

Inclusive WASH and Tourism in Labuan Bajo, Indonesia: Case Study Report



Research Project: Engaging Corporate Actors for Inclusive WASH at Work

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List of Abbreviations

AMDAL	Environmental Impact Assessment
AMPL	Drinking water and environmental sanitation
ASEAN	Association of South East Asian Nations
BOP	Tourism Authority Agency
BP4D	Regional Research and Development Planning Agency
Bupati	Provincial Regent
CSR	Corporate Social Responsibility
CTPS	Handwashing with soap (<i>Cuci tangan pakai sabun</i>)
Dasawisma	Dasawisma is a PKK work program from the centre to the village, which consists of a group of women from 10 heads of families (KK), who carry out beneficial activities for the family
DHF	Dengue Hemorrhagic Fever
DINKES	District Health Office
DPD	Regional Representative Council
DPR	House of Representatives
GEDSI	Gender equality, disability and social inclusion
HWWS	Handwashing with soap
KEK	Special Economic Zone (<i>Kawasan Ekonomi Khusus</i>)
Kelurahan	Village
KSPP	Provincial Tourism Strategic Area
Manggarai	Name of a specific locale
MHM	Menstrual Hygiene Management
NTT	West Nusa Tenggara
PDAM	Perusahaan Daerah Air Minum
PERUMDA	Regional public company
PHBS	Clean and healthy lifestyle
PKK	Family Welfare Empowerment, abbreviated as PKK, is a community organization that empowers women to participate in Indonesia's development
POKJA AMPL	WASH Working Group
RIPARDA	Masterplan of Regional Tourism Development/RIPARDA (<i>Rencana Induk Pembangunan Kepariwisata Daerah</i>)
RPJMN	Mid-term National Development Plan
RT	Neighbourhood
SDG	Sustainable development goal
SOP	Standard Operating Procedure
STBM	Community-led Total Sanitation (<i>Sanitasi Total Berbasis Masyarakat</i>)
TPI	Indonesian Education Television
UKL/ UPL	Environmental management/monitoring plan
UNICEF	United Nations International Children's Emergency Fund
WASH	Water, Sanitation and Hygiene
WWTP	Wastewater treatment plant

Executive Summary

Taking advantage of tourism's key role in Indonesia's development, the research investigated the value proposition for hotels to implement gender equality, disability and socially-inclusive (GEDSI, or Inclusive) water, sanitation and hygiene (WASH) at work programs that contribute to the sustainable development of the tourism sector and in host communities in Indonesia. A value proposition is defined as the ways that businesses can add value to their commercial enterprise by improving WASH practices at work.

The project researched three key questions:

1. What is the value proposition for an Inclusive WASH-at-Work program in the tourism sector?
2. What are effective water stewardship approaches to support the adoption of an Inclusive WASH-at-Work program in the tourism sector?
3. What are the barriers to, and opportunities for, engaging governments and civil society organisations to support the scale-up of Inclusive WASH-at-Work in the tourism sector?

The project team undertook formative research in Labuan Bajo, Flores to explore these issues using a range of qualitative research methods. Some of the key formative research findings described in this report note that:

- Larger hotels usually have high standards for water access, toilets and hygiene for their guests and staff, with regular training provided through Standard Operating Procedures;
- Access to water, water quality and cost of water are significant concerns for communities surrounding hotels in Labuan Bajo, with water scarcity a major concern in the dry season;
- Whilst hotel staff report practicing good hygiene at work this does not always translate to the home setting or to other family and community members.

The project team and in-country partners co-designed guidelines and tools that aim to drive progress at three levels of hotel size (i.e. large, medium and small/guest house). By working with the private sector (hotels and tourism associations), governments and civil society organisations, the research supported Indonesia's objectives to progress Sustainable Development Goals. The research particularly focussed on SDG 6, access to water and sanitation for all, and SDG5, achieve gender equality and empower all women and girls.

The research findings presented here identify the strengths, gaps and opportunities for improving Inclusive WASH in Labuan Bajo. They identify the need to strengthen the value proposition for hotels in the tourism sector to support and contribute to Inclusive WASH-at-Work and destination-wide improvements. The project will use findings to co-design Inclusive WASH-at-Work guidelines with hotel operators in Labuan Bajo. Guidelines for hotels enable them to consider socially inclusive WASH needs and opportunities in their hotels and local communities, and Guidelines for Government enable improved engagement and collaboration by government personnel with the tourism sector.

A range of recommendations has been drawn from the research for government, hotels, the tourism association, communities and all stakeholders, which are presented in section five of this report. The recommendations provide policy guidance for government and tourism sector stakeholders to support hotels and tourism operators to provide effective and inclusive WASH outcomes through a GEDSI WASH-at-Work program.

1 Introduction

The research project is focusing on the ways in which hotels can implement gender equal, disability- and socially-inclusive (GEDSI, i.e. Inclusive) Water, Sanitation, and Hygiene at work (WASH-at-Work) programs in Indonesia. It is developing a value proposition describing why hotels and the tourism sector should engage with Inclusive WASH-at-Work, helpful guidance for Inclusive 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 Inclusive WASH-at-Work programs that, in turn, contribute to sustainable development of the tourism sector and its host communities, particularly post-COVID-19.

Three research questions were developed to support optimal guidelines and actions. They are:

1. What is the value proposition for an Inclusive WASH-at-Work program in the tourism sector?
2. How can water stewardship approaches support the adoption of an Inclusive 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 an Inclusive WASH-at-Work program within the tourism sector?

The research project used a “mixed method” research approach to collect qualitative and quantitative data to examine how the tourism sector is currently investing in WASH-at-Work and in local communities. Quantitative data were acquired from government stakeholders such as departments of health, education, public works, and from tourism associations.

2 Overview of Relevant Literature

2.1 Water Stewardship

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 an Inclusive WASH-at-Work program. While definitions of water stewardship are varied the common ground is that stewardship is about taking care of something that we do not own (AWS, 2020).

2.2 Gender Equality, Disability and Social Inclusion

GEDSI, i.e. Inclusion, has been integrated into the water stewardship frame because:

- It is required to create a viable value proposition and an innovative, sustainable and Inclusive WASH-at-Work program that is anchored in and addresses the complex societies of Indonesia as a nation-state and their tourism sectors as contexts for the research.
- The United Nations guiding principles on business and human rights guide this research project'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). But for many, the tourism sector "perpetuates underdevelopment and the violation of human rights" (Ferguson 2015, 474). 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, 2017). For example, in Labuan Bajo, Indonesia, "women are responsible for domestic water provision and management" (Cole, 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, 2017), which negatively impacts the households in which women function.

GEDSI also shapes reflection about, and is integrated into, the project's focus on Inclusive WASH. In Labuan Bajo, the growth of tourism has been promoted "at any cost with little space for alternative discourses" (Dale, 2015 in Cole, 2017, 15), particularly discussions about ideas that consider how and why women "bear a disproportionate share of the hidden costs of tourism development [and the] differential impacts on different groups of women" (Cole, 2017, 15).

Water access and WASH programs can 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. Unless, however, women and men's "differentiated relationships to water access, uses, knowledge, governance and experiences" (Cole, 2017, 15) are recognised and women and members of socially vulnerable groups are the focus of engagement and collaboration, women will continue to be adversely impacted by the escalation of tourism in Labuan Bajo.

WASH is a key conduit to recognise the benefits of GEDSI because, as current literature shows, safe water and adequate WASH lead to significant gains in health outcomes, especially diarrheal disease (Caincross et al., 2010). 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).

High level frameworks such as the UN High Level Panel on Water's (HLPW) statement addressing the Drinking Water, Sanitation and Hygiene Challenge note

Low quality of drinking water, sanitation and hygiene leads to poor health, poor nutritional outcomes for children, low labour force productivity, and gender inequality due to the drudgery of water collection, the indignity and insecurity of open defecation, and barriers to education and employment when schools and workplaces do not have safe, private toilets... The Panel is seized of the fact that the SDGs relating to health, gender equality, education and poverty, are not achievable without improvements in WASH. (HLPW, 2018)

Of hotel staff and community members with special needs, people with disabilities face the highest health and safety risks from poor WASH services and practices at work, in communities, within tourist destinations and following natural disasters (Johannessen, Rosemarin, Thomalla, Swartling, Stenstrom & Vulturius, 2014). GEDSI also prioritises the human rights of people with a disability by working with them, their representative organisations, and partners (Kompak, 2018, p. 2). The concept of GEDSI is crucial therefore to the design of Inclusive WASH-at-Work programs and to ensure that women and socially vulnerable people are part of decision-making processes about water access and allocation, hygiene, the provision of sanitation infrastructure, and natural disaster management. Integrated water management works to enable social inclusion by promoting participation and outcomes that address the different yet equal needs, concerns and interests of different genders, people with disabilities and other members of socially vulnerable groups (Taukobong et al., 2016).

2.3 Inclusive 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 socially inclusive engagement and decision-making. Consequently, the project recognises that the value proposition for any Inclusive 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 Inclusive WASH is established, because businesses that invest in WASH have increased productivity 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 show that the issues are more complex than providing a simple business case focusing purely on commercial benefits. Rather, research suggests that Inclusive 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).

2.4 Enabling Environments for Scale Up

Several factors present in the governance of institutions or systems may 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 as 'enabling factors' or as barriers that may inhibit change within a particular enabling environment. 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).

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 Inclusive 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 et al. 2015) to ensure that a final framework was created to incorporate as much available knowledge as possible. The framework used in this project includes the following six factors:

- i. Government support: the long-term vision of government and coordination between government partners.
- ii. Knowledge and skills: the skills and capacity of the workforce, as well as the sectoral capability present in-country.
- iii. 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.
- iv. Regulation and enforcement: the existence of regulations and the ability of a sector to enforce those regulations.
- v. Institutional arrangements: organisational and administrative structures inside organisations, as well as agreements, including cost-sharing and financial agreements between organisations.
- vi. Engagement: engagement between government, communities and organisations.

All these elements need to be considered within a specific Inclusive WASH-at-Work context to understand the broader systems in which relevant stakeholders operate.

2.5 The Case Study Area

The key case study area in Indonesia is Labuan Bajo, Flores. It was chosen because:

- Water scarcity is a major issue, potentially affecting availability for drinking and food production.
- Raw water is sufficient on a seasonal basis, but distribution is a challenge. The current dam holds water that is only used for irrigation but demands for such water are increasing.
- The township and surrounding area have a population of 34,000, which is increasing due to inward migration as people arrive to search for employment in the tourism sector.
- The rapidly growing urban area is expanding into rural areas, but sanitation infrastructure is lagging.
- Communal toilets have been prioritised for vulnerable households.

- Women bear a disproportionate share of the hidden costs of tourism (Cole, 2017).

3 Indonesian Context

3.1 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. In 2015 the tourism sector comprised four percent of the total economy. In 2019, the Government of Indonesia (Gol) 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 Gol 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).

Prior to the COVID-19 pandemic, the Ministry of Tourism had 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. Labuan Bajo remains one of 10 tourism destinations targeted for major investment and development by the Gol, and it has been designated a super-premium destination. A limited number of studies since 2015 highlight the linkage of water to the tourism sector in Indonesia (Cole S. , 2017; Cole & Browne, 2015), one of which (Cole, 2017) concluded that tourism negatively impacts local people's access to water, particularly worsening women's burden in relation to water scarcity.

3.2 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 key Ministries involved in water management and their respective roles are outlined in Table 1. 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).

