

## THE ROLE OF HONEY IN DEVELOPING THE ISLAND OF LOMBOK AND SUMBAWA ISLAND AS A DESTINATION OF TRADITIONAL HEALTH TOURISM BASED ON SASAMBO CULTURE

Aliefman Hakim<sup>\*1</sup>, Jamaluddin<sup>2</sup>, and Syarifah Wahidah Al Idrus<sup>1</sup>

<sup>1</sup>Chemistry Education Department, FKIP University of Mataram, Mataram, Indonesia

<sup>2</sup>Biology Education Department, FKIP University of Mataram, Mataram, Indonesia

\*Email: [aliefmanhakim@unram.ac.id](mailto:aliefmanhakim@unram.ac.id)

Accepted: October, 31 2021. Approved: November, 11 2021. Published: November, 15 2021

**Abstract:** The development of tourism is currently a priority for governments in Indonesia. Apart from natural beauty, traditional health tourism by utilizing local products has begun to be developed. The islands of Lombok and Sumbawa have a wealth of honey with extraordinary properties. It has been promoted as one of the first steps in promoting tourism from the traditional health sector. Efforts are made to improve the quality of Lombok and Sumbawa as a traditional health tourism destination based on the Sasambo culture (indigenous culture of the islands of Lombok and Sumbawa). The use of honey with its various health benefits can support traditional health tourism on the islands of Lombok and Sumbawa. Apart from providing good health benefits for the public or tourists, both local and foreign, honey is also able to support the regional economy. Honey from the islands of Lombok and Sumbawa can be used as a superior product for souvenirs and educational products related to traditional health, increasing tourists' desire to visit the islands of Lombok and Sumbawa with their special types of honey.

**Keywords:** *Tourism, traditional, honey*

### INTRODUCTION

Today's tourism has developed towards health tourism, more inclined towards traditional health tourism according to the local culture of each region. It is an alternative for tourists and natural attractions such as beaches, hills, and others, and taking advantage of the natural wealth in the area with a local cultural approach. The health tourism industry is estimated to generate annual revenues of up to US\$ 60 billion [1]. The government is currently focusing on tourism by prioritizing several areas for the development and development of these tourist areas, including the Province of West Nusa Tenggara (NTB). Based on this, the development of tourism infrastructure has intensified. Local empowerment has been sought in increasing tourism and the local economy by developing traditional health tourism based on local culture to make the area a traditional health tourism destination. One form of effort to develop traditional health tourism destinations in NTB, Lombok, and Sumbawa based on the Sasambo culture, uses honey as a traditional health tourism product.

The Ministry of Health and the Ministry of Tourism and Creative Economic have collaborated to develop Health Tourism. Based on the mutually agreed Concept and Roadmap for Health Tourism Development. Health Tourism consists of 4 clusters, namely: (a) Medical Tourism, (b) Wellness and Herbal Tourism, (c) Sports Tourism that supports health, and (d) Health Scientific Tourism [2]. The Ministry of Health emphasized that the Ministry of Health and the Ministry of Tourism and Creative Economy agreed to prioritize the development of fitness and herbal tourism as a form of traditional health because they were considered to have high

health, cultural, and economic prospects. As a follow-up to the agreement, the Ministry of Health has formed a Task Force to implement Health Tourism Development. It consists of cross-programs, ministries/agencies, business actors, academics, media, communities, non-government stakeholders and private health services, and herbal medicine producers. Traditional medicine is already ready to carry out health tourism, especially traditional health. It is considered capable of increasing traditional health tourism destinations in the future [3-4].

The Ministry of Tourism and Creative Economy develops health, medical, fitness, and herbal tourism in Indonesia. In one of his speech videos, Minister of Tourism and Creative Economy, Wishnutama Kusubandio, said that health tourism is a strategic segment that can become one of the leading products in Indonesia. Wishnutama also appreciated the signing of the PKS between the Ministry of Tourism and Creative Economy and the Ministry of Health to restore Indonesian tourism after the COVID-19 pandemic. This PKS is a continuation of signing a memorandum of understanding (MoU) signed by the Minister of Tourism and Creative Economy/Head of the Tourism and Creative Economy Agency with the Minister of Health on December 17, 2020. Fitness and herbal tourism are some of the strengths of the tourism and creative economy sectors that represent the traditions and culture of the country. It can increase the economy and potential regional development for traditional health based on local cultures, such as the sasambo culture in West Nusa Tenggara [5-6].

