Resilience Analysis Guideline for Tourism Destinations

Introducing key concepts and methodological steps to analyse destination resilience

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Futouris
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Acknowledgements

Executive Summary

This guideline forms part of the wider collaboration between Futouris and the German Committee for Disaster Reduction. The report presents one output under the project 'Destination Resilience', which is financed by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) of behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ).

Among others, the project activities entail 1) the development of a holistic **destination resilience conceptualisation**, 2) the development of a **destination resilience analysis guideline** and 3) good practice results from the **implementation of the proposed analysis guideline** from three project countries (the Dominican Republic, Namibia and Sri Lanka).

First, the guideline introduces **conceptual ideas, key terms and underlying concepts** about resilience in tourism destinations. To provide an understanding of destination resilience, the concept of destinations (systems in which various public and private organisations interact on different levels to create the tourism product) and resilience (the overall ability of actors to assess, plan and act to prepare for, prevent, adapt and respond to hazards that pose a risk for tourism) are explored. To further deepen the conceptual understanding of terms, the report provides an explanation of the key concept of risk (the potential for adverse impacts and consequences for something of value) and translates it to a tourism context. Besides, underlying risk drivers and different sources of risks are further explored in chapter 2.

In a next step, the **destination resilience analysis guideline** is introduced, which is a practice-oriented guide on the application of the resilience concept as a risk-informed management tool in tourism. The guideline consists of five steps. Each step is underlined with hands-on **examples from pilot destinations** in the Dominican Republic, Namibia and Sri Lanka. Moreover, **good practice methodologies** and advice on how to implement the steps in practice are provided.

In conclusion, the destination resilience analysis guideline offers a differentiated understanding of the concepts surrounding destination resilience and provides a **resource for practitioners, policymakers and researcher** by introducing a **'how-to' guide** on analysing and **building long-term destination resilience**.

STEP 1

DEFINING THE DESTINATION
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STEP 2

IDENTIFYING SOURCES OF RISKS
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01

Introduction

While the COVID-19 pandemic has had a devastating effect on economic and social systems globally, the impact of the pandemic has caused economic hardship particularly in countries of the Global South. More so than other crisis events in tourism, COVID-19 has uncovered vulnerabilities and inequalities and has deeply changed the understanding of business, interaction and social cohesion.

As a detrimental example, the pandemic has reinforced the call that urgent measures need to be taken to better understand and manage risks to prepare for future crisis events. The pandemic has thereby opened **a window of opportunity** to rethink and reshape approaches to addressing risks by moving away from solely reacting to crises towards proactive action to reduce the consequences of existing risks, preventing the creation of new risks, and building resilience (UNDRR, 2021).

Besides COVID-19, a steady increase in climate-related disasters worldwide can be observed, which are felt directly through loss of lives, livelihoods and assets, and indirectly through disruption of economic production, welfare and society (OECD, 2017; UNDRR, 2022). Addressing **complex and interconnected risks** such as climate change, pandemics, ecosystem degradation, loss of nature and biodiversity are among the most pressing global challenges of our time (UNDRR, 2022).

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 still an indispensable source of income for many people. Especially in the Global South, tourism often is a key economic pillar but is also particularly vulnerable to the negative impacts of climate change as fewer adaptive capacities and coping mechanisms exist.

Therefore, tourism destinations are required to focus on a proactive, collaborative, inclusive and preventive approaches in order to address risks and achieve sustainable development. This means consistently integrating risk-informed management into planning to strengthen the resilience of people and communi-

ties and to ensure sustainable (tourism) development. **Resilience** is inevitably an important concept when dealing with risks that 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 is not opposed to sustainability but plays an important part to ensure continuous progress in achieving the Sustainable Development Goals (SDGs). Integrating sustainable development into all phases of risk management presents an opportunity to help tourism destinations to become more resilient to future risks.

▶ But what does resilience at the local level actually mean for a tourism destination?
▶ How can resilience be analysed and subsequently be built?
▶ How can actions for resilience be implemented?
▶ And how can resilience be linked to aspects of sustainability?

This report introduces conceptual ideas, key terms and underlying concepts about destination resilience, introduces a holistic destination resilience analysis guideline and illustrates an implementation process of the proposed destination resilience analysis. By innovatively merging knowledge from disaster risk reduction and sustainable tourism, a new and creative analysis methodology that is process-oriented, participatory, risk-informed, adaptive, feasible and allows for the integration local knowledge, is introduced. The guideline provides conceptual ideas which are reflected in a set of assessment tools that allow local tourism destinations to review risks and analyse options for resilient actions. It 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 report provides a differentiated understanding of the concepts surrounding destination resilience and represents a valuable resource for practitioners, policymakers and researchers on how a destination can build long-term resilience.

1.1 Background of the programme

The project 'Destination Resilience' was 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). The project forms part of the COVID-19 Response Measures for Tourism – For Crisis Response, Recovery and Resilience, a comprehensive programme funded by the German Federal Government. It aims to retain the structures of the tourism sector and to empower local actors to offer products and services in tourism. In the spirit of "build back better", the aim is to enable entrepreneurs to make risk-informed business decisions, improve the ecological and social aspects of tourism and to achieve improved resilience. The programme reacts to challenges for the tourism sector caused by the pandemic in more than 20 partner countries that were most affected. Besides enabling local actors to reopen their tourism markets, it also aims to improve the social and ecological aspects of tourism in emerging economies as well as making the sector more resilient to crises. Thus, the COVID-19 pandemic is envisioned to act as an opportunity for scrutinising old approaches and transforming the tourism industry accordingly.

The project forms part of the GIZ's field of activity 'Quality Infrastructure for Resilient Tourism' and collaborates with destinations from three of the mentioned 20 partner countries – the Dominican Republic, Namibia and Sri Lanka (→ Figure 1). Here, aspects of sustainable tourism development as well as topics such as risk reduction and disaster preparedness play a central role at the various levels of these destinations.

The **German Committee for Disaster Reduction** is a national platform for disaster reduction in Germany, which also serves as an intermediary to organisations and initiatives in this field. It carries out development processes and projects based on science and practice for effective risk and disaster management. **Futouris** is the sustainability initiative of the German-speaking tourism industry. Together with its members and other project partners the organisation carries out international projects and develops guidelines and standards to encourage more sustainable tourism practices. The merger of the two organisations within the framework of this project represents an unique opportunity to link the topics of sustainability, tourism, disaster prevention and crisis management.
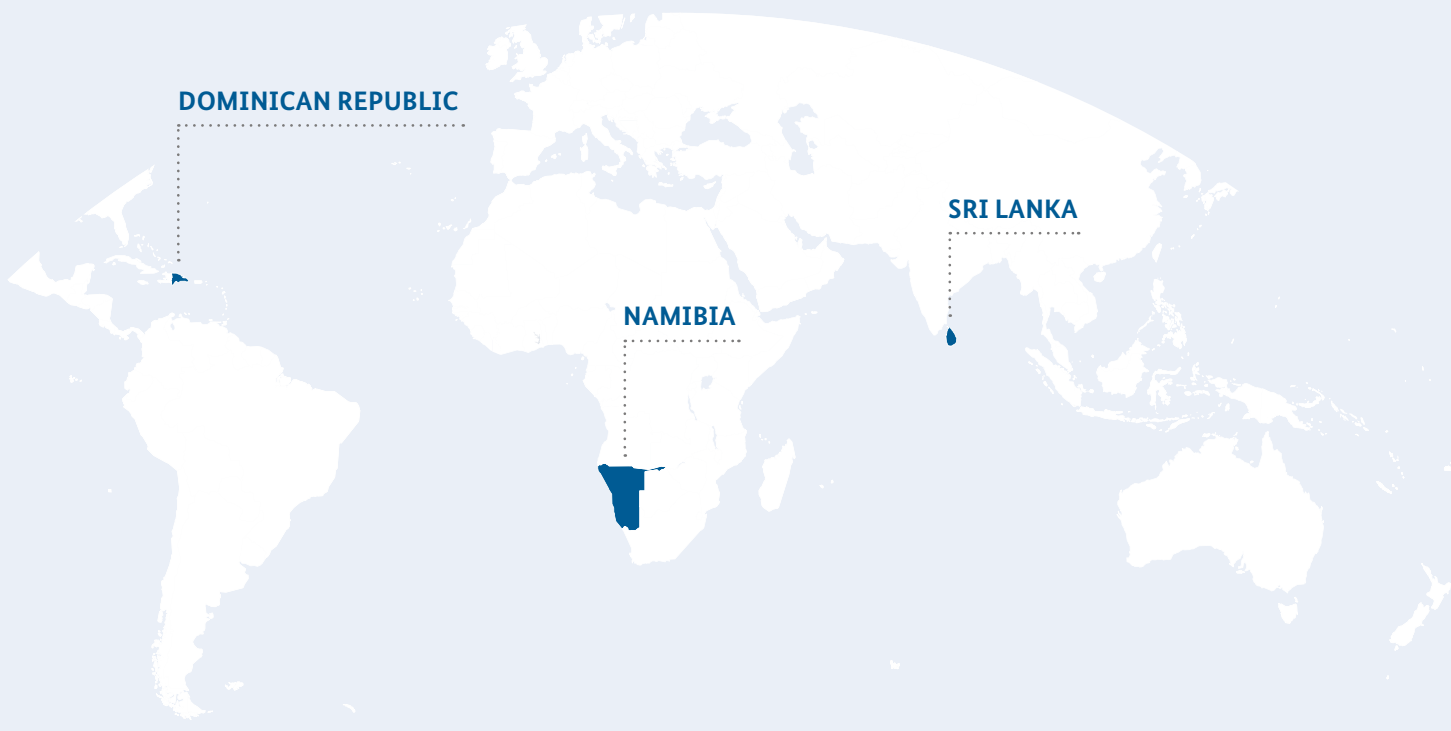

Figure 1: The three project countries: the Dominican Republic, Namibia, Sri Lanka

1.2 Target group

This guideline has been developed to support the analysis of destination resilience and the development of shared pathways towards risk-informed and sustainable tourism management. The destination management organisation, (non-)governmental organisations or academic institutions, which are engaged in activities at the intersection of tourism management, disaster risk reduction and sustainable development should ideally take the lead in implementing the analysis. These organisations and institutions include local tourism organisations, research institutes or development assistance organisations interested in assessing risks and resilience in a given destination to identify effective, feasible, and relevant measures as part of a strategy towards destination resilience.

Choosing the right lead in charge of conducting the analysis can vary from context to context, however, technical knowledge will be required in the field of tourism, risk analysis and participatory methods. A multi-stakeholder dialogue with the different actors in a tourism destination will be necessary to complete the analysis. While the proposed destination resilience analysis guideline can be applied to all tourism destinations due to its flexible nature, it is particularly tailored to the context and circumstances in emerging economies where different economic, social and environmental conditions might be prevailing. These countries are likely to have a high-risk exposure and little adaptive capacity and coping mechanisms and are often the first to experience the consequences from developments such as climate change. Therefore, the destination resilience analysis guideline is particularly concerned with providing readily understandable, user-friendly guidance in analysing and strengthening resilience in these tourism destinations. The guideline offers an adaptable guidance on how to specifically include local expertise in the face of scarce data availability and builds on the concept of local relevance, participation and co-creation of knowledge.

