

PRELIMINARY REPORT MCSTO UNRAM 2019

Introduction

The Monitoring Center of Sustainable Tourism Observatory (MCSTO) of Universitas Mataram (UNRAM) has been conducting monitoring and mentoring activities on three villages in West Lombok (Sesaot, Pakuan and Buwun Sejati Villages) since 2016. The activities have recorded five main achievements, including: (1) The establishment and development of Village-Owned Business Entities (BUMDES) in all three villages; (2) The increasing number of tourist attractions initiated by community members themselves; (3) The emergence of a number of local tourism entrepreneurs from within the local community members; (4) The establishment of Buwun Sejati Village as the first tourism village in West Lombok Regency in 2018; and (5) The recognition of Sesaot Village as the second best national tourist destination for environment management category by Indonesia Tourism Ministry in 2019.

In 2019, the MCSTO Unram applies 7 new monitoring areas which are located in 4 regencies in Lombok. The extension of the monitoring areas is intended to support the development of tourism industry in Lombok which is centered in Kuta beach and its surrounding areas. As Indonesia government adopt sustainability principles, the tourism development is preceded by the development of a tourism master plan known as *Integrated Infrastructure Development for National Tourism Strategic Areas (Indonesia Tourism Development Project, ITDP)*. In such master plan, tourism development involves all tourism stakeholders, and requires monitoring from an observatory, such as MCSTO UNRAM, in its implementation.

The ITDP aims to improve the quality and access to basic services and infrastructure related to tourism; strengthen the linkage of the local economy to tourism; and encourage private investment in priority tourist destinations. To achieve these objectives, there are 4 (four) components of work planned at ITDP, namely: Component-1: Enhancing institutional capacity to facilitate integrated and sustainable tourism development; Component-2: Improving the quality of roads and access to basic services related to tourism; Component-3: Increasing community participation and the local business community in the tourism sector; and Component-4: Improving a conducive business climate for private investment in the tourism sector.

The implementation of ITDP, which began to work in the second half of 2019, requires monitoring steps to ensure that all programs are running well, and the level of progress is continuously evaluated. Therefore, collaboration was carried out with MCSTO UNRAM which has had experience on tourism monitoring since 2016. The collaboration was carried out based on the Memorandum of Understanding (MoU) between the Indonesian Ministry of Tourism, Mataram University and 4 Regency Governments and 1 City Government on Lombok Island, which marked assignment to MCSTO UNRAM to conduct monitoring for 5 years in the tourism area which is spread in 4 districts on the island of Lombok. The four regencies include: West Lombok Regency, North Lombok Regency, Central Lombok Regency, and East Lombok Regency.

The MCSTO UNRAM has an important role in supporting the success of ITDP in Lombok, especially in relation to the implementation of work Component-1: Enhancing institutional capacity to facilitate integrated and sustainable tourism development; and Component-2: Increasing community participation and the local business community in the tourism sector. MCSTO UNRAM helps to monitor the activities of agencies, and other tourism components to be in line with the principles of sustainable tourism development. MCSTO as part of the United Nations World Tourism Organization (UNWTO) network, the International Network of Sustainable Tourism Observatories (INSTO) and / or Wonderful Indonesia Sustainable Tourism Observatories (WINSTO) is currently managed by the Deputy for Tourism Destination Development at the Indonesian Ministry of Tourism.

With the expansion of the monitoring area, MCSTO UNRAM monitors the indicators of sustainable tourism in 8 Districts. The results of the monitoring will be reported to the Minister of Tourism and Technical Team, Provincial and also District Tourism Destination Working Group—as regulated through a Decree (SK) of the Minister of National Development Planning Agency (Bappenas) Number Kep. 86 / M.PPN / HK / 06/2018 as the Program Coordination Team, as well as to the Regional Government. Determination of indicators to be monitored requires an analysis of the characteristics of each destination and the problems faced. The results of the analysis not only help to determine the type and number of indicators, but also the priority scale of each indicator to be monitored.

Situation Analysis

Lombok island is located in the province of West Nusa Tenggara, located between 115 ° 46' - 119 ° 5' East Longitude and 8 ° 10' - 9 ° 5' South Latitude, with an area of 4514 square kilometers. The furthest distance from the east to the west reaches 75 km, and 80 km from the

north to the south. Lombok Island is separated from Bali Island in the west by the Lombok Strait, and from Sumbawa Island in the east by the Alas Strait. There are hundreds of small islands called Gili, that surrounding Lombok. The Gilis are largely uninhabited, and have their own uniqueness as a tourist attraction.

