustainable Development Goals (SDGs). The integration of sustainable development into all phases of risk management can thus support future resilience building rather than limiting it. The rise in popularity associated with the concept of resilience has however led to the use of resilience as a buzzword in a variety of contexts, often lacking conceptual clarification.

Turning into such a fashionable term has helped public perception but issues central to the discussion remains unanswered: What does resilience actually imply at destination level? How can resilience be analysed and subsequently be built? The project 'Destination Resilience' set out to increase the understanding of these issues and contribute to resilience building in tourism destinations. Implemented by the German Committee for Disaster Reduction and Futouris with support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ)[1] the project combines a wide-ranging expertise in the areas of disaster risk reduction and sustainable tourism. Within the project, a holistic destination resilience analysis guideline was developed that provides a process-oriented and participatory methodology to assess and build resilience. The guideline is structured around 5 steps, which are the foundation for the development of destination resilience pathways towards risk-informed and sustainable tourism management that considers the local context. The 5-step approach has been successfully implemented in three tourism destinations in the Dominican Republic, Namibia and Sri Lanka. Please refer to the Destination Resilience Analysis Guideline to learn more about the conceptual ideas, key terms and underlying concepts about destination resilience.

This Risk and Resilience Manual presents outcomes and main conclusions of the destination analysis. It identifies valuable options for action to reduce risk and increase resilience in Ella, Sri Lanka. Presenting a resilience analysis tailored to the local context of Ella, Sri Lanka, it ensures the relevance of proposed options for action. The Manual is built on the principles of participation and co-creation of knowledge to increase ownership of proposed strategies. The future development is everyone's business so only by bringing together all relevant actors, destinations that are a resilient and sustainable place to live in and visit can be created.

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[1] The project forms part of the COVID-19 Response Measures for Tourism – For Crisis Response, Recovery and Resilience which is a comprehensive programme funded by the German Federal Government.

Overview

1.1 Background & Objectives

Tourism industry has been recognized as one of the fastest growing economic segments globally. Being the third largest foreign exchange earning option of the country, the government of Sri Lanka has been prioritizing the tourism development as a solution for many issues currently faced by the country's economy. However, many destinations in the country are not planned properly with needed risk analysis and resilience building plan to ensure long-term sustainability.

Recently, Ella has been emerging as popular tourist destination, and local communities used to depend upon agriculture, tea plantations and daily paid work. In the recent years tourism industry has become the primary sources of their economy. Approximately 45,000 people live in the area and basically depend on natural resources related to tourism activities, but the living standards of the community remain poor due to the underdeveloped infrastructure, lack of support from the public and private sectors, lack of knowledge and awareness of market opportunities, natural disasters, etc. However, the community is willing to welcome visitors and to get involved in tourism activities in Ella as it attracts a large number of domestic and international tourists to the destination.

Recently, Ella has been gazetted as a mini tourist zone in Sri Lanka. However, emerging unplanned tourism activities create risks of disturbing the natural setup of the environment and the livelihood of the community as well. Furthermore, as a socio-cultural impact, the negative conflicts between host and tourists can be considered with the development of community-based tourism. Moreover,

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currently, Ella is facing a number of hazards and risks, including natural disasters and man-made hazards, which should be addressed immediately and developed into comprehensive risk management strategies to build resilience and ensure sustainable development within the destination.

Amidst this background, the DKKV of Germany has come forward to develop risk assessment, and resilient building plan in Ella to ensure long-term sustainable tourism development in the area. The DKKV, the German Committee for Disaster Reduction, and Futouris, the sustainability initiative of the German travel industry, are collaborating on a project that aims to build destination resilience and promote sustainable development in emerging economies and the project is implemented by the DKKV an Futouris with support of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

Through a competitive bidding and proposal evaluation process, the initiative to the project activity was awarded for a team of experts from "Sustainable Tourism Service (Pvt) Ltd of Sri Lanka. As the first project deliverable, this manual was prepared to present a comprehensive overview on the risks and hazards of selected destination. Accordingly, "Ella" as the destination will be particularized based on desk research, focus group discussions, site visits and based on the experience of the project team. The report also will explain the current situation of Ella as a tourist destination, destination analysis that includes stakeholder mapping, destination value chain, as well as report comprised with a risk inventory visible at a glance based on the literature and focus group discussions.

Accordingly, following key objectives **are expected to achieve through the development of this manual;**

To identify the source markets and visitor profile of Ella tourist destination

To recognize tourist attractions and assets in Ella tourist destination

To analyse the tourism system and tourism actors of Ella tourist destination

To analyse natural and man-made risks and hazards occurred in Ella as tourist destination

1.1.1 Target Audience of the Manual

Mainly the target audience of the manual had to be chosen focusing on the project objectives in a way which manual fulfils the utmost expected objectives of the users of the manual. For that, it has derived the target audience based upon the government and private sectors. The prospective beneficiaries and users of this manual can be illustrated as a hierarchy as follows.

Target Audience

Public Sector

1. Municipal Councils
2. Local Government Authorities
3. Government Organizations
4. Provincial Disaster Management Centers
5. Ministry of Disaster Management and Human Rights
6. Geological Survey and Mines Bureau
7. Police and Tourist Police
8. Universities
9. Medical Officers
10. Community Leaders

Private Sector

11. Academic Experts in Tourism
12. Educational Institutes
13. Hotel Managers
14. Practitioners
15. Entrepreneurs
16. Officers and Managers of other related bodies

Figure 1.1 Categorization of Target Audience of the Manual

Apart from that, as the policy makers in the tourism industry and practitioners in different related fields, following institutes will be benefited from this manual.

1. Ministry of Tourism
2. Sri Lanka Tourism Development Authority (SLTDA)
3. Ministry of Higher Education
4. Tourism and Hospitality MSMEs
5. Medical Officer of Health (MOH)
6. Grama Niladari
7. Urban Development Authority (UDA)
8. Disaster Management Centres

Further, the National Tourism Industry Council also will be benefitted as they are practicing tourism activities and organizing several events and forums related tourism industry. The council can be demonstrated as follows.

THASL	The Hotels Association of Sri Lanka (THASL)
SLAITO	Sri Lanka Association of Inbound Tour Operators (SLAITO)
TAASL	Travel Agents Association of Sri Lanka (TAASL)
ASMET	Association of Small and Medium Enterprises in Tourism Sri Lanka (ASMET)
NTGA	National Tour Guides Association (NTGA)
CTGLA	Chauffeur Tourist Guides Lecturers Association (CTGLA)
CHSGA	Ceylon Hotel School Graduates Association (CHSGA)
SLAPCEO	Sri Lanka Association of Professional Conference, Exhibition & Event Organizers (SLAPCEO)
CCC	The Ceylon Chamber of Commerce (CCC)
NCCSL	The National Chamber of Commerce of Sri Lanka (NCCSL)
ECCSL	European Chamber of Commerce of Sri Lanka (ECCSL)
AMCHAM	The American Chamber of Commerce in Sri Lanka (AMCHAM)

National Tourism Industry Council

Figure 1.2 Categorization of National Tourism Industry Council

1.2 Conceptual Understanding of Resilience and Application of DRAG (5-steps)

The project methodology is based upon Destination Resilience Analysis Guideline (DRAG) five steps in the suggested methodology and this has designed to follow mixed methods including studying grounded theories, focus group interviews, semi structured interviews and statistical survey to achieve the identified project deliverables.

1.2.1 Defining the Destination

First, the tourism destination has been defined based on desk research and the experience of the project team. Parallel to the desk research, site visits have been conducted to get a practical understanding of the destination and to conduct informal discussions with potential stakeholders on stakeholder mapping, to identify potential actors, stakeholders, and assets that constitute the tourism destination.

Based on the gathered information, SWOT analysis and SOAR analysis have been conducted. Under the SWOT analysis, it has identified internal strengths and weaknesses as well as external opportunities and threats in a destination. Under the SOAR analysis, it has focused on strengths, opportunities, aspirations, and results and strived to understand the entire system through the opinions of relevant stakeholders.

1.2.2 Identifying Hazards, Risks and Impacts on Tourism

It is planned to identify hazards, risks, and impacts on tourism activities that would fall under the definition of the tourism destination. In particular, two focus group discussions have conducted, including nine members for the first group and four members for the second group.

Based on the findings of the focus group discussions, the report was prepared to identify the risks and hazards related to the tourism destination.

Thereafter, it is planned to prepare this risk manual to profile the risks and hazards in the destination and map them in relation to the tourism operations and stakeholders. Therefore, the manual consists of four main aspects: overview, tourism system, risk profiling (natural and man-made), risk registry, impacts of identified risks and conclusion.

1.2.3 Understanding Risks and Options for Actions

The first workshop was organized with the focus of local industry experts and stakeholders, including Uva Wellassa University, subject experts in the academic sector, practitioners in different industries, and other stakeholders including Ella local government, Ella Divisional Secretariat, Ella Railway Station, Uva Provincial Road Transport Authority, Sri Lanka Transport Board, Badulla, Sri Lanka Electricity Board, National Water Supply and Drainage Board, Centre for Disaster Management, Divisional Education Office, Ella, Department of Irrigation, Medical Officers of Health Office, Ella, Ella Police Station, Central Environmental Authority, Ministry of Tourism Uva Province, Sri Lanka Tourism Development Authority, Trade Association Ella, Hoteliers' Association Ella, Tour Guides' Association Ella, Department of Land use Policy Planning and Tourism Information Center, Ella.

At the workshop, it was focussed on how to relate each identified risk to different stakeholders and the impact of those risks. Based on that, it was planned to develop the risk impact chain. Secondly, a risk prioritization

analysis was conducted to rank the risks from high impact risks to low impact risks based on the systematic consensus approach. Based on the results of the risk prioritization analysis, a risk mitigation plan was developed to identify the most appropriate solutions for the prioritized risks.

1.2.4 Analysing Enablers and Barriers to Build Resilience

Under the fourth stage, it is planning to develop a risk assessment framework for sustainable development based on two methods:

Likert Scale Statistical Method – Economic, Environmental, Socio-Cultural, and Management Aspects

Semi-structured interviews to identify opportunities (enablers), challenges (barriers) and potential options for actions

At the end of the analysis, these opportunities, challenges, and options for action are validated by a systematic consensus approach with the participation of subject specialists.

1.2.5 Discussing Options for Actions and Reflecting Resilience Principles

The second workshop was organized under stage five, with the participation of members representing different segments of tourism operators, including hoteliers, home stay owners, restaurant owners, tour guides, owners of small businesses, farmers, etc. There should be at least three members representing each category to reduce the bias. The findings from the previous steps (status quo report, risk registry, risk impact chain, and risk mitigation plan) are planned to be presented in front of the workshop participants at the second workshop to give a basic understanding of the project.

1.2.6 Conducting Training Program

After identifying the training needs and gaps through the second workshop, it was planned to conduct specific training with the participation of members representing the same segments identified in the second workshop. For that, a training manual was prepared with the contribution of experts.

The training program was organized as a two-day residential training;

DAY ONE
Workshop at the hotel with networking dinner

DAY TWO Morning
Field training and on-site activities

DAY TWO Evening
certificate awarding, review and reflections

1.2.7 Project Implementation in a Destination Level

As part of the implementation of the project deliverables it is planning to contribute to risk mitigation at a destination level. Prioritized risks were selected in the destination according to the risk registry which will contribute to risk mitigation in a practical way. Moreover, it was planned to develop a mobile application or website to disseminate collected information, and publish risk updates as a communication channel with the community and other related stakeholders.
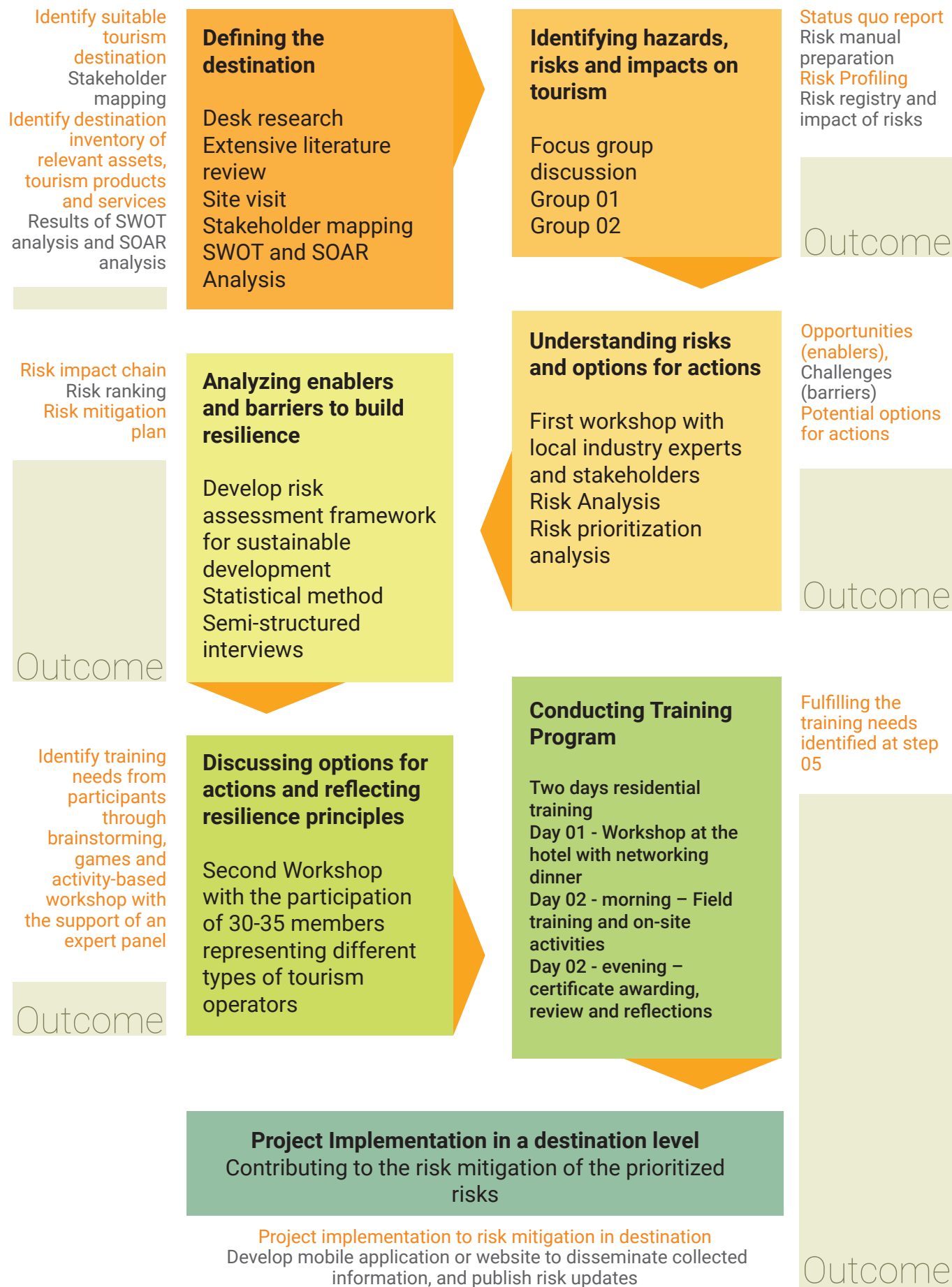
Figure diagram (left page)

Defining the destination

Desk research
Extensive literature review
Site visit
Stakeholder mapping
SWOT and SOAR Analysis

Identify suitable tourism destination
Stakeholder mapping
Identify destination inventory of relevant assets, tourism products and services
Results of SWOT analysis and SOAR analysis

Identifying hazards, risks and impacts on tourism

Focus group discussion
Group 01
Group 02

Status quo report
Risk manual preparation
Risk Profiling
Risk registry and impact of risks

Outcome

Analyzing enablers and barriers to build resilience

Develop risk assessment framework for sustainable development
Statistical method
Semi-structured interviews

Risk impact chain
Risk ranking
Risk mitigation plan

Outcome

Understanding risks and options for actions

First workshop with local industry experts and stakeholders
Risk Analysis
Risk prioritization analysis

Opportunities (enablers),
Challenges (barriers)
Potential options for actions

Outcome

Discussing options for actions and reflecting resilience principles

Second Workshop with the participation of 30-35 members representing different types of tourism operators

Identify training needs from participants through brainstorming, games and activity-based workshop with the support of an expert panel

Outcome

Conducting Training Program

Two days residential training
Day 01 - Workshop at the hotel with networking dinner
Day 02 - morning – Field training and on-site activities
Day 02 - evening – certificate awarding, review and reflections

Fulfilling the training needs identified at step 05

Outcome

Project Implementation in a destination level
Contributing to the risk mitigation of the prioritized risks

Project implementation to risk mitigation in destination
Develop mobile application or website to disseminate collected information, and publish risk updates

Figure 1.3 Summary Diagram of the Suggested Methodology

1.3 Methods Used

In order to gather the relevant data for the project a comprehensive methodology has been applied including comprehensive review of related literature, site visits and observations, desk research and review and focus group discussions and gathering expertise views.

1.3.1 Past Literature

Initially, the project team has started gathering information by referring to past published literature. Therefore, primarily, the team went through past literature related to risks that are existing in the Sri Lankan context and are having a greater impact for the destinations' long term survival. And then, the team narrowed it down to Ella, which is the selected destination to carry out the project, and was able to identify that Ella has been/is running for the past years and present under few considerable risks.

1.3.2 Site Visits and Desk Research

Afterwards, with the gathered literature, the project team participated on a site visit to Ella to observe the existing risks within the destination. From that, project team was able to identify some risks the destination is currently undergoing and have a potential to affect its future existence. After the site visit, a desk research was carried out in order to categorize the observed results accordingly. The structure of the desk research included 5 chapters focusing on,

1.3.3 Focus Group Discussions

With the background knowledge gathered through the site visits and desk research, two focus group discussions were conducted to gather some practical data from the experts in the tourism and related industries. Day 1 focus group discussion was held at Ella local government premises while Day 2 discussion was held at Kithal Ella Temple. For these two

Site visit at Ella

discussions, number of parties got involved from different sectors of tourism industry and they represented public and private institutions respectively. Hence, the sample of the people who got involved for these two discussions can be illustrated as follows.

Group 01

4th April 10.00 AM - 1.30 PM
At Ella Pradeshiya Sabha Premises

Moderator
Prof. Ruwan Ranasinghe
Head/ Department of Tourism Studies
Uva Wellassa University of Sri Lanka

Prof. Edirisooriya - Department of Geography and Environmental Management, SUSL
Mr. N.P.P. Liyanage - Senior Lecturer, UWU
Principal - Ella Maha Vidyalaya
Chairman - Ella Pradeshiya Sabha
Representative from Ella Police Station
Representative from Uva Tourism Ministry
Representative from Tourist Information Center - Ella
Public Health Inspector - Ella
Ayurveda Doctor (Indigenous Medicine)

Focus Group Discussion 01

Group 02

5th April 9.00 -12.00 PM
At Kithal Ella Temple

Moderator - Dr. Rangana Shalika
Former Head/ Senior Lecturer
Department of Tourism Management,
Sabaragamuwa University
of Sri Lanka

Station Master at Ella Railway Station
Homestay operator
Chairman of the Hoteliers
Association - Ella
Director of Disaster Management
Centre - Badulla

Focus Group Discussion 02

Each of them made significant contribution throughout the discussion sessions in order to attain our expected outcomes. Through that, project team was able to gain a vast area of knowledge and information regarding the risks existing in Ella and explored the suggestions from their end that can be adhered to control the risky situation.

