

Utilizing Mangrove Waste as Natural Colouring of Semarang Batik: A Tourism Commercial Product that Preserves Culture, Saves Environment, and Improves Economy

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Abstract. Culture reflects human being civilization. Its practice gives them cultured, civilized, and prosperous live to live harmoniously with each other and the environment. Batik is Javanese culture reflecting the local wisdom of using natural resources which is beneficial and environmental-friendly. This research shows how Semarang people preserve their culture by making Batik Semarangan, save their environment by using Mangrove waste as natural coloring, and improve their economy by using the final product as tourism product. The data were collected through literature review, observation, and interview. It is analyzed by using folklore method to reveal the culture background of the batik and its benefit for the city's environment and economy. The result shows that the Javanese local wisdom is shown by Semarang people effort of keeping their batik, minimizing pollutants, and adding income from tourism sector.

1 Introduction

Culture is human being way of thinking and life to live well within society and can be passed from generation to generation. It is an evidence of human being civilization showing their cultured, civilized, and prosperous live. It is created by human being to live harmoniously with each other and with the nature. As a creation, culture can be self-created, inherited, and passed to the next generation with changes to adapt the recent situation. It can be learnt from other society or be modified to suit the latest condition. Yet, it can be abandoned when it is considered less adequate to fulfil human being need. Undesired culture can be shifted by other culture which is considered more beneficial or extinct when nobody is practicing it.

Javanese culture is created by and inherited from the ancient Javanese, and then passed to the Javanese next generation with various adaptations to suit the recent situation. It is preserved by Javanese ethnic by practicing and passing it into the young generation with a particular modification to suit the modern era like the use of Lurik traditional fabric for out of the day teenager outfit and its waste as merchandise for tourism industry [1].

Javanese people should realize that modernisation and globalisation can be serious threat for their culture. It replaces the old and traditional cultural item with the new and modern one that is potentially make their culture abandoned or extinct. Indonesian government must support their local culture maintenance because it is part of the nation cultural heritage and wealth to make the people live in cultured, civilized, and prosperous life. The next generation will maintain a positive attitude toward their culture by keep practicing it to live well like their ancestors. This research shows how Javanese people, especially Semarang City people, preserve their culture, save their environment, and improve their economy by utilizing Mangrove waste whose plants were purposively planted in Semarang City coastal areas to prevent flood and abrasion, producing Batik Semarangan with natural colouring made of Mangrove waste, and promoting it as part of Semarang City merchandise in tourism industry.

2 Result and Discussion

Javanese cultural item is served as Javanese culture identity that must be preserved to keep it valuable for the next generation. Thus, they are willing to keep practicing it instead of abandoning or substituting it with other culture that is considered more valuable. As politic, economy, and social changes might reduce the value, the usage, and the respect of the culture [2], the local people along with the local and the central government must put an effort to preserve the culture. Although Javanese culture threat might be considered mild which is in line with what Pauwels [3] said about the mild threat on Javanese language since the diglossic or the multilingual situations is not actually present in the speaking community; not many Javanese people now understand Javanese language well. Not many of them know how to use the Javanese language politeness level and not many Javanese young generations speak the language except for those who live in the middle of Javanese speech community. The ones who live outside them might feel reluctant to show their cultural identity and choose to use more beneficial and 'high' language than theirs [4].

Javanese cultural item preservation is in line with Javanese language maintenance since there are Javanese people who still use the item. Javanese people wear batik although they also wear casual and modern outfit. Most of them wear it for formal situation since Indonesian people normally wear batik for formal situation. When Javanese language is used and maintained only by certain Javanese people, batik in fashion industry is quite popular clothing to wear around the world. Batik is a popular example of Javanese traditional cloth, clothing, and cloth making technique that went global and worn not only by old people but also young generation with different style. However, the use of chemical colouring which is considered cheaper and easier to use creates water and soil pollutant. This research shows Semarang City people local wisdom of utilizing Mangrove waste as natural colouring for Batik Semarang as part of their effort of preserving their Javanese cultural item as their culture identity as Javanese and saving their water and soil from being polluted.

