

WASH and Tourism in Mandalika, Lombok, Indonesia: Case Study Report



**Research Project: Engaging Corporate Actors for Inclusive
WASH at Work**

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List of Abbreviations

BPS	Badan Pusat Statistik/National Statistical Agency
CLUES	Community-Led Urban Environmental Sanitation planning
CSA	Case study area
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
GDI	Gender Development Index
GEDSI	Gender equity, disability and social inclusion
GEI	Gender Empowerment Index
GM	Gender mainstreaming
GoI	Government of Indonesia
ITDC	Indonesian Tourism Development Corporation
KND	National Disabilities Commission
LBH Apik	Women's Association for Justice
MICE	Meetings, Incentives, Conferences and Exhibitions
MotoGP	Motor Grand Prix
MP3E1	Masterplan for Acceleration and Expansion of Indonesia Economic Development
NAP	National Action Plans
NTB	Nusa Tenggara Barat – West Nusa Tenggara
NTT	Nusa Tenggara Timur – East Nusa Tenggara
PDAM	Perusahaan Daerah Air Minum
PSBB	Large-Scale Social Restrictions
PTD	Priority Tourism Destinations
RPJMN	Indonesian Mid-term National Development Plan
RPJPN	Indonesian National Long Term Development Plan
SDG	Sustainable Development Goal
SEZ	Special Economic Zone
UNICEF	United Nations International Children's Emergency Fund
WASH	Water, Sanitation and Hygiene
WRM	Water Resource Management

Executive Summary

Tourism is a key and growing industry in Lombok, West Nusa Tenggara (NTB) Province, Indonesia, as a destination attractive to both national and international tourists. Between 2015-2019 annual international tourist visits to Lombok doubled from 1 to over 2 million. Mandalika has been designated by President Joko Widodo as one of 10 key tourism development destinations in Indonesia, with a predicted tourist carrying capacity of more than 4.5 million visitors per year. The COVID-19 pandemic and associated travel restrictions has had immediate and deep negative effects on tourism. This Case Study report considers the importance and challenges of ensuring water, sanitation and hygiene (WASH) services are in place to support the tourism sector through difficult times and for future growth from the perspective of government, tourism operators and the community.

The research project is developing a value proposition for hotels to implement a gender equity, disability and socially-inclusive (GEDSI) WASH-at-Work program that contributes to sustainable development of the tourism sector and in host communities in Indonesia. The value proposition is defined as the ways that businesses can add value to their commercial enterprise by improving WASH practices at work. The project is guided by three key questions:

1. What is the value proposition for a GESI WASH at-Work program in the tourism sector?
2. How can water stewardship approaches support the adoption of a GESI WASH-at-Work program in the tourism sector, and what are the potential WASH benefits to host communities?
3. What are the barriers to, and opportunities for, engaging governments and civil society organisations to support the scale-up of WASH-at-Work in the tourism sector?

The project team undertook formative research to explore these issues using a range of qualitative research methods. Whilst hotels are generally well provided for, communities in Mandalika face water scarcity and quality challenges, as well as gaps in sanitation coverage. These and other formative research findings are presented here, and have formed the basis of further engagement with hotels, surrounding communities and relevant government agencies in Mandalika. Subsequent research outputs will aim to inform:

- A value proposition that provides context-specific guidelines and tools for hotels in the tourism sector to support and deliver a GEDSI WASH-at-Work program;
- GEDSI WASH-at-Work guidelines and tools to enable tourism operators to consider their WASH impacts on local communities; and
- Policy guidance for government stakeholders to support hotels and the tourism sector to provide effective WASH outcomes.

Inclusive access to WASH is important for the tourism sector to maintain a strong reputation with tourists and a social licence to operate from local communities. Whilst all stakeholders envision tourism success as contributing to an improved economy, enhancing community welfare, developing human resources and improving public and environmental health, a number of changes are required to achieve this vision. The report concludes with recommendations for action to take for more inclusive WASH, which will contribute towards achieving the vision of Mandalika as a tourism destination benefitting everyone.

1 Introduction

1.1 Summary of the research project

1.1.1 Research Objective

The research project is focusing on the ways in which hotels can implement gender equity, disability and socially-inclusive (GEDSI) Water, Sanitation, and Hygiene at work (WASH-at-Work) programs in Fiji and Indonesia. It is working to develop a value proposition that includes a country and context-specific understanding of why the sector should engage with WASH-at-Work, helpful guidance for WASH-at-Work programs in hotels, and policy briefs to enable governments to scale up programs. It is expected that research will enable greater uptake of GEDSI WASH-at-Work programs that, in turn, contribute to sustainable development of the tourism sector and its host communities, particularly post-COVID-19.

1.1.2 Research Questions

Three research questions have been developed in order to effectively investigate how actionable guidelines can be created. They are:

1. What is the value proposition, including the business case, for a GEDSI WASH-at-Work program in the tourism sector?
2. What are effective water stewardship approaches to support the adoption of a GEDSI WASH-at-Work program in the tourism sector, and what are the potential WASH benefits to host communities?
3. What are the barriers to and opportunities for engaging governments and civil society organisations (CSOs) to support the scale-up of a GEDSI WASH-at-Work program within the tourism sector?

1.1.3 Research Approach

The research project is using a “mixed method” research approach to collect both qualitative and quantitative data. Due to cultural preferences for talk and discussion, the project is adopting a qualitative methodology to examine how the tourism sector in both countries is currently investing in and/or supporting WASH-at-Work and in local communities, if at all. Quantitative data is being acquired from government stakeholders and relevant sources, such as departments of health, education, public works and tourism associations.

The project is being conducted over four research phases:

- Phase 0: Inception: During the Inception phase the project team reviewed literature on relevant topics and conducted initial in-country field trips to engage with government stakeholders, CSOs and local partners.
- Phase 1: Formative research: The project team has completed semi-structured interviews with decision-makers (owners and managers of tourism sector operations) and interviews and focus-group discussions with staff and communities’ members to understand barriers to and impacts between WASH-at-work and WASH in communities. Q-method analysis was also

conducted to provide quantitative data to identify the importance of WASH in tourism from the perspective of hotel guests, staff and management.

This case study is the central output of the formative research phase.

- Phase 2: Action research: The project team is co-designing and piloting a GESI WASH-at-Work toolkit with local stakeholders from two case study areas (CSAs), one in each country. The team will revisit the second CSAs to validate the toolkit.
- Phase 3: Consolidation and recommendations: The team will consolidate the findings into GESI WASH-at-Work toolkits, practitioner notes and guidelines for policy briefs. Each will be disseminated through in-country workshops.

1.1.4 Overall Research Outputs

The overall project intends to produce a GESI-integrated conceptual framework, a research methodology, and tools to gather data to support the articulation of a value proposition for GESI WASH-at-Work in the tourism sector. It is examining links between employees' WASH practices in their workplace and those in local communities.

Research outputs will inform:

- A value proposition that provides context-specific guidelines and tools for hotels in the tourism sector to support and deliver a GESI WASH-at-Work program.
- GESI WASH-at-Work guidelines and tools to enable tourism operators to consider their WASH impacts on local communities.
- Policy guidance for government stakeholders to support hotels and the tourism sector to provide effective WASH outcomes through a GESI WASH-at-Work program.

1.2 Literature review

1.2.1 Water Stewardship and Framing the Value Proposition

The concept of water stewardship frames the research because it drives the idea of a value proposition. Current literature demonstrates that businesses can contribute to the alleviation of potential water challenges by adopting a water stewardship strategy that addresses the economic, environmental and social dimensions of water. By adopting water stewardship and addressing their risks, companies may make a positive contribution to improved WASH management and governance and, at the same time, to sustainable development. The contribution of business means adopting values and practices that aim to safeguard long-term availability of clean water and the provision of sanitation for all stakeholders in a watershed (SDG Compass, 2019). The values and practices reflected in the concept of water stewardship provide a means via which hotel operators may devise a rationale and an economic model for a GESI WASH-at-Work program.

Definitions of water stewardship are varied. Stewardship is seen as being the responsibility of the state (Calman, 2009), the responsibility of private actors (Morgan, 2018; Hepworth, 2012; Sojamo, 2015) or that effective stewardship requires both state and private actors to work together (Loftus, Smardon, & Potter, 2004). Similar debate occurs in relation to stewardship practices (Hepworth, 2012; Orr & Sarni, 2015; Lange & Shephard, 2014; AWS, 2020) and aims (Calman, 2009; Lange & Shephard, 2014). The common ground is that stewardship is about taking care of something that we do not own (AWS, 2020). This conjoint definition has framed the project's thinking to prevent an

unnecessary narrowing of the scope and to avoid an initial focus on the specifics of the who, what or why.

1.2.2 Gender Equity, Disability and Social Inclusion

Gender equity and social inclusion (GEDSI) has been integrated into the water stewardship frame because:

- It is required to create a viable value proposition and an innovative and sustainable WASH-at-Work program that is anchored in and addresses the complex societies of Fiji and Indonesia and their tourism sectors as contexts for the research.
- The United Nations guiding principles on business and human rights guide this research's outcomes (UN, 2018).
- The project is alert to the conceptual and social merit of using the World Bank's International Finance Corporation's definition of social inclusion as people who are 'disadvantaged or vulnerable' due to "factors such as age, ethnicity, culture, [gender diversity], literacy, sickness, physical or mental disability, poverty or economic disadvantage, and dependence on unique natural resources" (IFC, 2012).

Gender is consistently revealed as a critical cross-cutting element for improving access to WASH and for the effective realisation of water as a human right (GWA, 2019; Women for Water Partnership (WfWP), 2019). A range of studies have examined the unequal gendered power relations embedded in the tourism industry (Duffy et al, 2015; Ferguson, 2011; Gentry, 2007; Schellhorn, 2010), but few have investigated the unequal impacts of tourism on women and men, or the gendered impacts of tourism in relation to water (Cole S. , 2017). For example, in Labuan Bajo, Indonesia, "women are responsible for domestic water provision and management" (Cole S. , 2017). However, because women's work is often unpaid, unrecognised and 'naturalised', they live with water privation and pollution. Moreover, women are usually excluded from public discussions, which inform water policy, and from the attention of power-brokers who influence decision-making. In this context, a consequence of the tourism industry competing for water supplies is an increase in the cost of water (Cole S. , 2017), which negatively impacts the households in which women function.

GEDSI also shapes reflection about, and is integrated into, the project's focus on WASH. Water access and WASH programs support the health and sustainability of people in communities that have no access to safe drinking water nor to proper sanitation. These programs may involve policy, public sector capacity building, community education and awareness (Rozaa, et al., 2013). WASH programmes can also support the protection of water sources through community water partnerships.

WASH is a key conduit to recognise the benefits of GEDSI because, as current literature shows, safe water and adequate WASH behaviours lead to significant gains in health outcomes (WaterAid Canada, 2017). For example, UNICEF notes WASH-in-Schools (WinS) increases student attendance, contributes to dignity, respect and gender equality and significantly reduces hygiene-related diseases. WASH programming has a critical role in raising awareness of gender issues in schools and contributing to improved gender equality by ensuring that girls have access to separate and appropriate washroom facilities, and systems to help manage menstrual hygiene (WaterAid Canada, 2017). Gendered and socially inclusive WASH strategies are essential to improving children's nutritional status and women's nutrition needs, for preventing infectious diseases and ensuring healthy environments and safe food. Consumption of improved water quality can reduce diarrhoea significantly, between 28 and 45 percent depending on the type of water supply (WaterAid Canada, 2017).

1.2.3 WASH-at-Work in the Tourism Sector

A key objective in the WASH sector is to provide equitable and universal water and sanitation services and access, thus protecting health and promoting development. An allied objective is to promote behavioural changes essential to realising the full benefits of WASH services. These objectives cannot be met without the full participation of women and members of socially vulnerable groups (ILO, 2016).

Existing WASH-at-Work frameworks consider the role of employers in providing sufficient access to water, sanitation and hygiene services in the workplace, as well as training and knowledge to staff to ensure good hygiene practices which safeguard both staff and guests. WASH-at-Work also considers more broadly the role of businesses to ensure adequate WASH services through supply chains and surrounding communities. However, GEDSI considerations of WASH-at-Work remain relatively unexplored, particularly in relation to inclusive engagement and decision-making. Consequently, the project recognises that the value proposition for any WASH-at-Work program in the tourism sector must be shaped by and integrate GEDSI into its design, management and outcomes.

The value proposition for businesses to increase investment in WASH is established, because businesses that invest in WASH have increased productivity (WaterAid Canada, 2017) and an increased social license to operate (USAid, 2017). However, the literature shows that, even with these proven benefits, there is a low uptake of WASH programs in private businesses, with only a handful of companies signing on to the CEO Water Mandate (CEO Water Mandate, 2012).

The lack of alignment between evidence of positive benefits to businesses and the lack of private sector uptake of WASH programs shows that the issues are more complex than providing a simple business case focusing purely on commercial benefits. Rather, research suggests that WASH programs need to be tailored to their proposed context, as acknowledged in water stewardship approaches that have been developed for multiple sectors, including hotels in the tourism sector (Global Water Partnership, 2014). There is, however, a lack of robust monitoring and evaluation of water stewardship frames and WASH programs, with both usually failing to consider the gendered social relations within and gendered impacts on local communities (GWA, 2019).

1.2.4 Enabling Environments for Scale Up

Several factors that can be present in the governance of institutions or systems will affect the ability of a country to implement and scale up any of the findings, recommendations, or outputs of this research. The factors are often referred to, in the literature, in a positive manner as 'enabling factors' or in the negative as barriers that may inhibit change within a particular enabling environment. Different actors in the WASH sector have varying definitions of the WASH enabling environments, but common elements which allow an assessment of the 'health' of the enabling environment include policies and strategies, institutions and human resources, coordination and planning, regulation, financing (capital and recurrent costs) and monitoring and evaluation (CS WASH Fund, 2017).

In addition, the World Health Organisation's and UNICEF's (2019) report has established service ladders for basic services, from no service to limited to basic service in water, sanitation, hygiene, waste management and environmental cleaning. The report requests member States to establish standards for accessibility, availability, quality, affordability, acceptability and sustainability of water and sanitation services. It provides a framework for partner countries to develop standards that have applications within homes, work, school, health centres, and public places.