Tourism System

2.1 Context

Sri Lanka is widely known for breath-taking sceneries and exotic experiences given to travellers. Among the diverse tourist destinations in Sri Lanka, Ella is considered to be one of the most attractive tourist destinations which offer a unique experience to travellers. Ella is a small town in the Badulla District of Uva Province in Sri Lanka. It is approximately 200 kilometres away from Colombo and is situated at an elevation of 1,041metres above the mean sea level and Latitude of 6.867 and Longitude of 81.050 in decimal degrees. Ella has a rich bio-diversity, dense with numerous varieties of flora and fauna and surrounded by hills covered with cloud forests and tea plantations (Life of Brit, 2021). The town has a cooler climate than the surrounding lowlands, due to its elevation. It was a

sleepy village in the Badulla District best known as a convenient way stop for travellers on the way to Kataragama. After a lapse of almost 14 years, it has been transformed into a bustling tourist town, a kind of mini Hikkaduwa. It is a classic market-driven development that, on balance, appears to have been good for almost all concerned. The local business community as well as some who have moved in from outside have invested in restaurants, guesthouses, spas and other tourism-related businesses (The Sunday Times, 2010).

The Ella town steadily growing as a tourist resort town, was declared under the Section 3 of the Urban Development Authority Act defining the metes and bounds of the Ella Grama Niladhari

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Division, where the Ella town is situated, by the government Gazette notification number 1558/5 dated 08th of July 2018. Further, UDA prepared an urban development plan for the Ella Township fulfilling the legitimate requirements and meeting the emerging needs to guiding the steadily growing tourism activities over the period from 2021 – 2030 and Gazette on 15th of April 2021 (Ella Development Plan, 2021).

Hence, Ella has become one of the top priorities of the travellers who visit Sri Lanka. The town's ideal location, positioned between lowland rainforests and highland tea plantations, makes it a perfect destination that offers thrilling experiences to visitors. This perfect geographical location of Ella has become a major reason which adds an enormous advantage to this little paradise over other tourist destinations of Sri Lanka. Moreover, there are several reasons why

Ella is so popular among the international travellers. Among them is the atmosphere of Ella which helps make life easier allowing travellers to enjoy a cool and relaxed afternoon with a perfect cup of tea. Moreover, Ella is famous among the travellers because it allows them to get a wide variety of experiences starting from the upcountry train ride to the thrilling Ella rock mountain hike. Hill Country railway ride is an amazing experience for locomotive lovers as it allows them to experience the beauty of the highland tea plantations and the untouched mountain forests. Most importantly, Ella could be considered a perfect destination for different types of travellers. Further, Ella is a fantastic destination for both backpackers and luxury travellers.

Another fascinating aspect about Ella is the unique and exciting experience of hiking. Little Adam's Peak and Ella Rock are the two well-known excursions

in the area. Ella is a fantastic starting place for overnight hikers and campers who are interested in exploring the beauty of nature. Further, the Ella Gap is a wonderful area that allows travellers to experience the breath-taking view of the surrounding mountains with views of lowland jungles and rainforests. Another fact that makes Ella one of the most iconic tourist destinations is that different accommodation experiences which include the unique homestay experience. These unique homestay experiences will take travellers through a delightful culinary journey that makes them fall in love with the Sri Lankan traditional cuisines. Other than the facilities in Ella, the lovely people in Ella will offer an unforgettable travel experience for the international travellers allowing them to experience a warm welcome from one of the world's most famous hospitable nations. Moreover, Ella has become a perfect example for the inclusive growth of the tourism industry. Throughout the past few years, Ella has shown a rapid growth in terms of economic and social aspects, generating more opportunities for tourism growth. Hence, the local community of Ella has been able to capitalize more business opportunities that allows them to generate more income. Further, reputed hotel brands which attracts more travellers to Ella have become a valuable platform which creates more employment opportunities. As a result of this rapid growth in Ella, life style and other social aspects of the people have changed dramatically replicating the significant impact of the tourism growth. Thus, being a popular tourist destination, Ella has been able to create more and more opportunities that create more space for the local community and other stakeholders to be a part of the inclusive tourism growth of Ella.

2.1.1 Main Tourist Attractions in Ella

Ella Rock

Little Adam's Peak

Figure 2.1 Destination Map - Ella

Source: Google Earth 2022

Ella Town

Nine Arch Bridge

Rawana Cave

Nil Diya Pokuna

2.2 Tourism Actors

As the dynamic nature and complexity of the sector, it is difficult to sustain as long term successful tourism destination within the tourism industry. Well established local governments, supportive tourism organizations, public and private sector organizations, local community leaders and sustainable shared vision and innovative strategies are networking together for a successful tourist destination. As a world known tourism destination, Ella enriches with number of stakeholders representing different sectors in the country.

Representing public sector, there are different organizations including Ministry of Tourism – Uva Province, Tourism Promotion Bureau - Uva Province, Tourism Information Centre, Tourist Police, Ella Pradeshiya Sabha, Divisional Secretariat Office, Government Universities, State Banks and other related government organizations to prepare policies, rules and regulations in tourism industry. As the practitioners and tourism service providers; hoteliers, travel agencies, tour operators, tour guides, taxi drivers, shop owners, restaurants, small and medium scale businesses, homestay owners, and recreation site operators are linking together to satisfy different recreational and basic needs of tourists who are visiting Ella. Apart from that, different associations such as Tour Guides Association, Ella Trade Association and Ella Hoteliers' Association are combine together to uplift the tourism activities in Ella. Moreover, Ella Railway Station, Uva Provincial Road Transport Authority, Sri Lanka Transport Board, Badulla, Sri Lanka Electricity Board, National Water Supply and Drainage Board, Centre for Disaster Management, Divisional Education Office, Ella, Department of Irrigation, Medical Officers of Health Office, Ella, and etc are providing supporting facilities such as transportation, infrastructure, and other basic facilities. With all these stakeholder, local community will play a major role by creating favourable image for Ella as a prominent tourism destination with their great hospitality, support and respect to the guest cultures. Therefore, for the success of the destination, cooperative behaviour of all tourism communities should be involved. Figure 2.2 illustrates the categorization of primary and secondary actors who are directly and indirectly involve in tourism activities in Ella as a tourism destination.
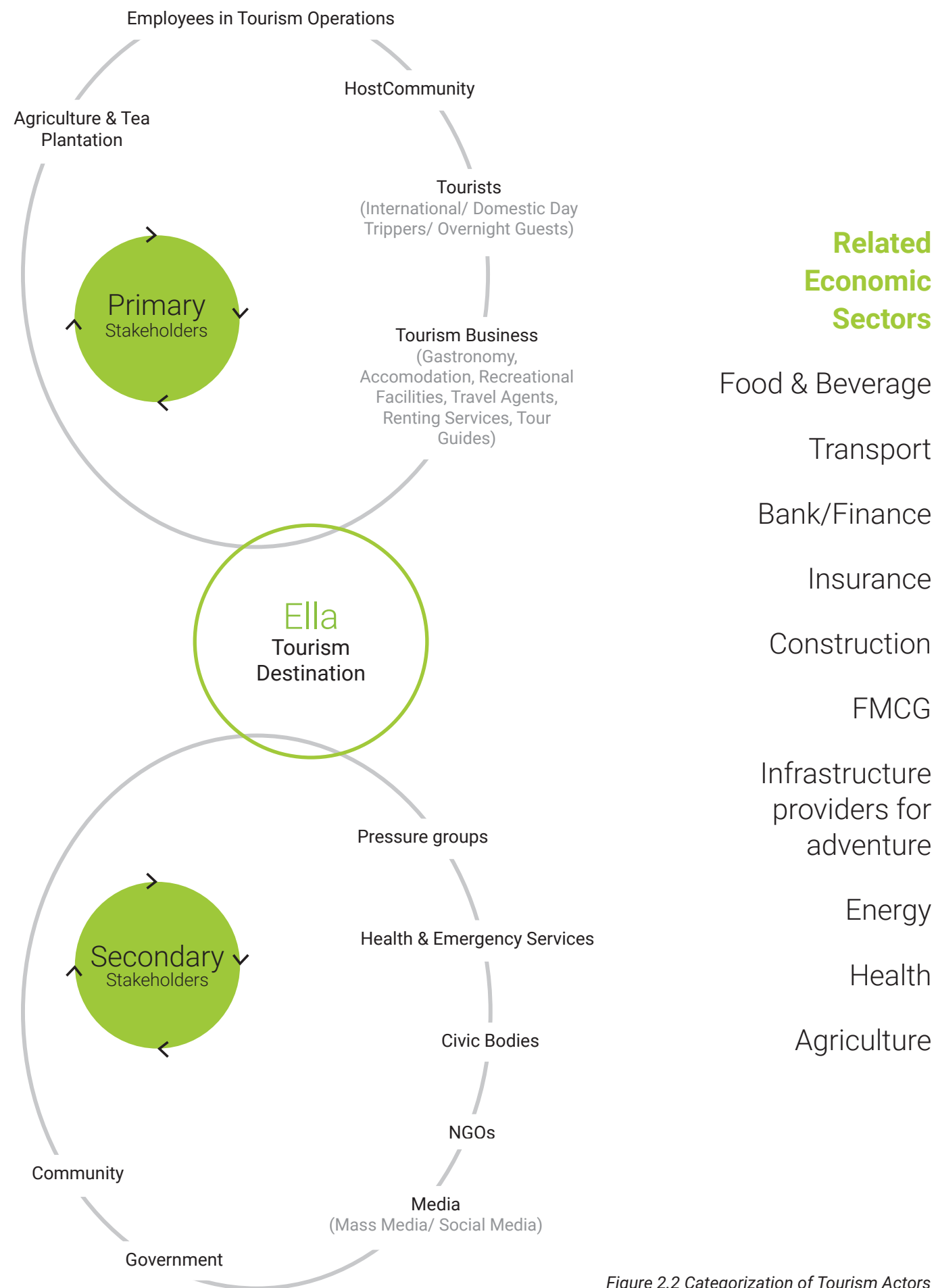
Employees in Tourism Operations

HostCommunity

Agriculture & Tea Plantation

Tourists
(International/ Domestic Day Trippers/ Overnight Guests)

Primary
Stakeholders

Tourism Business
(Gastronomy, Accomodation, Recreational Facilities, Travel Agents, Renting Services, Tour Guides)

Ella
Tourism Destination

Pressure groups

Secondary
Stakeholders

Health & Emergency Services

Civic Bodies

Community

NGOs

Government

Media
(Mass Media/ Social Media)

Related Economic Sectors

Food & Beverage

Transport

Bank/Finance

Insurance

Construction

FMCG

Infrastructure providers for adventure

Energy

Health

Agriculture

Figure 2.2 Categorization of Tourism Actors
Source: Filed Survey and Focus Group Discussion (2022)

2.3 Relevant Source Markets and Visitor Profile

Ella town being in the Uva Province rich with an assortment of natural resources is steadily becoming a tourist resort region, allows to experience an iconic destination for diverse traveller profile. However, there is no specific database currently in use to extract accurate statistics on the visitor profile to Ella area. The visitor profile to area can be anticipated by looking at the resource and facilities availability, demand for tourism products and services available in the area, and the profile of internal and domestic travellers in the country.

It is striking that the lowest number of Classified Hotels in Sri Lanka have been recorded from Uva Province with 1 four star & 1 one star hotel (SLTDA, 2020) and this indicates that the area seems have less attraction from high end tourists. Many of the accommodation places are belongs to the supplementary or unclassified; majority are home stays, guest houses and B&B establishments which suggest the attention from backpackers and low end budget travellers, but not limited.

It is reported that 6 per cent of total internal tourists to Sri Lanka are visiting Ella annually and this could be increasing annually with the proposing development projects in and around the Ella tourism region (UDA, 2021). It is further suggested by the UDA report on Ella Development Plan published in 2021, approximately 2,000,000 by the year 2030 with the proposed plan.

Majority of the travellers to Ella (around 65%) are notably young fallen between the age category of 21- 40 with sound educational background (approximately 77 percent are graduates) with lower and middle level of average household income (Karunarathne, 2015). The focus group discussion also confirmed this profile details and they declared that the average stay of travellers as 1-2 nights. In general, the travellers to Sri Lanka reported as majority from Asia Pacific (India and China key source markets), Europe (UK, France and Germany are key market sources) and respondents from the focus group confirmed that on average similar profile of visitors are received to Ella.

2.4 Destination Inventory

2.4.1 Destination Inventory Using 6As' Model

Destination inventory or destination attributes of Ella make significant influence on tourist arrivals from all over the world while affecting the perception and satisfaction of the tourists. The priorities of destination inventory available in Ella can be presented by using 6As model developed by Buhalis (2000) as follows.

Table 2.1 Destination Inventory using 6 As' Model

6 As' Model

Attractions	**Natural**
	Climate
	Water Resources
	Dunhinda Falls, Bomburu Ella, Nil Diya Pokuna-Underwater Pond in Ella, Kithal Ella Falls, Ravana Ella Falls
	Landforms and Landscapes
	Ella Gap, Mini Adam's Peak, Ravana Cave
	Geological Formation
	Ella Rock, Rawana Mountain Range, Porawagala
	Man-made
	Monumental Units (Ravana Ella Temple), Archaeological Sites (Rakkhiththa Kanda Aranya Senasanaya), Memorial Areas and Buildings, Halpe Pattini Devalaya, St.Anthony's Church, Individual Profane Buildings (Nine Arches Bridge, Tea Factories-Newburgh Green, Garden Architecture (Ella Spice Garden, Rawana Ella Sanctuary, Artistic Resources (Souvenirs, antiques, brass ornaments, wooden craft pieces, fridge magnets, Buddha statues, local handmade art, traditional paintings-RMS Antique and Brassware), Railway line – Demodara loop
Activities	**"Flying Ravana" Zip line, Hiking (Ella rock, Little Adam's Peak), Camping at Namunukula, Ella Rock, Cycling to Ellawala waterfall/ Ravana Waterfall/Ravana Cave and other, Train tour, Authentic Sri Lankan Cookery Demonstration and Experience, village tour, Events – weekly town fair and cultural, Festivals by Buddhists, Hindus and other religions, Tea estate tours**

Amenities	**Accommodation Establishment** **Homestays, Luxury hotels, Apartments, Hostels, Boutique hotels, Bunglows, and other, Tourist Information Centre, Restaurants (Matey Hut Ella, Café Chill, Ceylon Tea Factory), Sanitation and Hygiene Facilities (New Toilet Complex at Ella Railway Station)**
Accessibility	**Trains** Udatarata Menike, Podi Menike and Express train from Colombo, Ella Oddessay from Kandy **Heliports** owned by hotels **Other motorway access** from Katharagama, Maththala, Badulla, Colombo and Kandy **Airports** Mattala International Airport, etc.
Ancillary Services	Commercial Banks, Telecommunication, Internet facilities, Health Service, Tourist Police etc.
Available Packages	Pre-arranged tours by tour operators or hotels, tours by community and other tourism service providers in the destination

Source: Buhalis (2000), Filed Survey and Focus Group Discussion (2022)

2.4.2 Destination Life Cycle Using Butler Model

Number of Tourists

Rejuvnation — A
CRITICAL RANGE OF ELEMENTS CAPACITY
Stagnation — B
C
D
Consolidation
Decline — E
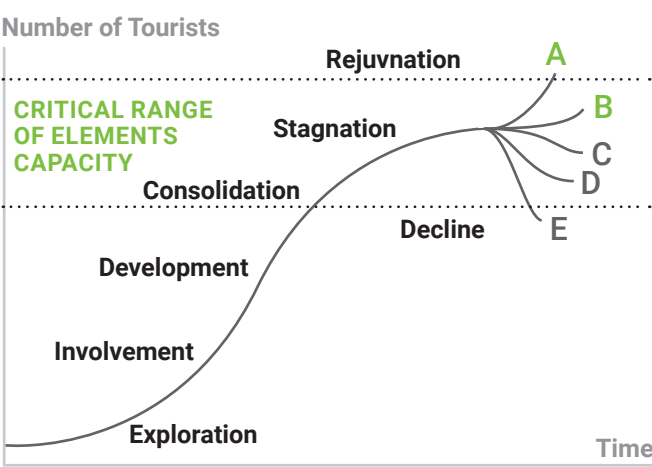Development
Involvement
Exploration
Time

Figure 2.3 Destination Life Cycle | Source: Adapted from Miller and Gallucci (2004)

The "destination life cycle" in figure 2.3 explains the development and the successive stages of the destination in relation to the time considered. Ella has passed mainly the exploration and development stages of its life cycle many years ago and currently reached to consolidation stage where the tourist growth rate to the destination begins towards a decrease. Decreasing carrying capacity of the destinations, health issues, insufficient infrastructure, such as parking, accommodation, improper waste management, lack of government support, demonstration effect, environmental pollution were the main causes to enter "critical range of elements of capacity" in the life cycle before the COVID-19 pandemic. However, the situation has become more critical after COVID -19 due to issues on retaining and existing of potential employees in the industry, regaining the business position, the challenge of building resilience, sustainability of Small and Medium Tourism Entrepreneurs (SMEs) in Tourism and Hospitality, Health & Safety, Social Acceptability etc.

Moreover, gradual transfer from consolidation stage to rejuvenation stage (A, B) is needed to Ella with the involvement of all stakeholders increasing technology and infrastructure where the destination will be able to hold more travellers with its increased capacity.

2.4.3 Tourism Value Chain in Ella

Structurally, tourism has a distinct potential in regional value added (Karunarathne, et al. 2018) and thereby contributing to sustainable development of emerging economies (Partale, 2020). Ella as one of the important tourism destinations locally and globally, contributes for the national and regional development extensively.
Above value chain presented in Figure 2.4 has visibly elaborated how the tourism operations in Ella area has networked with diverse neighbouring economic sectors, institutions as well as individuals fabricating an intensive multiplier effect boosting the local economy.

These elements can be either directly or indirectly indispensable to the industry sustainability and create and retain the value. The identified tourism value chain of Ella consists with two key fragments as tourists' behaviour before arriving to the destination (country of origin to destination) and tourists' behaviour after arriving to the destination (In and around destination).

From the country of origin to the destination of Ella comprises the tourists' behaviour in the pre-arrival stage of which includes the complete process of organizing the travel, making the reservations and reach to the final destination. This process involves both the direct and indirect supplier contacts in creation of value for the tourists from their origin until reach the final destination.

The "In and Around Destination" includes the direct and indirect stakeholder contacts that involves with the main experiences tourists encounter after the arrival to Ella. This framework also comprises few main phases of the experiences that encountered by the tourists within the destinations such as Transportation, Accommodation, Food and Beverage, Creative Industries, Tourism Resources, Leisure, Tours and excursions and Support Services incorporating the direct and indirect value creation. The light green colour shows the tourism activities that are currently operates within the Ella while the tourism activities in the developing stages are depicted by the dark green colour.