02

Key concepts for destination resilience

Resilience frameworks and concepts are available from a number of disciplines and research traditions focusing on disaster risk reduction, climate change adaptation and socio-ecological systems. A widely-accepted definition of resilience in the context of social systems refers to resilience as:

> **the ability of individuals, households, communities, cities, institutions, systems and societies to prevent, resist, absorb, adapt, respond and recover positively, efficiently and effectively when faced with a wide range of risks, while maintaining an acceptable level of functioning and without compromising long-term prospects for sustainable development, peace and security, human rights and well-being for all (UN, 2020).**

The definition underlines the **close link** between resilience, risk and sustainable development (Opitz-Stapleton et al., 2019). Understanding risk is a necessary requirement for building resilience in tourism destinations, whereas resilience is a necessary prerequisite for sustainable development.

However, paradigms and conceptions of key terms differ depending on the research tradition they originate from (Posch et al., under review). Each discipline adds different elements (e.g. definitions, methods, approaches) to increase our understanding of how to deal with risk and build resilience in tourism destinations. In a nutshell, the **conceptual ideas** that inform the destination resilience analysis guideline presented herein

▸ underline the importance of defining and analysing tourism destinations as complex systems,
▸ advocate for a risk-informed approach that identifies different sources of risks and underlying risk drivers,
▸ acknowledge both specific and generic forms of resilience with risk-informed management and principles as essential characteristics.

In the next sections, we approach these key concepts to translate them into tangible methods and actionable measures for building resilience in tourism destinations. Doing so, we draw on and integrate work from the following **building blocks**:

▸ the concept of risk as in the IPCC Sixth Assessment Report (IPCC, 2022; Reisinger et al., 2020),
▸ the risk governance framework (Renn, 2005, 2010; Florin & Bürkler, 2018),
▸ social-ecological systems literature on resilience (Biggs et al., 2012; Carpenter et al., 2001 / 2012; Pollard et al., 2014),
▸ global frameworks (O'Connell, 2015; OECD, 2014; UNDRR, 2015).

2.1 Tourism destinations

Despite the fact that tourism destinations are key concepts in tourism research and tourism practice, there is still little agreement about the conceptualisation of this term. Early definitions centred around the geographical boundaries of the tourism destination which led to the use of this term for everything from a municipality up to a transnational area. Later, the **'systemic approach'** of tourism destinations was introduced, which started a more holistic and sophisticated interpretation of the destination concept (Jovicic, 2016).

Since then, destinations are described as networks of related public and private organisations that are connected through a web of social linkages (Baggio & Cooper, 2010; Nunkoo, 2017). Different actors and stakeholders in this systemic structure serve various functions and purposes and jointly provide the **tourism product**.

Actors involved in tourism can be assigned to different **functional levels**, i.e. micro, meso and macro level or geographical levels, i.e. local, regional, national. At the local and regional micro-level, different service providers create value directly through their services. Actors at the public level support micro-level actors in creating value, e.g. through cross-cutting management activities such as local tourism representative bodies and regional government departments. Macro-level actors ensure certain basic functions and include the Ministry of Tourism, government institutions or national / international development organisations (Partale, 2020) (→ Figure 2).

Within the tourism destination, a variety of actors play a crucial role when it comes to the design and provision of the tourism product. In this analysis, the following actor groups are considered:

▶ accommodation providers (small, medium and large),
▶ food and beverage providers (restaurants, cafés, bars, etc.),
▶ tour operators (travel agencies, excursion operators, tour guides, etc.),
▶ transport service providers (taxi operators, train companies, car rental services, etc.),
▶ attraction providers (cultural, natural, retail),
▶ destination management organisations (DMOs),
▶ institutional actors (government, ministries, etc.).

In line with the idea that destinations are social-ecological system, it is important to stress the pivotal role of human actors in the destination. Human actors enable the flow of people, money and resources that are required for the functioning of the tourism system in the first place.

> **A tourism destination is a system comprised of interrelated and interdependent organisational elements and social bonds that are subject to constant change imposed by internal and external driving forces. Actors are organised across a micro, meso and macro level and collaborate to supply the tourism product.**
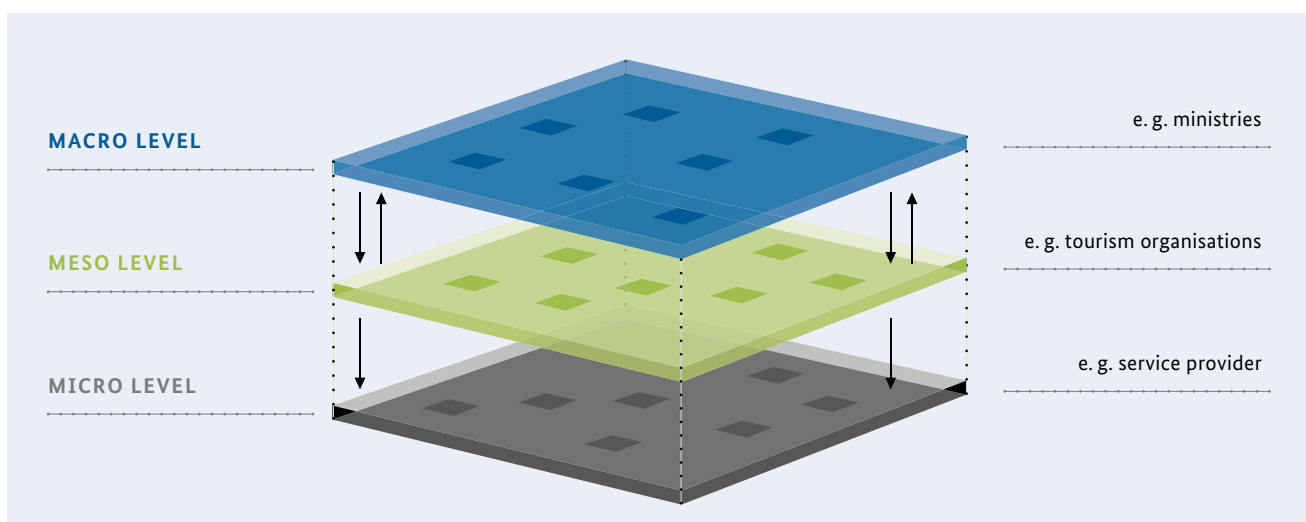

MACRO LEVEL	e. g. ministries
MESO LEVEL	e. g. tourism organisations
MICRO LEVEL	e. g. service provider

Figure 2: The tourism destination system

2.2 Risks to tourism

Risk is a key concept to assess, understand and build resilience in tourism destinations. Destinations are exposed to different hazards, threats and shocks or stressors that pose a risk to tourism. While different risk concepts and definitions exist, within scientific disciplines, cultures and languages, the concept of risk generally implies the potential for negative outcomes, impacts or consequences where something of value is at stake and where the occurrence and degree of an outcome is uncertain (Reisinger et al., 2020). While risks are often characterised as function of hazard, vulnerability and exposure, there is a growing recognition of framing risks more dynamically: Risks can not only arise from potential impacts of different hazards, but also from human responses to risks creating negative side effects or trade-offs on societal goals such as sustainable development (Oppenheimer et al., 2014; Reisinger et al., 2020).

It is important to distinguish hazards from risks (Renn, 2010). **Hazards**, however, encompass more than natural extreme events. Different types of hazards exist, including sudden shock events (e.g. landslides, earthquakes or terrorist attacks) as well as slow-onset stressors (e.g. environmental degradation, droughts, loss of biodiversity or economic decline) (IPCC, 2014; UNDRR & United Nations General Assembly, 2016).

Risks have the potential to harm something of value in the tourism system. Sources of risks can be natural, anthropogenic / human-made or socio-natural and include (UNISDR, 2009 / 2017):
- geophysical origin (e.g. earthquakes, mass movements),
- meteorological or climatological origin (e.g. intense rainfall, storms, cyclones, droughts, wildfire),
- hydrological origin (e.g. floods, landslides),
- chemical / biological origin (e.g. diseases, insect infestations, chemical accidents),
- environmental origin (e.g. environmental degradation, pollution),
- societal origin (e.g. terrorist acts),
- economic origin (e.g. financial crisis),
- political origin (e.g. political unrest, riots),
- infrastructural / technical origin (e.g. transportation accidents).

> In the context of tourism, a risk is the potential for adverse impacts and consequences for something of value in the tourism system depending on the local context, i.e. tourism actors, tourists and visitors, assets, properties, infrastructure, natural or cultural attractions.

Figure 3 summarises the key elements for analysing risk in a tourism destination. To better grasp how risk is created and how to build resilience, it is essential to identify who or what is at risk to what. Thus, having an understanding of the **different elements** (e.g. actors, infrastructure, services) who are exposed to different threats in a tourism destination is essential. These elements include:
- people (tourists, tourism service providers, communities),
- general infrastructure (roads, visitor entry points),
- tourism-specific structures (hotels, shops, restaurants),
- attractions (natural and cultural),
- services and activities.

Exposure is "the presence of people, livelihoods, species or ecosystems, environmental functions, services and resources, infrastructure or economic, social or cultural assets in places and settings that could be adversely affected" (Oppenheimer et al., 2014, p. 1048). **Vulnerability** is the extent to which something or someone can experience harm or damage after exposure to a hazard (IPCC, 2022; UNDRR & United Nations General Assembly, 2016).

Identifying options for action to adress risks is crucial to build resilience. Options for action need to be appropriate to their respective context, feasible and relevant, include activities and measures to respond to, prevent, adapt to, prepare.

Some trends, socio-economic conditions and global processes are significant drivers of risk. **Risk drivers** are particularly related to vulnerability but also influence hazards and the degree of exposure (UNDRR & United Nations General Assembly, 2016). They cover

▶ physical aspects (e.g. poor design and construction of buildings or unregulated land use planning),
▶ social aspects (e.g. poverty, inequality, urbanisation, migration, social unrest),
▶ economic aspects (e.g. income structure, dependence on a single livelihood),
▶ environmental aspects (e.g. poor environmental management, overconsumption of natural resources, environmental degradation, climate change).