## RESEARCH METHODS

This study's data collection methods were conducted through field studies, interviews, and literature studies. The field study was carried out in 28 honey-producing villages and 15 potential tourism areas for honey integration which became a priority for the West Nusa Tenggara Provincial Government based on Regional Regulation No. 9/1989. Nine of which were on the island of Lombok, and six were on the island of Sumbawa. The tourism area on the island of Lombok consists of Sire, Gili Air, Senggigi, Suranadi, Gili Gede, Selong Blanak, Sade Hamlet, Kuta, Tanjung A'an, Mount Rinjani, Gili Sulat, Gili Indah. The tourism area on the island of Sumbawa consists of Maluk Beach, Moyo Island, Mount Tabora, Hu'u Beach, Bima Bay, and Sape. Interviews to find out the potential of honey to be integrated into tourist sites were conducted with 124 people from honey-producing villages and tourism priority locations in West Nusa Tenggara Province. The method used for literature review is the display, reduction, and conclusion drawing in order to get the role of honey in the development of Sumbawa Island as a traditional health tourism destination based on Sasambo culture.

## RESULTS AND DISCUSSION

Health tourism, especially culture-based traditional health, has excellent potential in the future. The global health tourism industry is predicted to generate USD 38 to USD 55 billion annually. Based on research conducted, America has provided an overview of the income that will be generated from this health tourism sector, which reached US\$ 80 billion per year in 2017 [7]. Its value showed that a country like America is known as a superpower. It was also seriously worked on this sector and is expected to support the economy of this big country. It was shown that globalization in the health sector is advantageous for America in the tourism industry. Therefore, to improve traditional health tourism destinations based on the Sasambo culture on the islands of Lombok and Sumbawa. Honey from West Nusa Tenggara should be supported either from the islands of Lombok or Sumbawa, which the general public has known to have good benefits in treatment or healing.

The 2016-2017 Global Buyers Survey results show that there are around 11 million tourists or around 3%-4% of the world's total population who travel for medical tourism purposes. The 2017 Global Wellness Economy Monitor survey showed that the number of trips for fitness tourism was 691 million. It shows that health tourism, especially fitness and traditional medicine or health, has prospects growing in the future. Therefore, through the Ministry of Health and the Ministry of Tourism and Creative Economy, Indonesia manages and

develops fitness tourism and traditional entertainment or health [2].

Honey bees have been known for a long time by humans, the honey produced by honey bees is known as a food ingredient or a natural drink that is known to have an essential role in life. Honey is the medicine for all the medication in this world, and it cannot be denied. Honey is one of the natural ingredients that can be used as a nutritious drug for health in the form of a sweet liquid from the collection of nectar by honey bees which is then processed into honey which is very useful [8]. Honey quality can be determined by several things, including honey harvesting time, moisture content, color, taste, and aroma of honey [9]. The time to harvest honey must be done at the right time, namely when the honey has ripened and the honey cells begin to be closed by the bees. In addition, the water content contained in honey is also very influential on the quality of the honey itself. Good honey is honey that has a water content of about 17-21 %. Honey is a mixture of sugars formed from nectar by an invertase enzyme present in the bee's body. Honey may not be added with other additives, including water, sugar, or other sweeteners. The raw material for making honey is nectar, which covers the cells with wax to preserve the honey itself [10]. Some of the benefits of honey are that it can increase stamina, is easily digested by the body, honey can nourish the body and mind. Honey does not interfere with the lining of the digestive system, honey can help restore tired energy quickly, and honey can also be used as a preservative, especially food preservative. The benefits of honey in the community are usually used as medicine, the cure for various diseases, a natural sweetener, and an anti-bacterial [11].

The quality of the honey produced is very influential on the honey bee, the geographical area of the nectar source, and the environmental conditions of the hive. The substances present in honey can be beneficial for the human body. Honey also has its uniqueness in its properties. Although honey has a sweet taste, honey is not as dangerous as sugar for consumption. Honey is a highly saturated sugar solution that contains protein and minerals, although only in small amounts [12]. People have their own belief in honey, which can be a medicine or a healer for their suffering disease. The quality of honey in West Nusa Tenggara itself, both on the islands of Lombok and Sumbawa, is widely known by local, national, or even foreign people.