The main supporting institutions in Ella such as Ministry of Tourism Uva Province, Sri Lanka Tourism Development Authority (SLTDA), Urban Development Authority, and Central Environmental Authority are the government institutions related to the tourism industry, which support the tourism experience in Ella. Ministry of Tourism Uva Province is the regional level government authority which is responsible for regulating the tourism activities in Uva Province where Ella is belongs to the Uva Province. Moreover, Sri Lanka Tourism Development Authority

(SLTDA) is the government institution tasked with planning, development, regulation, and policy implementation of tourism and related industries on behalf of the Ministry of Tourism in Sri Lanka. Central Environmental Authority is the government institution responsible for regulating and assessing the environmental impacts caused by the different tourism activities and projects in Sri Lanka. In addition, trade promotion organizations like Chamber of Commerce, Banks and other financial institutions and licensing and standard bodies which regulate licenses, certificates and standards in different tourism operations are indirectly supported to improve the tourism experience in Ella. The value chain mentions Energy, Water, Information Technology, Communication, Health, Public Security and Education as the essential infrastructure facilities required for the smooth operation of the tourism activities in Ella.

Usually, the existing transportation modes available in Ella are public and private buses which are transporting people through Ella. In addition, car and bike renting services are also available as a mode of transportation. Furthermore, train is the most popular mode of transportation via Ella with a scenic view train journey for tourists. Recently, a new train journey called "Ella Oddessay" has initiated specially focusing the tourists who are visiting the Ella. Accordingly, institutions like Sri Lanka Customs, Ministry of Ports and Shipping, Department of Immigration and Emigration, and Ministry of Transportation also indirectly support the transportation of tourists within a tourism destination in Sri Lanka.

Under the accommodation sector currently there are many supplementary establishments such as homestays, villas, boutique hotels, guest houses, rest houses, heritage bungalows as well as many other unregistered establishments can be found in Ella. Furthermore, accommodation facilities such as classified hotels, tourist hotels and tree houses are still at the development stage. Moreover, Food and Beverage play an important role in tourists' stay in a destination. Food and

beverage involve both a fundamental need plus the cultural value of a particular tourist destination. Accordingly, Ella has restaurants, bars, night clubs, fast food outlets and street food outlets as existing food and beverage suppliers. In addition, food festivals and food souvenirs are currently at the developing stage in Ella destination.

The term 'creative industries' describes businesses with creativity at their heart, for example, design, music, publishing, architecture, film and video, crafts, visual arts, fashion, literature, performing arts etc. Handicrafts, art shops can be considered as the existing creative industry suppliers in Ella. Music and dancing theatres, artists and performers in Ella destination can be considered as developing stage creative suppliers. Furthermore, currently the indirect supplies related to the accommodation, food and beverage and creative industries such as construction and real state suppliers, goods & services suppliers: (Furniture, ICT, Food, Textiles, Agriculture etc.), warehousing, distribution, raw material suppliers, maintenance, and sales and marketing suppliers are within the developing stages.

In addition, Ella is rich with many natural (waterfalls, mountains, forests, rivers etc) and cultural resources (religious places - temples, kovil, church). But still the cultural resources such as festivals, museums, model villages and the built resources like architecture, infrastructure and superstructure are at the developing level. Also, activities like hiking, trekking, cycling, flying Ravana, and tour packages can be considered as existing leisure, tours and excursions suppliers in Ella. But still the professional tour guiding services, spiritual and wellness centres in Ella are in developing stage. In addition, indirect services for leisure, tours and excursions as signage and direction of natural and cultural sites, restoration, management, preservation, conservation, and promotion of resources are also still under the developing stages.

Furthermore, the existing supporting services

in Ella include laundry and cleaning services, banking services, security services, internet cafes etc and tourist information centres, shopping complexes are under the developing stages. Along with that the indirect suppliers like trade companies, manufacturers, distribution, fuel and energy suppliers, IT specialists and software (Property Management Systems, Travel Management Systems), research, training and consultancy services provided by especially higher education institutions are under the development stages.

Moreover, currently tourism activities in Ella often puts burden on nature and society through over-consumption and misuse of tourism resources. It can put enormous pressure on an area and leads to different kinds of negative environmental and socio -cultural impacts. Hence, it is needed to concern on minimizing this negative tourism impacts when conducting the direct and indirect tourism related activities through sustainable tourism activities. Accordingly, the gray coloured elements in figure 02 indicates the existing natural and socio- cultural negative impacts created through various tourism activities in Ella.
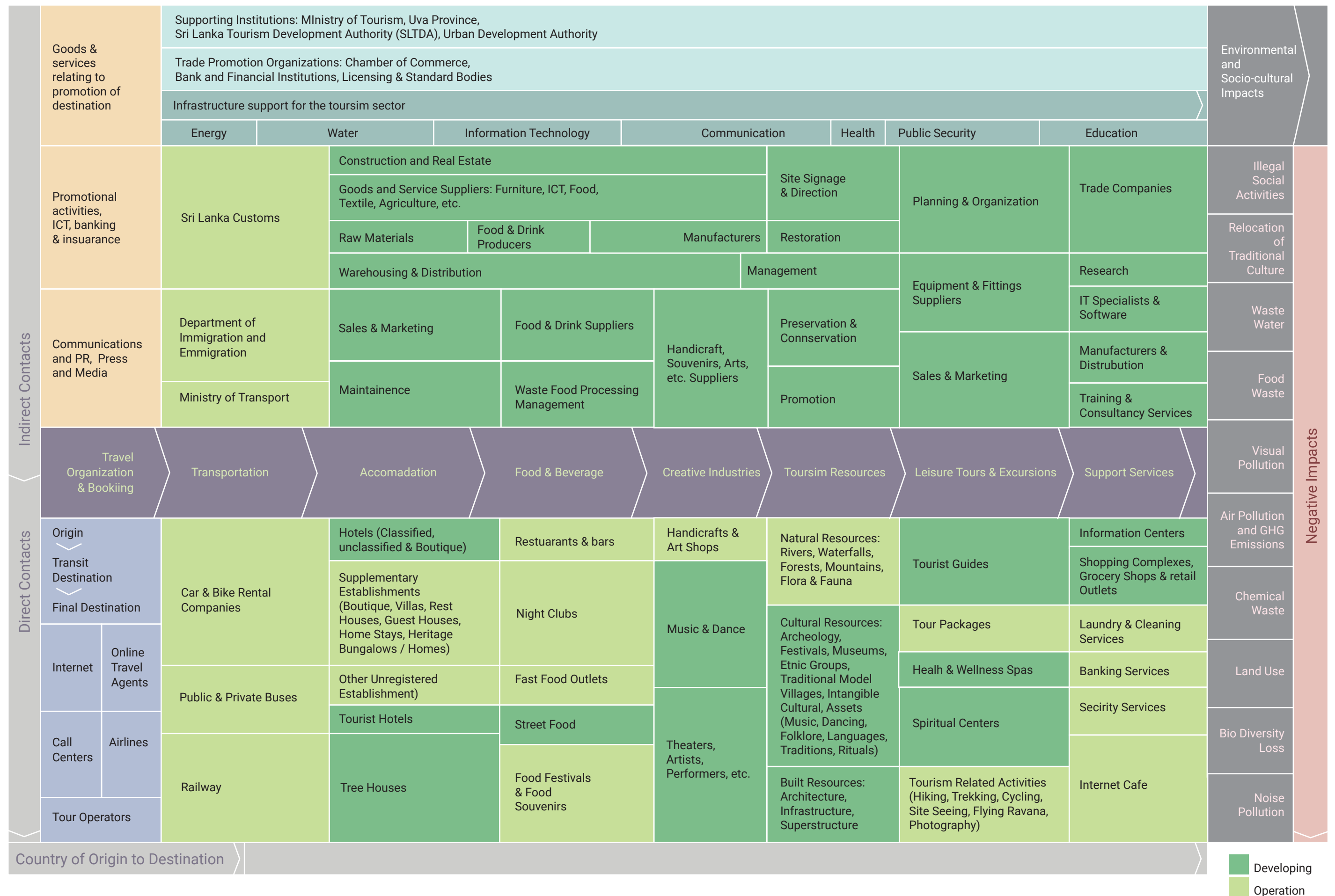
Figure 2.4 Tourism Value Chain in Ella

Goods & services relating to promotion of destination

Supporting Institutions: MInistry of Tourism, Uva Province, Sri Lanka Tourism Development Authority (SLTDA), Urban Development Authority

Trade Promotion Organizations: Chamber of Commerce, Bank and Financial Institutions, Licensing & Standard Bodies

Infrastructure support for the toursim sector

Energy	Water	Information Technology	Communication	Health	Public Security	Education

Indirect Contacts

Promotional activities, ICT, banking & insuarance

Sri Lanka Customs

- Construction and Real Estate
- Goods and Service Suppliers: Furniture, ICT, Food, Textile, Agriculture, etc.
- Raw Materials | Food & Drink Producers | Manufacturers | Restoration
- Site Signage & Direction
- Planning & Organization | Trade Companies
- Warehousing & Distribution | Management
- Equipment & Fittings Suppliers | Research

Communications and PR, Press and Media

Department of Immigration and Emmigration

- Sales & Marketing | Food & Drink Suppliers | Handicraft, Souvenirs, Arts, etc. Suppliers | Preservation & Connservation
- IT Specialists & Software
- Manufacturers & Distrubution
- Sales & Marketing

Ministry of Transport

- Maintainence | Waste Food Processing Management | Promotion
- Training & Consultancy Services

Travel Organization & Bookiing | Transportation | Accomadation | Food & Beverage | Creative Industries | Toursim Resources | Leisure Tours & Excursions | Support Services

Direct Contacts

- Origin
- Transit Destination
- Final Destination
- Internet | Online Travel Agents
- Call Centers | Airlines
- Tour Operators

Car & Bike Rental Companies

Public & Private Buses

Railway

- Hotels (Classified, unclassified & Boutique)
- Supplementary Establishments (Boutique, Villas, Rest Houses, Guest Houses, Home Stays, Heritage Bungalows / Homes)
- Other Unregistered Establishment)
- Tourist Hotels
- Tree Houses

- Restuarants & bars
- Night Clubs
- Fast Food Outlets
- Street Food
- Food Festivals & Food Souvenirs

- Handicrafts & Art Shops
- Music & Dance
- Theaters, Artists, Performers, etc.

- Natural Resources: Rivers, Waterfalls, Forests, Mountains, Flora & Fauna
- Cultural Resources: Archeology, Festivals, Museums, Etnic Groups, Traditional Model Villages, Intangible Cultural, Assets (Music, Dancing, Folklore, Languages, Traditions, Rituals)
- Built Resources: Architecture, Infrastructure, Superstructure

- Tourist Guides
- Tour Packages
- Healh & Wellness Spas
- Spiritual Centers
- Tourism Related Activities (Hiking, Trekking, Cycling, Site Seeing, Flying Ravana, Photography)

- Information Centers
- Shopping Complexes, Grocery Shops & retail Outlets
- Laundry & Cleaning Services
- Banking Services
- Secirity Services
- Internet Cafe

Country of Origin to Destination

Environmental and Socio-cultural Impacts

Negative Impacts
- Illegal Social Activities
- Relocation of Traditional Culture
- Waste Water
- Food Waste
- Visual Pollution
- Air Pollution and GHG Emissions
- Chemical Waste
- Land Use
- Bio Diversity Loss
- Noise Pollution

Legend: Developing | Operation

Source: Developed by the Project Team Based on the Desk Research and Focus Group Discussion Adopting the UN Environment from ITC UNWTO (2015)

2.4.4 SWOT Analysis for Ella

Strengths

- Gazzetted as a tourism destination in the country
- Climate of the destination that suit for tourism development
- Existence of picturesque locations in Ella
- Availability of state owned-owned lands within the town and the surrounding area
- Mix of natural, cultural and historical attractions
- High satisfaction ratings by visitors on travel platforms
- Well-known destination for country side tourism
- Numerous small and medium scale hospitality enterprises
- Highest oxygen concentration in the entire country
- Ravana wildlife conservation is located in Ella
- Existence of tea plantations with the potentials of tea tourism development
- Ravana legend and historical/ cultural value of the area
- Establishment of Environmental and Tourism Development Society with the invlovment of local community
- Implementation of international tourism promotion campaigns and advertisements
- Proposed "Kaushyma" solid waste management project

Weaknesses

- Natural disasters (ex: landslides)
- Mismanagement of natural resources
- Insecure and illegal constructions
- Overcrowded tourism spots
- Absence of visitor management system
- Traffic jams impact on both visual pollution and noise pollution
- Insufficient and improper waste management and drainage system
- Lack of basic facilities in the city area
- Lack of warning boards, sign boards, direction boards at some major tourist attractions
- Lack of awareness among local community on tourism activities
- Lack of usage of modern technologies in tourism activities

SWOT Analysis

Opportunities

- Being popularized as an emerging destination in international travel magazines
- Favorable government policies for tourism
- Accessibility to Ella by train and motoring through iconic views
- Growing demand and trend for safe, relaxed and natural tourism experiences
- Trend of green, geo, adventure and eco concepts
- Tourism investment opportunities towards Ella
- Developing road network
- Opportunity to explore and share diversified cultures
- Opportunity to launch diversified tourism related businesses
- Opportunity to re-start tourism activities in new normal condition within the country
- High proximity to commercial capital and international airports
- Government support for the tourism development and promotion
- Development of modern technologies

Threats

- Disappearance of water springs due to the impact of the Uma Oya (River) project
- Loss of vegetation
- Environmental pollution
- Degradation on the scenic beauty
- Threat of damaging sensitive environmental areas
- Shortage of drinking water, and usable lands in Ella
- Socio-cultural degradation due to over tourism
- Commodification of cultural and natural resources
- Loss of traditional livelihood
- Labour and resource migration from traditional agriculture to tourism without proper mechanism
- Spread of prostitution, STDs and drug usage
- Leakages of tourism benefits from Ella
- Present economic crisis in the country
- Emerging competitive tourism destinations

Figure 2.5 SWOT Analysis ———— *Source: Developed by the Project Team Based on the Desk Research and the Focus Group Discussion*

2.4.5 SOAR Analysis for Ella

Strengths

- Gazzetted as a tourism destination in the country
- Climate of the destination that suit for tourism development
- Existence of picturesque locations in Ella
- Availability of state owned-owned lands within the town and the surrounding area
- Mix of natural, cultural and historical attractions
- High satisfaction ratings by visitors on travel platforms
- Well-known destination for country side tourism
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- Ravana legend and historical/ cultural value of the area
- Establishment of Environmental and Tourism Development Society with the invlovment of local community
- Implementation of international tourism promotion campaigns and advertisements
- Proposed "Kaushyma" solid waste management project

Aspirations

- Natural disasters (ex: landslides)
- Mismanagement of natural resources
- Insecure and illegal constructions
- Overcrowded tourism spots
- Absence of visitor management system
- Traffic jams impact on both visual pollution and noise pollution
- Insufficient and improper waste management and drainage system
- Lack of basic facilities in the city area
- Lack of warning boards, sign boards, direction boards at some major tourist attractions
- Lack of awareness among local community on tourism activities
- Lack of usage of modern technologies in tourism activities

Opportunities

- Being popularized as an emerging destination in international travel magazines
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- Developing road network
- Opportunity to explore and share diversified cultures
- Opportunity to launch diversified tourism related businesses
- Opportunity to re-start tourism activities in new normal condition within the country
- High proximity to commercial capital and international airports
- Government support for the tourism development and promotion
- Development of modern technologies

Results

- Disappearance of water springs due to the impact of the Uma Oya (River) project
- Loss of vegetation
- Environmental pollution
- Degradation on the scenic beauty
- Threat of damaging sensitive environmental areas
- Shortage of drinking water, and usable lands in Ella
- Socio-cultural degradation due to over tourism
- Commodification of cultural and natural resources
- Loss of traditional livelihood
- Labour and resource migration from traditional agriculture to tourism without proper mechanism
- Spread of prostitution, STDs and drug usage
- Leakages of tourism benefits from Ella
- Present economic crisis in the country
- Emerging competitive tourism destinations

SOAR Analysis

Figure 2.6 SOAR Analysis ———— Source: Developed by the Project Team Based on the Desk Research and the Focus Group Discussion

2.5 Governance Structure

Governance entails a guidance process that is institutionally and technically structured, that is, based on principles, norms, procedures and practices to collectively decide about common goals for coexistence and about how to coordinate and cooperate for the achievement of decided objectives. In this light, Morrison (2013) mentioned that the destination governance is how a Destination Management Organization (DMO) or National Tourism Organization (NTO) is administered and who does the administering. Tourism governance involves clearly developed policies, systems and processes to ensure that all stakeholders are involved. Accordingly, the governance and the administration of the tourism industry in Sri Lanka is happening under three levels. First, the Cabinet Ministry of Tourism Development administers the tourism industry of the country. Second, the Sri Lanka Tourism Development Authority manages and facilitates the tourism industry in Sri Lanka as the DMO/NTO. Third, the provincial councils and the local governments manage the tourism industry at the respective levels.

"When considering the regulations on tourism industry in Sri Lanka, Majority of Power has gone to the Central Government. Accordingly, Sri Lanka Tourism Development Authority has been the main regulatory body of Sri Lankan tourism. In addition, Sri Lanka Institute of Tourism and Hotel Management is responsible for the development of human resource related to tourism industry. Further, Sri Lanka Tourism Promotion Bureau is operating with the aim of promoting Sri Lankan Tourism....."
(Respondent 07, Focus Group Discussion, 2022)

As respondent 07 mentioned above, the Ministry of Tourism plays the focal role to manage the tourism industry. Under the Ministry, four boards are operating. The SLTDA is acting as the main DMO/NTO of Sri Lanka. The official institution is tasked with establishing, positioning, and developing Sri Lanka as a leading destination for international visitors. It is responsible for tapping into Sri Lanka's natural potential to expand and enhance its tourism offering while benefiting investors and supporting communities. Sri Lanka Tourism Promotion Bureau (SLTPB) is the authoritative government body responsible for handling all marketing and promotional activities related to the travel and tourism industry of Sri Lanka. In addition, Sri Lanka Convention Bureau (SLCB) is an institute with the prime objective of promoting Sri Lanka as a venue for MICE (Meetings, Incentives, Conferences, Exhibitions & Events) activities. The Sri Lanka Institute of Tourism and Hotel Management (SLITHM) is functioning in training and educating youth for the tourism and hospitality sector. Following figure depicts the national tourism governance framework.

According to the Provincial Councils Act No. 42 of 1987, Sri Lankan government devolved powers to the respective provinces to decentralize the operations. Therefore, the tourism development of the relevant regions is managed by the Provincial Ministry of Tourism, and some provinces have developed an independent body like Tourism Bureau or Tourism Development Authority to handle tourism-related matters.