The generated or potential **adverse impacts** threaten the functioning of the tourism system (decline or standstill of tourism activity in the destination). While direct impacts include physical or structural consequences (e.g. loss of life, injury or other health-related impacts; or the damage, destruction or disruption of properties essential for tourism), indirect impacts are the subsequent or secondary results of the initial hazardous event, such as business interruption losses

due to closure of transport networks or damage of the destination image (UNDRR & United Nations General Assembly, 2016). Some impacts are difficult to quantify particularly when there is a psychological, social or cultural meaning associated to it (e.g. destruction of cultural heritage site, damage of reputation / image). Building on literature (Becken et al., 2019; OECD, 2017; UNDRR, 2015) and the case studies analysed in this project, we distinguish between different dimensions of impacts for a tourism destination that include but are not restricted to impacts on:

▶ built environment and infrastructure (i.e. damage or destruction of hotels),
▶ human lives (i.e. safety, loss of lives, health),
▶ economy (i.e. loss of income, loss of employment opportunities, worker migration to other sectors),
▶ environment (i.e. loss of natural attractions, environmental degradation, loss of resources),
▶ destination image (i.e. reputation, competitiveness),
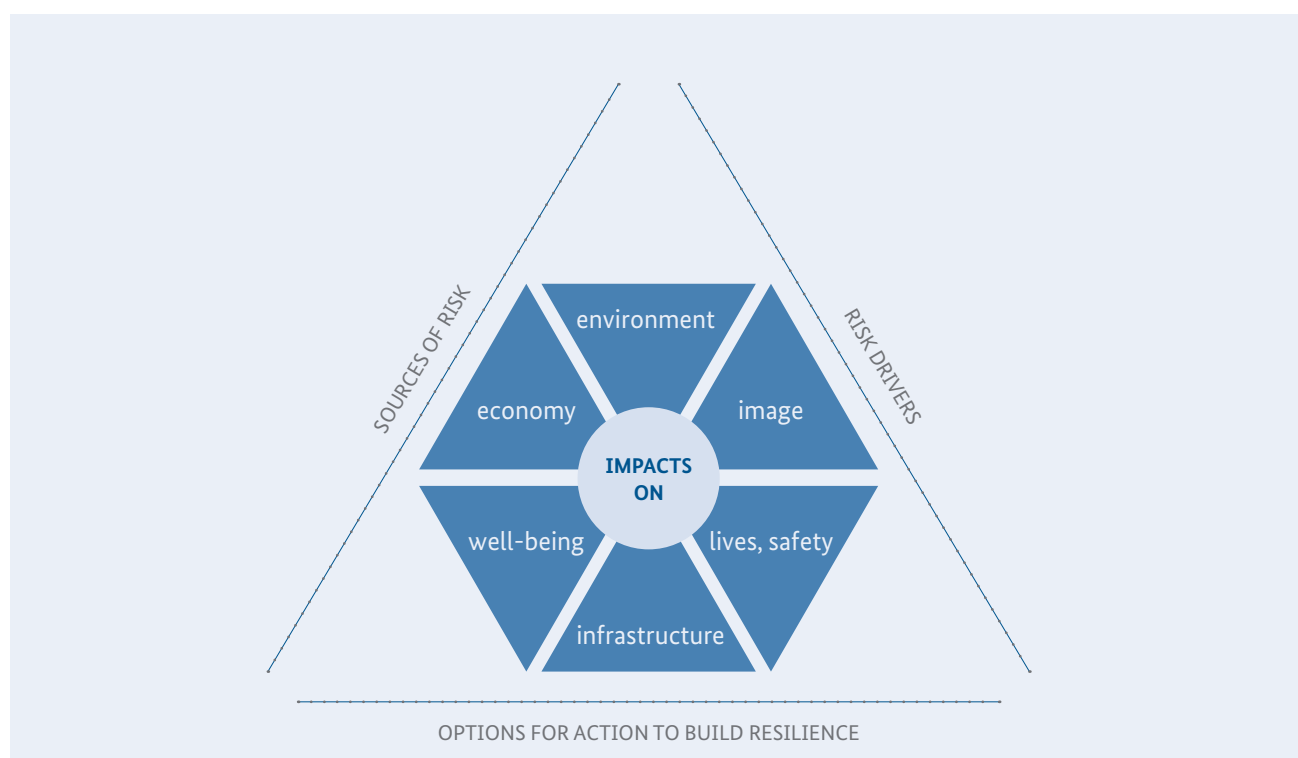▶ community well-being.

Figure 3: Analysing risk and resilience in a tourism destination

2.3 Resilience in tourism destinations

Different understandings of resilience exist depending on the disciplinary background and underlying paradigms of different research traditions. Two research traditions in particular stand out, which define, conceptualise and apply resilience differently: research on social-ecological systems and research on disaster risk (Posch et al., under review). Both perspectives add valuable elements that increase our understanding of destination resilience.

In scholarship on disaster risk, resilience has been historically linked to the concept of vulnerability although there is no clear understanding of its relationship (Keck & Sakdapolrak, 2013). Overall, the focus in disaster risk research is on the capacities or abilities of people, households or communities to deal with a specific risk clearly defining who or what should be resilient against what.

Destination resilience combines two perspectives on resilience: **generic and specified**

In social-ecological systems scholarship, resilience has evolved gradually from a focus on the ability of ecological and social-ecological systems to absorb disturbances to a focus on their ability to adapt to perturbations (Folke, 2006; Folke et al., 2010). In this perspective, generic principles and conditions have been identified for enhancing resilience directed towards disturbances that cannot be identified, or risks that are novel, unforeseen and uncertain (Carpenter et al., 2001/2012; Folke et al., 2010).

Our conceptual ideas about destination resilience combine these two perspectives of resilience, which we will call **generic** and **specified resilience**, a specific framing of resilience that fosters the ability to respond to a particular risk (e.g. terrorist attacks, floods or the eruption of a volcano) and a generic framing of resilience that focuses on disturbances that cannot be identified or risks that are novel, unforeseen and uncertain (Carpenter et al., 2012; Folke et al., 2010). However, both perspectives acknowledge that resilience is about people and their ability to take action to deal with different risks (Posch et al., 2020; Posch et al., under review).

> **Destination resilience is the overall ability of people in a tourism destination (e.g. service providers, institutions, organisations) to deal with different risks while maintaining an acceptable level of functioning of the tourism system without compromising long-term prospects for sustainable development. Dealing with existing and emerging risks involves the ability to assess, plan and act in order to prepare for, prevent, adapt and respond to different sources of risks (based on UN, 2020; UN-Habitat, 2018).**

Specified resilience can be strengthened through risk governance and risk management. Risk governance aims to include different actors in dealing with risks and to tackle identify root causes and drivers of vulnerability and exposure (Renn, 2010; UNDRR, 2022). Risk management focuses on re-active and pro-active actions to prevent new risks, and reduce or manage existing risks:

▸ prevention / mitigation (e.g. coastal reinforcement, trail marking, economic incentives),
▸ adaptation (e.g. land use planning, building codes, early warning systems, awareness / education programmes),
▸ preparedness (e.g. planning for emergency shelter sites, evacuation routes, emergency energy and water sources) and
▸ response and recovery (e.g. emergency funds).

Building on extensive research from the disaster risk and climate change communities, specified resilience is context- and place-specific addressing all aspects of risk (exposure, hazards and vulnerability) (Abram et al., 2019). Different factors influence the ability and willingness to take actions serving both as enablers and barriers (Posch et al., 2020). While the ability to take action strongly depends on the access to assets or capital (human capital, social capital, natural capital, physical capital, and financial capital), the willingness is shaped by individual values, norms and beliefs.

Generic resilience focuses on general or common aspects that are less context dependent and thus universally applicable. Across different disciplines, international frameworks and policy guidelines, principles (also referred to as conditions, essentials or qualities) have been identified for enhancing resilience (Quinlan

Figure 4: Linking sustainability, resilience principles and risk management

et al., 2015). Based on a review of selected studies and global frameworks, we summarised recurring themes and common elements (→ Annex 1).

We identified five recurring themes that provide a general orientation on **generic principles** that enable and encourage the development of resilience (→ Figure 4, → Annex 2):
Diversity and redundancy: while diversity implies the possibility to choose between different options and having more variety, redundancy also makes it possible to use a variety of available components in the event of an emergency.
Social networks: social networks contribute to the building of social capital and can be distinguished in bonding and bridging social capital
Reflexivity and awareness: reflexivity and awareness relates directly to specified resilience and provide a systemic perspective on risks.
Flexibility, adaptability and learning: adaptive learning enables recognizing risks, learning from them and adapting strategies accordingly; flexibility in processes combined with openness to new strategies and solutions.
Participation and collective action: participation refers to the involvement of various actors in decision-making and development processes.

These principles are normative and can be realised as strategy that guide the development of concrete action for different actors in a tourism system. The operational significance of the principles strongly depends on the individual actors at the destination and can be connected to specific risks.

Example 1: What does "diversity & redundancy" mean for a tour operator? E.g. addressing diverse target groups or spreading offers over the season in order to spread risks and have multiple sources of income.

Example 2: What does "diversity & redundancy" mean in the face of a global pandemic or in case of beach erosion? Marketing the product to domestic tourists instead of international travellers in case of travel restrictions or offering services to complement the classic sun and beach product with wellness, health or sports products.

The **integration** of both general and specified resilience is a fruitful addition to the discussion on destination resilience by immediately addressing known risks through risk management without losing sight of novel and unforeseen risks (→ Figure 4)

2.4 Resilience for sustainable development

Resilience and sustainability are often used in similar contexts, as the ambiguity of both terms and the only marginal differences make it difficult to distinguish between them (Hall, 2019; Lew et al., 2016). Both concepts are closely linked and share several characteristics but are ultimately only related and not identical (Hall et al., 2017).

While tourism used to be predominantly framed as a threat to the resilience of ecosystems, it is now increasingly acknowledged as a subject suffering from adverse impact induced by global tourism activity itself and other risk drivers.

Considering destinations as complex systems, it is therefore appropriate to include external influences in combination with system-immanent influences when considering risks. This is where a link to sustainability becomes apparent. Sustainable tourism is defined as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (UNEP, 2005). This definition is based on the core idea that growth is limited, and that ecological, economic and social resources are not infinitely available and must thus be used wisely or conserved.

In research, scholars are divided over the question whether sustainability builds on resilience or vice versa. In terms of spatial scale, resilience refers to the dynamic handling of shocks and stressors and therefore often operates on a local scale whereas sustainability broadens the view to global interdependencies. On a temporal scale, resilience thinking attends to shorter cycles whereas sustainability is more future-oriented and aims at conserving resources over a long period of time.

Finally, the fallacy must be dispelled that a high level of resilience in a tourism destination necessarily has a positive impact on its sustainable development. As per its definition, a resilient system can assess, plan and act to prepare for, prevent, adapt and respond to hazards to maintain an acceptable level of functioning. Said level of maintenance can, however, manifest or even exacerbate existing ecological, social and economic imbalances. An example could be the set-up of concrete blocks to mitigate beach erosion which could in turn harm marine biodiversity or affect ocean currents.

In line with a strong sustainability perspective, the focus should not (only) be on how the tourism structures themselves can be maintained but to the extent in which tourism can contribute to the resilience of an entire destination and thus enable sustainable development (→ Figure 4). Taking this into account, strategies for organisations and institutions need to be identified that can contribute to life-sustaining conditions in socio-ecological systems and strengthen the resilience of the destination as a whole.

03

5-step approach to analyse destination resilience

Destination resilience has evolved as valuable concept to deal with risks and uncertainty. However, it has not been easy to translate these conceptual ideas into useful practice. Besides the conceptual issues surrounding the concept of destination resilience, it is mostly because the right methods and tools to systematically analyse risks and resilience in a tourism destination are not available.

The destination resilience analysis guideline presented herein aims to provide an effective method to support:

▸ **analysing the situation** in a given tourism destination to generate an overview of different actors and assets in the destination,
▸ **identifying different sources of risks** and analysing why they pose a risk for tourism **depending on the local context,**
▸ Developing a **shared understanding** of identified risks by analysing underlying risk drivers,
▸ **evaluating options for action** to respond to risks,
▸ **identifying barriers and entry points** for actions to select the most relevant, appropriate and feasible actions towards resilience in a destination,

▸ **creating ownership by defining roles and responsibilities** for action towards resilience and helping allocating funds for actions towards resilience,
▸ sharing a vision how **resilience principles** can be integrated into daily tourism practice to deal with unknown risks and disturbance.s

In the following sections, you will find a step-by-step guideline to analyse risks and resilience in a tourism destination. The analysis involves the following five steps as shown in → Figure 5.

