

Implementation of Metrology in Supporting The Development of Caping Mendawai Tourism Village During The Covid-19 Pandemic Through A Political Perspective

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Abstract

The Covid-19 pandemic has negatively impacted many aspects of human life, including tourism. Whereas previously the tourism sector was a major contributor to the economy of world countries and absorbed a large workforce, thereby reducing unemployment. Through the use of metrology to support tourism in the Caping Mendawai Tourism Village during the Covid-19 pandemic, this research aims to analyze the role of metrology in supporting Indonesian tourism from a political perspective. A descriptive approach and a qualitative methodology were used in this study. From a political perspective, the research findings revealed a metrology implementation model to support the growth of the Caping Mendawai tourism village during the Covid-19 Pandemic, specifically the cooperation between state actors within it. Tourism can then be revived through the implementation of this which is also supported by digital innovation. Along with the capacity for innovation and adaptation, people are expected to have more than one source of income besides tourism.

Keywords: Politics; Metrology; Pandemic; Tourism.

INTRODUCTION

Since the end of World War II, tourism has grown to be a significant economic and social activity worldwide. Incoming tourists increased from 25 million in the 1950s to nearly 1.2 billion in 2016, according to the World Tourism Organization (UNWTO, 2017). Likewise in Indonesia, tourism is a strategic sector and has an important role as a source of foreign exchange and

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encouraging national economic growth.

However, this sector has been the sector that has collapsed the most with the Covid-19 pandemic which has spread in many countries since the end of 2019. The tourism industry is facing one of the darkest times in 2020 (Smart, Ma, Qu, & Ding, 2021). Covid-19 or Coronavirus, which started in Wuhan, Hubei Province, China, is one of the main pathogens that attacks the human respiratory system. These pandemics previously included Middle East Respiratory Syndrome (MERS)-CoV and Severe Acute Respiratory Syndrome (SARS)-CoV which significantly caused major threats to humans (Chen et al., 2020).

Countries have taken swift action to protect their societies and economies as steps to deal with the Covid-19 pandemic. The Indonesian government has also implemented a series of policies simultaneously, including health management to curb the rate of development of Covid-19. However, we are also working very hard to keep people's purchasing power up so that the economy doesn't become stagnant and that economic activity is kept in check (Purba, Fathiah, & Steven, 2021). Government policies to deal with Covid-19 in Indonesia were implemented swiftly and effectively in order to combat the economic contraction brought on by the pandemic. This pandemic has caused tourism sector players to experience huge losses, including due to the lack of foreign tourist arrivals, as can be seen in the following graph.

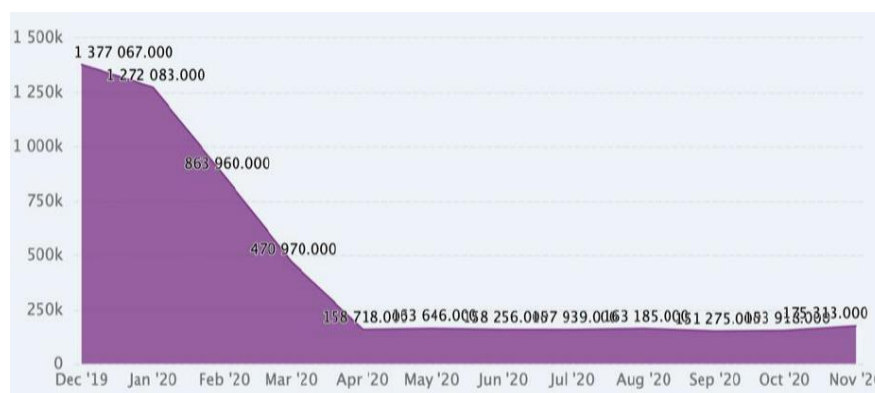


Figure 1. Tourist Arrivals to Indonesia in Pandemic Situations

Source: Atmojo & Fridayani, 2021

All nations have been greatly impacted by the Covid-19 pandemic, including Indonesia, which has been impacted. Numerous industries are impacted, including tourism. The economic

growth rate of the nation is significantly impacted by this. Since the initial case until now, many industries in Indonesia have been impacted. The economic sector, the tourism sector, the taxation sector, the trade sector, the industrial sector, the oil and gas sector, and the Micro, Small and Medium Enterprises (MSME) sector are the sectors affected by Covid-19 cases in Indonesia.