"When considering the provincial levels of Sri Lanka, each provincial council comprises with tourism ministry. When it comes to the regional level, Pradesiya sabha have some authority and regulatory power to develop tourism industry and they are working very closely with the community."
(Respondent 07, Focus Group Discussion, 2022)
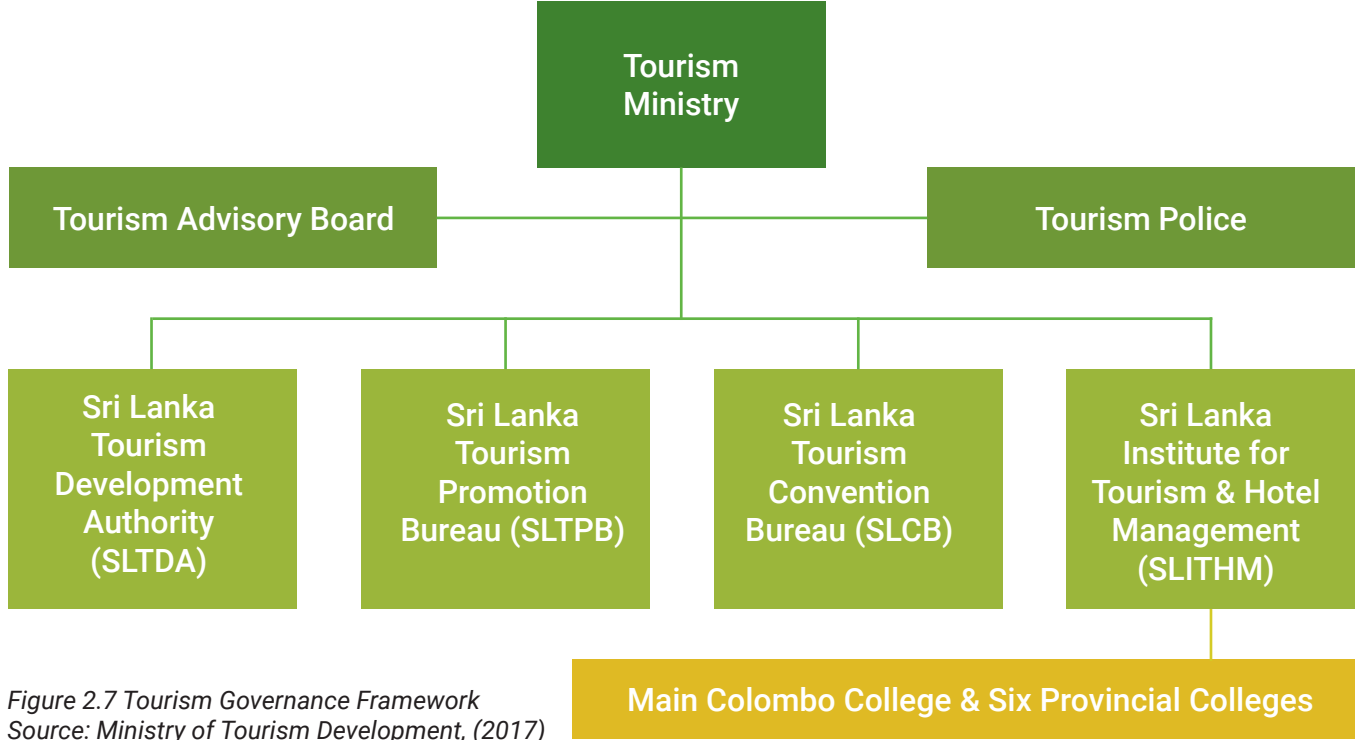
Figure 2.7 Tourism Governance Framework
Source: Ministry of Tourism Development, (2017)

However, there is no proper coordination and monitoring mechanism between the provincial ministries and the SLTDA (DMO/NTO). Some activities are happening in an ad-hoc manner. On the regional level, Pradesiya sabha have some authority and regulatory power to develop tourism industry and they collaborate very closely with the community.

"As a whole, we observed some issues in regulation of tourism in Sri Lanka. Especially on main destinations. For a instance, Government, Pradeshiya Sabha and Sri Lanka Tourism Development Authority has some limitations on regulating some activities in Ella area."
(Respondent 07, Focus Group Discussion, 2022)

When considering Ella as a tourist destination in Sri Lanka, there are some system issues which affect the tourism governing structure such as regulation Issues, quality issues and Behavioural issues. Especially, there is no any proper mechanism to register tourism service providers in Ella area. As a result, a solid administrative and regulatory framework is required. In this case, the duty of each institution should be clearly stated, and the governing structure should be changed to meet the needs of the tourism business.

"When considering the service providers in tourism industry, more than 79% are informal and unregistered. However, they should not eradicate form tourism industry. Since they are giving major contribution to the tourism industry with their capabilities. There are some issues with the quality of the service and the minimum levels of standards. In addition, we have observed some behavioural issues of the persons who are engaging in the tourism industry."
(Respondent 07, Focus Group Discussion, 2022)

Therefore, a well-established tourism institutional framework for destination governance is essential in achieving cooperation, collaboration and integration among the government organizations involved in various aspects of tourism, and between government and private sector enterprises, as well as between tourism policies and community interests are significant concerns for policymakers, managers, community members and academics.

Risk Registry

3.1 Hazards and Impacts on Tourism

Around the world, there are two main types of risks and hazards as; natural and man-made. Industrialization and urbanization have aggravated natural risks and hazards in the globe (Rosselló, Becken, & Santana-Gallego, 2020). Additionally, due to the development of powerful technologies, man-made risks and hazards are emerging and becoming more critical. Both types of risks are having high potential for physical disasters. As tourism operators, all the stakeholders should pay attention to the area's vulnerability, hazards, and capacity strengths when managing these risks.

At present, Ella has become a predominant destination among travelers around the world reporting enormous growth as an emerging tourist destination. Hence, geographical, morphological, hydrological, meteorological and political stability and security as well as health and safety and other factors should be routinely evaluated in this context to ensure the long-term sustainability of Ella as a tourist destination. On the contrary, the current scenario of this area has indicated often little or no care over the risk and resilience as a tourist destination and hence, many observable threats are emerging. For instance, the water supply, climate change, waste management, energy management, natural disasters, etc. are not properly predicted and the solutions for such evolving issues are not articulated sufficiently from the perspective of both

tourists and residents. Currently, Ella is facing several hazards and risks, including natural disasters and man-made hazards. Table 3.1 and 3.2 illustrates the risks and hazards together with their causes and impacts on tourism in Ella due to the natural and man-made risks.

3.1.1 Overview of Natural Hazards and Their Impacts on Tourism

Table 3.1 Summary of the Risks, Risk Causes and Impacts of Natural Hazards

Risk	Risk Cause	Impact on Tourism
1. Hydrological and Meteorological hazards		
I Increase in Greenhouse Gases in the Atmosphere and river scour	• Climate variability • Demographic trends • Land-cover change	The increase in greenhouse gases in the atmosphere will continue leading to global warming and an intensification of the hydrological cycle Highly considerable impact on economic of the area because of these hazards can have a direct impact on tourism businesses
2. Geomorphological Hazards		
I Landslides	• Highly fragile geographical set-up • Deforestation • Land degradation • Development pressure in area	Directly effect on human society Landslides may create further devastation in future due to prevailing global climate change
II Climate Change	• The topography of the location (different shapes of mountains, plains, unique symmetrical and asymmetric) which cause for elevation of the Ella directly impacts to the climate change of the location • Heavy rainfalls approximately 200 MM - 300MM are cause trend for Ella area	Heavy rainfalls within Ella negatively impact on Tourism and human settlement also. The consideration of the climate highly impact to the destination selection.
III Soil erosion	• Landslides • High water level of the land • High rain falls • Disappearance of water springs due to the impact of the Uma Oya	Due to the soil erosion, there are mudflows within the city areas. It causes to the decline of tourist's arrival
IV Steep cliffs	• High in the mountainous region • High density with flora and fauna	There are many steep cliffs in Ella-Wellawaya Road. Sometimes it makes dangerous experience or adventurous experience for both visitors and local community
3. Biological Hazards		
I Bacterial Contamination of water	• This has led to high use of toilets in the area. Simultaneously, due to the fact that un-availability of proper sewage system in Ella, the water sources have contaminated with bacteria and feces	Especially for small scale tourism service providers like restaurant operators, homestay operators, hostel operators and local vendor shops since they need to provide clean water for drinking purposes to tourists
II Loss of vegetation	Natural scenarios • Landslides caused by heavy rain, forest fires • Human activities	Currently, almost all picturesque sceneries are now visually polluted due to building constructions emerged from the green vegetation

- Garbage disposal
- Clearing lands for cultivation
- Illegal/unplanned constructions

Hence, loss of vegetation could lead to a decline of tourist arrivals in the long-run with the gradual degradation of natural beauty

4. Environmental Hazards

| I | Forest Fires | Both human and natural factors influence on forest fires. | Primarily several incidents have been reported where tourists who have been on trekking paths to Mini Adam's peak and other trails, have witnessed forest fires and have made their escapes |

Both human and natural factors influence on forest fires.

Natural scenarios such as,

- Increasing temperature
- Dry spells
- Less rainfall
- Humidity

Human activities like;

- Careless throwing of cigarette buds into the forests,
- Burning dead grass debris
- Animal hunting
- Burning areas for cultivations are the most frequent causes of forest fires

Primarily several incidents have been reported where tourists who have been on trekking paths to Mini Adam's peak and other trails, have witnessed forest fires and have made their escapes

precious bio-diversity of the area is severely damaged causing disturbances to the scenic beauty of Ella

If forest fires are not properly controlled, it could lead to reduction of tourist arrivals to Ella whose primary aim to enjoy the scenic beauty of Ella

Hydrological/Meteorological Hazards

Increase in Greenhouse Gases in the Atmosphere and River Scour

Hydrological and Meteorological hazards include flooding, droughts and groundwater contamination related events. Landslides and river scour and deposition also occurs due to hydrological and meteorological hazards. Hydrological and Meteorological hazards and their impacts are associated with climate variability, demographic trends, land-cover change, and other causative factors which are commonly seen in the Ella area. The increase in greenhouse gases in the atmosphere will continue leading to global warming and an intensification of the hydrological cycle, making hydrological extreme studies more complex and challenging. Hydrological and Meteorological hazard's impact can be localized to the Ella area or can be widespread. Sometimes these hazards can be predictable and, in some cases, they can be unpredictable. Damages caused by the hazards can be range from minimal to major depending on the severity of the incident, they can have a long-term impact on the infrastructure (Buildings, roads, bridges, and utilities) and more importantly these hazards can have a highly considerable impact on economic of the area because of these hazards can have a direct impact on tourism business. Because of the immense impacts of hydrological and meteorological hazards on society and its economies, it is important to consider novel approaches, techniques, or methods for the prediction, prevention, and mitigation of hydrological extremes.

Geomorphological Hazards

Landslides

Development pressure spreading towards the sensitive environmental areas within the Ella is the main weakness. Further, the Occurrence of devastating landslides has become more frequent in Ella Sri Lanka resulting in a high number of victims and considerable socio-economic impacts. A highly fragile geographical setup causes this situation. Bandara & Jayasingha (2018) and Edirisooriya (2019) have apprehended the reasons for such landslides and presented some landslide hazards risk reduction strategies that can be followed with the support of government authorities and practitioners. Many of these directly affect human society. Landslides may create further devastation in future due to prevailing global climate change. Due to the landslides, most of the roofs of the caves (that can be found in the forests which are also linked to various legends) have been thinned and caves are dissolving during the rainy seasons. Hence, identification of landslide-prone areas with high-risk potential and implementation of proper and effective landslide mitigation interventions to minimize the risk has become an essential priority need. Geomorphological hazards can be natural or be caused by human activities. Human activities, also, have had a huge impact on the environment and landscape through industrialization within Ella town and land-use change, leading to climate change also. Deforestation and land degradation are having a high impact on human livelihood. The impact of deforestation and land is strongly linked to the occurrence of geomorphological hazards such as Soil erosion and Landslides.

Climate Change

The topography of the location such as different shapes of mountains, plains, and unique symmetrical and asymmetric plays a vital role to attract more tourists to the Ella. The elevation of the Ella directly impacts climate change and it is the main reason to identify Ella as the best potential Geo Tourism destination. The Ella and its surrounding area have an ideal climatic condition with a comfortable temperature and a rainfall which increase the tourist arrival also. However, heavy rainfalls over 200 mm-300 mm cause tremendous risks in the Ella area. The recorded humidity level in the Ella area is 74 percent, which is accepted as the level of most comfortable humidity level for the human settlements.

Soil Erosion

Due to the landslides and soil erosion, there can see mudflows within the city areas also. It also negatively impacts the tourists' attractions. Ella is one kind of water feeder destination. The disappearance of water springs due to the impact of the Uma Oya (River) has recently occurred and it directly impacts the community's livelihood. The view of the Geologists is that the underground water table of this area has been lowered. The waters in the shallow wells in the area tourism industry as well. These are the geomorphological hazards occurring within Ella. The transformation of these geomorphological events into natural disasters occurred simultaneously with the appearance of human livelihood. Vegetation is also reducing due to soil erosion. Human life and properties are at high risk, and ultimately the tourism industry in this area is specifically affected (Jayasingha et al., 2015).

Steep Cliffs

Ella is a town high in the mountainous region

of Sri Lanka. There are Steep cliffs with different flora and fauna. While travelling in Ella overlooking the cliffs surrounded by fogs. Further, there are many steep cliffs on Ella-Wellawaya Road. Sometimes it makes a dangerous experience or adventurous experience for both visitors and the local community.

Unexpected Increase of Water Level in Waterfalls (Ravana Falls, Kithal Ella, etc.)

There are many iconic waterfalls surrounding Ella and they have become key attractions for many travellers. When it rains, strong water currents can form at any point, sweeping anything in their path in a couple of seconds. Many have lost their lives because of this sudden increase in water levels in waterfalls (Jayne, 2021). The Ravana waterfall in Ella is one of the popular waterfalls in Sri Lanka and is one of the key attractions in Ella. However, unexpectedly, the water level of Ravana waterfall increases with heavy rains fall in the other side of the mountains and fall becomes

an aggressive waterfall within a few minutes creating a huge threat to the nearby visitors enjoying the waterfall. Currently, there is no proper signage mentioning the risks.

Environmental Pollution

Environmental pollution can be considered as one of the prominent undesirable risks caused by the tourism activities at Ella. Poor waste management has led to many severe environmental issues such as water pollution, air pollution, and degradation of scenic beauty in the area (Edirisooriya, 2019). Many hotels and restaurants discharge wastewater into the natural water bodies informally. According to the environmental authorities, the pH value of the water has recently led to its downfall due to these informal garbage discharges (Sharmini & Bandusena, 2020).

Ella Site Visit, 2022

Soil erosion

Steep cliffs

Rockslides

Landslides

Biological Hazards ———

Bacterial Contamination of water

Since Ella is a geographical area having high tourist density, the food and beverage consumption is too high. This has led to the high use of toilets in the area. Simultaneously, due to the fact that un-availability of a proper sewage system in Ella, the water sources have been contaminated with bacteria and faeces. Due to bacterial contamination of groundwater, the residents are facing difficulties in finding drinking water as most of the groundwater sources have become unhygienic.

Loss of vegetation

Ella is located in an environmentally sensitive area and it is enriched with unique biodiversity (flora and fauna) due to the existence of Kinigama forest reservation, Pine forests, Ella precipice and Ravana Sanctuary. However, both natural factors and man-made factors influence negatively for loss of vegetation in Ella. Natural scenarios like landslides caused by heavy rain, forest fires and also human activities like garbage disposal, clearing lands for cultivation, illegal/unplanned constructions, etc., are causing loss of vegetation in the Ella area. It has been revealed that 30 percent of the tourists visit Ella, because of its natural environmental beauty which is the most popular reason. Hence, loss of vegetation could lead to a decline in tourist arrivals in the long run.

Heavy metal accumulation and associated risks

It was identified that bulbs and batteries have been used when constructing toilet walls and foundations in the Ella area. Since these items contain heavy metals and can create health risks for both humans and animals. Especially, if these heavy metals come in contact with groundwater, it poses serious health threats and also causes changes in the pH levels of water.

Environmental Hazards ———

Forest Fires

Ella is quite popular for its scenic beauty where its natural vegetation, Ella gap and surrounding mountain ranges add value to that. However, forest fires have become a major environmental hazard thus affecting tourism activities. Both human and natural factors influence forest fires. According to the previous research findings and focus group discussion revelations; natural scenarios such as; increasing temperature, dry spells, less rainfall and humidity as well as human activities like; careless throwing of cigarette buds into the forests, burning dead grass debris, animal hunting, burning areas for cultivations are the most frequent causes of forest fires (Bandara et al, 2019; Sandamali and Chathuranga, 2021). Primarily several incidents have been reported where tourists who have been on trekking paths to Mini Adam's peak and other trails, have witnessed forest fires and have made their escapes. On the other hand, the precious bio-diversity of the area is severely damaged causing disturbances to the scenic beauty of Ella. If forest fires are not properly controlled, it could lead to a reduction in tourist arrivals to Ella whose primary aim is to enjoy the scenic beauty of Ella.