The literature review undertaken to assist in the design of the project showed that the Community-Led Urban Environmental Sanitation Planning (CLUES) (EAWAG, 2011) is the most referenced WASH enabling environments framework. However, as the CLUES framework is not specific to WASH-at-Work, it was used as a springboard for analysis in relation to other enabling environment frameworks (Brown & Farrelly, 2009; Farrelly & Brown, 2011; Mukheibir, Gallet, & Howe, 2014; OECD, 2011; Rauch, Seggelke, Brown, & Krebs, 2005; Wang, Walker, & Redmond, 2007; Willetts, Murta, Gero, Carrard, & Harris, 2015) to ensure that a final framework was created incorporating as much available knowledge as possible. The final framework includes the following six factors:

- Government support: the long-term vision of government and coordination between government partners.
- Knowledge and skills: the skills and capacity of the workforce, as well as the sectoral capability present in-country.
- Political economy: the political will and support and potential risk aversion of the government, as well as the perceived/planned role for the private sector.
- Regulation and enforcement: the existence of regulations and the ability of a sector to enforce those regulations.
- Institutional arrangements: organisational and administrative structures inside organisations, as well as agreements, including cost-sharing and financial agreements between organisations.
- Engagement: engagement between government, communities and organisations.

All of these elements need to be considered within each particular GEDSI WASH-at-Work context to understand the broader systems in which relevant stakeholders operate.

1.3 Outputs from the case study

As well as informing the future phases of the research project, this case study is being used as an important communication tool with partners and stakeholders in Indonesia. For it to be effective several versions of the case study have been created:

- A longer “academic” case study (this document): This version is being used predominantly by the research team to inform future phases of the research, document important information, and inform the condensed versions.
- A concise summary version: The case study summary is no more than 10 pages and includes the key information for stakeholders who have shown an increased interest in the project. The version was produced in English and Bahasa.
- A marketing brief: A two page glossy brief featuring only the most vital information was created to circulate to all stakeholders or tourists. This version was produced in English and Bahasa.

1.4 Case study area selection

The key CSA in Indonesia is Mandalika, Lombok. It was chosen because:

- Water quality and quantity are major issues.
- Rainfall patterns are shifting, and concerns have been articulated by local stakeholders about a pending drought.

- Desalination is a proposed Government of Indonesia (GoI) and investor's solution for future hotel development, which reflects a recognition of water scarcity in relation to support for a proposed Grand Prix development project.
- Locally owned homestay/guesthouses are dependent on wells for water, so water supply is not yet a perceived risk.

2 Indonesian context

2.1 Tourism

The Ministry of Tourism and Creative Economy (Kementerian Pariwisata dan Ekonomi Kreatif, formerly Kementerian Pariwisata) estimated nine percent of Indonesia's total national workforce was employed in the tourism sector in 2015 and that the tourism sector comprised four percent of the total economy. In 2019, the GoI aimed for a two-fold increase from four to eight percent within four years; an aim that requires doubling the number of visitors to an estimated 20 million. To achieve the aim, the GoI has focused on the key areas of infrastructure (including information and communication technology), accessibility, health and hygiene, and online promotional campaigns abroad. The policy enabling visa-free access from 2015 has also served to attract more foreign tourists (Indonesia Investment, 2016).

The Ministry of Tourism has implemented a strategy to meet 2020's tourist arrival target by developing border tourism, hub tourism and the renovation of airport terminals to cater to low-cost carriers. The case study sites selected for this research include Mandalika (Lombok) and Labuan Bajo (Flores), two of 10 tourism destinations targeted for major investment and development by the GoI. A limited number of studies since 2015 highlight the linkage of water to the tourism sector in Indonesia (Cole S. , 2017; Cole & Browne, 2015). Cole and Browne (2015) examine the impacts of tourism on water stress in Bali from an institutional perspective. They concluded that tourist water users place strain on Bali's water resources without being aware of, nor being affected by, consequent water shortage problems. Cole's (2017) further study in Labuan Bajo also concluded that tourism negatively impacts local people's access to water, worsening the burden of women in relation to water scarcity in particular.

2.2 Water Resources Management and planning

Indonesia's water challenges are complex. Raw water supply deficits for multiple sectors such as domestic, industry, energy, and agriculture are worsened by the increasing uncertainty of climate change and persistent surface and groundwater pollution. BAPPENAS (2014) notes that water resources face problems not only related to water quality and quantity, but also obstacles related to the:

1. Inter-relationships within the central government.
2. Relationship between the central government and regional governments.
3. Relationship between the central and regional governments with the community.
4. Inter-relationships within and between the communities.
5. Relations between sectors.
6. Relations between regions.

7. Relations between policies that are not synchronous nor progressing toward the same goals.

The main drivers of water problems, i.e. land use change and deforestation, rapid urbanisation and economic development, as well as climate-related challenges, have resulted in lack of access to water and sanitation (Tularam & Murali, 2015).

While the National Statistical Agency (Badan Pusat Statistik, BPS (2017)) shows access to improved drinking water sources as being 80.82% and 62.1% in urban and rural areas respectively, BPS does not describe shortfalls in the quality of service: whether water is supplied in adequate quantity, is of sufficient quality to meet health requirements, is available 24 hours, and is affordable. Further, households in Indonesia often use multiple water sources to avoid risks. For example, a study in Bandung City, West Java, shows that more than 60.1% of households interviewed use multiple water sources, combining non-piped water, piped water, and/or bottled water (Muntalif, et al., 2017).

In the context of WASH and human rights, Nastiti & Prasetiawan (2018) have discussed the legal framework concerning human rights to water. The Watering Act Number 11 Year 1974, which was re-enacted post the annulment of the Water Resource Act Number 7 Year 2004 does not explicitly mention water as a human right, but emphasises that water should be used predominantly for society's prosperity. The revoked Water Resource Act Number 7 Year 2004 can be interpreted to have a dualistic view on water as a human right; it mentions that all water resource allocation should prioritise individual basic needs, but also enables an economic function for water that often has a narrow interpretation as water privatisation, which continuously violates human rights to water. Although the Act portrays the three functions of water – social, economic, and environmental functions, see Figure 1, fierce resistance towards water privatisation led to the annulment of the Water Resource Act Number 7/2004. Resistance was driven by opposition to private concessions in Jakarta's water supply system, which were seen to limit the poor's access to their infrastructure, and international bottled water companies' water-extraction operations. Annulment was realised through the Decree of Constitutional Court Number MK No. 85/PUU-XI/2013, which stated, "the State is responsible in realizing the human rights to water for the people, in which access to drinking water is a standalone basic right". Currently, explicit codification of human rights to WASH is required to accelerate WASH development in Indonesia. There has not been sufficient social pressure to fulfill WASH goals, potentially due to the rise of the bottled water industry as an "alternative", if not the main source of drinking water, and the perception that sanitation is a private matter. Currently, the 1974 Water Law has been revoked and replaced with Law Number 17 Year 2019 - Water Resource. The Law regulates management on water resources, including surface water, ground water, and drinking water. Management is based on the protection of rights to water, particularly water for basic needs that is of good quality, adequate quantity, is sustainable, and affordable. The Law states that water resources cannot be owned and/or acquired by individuals, community groups, or private entities and that water allocation should prioritise basic needs before commercial needs (Government of Indonesia, 2017).

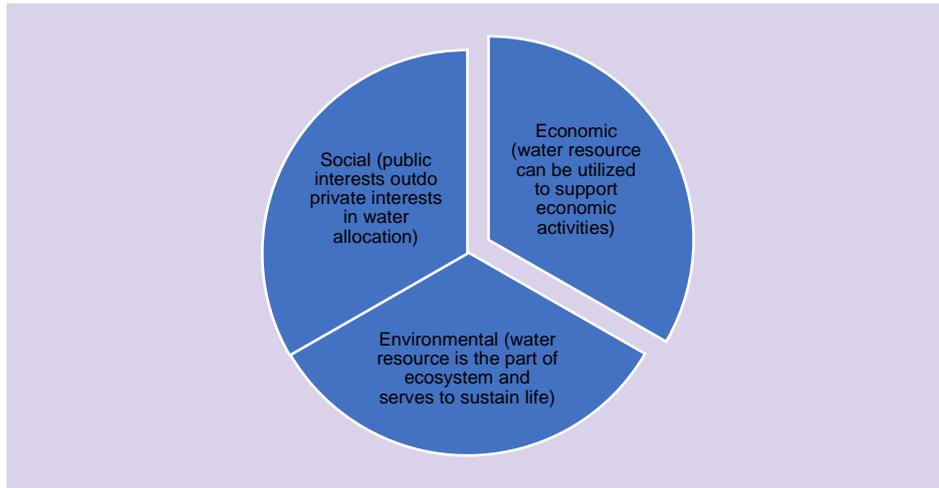


FIGURE 1. THREE FUNCTIONS OF WATER

TABLE 1. GOI WATER RESOURCE MANAGEMENT AGENCIES

Water Resource Management Agencies
<p>BAPPENAS (Ministry of National Planning) The Ministry is responsible for formulating and determining planning, budgeting, regulation and institutional policies in harmonious national development (between regions, inter-space, inter-time, inter-governmental functions, as well as between central and regional governments); and controlling the implementation of plans for programs and activities to accelerate the implementation of development carried out by the Ministries / Institutions / Regions in accordance with national development strategies and policies. The relevant divisions with WRM are:</p> <ol style="list-style-type: none"> a) the Directorate of Forestry and Water Resource Conservation is responsible for carrying out the coordination, formulation and implementation of policies, as well as monitoring, evaluating, and controlling national development planning in the field of forestry and conservation of water resources. b) the Directorate of the Environment is responsible for carrying out the coordination, formulation and implementation of policies, as well as monitoring, evaluating, and controlling national development planning in the environmental field. c) the Directorate of City and Housing and Settlements is responsible for carrying out the coordination, formulation and implementation of policies, as well as monitoring, evaluating, and controlling national development planning in the urban, housing and settlement fields. <p>Ministry of Public Works and Housing The Ministry is responsible for the formulation, stipulation, and implementation of policies in the field of water resources management, operation of roads, operation of drinking water supply systems, management of domestic wastewater, management of environmental drainage, and management of waste, structure of buildings, development of residential areas, development of strategic infrastructure facilities, implementation of housing, implementing public works and housing infrastructure financing, and fostering construction services. The relevant divisions with WRM are:</p> <ol style="list-style-type: none"> d) the Directorate General of Water Resource. The main responsibilities for this Directorate General are formulation of policies in the field of water resource management that is integrated and sustainable in accordance with statutory provisions; and implementing policies in the field of conserving water resources and utilizing water resources including ground water, and controlling the destructive power of water including ground water in accordance with statutory provisions. e) the Directorate General of Cipta Karya. The main responsibilities for this Directorate General are the formulation and implementation of policies in the field of organising drinking water supply systems, domestic wastewater management, environmental drainage management, and waste management, structure of buildings, developing residential areas, and developing strategic infrastructure in accordance with statutory provisions. <p>Ministry of Environment and Forestry The Ministry is responsible for formulation, determination, and implementation of policies in the field of conducting the stabilisation of forest areas and the environment in a sustainable manner, management of conservation of natural resources and their ecosystems, enhancement of carrying capacity of watersheds and protection forests, management of sustainable production forests, enhancing the competitiveness of primary industries of forest products, enhancing quality environmental functions, control of pollution and environmental damage, control of the impacts of climate change, control of forest and land fires, social forestry and environmental partnerships, as well as reducing disruption, threats and violations of environmental and forestry laws.</p> <p>Ministry of Health The Ministry of Health is responsible for policy formulation, policy implementation, technical assistance, and evaluation and reporting in the areas of improving family health, environmental health, occupational health and sports, community nutrition, as well as health promotion and community empowerment, including drinking water, sanitation and hygiene.</p> <p>Ref: BAPPENAS (2020), Ministry of Public Works and Housing (2020), Ministry of Health (2020), Ministry of Environment and Forestry (2020)</p>

2.3 The private sector and WASH

Indonesian policy discussions about WASH have primarily focused on the domestic arena. BAPPENAS had determined 18 Priority Tourism Destinations (PTD), and the next RPJMN will focus on 10 PTD: Danau Toba, Borobudur and its surroundings, Lombok/ Mandalika, Labuan Bajo, Bromo Tengger Semeru, Wakatobi, Tanjung Kelayang, Tanjung Lesung, Kepulauan Seribu dan Kota Tua Jakarta, and Morotai.

Although tourism is a key theme in the RPJMN technocratic document (BAPPENAS, 2019), there are few links between tourism, the private actors in the tourism sector, and WASH. Tourism development strategies will be focused on increasing the duration of stay and tourist spending as a direct result of improving accessibility, attractions, and amenities.

A key strategy to improve the tourism sector is through worker protection, i.e. a universal social protection system. There is a specific mention of the obligations of the private sector/industry to provide WASH in the regulations of the Ministry of Health (2016).

2.4 Gender and social inclusion

2.4.1 National Policy on Persons Living with Disabilities

Indonesia created a new disability law on 18 April 2016 with the enactment of Law No. 8/2016 on Persons with Disabilities, moving the nation's perspective towards persons with disabilities from a social-based to a human rights-based approach (Government of Indonesia, 2016).

Based on the UN Convention on the Rights for Persons with Disabilities, ratified by the Gol in 2011, the law sees the rights of persons with disabilities as inseparable from the equal rights of all members of the human family, including access to employment opportunities.

Law No. 8/2016 on Persons with Disabilities mandates the establishment of National Committee of Disabilities, which has been initiated by the Ministry of Civil Worker and Bureaucracy Reform Ministry. However, the Presidential Decree that serves as the basis of the establishment has yet to be enacted (Hukum Online, 2020).

2.4.2 Indonesia's National Gender Policy

The Presidential Instruction No. 9 of 2000 concerning Gender Mainstreaming in National Development mandates that to improve the position, role and quality of women, as well as to realise gender equality and justice in family, community, national and state life, it is necessary to conduct gender mainstreaming strategies in the entire national development process. The strategies are implemented by ensuring equal, equal access, participation, control and benefits for men and women in development (Government of Indonesia, 2000).

Human rights are integral to Indonesia's Constitution 1945; Act Number 39, 1999 was enacted as an interpretation and implementation of the Universal Declaration of Human Rights 1948. Since, Indonesia has ratified nine international human rights instruments¹. Komnas HAM –an accredited and

¹ Convention on the Elimination of All Forms of Discrimination Against Women (UU no. 7/1984); Convention on the Rights of the Child (Keppres no. 36/1990), termasuk Optional Protocol to the Convention on the Rights of the

independent national human rights institution, is responsible for analysis, research, assistance, and mediation activities regarding human rights issues. Indonesia has established and implemented four National Action Plans (NAP) for Human Rights, the latest being the NAP for Human Rights 2014-2019, which guides re-emphasising human rights improvement in public policy contexts. Implementation of human rights is monitored by the Joint Secretariat of the NAP for Human Rights. The State has a positive duty to facilitate the fulfillment and/or to provide basic human rights for all its citizens, and human rights violations may occur if the State fails to do its duty by commission and/or by omission (Abidin, 2013).