Geographically, Lombok is divided into two parts. The western and northern parts of Lombok are greener and more fertile than the central and southern parts. The northern part is affected by Mount Rinjani, one of the highest volcanoes in Southeast Asia (3726 meters above sea level) with its crater lake named Segara Anak, located more than 2000 meters above sea level. The topography and various unique natural events in Rinjani and its surroundings attract tourists. In contrast, the southern part of Lombok is a drier, rugged and hilly area. However, this area is surrounded by beautiful beaches that march more than 50 miles from the southwest to the southeast of the island. The beach area is attractive for a number of tourist activities such as surfing, diving and sailing. Some beaches have large flat land and white sand with crystal clear water and colorful marine life. A comfortable place for tourists to swim and snorkel or just sunbathe on the beach.

Figure 1. Map of Lombok Island



Administratively, Lombok Island is divided into 4 (four) districts and one City, namely East Lombok, Central Lombok, North Lombok, West Lombok and Mataram, as shown in Figure 1. The population of Lombok in 2017 was recorded to be more than 3.4 million as shown in Table 1, with the most number domiciled in East Lombok.

Tabel 1. Population of Lombok, 2017

Districts /City	Sex			Sex Ratio
	Male	Female	Total	
Mataram	231 797	236 712	468 509	97.92
West Lombok	330 182	345 040	675 222	95.69
North Lombok	106 812	109 703	216 515	97.36
Central Lombok	440 292	490 505	930 797	89.76

East Lombok	550 958	632 246	1 183 204	87.14
Total	1 660 041	1 814 206	3 474 247	91.50

Source: *West Nusa Tenggara in figures*, 2018

The native tribe or Lombok indigenous community is the "Sasak", who inhabit the entire island. The Sasaks are predominantly Muslim and, their beliefs characterize Lombok as "the island of a thousand mosques". However, the characteristics of the Sasak culture have many strong links with Hindu and Buddhist religions which were the majority belief in the era of the Sriwijaya and Majapahit kingdoms. The ancestors of the Sasak people in the early days were adherents of animism, which was then Buddhist, before the arrival of Hinduism and Islam. The influence of Hinduism on Lombok, which began in the early 18th century, is still seen in many historic buildings, such as palaces and temples located in West Lombok. Besides that, the influence of Hindu culture is also seen in various unique traditions of the Sasak people, such as rituals performed at wedding ceremonies, singing traditional songs, and traditional dance performances. All of this makes Lombok a destination that besides having beautiful natural attractions, as well as unique and interesting cultural attractions.

Basic Economic Data

The tourism industry in Lombok has started to develop since the end of 1970. However, formally tourism activities began to be widely known since the establishment of the Senggigi Beach hotel in 1986, which is the first star hotel in Lombok. Then followed by several other starred hotels such as Sheraton, Holiday Inn, Novotel, and Oberoi (Saufi, 2017). The development of the tourism industry in Lombok is a response to the increasing number of tourist visits to this area in recent years, as shown in Table 2.

The decline in tourist visits to Lombok occurred in 2018 because it was affected by the earthquake disaster that occurred in July - September. However, it is believed that tourist arrivals will increase again in the following years as more and more tourism facilities are provided and more intense promotional efforts were undertaken.

Tabel 2. Number and development of tourists in NTB in the last 5 years

Year	International	Domestic	Total	Development (%)
2014	752 306	876 816	1 629 122	
2015	1 061 292	1 149 235	2 210 527	35.69
2016	1 404 328	1 690 109	3 094 437	39.99
2017	1 430 249	2 078 654	3 508 903	13.39
2018	1 204 556	1 607 823	2 812 379	-19.85

Source: *NTB Province Tourism Statistics*, 2018

Until 2018 the number of hotels in Lombok was recorded at 1,176 hotels with 16,878 rooms, consisting of 80 star hotels (7,488 rooms) and 1,096 non-star hotels (9,390 rooms) (Dispar NTB, 2018). The highest number of starred hotels is located in West Lombok Regency, which is 37 hotels, while the highest number of non-star hotels are in the city of Mataram with 128 hotels as shown in Table 3. Meanwhile, North Lombok Regency has the most complete type of amenities where there are Bar, Spa and Dive business in addition to hotels and restaurants. This is influenced by the existence of three Gilis destinations where most of the tourists and visitors are foreign tourists from Europe, America and Australia.