3.1.2 Overview of Human-Made hazards and Their Impacts on Tourism

Table 3.2 Summary of the Risks, Risk Causes and Impacts of Man-made Hazards

Risk	Risk Cause	Impact on Tourism
1. Political Risks		
I — Government instability and lack of government influence on creating laws, and policies and regulations	• Lack of government supervision on Ella tourism segments • Frequently changing government development strategies	After tasting the short ways/methods in business through illegal terms, community people hesitate to legalize the business operations
II — Internal conflicts among stakeholders	• Different Stakeholder is having their own interests	Reduce efficiency Problems in making collective decisions
III — Corruption	• Low levels of democracy, weak civil participation and low political transparency Inefficient administrative structures Low economic freedom	Increase inequality and reduce political responsiveness Frustration among citizens in the society Create unfavourable situation within the destination for tourism operations
2. Financial Risks		
I — Loss of government tax income	• High percentage of unregistered tourism businesses in Ella • Outdated rules and regulations	Loss of annul tax income to the government Less income generation of local government authorities
II — Debt and working capital issues	• The impact of COVID-19 pandemic	Failure to repay loans by the borrowers Working capital issues Difficulties to invest in new ventures
III — Financial risk due to the COVID 19	• Due to lack of tourist demand for businesses • Due to suspension of tourism operations	Small scale tourism entrepreneurs have suffered from different financial risks such as failure to repay their loans and working capital issues Most of the small-scale tourism businesses have temporarily suspended their operations creating a vacuum in the tourism industry of the Ella area
IV — Challenge of attracting new investors due to inadequate and outdated financial rules and regulations	• Not having a proper master plan for the sustainable development of the tourism industry in Ella	Lack of support to the sustainable growth of the tourism industry in Ella Lack of investors for tourism businesses
V — Inflation at the Destination and Increase of Land Price	• Unstandardized price incensements of lands by the land owners	Ella is very expensive for the residents than surrounded villages

		High competition among tourism suppliers	Lands in Ella are unaffordable to local businessmen and these lands are now owned by migrants. Therefore, conflicts among community and migrants will occur

3. Social Risks

I	Drug Abuse and alcoholism	• High demand for drugs and alcohols among tourists • High stress as a result of a combination of unemployment and family problems • Development changes in Ella	▮ Involvement of school students in using drugs. ▮ Contribute to the local violence ▮ Emotional damage to the tourists
II	Sexually transmitted diseases	• Increased travel to Ella from countries and population groups with higher HIV and other STI prevalence. • Attempting to build up close interrelationship and friendliness with foreigners by locals. • Money based relationships with foreigners (inequality in terms of economic power)	▮ May spread the disease with the local community and children ▮ Disinfected foreigners may vulnerable to STD's
III	Cultural Degradation	• Local women, men and even the children are trying to imitate the foreign culture • The intrusion of foreigners in the area	▮ Acculturation effects ▮ Cultural commodification ▮ Hybrid culture
IV	Alteration of the life styles of locals	• Imitating the western tradition • Locals who engaged in plantation has come out of their households • Due to the operation of homestays privacy of the households have lost and the family units have collapsed	▮ The language of the people has improved ▮ Parents are pursuing children for education
V	Unhealthy food patterns	• Movement from healthy foods to artificial foods • Emulating the western culture	▮ Suffering from diabetics even from smaller ages ▮ Suffering from various non-communicable diseases
VI	Communicable diseases due to the improper solid waste disposal	• Improper garbage disposal system • Many constructions of restaurants and hotels are mushrooming across Ella • Unplanned constructions in Ella	▮ Fouling the vicinity ▮ Spread of Dengue fever ▮ Noxious smells
VII	Low tendency for education	• Considerable level of students is starting to visit attractions and travel with tourists since their younger time • Some parents have the view that there are plenty of tourism related jobs to do in Ella	▮ Job insecurity ▮ Low income ▮ Can't get the maximum productivity and use of the young

VII	Over-dependence on Tourism	• The ability of earning a good income rather than their traditional agricultural businesses • Ella has become a famous tourist destination recently, especially among Europeans and it has been gazetted as a tourism destination	Job insecurity in difficult circumstances occurred (e.g.: COVID 19, economic crisis)

4. Environmental Risks

I	Improper Waste Management	• Not following proper strategies • Not having proper policies and procedures to manage waste	Spreading of bad smell throughout the Ella town (core area) and creates doubt among tourists who visit Ella for good air as it believed that Ella has pure oxygen During the past few years, the number of tourist arrivals, population density, and tourism establishments like hotels, restaurants and other service providers in Ella is incessantly increasing Wastewater is discharged directly to the open drains that run through the Ella-Bandarawela main road and also to small water streams
II	Lack of Proper Drainage System	• Drains are not inter-connected • People throw garbage into open drainage causing drainage systems to block. • Do not have a stormwater drainage system	Due to this unhygienic atmosphere and open drainage, mosquito, flies and other insect breeding has increased creating an unpleasant environment in some areas

III	Disappearance of Water Springs	• Due to the drawbacks of the implementation of Uma Oya Project	Sudden floods, water shortages for irrigation, environmental pollution, and water scarcities due to the drying up of springs used as water sources for domestic needs Households of several villages do not have surface water either for drinking or for agriculture

5. Other Risks

I	Unplanned and unorganized infrastructure	• Lack of government investments on infrastructure development	Accidents have a potential to cause due to unsafe roads and routes in Ella. Tourists may name the destination as an unsafe location due to unsafe roads and it will negatively impact on the destination image locally and globally
II	Loss of tourist attraction and demand for tourism products and services	• Lack of quality standards for tourism products and services • No proper administrative structure and policies in moving forward with sustainable concepts	Negative impacts on the quality standards of the services and product ranges offering in Ella will influence the tourists' behaviour in purchasing terms as well as in consuming behaviour It will mislead the tourists who are into sustainable behavioural patterns. And there is a potential to question the Ella operating systems from their end

Political Risks

Government Instability and lack of government influence on creating laws, and policies and regulations

As identified, Ella has still been able to gain the tourist tendency to visit the destination despite all the weaknesses inherited from the destination. Yet, it is much needed to pay attention to the risk resilience programs to save Ella as a destination for future conservation. When referring to the manmade hazards, political risks grab the main attention. The collected data explained that the local government of Sri Lanka has only a very limited contribution towards the destination's development due to the government instability and it has resulted from the community people carrying on their day-to-day activities even under illegal terms. Lack of political influence on creating laws or policies against the illegal constructions around the Ella area has resulted in the growth of illegal constructions (homestays, restaurants, guesthouses) and natural hazards such as landslides have a tendency to occur the time being. Therefore, the absence of government policymaking and support has become a risk for the destination's development in every situational factor (proper hydraulic system, drainage system, waste disposal and etc.).

Lack of standards in spa operations

Further, spas play a major role around the Ella area and it has been identified that there are 50 spas currently working actively. Yet, there is no proper legislative body to assign the tasks to the relevant authorities in developing spa tourism around the Ella area. This is a risk which will result in the tourists' lack of travel visitation because the spas that are currently generated in Ella do not run under the right standards. Apparently, this will affect tourist complaints about not giving the quality experience of a spa. So the government will have to regulate laws and policies and will have to appoint the authorized people to conduct

spas with its expected values.

Internal conflicts among stakeholders

Different stakeholders are involving in tourism operations such as government, suppliers, hotel owners, customers, employees and management authorities. However, these stakeholders are having their own interests and goals. Therefore, internal conflicts will occur among stakeholders and it will result inefficiencies in operations and problems in making collective decisions.

Corruption

Political corruption in Sri Lanka will cause to high political risk in tourism operations in Ella. As reported by Transparency International according to the Corruption Perceptions Index, in 2021 Sri Lanka recorded the 102 least corrupt nation out of 180 2021. Corruption will occur because of high level of market and political monopolization, low levels of democracy, weak participation among civil community and low transparency, inefficient administrative structures, and less economic freedom. It will increase inequality and reduce political responsiveness which is resulting the enhanced frustration among citizens in the society. Therefore, it will create unfavourable situation within the destination for tourism operations.

Financial Risks

Loss of tax revenue

Financial risks can be identified as one of the most important aspects and priority must be given to identifying the risks associated with the Ella area. Based on the focus group interviews, Loss of tax revenue which should be received by the government can be identified as one of the key financial risks in the Ella area. According to the reports published by the Sri Lanka Tourism Development Authority, more than sixty per cent of the Sri Lankan tourism industry comes under the unregistered category. Hence, the government lost a large amount of annual tax revenue which should be generated from the tourism industry. In the Ella area also most of the small-scale businesses come under the unregistered category. On the other hand, this has affected the sustainable growth of the tourism industry in the Ella area. Therefore, taking the required strategic actions to solve that issue was emphasized in the discussions.

Financial risk due to the COVID 19

Further, data collected from the focus group discussion indicates the negative impact created by the COVID 19 pandemic on the rapid growth of the tourism industry in the Ella area. Due to the impact of COVID 19 pandemic small scale tourism entrepreneurs have suffered from different financial risks such as failure to repay their loans and working capital issues. As a result of the pandemic, most of the small-scale tourism businesses have temporarily suspended their operations creating a vacuum in the tourism industry of the Ella area.

Inadequate and outdated financial rules and regulations

Another fact which was identified as a financial risk is the inadequate and outdated rules and regulations which do not support the sustainable growth of the tourism industry in

Ella. Hence, making the laws which support the sustainable development of the tourism industry was emphasized in the discussions. Moreover, due to different financial risks in the Ella area attracting more investors has become a challenging task for Ella. Further, not having a proper master plan for the sustainable development of the tourism industry in Ella has become a major reason for the financial risks identified in the Ella area.

Inflation at the Destination and Increase of Land Price

It is a well-known truth that everything at Ella is very expensive for the residents than surrounded villages. Mainly, the Tuk Tuk rates, restaurant prices, and street vendors' prices are certainly a little expensive and the same is applicable to the residents also. The land price of the Ella village and the surrounding area has risen rapidly and hence, purchasing land from the surrounded area is extremely unaffordable for residents. Due to this reason, many of the lands are now owned by migrants and sometimes there are conflicts among these groups.

Social Risks

This risk is described as the possibility of suffering unfavourable consequences as a result of population-based activities and negative public opinion.

Some social risks which can be identified in the Ella area are listed below.

Drug Abuse and alcoholism

Drug use has been increased in Ella as a result of tourism. As there is a high demand for drugs and alcohol among tourists, which could have an impact on drug/alcohol use among locals in the Ella area, especially school students and other vulnerable groups of the society. Sometimes school students also get involved in drugs cases. This can be begun from small stages like using flavoured betel and up to serious cases like using weed or drugs. The Ella and nearby areas are very much locally popular for local marijuana and it is reported that these items are circulating among tourists by the local dealers very clandestinely. However, illegal drug selling and illegal drug usage are common in Ella and frequently incidences of prostitution and drug dealing are reported each month (Sharmini & Bandusena, 2020). Due to the COVID 19, this huge issue was somewhat lessened. Meanwhile, tourism is improving and may encounter issues as a result of an increase in drug cases.

Traditional Livelihood Migration

Traditional livelihood migration is one of the major risks in Ella where many people in Ella have totally abandoned their traditional livelihoods such as agricultural activities and migrated to tourism activities (Karunarathne et al., 2021). Furthermore, the people who have completely migrated to tourism businesses had to face an assortment of difficulties during the COVID 19 pandemic due to the loss of income from the tourism activities which was their primary livelihood. According to Sathsarani, Jayakody & Ranasinghe (2020), loss of a traditional way of life and over-dependence on tourism are the key socio-cultural risks in Ella due to the tourism activities.

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Another fact which was identified as a financial risk is the inadequate and outdated rules and regulations which do not support the sustainable growth of the tourism industry in Ella. Hence, making the laws which support the sustainable development of the tourism industry was emphasized in the discussions. Moreover, due to different financial risks in the Ella area attracting more investors has become a challenging task for Ella. Further, not having a proper master plan for the sustainable development of the tourism industry in Ella has become a major reason for the financial risks identified in the Ella area.

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Prostitution and Sexually transmitted diseases

The spread of Sexually Transmitted Diseases (STD) with the unplanned, unorganized and illegal tourism activities such as prostitution, and unprotected sexual habits are also severe issues that can be found within the Ella area. Accordingly, it has reported some HIV/AIDS patients from the community in Ella and however, the information on the individuals is not disclosed easily by the authorities due to privacy issues and to avoid However, there are some open posters displayed in Ella Junction (the main socializing gathering point of Ella) as Ella Grama Niladari Division which has a huge threat of spreading the virus due to tourism activities.

According to current information, the HIV epidemic in Ella is currently at a low level, although there are many overlapping HIV transmission hazards. Increased travel to Ella from countries and population groups with higher HIV and other STI prevalence, combined with situations that may worsen risks, has created a new focus for HIV interventions. Locals attempting to build a close interrelationship and friendliness with foreigners is one of the reasons for this situation. On the other hand, the money-based relationship also causes this. Collected data reveals that local men and tourist women have sexual interactions that are typically between individuals who are unequal in terms of economic power. So, there's a high potential risk related to our tradition, according to the observations sexually transmitted diseases, will be increased in future.

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Cultural Degradation

The collected data shows that the traditional way of life and cultural values have been damaged in the Ella area. Sometimes school students tempt to imitate foreign culture by travelling with foreigners to visit attractions or studying the behavioural patterns of foreigners. Not only have the students, but their mothers also tried to imitate the fashions and western traditions. Also, the way the personality has been built, mostly, is the effect that is coming from the families. The way a human runs his life now is mainly an impact of his family background and all. Thus, a gradual cultural erosion was observed that has significantly fuelled by tourism and related activities in Ella area.

Alteration of the lifestyles of locals

As the alternative income source, large number of families in Ella area are involving different tourism activities such as homestays, small and medium scale businesses, restaurants, tour guiding services, transportation services etc. Therefore, all the family members are involving in tourism activities and it will affect the daily lifestyle as they are much interacting with tourists in their day today lives. According to the experience of Medical Officer who have participated in the focus group discussion, children who belongs to under the 15-16 age category are getting very small things as very serious matters. As the negative impacts of tourism on the socio-cultural environment, they live in a fantasy world and they are trying to imitate western traditions. Further, some of them are driving three-wheelers in the evening to earn money because it will be easy method to earn money than following studies at schools and getting good jobs. Related to the homestay operations in Ella, many issues can observe as loss of privacy and the family unit collapsing. Rather than the village sector, the town area has had more influence from the tourism industry. As per the observation

of the respondent 08, Medical Officer, Free Indigenous Medicine Centre, at present Ella has widely been changed compared with the past . However, community members in the remote areas like Kithal Ella and Demodara, do not changed much with the impact of tourism industry when compared to the Ella city area. Anyhow, there is an impact for the Ella town area because nowadays even the small kids have different lifestyles than the past. According to the data collected, a major change occurred recently within the plantation in relation to little Adam's Peak, Ella. A number of people came out of their households; many Tamils started working in hotels and restaurants. So, a big cultural change caused positively within the people's lifestyles. The language of the people started to build and they encouraged their kids for education. Thus, it is a major positive cultural difference in the local community people. People have got open-minded to the world

Unhealthy food patterns

When considering the health condition of the people, the majority of the people have moved to artificial foods instead of healthy foods. Further, High consumption of chicken, pork, and sauces make health issues among children. Diabetics among children is another problem based on the food pattern.

Communicable diseases due to the improper solid waste disposal

The solid waste dump is entirely a man-made tragedy that humans have contributed to the impending calamity as well. While many constructions of restaurants and hotels are mushrooming across Ella, the environment too needs to be given its place. Ella rubbish dump has been placed by the main road, fouling the vicinity. It is sufficiently away from the town, sparing it from the noxious smells, however not far enough or concealed enough, to avoid a bad impression. Improper garbage dumps lead to natural hazards while affecting the communicable diseases and the business

entity constructions of the society.

Low tendency for education

As most of the community people in the Ella area are engaged in the tourism industry, a considerable level of students are starting to visit attractions and travel with tourists in their younger time. They used to earn pocket money from tourists through activities like this. So, they believe that they can enter this tourism industry without education and most of the students have dropped out of the Ordinary Level Exam from the school.

Over-dependence on Tourism

When we consider Ella, agriculture was the first activity the people were involved in. Now it is very much associated with the tourism industry. In almost all houses at least one room in each house is set up at a normal level and maintained as a Homestay level. It's going on for a long time. Because of this over-dependency on tourism-related activities they had suffered without a static income source in circumstances like COVID 19 pandemic.

Careless, vulnerable and hazardous behaviours of travellers

There are many unfortunate cases of drowning reported in Ella and nearby areas mainly due to careless, vulnerable and hazardous behaviours of travellers at the waterfalls and streams such as Rawana Falls, Kithal Ella, Elle Wala, etc. Among the victims, there were many domestic travellers as well as foreign travellers. Travelers are used to bathing in these places and trying to climb to the top of waterfalls without considering the warning signs and even some of the places do not have any warning signboards.

Environmental Risks

Improper Waste Management

It was observed that the Ella area doesn't have proper waste management in terms of solid waste, wastewater and sewerage. Currently, about 6 tons of solid waste is collected per day and although Ella local government has established a solid waste management centre, the process is inefficient. Thus, the increase of solid waste has become an acute problem in the Ella town due to increasing tourist arrivals. The organic waste from restaurants and hotels in Ella town is disposed of in an unsystematic way. This has led to the spreading of bad smell throughout the Ella town (core area) and creates doubts among tourists who visit Ella for good air as it believes that Ella has pure oxygen. Although there are efficiently functioning waste management centres and recycling centres in the country, Ella doesn't have such facilities despite being a highly popular tourist attraction.

Furthermore, a proper wastewater and sewerage system is lacking in Ella. During the past few years, the number of tourist arrivals, population density, and tourism establishments like hotels, restaurants and other service providers in Ella is continuously increasing with the simultaneous increase of wastewater and sewerage. However, still, there is no properly planned wastewater and sewerage system. In some cases, wastewater is discharged directly to the open drains that run through the Ella-Bandarawela main road and also to small water streams.

Lack of Proper Drainage System

Ella town lacks a proper drainage system and waste water disposal system . Most of the drains are not inter-connected and have waste exit points in many places of the Ella town. Further, they have opened in some places leading to safety risks for the pedestrians as well as people used to throw garbage into open drainage causing drainage systems to block. Further, it does not have a stormwater drainage system in addition to the above-mentioned drainage system that runs through the Ella town. Due to this unhygienic atmosphere and open drainage, mosquito, flies and other insect breeding has increased creating an unpleasant environment in some areas.

Disappearance of Water Springs due to the Impact of the Uma Oya Project

Mini-hydro project at the upper catchment of Uma Oya, Sri Lanka has a number of negative social and environmental impacts including, sudden floods, water shortages for irrigation, environmental pollution, and water scarcities due to the drying up of springs used as water sources for domestic needs (Thoradeniya et al., 2007). Many villages around Ella have been severely affected by this project and currently, the households of several villages do not have surface water either for drinking or for agriculture. The water springs around Ella are however currently in a severe threat and during some months of the year, the area faces tight drought conditions.

Improper drainage system
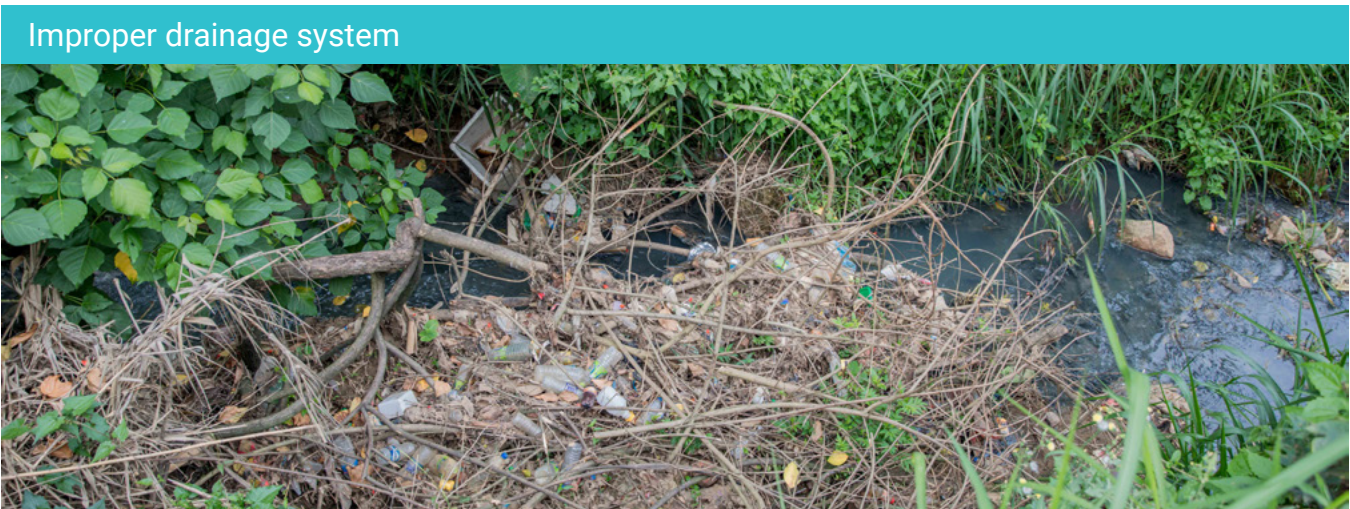
Improper drainage system

Improper waste management

Improper waste management

Other Risks

Unsafe destination due to unplanned and unorganized infrastructure

Lack of government investments in developing infrastructure (constructing roads), has resulted to cause accidents and tagged the destination as an unsafe location. This has become a risk where the travellers especially the domestic ones do not seem to be excited about the tour of Ella due to unsafe locations. Therefore, lack of political influence on policymaking and regulating laws have become a risk for the destination where unsafe constructions, roads and businesses have a tendency to expand. Apparently, it has been observed that the central government, local government and Sri Lanka Tourism Development Authority have some limitations on regulating some activities in the Ella area. Having a lack of proper structure to administrate and regulate policies in moving forward with sustainable concepts, will affect the quality standards of the service and product ranges offered in Ella. Since the term sustainable gives the meaning to preserving and conserving the natural resources for the future usage, it will be a risk if the destination operators do not conform to sustainability in order to meet tourists' expectations to its optimum hence, tourists who are into sustainable terms will definitely consider if the destination is operating in a sustainable manner just as said. It can be stated that the main stakeholder, the government, does not optimize and activate the necessary formulating strategies to link the required authorized parties to uplift the infrastructure and destination wellbeing of Ella and it is clearly a risk for the development and construction of illegal and unregistered constructions and homestays at Ella.