Act Number 39 /1999 highlights the issue of gender, stating all men and women are entitled to equal treatment and rewards at work; it also has a special section for women's rights.

Gender issues are the core business of the Ministry of Women's Empowerment and Child Protection. The Gender-sensitive Human Development 2018, an initiative between the Ministry and the National Statistical Center, acknowledges that gender is a multidimensional issue that cuts across almost all the sustainable development goals (SDGs).

The newly updated Technocratic Document for the 2020-2024 Mid-term National Plan (BAPPENAS, 2019) recognises that gender disparities remain a key development issue. The Document states that the national development strategy must include a gender perspective for fair and equal development for all, to be measured by the Gender Development Index (GDI) and Gender Empowerment Index (GEI). The initiative for gender-sensitive development is Gender Mainstreaming (GM).

The Mid-term National Development Plan (RPJMN) enabled BAPPENAS (2019) to link women's rights with WASH, stating that unimproved water and sanitation hinders women in managing households and performing productive, economic activities. Sanitation facilities located far from dwellings put women at risk of sexual abuse. However, in terms of infrastructure development, gender mainstreaming faces many challenges. For example, the Indonesian Infrastructure Initiative (2016), which performed a review of gender integration on infrastructure programs in Indonesia, identified key gender-related challenges such as the different priorities and understanding of stakeholders, their lack of capacity and knowledge about infrastructure programs, the time needed to achieve gender objectives, and changing personnel in stakeholder organisations.

Child on the Involvement of Children in Armed Conflict (UU no. 9/2012) dan Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography (UU no. 10 tahun 2012); Convention Against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment (UU no. 5/1998); International Convention on the Elimination of All Forms of Racial Discrimination, 1965 (UU no. 29/1999); International Covenant on Economic, Social, and Cultural Rights (UU no. 11/2005); International Covenant on Civil and Political Rights (UU no. 12/2005); Convention on the Rights of Persons With Disabilities (UU no.19/2011); International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (UU no. 6/2012).

2.4.3 Relevant Policies and Plans

TABLE 2. RELEVANT POLICIES AND PLANS

Development
<ul style="list-style-type: none"> • The Indonesian National Long Term Development Plan (RPJPN 2005-2025) is a reference point for Indonesian society (government, people, and businesses) to achieve the national objectives drafted and formulated by the country's democratically-elected government. • Indonesia's National Medium Term Development Plan 2020-2024 (RPJMN 2020-2024) is the fourth phase of implementation of the RPJPN 2005-2025. It constitutes the basis for all ministries and government agencies for formulating their respective Strategic Plans. Local governments must take this plan into account when formulating their regional development policies. • Indonesia's Masterplan for Acceleration and Expansion of Indonesia Economic Development (MP3EI) frames strategies through which the government initially targeted an economic growth rate of 7 - 8 percent per year after 2013, while aiming to turn Indonesia into one of the world's largest economies by 2025.
Tourism
<ul style="list-style-type: none"> • The Ministry of Tourism and Creative Economy (Kementerian Pariwisata dan Ekonomi Kreatif, formerly Kementerian Pariwisata) focuses on the administration of tourism.
Gender and Social Inclusion
<ul style="list-style-type: none"> • Indonesia's enactment of Law No. 8/2016 on Persons with Disabilities marks a significant movement in moving the nation's perspective towards persons with disabilities from a social-based to a human rights-based approach. The law sees the rights of persons with disabilities as inseparable from the equal rights of all members of the human family, including access to employment opportunities. • The Presidential Instruction No. 9 of 2000 concerning Gender Mainstreaming in National Development mandates that gender mainstreaming strategies be conducted in the entire national development process.

3 Site 1: Mandalika, Central Lombok

Mandalika in Lombok, West Nusa Tenggara (NTB) Province, has been designated by President Joko Widodo to be one of 10 key tourism destinations to be developed in Indonesia. Mandalika is an increasingly popular tourist destination as an alternative to Bali due to its natural beauty, less crowded beaches, ocean diving and world-class surfing. The GoI is investing in a range of infrastructure facilities and accommodation for visitors. Investment has included upgrading the airport to receive international flights, road improvements, a new market facility and beachfront boulevards and development. Mandalika tourist accommodation is primarily medium sized resorts (guesthouses and villas), with smaller options also available (homestay lodges) and a small number of high-end luxury resorts (Novotel).

A key attraction in Mandalika, Lombok, is the Bau Nyale Festival, which celebrates the gathering of earthworms as linked to a local legend. According to the legend, the name Mandalika derives from a beautiful princess of the Sasak Tribe. The princess had many suitors, but the princess could not

choose, and, not wanting to break any suitor's heart, she decided to plunge into the sea. Sea worms miraculously appeared; locals now consider them sacred and only gather to hunt the worms at the time of the festival.

3.1 Water in Central Lombok

Compared to other parts of Indonesia, Lombok and the rest of NTB Province are water scarce regions that experience wet and dry seasons. Lombok usually has tropical rain from November to May and a dry season throughout the rest of the year. An estimated 85% of the water on the island of Lombok is used for agricultural irrigation, with the remainder used for household needs, industry, tourism and other uses (Klock and Sjah, 2007).

The main water resources are spring water across the island, with approximately 198 spring locations, 20 point sources in West Lombok, 46 point sources in North Lombok, 44 point sources in Central Lombok and 88 point sources in East Lombok (AECOM Indonesia, 2019). The spring water generates about 5,857 m³/s, which decreases significantly during the dry season (AECOM Indonesia, 2019).

Water for urban distribution to the capital Mataram and surrounds is mostly of good quality and reliable in that it comes from natural springs around the base of Mount Rinjani. In contrast, Mandalika and the southern regions primarily depend on springs and groundwater, with impoverished people relying on wells reporting poor water quality plus wells running dry around September and October.

Ground water from deep artesian wells (*sumur bor*) and dug wells (*sumur gali*) are often used for household and agricultural purposes (Sjah & Baldwin, 2014). However, there is a significant difference in groundwater flows between North and East Lombok (approximately 2 L/s) and the southern coast in Central Lombok where the discharge is less than 0.25 L/s (AECOM Indonesia, 2019). When water is not available people purchase water from water tankers. The government is also planning to use sea water desalination as another potential source for water supply in the southern areas of Lombok.

The Department of Public Works has plans for a large piped system to be built from near the base of the southern side of Mt Rinjani to Mandalika to provide a continuous piped water supply to the region for community and tourism use. The pipe would supply 500 L/s. Plans were developed in 2019 but no work has yet commenced on the bulk water supply infrastructure. Novotel, the only large-scale luxury hotel operating in Mandalika, sources its water from the sea via an on-site desalination treatment plant and disposes the waste brine in the ocean. Their action reduces pressure on diminishing groundwater supplies as well as potential conflict with surrounding communities.

The customary approach to water resource decision-making is called *musyawarah*; it is based on consensus and is widely understood at all social levels in Lombok (Sjah & Baldwin, 2014). The custom has been an important foundation for resolving water-related conflicts generated by perceived inequities such as allocation to large bottled-water companies, tourism operators and other users, which have caused conflict and impacted immediate and downstream communities.

Based on the National Basic Health Survey (MOH, 2018), 48.9% of NTB province households use less than 100 L/ca water a day. Overall in NTB, access to improved sanitation is 89.62%, while in Central Lombok and particularly in Pujut sub district where Mandalika is located, sanitation coverage is 84.77% and 74.9% respectively. In Kuta Mandalika, sanitation coverage is 93.24%, however sanitation access in the surrounding village is lower, e.g. Mertak village at 63.08% .v. Rembitan village at 83.13% (MOH, 2018).

3.2 Tourism and development

Tourism has become a key industry in Lombok. From 2015-2019 there was a significant increase in tourists visiting NTB province (see Figure 2). The blue bars indicate foreign tourists, the red bars indicate local tourists, and the orange bars indicate total number of tourists. In 2015 there were 1,149,235 domestic tourists, increasing to 1,550,791 in 2019. At the same time the number of foreign tourists doubled from 1,061,292 in 2015 to 2,155,561 in 2019 (Tourism NTB , 2020).

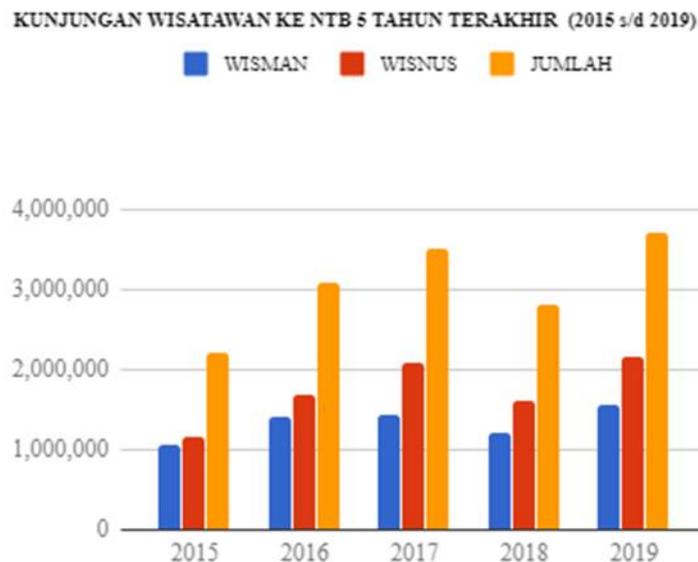


FIGURE 2. NUMBER OF TOURIST VISITS TO NTB PROVINCE FROM 2015 – 2019 (TOURISM NTB , 2020)

A US\$3 billion resort called the Mandalika Project is currently being developed in an area totalling an estimated 1175 hectares along 16km of pristine coastline. With the support of the government-backed Indonesian Tourism Development Corporation (ITDC), the project is one of the largest of its kind in Southeast Asia and is aimed at making Lombok a world-class tourism destination.

President Joko Widodo inaugurated the Mandalika Special Economic Zone in October 2017 with the specific aim of promoting tourism. The Special Economic Zone is expected to be different from mainstream tourist destinations such as Nusa Dua in Bali, which is famous for business meetings and exhibitions. The project aims to develop various facilities, roads and infrastructure including over 10,000 luxury hotel rooms and the international motor racing street circuit. Over US \$1bn is flagged to be invested so that Mandalika can host the Motor Grand Prix (MotoGP) in 2021.

Vinci, the French construction company with the development contract, is expected to build a 4.32 kilometre MotoGP racing track and supporting facilities such as hotels, shopping malls, a hospital and apartments to help ensure Lombok is capable of handling a large influx of tourists. The street circuit venue will house 150,000 spectators. The supporting facilities will be built on 131 hectares of land within the designated 1175 ha Mandalika resort. The event is expected to attract a minimum of 100,000 foreign tourists and to generate direct profits of IDR1 trillion.

Aside from these large-scale government plans, there has been a growing number of guesthouses, homestays and villas being built in Mandalika. A number are foreign owned and managed, and most have individual bores to extract groundwater to meet hotel needs. Based on the 2018 data, there are

two starred hotels operating in Mandalika, 15 non-starred hotels, 23 homestays and 6 bungalows and villas (Tourism NTB , 2020).

The prediction for Mandalika's tourist carrying capacity is 4,637,082 visitors per year, approximately 25% of the carrying capacity of Lombok Island, which is predicted to be 15,725,430 visits/year. With the current tourism development plan, by 2045 Mandalika is projected to be able to accommodate tourist visits with the following capacity (AECOM Indonesia, 2019):

- 12,000 hotel keys
- More than 1,500 units of luxurious residences
- 350.000 m2 of commercial and retail area
- 78 Marina berths
- 120 Ha thematic park
- MICE with 7,000 and 10,000 capacity
- Branded theme park
- International standard circuit (targeting completion by 2021)
- 27 holes golf course
- Mangrove edutainment/park
- Cruise ship terminal.

TABLE 3. CARRYING CAPACITY OF THE SOUTHERN COAST OF LOMBOK (AECOM INDONESIA, 2019)

Sub KTA / Location	Tourist Activities	RCC (Visitor/day)	RCC (Visitor/year)
Sekotong	Beach, Swimming, Snorkelling, Surfing	7,663	2,796,864
Praya-Mandalika	Beach, Swimming, Surfing, Culture	12,704	4,637,082
Pink Beach	Beach, Swimming, Surfing	787	287,321
Total Visitors		21,154	7,721,267

3.3 Local concerns

Increasing pressures on water resources from increased agricultural and economic activities (predominantly tourism development) are raising local concerns about equitable water allocation and security, especially for vulnerable rural households. Water users in Lombok are aware of people's water management experiences in Bali and the potential for these to be repeated in southern Lombok. For example, in the south of Bali, farmers reported reduced crop rotations, and falling groundwater levels with resulting saltwater intrusion (Strauss, 2011). Conflict and damage to pipelines owned by the regional water utility company (Perusahaan Daerah Air Minum – PDAM) has occurred in both Bali and Lombok. In Bali the tourism sector's water consumption is estimated to be twice the rate of local households (Sjah & Baldwin, 2014), which could be expected to be similar in Lombok.

At the outset of the COVID-19 pandemic in 2020, while other international airports in Indonesia experienced a decrease in tourist arrivals, Lombok International Airport had a 10% increase in tourist arrivals (Jan – Feb 2020) (Bisnis.com, 2020). However, the prolonged pandemic period is predicted to affect tourism and decrease tourist numbers. As of 28 June 2020, there were 1,213 positive COVID-19 cases recorded in NTB province, with 810 (66.78%) recovered and 61 (5.03) deaths. At this time Indonesia had a total has of 54,010 positive cases recorded (NTB Government , 2020).

4 Results

The data-driven thematic analysis identified 10 key themes emerging from the data, which are presented in Table 4 below.