Tabel 3. Number of tourism businesses in Lombok 2018

Regencies / City	Travel agent	Stared hotel	Non Stared Hotel	Restaurant	Bar	Spa	Dive
Mataram	253	28	128	338	0	196	0
West Lombok	241	37	154	271	0	46	7
North Lombok	29	9	566	375	85	44	38
Central Lombok	57	4	105	126	0	0	0
East Lombok	21	2	143	265	0	0	0
Total	601	80	1096	1375	85	286	45

Source: *NTB Province Tourism Statistics, 2018*

Hotel room occupancy rates fluctuate from year to year with an increasing trend. Significant increases were seen in 2014 to 2017. Fluctuations in hotel occupancy rates may have been affected by an increase in the number of hotels and other tourism businesses in recent years, thereby increasing the level of competition for attracting tourists in the hospitality industry. In addition, fluctuations in hotel occupancy rates may also be influenced by a changing trend in tourist behavior where visits to Lombok are only done in one day visit and not overnight. However, in general, the average occupancy rate for star-rated hotels is higher than for non-star hotels, as shown in Table 4.

Tabel 4. The hotel occupancy rate in Lombok in the last 5 years

Kind of hotel	Hotel occupancy rate as a percentage				
	2013	2014	2015	2016	2017
Stared	53.74	47.83	43.82	43.57	49.20
Non Stared	53.74	31.07	25.03	28.54	24.74

Source: *NTB Province Tourism Statistics, 2018*

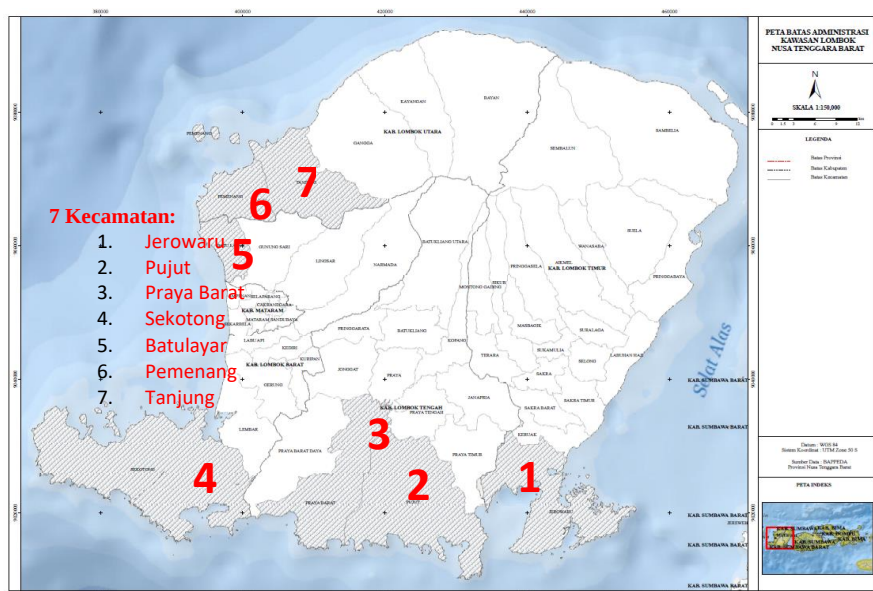
The increase in the number of tourist visits to Lombok has an impact on increasing the amount of foreign exchange from year to year. Total foreign exchange receipts from foreign tourists increased from 2013 which was Rp. 4.2 Trillion to Rp. 6.9 Trillion in 2018 (Dispar NTB, 2018). Meanwhile, foreign exchange receipts from domestic tourists fluctuated and tended to increase, from 4 trillion rupiah in 2013 to 4.5 trillion rupiah in 2018 (Dispar NTB, 2018). The amount of foreign exchange received in 2018 has the potential to be even greater if there is no earthquake in 2018.

The impact of tourism industry is expected to be sustainable, not only on economic aspects but also other aspects such as social, culture and environment, especially for the destination communities. Therefore, the implementation of tourism development that will be carried out based on ITDP as mentioned above needs to be academically monitored and evaluated to ensure that all tourism activities that occur are carried out in accordance with sustainable principles.