Each step will present expected outcomes, guiding questions and suggested tools and methods. Moreover, the content will be illustrated with good practice examples from case studies in the Dominican Republic, Namibia and Sri Lanka.

STEP 1
DEFINING THE DESTINATION
Definition and analysis of the destination system

STEP 2
IDENTIFYING SOURCES OF RISK
Overview of risks and hazards for tourism

STEP 3
UNDERSTANDING RISKS AND OPTIONS FOR ACTION
Risk analysis and options for action

STEP 4
ANALYSING ENABLERS AND BARRIERS FOR ACTION
Identifying barriers to and entry points for options for action

STEP 5
CREATING OWNERSHIP AND REFLECTING RESILIENCE PRINCIPLES
Defining roles and responsibilities for resilient action

Figure 5: Overview of the 5-step approach to analyse destination resilience

3.1 General considerations

Why conduct a destination resilience analysis?

A destination resilience analysis will act as an internal as well as external management and communication tool. Given the increasing occurrence of crises, many tourism stakeholders are aware of the need to address topics such as resilience and crisis management but find themselves overwhelmed when it comes to identifying the risk profile of their destination, coordinating responsive actions and rolling out a long-term resilience strategy. Conducting a structured destination resilience analysis therefore not only enables destination managers to better plan and act to prepare for, prevent, adapt and respond to hazards that pose a risk to tourism but can also act a communication tool to customers distinguishing the destination as a safe place for holidaymaking.

The destination resilience analysis guideline is built on the principles of **local expertise** and **ownership**. It follows a bottom-up approach turning the spotlight on local knowledge and encouraging the development of a strategy in the destination for the destination. That way, the influence of external agents from

development cooperation is limited thus encouraging long-term responsibilities from the destination. The proposed methodology allows for a resilience analysis tailored to the local context and ensuring the relevance of proposed options for action.

Moreover, the destination resilience analysis allows for the integration and genuine **participation** of a variety of destination stakeholders and is designed to enhance awareness, understanding, acceptance and ownership of resilient action among them.

The destination resilience analysis guideline ensures that resilience aligns with principles of sustainable development and accepted approaches and terminologies of risk and vulnerability research. It considers the entire spectrum of tourism destinations and risks from different sources of risk, making it flexible to be applied to a variety of tourism destinations. Accordingly, the analysis can be conducted at different scales depending on the destination's definition and the local context.

What kind of data is required?

The quality and availability of relevant data particularly concerning risks is often an issue in tourism destinations, especially in the Global South. Therefore, the destination resilience guideline does not require extensive data sets and models but instead draws

on expertise and knowledge already available in the destinations. In line with the entire analysis methodology, the data is collected through a bottom-up approach by encouraging the use of different methods for each step to generate knowledge relevant to the objective of the analysis. Depending on the local context and resources, suitable and appropriate methods can be chosen.

The destination resilience analysis is **flexible** and can be adapted to the local context. The methodological guideline presented herein is intended as guidance, rather than a prescription. Instead, in the attempt to avoid an one-size-fits-all approach, it is a site-specific analysis that can be tailored to the local circumstances. Methods used in each step are flexible and allow for an adaptive application for specific contexts with varying degrees of scientific rigour. Based on a **participatory approach**, the methodology allows tourism actors themselves to identify risks and options for action appropriate to their respective context.

The methodological guideline is not limited to a specific tourism destination or spatial level nor is it fixed temporally, allowing for the modification and revision of actions over time.

General questions concerning the setup of analysis are:
- Which studies and data concerning tourism, hazards and risks already exist?
- Is there existing data or a monitoring system on the economic, environmental and social impacts of tourism activity in the destination?

- Is there an existing inventory of tourism actors and businesses that specifies the approximate quantity and types of businesses?
- Is there an existing hazard map or inventory of hazards that documents past events and processes?
- What strategic policy frameworks exist that address the topic of tourism, sustainable development, hazards and risk management? Are they being implemented?
- Who are stakeholders from the public, private, civil and academic field that are relevant to the analysis?

How long does the destination resilience analysis take?

The entire destination resilience analysis guideline is designed to be flexible. For most stakeholders in a tourism destination, this will mean providing access to data and information and actively participating in two workshops. For the team leading and facilitating the analysis, more time is needed in the preparation and reflection phase. The timeline in Figure 6 gives an example of the time that was needed for each step of

the destination resilience analysis undertaken in the Dominican Republic, Namibia and Sri Lanka. Depending on the size of the team and the monetary resources of the organisation intent on conducting the analysis, 4-5 months are a realistic dimension besides usual business activity. A number of steps, especially in the starting phase, can be performed in parallel.
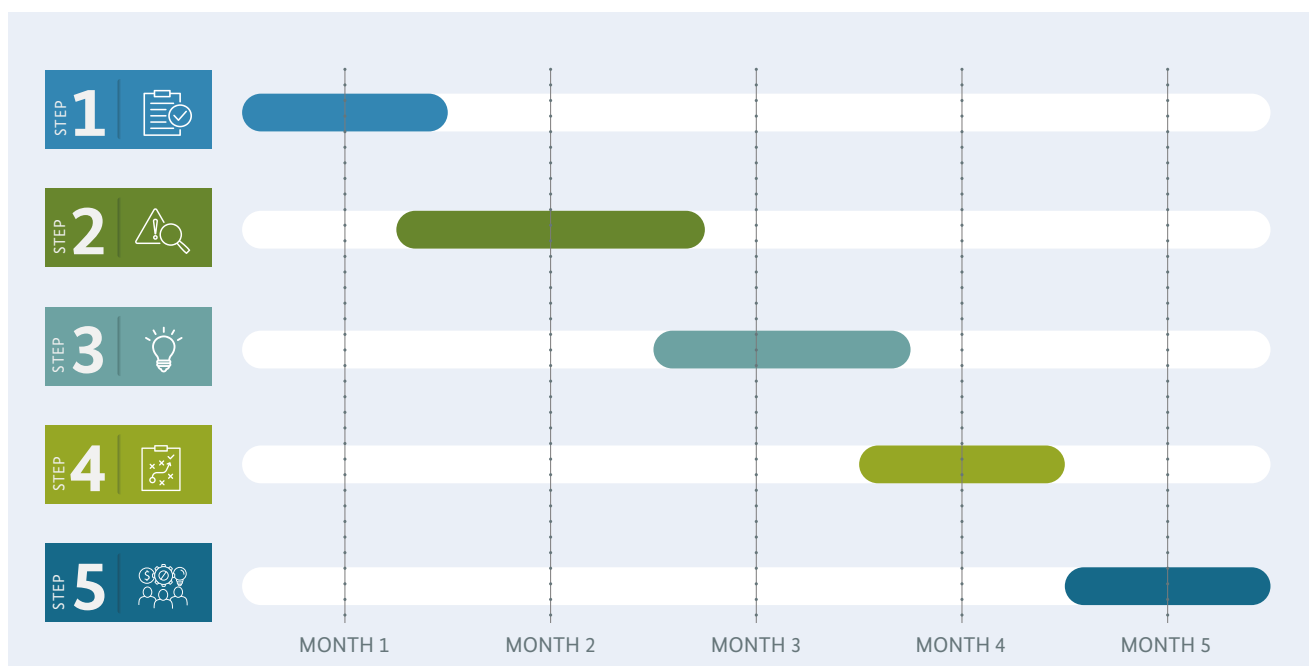

Figure 6: Illustrative timetable for a destination resilience analysis

3.2 Overview of 5-step approach

STEP 1

DEFINING THE DESTINATION

EXPECTED OUTCOMES

Description of tourism system in the chosen tourism destination, including
▶ overview of the context,
▶ overview of main actor groups and stakeholders of the formal and informal tourism economy,
▶ overview of relevant assets, products and services (destination inventory).

The destination is the cornerstone of the analysis, which is why it is essential to determine the unit of analysis before engaging with further steps of the guideline. Once a destination has been clearly marked, the analysis can capture aspects of the local geography and characteristics of tourism in that destination. The purpose is to help build a thorough understanding of tourism activity in that destination (context, actors, assets, visitors, governance, tourism system, etc).

The question of resilience of whom or what will guide this first step. It responds to the well-established fact that "resilience of a destination is often a matter of

the resilience of its constituents" (Prayag, 2018, p. 134). Thus, describing the tourism system, identifying different actors and assets and examining its defining characteristics (e. g. socio-economic, environmental and institutional aspects) is the first step towards a meaningful understanding of destination resilience. Methodologically, this step involves a desk study – a literature review of tourism–related information available including documents and secondary data (e. g. existing data sets, reports and scientific studies). A literature review is often the main source of information on the touristic environment and its different actor groups but can also be enriched by stakeholder consultation.

GUIDING QUESTIONS

What is the **geographical scope** of the destination of interest (e. g. a specific community, a district, a region, a specific type of destination)?

Who are the **main actors** involved in the creation and delivery of the tourist product offered in the destination?

What **elements** compromise and describe the destination (e. g. natural and built environment, assets, attractions, visitor markets)?

What is the social, economic, historic and political **background** of the destination?

SUGGESTED TOOLS AND METHODS

› Desk research, literature review,
› stakeholder identification and consultation (e. g. key person interviews).

STEP 1

GOOD PRACTICE FROM CASE STUDIES

DEFINING THE DESTINATION – NAMIBIA

The research team from Namibia started the analysis by clearly defining the unit of analysis. In this case, the Erongo Region surrounding the city of Swakopmund was chosen as the scale of analysis. After clearly defining the region, the research team specified the local context, compiled an overview of tourism actors, identified relevant source markets and visitor profiles. Moreover, they compiled the destination inventory with all its key attractions and assets. Lastly, the governance structure of the destination was mapped out.
→ Destination Risk and Resilience Manual Erongo Region

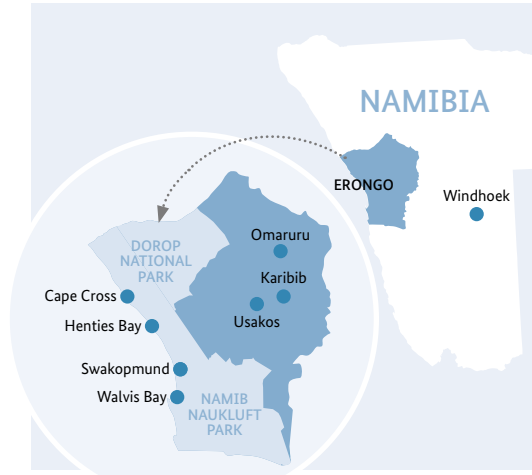**Figure 7:** Map of Erongo Region

GOOD PRACTICE FROM CASE STUDIES

ACTOR MAPPING IN THE DOMINICAN REPUBLIC

In the pilot region Samaná in the Dominican Republic, extensive literature review and interviews with key stakeholders facilitated the development of a detailed actor mapping containing governmental, non-governmental and private sector bodies (→Figure 8).