Loss of tourist attraction and demand for tourism products and services

Due to the political, financial, social, environmental and all other factors, tourism demand and attraction towards Ella as tourist destination will be reduced. It will badly affect the destination image and it will mark as unsafe destination among tourists.

3.2 Key Risks for Tourism

3.2.1 Overview of Key Risks

The risks that have been identified in the expert workshop are analyzed as follows. Those risks undergoing in Ella were explored under two categories, namely natural and man-made hazards. Each risk type has a direct or an indirect impact on the destination's tourism sector. The following diagram will brief the risks in Ella, which are currently impacting the destination's tourism industry in the short and long run.

Risks

Man-made

Natural

Hydrological and Geological Risks
- Landslides
- High annual rainfall intensity
- Soil Erosion

Biological Risks
- Bacterial Contamination of water
- Loss of vegetation
- Heavy metal accumulation

Political Risks
- Political instability
- Internal conflicts among stakeholders
- Constant changes in politics
- Lack of coordination among the tourism professionals
- Non updated rules and regulations
- Failure to enforce the law equally
- Corruption

Financial Risks
- Loss of government income tax
- Debt & working capital issues
- Risk due to COVID-19
- Challenges of attracting new investors due to inadequate & outdated financial rules and regulations

Social & Cultural Risks
- Drugs abuse & alcoholism
- Traditional livelihood migration
- Prostitution & STDs
- Cultural Degradation
- Spreading of dengue fever
- Low tendency of Education
- Over Dependence of Tourism
- Careless, vulnerable & hazarders behavior of tourists

Figure 3.1 Summary of Identified Risks through Expert Workshop

The identified natural risks and their impact on the Ella tourism sector along with the key drivers for the cause are analyzed as follows.

Table 3.3 Summary of the Identified Risks from Natural Hazards, their Impacts, Affected Parties and Drivers

	Hazard	Impact	Affected Parties	Key Driver
Hydrological & Geological Risks	Landslides	• Directly impact on hotels, road systems, day to day life of residents, communication, health, education systems & natural beauty • Loss of income from tourism industry • Property Damages • Deaths (Locals & Foreigners) • Mentality issues (Locals & Foreigners)	• Local hotels, Medium and small scale enterprises • Local Community • Foreign Tourists	• Poor drainage systems • Loss of buffer zones near mountains & Rivers • Poor awareness among residents • Poor coordination among relevant departments
	Extreme Rainfall Events	• Impact continues supply of electricity, water & telecommunication	• Local Community • Local Farmers • Foreign Tourists	• Climate Change • Social misuse
	Soil Erosion	• Impact on road system, agriculture systems, drainage system, natural beauty • Property damages • Segmentation issues for agriculture • Changes in slope value • Changes in acidity of soil	• Local hotels, Medium and small scale enterprises • Local Community • Foreign Tourists • Local Farmers	• Poor drainage systems • High annual rainfall
Biological Risks	Bacterial Contamination of water	• Health issues	• Local Community • Foreign Tourists	• Poor testing & chlorination of water • Lack of funds • Poor awareness among residents
	Loss of vegetation	• Loss of flora & fauna • Loss of natural Beauty	• Surrounding Environment • Local Community • Tourist Attraction Sites	• Human activities • Lack of forest conservation officers
	Heavy metal accumulation	• Directly affects to the invasive plants and fish breeding of lakes • Impacts on impression of tourists	• Natural Environment • Local Community • Foreign Tourists	• Poor waste management • Poor drainage management systems
	Spread of dengue fever	• Negatively effect on the tourists' demand • Deceases and life deaths	• Local Community • Foreign Travelers	• Ineffective soil waste management systems

The below table emphasizes the identified man-made risks and their impact on the Ella tourism sector along with the key drivers for the cause.

Table 3.4 Summary of the Identified Risks from Man-made hazards, their Impacts, Affected Parties and Drivers

	Hazard	Impact	Affected Parties	Key Driver
Political Risks	Political instability	• The prevailing situation of the country has driven to a temporary quit on continuing tourism activities as usual	• Local Community • Foreign Tourists • Local Government Authorities	• The dollar crisis has massively impacted the instability of the political status of the country and leads to unstable tourism activities
	Internal conflicts among stakeholders	• Dissociation between government officials and travel professionals	• Local Government Authorities • Medium and small scale enterprises • Local Community	• Ineffective communication within the internal and external stakeholders • Lack of coordination among stakeholders
	Constant changes in policies	• Extreme economic policy downturn affects the tourism sector in generating a revenue	• Local Government Authorities • Local Community • Policy Makers • Potential Investors	• Lack of stabilized policies • Regular changes in policies disrupt the work schedules of the tourism professionals
	Lack of coordination among tourism professionals	• Creation of problematic situations among the public institutes where essential parties reluctant to directly involve in public policy making	• Hoteliers • Medium and small scale enterprises • Foreign Tourists	• Ineffective integration of information flow among the stakeholders
	Non-updated rules and regulations	• Risk of providing the service for the required authorities due to non-updated rules and regulations related to services in different situational scenarios	• Potential Investors • Local Government Authorities • Policy Makers	• Lack of orientation within the stakeholders
	Failure to enforce the law equally	• Difficulty for the local community to continue the work smoothly in a daily basis due to deactivation of rules and regulations • Difficulty to obtain the trade license for the business enterprises	• Local community • Foreign Travelers	• Issuing of the trade license based on the political relationships with the politicians • No commitment to maintain equal rights for each stakeholder
	Corruption	• Leads for the corruption of the international image on Sri Lanka • Hardships for public sector institutes and entrepreneurs when getting documentaries	• Local Government Authorities • Potential Investors	• Lack of accountability of the public sector employees on effective management of resources

Financial Risks	Loss of government tax income	• Loosen of tax policy destabilizes state institutions and the economy	• Local Government Authorities • Local Community	• No transparency in the current tax policy • Reduction of the tax policy levied on large scale entrepreneurs
	Debt and working capital issues	• SME operators have to struggle in paying their debts	• Medium and small scale enterprises	• Economic downfall of the country Excess rising of the dollar rate
	Instability of business due to COVID-19 and current economic crisis	• Difficulties of implementing monetary policies	• Foreign Tourists • Local Community • Medium and small scale enterprises	• Public fund imposed to the tourism sector is not sufficient • Use of the public fund for other less required activities which are not gazette Inefficient imposition of the fund in the required tourism zones
	Challenge of attracting new investors due to inadequate and outdated financial rules and regulations	• Tightened tax policy effects on entrepreneurs, public sector professionals and the investors in investing on the Lankan businesses • Losing the domestic and international capitalists on uplifting Lankan businesses	• Local Government Authorities • Policy Makers	• Lack of involvement of the government and high commissions • Outdated policies
Social & Cultural Risks	Drug abuse and alcoholism	• Teenagers' addiction to consume drugs	• School Children • Local Community	• High spread of alcoholic products within the community cultures
	Traditional livelihood migration	• Change of traditional habitat and lifestyles when engaging with different businesses	• Local Community	• Attractiveness to engage in new and easy income generation methods
	Prostitution and sexually transmitting diseases	• Lifestyles of the younger generation is adapting to misleading occupations	• Local Community • Foreign Travelers	• Lack of awareness on sexually transmitting diseases
	Cultural degradation	• Exploitation of the local culture	• Local Community	• Change in the traditional lifestyles of the local community

Low tendency of education	• Low generation of educated workforce to engage with legalized business opportunities	• School Children • Local Community	• Lack of awareness on long term survival of businesses in the market
Over dependence of tourism	• Lack of identification on new industrial segments to survive if tourism industry breaks down	• Local Community • Medium and small scale enterprises	• Narrow minded and seeking for ease of income generation terms
Low tendency of education	• Low generation of educated workforce to engage with legalized business opportunities	• School Children • Local Community	• Lack of awareness on long term survival of businesses in the market

3.2.2 Probability - Impact Risk Matrix

The Probability and Impact Matrix is a popular qualitative evaluation technique. It is based on two risk variables: the possibility of occurrence and the impact on the objectives if it occurs. The following figure describes the Probability Impact Risk Matrix, which determines the risk zone for each identified risk factor. The matrix is 5x5, with the impact ranging from very low to very high on the horizontal axis and probability on the vertical axis (Dumbrava, 2013).

Red zone (dark)	The risks in this zone are of critical importance and should be avoided or transfer; these are the top priorities and close attention should be paid to them.
Red zone (light)	The risks in this zone are of critical importance and should be avoided, reduced, transferred or shared with other stockholders, these are priorities and close attention should be paid to them too.
Yellow zone	The risks in this zone are of moderate importance and must be controlled.
Green zone (dark)	Risk factors which located in this zone are considered the low level of effects which can be monitoring, controlling especially if it is in the dark green zone.
Green zone (light)	Risks in this zone have the very low level of impact which can be monitored, controlled or ignored. (Kassem et al, 2019).
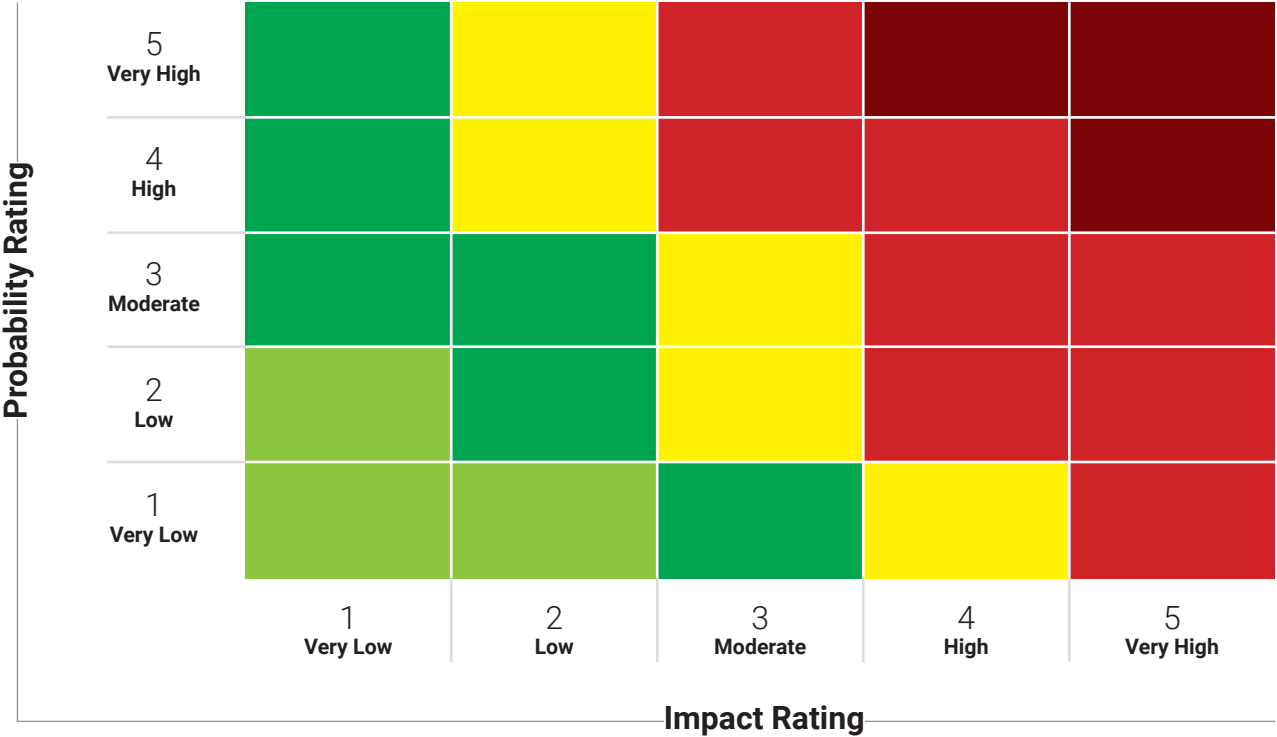
Figure 3.2 Probability Impact Risk Matrix
Source: Kassem et al, (2019)

The table below summarizes the status of the natural risks highlighted during the expert workshop using the probability impact risk matrix.

Table 3.5 Summary of Natural Risks according to the Probability Risk Matrix

Natural Risks			
Risk		**Status of Risk**	**Colour**
Hydrological & Geological Risks	Landslides	VH, VH	
	Extreme Rainfall Events	H, H	
	Soil Erosion	H, M	
Biological Risks	Bacterial Contamination of water	M, H	
	Loss of vegetation	M, M	
	Heavy metal accumulation	M, M	

VL = Very Low, L = Low, M =Moderate, H = High, VH = Very High

The table below summarizes the status of the man-made risks highlighted during the expert workshop using the probability impact risk matrix.

Table 3.6 Summary of Manmade Hazards according to the Probability Risk Matrix

Man-Made Risks		
Risk	**Status of Risk**	**Colour**
Political Risks		
Political instability	VH, VH	
Internal conflicts among stakeholders	M, H	
Constant changes in policies	H, M	
Lack of coordination among tourism professionals	H, M	
Non-updated rules and regulations	H, H	
Failure to enforce the law equally	H, M	
Corruption	VH, VH	
Financial Risks		
Loss of government tax income	H, H	
Debt and working capital issues	H, M	
Risk due to Covid-19	M, H	
Challenge of attracting new investors due to inadequate and outdated financial rules and regulations	M, M	
Social and Cultural Risks		
Drug abuse and alcoholism	M, M	
Traditional livelihood migration	M, M	
Prostitution and sexually transmitting diseases	L, VL	
Cultural degradation	M, M	
Spread of dengue fever	M, M	
Low tendency of education	L, VL	
Over dependence of tourism	H, VH	
Careless, vulnerable and hazardous behavior of travelers	L, M	

VL = Very Low, L = Low, M =Moderate, H = High, VH = Very High

Probability Rating

	1 Very Low	2 Low	3 Moderate	4 High	5 Very High
5 Very High				• Loss of government tax income • Cultural degradation • Over dependence of tourism	• Landslides • Political instability • Corruption • Spread of dengue fever
4 High			• Bacterial Contamination of water • Internal conflicts among • stakeholders	• Extreme rainfall events • Non-updated rules and regulations • Risk due to Covid-19 • Low tendency of education	
3 Moderate		• Careless, vulnerable and hazardous behavior of travelers	• Loss of vegetation Drug abuse and • alcoholism • Traditional livelihood migration	• Soil Erosion • Constant changes in policies • Lack of coordination among tourism professionals • Failure to enforce the law equally • Debt and working capital issues • Challenge of attracting new investors	• Heavy metal accumulation
2 Low					
1 Very Low		• Prostitution and sexually transmitting diseases			

Impact Rating

Figure 3.3 Probability Impact Matrix of Natural and Man-made Risks in Ella

Options for Actions

4.1 Overview of Potential Options for Actions

4.1.1 Hydrological & Geological Risks

1. Landslides

To mitigate these hazards, experts who participated in the workshop recommended that a well-planned drainage system should be implemented in the Ella area that can conserve the quality level of the soil to prevent landslides.

2. Extreme Rainfall Events

Extreme rainfall events may cause soil erosion, landslides, and the settlement of mud in the river beds. Hence, the professional's advice was to conserve the sensitive mountainous areas in Ella by enhancing the infiltration and recharge of ground water. Additionally, selection of appropriate crops may also help. Concerns about disaster risk reduction can be mainstreamed in new irrigation and other water related infrastructure development in Ella.

3. Soil Erosion

According to the expert suggestions, constructions of buildings in Ella needed to be adequently regulated in order to minimize the soil erosion. Accordingly, it is important to prevent the development of hotels, restaurants

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and other large buildings on sensitive land areas. In addition, over construction and unauthorized construction in Ella required to be stopped as quickly as possible to sustain the quality level of the land.

4.1.2 Biological Risks

1. Bacterial Contamination of water

According to the PHI of the Ella area, E. coli bacteria was discovered in the water samples examined in the region. This is highly severe matter as this may have an adverse effect on the health of the tourists and residents in Ella. To mitigate this critical hazard, professional's advice establishing a water testing and purifying plant to conduct regular water sample testing and maintain the accepted level of the water.

2. Loss of vegetation

According to the specialists' research study revealed that since climate of Ella is unfavorable for naturally occurring forest fires, and the human activities were the only reason for causing forest fires in Ella. Therefore, it is necessary to conduct awareness campaigns regarding the causes for all the pertinent Ella stakeholders. Loss of vegetation can be reduced by conducting awareness programs to all relevant stakeholders in Ella area including school children, business stakeholders, citizens and other community members related to the sustainable conservation of the vegetation in the region.

3. Heavy metal accumulation

It was adviced to establish a waste treatment plant in Ella to reduce the heavy metal accumulation and other ineffective waste management practices.

Furthermore, it is also necessary to organize awareness programmes for the community, business operators, government employees and other relevant stakeholders about the proper waste management practices to reduce the heavy metal accumulation and other wastes.

4. Risk of spread of dengue (infectious disease)

By establishing a considerable number of garbage disposal units, improper solid waste disposal can be minimized to a certain extent. Urban councils can also collect solid waste and sort it as polythene, carboard, and food waste and recycle or reuse it as compost, biogas, etc. In addition, legal action should be taken against those who are disposing of solid waste improperly.

4.1.3 Political Risks

1. Political instability

The current unstable political situation can cause a lot of negative impact on the tourism industry. To mitigate this situation and develop Sri Lanka as a nation, the main suggestion given by the professionals was to establish stable national policies based on Sri Lankan political tradition. This will help to create a politically stable country that does not change national policies according to the ruling political party of the country.

2. Internal conflicts among stakeholders

Implementation of an effective collaborative network among stakeholders in Ella to share their interests and proper understanding among each party with the leadership

of the relevant government authorities will reduce the internal conflicts that exist among different tourism-related stakeholders.