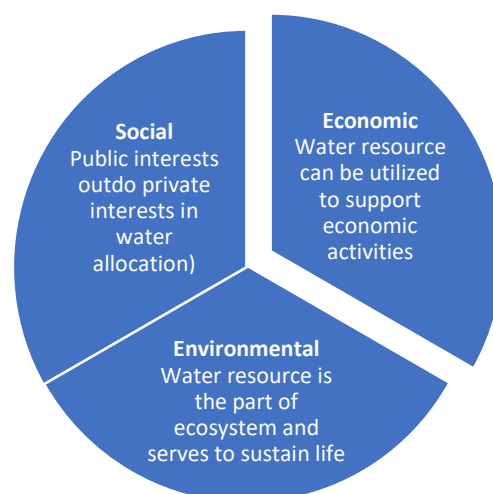


FIGURE 1. THREE FUNCTIONS OF WATER

TABLE 1. GOI WATER RESOURCE MANAGEMENT AGENCIES

Water Resource Management Agencies
<p>BAPPENAS (Ministry of National Planning)</p> <p>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.</p> <p>The relevant divisions with WRM are:</p> <ol style="list-style-type: none">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.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.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</p> <p>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.</p> <p>The relevant divisions with WRM are:</p> <ol style="list-style-type: none">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.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</p> <p>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</p> <p>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: Ministry of National Planning (2020), Ministry of Public Works and Housing (2020), Ministry of Health (2020), Ministry of Environment and Forestry (2020)</p>

3.3 The Private Sector and WASH

Indonesian policy discussions about WASH have primarily focused on the domestic arena. BAPPENAS had determined 18 Priority Tourism Destinations, and the next Mid-term National Development Plan/RPJMN will focus on 10 Priority Tourism Destinations: Danau Toba, Borobudur and its surrounds,

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. However, 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); these can be expanded to Inclusive WASH.

3.4 Gender Equality, Disability and Social Inclusion

The Mid-term National Development Plan (RPJMN) enabled BAPPENAS (2019) to link women' rights with WASH, stating that unimproved water and sanitation hinders women in managing households and performing productive, economic activities. 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.

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 (<i>Kementerian Pariwisata dan Ekonomi Kreatif</i>, formerly <i>Kementerian Pariwisata</i>) focuses on the administration of tourism.
Gender Equity, Disability 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.

4 The Research Site

4.1 Labuan Bajo

Once a small fishing village, Labuan Bajo (also *Labuhanbajo* and *Labuanbajo*) is now a tourist centre and centre of government for the surrounding region. Facilities to support tourist activities are expanding, although the rapid rise in the numbers of visitors is imposing strain on the local environment and infrastructure. Labuan Bajo is the gateway for trips to the nearby Komodo National Park on Komodo and Rinca Islands, both of which are home to the famous Komodo dragons.

There are numerous snorkelling and diving locations nearby such as Kanawa and Seraya Islands. Every evening at Kalong Island, to the south of Labuan Bajo, thousands of flying foxes (*burung kalong*) provide a display as, at dusk, they soar from the mangroves to form a column to begin the crossing to the main island of Flores to the east in search of food in the nearby forests. Other features close to Labuan Bajo include several waterfalls, trekking facilities, caves and many beaches.

The town is small and can easily be traversed on foot in 15 minutes. There are various churches and mosques. Main roads are paved. The local economy is centred around the ferry port and tourism, local shops and restaurants, and the diving trade. The wider area produces fish and palm oil and there is subsistence agriculture in the villages. Living standards remain low in the villages and levels of poverty in the surrounding rural areas are high.

From a total population 259,041 in Manggarai Barat, there are 103,257 people of productive age, while 22.12% are unemployed. 69,257 (67%) of the productive age group have an education level to the end of primary school or below, while 21% have completed secondary education (Manggarai Barat Tourism Report, 2019). The government plans to improve the quality of the workforce by providing further tourism-related training and establishing more tourism villages to be managed by communities. Collaborations with universities and large tourism companies are expected to help improve workforce quality.

4.2 Water in Labuan Bajo

Climatic conditions and rainfall - Labuan Bajo considered to be a semi-arid area, with only four wet months per year. The average rainfall is 1500 mm/year. The highest rainfall is at an altitude of 1000m above sea level (Manggarai Barat Regency, 2021).

Water supply - The water supply serves a population of 34,000. The need for clean water for residents in the city of Labuan Bajo is 100 litres/day/person. With a population of + 25,078 people, the total water requirement is 2,507,800 litres/day or 29.03 litres/second. This amount is expected to increase every year (BAPPEDA Manggarai Barat Regency, 2011). The main water sources are spring water (10 L/s) and surface water from rivers (8-336 m³/s) (BAPPEDA Manggarai Barat Regency, 2011). There are many springs in the Labuan Bajo Urban Area; at least 10 (ten) springs are scattered in Batu Cermin Village, Labuan Bajo Village, Wae Kelambu Village, Gorontalo Village, and Golobilas Village (BAPPEDA Manggarai Barat Regency, 2011). In 2019 the water supply was in deficit by 10 L/s. 30% of water demand is from the commercial sector. The government water supply company provides 50,000 L water tanks on a ship to deliver water to small islands and cruise ships, of which there are an estimated 1,000.

The Central Government of Indonesia supplies more than 80% of the budget for water infrastructure and for additional water sources for the tourism industry and the community, e.g. a sea water treatment plant is being constructed for hotels. However, in 2020 the Labuan Bajo community received less water from PDAM than prior to 2015, which is reasoned as being due to the massive development in the tourism sector and population increase, whereas water pipeline distribution remains steady. In addition, there are few water experts in West Manggarai District, suggesting a human resource issue. There are mixed responses from the community about the lack of water, e.g., some people in the communities have cut water pipes due to their dissatisfaction with the unequal provision of water. In communities, each house has water storage for households needs, which can be used for 3 - 4 days. Those who can afford to then purchase water from tanks from other businesses. Communities also have the option to buy tank water from PDAM, which is cheaper and of higher quality in comparison to buying tank water from individual businesses.

There is general agreement that multi-stakeholder platforms are not working to solve these emerging water problems. There are regular meetings, but there is limited discussion about potential water solutions.

Groundwater - groundwater quality is poor so communities rely on PDAM and tank water. However, in some cases 25% of the minimum salary is being paid for water. There is also illegal extraction of ground water due to lack of local government control. There is not an established process nor implementation of effective monitoring of groundwater quantity and quality, which is the responsibility of the Provincial Government, and the capacity to assist and monitor groundwater extraction appears to be negligible. PDAM has confirmed there are many sources of water and is working to manage increased water intake from spring water to supplement existing water resources and treatment facilities. However, this action poses problems during droughts, so communities resort to tank water. One water tank costs approximately IDR 85,000. Residents of small islands are supplied with clean water by Labuan Bajo City with water storage tanks distributed by boat. Generally, residents of small islands buy clean water for cooking and drinking needs (West Manggarai District, n.d.).

Household access to water - To 2019, in the Komodo sub-district where Labuan Bajo is located, the coverage of drinking water supply was 49% (5,415 households). In the city of Labuan Bajo, there are 4,586 households that are connected to the water supply system provided by PDAM. Those not connected to utility supplies source water from shallow wells and boreholes or buy water from private water tankers (at a cost of 150-200,000Rp for 5m³). In 2020, the Labuan Bajo communities received water twice a week from PDAM. The community has complained because hotels receive water on an almost daily basis. There is a differential tariff between hotels and the community, with hotels paying PDAM more for water. However, the community stated there has to be an equal balance in terms of water provision to hotels and the community. A new water treatment plant/ source is being constructed (to be completed early 2021), from which more water may be provided to the community, potentially for the whole week, and for private businesses beyond the hotels. The plant/source is being developed due to new tourism development planned for Labuan Bajo.

Household access to sanitation - Sanitation access in Manggarai Barat is 72% (STBM monitoring 2020), Komodo sub-district 64.97%, Labuan Bajo Village 85.05%, while surrounding villages range from 38% - 100%. In the past 10 years, Labuan Bajo has improved significantly in terms of hygiene and sanitation. There is a reduced number of cases of open defecation. No dry sanitation technology is being used. The wet system is preferred because there is a preference to use water for personal cleanliness. The communities were not optimistic about hygiene/sanitation facilities because of their on-going limited access to water, not being used to having access to a lot of water, and past ineffectiveness of facilities etc.

The graph in Fig. 3 below shows two different programs implemented by the Health and Public Works offices, drawn from a report by Bappeda (2019). The report states that both programs seem to target different communities, which can eventually enable both programs to increase WASH services and improve behaviours.

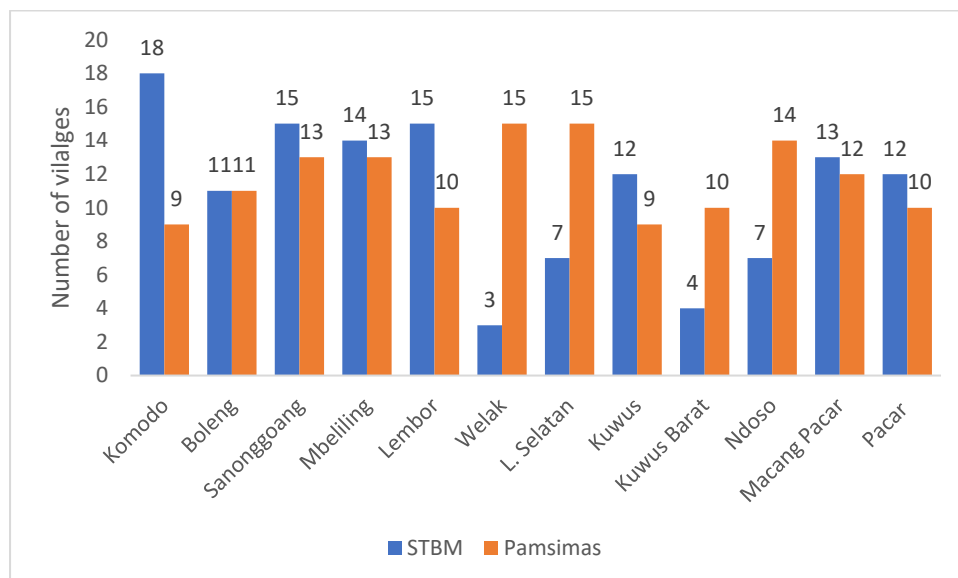


FIGURE 2. PROGRAMS TO INCREASE WASH SERVICES AND BEHAVIOUR (BAPPEDA OF MANGGARAI BARAT , 2019)

4.3 Tourism and Development in Labuan Bajo

The tourism office reports an increase of tourist visits from 41,117 in 2010 to 187,128 visitors in 2019; an average increase of 39.45% per year. International tourists accounted for 93% of total visitors in 2010 and 55.95% in 2019, which shows a significant increase in domestic tourist visits to Labuan Bajo compared to international tourists in the past 9 years. The comparison between the number of visitors in 2018 and 2019 also shows an increase in both domestic and international tourists, of 15.23% and 14.15% respectively (Manggarai Barat Tourism Office, 2019).

The three most favoured destinations in Labuan Bajo in 2019 were Rinca Island (74.4%), Komodo Island (68%), and Batu Cermin (25.9%). The average of length of stay in Labuan Bajo was 5.6 days in 2016; it increased to 6.9 days in 2019 (Manggarai Barat Tourism Office, 2019).

4.4 Airport Upgrade, Hotel Construction, Cruise Ship Arrivals

The Labuan Bajo airport upgrade means that it now has direct flights to Jakarta, Surabaya, Denpasar, Makasar, Lombok, Kupang, and other cities within NTT and can accommodate the Airbus 320, Boeing and ATR 72 aircraft. The movement of aircraft at Komodo Labuan Bajo Airport from 2011 to 2016 increased by an estimated 16%, the number of passengers also increased by an estimated 23%, baggage by an estimated 21% and cargo increased by 2% (Yarlina, 2018).