The maturation process of honey strongly influences the quality of honey in the beehive. The quality of its water content also impacts the quality of honey. When a bee takes nectar from a flower or plant, the nectar has a significant enough water content. The water content of the flower essence will affect the honey maturation process in the beehive any honey. If the honey maturation time in the hive

is too short, the honey will have poor quality [13]. The main component of honey is carbohydrates from the monosaccharide group consisting of glucose and fructose. In testing the quality of honey according to SNI, the two monosaccharides are termed reducing sugars [14]. Honey contains various reducing sugars, namely glucose, fructose, and maltose [15]. Other sugars in honey are disaccharides, namely sucrose, and maltose. In general, honey contains various reducing sugars, when stored for too long, will experience changes [16].

Bees mainly produce forest bee honey in Sumbawa from *Apis dorsata*. The honey produced is honey from nature [17]. One of the factors that make honey in NTB one of honey with good quality is the geographical conditions that support it so that the water content in the honey is following the excellent quality of the honey and the needs of the beekeeping that are cared for but still with the concept of being natural. It causes honey in NTB to be one of the best honey and a choice for tourists to take home. Some types of honey famous in NTB are Sumbawa, Bima, Dompu honey, white honey, and Trigona honey from North Lombok. The amount of forest honey production from Bima Regency is minimal with a relatively high price, IDR 500,000/bottle of 850-gram size [18]. This type of honey will turn white when stored in cold temperatures. The existence of traditional health tourism on the islands of Lombok and Sumbawa will further increase the popularity and sales of honey from NTB, ultimately improving the community's welfare.

One type of honey bee in Lombok is *Trigona* sp. Bee products produced by *Trigona* sp. have three kinds: honey, propolis, and *bee bread* [19]. At this time, the maximum utilization of beekeeping products in Lombok is only honey. The other two products have not been fully utilized. If the excess potential is known, it is hoped that it can be an alternative income for honey bee cultivators *Trigona* sp. on the island of Lombok. Honey in these places is sold in the form of natural honey and processed honey into soap. It further shows the extraordinary benefits of honey. It can be used as souvenirs for visiting tourists and can increase traditional health tourism destinations on the islands of Lombok and Sumbawa. Based on the interviews, the community stated that they were interested in consuming honey because of the many benefits it provided and almost no side effects. People try to drink honey to maintain their stamina and health. People are also interested in soap made from honey as a traditional health treatment in treating and maintaining healthy skin. Various products derived from honey are expected to attract traditional health tourists visiting the islands of Lombok and Sumbawa.

People in Lombok who are consumers of honey stated that every time they make official trips

to Bima, Dompu, or even Sumbawa, they always take the time to buy honey there. People believe that the benefits provided by honey are suitable for their health, so people always make honey a traditional family trust. Lombok people who have not had the opportunity to go to Sumbawa Island buy honey or order it from people on official trips. Even if no one is on official trips, they order honey from a trusted producer by telephone. It further supports the role of honey to improve the traditional health tourism destinations of the islands of Lombok and Sumbawa based on the Sasambo culture.

Tourism is overgrowing in the Province of West Nusa Tenggara. Lombok and Sumbawa can be increased to develop honey to increase traditional health tourism destinations based on the sasambo culture, which has clear benefits and is known by many people, both local and outside the region to foreign countries. It can be done by making honey as a souvenir, whether small, medium, or large, so it is easily accessible according to consumer needs. It is allowed for tourists to try to see firsthand the beekeeping and honey extraction process and try firsthand and feel the benefits of proving themselves. The development of MSMEs and industrialization on the islands of Lombok and Sumbawa must also prioritize efforts to develop honey production as one of the traditional health tourism products based on the Sasambo culture in increasing tourism destinations to the islands of Lombok and Sumbawa.

## CONCLUSIONS

With all the properties and beliefs of its users, honey has great potential in developing traditional health tourism based on the Sasambo culture on the islands of Lombok and Sumbawa. Honey from West Nusa Tenggara is considered capable of attracting the attention of tourists visiting the islands of Lombok and Sumbawa with the various benefits of honey for traditional medicine with no side effects. It can support the economy of the province of NTB. Honey can also be used as an educational tour related to traditional health and Sasambo culture. Traditional health tourism must become one of the leading priorities with the richness of honey owned by the islands of Lombok and Sumbawa.

## REFERENCES

- [1] Herrick, D. M. (2007). Medical tourism: Global competition in health care.
- [2] Susoanto, C. C. (2021). Proposal Studi Kelayakan Bisnis Serempah Spa di Gading Serpong (Doctoral dissertation, Universitas Pelita Harapan).
- [3] Kementerian Kesehatan RI. 2019. Kemenkes-Kemendagri Sepakat Kembangkan Wisata Kebugaran Dan Jejamuan.