Furthermore, information on source markets and visitor profiles were examined to identify (inter)national dependencies. Lastly, attractions and assets relevant for tourism development were identified. → Destination Risk and Resilience Manual Samaná Province
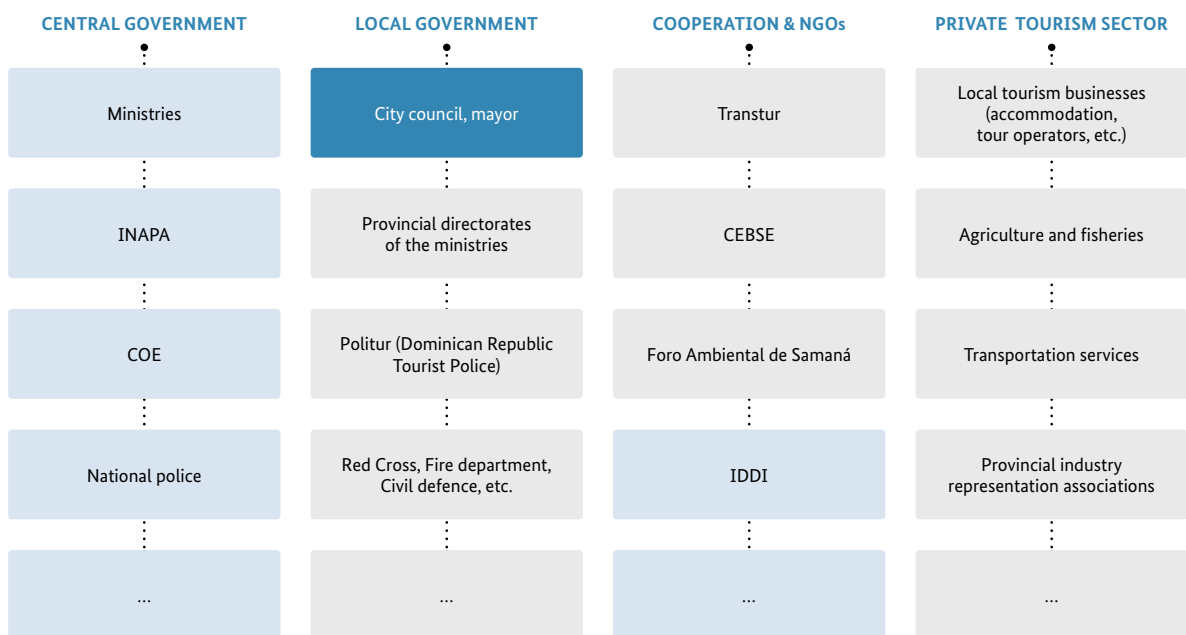
CENTRAL GOVERNMENT	LOCAL GOVERNMENT	COOPERATION & NGOs	PRIVATE TOURISM SECTOR
Ministries	City council, mayor	Transtur	Local tourism businesses (accommodation, tour operators, etc.)
INAPA	Provincial directorates of the ministries	CEBSE	Agriculture and fisheries
COE	Politur (Dominican Republic Tourist Police)	Foro Ambiental de Samaná	Transportation services
National police	Red Cross, Fire department, Civil defence, etc.	IDDI	Provincial industry representation associations
...	...	...	...

Figure 8: Actor mapping in Samaná, Dominican Republic
Source: Own elaboration based on Serrano, 2022)

▪ Regional and national   ▪ Provincial   ▪ Local

STEP 2

IDENTIFYING SOURCES OF RISKS

EXPECTED OUTCOMES

Risk registry, including
▸ overview of different sources of risks
 (e.g. natural and human-made hazards)
 and perceived risks,
▸ overview of observed impacts on tourism.

Analysing resilience in a destination and identifying actions to build specified resilience requires defining the question who is at risk and risk of what. In the context of tourism, a risk is the potential for adverse consequences for something of value in the tourism system depending on the local context (for example, the risk of property damage due to floods for hotel owners). Step 2 involves obtaining an understanding of different sources of risks for different parts of the tourism system in the destination. This also includes identifying perceived risks and describing observed or experienced impacts on tourism in the selected destination. The step can be broken down into two parts:

Part 1 A focuses on identifying and profiling the multitude of risk sources that can affect the destination and relating them to tourism. It includes the evaluation of how elements in the tourism system (e.g. visitors, accommodation providers, attractions) are exposed to various hazards and threats and the assessment of actual or potential impacts these hazards and threats might have on the system. This includes identifying different hazards such as geophysical, meteorological, climatological, hydrological, environmental, biological, societal, financial, political and infrastructural hazards. Methodologically, this step necessitates a desk study – a literature review of hazard-related information available, including documents and secondary data (e.g. existing data sets, reports and scientific studies); if needed it is supplemented with interviews.

Part 2 acknowledges the social construction of risks. Sometimes, perceived risks and concerns of local actors are in contradiction with identified risks from the literature review or expert interviews. What is selected and labelled as a hazard or risk in a tourism destination may differ between different actors – depending on underlying goals, perceptions, experiences or values (Renn, 2010). By conducting interviews or focus group discussions with local tourism stakeholders, subjective perspectives of risks and concerns of local actors in a tourism destination can be identified. All tourism-relevant actors in a destination should be represented. The information and findings from part 1 should be integrated with the data and findings from the interviews in part 2.

GUIDING QUESTIONS

What different sources of risk exist in the tourism destination?

How do identified sources of risk affect tourism?

What is perceived as a risk to tourism?

SUGGESTED TOOLS AND METHODS

› Literature review of scientific studies
 (e.g. socio-economic, environmental and
 development) and grey literature
 (e.g. national hazard, risk or adaptation
 plans; IPCC reports; information portals),
› supplementary interviews or focus group
 discussions with selected representatives of
 the destination as well as local experts.

GOOD PRACTICE FROM CASE STUDIES

IDENTIFYING SOURCES OF RISKS TO TOURISM – SRI LANKA

The research team from Sri Lanka started this step by compiling a list of hazards and deducted potential risks for tourism in the mountain town of Ella. An literature review and a site visit to the destination were the basis for this.

With the background knowledge gathered through the site visits and desk research, the team conducted two **focus group discussions** to supplement the information gathered with practical data from the experts in the tourism and related industries. The team also moderated two focus group discussions featuring academics with a disaster risk reduction background, local government officials, local police, tourist information personnel, tourism-related personnel from the health sector, transport company officials, accommodation operators, hotel association representatives and the local disaster management centre.

Participants discussed sources of risk and their negative impacts on tourism as well as other perceived risks. Through that, the project team was able to gain a vast area of knowledge and information regarding the risks for Ella and explored the suggestions from the experts.

STEP 3

UNDERSTANDING RISKS AND OPTIONS FOR ACTION

EXPECTED OUTCOMES

▶ Identification of key risks for tourism,
▶ discussion of underlying drivers of risks,
▶ overview of potential options for actions.

In the previous step, different sources of risks were identified based on scientific and local knowledge. Understanding key risk and underlying drivers of risk is crucial for building resilience. In step 3, an expert workshop with different experts and representatives of the tourism destination is conducted. The aim of the workshop is 1) to identify key risks to tourism, 2) to reflect underlying risk drivers and 3) to summarise options for action to respond to these risks.

Identifying key risks can be supported by developing risk diagram (risk matrix) with the workshop participants to visualise perceived probability (in the y-axis using: almost certain, likely, possible, unlikely and rare) and perceived extent of consequences (in the x-axis using three levels: high, medium and low). The risk diagram supports the identification of key risks and suggests the further course of action (Renn, 2010).

Risks are influenced by various underlying drivers. For example, climate change is a major driver of future risks by altering the frequency and severity of natural hazards (IPCC, 2022). Other risk drivers are environmental degradation, unplanned urbanisation or migration. Developing risk chains for key risks supports the identification of underlying drivers of risk (Fritzsche et al. 2014).

The workshop participants collect options for potential actions to respond to the identified risks, including actions and measures to prevent risks (e.g. coastal reinforcement, trail marking, economic incentives), to adapt to and reduce the impacts of existing risk (e.g. land use planning, building codes, early warning systems, awareness or education programmes), to prepare for risks (e.g. planning for emergency shelter sites, evacuation routes, emergency energy and water sources) and to recover from disasters (e.g. emergency funds).

The developed measures are purposefully called options for actions and not recommended actions as none of them are imperative and solely valid. The intention is rather to display the variety of pathways to be able to evaluate which option is feasible, practical and realistic. In some instances, resilient action might contradict goals of sustainable development (cf. chapter 2) which means that all options must be listed to select the ones which offset corresponding advantages and disadvantages in the best possible way.

GUIDING QUESTIONS

What are key risks for tourism in the destination?

What underlying factors influence risks?

What options for responding to risks are available (e.g. actions and measures to adapt, prepare, prevent and deal with identified risks)?

SUGGESTED TOOLS AND METHODS

Workshop with local experts or local stakeholders (governmental, non-governmental organisations and academia, e.g. departments or research institutions working on natural resource management, development studies, biodiversity, geography, disaster risk reduction) using participatory workshop techniques (e.g. gallery walk, small group discussions, simulation / serious game, risk diagram, risk impact chain).

GOOD PRACTICE FROM CASE STUDIES

EXPERT WORKSHOP IN WINDHOEK, NAMIBIA

For this step, the research team from the University of Namibia conducted a **participatory workshop** with participants from various institutions that have a stake in the tourism industry in Namibia: educational institutions, tourism associations, government, parastatals, NGOs and tourism businesses. The aim of the workshop was to identify the tourism destination's risk priorities, risk drivers and the options for action to address the risks.

First, the workshop participants were able to take part in a **gallery walk** which gave them a picture of the status of tourism from a global and local perspective. The idea behind the gallery walk was to stimulate dialogue around tourism before the presentation by the University of Namibia. Among others, the gallery walk covered topics such as global tourism trends, visitor numbers and different hazards. Rather than having a presentation, the gallery walk allowed for extended interaction between the participants and the team as well as between participants themselves.

After a further introduction, breakout sessions were organised for a discussion on key risks, risk drivers and priorities for action. For this, the **World Café method**, which makes use of an informal cafe setting for participants to explore

an issue by discussing it in small table groups was used. Discussions were held in two rounds of 30 minutes each. The cafe atmosphere was intended to allow for more relaxed and open discussions. Three major points of engagement during the discussions were: a) Mapping the risk priorities in the tourism industry by starting to define the meaning of risk; b) Identifying drivers of these risks and c) Suggesting potential options for action.