Further improvements were made to two seaports (PELNI and ASDP Marina Labuan Bajo). The new development of Marina Labuan Bajo comprises complex tourism facilities including hotels, ports and commercial spaces.

Inland transportation is also being improved. A new road an estimated 33km in length has been constructed, as have new routes on the north and south of the island.

In 2019, there were an estimated 481 (53%) tourism transport companies, 73 (8%) travel agencies, 113 (12%) accommodation companies, and 149 (16%) restaurants from a total of 852 companies providing services related to tourism. In total there were 2,136 accommodation rooms available in Manggarai Barat.

The composition of the workforce in the tourism sector in Labuan Bajo was 1,980 (45%) female and 2,432 (55%) males. The majority were working in starred and non-starred hotels; the total number were 824 women and 1,129 men. An estimated 478 people (28% women) were working in the travel related services sector and 910 people (71.2% women) were working in restaurants and catering services. Aquatic tourism companies (594 people, 17.8% women) were also a substantial employer.



FIGURE 3. ARTISTS IMPRESSION OF THE MARINA PLANNED IN LABUAN BAJO

5 Results

The data-driven thematic analysis identified 10 key themes and recommendations emerging from the data, which are presented in Table 3 below. The 10 key themes used to assess the data were:

- | | |
|--------------------------|----------------------------------|
| i) Governance and policy | vi) Culture |
| ii) Water | vii) GEDSI |
| iii) Sanitation | viii) COVID-19 |
| iv) Hygiene | ix) Engagement and collaboration |
| v) Water stewardship | x) Value proposition |

TABLE 3. OVERVIEW OF FORMATIVE RESEARCH FINDINGS

Themes	Statements	Comments
1. Governance & Policy <i>Labuan Bajo as a super-premium destination</i>	The Komodo National Park management is to be carried out comprehensively, meaning that it involves the central government, the environment ministry, the provincial government and the West Manggarai district government. In the future, the Komodo National Park will use a membership system of US1000 per person. At that time, we asked the central government to be able to establish the Komodo National Park as super premium tourism. PDR01, Male, Government.	Labuan Bajo has been designated a “super-premium” tourism destination by the central government, is a future G-20 destination and will host the ASEAN Summit in 2023.
<i>Tourism investment</i>	The central, provincial and district governments focus on the sustainability of tourism in this area. The area has been determined to become a premium tourism destination by the central government, so there’s a lot of assistance through the state budget and provincial budget. For example, cargo/logistics activities that have been relocated by the central government, road widening and the development of the Special Economic Zones, which are clearly very beneficial for the development of tourism in this area. IRN01, Male, government. Now there are many touches of technology and very rapid infrastructure developments with the intervention of the Central Government. Female, IRN10, community midwife.	Tourism investment is significant in Labuan Bajo. Tourism development has become a priority for the central and local governments as seen in the NTT Province’s mission - "Increasing Tourism Development in the Context of Empowering the People’s Economy".
<i>Maintain agency of district and provincial governments</i>	In the future, the Komodo National Park will use a membership system of US1000 dollars per person. At that time, we asked the central government to be able to establish the Komodo National Park as super premium tourism. The second step is to propose to the central government to amend PP (Government Regulation) Number 12 of 2014 concerning non-tax state revenue. So now we could manage the US1000 dollars to be distributed to the central, provincial and district governments. This rule was made so that the regency government did not become a spectator. This uneven income distribution is what makes us protest. PDR01, Male, government. The development of Labuan Bajo is very fast, the central and regional governments are competing to build a better Labuan Bajo, Female, IRN10, community midwife. The second step is to propose to the central government to amend PP (Government Regulation) Number 12 of 2014 concerning non-tax state revenue. So now we could manage the 1000 US dollars to be distributed to the central, provincial and district governments. This rule was made so that the regency government didn't become a spectator. This uneven income distribution is what makes us protest. PDR01, male, government. The government and social services do not really pay attention to people with disabilities. IRN10 Female, community midwife.	Central state budget and decision making is dominant in determining policy direction in Labuan Bajo. Concerns were expressed that the revenue generated from Labuan Bajo as a super-premium destination is not fairly distributed among central and local government. Concerns were expressed that people with disabilities were generally ‘invisible’ to government agencies in relation to tourism and communities.
2. Water Use <i>Water source & availability</i>	The (water) service is still the same, 2 times a week (all the time), but the hotel has a reservoir that can hold large amounts of water, whereas the community does not have such reservoirs. The average household has a water tank with a size of 450 litres while a household needs an average of 600 litres per day. It means that the water collected can only meet the water needs for 1 day only, whereas in the following days water distress will occur. So far there has been no conflict between the community and the hotel in the supply of clean water. LB.Informant_IRN03, government. PDAM, but the meter is there but there is no water. In the Golo Wilas area, the water never runs at all. LB.Informant_IRN12, female, community midwife.	Water availability is limited in the dry season. The government water utility (PDAM), under normal conditions, enables water to flow twice per week, which is a concern for some tourism businesses and surrounding communities. To meet water needs, hotel operators and communities access bore water or purchase water from retail tank water vendors, which is extremely costly. Some respondents highlighted issues with PDAM water not being distributed to certain areas, and communities are aware of the significant difference between PDAM water flow to hotels and communities. Because of the insufficient PDAM water supply, communities must rely on tank or well water.

Themes	Statements	Comments
	<p>The difference is very pronounced, if in the hotel PDAM water flows every day, but in the community it almost never flows. Even every month, we are paying for nothing, there is no running water. We have often complained to the PDAM regarding this problem. LB.Informant_IRN12, female, community midwife.</p> <p>Water from PDAM sometimes comes out once a week. Due to the insufficient availability of PDAM water, we now use tank water more often. LB.Informant_IRN13, female, community. now it has been 3 months since PDAM water is not running. So we use well water. For tourists, they should use existing bottled water. LB.Informant_IRN13, female, community.</p>	
<i>Distribution</i>	<p>There is not a shortage of water but the problem is of water distribution. I am sure that in 2021 in the dry season there will be water problems, especially from wells. I hope that the PDAM will look for other water sources for the community's clean water sources and improve water distribution management. LB.Community_IJM03, female, hotel.</p> <p>Public and hotel water access is very different. We always make complaints at the PDAM because the water is not flowing smoothly, sometimes only once a month. Those with money have better access to water. Female, IRN10, community midwife.</p> <p>We really hope that the distribution of access to water can be evenly distributed, if indeed the water comes out twice a week, all people can also get the same thing. If possible, schedule the discharge of the water, not in the middle of the night or early morning because it was very troublesome, we had to stay up late until morning to wait for the water to come out. Female, IRN10, community midwife.</p>	<p>Respondents understand that there are a number of spring water sources that provide sufficient water flow. However, they maintain that the key problem is water distribution, which the water supply company is not able to manage well. The water supply company states the company supplies tanked water to consumers on the main island of Flores, and to consumers on small islands and tourist cruise ships, which require the company to produce more water for all. These distribution issues are worse when there is insufficient water/water scarcity.</p>
<i>Water quality</i>	<p>Different quality among hotel and community: Our water quality is clear, odourless and has good water pressure. It is just a common problem in Labuan Bajo, our water is chalky. LB.Staff_03, hotel.</p> <p>The quality of PDAM water is good, but if the water tanks are not good, they contain a lot of lime. Usually during the dry season the water is difficult, so we buy from the tank. LB.Informant_IRN12, female, community midwife.</p> <p>Access to water is one of the main problems in Labuan Bajo. For this reason, it is necessary to build clean water infrastructure that can provide sufficient access to the surrounding community. Male, IPR03, hotel.</p>	<p>Respondents are aware of the alkaline problems of surface water, plus turbidity during the rainy season.</p>
<i>Water as a source of conflict</i>	<p>The water supply in Labuan Bajo must be increased, especially in relation to the distribution of water to the community. For this reason, it needs to be regulated so that the risk of conflict with the community does not occur. Water supply must change with attention to community needs. Nowadays there is a big conflict, there are people who often complain. Male, IPR03, hotel.</p>	<p>In Labuan Bajo, water has a potential to become a source of conflict among community members.</p>
3. Sanitation	<p>Public sanitation is generally good and access in public places distinguishes women and men. Public access has not yet provided a place for people with disabilities. LB.Informants_PDR01, male, government.</p> <p>We haven't used the toilet 100% yet, there are still residents who don't have private toilets. LB.Informant_IRN12, female, community midwife.</p> <p>At home the bath / washing wastewater is disposed on to empty land/ground, because there is a lot of empty land/ground around our house, while the wastewater from toilet is disposed to septic tank. LB.Staff_01, hotel</p>	<p>Communities in Labuan Bajo have good basic sanitation coverage, and have toilet facilities at home with some exceptions. Government highlighted this change as the result of the National Total Sanitation program (STBM), which has been implemented since 2012. The program has encouraged communities to stop open defecation and practice more effective hygiene. However, communities living on the smaller islands usually have less than 50% sanitation coverage due to space constraints.</p> <p>Toilets in communities are usually simple, less secure and less hygienic compared to toilets in hotels. A lack of hygiene is related to the lack of water in communities.</p> <p>Hotel staff were aware that toilet wastewater in their communities is treated in a septic tank, while no particular treatment is carried out for grey water from the kitchen, shower and laundry. The wastewater flows to the surrounding plants to be absorbed into the ground. The government officer</p>