In 2020, the pandemic caused a sharp decline in international tourism. Given that both the tourism and MSME sectors are essential to economic growth, the decline in tourists will have an effect on both of these industries, particularly the tourism industry. The situation, or displacement, also affects the transportation sector. For example, in early March, as many as 735 international flights were canceled, although domestic flights were not affected (Gandasari & Dwidienawati, 2020).

The decline in revenue for the Indonesian tourism industry has been significantly impacted by policies for combating the Covid-19 pandemic through the implementation of new normal adaptations such as physical restrictions, implementation of health protocols (wearing masks, washing hands, and maintaining distance), and implementation of large-scale social restrictions.

Meanwhile, the regional government in West Kalimantan Province is also implementing policies that have an impact on the tourism sector, including implementing mandatory PCR (Polymerase Chain Reaction) tests for anyone entering West Kalimantan via Pontianak Supadio Airport. This has an impact on the decline in tourists, both domestic and foreign. Even though Pontianak City is currently developing a new tourist destination, namely Caping Mendawai Tourism Village, which carries its superior product in the form of "caping" (a cone-shaped hat made from pandan leaves or something similar), it must also face the challenges of the Covid-19 pandemic.

In response, scientific estimations in metrology are crucial for making decisions and forecasting the future. Better predictions will aid directors and investors in making operational, tactical, and strategic decisions regarding the demand for tourism. In order to plan the necessary tourism infrastructure, including the location of lodging and the development of transportation in the industry, the government also requires accurate forecasts of tourism demand.

For this reason, this research aims to analyze the role of metrology in supporting Indonesian tourism through the implementation of metrology in supporting tourism in the Caping Mendawai Tourism Village during the Covid-19 pandemic from a political perspective.

Previous studies have been conducted to document the dramatic changes in the supporting structures of tourist villages in popular tourist destinations and the stakeholders'



reactions to the Covid-19 crisis. According to research findings, the pandemic has decreased income in even well-known tourist destinations in Indonesia, like Mandalika Lombok. This circumstance teaches an important lesson that rural tourism needs solid ties to related industries and it should not be the only source of income for the entire rural economic system (Damanik, Utami, & Mayani, 2022). The novelty of this research lies in the use of metrology to support the development of tourist villages during the pandemic and using a political perspective.

RESEARCH METHOD

This research was written using descriptive methods and a qualitative approach. The quality of relationships, activities, situations, or materials is the subject of a qualitative study. Qualitative research also aims to advance a thorough understanding of a specific phenomenon, such as an environment, a process, or even a belief. The data collected comes from literature studies collected through various journal articles, processing articles, scientific research papers, newspaper news, books, and others. So the validity of the data is obtained from testing facts from various sources.

RESULTS & DISCUSSION

In Pontianak City, West Kalimantan Province, there is a center for making caping which is located on the banks of the Kapuas River, precisely in Gang Mendawai, Bansir Laut Village, Southeast Pontianak District. In Mendawai Village, most of the residents work as makers of caping hats made from mengkuang leaves. The beauty of this new tourist destination in Pontianak City is that it has saprahan culinary tour packages, canoeing and boating packages, caping products, and fishing packages, and there are supporting facilities such as the Library and the Mendawai Waste Bank which can be seen in the following picture.





Figure 2. Caping Mendawai Tourist Village in Pontianak City

Source: Inside Pontianak, 2020

There are many things you can get when traveling there, such as enjoying the atmosphere and charm of the Kapuas River, which is the longest river in Indonesia because the Caping Mendawai Tourism Village is located right on the bank of the river. The Mayor of Pontianak, Edi Rusdi Kamtono, expressed his hopes regarding the development of the Caping Mendawai Tourism Village. He revealed that this new destination has the potential to be developed into a leading tourist destination (Chairunnisa, 2020).