TABLE 4. OVERVIEW OF FORMATIVE RESEARCH FINDINGS - MANDALIKA

Theme	Statements	Comments
1. Governance and Policy	“Until now tourism has not been a content in regional policies. It still runs by itself, especially since the KEK is [structured via] policy directly from the central government. Provinces and regions are still running on their own ability.” M. M.Informant_IJZ01	Mandalika as a special economic zone/ <i>Kawasan Ekonomi Khusus</i> (KEK) is supported by the GoI with provision of infrastructure and facilities, incentives and ease of investing. While the support provides advantages for local governments, efforts to synergize policies from central and local government are necessary.
WASH	“..local governments need to be put [in] the effort so water is always available throughout the year”. M. M.Operator_2 “..in addition to water supply by the government, they should also conduct periodic checks of water quality and provide input for treatments that can be performed on water quality issues”. M. M.Operator_4	There is general agreement that water, sanitation and hygiene (WASH) is the responsibility of the local government, due to existing regulations.
Decision-making	“...sometimes decision making by each OPD is different because it does not have the same perspective in determining and developing tourism. Each OPD carries out its role as a technical OPD in the Regency without revisiting regional development plans.” M. M.Informant_IJZ01	The Regional Apparatus/ <i>Organisasi Perangkat Daerah</i> (OPD), is an organization within the Regional Government that is accountable to the Regional Head in the framework of administering governance in the regions. In the Provincial Region, the Regional Apparatus consists of the Regional Secretariat, Regional Offices and Regional Technical Institutions. In a Regency/City Region, the Regional Apparatus consists of the Regional Secretariat, Regional Offices, Regional Technical Institutions, Districts and <i>Kelurahan</i> (village). In Mandalika, decision-making lies with each OPD with an expectation there should be synergy between each OPD that refers to higher centralized regulations.
2. Water	“For drinking and cooking, we use refill water using gallons from the nearest hamlet.” M. M.Community_IJZ08 “For drinking water, employees use bottled water.” M. M.Operator_1	The local communities in Mandalika differentiate water sources for drinking and for hygiene, sanitation and other purposes. While bottled water is mainly used for drinking, the sources of water for other purposes vary from shallow groundwater, deep groundwater, Municipal Water Supply companies (PDAM) and, for hotels, water from the Indonesia Tourism Development Corporation (ITDC) or a state-owned enterprise that specializes in the development and management of integrated tourism complexes.
Good water governance and sustainable water	“There has never been a training to guide the use of water for guests, but related to water savings for guests in each room there is a "note"/ note card about saving water and all water facilities for washing hands (faucets) use an automatic sensor system except in the kitchen” M. M.Staff_ITT14	Seasonal water scarcity is a major concern, especially for the community who purchase water from retailers at high prices during times of drought.
Water quality and access	“For the needs of bathing, washing, toileting (MCK), we use water from the wellbore.” M. M.Community_IJZ08 “There are 2 dug wells that can be accessed and even then the water is still dirty/turbid” M. M.Community_ITT10 “Access to clean water in the hotel is different from access in the community where the respondent lives, if in the hotel for drinking water all use bottled water while for other needs they use drilled well	While there are a number of wells that can be accessed, respondents reported water quality issues, centering on the poor quality of groundwater, particularly during the rainy season. Water quality in the hotels is considered to be of higher quality when compared to the community. Hotel operators generally did not complain about water quality, but used filters or chemicals to minimise risks of contamination, or took immediate action to improve poor water quality.

	<p>water that has guaranteed water quality. Water supply in hotels is always smooth because all use their own bore wells, they also have alternative water sources for dug wells and PDAMs, and if all of these sources have reduced water they have the financial capacity to buy water according to their needs.” M. M.Community_IJZ11</p> <p>“Community access to clean water in the area is very different. The hotel has been utilizing the Deep Well water that was built and managed by them. While the community still uses shallow well water for daily needs. qualitatively deep well water is cleaner than shallow wells. water from shallow wells is brackish and brownish.” M. M.Informant_IJZ02</p> <p>“The difference is that people still use shallow wells while hotels use deep wells and PDAMs. This is because the hotel can afford to buy water for hotel supply.” M. M.Informant_IJZ01</p>	<p>Sanitation access is good for guests and staff of hotels, but not in surrounding communities.</p>
<i>Water testing</i>	<p>“Water quality will usually decrease at the beginning of the rainy season, water is usually coloured and smelly, the treatment carried out (in the) homestay is usually by placing chlorine into the well” M.Operator_ITT06</p>	<p>According to the Regulation of Ministry of Health Number 736 - 2010, all water suppliers need to perform quality testing. Moreover, water at point of use in households and hotels should be inspected regularly. However, this is not often the case in practice; water quality in homes is rarely checked. Hotels usually perform water quality testing through a third party, but some hotels do not perform it regularly.</p>
3. Sanitation	<p>“The number of toilet facilities in the community is still limited and has no distinction between places for men or women” M.Informant_IJZ01</p>	<p>Sanitation access in the community in comparison to access in hotels is significantly different, particularly in relation to the availability of toilets, type of toilets, comfort and safety of toilets, and their quality.</p> <p>Many community members without household latrines note the difference in accessibility, type, comfort, safety and quality of toilets compared to those for tourists in hotels, which are good quality toilets with handwashing facilities, soap, and are comfortable, safe and private.</p>
<i>Different access between hotels and community</i>	<p>“Because there are still people at the beach (tourists) doing defecation in any place. This is also due to the limited place to defecate.” M.Informant_IJZ01</p> <p>“How can there be a change in the behaviour of residents while there are no private or public latrines, many residents still defecate in the open.” M.Community_ITT10</p>	<p>Some local villagers practice open defecation at the beach, due to lack of a toilet at home and limited public or communal toilet facilities. With this current low level of access, the community expects more provision of public toilets in their areas.</p>
<i>No disability access</i>	<p>““For now there is no special toilet for the disabled” M.Staff_ITT14</p>	<p>The provision of sanitation/toilet facilities for people with disability is still limited in hotels. An operator mentioned that their hotel provides one unit on the first floor, while other hotels do not provide toilet facilities for people with disability.</p>
<i>Improvements and barriers to sanitation access</i>	<p>“Changes in sanitation behaviour (BAB) have occurred, especially in the last 2 years, the number of people who defecated in the toilet is increasing. This increase could occur due to counselling from Puskesmas and assistance for the construction of latrines from LIPI 100 units per year since 2019 and from the 20 health units.” M.Community_ITT08</p> <p>“There are still around 15% of residents not yet accessing latrine facilities, especially for those who live on the outskirts of villages and border a forest or garden area. They still think it is safe to defecate in the garden/forest for the reason they are far from residential areas and do not have enough funds to build.” M.Community_IJZ11</p>	<p>Sanitation access in the Mandalika community has been increasing over the past few years. Change has been driven by several factors, predominantly government assistance, economic status and tourism influence. The local government has provided some aid to the community for toilet construction as well as counselling by community health workers from the primary health centre/<i>Puskesmas</i>, which has helped the community to build toilets and change their defecating behaviour. The tourism development in the area also has driven change due to better economic status and more involvement in tourism</p>

		<p>business. Households tend to improve their sanitation facilities if they change part of their house into accommodation for tourists. A village midwife believes that shame can trigger the community to stop open defecation.</p> <p>Barriers for sanitation access mentioned by community members are that the perception of open defecation is a safe practice if it is conducted far from residential areas, and that many families cannot afford to build a toilet.</p>
<i>Recommendati on for collaboration and support</i>	<p>“It is necessary to increase the awareness of the people around Mandalika about the importance of sanitation facilities and clean and healthy living behaviour. - the participation of hotel entrepreneurs through their corporate social responsibility (CSR) are needed to contribute to the facility provision” M.Informant_ITT01</p> <p>“Need cooperation between the community and the government and the hotel in dealing with sanitation issues, especially for people who are still defecating anywhere.” M.Community_IJZ08</p> <p>“In addition to supporting the provision of infrastructure, this is in the context of its maintenance and sustainability; for example, the government has repaired and made sewers/drains but because there is no maintenance many of the drainage/gutters are not functioning, even becoming a dump ” M.Community_ITT11</p>	<p>Collaboration and support is recommended by respondents to improve sanitation access, particularly conditions within the community. Collaboration between the community, government, and hotels is expected to address sanitation issues in the community in terms of changing people’s behaviour and for infrastructure such as constructing toilets. A community respondent also highlighted the importance of support for maintenance of existing sanitation infrastructure.</p>
<i>Wastewater and solid waste</i>	<p>“Toilet waste between people and hotel are the same, using the septic tank, but for washing, bathing and kitchen waste in the community most do not have waste treatment, [it is] only channelled into the gutter or backyard. Whereas if there is a waste treatment in the hotel itself, if it is completely drained, it uses a toilet suction service” M.Operator_ITT06</p> <p>“It is necessary to increase the awareness of the community and visitors to maintain cleanliness in the Mandalika area, especially the awareness to dispose of rubbish at its place” M.Informant_ITT02</p> <p>“So far there is still many waste from the hotel which is dumped carelessly near the location of the hotel” M.Informant_IJZ01</p> <p>“There needs to be a good sorting of garbage in the hotel and at the disposal site, finally the hotel has started to pioneer the reduction of plastic waste” M.Staff_ITT13</p>	<p>There is a significant difference in wastewater management practices between community and hotels. In the community, many households flow their blackwater from toilets to a septic tank, and domestic (grey) wastewater to the surrounding environment without proper wastewater channels or collection and treatment facilities. There is growing awareness in some households to build proper wastewater channels.</p> <p>Solid waste management is related to environmental sanitation and includes people’s behaviours in littering and improper waste-dumping by households and some hotels. The impact of solid waste on the environment is recognised as also impacting the area’s attraction as a tourist destination. It is noted the community should sort waste for recycling, and reduce plastic waste.</p>
4. Hygiene	<p>“The difference between the practice of personal hygiene in hotels with the community is clearly different, in a hotel with complete facilities where hand washing is everywhere, in the room, the living room and there is always soap, water is always available when bathing and can also use warm water, while in the community washing hands more often do not use soap and for bathing there is one time a day for fear of lack of water later when often bathing, and this always happens every year.” ITT12</p>	<p>Handwashing with soap at critical times is standard operating procedure in hotels for staff and sufficient facilities are provided. Critical times include:</p> <ul style="list-style-type: none"> - After using the toilet; - Before food preparation; - When starting and finishing work. <p>Staff and operators agree this is commonly practiced. Community members are also aware of the good conditions provided for handwashing and hygiene in hotels, and of their comparative lack of water access (e.g. mentioning the number of times they are able to shower a day compared to hotel guests).</p>
<i>Hygiene training</i>	<p>“The most important practices for personal hygiene in hotels are bathing and washing hands with soap, because the employees clearly become fresher and confident in carrying out their work and most importantly make guests comfortable to be served, not disgusted”. M.StaffITT07</p>	<p>Good hand hygiene by hotel staff is viewed as critical to guest satisfaction, however explicit hygiene training is not usually provided. Hotel environmental</p>

	<p>All employees have not received specific training in hygiene practice, training is done only in the form of OJT (On the Job Training) as the focus of a particular field based on the duties they are doing. M. Operator 1</p>	<p>health and hygiene are verified by the relevant authority, such as the Central Lombok District Health Office.</p>
<p><i>Handwashing with soap, menstrual hygiene management, community handwashing</i></p>	<p>So far no problems with menstrual hygiene management for employees and guests, both in the toilet room for guests, as well as in the employee toilet available for the disposal of plastic bags that will be in the waste bin, along with the transport of the garbage truck. The employees in the toilets also provide disposal pads for supplies for female employees and female employees who experience pain during menstruation are allowed holidays; they rest at home without reduction in their salaries. M.Operator 1</p> <p>The Homestay has not prepared menstrual necessities for female employees, female employees prepare menstrual needs and others independently, the homestay only prepares trash bins, but this has not been considered a problem by female employees with only 1 person. M.Staff IJZ13</p> <p>Meanwhile, the residents around the respondents were mostly more intense in doing hand washing before and after eating, after defecating or touching faeces (<i>peboki</i> children after defecation) and if the condition of the hands looked dirty, sometimes even though they were already traveling or holding something if they looked clean, they did not appear dirt does not wash their hands. M.Community IJZ10</p> <p>In general, they wash their hands with soap only when they see the dirt sticking in their hands. M.Community ITT09</p> <p>Never use soap except for very dirty hands. M.Community ITT10</p> <p>Men, they tend to ignore the cleanliness. M.Community IJZ10</p> <p>Those who usually forget and tend to ignore hand-washing are children and fathers, because that often happens and does not directly affect health. M.Community ITT08</p> <p>The obstacle to washing hands with soap usually occurs at parties in the village, eating "<i>begibung</i>" by means of washing hands in the form of a bowl of clean water, without soap and 1 cup of water for more than 1 person. Water washing hands before eating is also used to wash hands after eating. With this condition, respondents will usually wash their hands again with soap when they get home. M.Community IJZ10</p> <p>Respondents sometimes never wash their hands because water is only a little, just to drink, which often forgets to wash hands actually all children and parents because there is no water, the most important thing is when you eat, you have to wash your hands, but that was water that was just barely enough to drink. M.Community ITT10</p>	<p>Handwashing with soap facilities are readily available to hotel guests.</p> <p>Menstrual Hygiene Management (MHM) for hotel and homestay staff is addressed and no concerns were raised.</p> <p>In the community handwashing is reported as practised for some (but not all) critical times, but not consistently, and not consistently with soap.</p> <p>There is a perception that some groups (men, children) wash hands less regularly than women.</p> <p>There are cultural gatherings in communities when handwashing practices before eating are less safe. Good hygienic handwashing practices should involve use of soap and running water. Communities reported use of water in a bowl rather than running water, especially during community gatherings. This behaviour does not constitute good handwashing practice as diseases can spread through the communal handwashing bowl.</p> <p>Water insecurity is so severe in some communities that there is only enough to drink, and not enough for people to practice hand hygiene.</p>
<p>5. Water Stewardship</p>	<p>"There needs to be a local regulation related to the distribution of water to the community and hotels to avoid jealousy." M. M.Informant_IJZ03</p> <p>"The water supply for the community needs to be comparable with/between the hotel and the community to avoid social jealousy" M. M.Informant_IJZ01</p>	<p>Water stewardship is defined as using water in a way that is socially equitable, environmentally sustainable, and economically beneficial, which also uses a stakeholder-inclusive process involving site and catchment-based action. Key informants are aware of the potential for social conflict and attendance loss of social cohesion, evidenced by their mention of social jealousy.</p>