Themes	Statements	Comments
	<p>For toilet waste already using a septic tank, we usually do inspections during family visits to see how environmental hygiene, sanitation and water storage practices are so we always advocate for good household waste treatment. LB.Informant_IRN12, female, community midwife.</p> <p>Public toilets in this area only exist in the sub-district office and Puskesmas, the toilets have been separated between men and women. The condition is good in terms of security and easy access, but problems with cleanliness. Only the public health office toilets are clean, but the toilets in the sub-district offices are not clean. Female, IRN10, community midwife.</p> <p>100% of Batu Cermin Village uses a toilet and the toilet waste is collected using a septic tank. Public toilets are only available in the market but the conditions are not good, they cannot be used for people with disabilities. Female, IRN11, community midwife.</p>	<p>stated they have provided a wastewater treatment plan in the dense area of the city, however it only reaches about 100 families. Further, a village leader raised the issue of unpleasant odour from the wastewater treatment plant, which is located in the neighbourhood, and thus led to complaints from communities.</p>
<i>Solid waste management</i>	<p>Batu Cermin Village already has a garbage tip, there are officers who carry garbage every day, but during Covid all activities are temporarily suspended. LB.Informant_IRN14</p> <p>The main risk here is garbage. LB.Informant_IRN14, female, community.</p> <p>Waste is a problem in Labuan Bajo so that the relevant agencies are responsible for solving the problem, in addition to the concern of the community and tourists who also maintain cleanliness both in the environment and tourist attractions. LB.Informant_IRN12, female, community midwife.</p> <p>For now, we still cannot be like Bali, because Labuan Bajo is still constrained by the problem of waste. Hopefully in the future we can imitate a very clean Bali. The government must adopt what Bali has made with its waste problem so that in the future Labuan Bajo can be clean and become like Bali. Female, IRN10, community midwife.</p> <p>The main problem is garbage, but now activities that involve many people are being promoted to clean up the environment together. There is a clean Friday activity in Labuan Bajo led directly by the regional head. Female, IRN10, community midwife.</p>	<p>Solid waste management is seen by some as a major problem, including to tourism development. While some villages have a waste management system in place, there are reports that this has been discontinued during COVID-19 pandemic. Stakeholders recognise that better solid waste management is needed, and that the government has the main responsibility to lead improvements.</p>
4. Hygiene	<p>Every hotel has SOPs and guidelines on cleanliness. Special hygiene training is carried out by each hotel. The training we provide is generally about tourism and in its material also concerns hygiene. PDR01, male, government.</p> <p>If we are in a hurry we rarely wash our hands with soap after going out of the toilet. LBStaff 02, hotel.</p> <p>Usually people who have a good education and economy have a good level of personal hygiene, this is of course very different from people who have less education and low economic status. The conditions for personal hygiene practice are also very different from what is in the hotel, everything is completely clean, the water conditions are abundant and very luxurious. Female, IRN10, community midwife.</p> <p>The practice of personal hygiene that we do at the hotel, we also do it at home, but has not yet had a significant impact on other family member at home, especially children. FGD Staff01, hotel.</p> <p>Hygiene matters are not only a matter of the health department but must be a common matter, various parties must be actively involved in providing counseling about personal hygiene. Female, IRN10, community midwife.</p>	<p>Handwashing with soap at critical times is standard operating procedure (SOP) in hotels for staff and operators and staff are knowledgeable about handwashing at the most critical times.</p> <p>Whilst soap is reported as always available to staff, handwashing stations could be more accessible in some hotels and hand sanitizer could be made more uniformly available.</p> <p>Good hand hygiene by hotel staff is viewed as critical to guest satisfaction and good service provision. SOPs, guidelines and hygiene training are reported as being provided by hotel operators, but the detail on what is included is not clear.</p> <p>Staff report that while they practice good hygiene at home, not all family members do so and children in particular do not practice good hygiene at home.</p>
5. Water Stewardship <i>Good water governance &</i>	<p>We have a forum called AMPL, where this forum discusses clean water and sanitation, where structurally, the BP4D, the Health Office, PDAM, Public Housing and the Regional Government Office have a role in increasing access to GEDSI WASH. Although admittedly, we rarely hold</p>	<p>Concerns were expressed about how PDAM manage water, in particular, lack of continuous water flow. Recommendations were to improve the governance and management of clean water, especially related with the performance of PDAM. AMPL, a multi-stakeholder forum to discuss WASH affairs, is present, but sectoral egos are “holding them back” to achieve sustainable Inclusive WASH in Labuan Bajo.</p>

Themes	Statements	Comments
<i>sustainable stewardship</i>	regular meetings to discuss aspects related to the GEDSI WASH. The lack of sectoral coordination and ego is holding us back here. IRN01, male, government. The tools to include GESI in the inspection has not [been] updated yet, thus there is no compulsory to monitor those criteria. But for other WASH criteria, it is regularly monitored, for example, in the STBM program. IYT02 Female, government. GESI WASH should be the expense of APBN/Central and Regional Government. JEM02 Male, government.	Concerns were expressed that explicit Inclusive WASH criteria and tools were not incorporated into inspection procedures, nor adequately budgeted.
6. Culture <i>Culture as tourism attraction & unique identity</i>	<i>Manggarai</i> must be in accordance with our identity. We must show our character and uniqueness. It doesn't need to be the same as other places. For example, the tourism design must be in accordance with the architectural style of culture and local identity. We must show in practice that this <i>Manggarai</i> has a traditional identity, for example, a traditional house. In the future there needs to be Regents Regulations or better Regional Regulations. LB.Informants_JEM02, male, government. We have some cultural uniqueness of our own that might be an opportunity in the future. LB.Informant_IRN14, female, community The culture of the people here is still kinship and familiarity, so the culture to respect guests is very high here. The cultural (art) studios are still in a developing stage. Female, IRN10, community midwife. Our culture is good, but there is no guidance from the government to maximize the cultural sector, such as the existing art and performance studios, so that it can be utilized in the tourism sector so that it can generate better economic income. Female, IRN10, community midwife.	Culture plays an important role in attracting tourists to Labuan Bajo as a destination. Some larger hotels offer cultural entertainment to important guests.
7. GEDSI <i>Sanitation</i>	Public sanitation is generally good and access in public places distinguishes men and women. Public access has not yet provided a place for people with disabilities. PDR01, Male, government. Guest and employee toilets are also separated but not separated by men and women. Until now, we don't have toilets for people with disabilities. FGD Staff04, hotels The Puskesmas visits directly to the nursing home owned by the nuns and brothers to see the condition of residents with disabilities. IRN11 Female, community midwife. We focus on maternal and child health. There are several cases of mothers giving birth here, but we do not know the process of pregnancy so far, because these mothers are migrants and only give birth here. This is very disappointing for us who are trying to reduce the stunting rate. IRN12 Female, community midwife.	GEDSI is integral to the complex network of social, environmental, political and economic issues that shape tourism. The lack of recognition underpins 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 broader social WASH issues.
<i>Menstrual hygiene</i>	We don't have disability-friendly areas yet. IRN08, male, community For female employees who are in their menstrual cycle, they usually clean themselves in the employees' toilets and wrap used sanitary pads in the plastic bags provided, take them home, and throw them away in the trash can. FGD Staff01, hotel.	A lack of recognition of the specific needs, interests and concerns of women became clear in relation to menstrual hygiene management (MHM) and the diverse needs of the communities. Beyond the provision in some hotels of trash cans, women are generally expected to tend to their own MHM needs. In public areas, WASH facilities for women are still lacking, for example, public toilets are usually shared male and female facilities, which causes inconvenience to women especially.
<i>Disability</i>	For disabilities we focus on women / mothers with disabilities who are pregnant, we provide assistance from pregnancy until the baby is born. IRN12 Female, community midwife. We always listen to ideas or ideas from both the kelurahan and the local government. We have a foundation that accommodates people with disabilities, we also often visit there for cleaning activities. IRN14 Female, community.	While one hotel provides wheelchairs for guests with a physical disability, hotels generally do not recognise the complex needs of, nor provide for, people with disabilities. There is some basic assistance for this socially vulnerable group through local government. Moreover, in public place, facilities for disabled people are insufficient. Until now there is only one public toilet for people with disabilities in the city park. However, because there of a lack of socialization, the general public do not know that this toilet is for people with disabilities.

Themes	Statements	Comments
	<p>Specifically for people with special needs is not in this kelurahan. Women and children are treated like other communities as recipients of aid or donations from outside parties IRN08 male, community.</p> <p>People with special needs are assisted by the local government through basic food assistance, but there is still no such thing from the village government. IRN09 male, community</p> <p>There are no facilities intended for people with disabilities such as sidewalks and toilets, nor is there good management of domestic waste. JEM02 Male, government</p> <p>There are many children who are cared for by Green Prundri hotels to be assisted in their education and health problems. Our hotel also prepares wheelchairs for people with disabilities. FGD Staff03, hotel.</p>	
<i>Women's voices are heard</i>	<p>Gender equality in changing gender roles was lacking in before 2010 but after the 2013 Komodo Sailing event, women's roles began to change, such as in decision-making, for example, female neighbourhood (RT) heads were actually more effective than male. IJM03 Male, community.</p> <p>Women can talk, in this case women always raise water problems during meetings in the village. The ideas of women are still being heard. IPR02 Female, community</p> <p>Decision making usually rests with the head of the family, women's voices are also heard, but they are not very influential. Especially in the island area, there are voices of men / heads of families that are heard. For government activities, women's voices are heard, there is no problem regarding gender in government. For pregnant disabilities, we provide assistance from pregnancy until the baby is born. IRN12 Female, community midwife.</p> <p>We have village heads who really respect women's voices. During village meetings, women's voices were often heard and acted upon. Disability groups always receive assistance from the village government, such as the elderly, disabled and widows. IRN13 Female, community.</p> <p>Women are very able to talk about everything, this area is very plural and tolerant of women. We have a representative of 1 woman in the DPR and our deputy district head is a woman. Not to mention some of our department heads are women. so that in all aspects, women's voices were heard, including talking about water and sanitation issues. Disability issues are also often discussed, some road and sidewalk planning also accommodates disability needs, but for toilets that accommodate disability needs is still not much discussed. IRN01 Male, government.</p>	<p>Opportunities from women and minority groups to talk with community leaders are open, but there are not many women's groups, disability organisations and other socially marginal groups who talk with leaders and the government, including discussion of water and sanitation issues.</p> <p>There is inconsistency in responses to whether women's ideas are heard and enacted, across government, tourism enterprises, and in local communities.</p> <p>Many women in Labuan Bajo become high-ranking public officials. However, there is a need to involve them more on Inclusive WASH policy making or to improve their awareness about the importance of Inclusive WASH. In this way future policies on hygiene and sanitation will be more gender sensitive and inclusive of all people's needs.</p>
<i>COVID-19 & Domestic Violence</i>	<p>Women, children and people with disabilities are also affected by Covid so there is a lot of assistance from the village government for them. IRn13 Female, community.</p> <p>We don't know that there are cases of domestic violence occurring in Labuan Bajo, maybe there are but not widespread and we hope that it doesn't happen. Staff05, hotel.</p> <p>I don't see any cases of domestic violence; the problem is an increasingly difficult economic problem. Like many people who start to go into debt because they have no income. IRN10 Female, community midwife.</p> <p>There are no cases of domestic violence in Labuan Bajo. IRN11 Female, community midwife.</p> <p>No cases of domestic violence occurred here. However, pregnancy rates are increasing during the current Covid pandemic. IRN12 Female, community midwife.</p>	<p>There was a general sense that the COVID-19 pandemic had heightened awareness about hygiene, and this was a positive social and health change that should be continued. The GEDSI-specific factors related to COVID-19, particularly the potential increase of domestic violence on women and children, have not been recognised or have been ignored. The key COVID-19 impacts are the economic problems endured by families and the increase in pregnancies.</p>
8. COVID-19	<p>We immediately held a staff meeting, all worked together and contributed to the purchase of disinfectants, masks and personal protection. There have been nearly 3,000 masks that have been distributed to the community from the donations that exist. From house to house, I also advised about health protocols. every house prepared hand washing water. We also prepared a Covid post by receiving assistance from Bank NTT in the form of a tent for the post. Many</p>	<p>The impact of the COVID-19 pandemic on tourism in Labuan Bajo saw most hotels close for a period; some remain closed while others have opened and are complying with government health and hygiene protocols.</p> <p>Government health and hygiene protocols stipulate a range of measures that must be followed including cleanliness of hotel, personal hygiene and social distancing measures.</p>