Key Sustainability Issue Areas

So far, there are three areas which are most developed tourism development in Lombok, namely the Senggigi Beach area in West Lombok Regency, the three Gili regions (Gili Trawangan, Gili Meno and Gili Air) in North Lombok Regency, and the Kuta Beach Region (Mandalika) in Central Lombok Regency. Furthermore, with the formation of ITDP, the area of tourism development was expanded to the entire island of Lombok, within the administrative area of 4 districts and 1 city government. Meanwhile, the focus of monitoring for MCSTO UNRAM is in the coastal area which lie in more than 100 km from the southeast to the northwest of Lombok Island. The area is in 7 sub-districts, as shown in Figure 2, and subsequently becomes the Key Tourism Area (KTA) and the MCSTO UNRAM monitoring area.

Figure 2: MCSTO UNRAM Monitoring Area



Each district has interesting natural and cultural attractions to be developed as tourist attractions. Some of these attractions have been managed as tourist destinations and are well-known among tourists, while others are still not well managed. Attractions that have been managed are completed with tourism facilities such as access and amenities that are more complete than those that have not been managed. Some tourist attractions owned by each district are shown in Table 5.

Table 5. Additional Monitoring Areas for the MCSTO UNRAM

Subdistricts	Villages	Tourist attractions
Jero waru	Jerowaru	Mangrove forest
	Sekaroh	Pink Beach Tanjung Ringgit Goa Jepang (Japan Cave)
Pujut	Rembitan	Sade Traditional Village
	Kuta	Kuta Beach and surrounding areas Merese Hill
Praya Barat	Selong Belanak	Selong Belanak Beach and surrounding areas
	Mekar Sari	Tampah Beach and surrounding areas Semeti Beach
Sekotong	Pelangan	Mekaki Beach

	Batu Putih	Goa Jepang (Japan cave) Gili Renggit Gili Layar Gili Asahan Gili Genting Gili Goleng Bange Beach Goa Alam Raksasa (Giant Nature Cave) Bangko Bangko
	Gili Gede Indah	Gili Gede
	Sekotong Barat	Gili Poh
		Gili Lontar Gili Nanggu Gili Sudak Gili Tangkong
	Kedaro	Makam Keramat (Keramat cemetery) Kedaro reservoir Nambung Bach
	Buwun Mas	Belongas Sepi Beach Nambung Beach
Batu layar	Senggigi	Senggigi and surrounding area Mangsit Beach Laguna and surrounding area
	Batu layar	Batu Bolong Temple Batulayar cemetery
Pemenang	Malaka	Nipah Beach
	Gili Indah	Gili Terawangan Gili Meno Gili Air
Tanjung	Medana	Medana Beach Jambianom Beach
	Sigar Penjalin	Tembobor Beach Sira Beach

Central Lombok Regency with two sub-districts (Pujut and West Praya) has the highest population density of all districts. The existence of the Mandalika beach, which is one of Lombok's mainstay projects, has made two sub-districts in Central Lombok a center for emerging tourism activities and vulnerable to various environmental and socio-cultural problems. Likewise with Jerowaru sub-district in East Lombok, which is located adjacent to and is the main buffer area for Mandalika tourism. As a new area that is in contact with tourism, security issues often become a major issue, due to the cultural gap between the local community and tourists.

Meanwhile, the two sub-districts in West Lombok, Sekotong District and Batu Layar District, are tourist destinations with different issues. Sekotong District has a topographic and coastal area which has the potential to support the Lombok tourism industry. However, the existence of illegal gold mining carried out by the local community has yet to find the best solution. In fact, these mining activities often clash with nature conservation efforts both on land and in the ocean. Batulayar sub-district covers Senggigi Beach which is one of the oldest tourist destinations in Lombok. At this time, Senggigi tourist destinations are faced with challenges related to destination lifecycles. Senggigi Beach requires destination rejuvenation efforts and tourism revitalization programs to redefine destination positioning with more sustainable principles.

Two sub-districts in North Lombok Regency include small islands (Gili) which are the mainstay of Lombok tourism. However, the three Gilis in this region face the challenge of continuing to increase the number of tourist visits and the number of tourism facilities built on it. Thus, the carrying capacity of the three gilis in this region is considered to be a major issue that must be addressed immediately, as suggested by one of the GSTC assessors in 2016.