<p><i>Sustainable water</i></p>	<p>“There has never been a training to guide the use of water for guests, but related to water savings for guests in each room there is a "note"/ note card about saving water and all water facilities for washing hands (faucets) use an automatic sensor system except in the kitchen” M. M.Staff_ITT14</p>	<p>A key issue for stakeholders is the impact of hotels’ activities regarding water on the local community.</p>
<p><i>Good water quality is desirable</i></p>	<p>“..the movement from the rainy season to the dry season always changes both the quality and quantity of water from the wellbore.” M. M.Community_IJZ08</p> <p>“Water quality will usually decrease at the beginning of the rainy season, water is usually coloured and smelly, the treatment carried out (in the) homestay is usually by placing chlorine into the well.” M. M.Operator_ITT06</p> <p>“The hotel and tourism actors should support and contribute to the management of clean water, sanitation and garbage in the community around the hotel because the cleanliness of the hotel’s surrounding environment would make guests comfortable to stay in the hotel for a long time. This would then be a hotel brand that will continue to be searched for by domestic and foreign guests.” M. M.Community_IJZ11</p> <p>“There is a need for care from tourism actors, especially large hotels, to help improve clean and healthy living behaviour in the community, by helping to provide means and or developing activities to improve the knowledge and skills of citizens doing personal hygiene practices.” M. M.Community_IJZ10</p> <p>“CSR of the smallest hotel should be directed to the development of clean water and sanitation for the community around the hotel.” M. M.Community_IJZ11</p> <p>“There needs to be involvement of hotels/tourism entrepreneurs in providing assistance in improving the supply of clean water, sanitation and hygiene behaviour in the community.” M. M.Community_ITT08</p>	<p>Respondents noted that water quality is not consistent throughout the year, particularly in the rainy season.</p> <p>Health Office staff stated there is no significant positive influence from present tourism operators in Mandalika to the surrounding community; that the involvement of the tourism sector with water and sanitation development is limited, and the hotels have very limited CSR activities that address WASH issues.</p> <p>Many community members stated that hotels should contribute to their society by providing WASH through CSR programmes. They viewed the CSR contribution as good not only for their community, but also for the benefit of the hotels, believing that tourists would be more comfortable when staying in a clean environment.</p>
<p><i>Safe water, sanitation and hygiene (WASH)</i></p>	<p>“Water supply in hotels is always smooth because all use their own bore wells, they also have alternative water sources for dug wells and PDAMs, and if all of these sources have reduced water they have the financial capacity to buy water according to their needs.” M. M.Community_IJZ11</p> <p>“Community access to clean water in the area is very different. The hotel has been utilizing the deep well water that was built and managed by them, while the community still uses shallow well water for daily needs.” M. M.Informant_IJZ02</p> <p>“The difference is that people still use shallow wells while hotels use deep wells and PDAMs. This is because the hotel can afford to buy water for hotel supply.” M. M.Informant_IJZ01</p> <p>“ITDC currently provide water distilled from sea water but it is very expensive and unaffordable for medium-sized hotels and for the local communities.” M. M.Operator_1</p> <p>There is a need to procure proper sanitation facilities in the community and also SPALD (waste water system) needs to be considered so as not to pollute the environment within the KEK area.” M. M.Informant_IJZ02</p>	<p>Safe water, sanitation, and hygiene for all emphasizes that no-one is left behind in access to WASH. There is a major difference between access to WASH in hotels and the community.</p> <p>Respondents are aware that safe sanitation is required and faecal waste is one of the major pollution sources of clean water.</p>

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	<p>“Waste management needs to be included, and for the community around the inn, because [otherwise the inn] will pollute the environment and hotel area.” M. M.Staff_IJZ07.</p> <p>“Waste outside the ITDC area that has not been managed, and public awareness not to litter is low. For example (as a result), in the environment around the homestay, if rain and river overflow there will be a puddle as high as an adult’s heel. Whereas foreign tourists are usually very concerned about environmental cleanliness” M.Operator_ITT06</p>	<p>A hotel staff member emphasized the importance of waste management in relation to the impact of the hotel on the surrounding community.</p> <p>The Environment Office noted that much of the clean water supplied to tourism areas and to communities is used for gardening and irrigation and that it is important to have different water sources for these purposes. However, there is minimal rainwater harvesting despite water scarcity because safe water use behaviours are not yet in place.</p>
6. Culture	<p>“Culture and tradition are now selling points for the central Lombok region. Some big events such as the <i>bau nyale</i> are special attractions for this region. In addition, there are several other cultures developed and preserved by the government today such as <i>nyongkolan</i> and <i>jaran kamput</i>” M. M. IJZ02</p>	<p>Culture and traditional events such as <i>bau nyale</i>, <i>nyongkolan</i> and <i>jaran kamput</i> are key attractions of Mandalika, together with the area’s natural beauty. Preserving culture is seen to be the responsibility of the local government.</p>
<i>Culture and hand-washing</i>	<p>“The obstacle to washing hands with soap usually occurs at parties in the village, eating <i>begawe</i> by means of washing hands in the form of a bowl of clean water, without soap and one cup of water for more than one person” M.Community_IJZ10/M.Community_ITT08/M.Community_ITT11/M.Community_ITT09</p>	<p>Handwashing practices are related to culture because village parties, called <i>begawe</i> or <i>rowahan</i>, are events at which members of the local communities eat together.</p>
<i>Good water quality</i>	<p>“Water quality will usually decrease at the beginning of the rainy season, water is usually coloured and smelly, the treatment carried out (in the) homestay is usually by placing chlorine into the well.” M. M.Operator_ITT06</p>	<p>Groundwater quality is a concern for the community, and it is generally recognised that hotel water is of higher quality than in the community.</p>
<i>Safe WASH for all</i>	<p>“The difference is that people still use shallow wells while hotels use deep wells and PDAMs. This is because the hotel can afford to buy water for hotel supply.” M. M.Informant_IJZ01</p>	<p>Community wastewater management is often unsafe, with many households flowing their faecal sludge from toilets to septic tanks, and domestic (grey) wastewater to the surrounding environment without proper collection and treatment. In larger hotels, wastewater is treated with effective treatment systems, with designated personnel to maintain the system’s operation as well as a clear auditing system.</p>
7. GEDSI – Gender Equity, Disability and Social Inclusion	<p>“Opportunities from women and minority groups to talk with community leaders are open, but there are not many women’s groups, disabilities and other marginal groups who dare to talk with leaders and the government including discussing water and sanitation issues.” M. M. IJZ09</p>	<p>GEDSI is integral to the complex network of social, environmental, political and economic issues that shape tourism but opportunities for specific groups such as women, people with disabilities, and members of socially vulnerable groups to speak out and voice their interests, needs and concerns are not systematised among all stakeholders when planning for the development of Mandalika and its infrastructure needs.</p>
<i>Government requirements not recognised or fulfilled</i>	<p>“All hotels should provide facilities for the elderly, but to my knowledge they do not. Especially in the income management office/BPPD there are no facilities for the elderly and disabled.” M.M. IJZ03</p> <p>[There are] limited facilities for persons with disabilities in tourism areas, limited government policies governing disability facilities and [disability] has not become a priority government program. M. Female. IJZ06</p>	<p>Government policies and their requirements for public/community and hotel WASH facilities were either not known or were perceived not to be fulfilled, particularly where policies addressed the specific needs of people with a disability. There is little recognition by government agencies and hotel management of the different needs of disabled tourists and those within the</p>

	<p>There is an NTB Province Regulation No. 4 of 2019, validated 15 May 2019, concerning the fulfillment of intellectual property rights and protection for persons with disabilities in local regulations governing health, education, infrastructure, clean water supply and labour. M. Female. IJZ06</p> <p>There has been a special discussion on disability in the Batu Kute village, Narmada sub-district. M. Female. IJZ06.</p> <p>From the perspective of disability for the tourism sector, there is no command support yet. It can be seen from the supporting facilities that have been built that [GEDSI facilities] do not yet exist for the future development of HWDI (association of women with disabilities). The regency regulation that has been ratified is just for the city of Mataram, [broader] Lombok is still [a work-in-progress]. M. Female. IJZ06.</p> <p>The WASH GEDSI aspect is inherent in each OPD in the region, it's just the ability of each OPD to connect the TOURISM issue with its planned job description annually. M.M. IJZ02</p>	<p>community. Six hotel operators did not know the Government's policy focus on WASH access.</p> <p>Generally, there is a lack of recognition of the needs, interests and concerns of women and members of socially vulnerable groups which underpins the gender-based attitudes and norms currently impacting their capacity to become involved in the management of water, water infrastructure decision-making and maintenance, and WASH issues. At the community level discussions about disability have occurred.</p>
<p><i>GEDSI requirements permeate community water issues</i></p>	<p>Community water access [is] different to hotels. 5 males, 1 female (Hotel operators)</p> <p>MHM - Plastic disposal bags are provided in room for guests and in the toilet for employees. Goods can be obtained from Human Resources, M. M. IJZ07, and Homestay Manager. M. F. ITT06</p> <p>For menstrual hygiene management in the toilet for female employees, there is a special trash bin to dispose of menstrual used items, but items for menstrual needs such as sanitary napkins are not provided at the hotel, the hotel only prepares painkillers. However, female employees do not consider this a problem, because it is a routine cycle for women so they are always ready when menstruation comes. M. M&F. ITT14</p>	<p>Women in the community are likely to have higher demands for water during their period (due to the need to wash more regularly), and when they care for small children or the elderly or sick relatives.</p> <p>Safe workplace washrooms are available for women. In the workplace, women require water to maintain an acceptable public standard of hygiene, which is difficult when there is limited availability of and access to water.</p> <p>While there was a recognition of the existence of menstruation in female employees and the need for disposal of items, there is no training in menstrual hygiene management (MHM) (or broader social inclusion) in the workplace.</p>
<p><i>Collaboration and cooperation to perform GEDSI actions and training</i></p>	<p>It is important to [compile] a masterplan which involves all parties in supporting tourism in central Lombok. M.M. IJZ02</p> <p>The government and the community must work together, for example, when the construction of a drill hole has an impact on the surrounding community, and the community must also respond when involved in preparing a plan. M. Female. IJZ06.</p> <p>Women, disability groups and other marginal groups may talk with community leaders about water and sanitation issues, but they prefer to leave the problem to men, because they lack confidence. M. M.Community_IJZ11</p> <p>The government and the operators are still very distanced (not synergized). Especially with the people [i.e. community]. Communication rarely occurs between the government and tourism actors as well as with/to the community. M.M. IJZ03</p> <p>There needs to be an effort from the government/ health office/ village to encourage people who are still [open] defecating to change their behaviour to always defecate in the toilet and for that there needs to be stimulants/ help [within the] community to build latrines. M. F. IJZ08</p> <p>Sanitation practices between communities and hotels are very different. The hotel tends to be cleaner because the tools and facilities are available, different from the people whose facilities and tools are</p>	<p>There was a consistent view from all respondent categories and genders that collaboration and cooperation is key to socially inclusive engagement with female and male hotel operators and staff, with women in communities, and with the GEDSI requirements of the community's needs.</p>

	<p>very limited. The number of toilet facilities in the community is still limited and has no distinction between the place for men or women. M.M. Informant_IJZ01</p> <p>The community still needs counselling by both the <i>Puskesmas</i> and the village regarding personal hygiene so that the practice of personal hygiene, especially washing hands with soap and bowel movements in the toilet, becomes a necessity and habit - not when there is an outbreak of this corona[virus]. M. M. IJZ09</p> <p>Specifically in tourist areas such as Kuta Mandalika there needs to be involvement of hotels in conducting educational activities related to personal hygiene practices to [community] residents [and] there needs to be support for the provision of hand washing facilities for schools around the area. M. M. ITT11</p>	<p>Both male and female respondents want to see an increase in training and education within the tourism sector in Mandalika in order to see an improvement in the operation and functionality of existing water infrastructure, and knowledge about water hygiene. When hotel staff were asked in their focus group discussion whether they had received training in water use, for example, 5 out of 7 responses were that “no training” had been provided.</p>
<p><i>GEDSI impacts of COVID-19</i></p>	<p>All hotel employees have been given training on Wash-at-Work practices, hygiene practices including food preparation and service ethics whether done in a hotel or in collaboration with the health department. The last 3 months, before Covid-19, training has been held which was attended by employees both men and women in turn. M. M.Staff_ITT14</p> <p>We do not recognize these conditions [C-19 and its impacts on/increase in domestic violence] in society. M.M. IJZ02</p> <p>There is none [C-19 and its impacts on/increase in domestic violence]. M. F. ITT07; M. M. IJZ07; M. F. IJZ12</p>	<p>Even though women’s involvement in access to, use of, need for, and decisions about water were raised as important and beneficial, many barriers emerged from the data in relation to a recognition of the needs, interests and concerns of women and members of socially vulnerable groups during the COVID-19 pandemic. In most cases the GEDSI-specific factors related to COVID-19, particularly in relation to the increase of domestic violence on women and children, have not been recognised or have been ignored.</p>
<p>8. COVID-19</p>	<p>“The positive impact is that the habits of the community to behave in a clean and healthy life are increasing, such as the habit of washing hands with soap. Each household has hand washing facilities using soap and other environmental hygiene” M.Staff_IJZ13</p> <p>“Hand washing [has] become more frequent than before on the premises due to Covid-19, [as has use of] personal protection.” (M.Operator_3)</p> <p>“In the community hygiene practices before the Covid-19 period were still very weak. The hygiene practice of washing hands with soap is usually done when hands look dirty, if not [people] wash hands without soap. With the outbreak of Covid 19 personal hygiene behavior in the community has increased especially for hand washing with soap and bathing after traveling. This is done because the community is worried about/afraid of Covid-19 transmission to the family and the surrounding environment.” (M.Staff_IJZ14)</p>	<p>Positive and negative implications of COVID-19 and associated travel restrictions, hygiene requirements and economic consequences were reported. The positive impacts of COVID-19 are an increase in hygiene in the community, especially in relation to hand washing with soap practices.</p> <p>The pandemic has increased people’s awareness of the immediate benefits of personal hygiene, i.e. it stops transmission and therefore keeps their family safe. Keeping family safe links to the finding that hotel staff have maintained personal hygiene primarily for the benefit of hotel guests. The COVID-19 pandemic may change this limited perception, potentially leading to a long-term improvement in hygiene practices.</p>
<p><i>Negative impacts</i></p>	<p>“The negative impact of Covid-19 for tourism and the community, especially in the economic sector is felt. Since March 2020 guests are no longer in the Kuta area. Many hotel employees are laid off, hotels no longer accept food from suppliers, the hotel has a lot of expenditure and minimal income. In the community, many have lost their jobs, traders were generally empty of buyers, providers of vehicle rental services were quiet of users, while the credit/<i>kredit</i> installments continued to be billed by the finance/[lenders] and others.” (M.Staff_IJZ13)</p>	<p>A range of negative impacts arise from COVID-19. Impacts for hotels include reduction in hotel occupancy, closure of some hotels, low morale due to new disaster for businesses. Impacts on employees involve lost or reduced work for employees leading to financial difficulties. Impacts on families of employees and wider community are loss of income while household expenses are ongoing, which is particularly difficult for women; loss of work in other sectors,</p>