Themes	Statements	Comments
	<p>donations came for basic food assistance for economically affected communities. To date, more than 190 people have been assisted. In addition, BST from the centre has flowed to several affected households. LB.Informants_IRN08, male, community.</p> <p>We practice good personal hygiene here, often take baths, hand-washing with soap, especially during a pandemic like this. LB.Informant_IRN13, female, community.</p>	<p>Operators and staff appreciate the importance of hygiene practices (such as handwashing with soap) during the COVID-19 pandemic to protect health. Similarly, COVID-19 has increased the awareness of personal hygiene practices in the community.</p> <p>It is a commonly held view that the higher focus on hygiene will be maintained beyond the current pandemic.</p>
<p>9. Engagement & Collaboration</p>	<p>The government cannot run alone, we need the role of the private sector and the community in supporting the tourism sector. The three main pillars in tourism development are the government, the private sector and the community. IRN01, male, government.</p> <p>Our relationship and collaboration with community is always there, communities are our main beneficiaries and targets, thus our subordinate networks (Puskemas or the community health centre) mainly works with the community. IYT02, female, government.</p> <p>We need to improve our internal management. We must sit together to talk about what we have to do so that there is no scapegoat between the Housing Agency and PDAM. We must work together. To put it bluntly, in terms of regulations, both the Law and the Minister of Internal Affairs regulation clearly state that we are the ones who have the duty and have to regulate drinking water, the PDAM only process (the water). So, we can see that there is overlap by the PDAM. IRN03, male, government.</p> <p>Collaboration between governments has been going well, seen from the development of existing infrastructure. LB.Informant_IRN14, community.</p> <p>The government and tourism operators have good relations, but local people are not directly involved, perhaps through community leaders only. Female, IRN10, community midwife.</p>	<p>References are made to the importance of the synergy between government, the private sector, and the community as the three stakeholders critical to achieving a vision for tourism in Labuan Bajo. The involvement of the private sector is also crucial in achieving a vision of tourism and WASH in Labuan Bajo (see Box 3). In general, collaboration between the public and private sectors is still limited and needs to be enhanced. However, there are references to the involvement of the private sector, especially hotel industries, through corporate social responsibility (CSR) in Labuan Bajo in different public programs, such as STBM (Community-led Total Sanitation). There is an opportunity to enhance private sector participation through the help of CSOs, such as the Dian Desa Foundation. Cross-sectoral coordination has been initiated through the establishment of POKJA AMPL (WASH Working Group). The National Drinking Water and Environmental Sanitation Working Group (Pokja AMPL) is an <i>ad hoc</i> institution that was formed in 1997 as a forum for communication and coordination to make drinking water and sanitation development more effective; starting from planning, implementation, monitoring, to evaluation stages.</p> <p>Coordination between government agencies was perceived as going well by community representatives, judged by the rate of infrastructure development.</p> <p>There are overlapping issues and responsibilities between the PDAM and the Residential Settlement Office (Dinas Perumahan Rakyat) in managing water for communities. They do not work synergistically and are prone to passing tasks and responsibilities to each other. This can hinder the development process for improving water access for the community.</p>
<p>10. Value Proposition</p>	<p>The significant changes occurred after the Komodo sail activities in 2013 where a lot of tourists came here. For this reason, the activities around here are focused on the creative economy by the way of strengthening community-based ecotourism. The community must be involved around the location of the tourism object, strengthening community-based ecotourism. The goal is so the community will not only become spectators of the tourism activities. LB.Informant_PDR01, male, government.</p>	<p>Destination image and attractiveness heavily rely on natural features. Maintaining a pristine environment is critical to support the provision of important ecosystem services, such as fresh water, and is crucially entwined with the success of tourism.</p> <p>Tourism in Labuan Bajo is currently heavily based on the Komodo Dragon, marine activities and an authentic cultural experience. For this reason, participants associate the destination image or brand with ecotourism and sustainable tourism.</p> <p>Participants associate a clean environment with a high-quality tourism product.</p> <p>Many respondents expressed concern about the need for the community to be actively engaged in tourism, including decisions on tourism development. Recognising that maintaining/improving the image of the destination, including environmental cleanliness and appeal, is a joint responsibility of all stakeholders, may provide opportunities for engagement and collaboration on Inclusive WASH issues.</p>
<p>Recommendations</p>	<p>Coordination between the central, provincial and district governments needs to be improved. In addition, there needs to be better coordination between agencies within the district of Manggarai so that all programs can run well. LB.Informants_PDR01, male, government.</p> <p>Water distribution channels must be better, so that people can also get access to clean water from PDAM. LB.Informant_IRN13, female, community.</p> <p>Our suggestions for clean water, we must be certain of how to serve the community. We must comply with quality standards, there must be publications, (Water) technology must assist health in the community. The community must be prioritized. There must be an alternative</p>	<p>The distribution, management and regulation of water resources needs to be improved. Awareness needs to be increased about the importance of personal hygiene and environmental cleanliness. Neighbourhood blocks should receive assistance to increase awareness of hygiene practices within the community.</p> <p>Budgets should be increased to improve water and sanitation and invest in sufficient infrastructure, such as sufficient public toilets.</p>

Themes	Statements	Comments
	<p>source for capacity improvement. there is water treatment from the central government to improve to 100 litres, but sustainability is not yet considered, only exploitation. So that if the catchment area is damaged, only then sustainability is built. Also for irrigation water, people are more inclined (to use it). Water must be collected in reservoirs so that it is not discharged into the sea. Construction of a desalinisation plant in Golomori using sea water is planned because this area will be developed as a high class tourism area, though this project is still in the planning phases. Therefore, this area does not use PDAM water. LB.Informants_JEM01, male, PDAM/government.</p> <p>Public awareness that must be improved [to improve cleanliness in the destination]. Changing people's behaviour patterns takes a long time. LB.Informant_IRN12, female, community midwife.</p>	

6 Discussion

Research questions:

1. Value proposition: What is the value proposition for an Inclusive WASH at-Work program in the tourism sector?
2. Effective stewardship approaches: How can water stewardship approaches support the adoption of an Inclusive WASH-at-Work program in the tourism sector, and what are the potential WASH benefits to host communities?
3. Enabling environment: What are the barriers to and opportunities for engaging governments and CSOs to support the scale-up of Inclusive WASH-at-Work within the tourism sector?

The project worked to understand whether, and if so, how, an Inclusive WASH-at-Work program could be of use to hotels and the broader tourism sector in Labuan Bajo, Flores, and elsewhere in Indonesia.

Integrated water management works to enable social inclusion by promoting participation and outcomes that address the different yet equal needs, concerns and interests of diverse genders and socially vulnerable groups (Taukobong et al., 2016).

In order to understand whether an Inclusive WASH-at-Work program may effectively address the WASH requirements of the hotels operating in, and the communities supporting, Indonesia's tourism sector, it is important to understand what are their needs, concerns and interests within their local contexts, recognise existing WASH practices, and assess the tools required to enhance them.

6.1 Governance and Policy

President Joko Widodo through Presidential Regulation (Perpres) No. 32 of 2018 dated 5 April 2018, established *Badan Otorita Pariwisata Labuan Bajo* (BOP, The Labuan Bajo Tourism Authority) to manage the tourism development in Labuan Bajo, the capital of West Manggarai Regency on the western tip of Flores Island, East Nusa Tenggara. The authority of BOP is to develop tourism destinations with the 3A concept, namely cultural and artificial natural attractions, access to basic infrastructure, and amenities with a focus point on the development and construction of hotel facilities and other tourism supporting infrastructure.

Due to Labuan Bajo's designation as a "super-premium" tourism destination by the National (central) Government and the plan for it to host the ASEAN Summit and the G-20 Summit in 2023, many people's attention has been drawn to its development, with the allied expectation of accompanying support from the Government.

Development policies, such as infrastructure development (roads, water, etc.) are built upon sustainable premium tourism. The BOP that was established, has met with resistance from the community due to perceptions of lack of transparency in its formation, plus lack of clarity about its role and whether it is actually working in conjunction with the local government tourism office (*Dinas Pariwisata Manggarai Barat*). Despite contributions from the National Government, (i.e. "now there are many touches of technology and very rapid infrastructure developments with the intervention of the Central Government." Female, IRN10), local respondents are concerned that state revenue generated from Labuan Bajo as a super-premium destination is not being distributed fairly among central and local government, leaving local government as a mere 'spectator' to development.

The data show the importance of WASH, particularly as it links to solid waste management in Labuan Bajo and to health policy in achieving sustainable tourism destinations. For example, waste management is usually regulated at the Regency level but is implemented by local village leaders, who may not have the knowledge, skills or support to effectively manage solid waste and wastewater.

Monitoring and evaluation, according to the data, is an integral part of the programs developed and implemented by the government, for example, the STBM program, but although reporting is conducted public access to the data generated is unclear. The five pillars of the STBM program are: food hygiene;

safe water at home; HWWS; use a hygiene toilet; solid waste management. Hotels have their own monitoring and evaluation programs. Also, they report to UKL and UPL (environmental management plans) regarding solid waste and wastewater management.

The research findings link policy to WASH and the tourism sector, particularly the implementation of policy 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 (WBCSD), which devised a Pledge for Access to Safe Water, Sanitation and Hygiene (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 if they are to provide Inclusive WASH-at-Work programs and broader WASH opportunities that, in turn, may lead to more comprehensive commercial, social and health benefits.

Communication of information and concrete government support have the further potential to enable Indonesia, via the tourism industry, to achieve aspects of its Sustainable Development Goals (SDGs), i.e. SDG 6, which requires the achievement of universal access to water and sanitation by 2030, and SDG 5, which requires the achievement of gender equality and empowerment of all women and girls. Actions to achieve both goals have the potential to address perceptions that “The government and social services do not really pay attention to people with disabilities” (IRN10 Female), and concerns that people with disabilities are generally ‘invisible’ to government agencies when addressing tourism, and within communities.

Equally, it is important to note the chances for women to work for government in Labuan Bajo are minimal which, in turn, “severely restricts the chances of women’s voices... being heard in the policy development or planning of either water services or tourism” (Cole S. 2017, 21) and is likely to further entrench policies that ignore the needs of women and members of socially vulnerable groups.

The Plan for Technocratic Strategies 2020-2024, Ministry of Tourism and Creative Economy/ *Rancangan Teknokratis Rencana Strategis 2020-2024 Kementerian Pariwisata and Ekonomi Kreatif*, 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 Plan provides the potential for collaboration by the tourism sector with their associations and their communities to support each in improving the health and environmental sanitation at the destination site, which has the potential to positively impact the development of tourism in the broader area.

6.2 Water Use

Water is important to all stakeholders in Labuan Bajo. The need for clean water for residents in Labuan Bajo City is as much as 100 litres/day/person. With a population of + 25,078 people, the total water requirement is 2,507,800 litres/day or 29.03 litres/second. As many as 1735 households the Labuan Bajo City area have received clean water services through a piped system (Manggarai Barat Regency, 2011). Assuming one household consists of four persons, the proportion of the population served by piped water is 27.7%. Due to limited production capacity, the service system uses a rotating system in each service area (Manggarai Barat Regency, 2011).

The stakeholders are concerned primarily about uneven distribution, rather than issues about water quality, especially the inequality in current water provision arrangements, and the comparative dysfunction of the water sector collaboration versus sanitation sector (which via STBM seems to be functioning quite well).

Stakeholders are aware of the need to prioritise water use and to practice water saving and recycling. However, differing access to water between hotels and the community has already begun to incite social conflict. As a consequence, there is potential for the future loss of social cohesion in Labuan Bajo due to conflicts over water. Questions were raised by informants as to how to resolve the emerging conflicts between National and Local Government in relation to access to water and Inclusive WASH.

Uneven water distribution is seen to be a result of poor management by the water supply company. In turn, the company contends they supply water to consumers on the main island of Flores, and to consumers on small islands and tourist cruise ships. This lack of water resources is worsened by the incapacity of government to manage water for people. There are overlapping mandates and a lack of coordination between the PDAM and the Residential Settlement Office (Dinas Perumahan Rakyat). This, for example, results in some areas being missed from the water pipe network development plan. Issues of leaking water pipes and geographic and socio-economic issues arising from developing distribution pipelines such as those related to mountain contours and land acquisition by the private sector are acknowledged. Water saving is promoted to mitigate high operating costs from pumping groundwater or purchasing from water tankers. Respondents identified alkaline problems in surface water, turbidity during the rainy season, the impact of alkaline on water pipe maintenance, and the limited capacity of the local laboratory to cope with water monitoring requirements. Respondents also identified problems with stagnant water in the reservoir and the incipient risk that it may become a breeding ground for vectors or disease. For small islands, a few projects have built and trialled small-scale desalination water treatment plants in the past. However, those systems could not be supported by local power capacity and thus were not functional at the time of writing.