This descriptive and qualitative research is done by using folklore research method from Dundes in Bronner [5] in two steps, Identification and Interpretation. The data were collected by holding Library Research, Observation, and Interview along with giving Questionnaire [6]. The Library Research is done to figure out the history and the folklore behind batik as cultural item, while the Observation is done to document how the

people produce it. Meanwhile, the Interview and the Questionnaire is used to show how and why they maintain their cultural item. The data were selected using Purposive Sampling Technique [7] to see which owner produce the cultural item, how they use Mangrove waste as natural colouring, how they promote it as tourism commercial product, and how it is beneficial for their workers to get more income for their low-class family. The data were analysed using seven elements of culture [8] and Language Maintenance Theory [2, 3, 4] as part of culture maintenance to know how and why the people preserve Batik Semarang as cultural item.

Result

Batik is defined as a specific Indonesian traditional technique of wax-resist dyeing and *canting* (batik drawing tool) drawing on cloth from Java. The word *batik* comes from two Javanese words *amba* or 'wide' and *tik* or 'dot', resulted in *ambatik* word or 'cloth (wide fabric) with dots motive on it'. Batik motives that served as standard batik motive or *pakem* were coming from Surakarta and Yogyakarta batik, while different or new motives were commonly created by *batik pesisiran* which is found along the northern coast of Java Island as well as the new batik which is found around the nation.

Batik Semarangan was firstly developed in Semarang Batik Kampoong as batik artisans' settlement who ran their business in 1970s [8]. Batik Semarangan reign its supremacy in the early of the 20th Century. It is reflected from the Dutch Colonial financial report showing the high number of businesses from batik industry. Batik Semarangan rose again after the Batik Kampoong is creatively developed as modern tourism industry by the local people which is supported by the local government and Semarang low and high education institutions through research and community service.

Only limited Batik Semarangan artisans use Mangrove waste as natural colouring and promotes it as tourism commercial product. The research shows how the owner gets the idea of using Mangrove waste as natural colouring, how to get raw material and process it into natural colouring, how to use natural colouring for Batik Semarangan, and how to promote Batik Semarangan with natural colouring as valuable collectible item in tourism industry. It is done to show how the local people preserve their culture by keeping Batik Semarangan, saving their

environment by minimizing water pollutant (Mangrove waste on sea water and chemical batik colouring on clear water), and improving their economy by running business involving housewives from the low-class family as part time workers and supporting tourism industry to get income for the local government from the tourism industry.

Discussion

Batik was proposed as the world heritage item to UNESCO on January 9th, 2009. It was listed first in The UNESCO's Representative List of Human Heritage Intangible Culture on September 30th, 2009. On October 2nd, 2009, by President Decision Number 33 Year 2009, Indonesian Batik was finally established as The World's Intangible Cultural Heritage, marking the day as Indonesian Batik Day [9]. Batik becomes a cultural heritage because it is worn and used by Indonesian people in their daily life. Batik is rich with hope and praying which is represented by its motives that symbolize Javane seculture and philosophy.

Although batik making technique was introduced by Indian or Srilankan fabric makers in the 6th or 7th Century [10], Java Island are famous of batik as it was being introduced in the island since the era of Majapahit Kingdom. Surakarta and Yogyakarta are famous of its *pakem* motives with *parang* as the oldest Javanese batik motive, Lasem is famous of its maroon natural colour, and cities along Java Island northern coastal areas like Cirebon and Pekalongan are famous of their *batik pesisiran* (coastal/maritime batik) with bright colour and natural motive. Other cities, provinces, islands in Indonesia also create batik, such as Semarang Batik, Papua Batik, Madura Batik, etc.

Batik Semarangan is less popular than the standard batik from Surakarta or Yogyakarta, the unique coloured batik from Lasem, and the *pesisiran* batik from Cirebon and Pekalongan. Yet, it is known for its unique characteristics. It has common bright colour like any other *pesisiran* batik reflecting the colourful coastal ecosystem. It also has different motives with Surakarta and Yogyakarta standard motives. Like Mega Mendung batik motive from Cirebon and Jlamprang batik motive from Pekalongan; Batik Semarangan motives reflects the city's ecosystem and landscape.