3. Constant changes in policies

Continuous fluctuations in the national tourism policies in the country is another main political risk identified at the expert workshop. The policies are fluctuating with the change of the ruling political party of the country, which is causing many negative impacts on the tourism industry. Therefore, it is needed to develop sustainable and stable national tourism policies to sustain the tourism industry and increase its positive impact on the national economy. These policies should be developed by professionals, which cannot be changed with the political situation.

4. Lack of coordination among the tourism professionals

It is needed to organize continuous programs to develop the knowledge and skills of government employees and other tourism stakeholders and to initiate learning channels to continuously educate the industry stakeholders to enhance the required knowledge and skills.

5. Non updated rules and regulations

In order to create a sustainable legislative framework that can be altered depending on the existing and future trends and opportunities in the market, both nationally and regionally, is essential given how quickly the tourism industry's tendencies are changing.

6. Failure to enforce the law equally

The implementation of a legislation and legal policy that can be written to

offer equal protection under the law for everyone was recommended by the experts.

7. Corruption

The experts' recommendation for reducing corruption in the nation was to enact a solid and stringent system of rules and regulations.

4.1.4 Financial Risks

1. Loss of government tax income

The existence of many unregistered tourism establishments in Ella caused a loss of tax income for the government authorities, which hindered the development of the tourism industry. Hence, it is a mandatory requirement to implement a fair and sustainable tax policy focusing on the tourism industry of Sri Lanka. Furthermore, as per the suggestion of the experts, the tax policy should be stable and simple in nature in order to encourage tourism operators to pay the relevant taxes.

2. Debt and working capital issues

Unable to repay the loans was one of the major risk-caused debt and working capital issues due to the COVID-19 pandemic situation. The experts suggested implementing a long-term funding scheme, especially for the small and medium-sized entrepreneurs within the tourism industry, as SMEs are highly vulnerable during the unstable economic condition of the country.

Furthermore, many small and medium-scale business operators in Ella belong to the informal sector as they have not registered with relevant government authorities. Therefore, these small and medium-scale operators are moving towards microfinance institutions to seek funding sources as they are facing

many issues and challenges in terms of seeking funds from well-established financial institutions. However, the lack of a proper mechanism to monitor these micro-finance institutions in the country sometimes leads to unfair and arbitrary procedures. Hence, it is necessary to implement a mechanism to monitor these microfinance institutions to reduce their arbitrary procedures.

In addition, the experts suggested launching a consultancy service for small and medium-scale business operators to support their funding requirements.

3. Risk due to COVID-19

The experts claim that in order to reduce the problems brought on by pandemics and other unstable situations, it is necessary to adopt a suitable financial investment framework. Recruiting new investors is difficult because of insufficient and out-of-date financial norms and regulations. For Sri Lankan tourism firms to succeed over the long term, both domestic and foreign investors must be drawn to the country. Accordingly, both parties need to be strengthened. For that, both components of the tax code need to be loosened. Due to the government's lack of involvement and the high commissions set on the linked tourism sectors, the majority of investors no longer tend to come to invest in Lankan tourism firms. This has an immediate effect on business owners, employees of the public sector, and investors whose decision to invest in Sri Lankan companies is impacted by tighter tax regulations. Due to obsolete rules, the tax code will be loosened, which will cause the tourism industry in Sri Lanka to lose both domestic and foreign investors who would otherwise help the country's economy grow.

4.1.5 Social & Cultural Risks

1. Drug abuse and Alcoholism

Monitoring changes in alcohol use, alcohol-related harm, and community responses, as well as analyzing and disseminating this information, will be critical areas for action. Information on the extent of harmful alcohol use, as well as the effectiveness and cost effectiveness of preventive and treatment interventions, should be systematically consolidated and expanded at the community level, particularly through a systematic review of alcohol use and alcohol-related harm and the impact of harmful alcohol use on economic and social development. Simultaneously, visualized awareness (e.g., LED screens that can be displayed in congested areas) could be a powerful strategy. The policies must be based on the current situation and include defined objectives, strategies, and targets. A precise action plan should accompany the policy, as well as effective and long-term implementation and evaluation systems. It is vital that civil society and economic actors work together effectively. To avoid harmful alcohol use, it must develop or strengthen existing comprehensive national and subnational strategies, plans of action, and initiatives.

Moreover, in the meantime, Ella is a famous tourist destination, and the presence of tourist police has become necessary in order to ensure the safety and security of tourists, as there is no tourist police established here. Responsible government institutes can educate, promote and encourage people about the bad consequences of alcoholism and drugs, starting from the teen level, as they are the ones who can easily get involved with those. While they are aware of the bad consequences of alcohol, they can promote the importance

of healthy food and healthy lifestyles like yoga and meditation.

2. Traditional Livelihood Migration

Until the community of Ella became reliant on tourism, agriculture was the community's major source of income. Pottery, dairy farming, and vegetable growing were among the Ella community's traditional livelihoods. It can be established that these traditional livelihoods are more revenue-generating tourism products than traditional tourism products with the proper direction to the community. The traditional handmade creations of the community, like clay pots, woven mats, etc., can be sold to tourists as souvenirs. At the same time, it helps to sustain the traditional creations of the community.

3. Prostitution and sexually transmitted diseases

The purpose of community awareness programs should be to enhance villagers' knowledge of HIV/AIDS and other sexually transmitted diseases, as well as how to protect themselves from these diseases. Electronic media, non-electronic media, and PHI personnel can be used for those awareness sessions, and at the same time, it can be conducted some health campaign camps for the community to ascertain the diseases. It could be more effective if the personnel, like hoteliers, travel agents, etc., who directly engage with tourists, participated in those campaigns and awareness sessions. Accordingly, the health facilities and medical aids that are needed must be improved, as Ella is one of the major areas where STD patients can be found.

4. Cultural Degradation

The relevant government institutes should be aware of the local community

about the value of traditional culture while empowering them to be the guardians of it. Subsequently, the traditional cultural items and industries can be encouraged to develop as experience-based tourism products while securing the traditional culture for future generations.

The majority of the homestays in Ella had been constructed without knowing the concept of "homestay". It should be a place where tourists can experience the authentic Sri Lankan culture, and that would be the final expectation of tourists who want to experience the authentic culture of the community in Ella. Hence, homestays should be reformed in tally with the authentic traditional culture to provide an experience-based tourism product.

5. Alternation of Lifestyles of Locals

Inform the community about the importance of maintaining the traditional way of life and the demand for traditional items such as dancing and pottery, which are directly related to their way of life. Moreover, empower them to pass on their traditional lifestyles from generation to generation without becoming dependent on the overly westernized lifestyles of tourists.

6. Low tendency of Education

If the government tourism-related institutes and the hotels in the Ella area provide an opportunity only for those who have a formal education and education in tourism to engage in tourism-related businesses, they will probably have a formal education. Also, by introducing salary differentiation in accordance with the education level in tourism-related occupations (e.g., tour guiding), a spontaneous value for education will be created.

7. Overdependence on Tourism

The majority of the community in Ella are engaged in tourism-related businesses because they believe that tourism is the only livelihood from which they can generate high revenue. As a result, they reinvest all of the money they made from the tourism industry in a tourism-related business. But it's not a good choice for several circumstances, like pandemic situations. So, if the earned money is invested in an investment portfolio and diversified businesses, the risk of overdependence on tourism can be mitigated. Also, awareness programs should be conducted to teach financial management for ground-level tourism and hospitality facility providers.

Photos from the
Stakeholder Workshop

4.2 "Systematic Consensus Building" Approach to Present the Survey Results

The present study used "Systematic Consensus Building" approach to identify the acceptance of options for actions, barriers and entry points for specified resilience in Ella area. The approach allows to look for highest and least resisted options by all stakeholders instead of favorites of majority and taking the most wanted option on challenges/priorities and etc. It involves the following steps,

Step 1

Defining context
Aware and Background search on given area/issues/challenges ensuring the balance, participation, long-term orientation, and cooperation.

Step 2

Collecting options
a. Identifying – Brainstorming, Mind-map, Focus-group discussions etc.
b. Registering the identified options

Step 3

Compiling terms representing similar options
a. Categorizing
b. Summarizing meta-categories

Step 4

Resistance-oriented voting

4.3 Acceptance of Options for Actions

According to table 4.1, the Systemic Consensus approach was used for the decision as more than two mitigation strategies/options for actions were involved for the identified risks in the Ella area. It minimized the conflicts with controversial decisions while participants were happier than in simple voting.

In May 2022, the team conducted face-to-face interviews with 18 participants at their business places. First, the systematic review team interviewed the participants on mitigation strategies for natural risks under the subcategories of hydrological and geological risks and biological risks. Under those sub categories, it was proposed that four mitigation strategies for each hydrological and geological risk are H1, H2, H3, H4 and for each biological risk are B1, B2, B3, B4 with respect to the expert workshops which were conducted. The responsibility of all voters was to listen with the intent to understand those strategies and to vote from 1−4 according to the objection level of the participant. The values in between are set according to the subjective feelings of the individual person. It explains that **"1" means absolutely no resistance, i.e., complete agreement with the proposed strategy ("I have no objection, I support this strategy strongly")**. Meanwhile, **"4" means maximum resistance, i.e., total objection ("I have huge objections; I refuse this strategy heavily")**. Following that, voters voted from 1-4 for building construction regulations, a well-planned drainage system, the conservation of sensitive mountains, and the selection of appropriate crops. It means that, according to the voter's selection regulations for building construction (H4), it is the most prioritized mitigation strategy that can be accepted. Similarly, a well-planned drainage system (H1) is another strategy which can be accepted through the objection level of participants. Conserving the sensitive mountainous (H4) is the maximum resisted

strategy for the hydrological and geological hazards. Under the biological hazards, the establishment of waste treatment plants (B3) and the establishment of water testing and purifying plants (B1) can be accepted as the most appropriate strategies which can be used in action as the participants had a complete and considerable agreement with those. The Awareness Program on proper waste management practices (B4) was the least agreed strategy according to the voting level of the participants.

First, the systematic review team interviewed the participants on manmade risks. When considering the man-made risks, it has identified three sub-risks as political risks, financial risks, and social and cultural risks. Under those sub risks, 07 strategies (P1, P2, P3, P4, P5, P6, P7) for political risks; 06 strategies for financial risks (F1, F2, F3, F4, F5, F6, F7) and 12 strategies for social and cultural risks (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12) have been proposed in accordance with the experts' suggestions at the workshop. Under the political risks, it has identified mainly four mitigation strategies in accordance with the voter's agreement. Accordingly, it has proposed knowledge dissemination and training (P4), initiation of learning channels (P5), networking of stakeholders in Ella (P2), and establishment of stable national policies (P1) as the strategies to implement according to the agreement level of the votes of the participants. The other three strategies (P6, P7, and P3) were rejected as the participants had heavily objected to those strategies. When considering the financial risks, 07 identified strategies were voted by the participants. 03 strategies were selected by the systematic review team. According to table 02, implementing a mechanism to monitor the microfinance institutions (F4), encouraging the tourism operators to pay the relevant taxes (F2), and implementing a proper

financial investment structure (F6) have been identified as the accepted agreeable strategies, which were voted according to the intention of the participants. The other three strategies were rejected as the participants had objected to those strategies. Finally, under the social and cultural risks, 12 strategies (S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, and S12) were proposed. From the proposed strategies, it has selected 05 strategies according to the vote levels of the participants. Community awareness programs on sexually transmitted diseases (S3), conducting health camps (S4), educating the local community about the value of traditional culture and empowering them to safeguard it (S5), establishing separate but considerable garbage disposal units (S8), and taking legal actions for improper waste disposal (S9) were accepted strategies. The remaining 07 strategies were objected to in accordance with the participants' level of vote. The following table depicts the summary of the potential accepted options for actions.

Table 4.1 Summary of the potential accepted options

Risk Category	Potential Options for Actions
1. Hydrological and geological risks	• Regulations of Constructions of Buildings • Well-planned drainage system
2. Biological Risks	• Establishment of Waste Treatment Plant • Establishment of water testing and purifying plant
3. Political Risks	• Proposed knowledge dissemination and training Initiation of learning channels • Networking of stakeholders in Ella • Establishment of stable national policies
4. Financial Risks	• Implementation of a mechanism to monitor the microfinance institutions • Encouraging the tourism operators to pay the relevant taxes • Implementation of a proper financial investment structure
5. Socio and Cultural Risks	• Community awareness programs on sexually transmitted diseases • Conducting health camps • Educating the local community about the value of traditional culture and empowering them to safeguard it • Establishing separate but considerable garbage disposal units

Table 4.2 Acceptance of Options for Actions in Ella

Voter #	1. Hydrological and Geological Risks				2. Biological Risks				3. Political Risks							4. Financial Risks						5. Social and Cultural Risks											
	H1	H2	H3	H4	B1	B2	B3	B4	P1	P2	P3	P4	P5	P6	P7	F1	F2	F3	F4	F5	F6	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
Voter 01	2	4	3	1	2	3	1	4	4	2	7	3	1	2	6	5	1	4	3	6	2	12	6	3	5	1	4	10	8	2	9	7	11
Voter 02	2	3	4	1	2	4	1	3	4	3	7	1	2	6	5	6	2	4	1	5	3	8	5	1	6	2	4	12	11	3	10	7	9
Voter 03	2	4	3	1	1	2	3	4	7	6	5	1	2	3	4	3	2	4	1	5	6	11	4	1	3	2	7	8	9	6	12	5	10
Voter 04	3	1	2	4	3	2	4	1	5	3	6	1	4	2	7	2	4	5	1	6	3	12	7	8	2	9	5	4	1	10	3	6	11
Voter 05	4	2	1	3	4	1	3	2	6	5	2	3	4	1	7	1	4	6	3	2	5	2	7	11	9	12	10	5	3	4	6	8	1
Voter 06	2	1	3	4	2	3	4	1	4	3	7	1	2	6	5	6	2	4	1	5	3	4	11	8	6	2	12	3	10	9	1	7	5
Voter 07	2	4	3	1	1	2	3	4	7	6	4	1	5	3	2	3	5	4	1	2	6	12	2	1	3	5	7	10	8	6	11	4	9
Voter 08	3	1	4	2	3	4	2	1	1	2	7	4	3	6	5	6	3	1	4	5	2	1	6	10	4	12	5	11	9	8	7	2	3
Voter 09	2	4	3	1	1	3	4	2	1	2	4	4	3	5	7	5	3	1	4	6	2	9	4	1	6	2	5	12	10	3	11	8	7
Voter 10	2	4	3	1	2	3	1	4	6	5	4	2	7	3	1	3	4	5	2	1	5	3	6	9	8	10	7	5	4	11	1	12	2
Voter 11	2	3	4	1	2	4	1	3	4	3	7	1	2	6	5	6	2	4	1	5	3	4	9	1	12	2	10	6	5	3	8	7	11
Voter 12	2	4	3	1	2	3	1	4	4	2	7	3	1	6	6	6	1	4	3	5	2	9	11	2	6	3	12	1	4	5	10	8	7
Voter 13	2	4	3	1	2	3	1	4	6	7	5	1	2	3	4	3	2	6	1	4	5	11	4	1	3	2	7	8	9	6	12	5	10
Voter 14	1	3	4	2	1	3	2	4	4	3	7	2	1	5	6	5	1	4	2	6	3	12	7	8	2	9	5	4	1	10	3	6	11
Voter 15	3	4	1	2	3	1	4	2	2	7	6	3	4	5	1	5	4	2	3	1	6	2	7	11	9	12	10	5	3	4	6	8	1
Voter 16	1	2	3	4	4	3	1	2	2	1	7	5	6	4	3	4	6	2	5	3	1	4	11	8	6	10	12	3	2	9	1	7	5
Voter 17	4	2	3	1	4	2	1	3	3	2	6	1	4	5	7	5	4	6	3	1	2	9	11	2	6	3	12	1	4	5	10	8	7
Voter 18	3	4	2	1	3	2	1	4	1	2	4	7	3	5	6	5	4	1	3	6	2	11	4	1	3	2	7	8	6	9	12	5	10
Total	42	54	52	32	42	48	38	52	71	64	102	44	56	79	86	79	54	68	42	74	61	136	122	87	99	100	141	116	107	113	133	120	130
Rank	2	4	3	1	2	3	1	4	4	3	7	1	2	5	6	6	2	4	1	5	3	11	8	1	2	3	12	6	4	5	10	7	9

Index for Options for Actions

H1: Well-planned drainage system
H2: Conserve the sensitive mountainous
H3: Selection of appropriate crops
H4: Regulations of Constructions of Buildings
B1: Establishment of water testing and purifying plant
B2: Conducting   awareness programs on forest fires
B3: Establishment of Waste Treatment Plant
B4: Awareness Program on proper waste management practices
P1: Establishment of stable national policies
P2: Networking of Stakeholders in Ella E.g., Share their interests, reduce conflicts
P3: Development of sustainable and stable national tourism policies
P4: Knowledge Dissemination and Training
P5: Initiation of Learning Channels
P6: Equal enforcement of the law
P7: Implementation of Strict Rules and Regulation System
F1: Implementation of fair and sustainable tax policy
F2: Encourage the tourism operators to pay the relevant taxes
F3: Implement a long-term funding scheme especially for the small and medium entrepreneurs
F4: Implement a mechanism to monitor theses micro financing institutions
F5: Initiate a consultancy service for the small and medium scale business operators
F6: Implement a proper financial investment structure
S1: Develop or strengthen existing comprehensive national and subnational strategies, plans of action, and initiatives
S2: Promote healthy food and healthy lifestyles
S3: Community awareness programs on sexually transmitted diseases
S4: Conduct health camps
S5: Aware the local community about the value of traditional culture and empower them to safeguard
S6: Develop experience-based tourism products while securing the traditional culture
S7: Empower community to concern tradition lifestyles
S8: Establish separate considerable garbage disposal units
S9: Taking legal actions for improper waste disposal
S10: Encourage community to obtain formal tourism education
S11: Invest in an investment portfolio and in diversified businesses
S12: Awareness programs on financial management

4.4 Barriers for Specified Resilience

Table 4.3 Barriers for specified resilience in Ella

Voters	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	
V1	16	15	2	3	4	5	7	6	14	1	8	9	12	3	11	13	136
V2	13	14	3	1	4	5	6	12	9	2	8	7	11	10	15	16	136
V3	12	11	3	2	1	6	5	7	8	4	9	10	16	13	15	14	136
V4	11	10	1	2	3	5	4	6	7	9	8	12	14	13	16	15	136
V5	12	11	4	3	1	2	5	6	8	7	9	10	16	15	13	14	136
V6	10	6	8	5	4	1	2	3	7	9	11	13	12	14	16	15	136
V7	11	9	4	3	2	1	5	6	7	8	10	13	12	15	14	16	136
V8	1	5	6	2	8	3	4	9	7	10	12	13	11	16	15	14	136
V9	16	13	15	14	5	2	1	3	4	6	12	7	8	9	10	11	136
V10	11	14	13	10	5	6	4	3	1	2	7	9	8	12	16	15	136
V11	15	16	11	13	14	12	6	5	4	7	1	3	2	9	10	8	136
V12	13	11	12	3	2	1	4	6	5	9	7	8	10	15	16	14	136
V13	6	5	7	1	2	3	4	9	10	8	12	13	14	15	16	11	136
V14	9	10	7	8	4	3	1	2	6	5	11	15	16	14	13	12	136
V15	11	12	7	5	4	3	1	2	6	9	8	10	16	15	14	13	136
V16	12	13	11	4	5	1	2	3	9	10	6	8	7	15	16	14	136
V17	4	5	7	6	3	2	1	16	11	10	8	12	9	15	14	13	136
V18	9	16	8	6	5	1	2	4	7	3	13	12	11	10	15	14	136
Total	192	196	129	91	76	62	64	108	130	119	160	184	205	236	257	239	
Rank	11	12	7	4	3	1	2	5	8	6	9	10	13	14	16	15	

(V= Voter/Respondent, B =Barrier)

Source: Survey Data, 2022

The table 4.3 shows the results of systematic consensus building approach for identifying barriers in Ella tourism destination. According to that, 16 meta-categories of barriers have been identified, ranked by the respondents/voters to the study and evaluated to reveal the least resisted and highest resisted options.