The findings align with broader literature, which links access to water and sanitation to human rights, gendered and unequal social, economic and health impacts, particularly on women and socially vulnerable groups, and can drive critical sustainable development challenges. Negative impacts on people within local communities are increasing as competing demands for clean freshwater place increased pressure on water quality and availability. Increasing risks for businesses, governments, communities and the environment are co-related impacts (SDG Compass, 2019) of water as a contested and constrained public resource. 'Water stewardship' is a useful concept that can be applied to Labuan Bajo's tourism sector. It has emerged not from business theory, but in response to business awareness of water as a critical resource for business and society (Hepworth and Orr, 2013).

Relevant government agencies and the tourism industry 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, companies may make a positive contribution to improved WASH management and governance. Where their contribution also works to adopt values and practices that aim to safeguard long-term availability of clean water and the provision of WASH for all stakeholders in a watershed (SDG Compass, 2019), then progress towards Inclusive WASH is taking place.

6.3 Sanitation

Sanitation in communities in Labuan Bajo varies significantly from location to location, with overall sanitation access in Manggarai Barat at 72%. There is higher sanitation in the more populated Labuan Bajo Village (85%), while some villages have coverage as low as 38%. A government key informant highlighted that the current situation is an improvement over the past, and that these improvements to sanitation access are the result of the National Total Sanitation Program (STBM), which has been implemented since 2012. The program has encouraged communities to stop open defecation and practice more effective hygiene.

However, communities living on the smaller islands usually have less than 50% coverage due to a lack of suitable locations. Toilets in communities are usually simple, less secure and less hygienic compared to toilets in hotels. Their lack of hygiene is due to the impact of lack of water in communities. In small cruise ships (with capacity of 10-15 passengers), the toilet facility is very simple with direct discharge to the sea without treatment.

Respondents observed that in hotels, there is a higher quality of toilet, usually a private toilet in each bedroom and a public toilet in the hotel. Some smaller hotels do not provide gender differentiated toilets for their staff; these staff prefer to use a squat pan toilet than a toilet with a riser seat, for reasons of hygiene, particularly if the toilet is used by both female and male staff.

In terms of security of staff using toilets in the hotels, no issues were mentioned - the doors function properly, lights are bright and the floor is not slippery. All hotel respondents stated there were no specific

toilets available for people with a disability, and the government informant confirmed that they do not yet incorporate disability criteria in their sanitation and hygiene inspection tools. Government officials are aware of the needs of people with a disability and are proposing to include relevant criteria in the future.

Public facilities in tourist destinations are similar. There is variation in the provision of gender-differentiated toilets and toilets available for people with a disability. One respondent also mentioned the conditions of public toilets in public facilities such as health facilities and village offices. “[T]he toilets have been separated between men and women. The condition is good in terms of security and easy access, but [there are] problems with cleanliness.” IRN01.

Wastewater, faecal sludge and solid waste management in hotels and the broader community remains a concern for all respondents, despite recent actions taken odours generate complaints, and tourist perceptions of Labuan Bajo and its surrounding seas are that both are ‘dirty’. Waste issues are seen by many as the main hindrance to tourism success, and Bali was used as a positive example of how the waste problem has been dealt with elsewhere. There are also reports of COVID-19 having impacted community waste programs.

Effective implementation and monitoring of relevant policies, plus an increase in awareness for sanitation behavior change and increasing access to infrastructure require funding and ongoing support. Wastewater, faecal sludge and solid waste management is a key issue that respondents related to environmental sanitation and cleanliness and potentially negative impacts on Labuan Bajo as a tourist destination.

The pressing need for sanitation improvements in Labuan Bajo and its surrounding area can be linked to the main drivers of water problems, i.e. rapid urbanisation and economic development, which have resulted in a lack of access to water and sanitation (Tularam & Murali, 2015).

6.4 Hygiene

The previous section on sanitation is closely linked to hygiene practices and management in Labuan Bajo, particularly in relation to availability of water, soap, facilities, and hygiene awareness, education and training.

The respondents identified handwashing with soap (HWWS) at critical times is standard operating procedure (SOP) in hotels for staff and sufficient facilities are provided. However, no respondents mentioned handwashing before eating. Staff reported regular handwashing or sanitizing, yet one staff member reported that handwashing is not always practiced even after using the toilet if staff are in a hurry. It was also reported that good HWWS may not always be practised because of “individual habits”. Whilst there was a strong focus on protecting tourists’ enjoyment and health (e.g. with good food hygiene) there was little mention of protecting staff health through good hygiene. Some hotels reported regularly training staff in hygiene, especially food hygiene. In addition, hygiene practices in the small cruise ships also require attention. This type of tour service is one of the main attractions to tourists in Labuan Bajo who spend at least 2-3 days and nights on the cruise. It is common for tourists to spend more days on the cruise than on the main island. These small cruise services are usually provided by local Bajo people who lack proper training in hygiene, sanitation, safe water treatment and storage and waste management.

The government prioritises hygiene for tourism operations and works to ensure hygiene in hotels is maintained to ensure the safety and attractiveness of hotels to guests and maintain Labuan Bajo as a desirable tourism destination. A respondent maintained that hygiene must not only become a health sector matter, but that various parties must be involved in tackling hygiene issues in Labuan Bajo. The Ministry of Education and Tourism also reported that each hotel should have a SOP and guidelines to ensure hotel cleanliness. The Ministry aims to further incentivize good hygiene in hotels by hosting a hygiene competition next year.

The physical facilities for Menstrual Hygiene Management (MHM) for women to manage menstruation at work in hotels are provided (plastic bags and wastebins). MHM products are individually sourced by staff rather than by the hotel and no explicit MHM training in hotels or the community was provided,

particularly to both genders to enable education of men about female staff's MHM concerns such as pain, irregularity and emotion(s). While good hand hygiene by hotel staff is viewed as critical to guest satisfaction, explicit hygiene training is not usually provided.

Hotel staff report that they practice workplace personal hygiene at home, "but such practices have not yet had a significant impact on other family members, particularly children" (FGD Staff01). 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). Opinion was voiced that people with higher levels of education and greater economy security have a good level of personal hygiene. Respondents also noted that risks associated with COVID-19 have altered handwashing practices amongst community members and hotel staff.

6.5 Water Stewardship

The data suggested there has, to date, been limited conflict in the community due to lack of water. However, the disparity between community and hotel access to water is recognised. Concerns about how PDAM manage water, particularly given frequently interrupted water flow, were raised, with recommendations to improve the governance and management of clean water. The AMPL forum discusses clean water and sanitation, and the BP4D, the Health Office, PDAM, Public Housing and the Regional Government Office are seen as having a role in increasing access to Inclusive WASH via this forum. However, it was stated that "we rarely hold regular meetings to discuss aspects related to GEDSI WASH. The lack of sectoral coordination and ego is holding us back here" (IRN01, male). Further concerns were articulated that explicit Inclusive WASH criteria and tools were not incorporated into inspection procedures, nor adequately budgeted, so there was no obligation to monitor for Inclusive WASH, for example, in the STBM program and that it is an area that should be financially supported by the APBN/Central and Regional Government.

Environmental sustainability issues, particularly those related to water conservation, underpin concerns that water will "run out" if excessive groundwater extraction continues, and are supported by memories of the drought of 2018.

Lime is the key groundwater quality issue, particularly in the dry season, with limescale accumulation in distribution pipes. Water from PDAM and tanker trucks does not have high lime content but concern was expressed that tanker water may be unclean, particularly as there is no testing of such water.

Many community members were supportive of the idea that hotels should contribute to water stewardship and broader society by providing WASH services and STBM through their corporate social responsibility (CSR) programs. And, significantly, the data emphasised the importance for people with disabilities to obtain equal access to Inclusive WASH. Unfortunately, sanitation facilities in most hotels and public places do not yet consider the diverse needs of people with disabilities, or the elderly.

Rapid urban growth, a lack of planning, poor governance and decision-making emerge as the key immediate causes of Labuan Bajo's water scarcity (Cole, 2017). The use of water for tourism exacerbates water scarcity and forces the poorest to purchase water at high cost. As tourism businesses can afford the prices charged by purveyors of tanker water and to extract water from the local river system, thereby taking water away from agriculturists, "they win in the competition with local people's needs" (Cole S. 2017, 19).

International and national migrants into Labuan Bajo to take advantage of the economic benefits of the tourism sector do not consider the cost of water to be high in relation to their overall business costs. But local business people are aware of the value of water to local communities, "the price of which has risen steeply with growing demand for tourism" (Cole, 2019, 19). The factors required for citizens to exert water stewardship link to Frederiksen's (Frederiksen, 2007) proposal that water resource management include in its focus not only goals, policies, strategies and governance but also 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 markets, 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).

Water conservation is a key component of Green Globe 21 certification, which has been considered an important tourism sector environmental standard among large hotel operators. 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 stresses the threat of climate change to tourism industries. However, the impacts of climate change in the Plan are not effectively linked with potential water issues and the intensive spread of infectious diseases due to climate warming. The potential negative impacts of climate change require the tourism sector to address the intersection of water, sanitation, health and hygiene issues more effectively in the present for the future.

6.6 Culture

Cultural and environmental assets include natural attractions such as the 'champion' species, i.e., the Komodo Dragon, local and island environmental beauty, cultural entertainment in the larger hotels, and the lifestyles of people of local communities. All suggest that 'culture' has an important part in attracting tourists to Labuan Bajo as a destination. Some respondents contend that culture could have a more substantial role in Labuan Bajo tourism in the future. Consequently, some assert the government should increase support for cultural entertainment, such as the improvement of local art and dance studios to generate higher levels of economic income and to enhance the value of culture in tourism.

Local residents' emerging experience with tourism has contributed to their awareness of the importance of preserving their local culture, often via the construction of cultural centres in the villages, thereby helping to preserve culture due to the regular presentation of activities to attract tourists.

No activities related specifically to culture and WASH were identified. Nonetheless, as Labuan Bajo moves into planning for a post-COVID-19 tourism sector, Inclusive WASH and culture, particularly in relation to hygiene practices, will remain important in order to minimise the potential for disease transmission, particularly during future 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 which allows for the use of a cultural approach to ensure food remains safe. An Inclusive WASH-at-Work program generated from the tourism sector and supported by all levels of Government could work to minimise any problematic enculturated behaviours by enhancing knowledge and awareness of effective hygiene practices within local communities.

6.7 Gender Equality, Disability and Social Inclusion

A number of key gender equity, disability and social inclusion (GEDSI) issues were identified as important factors in hotel operations in Labuan Bajo's tourism sector. GEDSI is integral to the complex network of social, environmental, political and economic issues that shape tourism. In addition, Indonesia's Mid-term National Development Plan (RPJMN), BAPPENAS (2019), which links women's rights with WASH, states that unimproved water and sanitation hinders women in their management of households, in performing productive economic activities, and places women and girls at risk of sexual abuse where sanitation facilities are located at a distance from dwellings.

Some respondents do not recognise the diverse needs of different tourists and members of the local communities, such as those of people with a disability, pregnant women, the elderly and children, nor the ways in which these can *intersect*, i.e. women and girls with a disability, elderly women and men

with a disability, young boys and girls etc. Others do not understand the GEDSI implications of intermittent water availability in terms of the increased labour of women in their households, and of poor water quality in terms of impacts on householders' health, nor the GEDSI requirements to mitigate the challenges of tourism development.

Respondents noted that there are opportunities from women and minority groups to talk with community leaders and female staff with hotel operators, and that such social changes have occurred in the past few years. For example, "Gender equality in changing gender roles was lacking before 2010 but after the 2013 Komodo sail, women's roles began to change, such as in decision-making, for example, female RT heads were actually more effective than male" (IJM03 Male).