The natural-realistic motives of Batik Semarangan reflect the natural resources and the acculturation of Javanese, Chinese and Arabic ethnics [11]. There are six out of fifty-nine motives of Batik Semarangan,

documented by Mrs. Oosterom and Mrs. Von Franquemont in the 19th Century, were still popular now. Tugu Muda Kekiteran Sulur (youth monument surrounded with vines) motives symbolizes the local people fight against the Japan colonial in five days battle on October 15th-20th, 1945. Lawang Sewu Kekiteran Asem (thousand doors building surrounded with tamarind trees) motive reflects of the Dutch colonial building preservation as cultural heritage. Ceng Ho Neng Klenteng (Ceng Ho in Klenteng) motive symbolizes the acculturation of Javanese and Chinese ethnics as Admiral Ceng Ho, who was converted into Islam, built Klenteng (Chinese praying house) in Semarang. Warak Ngendog motive (a mythical creature that is exhibited and paraded in *dugderan*, an Islamic celebration to mark the beginning of Ramadhan Islamic month) symbolizes the acculturation of Javanese, Chinese, Arabic ethnics as it has dragon head representing Chinese ethnic, *buraq* body representing Arabic ethnics, and goat legs representing Javanese ethnic. Asem Arang (tamarind trees) and Blekok Sronдол (birds living on tamarind trees along Setia Budi street, Sronдол area) motives reflects the city natural resources of flora and fauna symbolizing the city's naming, that is, an area with *wit asem* or tamarind tree that is *arang-arang* or rarely found, or Sem-arang.

One of limited Batik Semarangan artisans who use Mangrove waste as natural colour is Batik Ngesti Pandawa. The use of natural colouring is initiated after they were informed by the scholars about the use of Mangrove waste as environment-friendly natural colouring for fabric, taught how to process the waste into natural colouring, and suggested to use the natural colouring to colour Batik Semarangan in the scholars' community service. The community service is done based on the scholars' research of how to save clear water from hazardous batik chemical colouring, how to minimize Mangrove waste from sea water, and how to utilize Mangrove waste as natural colouring for batik to save environment. Since then, they started to build good network with Mangrove farmers and people who collect and sell Mangrove waste to get the raw material that will be processed as natural colouring.

To process Mangrove waste into natural colouring; the unused root, trunk, bark, leaf, and bud of Mangrove were selectively collected, thoroughly washed, and carefully sun dried before they were boiled for 2-3 hours to produce brown to reddish brown colour. The colour is ranging from light to dark brown colour depending on the amount and the quality

of the raw material. This natural colouring is ready to be used to colour cloth like batik [12].

Batik Semarangan shows the seven characteristics of culture because it is involved in the local people religious/spiritual ceremony, social system and organization, knowledge system, language, art, living system, as well as technology and tools system [8]. Producing Batik Semarangan as the local people cultural identity shows their effort of maintaining their culture as Javanese who are familiar with the cultural item symbolized in the motives that were easily found around the city along with its meaning and philosophy.

Batik Semarangan also served as monitoring tool for culture maintenance. The changing or missing motive reflects the environment change, such as the changing function of Dutch colonial building as cultural heritage from cultural and historical functions into economical and industrial. The decreasing number of Blekok birds nesting on Asem trees along Setia Budi Street in Sronдол area. Thus, the local people and the local government can initiate an effort to restore the cultural items to ensure its existence and maintenance.

The use of Mangrove waste as natural colouring for batik helps the city to preserve its coastal environment from tidal flood, abrasion, and sea water pollutant. The farmers' effort in purposively cultivating it to minimize tidal flood and abrasion is indirectly supported by batik industry. The use of natural colouring for batik also preserves the city water environment from clear water pollutant because it has the least negative side effect than artificial or chemical batik colouring that has been alerted by environmentalist.

The use of Mangrove waste as natural colouring for Batik Semarangan is beneficial for the Mangrove farmers who can have an economic value of the plant waste than can be sold as raw material of batik natural colouring. It opens a business opportunity for the people who collect and sell the waste as raw material or the people who process the waste into and sell it as natural colouring. Batik artisans who use it as natural colouring also get economic benefit as it is popular among tourists so that their business can run well and giving benefit for their workers who are mostly housewives from low-class family as part time workers. Batik Semarangan surely has additional art, cultural, and economical value. Tourists choose this product as the city cultural identity with local wisdom of using abundant but wasted item as valuable material for aesthetic, cultured, and

high valued merchandise in tourism industry that preserves the city culture, save the city environment, and improve the city economy.

3 Conclusion

The whole explanation shows Semarang City local wisdom as Javanese in utilizing unused natural resource which is hazardous for their environment for their benefit. It reflects the city effort to preserve their culture as Javanese, to save their environment as coastal city, and to improve their economy by running business. Similar research has been done to show Javanese effort in different areas of Java Island to maintain their culture [13, 14]. It shows that Javanese people as the culture owners were responsible for maintaining their culture so that it will not be abandoned, substituted, or extinct

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