- [4] Herfian, M., Trias, M. M., Wahyudi, M. C., & Hasanah, R. (2021). Studi Etnobotani Minuman Pokak Di Desa Clarak Kabupaten Probolinggo Sebagai Potensi Wisata Kuliner. *Experiment: Journal of Science Education*, 1(2), 63-70.
- [5] Kementerian Pariwisata dan Ekonomi Kreatif RI. 2020. Kemenparekraf – Kemenkes Kolaborasi Kembangkan Wisata Kesehatan.
- [6] Mashur, M., Subagio, S., Hamid, G., & Oktaviana, D. (2021). Pemberdayaan Masyarakat Desa Taman Ayu Melalui Inovasi Teknologi Sistem Integrasi Jagung Dan Sapi (Sijasa). *Sasambo: Jurnal Abdimas (Journal of Community Service)*, 3(2), 57-69.
- [7] Gan, L. L., & Frederick, J. R. (2010). Patterns of service differentiation among medical tourism facilitators. Available at SSRN 1679511.
- [8] Amanto, B. S., Parnanto, N. H. R., & Basito, B. (2012). Kajian Karakteristik Alat Pengurangan Kadar Air Madu Dengan Sistem Vakum Yang Berkondensor. *Jurnal Teknologi Hasil Pertanian*, 5(1).
- [9] Saepudin, R., Fuah, A. F. M., Sumantri, C., Abdullah, L., & Hadisoesilo, S. (2011). Peningkatan produktifitas lebah madu melalui penerapan sistem integrasi dengan kebun kopi. *Jurnal Ilmu-Ilmu Peternakan (Indonesian Journal of Animal Science)*, 21(1), 29-39.
- [10] Darmawan, S., & Agustarini, R. (2011). Penurunan kadar air madu hutan alam Sumbawa. *Balai Penelitian Teknologi Hasil Hutan Bukan Kayu Lombok Barat. NTB*, 319-321.
- [11] Sudaryanto, H. (2010). Analisis Kualitas Fisik dan Kimia Madu Lebah (Apis Cerana) Di Desa Kuapan Kecamatan Tambang Kabupaten Kampar (Doctoral dissertation, Universitas Islam Negeri Sultan Syarif Kasim Riau).
- [12] Jaya, F. (2017). Produk-produk lebah madu dan hasil olahannya. Universitas Brawijaya Press.
- [13] Wulandari, D. D. (2017). Analisa kualitas madu (keasaman, kadar air, dan kadar gula pereduksi) berdasarkan perbedaan suhu penyimpanan. *Jurnal Kimia Riset*, 2(1), 16-22.
- [14] Sukmawati, S., Noor, A., & Firdaus, F. (2015). Analisis Kualitas Madu Mallawa Berdasarkan Parameter Fisika Kimia. *Indonesian Journal of Chemical Research*, 3(1), 259-262.
- [15] Ratnayani, K., Adhi, D. S. N. M. A., & Gitadewi, I. G. A. M. A. S. (2008). Penentuan kadar glukosa dan fruktosa pada madu randu dan madu kelengkeng dengan metode kromatografi cair kinerja tinggi. *Jurnal Kimia*, 2(2), 77-86.
- [16] Nanda, P. B., Radiati, L. E., & Rosyidi, D. (2014). Perbedaan kadar air, glukosa dan fruktosa pada madu karet dan madu sonokeling. *Repository Fakultas Peternakan Universitas Brawijaya. Malang*.
- [17] Hidayatullah, M., Handoko, C., Maring, A. J., & Ramdiawan, R. (2018, May). Teknik Pemanenan Madu Hutan oleh Masyarakat di Pulau Moyo Nusa Tenggara Barat. In *Prosiding Seminar Nasional Fakultas Pertanian UNS (Vol. 2, No. 1, pp. C-8)*.
- [18] Adalina, Yelin. 2017. Kualitas Madu Putih Asal Provinsi Nusa Tenggara Barat. *Pros Sem Nas Masy Biodiv Indon.* 3 (2) : 189-193.
- [19] Riendriasari, S. D., & Krisnawati, K. (2017). Produksi Propolis Mentah (Raw Propolis) Lebah Madu Trigona spp Di Pulau Lombok. *ULIN: Jurnal Hutan Tropis*, 1(1).