Also, "We have village heads who really respect women's voices. During village meetings, women's voices were often heard and acted upon. Disability groups always receive assistance from the village government, such as the elderly, disabled and widows" (IRN13 Female). However, there are not many women's groups, disability organisations and other socially marginal groups who are provided the opportunity to talk with leaders and government officials, or who are enabled to contribute to discussion on water and sanitation issues, or whose capacity is built to participate in stakeholder engagement with public works officials and project planners.

Further, while women are heard, "Decision making usually rests with the head of the family, women's voices are also heard, but they are not very influential. Especially in the island area, there are voices of men/heads of families that are heard" (IRN12 Female). Community focus group discussion data suggested women are comfortable with ensuring their voices are heard, but some men may perceive them to be socially and intellectually 'inferior'.

While government agencies were generally perceived to be benevolent, and government policies and their requirements for public/ community and hotel WASH facilities were being developed, the implementation of policies addressing the specific needs of people with a disability can be improved. The data suggest there is a strong focus on maternal and child health, including a reduction of the child stunting rate, and on mothers with disabilities who are pregnant, but these *foci* must be broadened to include those groups categorised by the IMF as 'socially vulnerable'.

COVID-19 has also brought an additional focus on women, children and people with disabilities, who may be affected by COVID-19, "So there is a lot of assistance from the village government for them" (IRN13 Female). However, in some communities the specific needs of members of socially vulnerable groups and people with disabilities are not recognised, for example, "For people with special needs ... not in this kelurahan. Women and children are treated like other communities as recipients of aid or donations from outside parties" (IRN08 Female) and "People with special needs are assisted by the local government through basic food assistance, but there is still no such thing from the village government" (IRN09 Female).

Although there was one site in Labuan Bajo that has a facility for people with a disability it did not provide for their WASH needs. There is a strong obligation on government to provide Inclusive WASH facilities, to ensure they are accessible and usable, and to deliver education programmes to build awareness about how to use them.

Specifically, disability advocacy groups provide a sense that hotels and the broader tourism sector do not work to explicitly address their needs.

While washrooms were available for women in the workplace, many were not always specific to women. The data also show a lack of recognition of women's needs in relation to menstrual hygiene management (MHM). While the practical issues can be addressed in a series of straightforward actions funded via local government or hotels' CSR programs, the lack of recognition of women's needs underpins the gender-based attitudes and norms that have the capacity to impact women and members of socially vulnerable groups' ability to become involved in the management of water, water infrastructure decision-making and maintenance, and broader social WASH issues. Amongst male informants there is a strong sense that individuals/ families are responsible for their hygiene, rather than via the support of government/ health care workers and appropriate programs.

While there was a recognition of female employees' menstruation and the need for disposal of items safely so that toilets were not clogged, there was no training in MHM in the workplace and communities. Women's Inclusive WASH requirements are taken for granted and women are expected to bear individual responsibility for their menstrual hygiene needs. Further, in the workplace, for example, women require water to maintain an acceptable public standard of hygiene, which is difficult when there is limited availability of and access to water. Additionally, 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. Pregnant women require water of high quality to ensure their continued health and that of their foetus.

There was a general sense that the COVID-19 pandemic had heightened awareness about hygiene, and this was a positive combined social and health change that should be continued. However, the GEDSI-specific factors related to COVID-19, particularly in relation to the potential increase of domestic violence on women and children, were either not recognised or were ignored, e.g., "There are no cases of domestic violence in Labuan Bajo" (IRN11 Female). Rather, the focus was on the impacts of COVID-19 on families, primarily the economic challenges, and an increase in rates of pregnancy, e.g., "I don't see any cases of domestic violence, the problem is an increasingly difficult economic problem. Like many people who start to go into debt because they have no income" (IRN10 Female), and "No cases of domestic violence occurred here. However, pregnancy rates are increasing during the current Covid pandemic" (IRN12 Female). Global research maintains that domestic violence isolates victims (as occurs during COVID-19 lockdowns and imposed limitations on leaving the home for a workplace), and financial stress and unemployment are key risk factors (unimelb 2020).

Gender is consistently revealed as a critical cross-cutting element for improving access to Inclusive WASH and for the effective realisation of water as a human right (GWA, 2019; Women for Water Partnership (WfWP), 2019) (see section 2). Data across all respondent categories and genders identified that collaboration and cooperation is key to socially inclusive engagement with female and male staff, with women in communities, and with the GEDSI requirements of the community's needs. Both genders want to see an increase in training and education within the tourism sector in Labuan Bajo in order to realise an improvement in 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, as well as gender-based violence and barriers to the realisation of the human right to water and sanitation. It links with the Global Water Partnership (GWP), which has identified gender as a key cross cutting issue, and the Women for Water Partnership (WfWP), which emphasises the importance of cross-linking the implementation of SDGs 5 and 6.

The findings also related to Cole's (2017, 21)) work, which examined the patriarchal framework of Labuan Bajo society and the ways in which emotional challenges in relation to obtaining water for a woman's household add to women's physical and financial struggles. Poverty compounds gender inequality.

The research shows that integration of GEDSI into established development projects' Theory of Change frameworks lies in the recognition of human rights as a basis for transformational social change and the explicit questioning of socio-political assumptions. It is easy to lose a focus on GEDSI in the drive to complete a development or infrastructure project in a timely fashion and to assume that previous research practices remain adequate in new projects. Ensuring GEDSI is integrated into all aspects of project conceptualisation, design, staffing, management and outcomes ensures that assumptions are questioned, such as:

- Ideas and norms people hold about gender roles, behaviours and social identities;
- Ideas about how social, economic, political and cultural change occurs and how gender equality and women's empowerment may progressively evolve;

- The extent to which gender issues and gendered relations of power are considered integral dimensions of social change, sustainable development and cultural/political/economic transformation.

It is imperative that corporate social responsibility motivated by genuine intent towards human rights be embedded in every organisation's governance strategy and outputs.

In relation to people with a disability, the UN Disability and Development Report (2017) provides evidence that persons with disabilities remain at a disadvantage in global, regional and national efforts towards achievement of the SDGs. Recognition of disability-inclusive development in water and sanitation (SDG 6) is detailed as "Ensuring inclusive access to water and sanitation for person with disabilities requires accessible designs, including accessible toilets, water points, water carriers, bathing places and handwashing facilities" (UN, United Nations Disability and Development Report, 2017). Accessible infrastructure development in urban and rural environments, public spaces, facilities and services (SDG 11) is of parallel importance to the participation of persons with disabilities in all aspects of society and development (UN, United Nations Disability and Development Report, 2017). And it is recognised that double disaggregation of data is needed to achieve the SDGs for those who experience disadvantage based on more than one aspect of their identity, such as women and girls with disabilities.

6.8 COVID-19

The impact of the COVID-19 pandemic on tourism in Labuan Bajo saw most hotels close for a period. Some have now reopened with health and hygiene protocols in place, but some remain shut. The Government has set hygiene and health procedures and protocols, and hotels follow this guidance. Hotels take these procedures and protocols seriously as they want guests to feel safe.

Procedures also are in place to protect the health of staff and guests; these include information on when and where to seek medical advice. The importance of hygiene practices (like handwashing with soap) during the COVID-19 pandemic was emphasized by hotel operators and staff. There are recommendations to further improve staff hygiene at work by providing individual lockers for personal items and equipment. Respondents reported that hygiene and health protocols and social distancing are well adhered to in hotels by both staff and guests.

Beyond hotels, communities mobilised and worked together to control the COVID-19 pandemic through joint purchasing of personal protection equipment (PPE). One village chief reported going door-to-door to share information on health protocols and ensuring handwashing stations were in place. Relief food packages have been provided to economically affected communities with more than 190 people assisted to date.

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

The opportunity exists for hotels to assist the community to respond to COVID-19. 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 for environmental destination stewardship).

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 broad participation sought (Dwyer, 2018). A coordinated destination-wide response is likely to require input from government and tourism sector associations to assist Labuan Bajo's businesses and community with additional guidance and support.

While responses indicated that respondents were not aware of cases of domestic violence in Labuan Bajo, they also demonstrate the extremely low awareness of COVID-19's impact on domestic violence towards women and children - to the point of disregarding the topic.

The findings align with the business case for Inclusive WASH. The availability and quality of Inclusive WASH services is a basic yet valuable indicator of government functionality at national and local levels. The full potential of investment in Inclusive 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 Inclusive 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, 2013). 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).

Providing Inclusive 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. Inclusive WASH interventions can help bridge immediate humanitarian needs with longer term development efforts (WaterAid Canada, n.d. 22). Equally, 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, must be addressed.

6.9 Engagement and Collaboration

Respondents discuss the importance of the synergy between government, the private sector, and the community, or the so-called "triple-helix" in achieving a vision for tourism in Labuan Bajo. A respondent mentioned that government cannot run alone; especially now Labuan Bajo is considered to be an important tourism destination internationally.

The role of community is emphasised in terms of encouraging their activities in the tourism and the WASH sectors (including solid waste management). The low participation of the community in urban areas compared to the higher participation of the community in rural areas was noted.

The involvement of the private sector is seen to be crucial to achieving tourism and Inclusive WASH in Labuan Bajo. While collaboration between the public and private sectors remains limited, there are references to the involvement of the private sector, especially hotel industries, through CSR in Labuan Bajo in different public programs, such as water supply in the small islands. There is an opportunity to enhance private sector participation through the help of CSOs, such as the Dian Desa Foundation in implementation of STBM (Community-led Total Sanitation).

In Labuan Bajo, references to multi-level governance mainly discuss the collaboration between different levels of government (vertical collaboration between central government, provincial government, regency, and subdistrict/village government). The quality of collaboration is generally perceived as positive with room for improvement, particularly horizontal collaboration between leaders of different regencies throughout Flores to achieve the over-arching vision of tourism.

However, cross-sectoral collaboration is perceived as a challenge in Labuan Bajo, with references to sectoral egos and lack of teamwork between different sectors or departments in Labuan Bajo. Respondents suggest pushing cooperation forwards by increasing the regularity of the different departments to meet and discuss important issues related to tourism and Inclusive WASH. In the WASH sector, cross-sectoral coordination has been initiated through the establishment of POKJA AMPL (WASH Working Group). The National Drinking Water and Environmental Sanitation Working Group (POKJA AMPL) is an *ad hoc* institution that was formed in 1997 as a forum for communication and coordination to make drinking water and sanitation development more effective; starting from planning and implementation, through to monitoring and evaluation. In addition, the formation of the POKJA aims to improve coordination between government agencies involved in drinking water and sanitation development.

There is a significant lack of coordination between Government, stakeholders and local communities. Collaboration and coordination are key to providing effective water services in Labuan Bajo and its tourism sector. Key stakeholders such as the Ministry of Health, solid waste etc must collaborate effectively to retain existing services to the community and to improve upon them. Existing WASH stakeholders (in Pokja AMPL) do not invite tourism stakeholders into meetings related to and planning for WASH. An integrated approach to Inclusive WASH in tourism is required to address the complex needs and concerns that are emerging in Labuan Bajo as the area swiftly develops.

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 Labuan Bajo 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).

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 via Number 64 year 2014's, strategic multisectoral collaboration for tourism management.

6.10 Value Proposition

Ideas presented in the data related to the importance of Inclusive WASH to tourism support the construction of a value proposition as it is reflected in multiple scales, i.e. the stewardship of the destination (destination scale), and the importance of Inclusive WASH-at-Work (workforce scale and hotel scale).