The scope of material for the Sustainable Tourism Observatory activities in general uses nine core issues that must be monitored. These indicators are: local satisfaction, destination economic benefits, employment, seasonal tourism, energy management, water management, liquid waste management (sewerage), solid waste management, and governance. The nine core issues are mandatory indicators, although they can be adjusted (added / subtracted) to the main issues according to the characteristics of the observatory destination.

There are 5 (five) main issues that are the focus of sustainable tourism management in Lombok, as well as being the main task of monitoring for MCSTO UNRAM. These five issues emerged as a result of the rapid construction of tourism facilities and tourism activities in Lombok. MCSTO UNRAM focuses on monitoring the five main issues, as shown in Table 6 below:

Table 6. Main Issues on the Main Duty of MCSTO UNRAM

Monitored issues	Indicators
Liquid waste management	Percentage of wastewater recycled by the destination (or a number of companies operating in the tourism sector that have managed a wastewater recycling system)

Solid waste management	Amount of rubbish littered in public spaces (amount of rubbish)
Water management	Number of companies participating in water conservation practices / programs, implementing water conservation policies and techniques
Conservation and protection of important ecosystems (coral)	Percentage of protected coral
Security	Number of security issues reported to the police, hotels, etc. by tourists

Source: Terms of Reference Sustainable Tourism Observatory (STO) monitoring and reporting as part of UNWTO International Network of Sustainable Tourism Observatories (INSTO) in destination, 2019

Current monitoring activities and structures

MCSTO UNRAM monitoring activities that has been carried out since 2016 in Narmada Subdistrict, focused on two main issues namely: (1) Help to increase local community participation in tourism activities, especially through tourism entrepreneurship, and (2) Monitor income levels and community satisfaction from tourism activities. To carry out these activities, MCSTO UNRAM collaborates with LPPM UNRAM in involving students, lecturers and researchers in monitoring activities, in a project called community service. Community service conducted by the students has a program for 6 weeks living in a tourist village to help the community solve certain problems related to community empowerment. This community service activity is carried out by 1 group of students consisting of 10-15 people each semester. Meanwhile, the community service conducted by researchers and lecturers is only done once a year, and in very specific fields, such as the field of waste treatment, creating tourism products, etc.

Monitoring activities on the 7 new sub-district areas have been made since the second semester of 2019 by focusing on the determining tourism areas and main sustainable issues in each area. Data collection related to the specific issues in each Subdistrict in accordance with the results of the initial observations of the period July 16-September 16 2019, as follows:

1. Jerowaru Subdistrict, East Lombok Regency, field observations for data collection was emphasized on the issues of security, the environment (terrestrial and coastal ecosystems), and additional issues in the form of tourism and hospitality management.

2. Tanjung Subdistrict and Pemenang Subdistrict, North Lombok Regency, the observation was emphasized on the issue of waste management, coral reef conservation, and security.
3. Pujut Subdistrict and West Praya Subdistrict, Central Lombok Regency, observation was emphasized on the issue of waste management by the hotel management.
4. Sekotong District and Batu Layar District of West Lombok, observations was emphasized on the issue of conservation of coral reefs and marine and coastal conservation, and management of hotel waste.

Table 7. Monitoring focus issues based on sub-district and KTA

Subdistrict	Issue monitored				
	Solid waste	Liquid waste	Water Management	Coral conservation	Security
Jerowaru			X		X
Pujut	X	X	X		X
West Praya			X		X
Sekotong			X	X	X
Batu Layar	X	X	X		
Pemenang	X	X	X	X	
Tanjung	X	X	X		

Source: Results of field observations

Determination of monitoring focus issues that are tailored to the sub-district area and Key Tourism Area requires further analysis in order to find the data requirements, data sources, and methodologies needed to collect and analyze the data. The analysis focuses on each of the sustainability issues that will be monitored, taking into account current management conditions to be used as preliminary data. Next, yearly data will be presented that illustrates the changes that occur in each of the sustainability issues.

Data needs, availability, sources and gaps

To do preliminary records, data is needed related to five sustainability issues. Some of these issues do not have secondary data so early observations are needed to obtain primary data. The five sustainability issues include:

1. Solid waste management

The monitoring area for solid waste management covers all sub-districts with two focuses; the management of household solid waste by destination communities and by the tourism industry, which is hotels and restaurants. The focus of monitoring on the tourism industry is carried out in four districts: Pujut, Batu Layar, Pemenang and Tanjung. These four

sub-districts are the most developed destinations for tourism development and are the places for most hotels in Lombok, both starred and non-starred. However, there is no adequate solid waste management system in the four sub-districts.