	<p>“The impact of Covid - 19 on this large hotel is quite pronounced, because since March 2020 guests have gradually left and no one has re-entered, some employees at home are mainly employees residing in the Red Zone (<i>Zona Covid-19</i>), while hotel operational costs have become larger compared to income. Employees who are not home are operating with a reduced number of work days. For these employees this condition reduces family income, while the necessities of life remain. For female employees this is quite a hassle, especially in managing household expenses.” (M.Staff_ITT14)</p>	<p>economic ripple effect from loss of tourists and work, unpredictable consequences.</p>
<p><i>Response to COVID-19</i></p>	<p>Always wearing masks, and maintaining bodily hygiene while at the hotel and at home, maintaining contact with hotel guests, the hospitality forum has been held to have limited discussions with hotel managers to anticipate co-infectious transmission in every hotel, some agreements including providing more CTPS facilities at hotel and public areas.” (M.Operator_2)</p> <p>“In the community hygiene practices have not been implemented maximally, hygiene practices are only carried out by educated community groups and that number is very small. But over time and the development of science and technology has seen changes in hygiene behaviour in society, especially nowadays (the outbreak of the Covid-19 case), the behaviour of maintaining personal hygiene in the community increases, especially washing hands with soap and bathing after traveling. This is intended to break the chain of transmission of Covid-19 especially for family members and the surrounding community in general.” (M.Staff_IJZ13)</p> <p>The hotel should provide assistance to the community for Covid-19 assistance” (M.Community_IJZ08) “Hotel intervention for the prevention of Covid-19 in the community has not been done” (M.Staff_ITT14) “Local governments should be thinking about us, protect us, protect us, telling us about the vision and mission of local tourism development in the future and give us good support and moral support infrastructure that supports the development of tourism and the surrounding area Mandalika” (M.Operator_1)” “Outbreaks of the disease are unpredictable as it is today, limited capacity (knowledge and skills) of local human resources in managing tourism” (M.Operator_1) “The hospitality forum has been held to have limited discussions with hotel managers to anticipate co-infectious transmission in every hotel, some agreements including providing more CTPS facilities at hotel and public areas.” (M.Operator_2)”</p>	<p>Hotel operators and staff are working to reduce the spread of COVID-19.</p> <p>COVID-19 has increased personal hygiene practices within the community, which remained basic prior to the pandemic.</p> <p>Respondents indicated limited human capacity in tourism management. This is also reflected by responses to the question what the long-term changes are that need to be made in hotel operation during the outbreak and afterwards, to which not all operators had an answer. This indicates the need for education and human capacity building initiatives, not just in response to COVID-19 but more generally to address WASH in tourism.</p> <p>There is also an opportunity for hotels to assist the community to respond to COVID-19, as some responses suggest. Safe destinations are important to tourism, which highlights the importance of destination stewardship. However, the economic situation of hotels, especially smaller ones, cannot be ignored, and a coordinated destination wide response may require input from industry bodies and government.</p>

<p>9. Engagement & Collaboration</p>	<p>“The government and the operators are still very distanced (not synergized). Especially with the people. Communication rarely occurs between the government and tourism actors as well as with/to the community.” M.Informant_IJZ03</p> <p>“Recommendations related to efforts to improve clean water, sanitation and hygiene practices in the community that need to be encouraged by a forum that involves tourism actors with community representatives who have a program focused on developing access to clean water, sanitation, and hygiene practices in the community around the hotel.” (M.Community_IJZ09)</p> <p>“Because of limited district budgets, it requires the involvement of various central, provincial, and private parties to increase the supply of clean water in the KEK Mandalika” (M.Informant_ITT02)</p> <p>“Recommendation; The government and the Novotel need to increase their cooperation to conduct socialization in the community about the importance of clean and healthy living behaviours so that hygiene practices in hotels and in the community do not occur too far apart.” (M.Staff_ITT14)</p> <p>“Recommendation: Regarding waste management in Novotel, if there is a more sophisticated tool for processing waste, it needs to be improved in this hotel. And a cooperation program between the Novotel and the government is related to the socialization of waste management in the community so that domestic wastewater can be utilized or managed properly. So that the environment becomes clean/not muddy” (M.Staff_ITT14)</p>	<p>There is a lack of cooperation and collaboration between communities, government and tourism operators. The absence of synergy between parties presents a barrier to addressing WASH issues and impacts tourism development.</p> <p>A reoccurring theme was the need for improved collaboration and engagement of a range of stakeholders, to improve WASH issues and enhance tourism management.</p> <p>Communities want hotels to contribute to their society by providing WASH through CSR programmes – a mutual benefit for the community and hotels, as tourists would be more comfortable when staying in a clean environment.</p>
<p><i>Inclusive WASH training</i></p>	<p>“Before the COVID-19 outbreak Sasak homestay had conducted training for its employees on water management, sanitation and hygiene practices, in collaboration with the Central Lombok District Health Office” M.Staff_IJZ14</p>	<p>Training on WASH –at Work practices has been conducted in collaboration with the health department, showing a joint initiative between tourism operators and government on which future training can be built.</p>
<p><i>Recommendations to improve collaboration</i></p>	<p>“Recommendations related to efforts to improve clean water, sanitation and hygiene practices in the community that need to be encouraged by a forum that involves tourism actors with community representatives who have a program focused on developing access to clean water, sanitation, and hygiene practices in the community around the hotel.” (M.Community_IJZ09)</p> <p>“Regional regulations need to be involved to involve tourism businesses in contributing to the clean water distribution around the Mandalika area” (M.Informant_ITT01)</p> <p>There is an expectation or request that hotels contribute to the distribution of water to the community:</p> <p>“This collaboration is in the context of building synergy between OPD and tourism businesses.” (M.Informant_IJZ01)</p> <p>“Village government needs to conduct socialization and counselling about clean and healthy living behaviour, especially related to BAB behaviour to realize ODF in Mertak Village in collaboration with related parties (Village, Health Office, PU and LH)” (M.Community_ITT09)</p>	<p>The willingness for collaboration needs to be improved by all stakeholders, including government - to engage with the community to gain their inputs into policy making, but also from the community - to provide a response into planning when the opportunity is supplied.</p> <p>Recommendations were made to improve engagement and collaboration between stakeholder groups via:</p> <ul style="list-style-type: none"> ● Organising a forum to bring together different stakeholders and facilitate a discussion about how WASH practices can be improved in the community; ● Improving regulations (which may involve defining or agreeing on what the responsibilities are for the public and private sector); ● Offering training that is developed in collaboration between a range of stakeholders, including community and government; ● Engaging stakeholders in collaboration, which may be framed around building synergies and mutual support.

<p>10. Value Proposition</p>	<p>“Cleanliness of the environment and the community of tourism actors need to be developed and managed.” (M. M.Informant_IJZ02) Success will be seen in the next 20 years: Tourism with international service standards for all its facilities including its environmental health facilities. It is the locals’ need to innovate in order to prepare their human resources, so that safe and comfortable tourism in Mandalika can be created and maintained.” (M. M.Informant_IJZ06) M.Staff_IJZ12 community “do not maintain the cleanliness of the neighbourhood”. “Safe & Comfortable" means safe from crime and the risk of diseases, especially environment-based diseases, and comfortable in terms of using all available facilities.” M. M.Informant_ITT01</p>	<p>The importance of WASH to tourism is reflected in WASH at work (hotel scale), and stewardship of the destination (destination scale). WASH is important for the attraction of the destination because it impacts:</p> <ul style="list-style-type: none"> - The pristine state of the natural environment; - Perceptions of cleanliness and safety; - Culture (particularly food preparation). <p>It is in the interest of tourism businesses, and the wider tourism sector, to contribute to an improvement of WASH “over the fence” into local communities and the broader surrounding environment.</p>
<p><i>WASH is important to success and image of hotels</i></p>	<p>“Environmental cleanliness and hotel rooms” (M. M.Operator_4) “This homestay is famous for the hospitality of its owners in providing services and cleanliness” (M. M.Operator_ITT06). “Key factor of success of the lodge was “Cleanliness of the environment and lodging rooms” (M.Operator_ITT06).</p>	<p>While health issues were predominantly related to accidents, alcohol or drug consumption, a few examples of illness due to food or hygiene were provided. Since the rapid development of tourism in Mandalika, some organizations and academic institutions have provided training related to food handling to communities who provide services to tourists. However, hotel operators’ contribution to “capacity building to the surrounding community is still very limited”.</p>
<p><i>WASH in hotels can support healthy workforce</i></p>	<p>Staff always wash their hands with soap, before and after their activities because it is an obligation to maintain personal hygiene. M.Staff_IJZ12 Those who usually forget and tend to ignore hand-washing are children and fathers, because that often happens and does not directly affect health. M.Community_ITT08 “There needs to be involvement of hotels/tourism entrepreneurs providing assistance in improving the supply of clean water, sanitation and hygiene behaviour in the community.” M. M.Community_ITT08/ITT09</p>	<p>The higher level of cleanliness, hygiene and sanitation in hotels is important for the optimization of guest experience. Many references were made about staff hygiene practices, which are linked to serving the guest well. The association that personal hygiene may have personal health benefits is largely missing, which suggests an opportunity for awareness creation, training and education. In the context of COVID-19 participants recognised the importance of washing hands with soap to stop transmissions but there is little recognition for the benefits of hygiene practices to stop a spread of disease between tourists (work) and the community (home) and vice versa. Hygiene practices such as washing hands with soap are not practiced consistently within the community and the link between good hand hygiene and health is not consistently understood. Larger hotels provide hygiene training, indicating an opportunity to enhance awareness of hygiene practices beyond the hotel.</p>

5 Discussion

The project investigated how a GEDSI WASH-at-Work program could be of use to hotels and the broader tourism sector in Mandalika, Lombok, and be scaled-up for use elsewhere in Indonesia. The research questions were:

1. What is the value proposition, including the business case, for a GEDSI WASH-at-Work program in the tourism sector?
2. What are effective water stewardship approaches to support the adoption of a GEDSI WASH-at-Work program in the tourism sector, and what are the potential WASH benefits to host communities?
3. What are the barriers to and opportunities for engaging governments and CSOs to support the scale-up of a GEDSI WASH-at-Work program within the tourism sector?

5.1 Governance and policy

The data indicated the general agreement in Mandalika that WASH in the community is the local government's responsibility, due to existing regulations.

Mandalika's status as a special economic zone (KEK) enables it to enjoy advantages that include the provision of infrastructure and facilities. While managed by the national government through the ITDC, data showed that hotel managers know of and understand the vision for and mission of tourism development in their KEK.

The Masterplan of Regional Tourism Development/RIPARDA (Rencana Induk Pembangunan Kepariwisata Daerah) regulates tourism but RIPARDA appears to be inadequately disseminated in Mandalika because not all hotel owners are aware of its existence. Effective communication of information and concrete government support have the potential to enable Indonesia, via the tourism industry, to achieve aspects of SDG 6 - the achievement of universal access to water and sanitation by 2030, and SDG 5 - the achievement of gender equality and empowerment of all women and girls.

The research findings link policy to WASH and the tourism sector, particularly policy dissemination and community support for collaboration with the tourism industry. While the tourism industry was rapidly expanding in Indonesia (prior to COVID-19) and is considered globally to be a key driver for socio-economic progress, organisations such as the World Business Council for Sustainable Development, which devised a Pledge for Access to Safe WASH at the Workplace, have noted that since the launch of their WASH Pledge in 2013 only 47 companies have signed. The low uptake suggests it is timely to recognise that tourism sector businesses require information and government support, via:

- Encouragement to engage in WASH-at-Work programs.
- Guidelines for actions to be taken.
- Regulations to ensure that hotel operators, other tourism accommodation providers, and tourism businesses more generally know what is required from them.
- Provision of information required to promote compliance.

Such information and support will assist them to provide GEDSI WASH-at-Work programs and broader WASH opportunities that, in turn, may lead to more comprehensive commercial, social and health benefits.

The Plan for Technocratic Strategies 2020-2024, Ministry of Tourism and Creative Economy/ Rancangan Teknokratis Rencana Strategis 2020-2024 Kementerian Pariwisata and Ekonmi Kreatif, mentions that some of the barriers for tourism development in Indonesia are the quality of infrastructure and amenities to support security, cleanliness and accessibility; the readiness and capacity of local communities in managing tourism sites; and the lack of collaboration between tourism actors and associations with government.

The Plan articulates some strategies to improve tourism, which include building the capacity of communities and tourism and creative economy institutions/organisations in communities (the 13th strategy). The private sector can collaborate (via tourism associations and destination communities) to improve the health and environmental sanitation of the destination site, potentially and positively impacting tourism development of the broader area. For example, EarthCheck is a green certification program for the tourism sector , which provides environmental standards and benchmarking tools for measuring tourism operators' and destinations' sustainability performance.

5.2 Water use

The data indicated that local communities in Mandalika differentiate water sources for drinking, hygiene and sanitation, and other purposes. While bottled water is mainly used for drinking, water sources for other purposes vary from shallow and deep groundwater, Municipal Water Supply companies/PDAM and, for hotels, water from the ITDC or a state-owned enterprise that specializes in the development and management of integrated tourism complexes.

Respondents identified there is more effective access to water in hotels compared to the community. Further, studies have shown that hotels use significantly more water per guest night than locals consume, with disparity being highest in low or middle-income countries (Becken, 2014). Due to their greater financial capacity, hotels have more alternative water source options when the main water source becomes inadequate due to drought. However, hotel size matters; costs become prohibitive if homestays are forced to purchase water when their wells run dry.

The findings align with broader literature that suggests access to water and sanitation, although a basic human right, can face critical sustainable development challenges. Negative impacts on people are increasing as competing demands for clean freshwater place increased pressure on water quality and availability. Correlated negative impacts are increasing risk for businesses, governments, communities and the environment (SDG Compass, 2019). Due to the increased risks surrounding water as a contested public resource, 'water stewardship' has emerged in response to business awareness of water as a critical resource for business and society (Hepworth and Orr, 2013).

Business can contribute to the alleviation of potential water challenges by adopting a water stewardship strategy that addresses water's economic, environmental, and social dimensions. By adopting water stewardship, companies may make a positive contribution to improved WASH management and governance by adopting values and practices that aim to safeguard long-term availability of clean water and provide WASH for all stakeholders in a watershed (SDG Compass, 2019). The National Hotel Association has been committed to and supports the reduction of plastic waste in all hotel businesses in Indonesia, however, there is no commitment to support water and hygiene development in the community.

5.3 Sanitation

Access to sanitation in the communities of Mandalika is not as good as that available in hotels. Toilets in communities are less available, and of lower quality, type, comfort, and safety. Most significant is that most villages in and around Mandalika have not achieved Open Defecation Free (ODF) status.

Respondents observe that in local villages, some people are practicing open defecation at the beach, because some households in the area do not have a toilet at home, there are limited public toilet facilities at the beach/tourism sites, and some share toilets with neighbours. With the current low level of access, the community expects more provision of public toilets in their area. As many informal tourism workers are women, who are usually the street vendors of local souvenirs and crafts, provision of accessible, adequate and comfortable public toilet facilities at tourism destinations is necessary, not only for tourists but also women as a key group of tourism actors.