The Head of Southeast Pontianak Subdistrict, Rendrayati, explained that caping has been around since our ancestors for a century, but we have to try to ensure that caping is not only used among farmers but can also be used as decoration. Caping production in the Caping Mendawai Tourism Village can reach 20 pieces per day and tourists who come can take part in making them and paint their capings. Tourists can even take home the painted hats to use as decoration. Mendawai Caping Tourism Village assistant, Beny Than Heri, said that the types of caping sold vary in size and price. Prices start from IDR 30,000.00 to IDR 50,000.00. However, the price can change according to conditions considering the source of raw materials and the difficult manufacturing process (Andi & Ega, 2020).

In line with this, the head of the Caping Mendawai Tourism Village volunteers, Alamulhudah, revealed that the caping craftsmen in the Caping Mendawai Tourism Village consist of 60 craftsmen who currently still really need transportation facilities in the form of water motorbikes as a means of transportation to transport caping raw materials in the form of leaves. mengkuang which is only found on the banks of rivers (Mukaram, 2021). Thus, a measuring tool is

needed to ensure the accuracy of the quantity and quality of sales of caping products and the Caping Mendawai Tourism Village destination. These measuring instruments are systematically a function of metrology.

Facing the phenomenon of the tourism sector weakening in the face of the Covid-19 pandemic, there is an important role for metrology in it. Metrology is defined as the science of measurement, which includes the experimental and theoretical determination of any degree of uncertainty in any area of science and technology, according to The International Bureau of Weights and Measures. Metrology is a structure that ensures these measurements are stable, comparable, and accurate to provide confidence in measurements at a specified level (BIPM, 2020). When these qualities are linked to measurement, they can have a positive impact on advancing technology, prospering the economy, encouraging global agreements, collaboration, and trade, and ensuring safety and a sustainable quality of life. Therefore, metrology as a scientific discipline that studies methods of measurement, calibration, and ensuring accuracy in the fields of industry, science, and technology can be used to make accurate measurements of the products and services offered by tourism destinations.

Since 2018, the Metrology Directorate of the Ministry of Trade of the Republic of Indonesia has focused on three national priorities in its programs, namely (1) the development of business and tourism; (2) energy security; and (3) politics, law, and defense and security. Development of the business and tourism world as much as 19.05 billion was also allocated for the establishment of orderly areas and orderly markets, assessment and facilitating the establishment of legal metrology units, and facilitating recalibration and supervision of Measuring, Measuring, Weighing, and Equipment equipment and Goods in Wrapped Condition (Directorate of Metrology, 2017).

Modern metrology theory reveals that there are important characteristics in metrology, including in the tourism sector, namely accuracy, absence of systematic errors, precision, and minimizing errors in random measurements. In other words, a measurement is accurate if it is close to the true value of what we measure and precise if all measurements of a quantity are close to each other (Tal, 2016). Along with the development of technology and information, metrological issues have become a fundamental need for governments, traders, entrepreneurs, consumers, and the wider community. For the government, metrology capabilities are a measure of the level of social welfare and technological developments in various fields. This metrology capability is also an important part of ensuring the creation of fair and honest metrology services and supporting better public protection, especially in terms of safety, security, and health.



Therefore, the application of metrology in handling tourism affected by the pandemic is also relevant from a political perspective.

Furthermore, metrology is one of the pillars that supports national quality infrastructure in addition to standardization and conformity assessment. Metrology plays a role in producing innovative works and products. By implementing international agreements, Indonesia is expected to be able to meet product quality and requirement standards in order to achieve global trade and boost its competitiveness.

A product that meets the Indonesian National Standard must comply with the correct quantity according to Law of the Republic of Indonesia Number 20 of 2014 concerning Standardization and Conformity Assessment; Law of the Republic of Indonesia Number 7 of 2014 concerning Trade; Law of the Republic of Indonesia Number 3 of 2014 concerning Industry; Law of the Republic of Indonesia Number 8 of 1999 concerning Consumer Protection; as well as Law of the Republic of Indonesia Number 2 of 1981 concerning Legal Metrology with the overall aim of protecting consumers.