The waste management monitoring system in the four sub-districts will be carried out by collecting data from hotels and tourist attractions, and from the destination community (villages around the tourist attractions). This is done to obtain detailed and reliable data in creating based-line data, and to record the waste management annually.

2. Liquid waste management

Likewise the solid waste treatment, the monitoring area for liquid waste treatment is also focused on tourist destinations that are already advanced and have adequate accessibility and amenities, namely in the Districts of Pujut, Batu Layar, Pemenang and Tanjung. The results of preliminary observations in the four sub-districts cover three main matters related to liquid waste management; (1) Wastewater Treatment Plant (IPAL) facilities only exist in large-scale hotels while there are none for small and medium-scale hotels so monitoring for water quality of the liquid waste has never been carried out. (2) For medium and small scale hotels that do not yet have adequate waste management facilities, waste management is still collected in the garbage bin which is then transported by the local garbage transport officer. And (3) The tourism area has placed garbage bins, however the number needs to be increased and composting facilities need to be held as an education to visitors of the tourist sites.

Therefore, the focus of monitoring this year is on making based line data and analyzing empowerment programs on the management and treatment of solid and liquid waste, especially in the four districts. Places that do not have wastewater management will be observed to get primary data.

3. Water management

The focus of monitoring related to water management is carried out in all districts, as shown in Table 7. In addition to the management of liquid and solid waste, almost all hotels and restaurants have done water conservation efforts through their internal policies. The strategy for implementing internal policies is limited to employees and hotel management. However, given the importance of water management, MCSTO UNRAM will encourage hotels and restaurants to have internal water management policies, such as planting trees in deforested areas, environmental service policies, and other related programs.

Internal and external policies of the tourism industry are needed in cooperation to preserve protected forests. Forest damage is common in Lombok, which is caused by forest fires and illegal logging. Forest fires and illegal logging are often done deliberately by humans to open up forest areas to live and grow crops. In fact, burning forests destroys trees, causes loss of shelter for many animals in the forest, and loss of springs.

Damaged natural conditions are a challenge for tourism development in Lombok. Water scarcity has become a problem that is increasingly felt, especially in some destinations that have the most severe levels of forest destruction such as in the districts of Jerowaru, Pujut, West Praya and Sekotong. Water scarcity and environmental damage are challenges that can hinder the development of the tourism industry in Lombok. Therefore, this issue has become one of the central tasks monitored by the MCSTO UNRAM in all districts.

4. Coral conservation

Lombok Island consist of large marine area with a huge wealth of underwater life. However, monitoring activities regarding coral reef conservation are focused on two sub-districts namely Sekotong and Pemenang. This is in view of two main points: (1) these two sub-districts have extensive coral reef conservation areas, and dozens of smaller islands which are places for tourists to do snorkeling and diving. Sekotong subdistrict has a coral reef conservation area of 21,132.82 ha with dozens of small islands which are the center of tourism activities. Meanwhile, Pemenang subdistrict has a coral reef conservation area of 2,273.56 ha with three small islands that are already well-known among domestic and foreign tourists.

The focus of monitoring will be not only on coral reef conservation methods but also on the activities of tourists visiting conservation areas. In addition, monitoring is also carried out in coastal border zone areas planted with mangroves.

In the coastal environment there are three main ecosystems, namely mangroves, seagrass beds, and coral reefs. Ecologically, the existence of these three ecosystems has a close functional relationship each other. Various types of biota that move, such as fish and crustaceans utilize this ecosystem as a feeding ground, nursery ground, and as a spawning ground. In the assessment of the condition of coral reef ecosystems it is often carried out in one unit or series of work that is inseparable so it is called coral reef ecosystems and other related ecosystems.

The three coastal ecosystems above can also be used as a source of community life, both directly and indirectly. The community can use this resource directly, for example by

exploiting the fish and clam resources in it. In the last few decades, this marine resource has been utilized as a potential tourism mainstay in West Nusa Tenggara, especially Lombok Island. The beauty of the coral reefs in the Sekotong and Gili Indah (Gili Matra) regions has become a special attraction for tourism activities in this area. The beauty and uniqueness of this unique tropical ecosystem has been utilized in the form of very pleasant tourism such as diving, snorkeling, and seagrass and mangrove ecotourism. Furthermore, the beauty of this marine tourism object has become a tourism mascot in West Nusa Tenggara.