After the breakouts were concluded, the different groups were given an opportunity in the plenary to provide feedback on the discussions. They discussed identified risk priorities, underlying drivers of risk and options for action. An example for a risk chain from the workshop can be found in Figure 9.
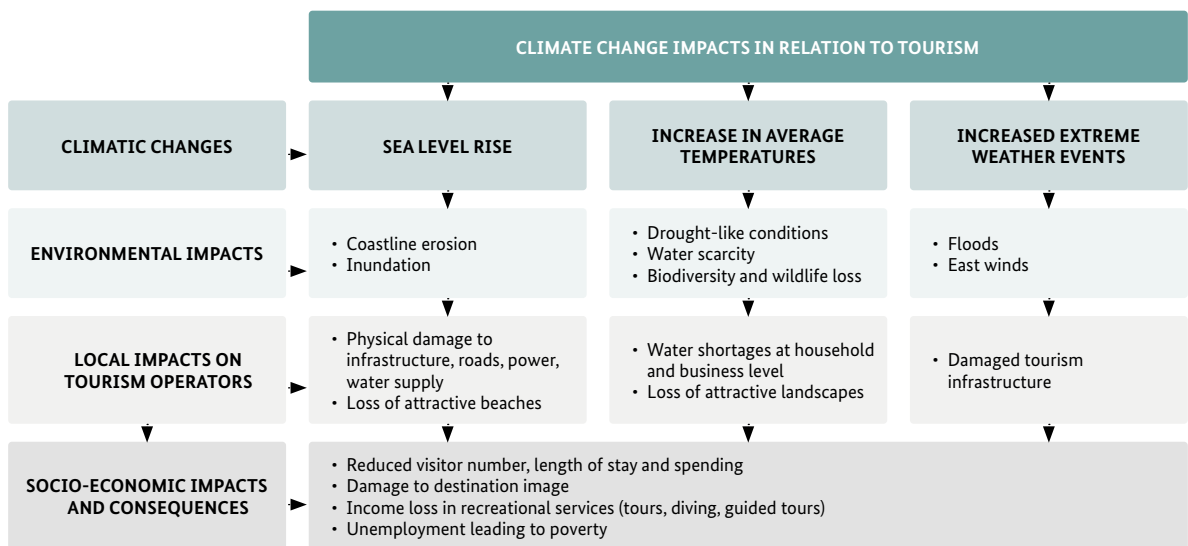
CLIMATE CHANGE IMPACTS IN RELATION TO TOURISM		
CLIMATIC CHANGES → **SEA LEVEL RISE**	**INCREASE IN AVERAGE TEMPERATURES**	**INCREASED EXTREME WEATHER EVENTS**
ENVIRONMENTAL IMPACTS → • Coastline erosion • Inundation	• Drought-like conditions • Water scarcity • Biodiversity and wildlife loss	• Floods • East winds
LOCAL IMPACTS ON TOURISM OPERATORS → • Physical damage to infrastructure, roads, power, water supply • Loss of attractive beaches	• Water shortages at household and business level • Loss of attractive landscapes	• Damaged tourism infrastructure
SOCIO-ECONOMIC IMPACTS AND CONSEQUENCES → • Reduced visitor number, length of stay and spending • Damage to destination image • Income loss in recreational services (tours, diving, guided tours) • Unemployment leading to poverty		

Figure 9: Risk chain example from Namibia   *Source: Own elaboration based on Becken et al, 2019; Fritzsche et al, 2014*

STEP 3

GOOD PRACTICE FROM CASE STUDIES

GOOD PRACTICE FROM CASE STUDIES: DEVELOPMENT OF A RISK MATRIX IN THE DOMINICAN REPUBLIC

As part of this step, the local team in the province of Samaná held a participatory workshop in which actors from all institutions, organisations and corporations involved in the tourism sector came together.

Participants received a tag with their name on it and a specific colour to show which institutions they represented. They were then distributed over four tables to create **heterogeneous groups** with public sector, private sector and civil society representatives at each table. The workshop entailed a detailed description of the tourism system in Samaná and an overview of hazards and risks for tourism action in the province, illustrated by the moderator.

After identifying strengths, weaknesses, opportunities and threats in a **SWOT analysis**, the participants derived natural and human-made threats to tourism development in the destination. These hazards were then again contrasted with the previously identified shocks and stressors.

Afterwards, shocks and stressors were categorised in a **risk matrix** based on the level of perceived probability and extent of consequence. Working in groups, participants categorised shocks and stresses into four quadrants (high probability and serious consequences, high probability and few consequences, low probability and serious consequences, low probability and few consequences) based on their previous knowledge of and experience in the territory.

The feedback participants provided after the workshop was positive throughout: participants appreciated the opportunity to express their concerns and contribute to tourism planning and development. Moreover, participants felt that they gained a **better understanding** of the responsibilities of each institution and that they learned about new concepts and ideas regarding sustainability and resilience.

STEP 4

ANALYSING ENABLERS OF AND BARRIERS TO ACTION

EXPECTED OUTCOMES

▸ Overview of local preferences for action to address risks and promote sustainable development,
▸ identification of enabling and hindering factors for action.

The aim of step 4 is to evaluate tourism actors' preferences on which options for action to pursue to address risks. In this context, enablers of and barriers to relevant and targeted actions to build resilience are evaluated. Peoples' ability to take action in the context of risk strongly depends on their access to assets or capital (human capital, social capital, natural capital, physical capital and financial capital), while the willingness to take action is shaped by individual values, norms and beliefs. These factors serve both as enablers and barriers. For example, tourism stakeholders often lack the adequate skills, awareness and knowledge of risk management or sustainable tourism planning for the technical development or implementation of actions that respond to different risks. Access to financial resources or a social network is essential to plan or implement actions that build resilience. Besides, perceived benefits and interests – shaped by underlying values, norms and beliefs – serve as a strong motivating or disabling factor to take action. Thus, analysing enablers and barriers that influence people's ability and willingness to take action is an essential step to building destination resilience and creating ownership for proposed measures.

Besides identifying enabling and hindering factors for specific options for action, the latter are evaluated in terms of appropriateness and feasibility to integrate local perspectives and priorities. Moreover, this step aims to identify preferences for the type of action to address risks (e.g. preferences for preventive or proactive action). We suggest the use of a survey methodology to capture a broad spectrum of preferences as well as barriers and entry points that may enable or restrict actions. Ideally, a survey or short, structured interviews can be used to activate a sample size large enough to allow for statistical generalisation.

GUIDING QUESTIONS

How do local tourism actors prioritise different options for action to respond to risks?

Which options for action are feasible and relevant for local tourism actors?

What factors influence people's ability and willingness to take action for building resilience (e.g. financial and time resources, knowledge, social networks, beliefs, values, norms)?

SUGGESTED TOOLS AND METHODS

› Survey or
› short, structured interviews.

STEP 4

GOOD PRACTICE FROM CASE STUDIES

ACTOR SURVEY IN SRI LANKA

For this step, the local team from Sri Lanka conducted a particularly thorough analysis, carrying out a survey among local stakeholders. The team used the **"Systemic Consensus Building"** approach to analyse the acceptance of options for action, associated barriers to and opportunities for resilience-building in the project destination Ella. This specific approach was chosen due to the high number of mitigation strategies/options for action for the identified risks in Ella.

As a first baseline, the team organised face-to-face interviews with 18 participants. First, eight **options for action** to mitigate natural risks including hydrological and geological as well as biological hazards were identified. In addition to those natural risks, human-made risks were collected, which were assigned to political, financial and social/cultural risks. Afterwards, the interview participants gave feedback on **barriers** to specified resilience in Ella as a tourism destination. Subsequently, a total of 16 barriers could be derived. In a last step, the project team asked the interview participants about opportunities for resilience-building in the destination, which were then divided into nine categories.

After completing the face-to-face interviews, a quantitative survey with 50 respondents from the public and private sector was carried out. Participants were asked to vote on hazards, risks and the categories developed throughout the precedent survey based on a 4-point Likert scale which ranged from 1 (I strongly support this strategy) to 4 (I strongly refuse this strategy).

Respondents indicated "regulations of construction of buildings" (H4) as the most prioritised option for action for hydrological and geological hazards while "conserve the sensitive mountains" (H2) received the least approval. Regarding the identified political risks, respondents favoured "knowledge dissemination and training" (P4) the most and ranked "development of sustainable and stable national tourism policies" (P3) as the

least favorable option of action in this field. Concerning the socio-cultural risks, a "community awareness programme on sexually transmitted diseases" (S3) was considered the best option for action, whereas "develop experience-based tourism products with securing the traditional culture" (S6) was the most objected option for action. Table 1 exemplifies the voting system employed for the options for action.

Hydrological and geological hazards

	H1	H2	H3	H4
Voter 01	2	4	3	1
Voter 02	2	3	4	1
Voter 03	2	4	3	1
Voter 04	3	1	2	4
Voter 05	4	2	1	3

Table 1: Voting on options for action to mitigate hydrological and geological hazards in Ella

Moreover, they identified barriers to pursuing targeted resilience action in Ella. The three main barriers are shown in Table 2.

Ranking	Barrier
1.	Outdated policies, guidelines, rules and regulations
2.	Inconsistency of industry stakeholders' involvement
3.	Frequent changes in government structure

Table 2: Key barriers for pursuing options for actions to build resilience in Ella

Based on the results of this survey, options for action and subsequent strategies for future resilience-building in Ella could be derived and provided a valuable baseline for the second workshop.

STEP 5

CREATING OWNERSHIP AND REFLECTING ON RESILIENCE PRINCIPLES

STEP **5**

EXPECTED OUTCOMES

> ▸ Identification of responsibilities and strengthening of ownership for resilient action,
> ▸ development of pathways for resilience,
> ▸ integration of resilience principles into daily tourism practice.

In the previous steps, awareness and an understanding of risks for tourism in a specific destination were created and feasible actions identified. In step 5, all findings are brought together. Hence, a participatory workshop with different actors and representatives of the tourism destination is conducted. The aim of the workshop is:

▸ to share and discuss findings from previous steps,
▸ to create ownership for identified actions to respond to risks,
▸ to find solutions for identified barriers to implementing actions,
▸ to create a shared vision how resilience principles can be integrated into daily tourism practice.

First, findings from step 1 (tourism system), step 2 (hazards and risks) and step 3 (risk drivers and options for action) are briefly presented to participants. Next, the results of step 4 (barriers and enablers) are presented to get participants on the same page in terms of risks to tourism and what options for action have been deemed desirable, practical and realistic for future implementation. The relevance and feasibility of proposed actions as well as potential barriers and solutions are discussed again – leading to a shared pathway about their realistic implementation. In a participative setting, responsibilities for selected options for actions are identified i.e. who should be responsible for the implementation of the pursued actions. The involvement, information and co-creation of results is expected to increase the tendency for acceptance, appreciation and implementation of pathways identified by the stake-

holders and create ownership for the proposed strategies. Moreover, the workshop is aimed at facilitating a better community understanding of sustainability and resilience by integrating those ultimately affected by future risks and tourism planning.

Not all risks are known or foreseeable. This is why, in addition to the selected options for action, general resilience principles that help to develop action strategies for dealing with unforeseen future disturbances are introduced. These general resilience principles are presented and discussed – guiding a shared vision on how principles can be integrated in daily tourism practice.

GUIDING QUESTIONS

Who is responsible for the implementation of selected actions for building resilience?

How can identified barriers be overcome and a pathway be developed?

How can local tourism actors integrate resilience principles into their daily tourism practice?

SUGGESTED TOOLS AND METHODS

Participatory workshop (e. g. gallery walk, scenario techniques, experimental game, serious gaming approach).

STEP 5

GOOD PRACTICE FROM CASE STUDIES

PRESENTING FINDINGS FROM THE ANALYSIS IN SWAKOPMUND, NAMIBIA

As part of this step, the University of Namibia conducted a participatory workshop with 25 participants from various stakeholder institutions such as tourism associations, government and tourism businesses. The aim of the workshop was to identify enablers and barriers, develop a long-term resilience strategy and to identify training needs.