The type of toilet available to the community is also described as differing from those of hotels; it is usually a squat type toilet, with a wet floor, while hotels generally provide Western-type toilets, which comprise a cistern (seated) toilet with a dry floor. Also, some toilets in the community do not provide enough privacy because the door cannot be closed or locked properly, the floors are slippery and some have limited lighting.

The differences continue in terms of access in hotels to a good quality toilet that is complete with handwashing facilities and soap. Larger hotels have staff toilets that are differentiated between genders, which is not the case in homestays. And only one hotel participating in the research provides toilets for people with a disability.

Sanitation in terms of wastewater management is in place but, again, with significant differences between community and hotel practices. In the community, many households flow blackwater from toilets to a septic tank, and domestic (grey) wastewater to the surrounding environment without proper wastewater channels or collection and treatment facilities. Solid waste management is seen as a key issue related to environmental sanitation, cleanliness and potential negative impacts on Mandalika as a tourist destination.

Improvements in sanitation in Mandalika have been driven by government assistance, increased economic status, and the external influences and income brought by tourism. The local government has provided some assistance to the community for toilet construction as well as awareness programs by community health workers from the primary health centre/puskesmas. Belief systems and economic barriers to access sanitation mentioned by community members are their perception of open defecation as safe if practised away from residential areas, and that poorer families cannot afford to construct a household toilet.

5.4 Hygiene

Sanitation is closely linked to hygiene practices and management in Mandalika, particularly to availability of water, soap, facilities, and hygiene awareness, knowledge and beliefs.

Handwashing with soap at critical times is standard operating procedure in hotels for staff and sufficient facilities are provided, however, hotels did not mention undertaking spot checks or monitoring of compliance to standard operating procedures. Community members are aware of the good conditions provided for handwashing and hygiene in hotels, and their concomitant lack of water access. While good hand hygiene by hotel staff is viewed as critical to guest satisfaction, explicit hygiene training is not usually

provided. While Menstrual Hygiene Management (MHM) for hotel and homestay staff is addressed through provision of waste disposal facilities, no explicit MHM training in hotels or the community was provided.

In the community handwashing was reported as practised for some (but not all) critical times, but not consistently, and not consistently with soap. Some respondents perceived some groups (men, children) wash hands less regularly than women and there are cultural gatherings in communities when handwashing practices before eating are less safe because water in a communal bowl (without soap) was used rather than running water. However, water insecurity is so severe in some communities that there is only enough to drink, not for people to practice hand hygiene. Where handwashing practices are part of religious ablutions, they do not involve soap. The linkage between good hand hygiene and health is not consistently understood, and children's health remains a key concern for communities.

Community practices link to the need to recognise the structural factors that support handwashing, which include time to wash hands, accessible and clean facilities, and ensuring handwashing is a social norm. Understanding people's perceptions of handwashing is critical to planning hygiene interventions (Chittleborough, Nicholson, Basker, Bell, & Campbell, 2012).

Respondents noted that risks associated with COVID-19 have altered handwashing practices amongst community members and hotel staff, particularly when people travel beyond their homes.

5.5 Water stewardship

Data demonstrated that hotels have the financial resources to access expensive and sustainable water sources. The Novotel, for example, uses a private desalination unit to desalinate sea water from the area owned by ITDC which, in turn, is a private company owned by the GoI. Other hotels and guesthouses source water from the Municipal Water Supply (PDAM) company's sources, and build bore wells using electric pumps. Local communities have differing access to water and are primarily reliant on shallow wells. While hotel staff declared there has been no social conflict over water between hotels and the local community, government key informants and hotel operators expressed a keen awareness of potential water conflicts and attendant loss of social cohesion.

Many respondents identified the links between maintaining safe sanitation and ensuring high water quality and access to safe, clean water, while recognising that water quality worsened in the dry season. Community members requested that hotels provide WASH support through CSR programs, viewing such actions as beneficial for their community, the hotels, and tourism broadly.

The findings link to Kreutzwiser et al.'s (2011) study of private wells and the factors required for citizens to exert well stewardship. Enabling factors for effective well stewardship included reassurance, perception of problems and knowledge of the environment. Constraints included complacency, inconvenience, ignorance, cost, and privacy concerns. The authors call for effective government regulation and responsibility of private wells and understanding of well owners' behaviours, as a first step to plan well stewardship programs. For example, a free-of-charge service offered by the government to test water quality and its low usage due to the inconvenience of leaving and collecting samples. The authors propose enhanced education and targeted regulations to improve well quality (Kreutzwiser, et al., 2011), linking to Frederiksen's (Frederiksen, 2007) proposal that water resource management shift its focus from goals, policies, strategies and governance to the effective functions of stewardship and services.

The data suggest that water quality and WASH need to be guaranteed by the government to avoid the breakdown of social cohesion that can arise from people's perceptions of the social injustice of water access and pricing, and that the policies and regulations of governing bodies should also consider local

cultural norms when planning to meet water management challenges (Wutich, York, Brewis, Stotts, & Roberts, 2012).

Safe destinations are important to tourism, particularly for the elderly and parents with children, which highlights the importance of the concept of destination stewardship (see May 1991). The concept of stewardship in tourism encompasses responsibility and precaution, whereby it is in the “host’s best interest to become proactive champions, stewards and custodians of the natural environment and cultural context” (Dwyer, 2018, p. 36). To develop a stewardship approach, community interests need to be considered and their participation sought (Dwyer, 2018) to enhance a co-ordinated destination-wide response with input from government and tourism sector associations to assist Mandalika’s businesses and community with additional guidance and support.

Water conservation is a key component of Green Globe 21 certification which, although critiqued for its lack of focus on sustainable tourism, has been considered an important contributor to tourism sector environmental standards among large hotel operators (Eldis, 2000). However, awareness of water conservation is lacking among other actors. The Plan for Technocratic Strategies 2020-2024, Ministry of Tourism and Creative Economy states that tourism industries in Indonesia remain unconcerned with environmental sustainability issues, which is due to lack of incentive for tourism actors who perform well in these areas. The Plan also highlights the importance of CSR from businesses in the tourism sector to support the development of community-based sustainable tourism. The Plan also highlights the threat of climate change to tourism industries but focuses predominantly on the risk of natural disasters and less on water issues and the intensive spread of infectious diseases due to climate warming. Nonetheless, the potential negative impacts of climate change require the tourism sector to address water, health and hygiene issues more effectively in the present for the future.

5.6 Culture

Data illustrate Mandalika’s culture and the traditional events celebrated by its ethnically diverse village communities are key attractions for visitors that work in tandem with the area’s natural beauty. The research data identified a range of tourism’s negative impacts on local culture, but respondents maintained that preserving and protecting culture is the responsibility of the local government and expressed concern that many events are being moved from their traditional locations at the beach.

Respondents identified key links between culture and WASH practices. At village parties/begawe or rowahan, during which members of local communities eat together, people wash their hands in a communal bowl of water, without soap. Traditional ceremonies are usually performed on the beach, where there is no water to wash hands during the performance, exacerbating the potential for disease transmission, particularly during COVID-19 type pandemics.

People’s enculturated behaviours link to the facilities and conditions required to enact Law No. 18/2012, which relates to food safety in Indonesia and supports existing socio-cultural ideas about food hygiene and safety. A GEDSI WASH-at-Work program generated from the tourism sector and supported by government can work with and minimise problematic enculturated behaviours by enhancing knowledge and awareness of effective hygiene practices and embedding them within local communities.

5.7 Gender equity, disability and social inclusion

Many gender equity, disability and social inclusion (GEDSI) issues were identified as key influences on hotel operations in Mandalika’s tourism sector. In some cases, GEDSI exists in the gaps in people’s

knowledge, for example, in their lack of awareness about pregnant women's needs, children's specific requirements in infrastructure design such as public facilities, and the mobility requirements of people with a disability.

In not recognising the heterogeneity of tourists and the community, the needs, interests and concerns of women and girls and members of socially vulnerable groups are under-estimated or ignored. For example, when speaking of the 'human' resources "of the local community in adjusting to the development of the region. M.M. ITT02", no GEDSI issues are mentioned. The specific needs of the many social groups who are labelled GEDSI are conflated into the broad category of 'human', with no accompanying recognition of difference and correlated social, safety and security issues. UNESCO (2003-2004) and the UN's Disability Rights, Gender, and Development: A Resource Tool (2008) notes

women and children with disabilities are more vulnerable to poverty, violence and social exclusion, women and children are more at risk than their male counterparts to develop disabilities because they are often last in line to access food, education and health care. Women are also disproportionately concentrated as caregivers of family members with disabilities. Furthermore, while men with disabilities are more commonly cared for by their wives, women with disabilities are more likely to be abused or deserted by their husbands. Consequently, such discrimination on the grounds of disability, gender, age, and minority status converges and intersects in the areas relating to gender-based violence, traditional practices. (UN 2008, 2-3)

The lack of recognition of GEDSI difference problematises 'top-down' planning for the tourism sector and potential risk to social cohesion in Mandalika. For example, in terms of actual hygiene facilities, there is differing access to safe facilities, which exist in the workplace, but not in the community. Hotel operators' assertion there was no potential for social conflict to arise from these differences demonstrates a lack of knowledge about and awareness of the community's WASH situation and needs.

Among many hotel operators, government policies and their requirements for public/community and hotel WASH facilities were not known or not fulfilled, particularly where policies addressed the specific needs of people with a disability. The lack of focus on disability is significant for hotel operators' ability to enact the requirements of the International Labour Organisation WASH-at-Work framework. Members of disability advocacy groups confirmed that hotels do not specifically address their WASH needs.

Persons with disabilities remain at a disadvantage in global, regional and national efforts towards achievement of the SDGs. SDG 6 works to ensure inclusive access to water and sanitation for persons with disabilities, which requires "accessible designs, including accessible toilets, water points, water carriers, bathing places and handwashing facilities" (UN, United Nations Disability and Development Report, 2017), while accessible infrastructure development in urban and rural environments, public spaces, facilities and services (SDG 11) is of parallel importance for inclusive participation in all aspects of society and development.

In the workplace staff require water to maintain an acceptable public standard of personal hygiene, which is difficult when there is limited availability of and access to water. However, in not understanding the GEDSI implications of water availability, quality and access, respondents do not recognise that a lack of access to drinking water, effective sanitation, and knowledge about hygiene hinders gender equality by ignoring the needs of women in the community, who are likely to have higher demands for water during menstruation (due to the need to wash more regularly), and when they care for small children, the elderly and/or sick relatives. WASH facilities in places of employment enable women to fully participate in the workforce, and WASH programs and practices must be shaped by and integrate GEDSI into their design, outputs and outcomes, i.e. acknowledging the different perceptions, needs, issues and concerns of female

and male hotel employees, and members of local communities in terms of the elderly, children and youth, and persons with a physical or mental disability.

Of significance is that GEDSI-specific factors related to COVID-19, particularly in relation to the increase in domestic violence on women and children, were not recognised or were ignored. Under Indonesia's Anti-Domestic Violence Law (No. 23 of 2004), physical, psychological, sexual and economic violence are criminalised. But there are many barriers to implementation of the law, which range from a lack of public education about domestic violence to under-resourcing of front-line services. Domestic violence is now widely recognised as the most prolific form of gendered violence perpetrated against women in Indonesia, which is worsening as COVID-19 spreads.

Domestic violence during the COVID-19 pandemic has been described as “more frequent, severe and dangerous”. The Legal Aid Institute of the Indonesian Women's Association for Justice (LBH Apik) has reported an increase in domestic violence cases since Large-Scale Social Restrictions (PSBB) came into effect - exacerbating the frequency and seriousness of violence in already abusive relationships, but also aggravating tensions in families because of extended periods of confinement. Social norms that position the husband as head of the household and primary breadwinner are placing pressure on men who lose their jobs. The Indonesian National Commission on Violence Against Women (Komnas Perempuan) is conducting a nation-wide survey on the impact of PSBB on women, particularly on domestic violence (Jones, 2020).

Actions taken in relation to COVID-19 such as dismissal of employees who are not feeling well can show a lack of knowledge about the specific impacts on female employees. The UN Report on the gendered effects of COVID-19 show that in Indonesia women report significantly greater negative mental and physical health impacts than men (UN Women 2020, 7).

In the community assertions about women's lack of capacity and opportunity to be heard, which suggest also that members of socially vulnerable groups remain unrecognised and unheard, underpin the gender-based attitudes and norms currently impacting the capacity of women and members of socially vulnerable groups to become involved in the management of water, water infrastructure decision-making and maintenance, and WASH issues.

Yet women and girls are empowered when they have control over the resources to meet their WASH needs and to participate in the provision of WASH services. Water and sanitation are fundamental human rights and integral to a human rights-based approach to development, while investments in WASH reduce the burden of unpaid work on women and girls, and facilitate participation in education, employment, leisure activities and decision making. WASH services provide economic opportunities for women. WASH services also enable women to seize local entrepreneurial opportunities, including WASH-related income generating activities that improve their livelihoods.

Data demonstrate that despite the recognition in hotels of the existence of female employees' menstruation and the need for hygienic disposal of items, there was no training in menstrual hygiene management (MHM) in the workplace, suggesting women are expected to bear individual responsibility for their menstrual hygiene needs. This contrasts with the International Labour Organisation (ILO) advice to engage in MHM awareness and training for all employees (ILO, 2016, 107).

Women represent nearly half of the global labour market, and those of menstruating age (~12 to 49 years) are a significant and growing portion of female employees. Menstruation is a normal biological process and a key sign of reproductive health, yet it may still be seen as shameful and carry a significant social stigma. This can be particularly problematic at work, and women may face many challenges when it comes to managing their menstruation during working hours, particularly in terms of raising MHM issues with male employers (such as the need for additional time to access toilet facilities), and managing cultural

restrictions (such as menstruating women not being able to leave the house), which may impact their ability to engage in work-related activities (ILO, 2016, 107-108).

Adequate MHM refers to the materials, services, and information necessary for girls and women of menstruating age to safely and effectively handle their menstruation, without shame or embarrassment. MHM is truly a cross-cutting WASH issue that extends beyond access to hygiene, and encompasses access to safe water and access to sanitation. Ensuring adequate MHM at the workplace not only promotes the health and wellbeing of girls and women, but also contributes to their increased morale and productivity, as well as to the reduction of harmful menstruation related stigma of all workers (ILO, 2016: 107-108).

Both genders identified that collaboration and cooperation is key to socially inclusive engagement with female and male staff, with women in communities, and with the communities' GEDSI requirements. Both genders wish for an increase in training and education within Mandalika's tourism sector to improve the operation and functionality of existing water infrastructure, and their knowledge about water hygiene.