5. Security

Security is a crucial issue because there are often security disturbances to tourists such as theft and robbery. Community involvement from the beginning is needed so that they understand the benefits that can be obtained from tourism. The roles of tourism associations such as tourism awareness groups (pokdarwis) in order to increase awareness and encourage public participation to be involved in tourism development are urgently needed.

Monitoring related to security issues is basically conducted in all sub-districts, although not all sub-districts experience a low level of security record. For example, the four subdistricts in the south of Lombok (Jerowaru, Pujut, West Praya and Sekotong), have a lower level of tourist safety compared to the other subdistricts. This could be influenced by the number of tourism facilities that are still not many, and the level of local community participation in the tourism industry which is still low. Therefore, the focus monitoring on security is made on the four sub-district.

List of Key Stakeholders

To monitor the five main issues above, and nine other main issues, the involvement of tourism stakeholders in Lombok is needed. These stakeholders will be involved in the monitoring process through several approaches such as observation and focus group discussion (FGD). The stakeholders involved in the monitoring process came from 5 main groups called pentahelix tourism, namely: (1) government, (2) industry, (3) community, (4) academics and researchers, and (5) the mass media.

Objectives of the Observatory (short, medium, long-term)

Meanwhile, monitoring activity objectives are formulated in short-term goals (1-2 years), medium-term goals (3-5 years) and long-term goals (over 5 years).

Short-term goals (1-2 years) include:

1. Increasing the number of monitoring areas and register new MCSTO monitoring areas to the UNWTO
2. Identifying problems in the monitoring area related to the 5 main indicator areas
3. Finding a monitoring methodology for each region and indicator area
4. Finding a methodology for stakeholder participation in each monitoring area
5. Developing based-line data that underlies the implementation of monitoring
6. Preparing annual monitoring reports.

Medium-term goals (3-5 years) include:

1. Documenting sustainability indicators in each monitoring area and 5 main indicator areas
2. Developing a monitoring methods for each region and the whole (nine) indicator areas
3. Developing a methodology for stakeholder participation in each monitoring area
4. Creating a time series of data on the development of the overall state of the indicator area in accordance to the monitoring area.
5. Preparing reports on the progress of monitoring results on an ongoing basis (annual report).
6. Creating the best practice of the development of sustainable tourism development
7. Creating scientific publications of the monitoring results.

Long-term goals (> 5 years) include:

1. Developing a methodology for implementing contextual monitoring according to the field of indicators and monitoring areas
2. Preparing a best practice report on the implementation of sustainable tourism development in the monitoring area
3. Organizing ongoing socialization about the results of monitoring in international forums such as international conferences

Proposed List of Issue Areas and Indicators to be Measured

The scope of material for the Sustainable Tourism Observatory activities in general uses nine core issues that must be monitored. These indicators are: local satisfaction, destination economic benefits, employment, seasonal tourism, energy management, water management, liquid waste management (sewerage), solid waste management, and

governance. The nine core issues are mandatory indicators, although they can be adjusted (added / subtracted) to the main issues according to the characteristics of the observatory destination.

There are 5 (five) main issues that are the focus of sustainable tourism management in Lombok, as well as being the main task of monitoring for MCSTO UNRAM. These five issues emerged as a result of the rapid construction of tourism facilities and tourism activities in Lombok. MCSTO UNRAM focuses on monitoring the five main issues, as shown in Table 8 below:

Table 8. Main Issues on the Main Duty of MCSTO UNRAM

Monitored issues	Indicators
Liquid waste management	Percentage of wastewater recycled by the destination (or a number of companies operating in the tourism sector that have managed a wastewater recycling system)
Solid waste management	Amount of rubbish littered in public spaces (amount of rubbish)
Water management	Number of companies participating in water conservation practices / programs, implementing water conservation policies and techniques
Conservation and protection of important ecosystems (coral)	Percentage of protected coral
Security	Number of security issues reported to the police, hotels, etc. by tourists

Source: Terms of Reference Sustainable Tourism Observatory (STO) monitoring and reporting as part of UNWTO International Network of Sustainable Tourism Observatories (INSTO) in destination, 2019

Methodology

To carry out the monitoring process for KTA in the 7 sub-districts, several methodological approaches will be chosen, according to the context and problems faced by each destination. The methodology was chosen based on three main issues namely (1) the number of tourist attractions and the area; (2) the number of residents, as shown in Table 9, and (3) the level of progress in managing tourist attractions. In collecting data, several methods will be applied include; documentary, observation, in-depth interview, focus group

discussion, and survey (using questionnaire). The data collected will be analyzed using qualitative and quantitative approaches, according to the context. For example, data collected by interview techniques will be analyzed using a qualitative approach through the process of codification and data categorization. Meanwhile, the data collected from the questionnaire will be processed quantitatively using SPSS, PLS and/or AMOS.