Data provided evidence that Inclusive WASH is important for the holistic attractiveness of Labuan Bajo as a destination, because it impacts:

- The pristine state of the natural environment;
- Perceptions substantiating eco-tourism businesses and personal safety;
- Values of high quality and sustainable tourism.

Destination image and attractiveness heavily rely on natural features. Maintaining a pristine environment is therefore not only critical to support the provision of important ecosystem services, such as fresh water, but also for the success of tourism.

Tourism in Labuan Bajo is currently heavily based on the Komodo Dragon, as well as marine activities and an authentic cultural experience. Respondents associate the destination image or brand with ecotourism and sustainable tourism and some of the accommodation providers stated their hotel "has an ecotourism concept".

Participants associate a clean environment with a high-quality tourism product and success in tourism is associated with the sector being sustainable.

However, the data also identified a range of limiting factors or barriers to successful tourism development, which link directly to WASH practices, due to poor waste management and limited access to clean and safe drinking water increasing health risks:

- Waste management;

- Access to freshwater;
- Health risks.

Inclusive WASH has an important role in sustainable tourism development, particularly in relation to the community becoming actively engaged in tourism, including decisions on tourism development. Recognising that maintaining or even improving the image of the destination, including environmental cleanliness and appeal, is a joint responsibility of all stakeholders, may provide opportunities for engagement and collaboration on Inclusive WASH issues. Furthermore, there are existing examples where CSR funds have been used for environmental and social causes.

The vision for Labuan Bajo is for it to become a 'Super-premium tourism' destination. Stakeholders are confident that Labuan Bajo will be successful due to government priority and investment. Nonetheless, the data clearly identified areas of concern, including waste, access to water and health risks. Limitations to Inclusive WASH pose risks and may restrict swift tourism growth and development. Equally respondents identified opportunities for tourism development. In addition to improving access and connectivity and enhancing institutional support and capacities, maintaining the attractiveness of the destination was identified as important to ensure the vision for tourism in Labuan Bajo will be met.

Examples exist in which hotels contribute to improving Inclusive WASH practices in the community. Data suggest this occurs where organisations, such as the Health Office of Manggarai Barat, approach hotels and other operators to become engaged in existing community or education programs. These can be:

- Training and education to enhance human resource capacity (both in terms of WASH and tourism planning);
- Sanitation guidelines for hotels;
- Providing sanitation facilities to communities;
- Water management and stewardship;
- Improved and Inclusive WASH practices.

There is a large number of factors that 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, whereby 'health and hygiene' is considered important. Respondents identified the natural environment as one of the drawcards, together with the Komodo dragon, making Labuan Bajo attractive.

This is in line with existing studies and of particular importance considering the national government's plans to expand tourism in Labuan Bajo.

To achieve sustainable economic development through tourism, a holistic approach needs to be taken to develop destinations and improve the tourism product on offer. 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 in Indonesia (Hutton et al., 2008).

There is thus 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 Inclusive 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 Labuan Bajo 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 Inclusive WASH (due to a few examples of tourist illness brought on by food or hygiene) and suggested there is a need for improvement and social inclusion 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 Inclusive WASH for the image of hotels. Previous studies on hotel preferences have found that attributes including price, room quality, location, service quality, facilities and cleanliness influence hotel choice (Chu & Choi, 2000; Lockyer, 2005; Chen, 2002; Chia-Jung & Pei-Chun, 2014). WASH practices, in particular sanitation and cleanliness of areas such as toilets, have also 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.

A value proposition for Inclusive WASH-at-Work can benefit from the concept of 'gender lens investing', which integrates gender analysis with financial analysis to promote beneficial investment decisions. Gender analysis for investment strategies can include making money available to enterprises owned by women, market analysis of female consumers, focusing on workplace equity and employment opportunities for women, and investing in products and services that benefit women and girls (US AID, 2015).

An Inclusive WASH-at-Work value proposition can also ask broader questions about support for women in WASH programs, i.e. are there potential public or private financing stakeholders who prioritise social impact and would be drawn to investing in WASH to support women's leadership, entrepreneurship and economic empowerment? What is the gender dimension of new products, services and business models for Inclusive WASH? (UNICEF 2017:4). It can frame qualitative questions such as how do women and girls perceive their level of participation in community-based Inclusive WASH committees? What enhances and what are barriers to female participation? (UNICEF, 2017).

Inclusive WASH-at-Work can also provide Illustrative Gender Targets and Indicators, as does SDG Target 6.2, i.e. By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Further, a value proposition for Inclusive WASH-at-Work can frame quantitative questions, i.e. what is the percentage of WASH staff aware of basic issues related to gender and prevention of violence against women and girls, including linkages between Inclusive WASH programming and reduced vulnerabilities to violence? What is the female-to-male ratio of Inclusive WASH program staff? What is the percentage of women/girls in job skills training on operation and maintenance of water supply and sanitation, including for technical and managerial roles? What is the access to menstrual hygiene-related education, materials, and disposal options? What is the female-to-male ratio of persons who participate in community-based Inclusive WASH committees or other decision-making structures?

7. Conclusion and Recommendations

Labuan Bajo is internationally recognised and is a top priority tourism destination for Indonesia, tipped for expansion due to its designation by President Joko Widodo as one of 10 'new Balis' to be developed. Despite this prioritisation, infrastructure planning is not being conducted via collaboration and engagement between tourism operators, Labuan Bajo's residents, and local government.

Inequities in access to water between tourist operators, tourists and local communities have increased as new hotels and resorts have been built. Amenities for tourists in hotels differ markedly from those available to local communities, particularly the lesser availability and inferior type of toilets, their poorer quality, comfort and safety, and the minimal provision of handwashing facilities, soap and privacy. Water scarcity is a major constraint to sustainable development in Labuan Bajo and is provoking social conflict; it is a mounting source of tension despite the economic benefits brought by tourism activities to Labuan Bajo and surrounding areas. In addition to the potential for loss of social cohesion due to conflict, the social and health impacts of reduced water access, service and quality have a gendered character; they are disproportionately borne by women and girls in Labuan Bajo's communities.

The research documents the lack of cooperation and collaboration between Government, tourism operators, and local communities. While tourism is perceived to be improving the economic lives of local people and enhancing their health and environment, respondents also identify the need for Inclusive WASH. Their need provides an emerging opportunity for Government agencies and the tourism sector to provide, via joint CSR programs, Inclusive WASH awareness, training and education, and to support socially-inclusive WASH access within local communities.

Existing local government WASH stakeholders, such as those in Pokja AMPL, have an opportunity to conduct more effective and socially-inclusive stakeholder engagement by inviting tourism stakeholders, local community leaders, and representatives of organisations for women, people with a disability, the elderly and youth, to meetings in which WASH projects are being designed and planned. Such action would enable the complex societal needs emerging in Labuan Bajo due to rapid tourism development to be recognised and addressed before conflict arises, social cohesion is damaged, and social and health problems arise.

Actions taken to expand cooperation have the potential to develop a water stewardship approach that is tailored for the needs of Labuan Bajo and its surrounding areas, in which community interests are considered and participation beyond 'top-down' government processes is sought. A tailored water stewardship approach could then enable the development of a coordinated destination-wide Tourism Master Plan to enhance future planning, incorporating input from Government, tourism sector associations, and Labuan Bajo's businesses and communities, enabling the cross-fertilisation of ideas, and acknowledging all parties' differing needs.

The research demonstrates the ways in which GEDSI, as a detailed framework by which to understand the need for social inclusion, is integral to the complex network of social, environmental, political and economic issues that are shaping tourism in Labuan Bajo. It shows how social inclusion is required to address the *intersection* of disadvantage and vulnerability in local communities, particularly in relation to water access and WASH. Inclusive WASH-at-Work programs can be developed in conjunction with hotels, communities, and Government to address the range of gendered disadvantage and vulnerability in Labuan Bajo and its surrounds. Such programs can work to ensure:

- The inclusion of disability advocacy groups, who note that hotels and the broader tourism sector in Labuan Bajo do not work to explicitly address their needs.
- Local culture is sustained in a safe, respectful, collaborative and *inclusive* manner from a base of equity practice, education awareness and changing behaviours.
- Specific issues of water access and use, sanitation and hygiene are addressed such as training in menstrual hygiene management (MHM) and broader social inclusion in the workplace, and

women's needs in the workplace and communities in terms of higher demands for water during menstruation, and when they care for small children, the elderly and/or sick relatives.

- Government policies that recognise water, sanitation and access to effective hygiene facilities are fundamental human rights and a human rights-based approach to development.
- The tourism sector's capacity to maintain a strong reputation with tourists and obtain a social licence to operate from local communities in Labuan Bajo and its surrounds.

Whilst all stakeholders envision tourism success as contributing to an improved economy, enhancing community welfare, human resource development and improved public and environmental health, a range of actions are required to achieve this vision.

The recommendations presented are made as steps towards achieving the vision of Labuan Bajo as a tourism destination benefitting all stakeholders.

1. Government

- 1.1. Improve water security in Labuan Bajo for all stakeholders by building more effective collaboration in water supply planning to ensure equal distribution of water supply for communities in the main island, small islands and for tourism services.
- 1.2. Address and ensure 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 community, hotels and public places;
- 1.3. Integrate socially-inclusive WASH and water stewardship into tourism policy and plans. Communicate and enforce policy.
- 1.4. Enforce regulations for wastewater management, drainage and solid waste and encourage community behaviours to achieve the vision of Labuan Bajo as a clean, safe and attractive destination.

2. Community/Civil Society Organisations

- 2.1. Develop and deliver targeted handwashing hygiene promotion activities for specific groups (e.g. men and children) in the community to increase and sustain handwashing behaviours beyond COVID-19 and ensure access to handwashing facilities and soap supplies.
- 2.2. Ensure equitable access to water for communities as well as tourism development projects.
- 2.3. Promote and collaborate with communities to implement STBM and safe faecal sludge management.
- 2.4. Encourage civil society organisations to support households in building accessible inclusive WASH facilities.

3. Hotels

- 3.1 Develop an Inclusive-WASH-at-Work program 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 status in all surrounding areas.
- 3.2 Maintain high quality service for tourists whilst improving water efficiency and reducing consumption of a shared resource.
- 3.3 Increase CSR activities and contribute to the community and clean environment.
- 3.4 Adopt a water stewardship strategy that considers factors beyond the hotel premises (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 Inclusive WASH-at-Work training.

3.5 Implement Inclusive WASH-at-Work guidelines to ensure barriers to faecal-oral transmission pathways are disrupted to protect health of tourists, staff and communities (e.g. good food hygiene as barrier to contamination of fresh produce).

4. All Stakeholders

4.1 Recognise that women's water needs and social roles using water in the household are greater than those of men and that water scarcity has greater negative impacts on women and girls.

4.2 Involve more women and disabled groups in socially-inclusive WASH decision-making processes to improve stakeholder awareness about the importance of inclusive WASH and create more effective gender-sensitive and inclusive WASH services.

4.3 Expand 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:

- Inclusive 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;
- Actions required to maintain Labuan Bajo as a desirable tourist destination.

4.4 Government and hotels to provide 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.

4.5 PDAM, communities and small hotels to 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;

4.6 Develop Inclusive WASH-at-Work guidelines, procedures and certification system and integrate into approaches to re-open tourism by addressing COVID-19 risks. This has potential for broader scale-up across Indonesian tourist destinations.

4.7 Government and tourism association to target training of Inclusive WASH-at-Work for small hotels and small cruise ships travelling to smaller islands in order to improve the quality and inclusion of WASH services and more effective waste management.

4.8 Provide contextualised and culturally appropriate hand hygiene campaigns to increase hand washing with soap as a social norm in communities.

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