An interactive method for introducing the participants was chosen as an opening activity to create an atmosphere conducive to the following discussion. A presentation and a gallery walk showcased the previous project steps. In this session, workshop participants were introduced to various key issues in tourism through posters that were displayed on the walls of the workshop venue. The gallery walk stimulated dialogue around identified risks and options for action and thus set a valuable baseline for the discussion to follow.

GOOD PRACTICE FROM CASE STUDIES

IDENTIFYING RESPONSIBILITIES IN SAMANÁ, DOMINICAN REPUBLIC

Step 5 entails the identification of responsibilities and the development of a long-term resilience strategy for the destination. To achieve this, the local team from Samaná developed an approach for a trans-sectoral resilience roundtable. They concluded that a governance system's comprehensiveness depends to a large extent on the horizontality of decision-making. Through the implementation of a resilience roundtable, all relevant actors of the three governance levels in the province (central, provincial and municipal) as well as NGOs, the community and the private sector can be represented. This structure allows for taking relevant decisions of the territory and its dependencies but also for monitoring processes regardless of changes in who represents the different roles and functions in the institutions, organisations, associations and groups. The following figure exemplifies the set-up of such a round table.

Public Sector	▶ Governors ▶ Mayors ▶ Municipal Districts ▶ …	▶ Provincial Tourism Board ▶ Provincial Environmental Directorate ▶ Provincial Agriculture Directorate ▶ …	▶ Provincial Employment Directorate ▶ Provincial Education Directorate ▶ National Climate Change Council ▶ …
Civil Society	▶ Neighborhood councils ▶ Community leaders ▶ Journalists and activists ▶ Mothers' groups ▶ …	▶ Civil defence ▶ Fire brigade ▶ Red Cross ▶ …	
NGOs	▶ Transtur ▶ Foro Ambiental de Samaná ▶ CEBSE ▶ …	▶ SME support cluster ▶ Guild for business activities ▶ Construction sector cluster ▶ …	
Private Sector	▶ Logistics service cluster (public and private transport cluster, etc.)	▶ Tourism service cluster (hotel and restaurant cluster, sports and leisure activities cluster, tourist guide association, etc.)	▶ Agriculture and fisheries cluster ▶ Fishermen's association ▶ Farmers' association ▶ …

Figure 10: Structure of a resilience roundtable for Samaná   *Source: Own elaboration based on Serrano, 2022*

GOOD PRACTICE FROM CASE STUDIES

TRAINING PROGRAMMES IN NAMIBIA AND SRI LANKA

Following the identification of training needs in the workshops in Sri Lanka and Namibia, both project teams designed and conducted training programmes with creative elements such as blended learning or field visits.

In **Sri Lanka**, the local team developed a two-day training programme. During the first day, the director of the local disaster management centre held a workshop on fire safety and emergency response measures in businesses, also addressing environmental risks such as forest fires, landslides and human–wildlife conflict. This first session was followed by a field trip in which participants identified risks in popular tourism destinations, specifically at Ravana Falls, Ella. On the second day, participants reflected on the findings of the previous day and worked in groups to develop risk mitigation strategies. Moreover, another training session on resilience-building principles was held, which also covered how these strategies can be connected to goals of sustainable business development.

In **Namibia**, the local team developed a two-day training programme, which they subsequently conducted in Swakopmund, a central hub in the Erongo Region. To give tourism stakeholders from remote areas the opportunity to participate as well, the workshop was also streamed online. As part of the training, four different modules were offered to the participants: GIS, Destination Brand Management, Community Resilience and Tourism Resilience.

In the GIS-module, participants learned how to identify areas prone to flooding and drought, estimate fire danger and analyse areas prone to human–wildlife conflict. As part of the key risk "drought", which was identified in the preceding workshops, sustainable water consumption, recycling and water harvesting for tourism stakeholders were discussed.

Further topics of the other modules were climate change awareness (e.g. use of climate resilient tourism assets and infrastructure, benefits of having an early warning communication system and training in disaster preparedness and risk inventory), training on collective action (e.g. building successful partnerships/collaborations, social capital) and diversification of business action (e.g. investment in multiple streams of income, savings). Due to the modular structure of the programme, participants had the opportunity to attend every module they were interested in.

In conclusion, the two trainings in Sri Lanka and Namibia were very successful and presented participants with new and important insights. To aid accreditation of the knowledge shared, every participant received a certificate of participation in the end.

04

Ideas and inspirations for building resilience

4.1 Results from applying the 5-step approach

In the Dominican Republic, Namibia and Sri Lanka, the 5-step approach supported the analysis of destination resilience. Within the project, different key risks for tourism, underlying risk drivers, options for action and potential barriers to and enablers supporting the implementation of the identified resilience pathways were identified. The identified sources of risks have the potential to cause adverse impacts on human lives (i.e. safety, loss of life, health), the economy (i.e. loss of income, loss of employment opportunities, worker migration to other sectors), the environment (i.e. loss of natural attractions, environmental degradation, loss of resources), destination image (i.e. reputation, competitiveness) and community well-being. While each of the three case study destinations faces individual risks, there are also common risks ranging from natural hazards to global pandemics (→ Table 3).

Table 3: Key risks in the Dominican Republic, Namibia and Sri Lanka (based on Destination Resilience Manuals)

Key risk	Ella, Sri Lanka	Erongo, Namibia	Samaná, Dominican Republic
Hurricanes and tropical storms			✖
Earthquakes			✖
Extreme precipitation events and floods	✖	✖	✖
Drought / heat waves		✖	
Forest fires	✖		
Beach erosion		✖	✖
Vector-borne diseases / HIV / AIDS			✖
Biodiversity loss	✖	✖	✖
Human–wildlife conflict		✖	
Overexploitation and mismanagement of natural resources	✖	✖	✖
Pollution and solid waste issues	✖	✖	✖
Water contamination	✖		✖
Beach access, issues with land use			✖
Road accidents, infrastructure issues along the borders		✖	✖
Political instability in the border region			✖
Theft / harassment / crime	✖	✖	✖
Drug abuse	✖		

Key risk	Ella, Sri Lanka	Erongo, Namibia	Samaná, Dominican Republic
Sex trade / lack of child protection	✖	✖	✖
Lack of international flights		✖	
Overdependence on tourism	✖		✖
Informal business activity	✖	✖	✖
Debt and working capital issues	✖		
Economic crisis	✖		
Inflation / currency fluctuation	✖	✖	✖

All these risks are intensified by underlying risk drivers, which are often development-related. The most prominent risk drivers in the case study destinations include **unemployment**, **poverty**, **inequality**, **insufficient land use plans**, **poorly planned tourism development**, **corruption**, **government instability**, **geopolitical instability** and, **in particular, significant climate change**.

In the pursuit of finding practical, realistic and feasible options for action to address risks in the destinations, key barriers to implementation of said actions were analysed. The results from the case study destinations indicate that key barriers include **lack of funding**, **lack of knowledge and skills**, **risk culture** and **lack of awareness**.

As mentioned in Step 3 (p. 26 ff), the developed measures to address risk are purposefully called options for actions and not recommended actions as none of them are imperative and solely valid. Some options for action are related to the generic resilience principles whereas other options are risk-specific measures. As there is a myriad of measures to take in the pursuit of mitigating risk this guideline can only display a selection of developed options for action from the case study destinations (→ Table 4).

The destination manuals are available at
https://www.dkkv.org/en/consulting/projects/resilience-in-tourism

Table 4: Identified options for action in the Dominican Republic, Namibia and Sri Lanka (based on Destination Resilience Manuals)

Key risks	Risk to tourism	Potential options for actions
Flooding	▶ Damaged tourism infrastructure. ▶ Decline of visitor numbers in affected area.	**Namibia / Sri Lanka** ▶ Identify flood-prone infrastructure. ▶ Develop climate-proof infrastructure. ▶ Document indigenous knowledge of flood-prone areas. ▶ Map flood-prone areas using GIS. ▶ Construct drainage systems and implement existing drainage plans. ▶ Training on civil engineering strategies for flood-prone infrastructure for tourism stakeholders.
Drought	▶ Loss of biodiversity and wildlife. ▶ Water scarcity and shortages. ▶ Inadequate water supply for local communities and tourism facilities.	**Namibia** ▶ Develop and enforce policy on rural and urban water harvesting. ▶ Create awareness on water recycling at private household and tourism business level. ▶ Promote public tourism infrastructure projects to reuse rainwater. ▶ Training on preservation of natural resources (e.g. water harvesting, recycling) for local tourism stakeholders and tourists. ▶ Planting of trees. ▶ Training on indigenous drought tolerant plants at lodges and other tourism sites (zero scape plants). ▶ Training on sustainable water consumption, recycling and water harvesting for tourism stakeholders.
Hurricanes and storms	▶ Decrease in safety for visitors and local community. ▶ Damage to infrastructure.	**Dominican Republic** ▶ Organise awareness programmes and leaflets for visitors (including location of nearest shelter). ▶ Training on preparedness measures for tourism actors (e.g. how to prepare emergency supply kit; locating the nearest shelter; covering windows and doors). ▶ Identify safe shelters and evacuation routes.
Forest fires	▶ Decrease in safety for visitors and local community. ▶ Damage to infrastructure and local attractions.	**Sri Lanka** ▶ Organise awareness programmes and leaflets for visitors (including location of nearest shelter, evacuation routes). ▶ Reduce smoke exposure by wearing masks. ▶ Promote the use of high-efficiency filters in air conditioning systems. ▶ Create a checklist for evacuation in tourism facilities. ▶ Strengthen the military, municipal police and emergency institutions, especially firefighters.

Key risks	Risk to tourism	Potential options for actions
Overexploitation and mismanagement of natural resources	▶ Loss of wildlife habitat and species that form part of the tourism destination. ▶ Damage to terrestrial environment and scenery.	**Dominican Republic / Namibia / Sri Lanka** ▶ Develop action plans (e.g. on biodiversity, climate change, pollution prevention and waste management). ▶ Strengthen lifecycle planning in tourism. ▶ Conduct wildlife and environmental assessments and monitoring. ▶ Ensure policy does not grant high-risk mining licenses in parks. ▶ Create awareness and ensure environmentally sustainable mining is adhered to. ▶ Create awareness on dangers of sand mining and other mining to wildlife, humans and the natural environment. ▶ Training on how to appropriately rehabilitate and re-use mined areas for tourism.
Waste and pollution	▶ Littering adversely affects the beauty and health of the landscape and scenery. ▶ May cause harm to local people and wildlife that form part of the tourism destination.	**Dominican Republic / Namibia / Sri Lanka** ▶ Create awareness of safe potable water and the possibility to re-use water bottles and bags. ▶ Build awareness around proper waste disposal and waste management for local communities and tourists. ▶ Implement waste infrastructure improvements. ▶ Ensure strict adherence to and enforcement of environmental law mechanisms, established rules and regulations. ▶ Create incentives for behavioural change e.g. discounts at shops for not using plastic bags. ▶ Build broader awareness around proper waste disposal through use of recycling bins for tourists / visitors, tour guides and locals at household, roads and tourism establishment level. ▶ Create user-friendly videos that cover information on environmental law, rules and regulations.
Human–wildlife conflicts	▶ Imbalance in the ecosystems that attracts tourist. ▶ Extinction, threatened or endangered species that attract tourism.	**Namibia** ▶ Increase surveillance on wildlife. ▶ Enhance ministerial capacity for case management (i.e. evidence collection, prosecution, etc.). ▶ Locally visible patrols (police, tour guides and community members collaboration, etc.). ▶ Manage expansion of human settlement. ▶ Training on case management & prosecution. ▶ Partnership patrolling. ▶ Training for game guards, tour guides.