Furthermore, for the participation of destination communities, a number of approaches will be taken including: focus group discussions, auto-ethnography, informal approaches with the help of informal leaders, organizing guidance and workshops at the destination, and several informal approaches that are appropriate to the characteristics of the community at the destination to be monitored.

Table 9.Population in the MCSTO UNRAM Working Area

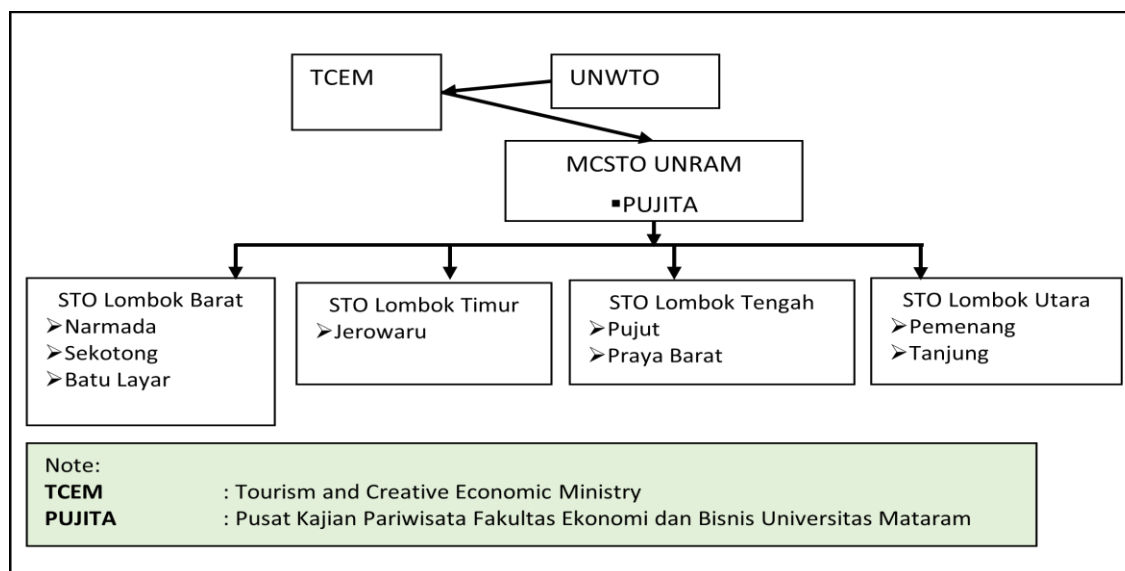
No	Subdistrict	Number of village	Population		
			Male	Female	Total
1	Jerowaru	15	28 335	30 640	58 978
2	Pujut	16	440 292	490 505	930 797
3	West Praya	10	436 155	485 933	922 088
4	Sekotong	9	30 576	30 871	61 447
5	Batulayar	9	24 761	24 838	49 599
6	Pemenang	7	18 138	17 728	35 866
7	Tanjung	4	23 838	24 573	48 411

Source: West Nusa Tenggara Barat in figure, 2018

Proposed structure of the Observatory

To conduct monitoring activities in the seven sub-districts, as previously stated, MCSTO UNRAM has proposed a management and delegation structure as shown in Figure 3. Monitoring activities are carried out by the Center for Tourism Studies (PUJITA) of the Mataram University. In doing so, MCSTO UNRAM work together with two other parties namely the monitoring expert team and the Research Institute and Community Service (LPPM) of Mataram University.

Figure 3. Proposed Structure of MCSTO UNRAM



The monitoring tasks are delegated to MCSTO UNRAM by the Indonesian Ministry of Tourism and Creative Economy (TCEM). The delegation is related to the implementation of monitoring and empowerment programs in 8 (eight) sub-districts within four districts in Lombok. The results of monitoring and empowerment are reported to TCEM in detail, and to UNWTO in the form of dense academic report.

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