Seeing the importance of metrology in the tourism industry which can support the development of the Caping Mendawai Tourism Village in Pontianak City, training is needed which is presented in the form of a business incubator so that the training given to tourism actors and MSMEs in it can develop massively. This intensive incubation needs to focus on innovation in the form of digital aspects, considering the pandemic conditions, tourism actors need to utilize applications and the internet for data collection and marketing of the tourism industry on offerGovernment, business, academia, the media, and society are among the five interrelated pentahelix actors who work together to support the incubator. The implementation model can be seen in the following image.



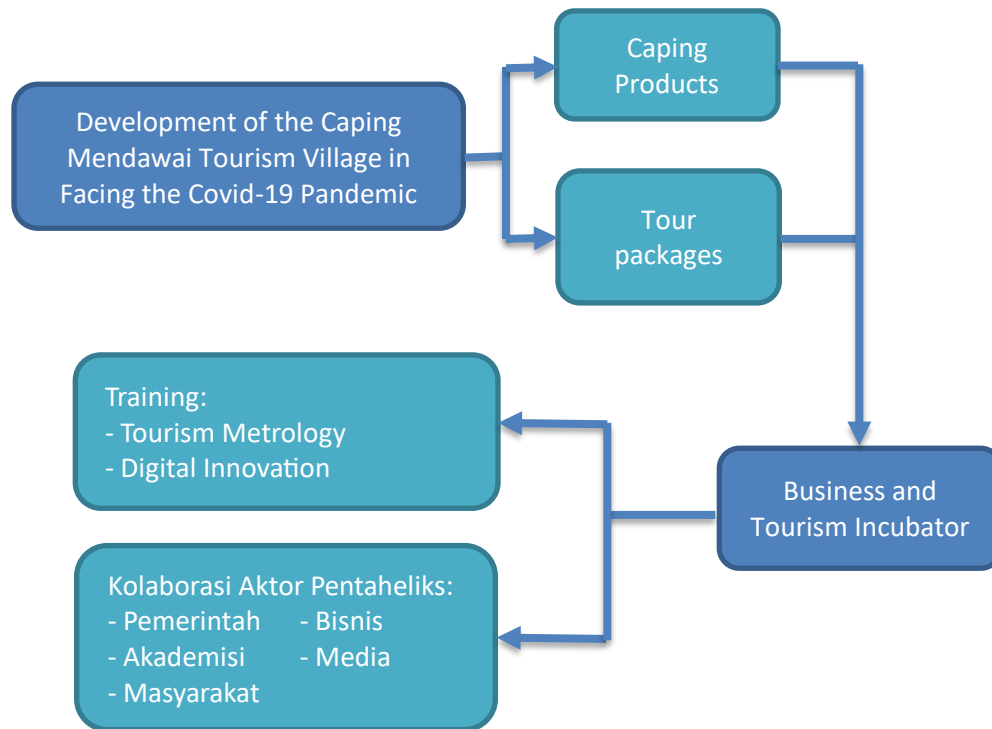


Figure 3. Metrology Implementation Model to Support the Development of the Caping Mendawai Tourism Village during the Covid-19 Pandemic

Source: Processed by researchers, 2023

CONCLUSION

Tourism is one of the sectors most affected by the Covid-19 pandemic which has impacted the economies of communities and countries around the world including due to the resulting travel restrictions and decreased demand among tourists. This also influences the development of the Caping Mendawai Tourism Village destination. The number of tourists coming and demand for caping products has decreased. This paper finds that it is necessary to implement a business incubator in the tourism sector which aims to increase tourism development by guaranteeing the quality and quantity of caping products as well as tourist visits through tour packages available at the destination. The incubator focuses on training on two things, namely metrology in tourism and digital innovation. Its implementation requires collaboration from Penta helix actors, namely

government, business, academics, media, and society. Thus, from a political perspective, and more specifically the cooperation between state actors within it, the research findings revealed a metrology implementation model to support the expansion of the Caping Mendawai tourism village during the Covid-19 pandemic. The implementation of this, which is also aided by technological innovation, can revive tourism. People should have the ability to innovate and adapt, as well as more than one source of income besides tourism.

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