Key risks	Risk to tourism	Potential options for actions
COVID-19 and vector-borne diseases	▶ Loss of visitors. ▶ Impact on community well-being.	**Dominican Republic / Namibia / Sri Lanka** ▶ Ensure adequate health facilities and health care in remote areas. ▶ Ensure availability of first aid certification of personnel at tourism establishments. ▶ Develop tourism emergency fund (not only for conservancies but for all employees). ▶ Awareness training on the importance of vaccinations. ▶ First aid training for all personnel at tourism establishments.
Sex trade, lack of sex education and child protection	▶ Visitors with HIV and other STD prevalence. ▶ Money-based relationships exacerbating power imbalances. ▶ Impact on community health and safety.	**Dominican Republic / Namibia / Sri Lanka** ▶ Strengthen sex education programmes. ▶ Raise awareness of child protection in tourism businesses and among visitors.
Crime, theft, robbery	▶ Decrease in visitor safety. ▶ Negative impact on destination image. ▶ Decrease in number of visitors. ▶ Loss of income from tourism that can lead to loss of tourism employment (retrenchments).	**Dominican Republic / Namibia / Sri Lanka** ▶ Enhance Tourist Protection Unit at the Namibian Police Force. ▶ Enhance local and community-based patrols. ▶ Awareness campaigns of codes of conduct & crime for tourists and visitors. ▶ Create community awareness of importance of tourism. ▶ Create tourists' awareness campaigns on codes of conduct and crime hotspots (e.g. video clips, leaflets, etc.).

4.2 Refining resilience principles for tourism destinations

Generic resilience principles focus on common aspects that are less context dependent and encourage the development of resilience pathways in tourism. These principles can be realised as strategy that guide the development of concrete action for different actors in a tourism system. Table 5 picks up the generic resilience principles and illustrates their implications for tourism destinations to facilitate a better understanding of their operationalisation.

Table 5: Resilience principles for tourism destinations (based on Destination Resilience Manuals; Röther & Balas, 2022)

DIVERSITY AND REDUNDANCY

- ▶ Identify dependencies on local biodiversity and implement appropriate conservation measures.
- ▶ Implement policies and programmes that facilitate a pluralistic development of the economy in line with sustainable development.
- ▶ Diversify tourism products and activities to avoid overdependency (e.g. promotion of domestic tourism).
- ▶ Ensure that natural and infrastructural capacities and redundancies are not overstretched by tourism.
- ▶ Review and market the destination brand internationally and locally.

FLEXIBILITY, ADAPTABILITY AND LEARNING

- ▶ Introduce training and education programmes.
- ▶ Educate businesses and guests in resilience and sustainability.
- ▶ Establish facilitated spaces for dialogue.
- ▶ Enable learning from real-world experiences.
- ▶ Allow intentional experimentation to find possible solutions to societal challenges.
- ▶ Use innovative technological resources to adapt to changing conditions in a sustainable manner.

SOCIAL NETWORKS

- ▶ Build and strengthen cooperation among stakeholders.
- ▶ Create a central hub for tourism information / communication and data.
- ▶ Manage connections with organisations in the same industry that play an important role in overcoming challenges.
- ▶ Promote flexible cross-functional teams through tools or programmes that facilitate a broad participation and exchange of information.
- ▶ Establish successful communication structures (shared values and visions, regular exchange of information and meetings, transparency) within the social network.
- ▶ Identify pressures of tourism activities on the destination community.
- ▶ Create services and places that meet the needs of the community and encourage visitors and residents to meet.
- ▶ Promote volunteerism and engagement of community members, organisations and visitors.
- ▶ Communicate the positive impact of the tourism sector on the region.

PARTICIPATION AND COLLECTIVE ACTION

▶ Integrate the views of the local population into tourism development.

▶ Integrate local knowledge systems into management and decision-making processes.

▶ Promote of inclusive and discrimination-sensitive processes and management practices.

▶ Take coordinated action across government bodies at all levels and in partnership with communities.

▶ Create a unifying tourism employees' public platform professionally managed by employees for issues related to awareness and education and other areas of concern.

▶ Promote co-production of knowledge between locals, practitioners and academia.

▶ Establish easily accessible tourism revolving funds and stimulus packages.

REFLEXIVITY AND AWARENESS

▶ Introduce proactive monitoring of current developments and risks.

▶ Promote and enhance community-based risk management planning.

▶ Sensitise the community, organisations and visitors to risks and risk reduction.

▶ Put appropriate emergency action plans and recovery plans in place before a crisis or disruption occurs.

▶ Build crisis management partnerships before a crisis or disruption occurs.

▶ Evaluate and incorporate lessons learned into an updated emergency response and recovery plan.

▶ Organise workshops and training to raise awareness of different risks in the destination.

▶ Reflect contribution of tourism to economic growth and improving tourism satellite accounting.

05

Outlook

The guideline presented here has highlighted the critical role of **risk-informed management** for destination planning and development to strengthen the resilience of people and communities and to ensure sustainable tourism development.

By providing a holistic destination resilience conceptualisation that introduces key terms and underlying concepts of destination resilience, we were able to facilitate a deeper understanding of the concepts risk and resilience and the implications they pose for tourism destinations.

As a resilience building tool, we introduced the 5-step destination resilience analysis guideline. This methodology supports long-term **resilience-building** in tourism destinations while also addressing issues central to **strengthening sustainable development** in the destinations. This process-oriented, participatory, risk-informed, adaptive and feasible tool allows destinations around the globe to assess, plan and act to prepare for, prevent, adapt and respond to hazards that pose a risk to their destination. To facilitate a better understanding, we provided exemplary implementation processes of the guideline through methodological **good-practice examples** and outcomes from the three project destinations (Dominican Republic, Namibia and Sri Lanka). This information is supple-

mented with ideas and inspiration to build resilience, based on specific results from the 5-step approach in the case study destinations. Moreover, resilience principles and their implications for building destinations resilience were introduced.

The insights gained from this study may be of assistance to (non-)governmental organisations or academic institutions that are engaged in activities at the intersection of tourism management, disaster risk reduction and sustainable development, and who would like to support a similar process in their own destination.

Moreover, the report poses a valuable resource for destination managers, policymakers, academics and other practitioners that are aware of the growing necessity to consistently integrate aspects of risk-informed management and development into strategies, development plans, laws and academic research. In the long-term, greater efforts are needed to ensure that resilience constitutes an equally essential concept as sustainability in tourism planning and development. Now the challenge is to address resilience not only on paper but directly in the destination by bringing stakeholders together to facilitate a better understanding of risk and create ownership for future resilient action in the destination.

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Annex 1

Selected studies, frameworks and publications for this review do not constitute an exhaustive overview of the subject. Also, the final selection and categorisation of recurring themes involves subjective interpre-

tation (Yu et al., 2020). However, we believe that the selected recurring themes largely reflect the state of the art and content discussed in the literature.

Table 6: Recurring themes of resilience principles

Recurring themes	Source
Diversity, variety, redundancy	▶ Biggs et al., 2012 (maintain diversity and redundancy) ▶ SRC disaster (diversity = flexibility, and space for innovation); (redundancy = path to success) ▶ Hartmann, 2018 (variety & redundancy) ▶ CRI – Rockefeller Foundation (being diverse) ▶ OECD principles (diversity and redundancy, inclusion) ▶ RATA (diversity and openness) ▶ Orchiston, Prayag et al., 2016 (internal resources) ▶ GRP (embrace diversity) ▶ Preiser et al., 2018 (diverse components, built-in redundancy)
Social networks, connectivity, partnerships	▶ Biggs et al., 2012 (manage connectivity) ▶ SRC disaster (connectivity can promote recovery & promote learning) ▶ Hartmann, 2018 (connectivity) ▶ OECD principles (connectivity) ▶ RATA (connectivity across scales) ▶ Orchiston, Prayag et al. 2016 (strategic partnerships) ▶ GRP (create self-organising networks) ▶ Lee et al., 2013 (connectivity awareness, communication and relationships)
Reflexivity, information, awareness	▶ Biggs et al., 2012 (manage variables and feedbacks, foster adaptive systems) ▶ CRI – Rockefeller Foundation (being reflective), (accepting of uncertainty and change) ▶ Preiser et al., 2018 (dynamic processes)

Recurring themes	Source
Flexibility, innovation, creativity, adaptability, learning	▶ Biggs et al., 2012 (encourage learning) ▶ SRC disaster (adaptive learning) ▶ Hartmann, 2018 (learning & reflexivity) ▶ CRI – Rockefeller Foundation (being resourceful / efficient; being adaptive) ▶ OECD principles (learning & innovation, responsiveness) ▶ GRP (innovate, learn, sustain and scale) ▶ RATA (capacity for novelty and innovation) ▶ Orchiston, Prayag et al., 2016 (innovation & creativity, situation awareness) ▶ Preiser et al., 2018 (adaptive capacities; novel qualities, contextually determined)
Participation, cohesion, equity, inclusion, collective action	▶ Biggs et al., 2012 (broaden participation, promote polycentric governance) ▶ SRC Disaster (inclusivity and equity – critical for building trust) ▶ Hartmann, 2018 (promote polycentric governance system) ▶ CRI -Rockefeller Foundation (being inclusive, being integrated) ▶ OECD principles (social cohesion) ▶ RATA (capacity for changes in rules / by governance ▶ GPR (promote equity, inclusion and decentralised decision-making)

Annex 2

Checklist

STEP 1: DEFINING THE DESTINATION

☐ The geographical scope of the destination is defined

☐ The main actors of the local tourism system are identified

☐ Main elements which compromise and describe the destination are identified
(e.g. natural and built environment, assets, attractions, visitor markets)

☐ The social, economic, historic and political background of the destination is described

☐ Governance structures in the destination are identified

STEP 2: IDENTIFYING SOURCES OF RISKS

☐ The existing sources of risks in the tourism destination are identified

☐ It is pointed out how the identified risks affect tourism

☐ Local tourism actors are consulted on perceived risks for tourism

STEP 3: UNDERSTANDING RISKS AND IDENTIFYING OPTIONS FOR ACTION

☐ The key risks for tourism in the destination are identified

☐ Underlying factors that influence risks are identified

☐ Possible options for action to deal with risks and increase resilience are collected
(e.g. actions and measures to adapt, prepare, prevent and deal with identified risks)

STEP 4: ANALYSING ENABLERS FOR AND BARRIERS TO ACTIONS

☐ Local tourism actors are involved in a prioritisation of the different options for actions
to deal with risks

☐ It is pointed out which options for actions are feasible and relevant for local tourism actors

☐ Barriers that influence people's ability and willingness to take action in building resilience are
collected (e.g. financial and time resources, knowledge, social networks, beliefs, values, norms)

STEP 5: DISCUSSING OPTIONS FOR ACTIONS AND REFLECTING RESILIENCE PRINCIPLES

☐ Clear responsibilities for the implementation of the selected actions are defined

☐ A plan is developed to overcome the identified barriers to building resilience

☐ Strategies are collected how local tourism actors can integrate resilience principles
into their daily tourism practice

Imprint