Index for Barriers

B1: *Financial Issues*
B2: *Political Issues and Instability*
B3: *Lack of proactive actions of related-authorities*
B4: *Unskilled-human resources*
B5: *Frequent Changes in government structure*
B6: *Outdated Policies, Guidelines, Rules and Regulations*
B7: *Inconsistency of industry stakeholders' involvement*
B8: *Inequitable Political Intervention*
B9: *Complicated and time-consuming process for approval/permits*
B10: *Pessimistic Attitudes shown by Government Employees*
B11: *Unfitted debt restructuring mechanism*
B12: *Unavailability of government funds for Tourism Projects*
B13: *Reluctance in Investment on Tourism Industry*
B14: *Low education/awareness of sexually transmitted diseases and drug addiction*
B15: *Inability of grabbing business opportunities*
B16: *Less Involvement by youth on cultural conservation*

As per the table 4.3, the least resisted option **(Rank 01) was (B6) outdated policies, guidelines, rules and regulations used in Ella area** followed by **(B7) Inconsistency of industry stakeholders' involvement -** Rank 02, (B5) **Frequent Changes in government structure – Rank 03, (B4) Unskilled-human resources – Rank 04,** and **(B8) Inequitable Political Intervention – Rank 05**. Therefore, the above five from Rank 01-05 should be addressed immediately for destination resilience. Further, B14 - Low education/awareness of sexually transmitted diseases and drug addiction – Rank 14, B16 - Less Involvement by youth on cultural conservation – Rank 15, and B15 - Inability of grabbing business opportunities – Rank 16 were appeared as the barriers with less impact to build resilience. Although they are barriers to the destination, stakeholders do not accept them as more crucial for resilience.

4.5 Opportunities for Specified Resilience

Table 4.4 Opportunities for specified resilience in Ella

Voters	O1	O2	O3	O4	O5	O6	O7	O8	O9	
V1	1	4	3	7	9	8	5	2	6	45
V2	1	7	4	6	8	9	2	3	5	45
V3	3	1	3	6	7	9	2	6	8	45
V4	1	5	2	8	7	9	4	3	6	45
V5	3	9	1	4	6	7	2	5	8	45
V6	4	6	2	9	5	8	1	3	7	45
V7	3	4	1	7	8	9	2	6	5	45
V8	2	9	1	8	6	4	3	5	7	45
V9	4	1	6	3	8	7	2	5	9	45
V10	1	6	3	9	8	4	2	5	7	45
V11	1	5	4	8	7	9	2	3	6	45
V12	1	4	3	5	7	9	6	2	8	45
V13	1	7	3	6	5	9	2	8	4	45
V14	2	7	4	8	9	6	1	3	5	45
V15	6	2	1	4	8	5	3	7	9	45
V16	1	2	3	9	7	5	4	6	8	45
V17	1	9	3	5	6	7	4	2	8	45
V18	1	8	2	9	5	6	3	7	4	45
Total	37	96	49	121	126	130	50	81	120	
Rank	1	5	2	7	8	9	3	4	6	

(V= Voter/Respondent, B =Barrier)   Source: Survey Data, 2022

The table 4.4 shows the results of systematic consensus building approach for identifying opportunities for resilience building in Ella tourism destination. According to that, 9 meta-categories of opportunities have been identified, ranked by the respondents/voters to the study and evaluated to reveal the least resisted and highest resisted options.

Index for Opportunities

O1:   *Being a world famous tourism destination and tourist hotspot*
O2:   *Competent human resources*
O3:   *Favourable geographical location and historical values*
O4:   *Developing a tourism manpower force with technical know-how*
O5:   *Attract more tourism investors and established reputation*
O6:   *Introducing independent financial consultancy firms*
O7:   *High tourist demand*
O8:   *Competitiveness of Ella as tourism destination*
O9:   *Updated community*

As per the table 4.4, the least resisted option **(Rank 01) was (O1) Being a world famous tourism destination and tourist hotspot** followed by **(O3) Favorable geographical location and historical values - Rank 02, (O7) High tourist demand – Rank 03, (O8) Competitiveness of Ella as tourism destination – Rank 04, and (O2) Competent human resources – Rank 05**. Therefore, the above five elements should be grabbed as opportunities immediately for destination resilience. Further, O4 - Developing a tourism manpower force with technical know-how – Rank 07, O5 - Attract more tourism investors and established reputation – Rank 08, and O6 - Introducing independent financial consultancy firms – Rank 09 were appeared as the less opportunities to build resilience. Although they are opportunities to the destination, stakeholders should accept them after grabbing highest opportunities for resilience.

4.6 Resilience Principles for General Resilience

Options for actions, barriers and opportunities in Ella were prioritized based on the results of the systematic consensus approach conducted with the participants. Accordingly, the general resilience strategies for Ella were proposed under five main resilience principles. The five main resilience principles are comprised of **Diversity, Connectivity, Learning, Participation and Multiplicity Governance** (Biggs, Schlüter, & Schoon, 2015).

4.6.1 Diversity

Diversity means there should be diversified products and services within a tourism destination as well as there should be more options to solve the problems or the risks within a particular destination. Ella is rich with diversified tourist attractions such as natural (climate, geographical location, mountains, waterfalls, forests etc) man-made attractions (Archeological sites, religious places and monuments, railway lines, historical and valuable buildings, constructions etc) and activities (Flying Ravana, Hiking, Cycling, Events, Train tours, Cookery demonstrations, Village tours etc) as a tourism destination. Hence, being a world-famous tourism destination with these variety of tourism resources and high tourist demand, it is proposed to conduct more promotional programmes on the diversification of the tourism resources in Ella. In addition, it is proposed to discover the hidden tourism resources and promote more tourism activities like food and other cultural and community related festivals, photography, bird watching etc to proper utilization of the destination resources. Diverse resources can meet the demands of tourists with different tastes, and they can be backed up by additional resources if one resource fails.

Furthermore, it is proposed to develop the diverse facilities such as accessibility, ancillary services and accommodation facilities in order to support the tourism operations. Also, it was suggested to plan diverse options for the risks associated with Ella to mitigate risks if one option fails. Accordingly, it is suggested to promote and provide incentives for the local community to diversify their livelihoods to different methods. For an example, if the tourism activities not possible due to the natural or pandemic situations, local community needed to be engaged in alternative livelihood methods such as agricultural activities.

4.6.2 Connectivity

Connectivity refers to the network between the components of the tourism destination such as the stakeholders and the tourism resources. It is proposed to buildup a strong network among the various stakeholders in Ella such as accommodation suppliers, tour guides, community, relevant public and private authorities, NGO's, etc in order to create better collective solutions for the problems and initiate the solutions for the associated risks with transparency and quickly.

4.6.3 Learning

Learning principle in tourism refers to the process of creating, modifying and disseminating the knowledge for various stakeholders related to the tourism destination. It is proposed to initiate knowledge dissemination and training programmes and learning channels in Ella for the stakeholders to provide awareness about the different tourism related risks and the mitigation and resilience strategies. For an example, learning progarmmes such as community awareness on drug usage and sexually transmitted diseases, conducting health camps, educating the local community about the value of traditional culture and empowering them to safeguard it can be conducted about the associated risks in Ella.

4.6.4 Participation

Participation can be considered as the active involvement and engagement of the different stakeholders in management of the different tourism operations and components. Active participation especially in decision making process would be enhanced the trustworthiness of the decisions. Active engagement of the different stakeholders in designing the rules, regulations and policies and managing the reginal tourism operations were proposed for Ella in order to formulate the favorable rules, regulations and policies.

4.6.5 Multiplicity Governance

It is proposed to establish a more integrated governance approach for policy making and policy implementation in Ella to effective management of the tourism destination. There is no any proper integration between the central government and the regional authorities related to the formulation of the rules, regulations and policies. Hence, multiplicity governance will be enhanced the information sharing, coordination, problem solving and resilience of the internal conflicts of the community and favorable policy formulation etc. by integrating the national government and the regional government procedures.

Synthesis –Resilience in Tourism Destination

5
Chapter

5.1 Overview of Potential Options for Actions

Tourism industry has been recognized as the fastest growing economic segment globally. Being the third largest foreign exchange earner, Sri Lanka has prioritized the tourism development as a solution for many issues currently faced by the country's economy. However, many destinations in the country are not planned properly with needed risk and resilience plan. Modern tourism is closely linked to development and encompasses a growing number of new destinations. These dynamics have turned tourism into a key driver for socio-economic progress. Ella is considered to be one of the most attractive tourist destinations which offer a unique experience to travelers and has become one of the top priorities of the travelers who visit Sri Lanka. However, emerging unplanned tourism activities in the area has already uncovered many risks challenging the tourists, natural setup of the environment and the livelihood of the community as well. Furthermore, as a socio-cultural impact, the negative conflicts between host and tourists can be considered with the development of community-based tourism. Moreover, currently, Ella is facing a number of hazards and risks, including natural disasters and man-made hazards, and this section explains those identified risks based on the desk research. Further, destination Tourism Sustainability and the UN Sustainable Development Goals require resilience. A destination would never be able to maintain its sustainability efforts if it lacked resilience.

Analyzing the responses given by the respondents, the team has identified the following **types of risk, barriers, tackling barriers and strengthening entry points, responsibilities and ownership and building strategies for resilience** in Ella tourist destination.

Table 5.1 Resilience Plan in Ella Tourist Destination

Types of Risks	Barriers	Tackling Barriers and Strengthening Entry Points	Responsibilities and Ownership	Building Strategies for Resilience
Hydrological and Geological Risks				
• Landslides • Extreme Rainfall Events • Soil erosion • Steep cliffs	• Unauthorized Constructions • Lack of information • Lack of awareness	• Personal observations and get risk mitigation action to minimize the risk	• Provide proper awareness for both visitors and community residents	• Build safety fences around the dangerous areas • Provide informative sign boards and provide awareness for visitors • Sufficient advertisement in surrounding areas
Biological Risks				
• Bacterial Contamination of water	• High tourists' density • Over tourism Unhygienic Practices of tourists and community residents	• Testing quality of the drinking water time to time	• Responsibility to protect the water resources	• Maintain proper standards for hygienical practices
• Loss of vegetation	• Over Tourism Unauthorized construction • Environmental pollution • Over usage of land resources • Plantation crops	• Moving to the tree plantation within some tourist's destinations and home gardens	• Responsibility to protect the environment and raise the voice if there any unauthorized incidents	• Enhancing the awareness • Invest for Eco Friendly practices • Reducing negative impact on Tourism

Political Risks				
• Lack of proper national policy on tourism	• Political Instability	• Adhere to the regional level or state level tourism policy	• Continuously monitoring the policy and standards	• Develop a compatible set of Planning Regulations to regulate the ongoing • developments Build stable tourism policy • Developing a tourism manpower forces with technically know-how
	• Constant changes in governmental policies • Outdated policies, guidelines, rules and regulations	• Plan the business carefully Conducting regular awareness program Rather than having long term policies and objectives Ella tourism work under the short-term policies and objectives	• Work with the timely updated information • Strategic decision making with contingency planning.	• Investment friendly Government Policies • Try to gather expert insight • Move to the alternatives and strategic planning and well prepared for the changes
	• Disagreements among different stakeholders	• Build community groups as different business sectors based on the nature of the business Ex: Homestay operators, Guides	• Enhancing the unity of the all stakeholders	• Make effective coordination with industry experts • Allow voices of the community people from grassroot level
• Failure to enforce the law equally	• Unfair political intervention			• Minimized centralized government structure and decision-making power
• Corruption	• Lack of positive attitude shown by government employees			• Government structure should be changed or attempts should be taken to shut the windows for corruption • Train to make positivism • Allow voices of the community people from grassroot level
Financial Risks				
• Loss of government tax income	• Constant government changes	• Enhancing rationale thinking of politics in Sri Lanka for the citizens	• Having unbiased opinion on the political system of the country • Playing a responsible role as citizens who possess the voting power	• Imposing a simple, standard tax policy • Continuous encouragement to pay relevant taxes on time

Debt & working capital issues	Lack of proper debt restructuring methods	• Planning and implementing long-term debt restructuring methods after careful assessment • Act quickly according to the market trends	• Be vigilant on the current trends of debts and debt restructuring methods	• Introducing independent financial consultancy firms
Risk due to COVID-19 and other emergencies	Lack of government funds for implementing tourism projects	• Collectively searching for donations (tourists and other interest parties) and CSR projects to be implemented in Ella	• Locals in Ella (including key tourism stakeholders) are the primary party who receive majority of the benefits through the increase of tourist influx to Ella. Thus, they have a responsibility of monitoring the tourism projects in the area and successfully operating them	• Collecting funds from tourists • Having contingency plans for emergencies • Attracting investors through international expos and other events
Challenges of attracting new investors due to inadequate and outdated financial rules and regulations	Existing tax policy & inflation	• Sharing the community views on concerned financial policies to the responsible parties of the local government	• Be responsible to share their honest views, pros & cons of financial policies	• Efficient tax policy with tax concessions
Social & Cultural Risks				
Drug Abuse and Alcoholism	• Unwillingness to accept the alcohol addiction by the individual • Reduced Income to tourism establishments	• Having close relationships with the addicted individuals and making them less vulnerable for addictive behaviors through emotional advice • Encourage the addicted individuals to engage in useful leisure activities/hobbies which generate income	• The concerned individuals should have motivation and strong desire to over these issues with commitment	• Reducing the negative impact on family through regular awareness sessions • Modification of rules and empowerment
Traditional Livelihood Migration	• Unavailability of food cultivation areas in Ella • Lack of income	• Starting home gardening by the locals	• Due to the current economic crisis and to further promote tourism with value added concepts, the locals should pay their attention to start cultivation as per their capacity	• Starting cooking classes for tourists • Incorporate traditional agricultural activities into community-based tourism • Engage in home gardening

• Prostitution and Sexually Transmitting Diseases	• Lack of awareness on Sexually Transmitted Diseases (STD)	• Consult with healthcare professionals and having regular medical check ups	• The locals should have the sense of responsibility to take necessary medical precautions to avoid STDs	• Conducting regular awareness programs • Distributing sanitary items to minimize the transmission of STDs
• Cultural degradation • Alternation of lifestyles of locals	• Less Youth Engagement	• Get the active involvement of youth community through various activities	• The locals should ensure to protect the identity of "Ella – Sri Lanka" so that foreign tourists continue to visit over a long period of time	• Conserving historic landmarks and threatened tourist attractions • Promotion of traditional sectors as value-added tourism product (pottery, agriculture, handicrafts, etc.)
• Dangerous area for spreading dengue mosquitoes, due to the ineffective Solid Waste Management system	• Negative human behavioural patterns	• The residents should change their negative behaviors and attitudes in garbage throwing Starting to make compost fertilizer within their home gardens by the locals		• Conducting regular mosquito breeding prevention programs (smoking, cleaning drainages) during rainy season • Effectively carrying out the operations of solid waste management system • Conducting awareness sessions on garbage disposal, garbage classification for residents and other entrepreneurial establishments (hotels, home-stays, restaurants, etc.) In Ella
• Low tendency of Education	• Low education on financial management • Low education on financial management	• Self-study of basic financial management practices like book keeping and managing profit & loss account	• Since the world is fast moving to a new technological era with highly competitive job market, the locals should have the motivation to learn new things to keep up	• Provision of systematic vocational training of financial management • Independent learning systems through electronic media in native language
• Over Dependence of Tourism		• Engaging in self-employment jobs which can be bundled and sell through tourism activities or not	• Since the world is fast moving to a new technological era with highly competitive job market, the locals should have the motivation to learn new things to keep up	• Diversified investments through selling of bundled products
• Careless, vulnerable and Hazarders behavior of Travelers	• Limitations of laws & regulations	• Implementing safety rules and regulation for sustainable travelling and strict monitoring of them	• The local tour guides in the area must ensure to inform the travelers to avoid unethical/harmful travel behaviors	• Introducing adventure packages with safety measures • Displaying sign boards to warn the travelers and punishments on violation of such rules at the main entry points to the area such as Ella Railway Station, etc.

Photos from the Workshop held at Ella

Photos from the Expert Workshop

Conclusion

Sustainable tourism industry has been a key concern around the globe in recent decades. In response to the growing need of a risk identification, impact assessment and resilient building in tourist destinations, this manual focus on laying the foundation for destination resilient building for Ella tourist destination in Sri Lanka. After rigorous desk research and conceptual development, a comprehensive methodology was crafted based on both quantitative and qualitative approaches for this project. Ella was identified as a promising tourist destination which is full of natural as well as man-made risks and hazards claiming prompt attention to ensure sustainable tourism.

Comprehensive literature survey elucidated the ongoing arguments on the thesis of risk assessment and resilience building at tourist destinations where Ella found to be an ideal research site for this endeavor. The tourism operating structure and actors of tourism industry of Ella and in broad sense that of in Sri Lanka facilitated the project implementation. Specifically, resource profile and visitor profile as well as organization network are critically important in a resilient building strategy development. SWOT and SOAR analysis of Ella tourist destination was completed at this stage of the project and presented in the manual.

The risk registry for Ella was completed and two focus group discussions conducted vastly smoothed the risk registry development. Destination hazards were enlisted under four main categories namely, Hydrological and Meteorological hazards, Geomorphological Hazards, Biological Hazards and Environmental Hazards. Aforementioned hazards were further elaborated under natural and manmade categories and risks were profiled under four main categories namely, political, social, financial and environmental illustrating causes and impacts of each. In order to elaborate and further trace down the risks, and particularly the item wise impact assessment and identifying mitigation strategies, an expert workshop as well as a survey were put into operation.

Careful planning of facilities and business operations to mitigate hydrological, natural and socio-cultural risks is necessary to ensure long-term sustainability of the tourism activities at the destination level. Comprehensive policy formulation and a solid legal framework to implement the policies together with conformance assurance are crucial to ensure the function of risk mitigation and hazard control mechanisms proposed in this study.

Chapter 6

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Project Team

Sustainable Tourism Services (Pvt) Ltd
Director: Prof. J.P.R.C Ranasinghe / Consultant - Tourism, Hospitality and Community &
Regional Development
Address - 21/2 Hingurugamuwa Kanupelella New Road, Badulla, 90000, Sri Lanka
Contact: Mobile +9477 751 3464, Residence +9455 223 0004, E mail ruwan.fm@gmail.com