The findings align with Heller's (2016) report on the Human Right to Safe Drinking Water and Sanitation on the role of gender equality in the realisation of the human right to water and sanitation. The report highlights key areas to prevent and respond to gender inequalities in WASH and barriers to the realisation of the human right to water and sanitation.

The findings also align with the business case for WASH. The availability and quality of WASH services is a basic yet valuable indicator of government functionality at national and local levels. The full potential of investment in WASH is realised through the establishment of effective, accountable and inclusive institutions that support equity and inclusion for the poorest and most vulnerable, including women and girls. Establishing such institutions and enhancing WASH services through tourism provide an example of how a shift in tourism development from focusing on serving the community rather than (or as well as) the tourist may be achieved (Pollock, 2015). Gender-responsive budgeting is an important tool to ensure that commitments and policies that support the WASH needs of women and girls are put into practice (WaterAid Canada, n.d. 20).

5.8 COVID-19

The tourism sector's focus on maintaining personal hygiene primarily for the benefit of hotel guests may be changed by the COVID-19 pandemic to maintaining personal and family safety, thereby generating potential long-term improvements in the broader community's hygiene practices.

Positive and negative impacts of COVID-19 were an increased focus on personal hygiene for health in contrast to travel restrictions and negative economic consequences. Hotel operators and staff provided examples of measures taken by hotels to manage the economic impacts.

Respondents indicated there was limited capacity in tourism management to respond to COVID-19 immediately during the pandemic and in planning for actions following it, revealing the need for education, training and capacity-building initiatives, not just in response to COVID-19 but to address WASH in tourism generally, and GEDSI-WASH-at-Work in particular. Responses also indicated that no cases of domestic violence had been recorded in Mandalika, suggesting the extremely low awareness of COVID-19's impact of domestic violence on women and children.

Providing WASH services in a timely manner is an essential first step in re-building communities and re-establishing or strengthening local government systems and creating an enabling environment for long-

term sustainable development following a health and economic crisis such as that caused by COVID-19. WASH interventions can help bridge immediate humanitarian needs with longer term development efforts. Equally, there must be a clear recognition of power relations that are triggered when working on GEDSI issues, especially when using an approach that aims to transform harmful power dynamics in households and the broader community (Jones, 2020; UN Women 2020).

5.9 Engagement and collaboration

There is a desire for more effective cooperation and collaboration between communities, government and tourism operators in Mandalika so the whole community benefits from tourism in the area. The absence of synergy between parties presents a barrier to addressing GEDSI-WASH issues and negatively impacts tourism development beneficial to the community.

Key informants reported there were no ‘best practice’ models about how to improve management through multi-stakeholder collaboration between communities, government and tourism operators. Respondents noted that trainings on WASH-at-Work practices in communities have been held in collaboration with the health department, which demonstrates the potential to leverage from an already existing capability for a joint initiative between tourism operators and government.

The need for more effective collaboration and cooperation between multi-stakeholder groups to address WASH issues in Mandalika was highlighted, particularly via a collaborative approach to addressing WASH issues (and policy-making more broadly) in order to transfer some of the responsibility to the community, and thereby potentially increase their agency. The Government of Indonesia’s regulation Presidential Regulation/*Peraturan Presiden* Number 63 Year 2014, relating to tourism monitoring and control addresses the issue of multisectoral coordination to support tourism development.

Respondents voiced their unhappiness with the way tourism development has been managed, there was a lack of capacity, and improved collaboration may have the potential to contribute to improved tourism management. Collaboration was perceived to be critical to implement change and reflected an important value within Mandalika of how change can be achieved.

A Tourism Master Plan, to which all stakeholders have contributed and which all support, was seen to be essential for future planning. Collaboration was considered important for effective policy making in tourism, which may also improve how government policies are made; examples were provided where improved co-operation between stakeholders has led to improved WASH outcomes.

The findings relating to the desire for increased collaboration in planning and cooperative actions align with literature from international hotel chains that have implemented collaborative processes, such as the Hilton Hotel Group’s We care! Program (Bohdanowicz, Zientara, & Novotna, 2011). The program was devised to improve the environmental performance of the 70 Hilton hotels operating in Europe between 2006-2008; it was developed as part of the organisation’s CSR program. The hotel chain’s employees believed the program was about team collaboration and were proud to work for a company that cared.

The desire to see the benefits of more collaborative planning and implementation in the tourism sector and the Mandalika community also links to destination stewardship and water stewardship as “an evolving framework, which implies an awareness and willingness to seek collaboration on business water-related risk across the value chain” and to move beyond the limited concept of economic efficiency (Orr & Sarni, 2015, p. 18).

5.10 Value proposition

The importance of WASH to tourism lends itself to a value proposition as it is reflected in multiple scales, i.e. the stewardship of the destination (destination scale), and the importance of WASH-at-Work (workforce scale and hotel scale). WASH is important for the attractiveness of Mandalika as a destination, because it impacts:

- The pristine state of the natural environment.
- Perceptions of cleanliness and safety.
- Culture (particularly food preparation).

Many factors influence destination choice, but tourism is image sensitive and risk averse (Shakeela & Becken, 2014). For example, the World Economic Forum (2019) measures the travel and tourism competitiveness for each country using a range of indicators, in which 'health and hygiene' is considered important. In this research, local respondents identified the 'environmental health' of the pristine beaches and clean surroundings as one of Mandalika's drawcards.

To achieve sustainable economic development through tourism, a holistic approach needs to be taken to develop destinations and improve the tourism product. To be successful, this needs to go beyond developing the primary tourism product and includes improving the provision of sanitation in addition to enhancing environmental and health conditions (Arthur & Mensah, 2006). Ensuring improved access to clean drinking water and sanitation can help maximise tourism potential which may lead to further investment in tourism businesses (Hutton & Chase, 2016). Hutton et al. (2008) calculated the economic impact of poor sanitation on health, environment as well as the tourism industry in Cambodia, Indonesia, the Philippines and Vietnam. The study found that poor sanitation impacts tourism as it affects the attractiveness of destinations, can lead to sickness of visitors and therefore effect arrival numbers, leading to economic costs in form of revenue loss and failure to exploit potential tourism capacity (Hutton et al., 2008). In Indonesia for example, poor sanitation was estimated to incur an economic loss of US\$215 million in the tourism sector and holiday sickness episodes of tourists including daily welfare losses were estimated to create an economic cost of US\$ 25.5 million (Hutton et al., 2008).

There is consequently a case for improved WASH services across the destination to reduce the risk of infectious disease or environmental degradation which may deter tourists. The data suggested it would be in the interest of the wider tourism sector and its businesses, to contribute to an improvement of WASH 'across the fence' into local communities and the broader surrounding environment.

Respondents perceive tourism as improving local people's economic lives (particularly in terms of Mandalika becoming an internationally-recognised destination), contributing more broadly to capacity-building their skills, and enhancing their health and environment. Respondents identified the range of factors important to the success and image of local hotels, including the need for WASH (due to a few examples of tourist illness brought on by food or hygiene) and suggested there is a need for improvement in WASH. However, the association that hotel staff's personal hygiene may have personal health benefits is largely missing, suggesting an opportunity for Government agencies and the tourism sector to provide WASH awareness, training and education. Community members also support the idea that there should be more involvement of tourism businesses in providing community WASH access, awareness, training and education.

These findings align with existing studies highlighting the importance of WASH for the image of hotels. WASH practices, in particular sanitation and cleanliness of areas such as toilets, have been found to impact on guest satisfaction. Chan & Baum (2007) identified the satisfaction and dissatisfaction of

ecolodge visitors, whereby constructs leading to satisfaction are not the same that lead to dissatisfaction. Poor sanitation was one of the factors that contributed to dissatisfaction, whereas good sanitation did not lead to satisfaction. The results suggest that good sanitation is a factor linked to the minimum expectations of guests (Chan & Baum, 2007), and it is likely that this expectation would increase due to the experience of the COVID-19 pandemic.

6 Recommendations and Conclusion

6.1 WASH-at-Work in Mandalika

Mandalika is a top priority tourism destination for Indonesia, tipped for expansion due to its designation by President Joko Widodo as one of 10 key tourism destinations to be developed. Despite this ambition, planning for infrastructure is not developing via collaboration and engagement with local people's needs, interests and concerns, particularly those of small-scale hotel and guest-house operators, and those of the community.

The data show that water scarcity remains a major constraint on development, despite desalination plants for larger hotels such as the Novotel. Members of local communities rely on shallow wells and guesthouses on bore wells, but concerns are arising over increasing salinity of wells situated close to the shoreline.

Amenities for tourists differ markedly from local communities, particularly in relation to the lower availability and type of toilets, lower quality, comfort and safety and, when compared to hotels, to the latter's provision of handwashing facilities, soap and privacy. Some local villagers practice open defecation at the beach, due to lack of a toilet at home and limited public or communal toilet facilities, which in turn impacts their broader human right to, and gender equality in, water and sanitation.

The research documents that there is a lack of cooperation and collaboration between communities, government and tourism operators. Communities want hotels to contribute to their society by providing WASH through CSR programmes. Staff affirm that collaboration and cooperation are key to socially inclusive engagement with female and male hotel staff, women in communities, and understanding the GEDSI needs of the community. Key informants in hotels reported there were no 'best practice' models about how to improve management through multi-stakeholder collaboration between communities, government and tourism operators. Government stakeholders confirm the need to more effectively link policy to WASH and the tourism sector, particularly in relation to policy dissemination. Overall, there is a desire for more effective cooperation and collaboration using multi-stakeholder groups to address WASH issues and broader policy-making, which has the potential to transfer some responsibility to the community (and thereby potentially increase their agency) and to enhance knowledge transfer between communities, government and tourism operators in Mandalika to improve tourism management and to enhance benefits from tourism to the whole community. A Tourism Master Plan, to which all stakeholders have contributed and which all support, was seen to be essential for future planning.

GEDSI WASH-at-Work tools need to be developed in conjunction with hotels, communities, and government. The research demonstrates the ways in which GEDSI is integral to the complex network of social, environmental, political and economic issues that shape tourism. However, there is little recognition by government agencies and hotel management of the different needs of tourists, and those within the community, with a disability. There is no training in menstrual hygiene management (MHM) (or broader social inclusion) in the workplace. Also, key to understanding the needs of the community is a GEDSI lens to recognise the needs of women, who are likely to have higher demands for water during menstruation (due to the need to wash more regularly), and when they care for small children, the elderly and/or sick relatives. These findings are significant for Indonesia's recognition that water and sanitation are

fundamental human rights and are integral to a human rights-based approach to development, and for the tourism sector's ability to enact the requirements of the ILO's WASH-at-Work framework.

Inclusive access to WASH is important for the tourism sector to maintain a strong reputation with tourists and social licence to operate from local communities. Whilst all stakeholders envision tourism success contributing to an improved economy, enhancing community welfare, human resource development and improved public and environmental health, a number of changes are required to achieve this vision.

6.2 Recommendations for Mandalika

The recommendations are made as steps towards achieving the vision of Mandalika as a tourism destination benefitting all stakeholders:

1. Government

- 1.1. Government explicitly addresses, and ensures compliance to policies supporting, the needs of different genders, the elderly, youth, children and people with a disability, and their differing WASH access needs in hotels and public places.
- 1.2. Integrate WASH and water stewardship into tourism policy and plans. Communicate and enforce policy.
- 1.3. Improve water security in Mandalika for all stakeholders including improving regulation of groundwater extraction to allow for more equitable access.
- 1.4. Government has and enforces regulations for wastewater management, drainage and solid waste and encourages community behaviours to achieve the vision of Mandalika as a clean attractive destination.
- 1.5. Government and hotels support measures to support the poor and vulnerable in the community to improve water access through economic hardship. Water access is critical for hygiene practices for infection prevention and control (such as COVID-19) so benefits all stakeholders.

2. Community / Civil Society Organisations

- 2.1. Develop and deliver targeted hand washing hygiene promotion activities for specific groups (e.g. men and children) in the community to increase and sustain handwashing behaviours beyond COVID-19 including ensuring access to handwashing facilities and soap supplies.
- 2.2. Hotels increase their CSR activities and contribute to the community and clean environment.
- 2.3. Ensure equitable access to water for community as well as tourism development projects. (e.g. 100L pp/day vs 600L pp/day; institutional responsibilities that ITDC provide for tourism and Local Government for tourism).
- 2.4. Communities implement Community Based Total Sanitation (STBM) and safe faecal sludge management.
- 2.5. Encourage civil society organisations to support households in building accessible WASH facilities.

3. Hotels

- 3.1 Hotels develop GEDSI-WASH program at work to support hygiene behaviour change in hotels and at home for staff (hand and food hygiene, and MHM). Encourage private sector (through Tourism Board) and tourists to contribute to STBM program to achieve open defecation free in all areas in areas surrounding Mandalika. (STBM pillars: food hygiene; safe water at home; HWWS; use a hygiene toilet; solid waste management)
- 3.2 Encourage hotels to maintain high quality service for tourists whilst improving water efficiency and reducing consumption of a shared resource.
- 3.3 Hotels to adopt a water stewardship strategy that considers factors beyond the hotel premise (e.g. environmental and social dimensions of water); and uses CSR programs to support collaboration and cooperation with communities via community capacity building programs, and WASH-at-Work training.
- 3.4 Implement GEDSI WASH-at-Work guidelines to ensure barriers to faecal-oral transmission pathways are broken to protect health of tourists, staff and communities (e.g. good food hygiene as barrier to contaminated fresh produce).

4. All Stakeholders

- 4.1 Women's water needs and roles using water in the household are greater than those of men and should be recognised as water scarcity has greater negative impacts on women and girls.
- 4.2 Expand on existing multi-stakeholder platforms (e.g. POKJA AMPL, Tourism Board, Tourism Association etc) including government, tourism sector, communities, civil society organisations and academia to discuss, prioritise and manage: WASH risks and needs of all stakeholders; water quality and quantity and water stewardship; commercial challenges and health risk assessments; future challenges including climate change impacts; and actions required to maintain Mandalika as a desirable tourist destination.
- 4.3 PDAM, communities and small hotels develop and implement Water Safety Plans to identify, prioritise and manage risks (e.g. overextraction, saline intrusion) to their water supply systems, with technical support from government, taking local cultural norms for water management into account where appropriate;
- 4.4 Develop a GEDSI WASH-at-Work guidelines, procedures and certification system and integrate into approaches to opening tourism addressing COVID-19 risks. This has potential for broader scale-up across Indonesian tourist destinations.
- 4.5 Contextualised and culturally appropriate hand hygiene campaigns are provided to increase HWWS as a social norm in communities.

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