Transfer of Knowledge: Educational Value in Cold Wax Batik Technique Training

Ariesa Pandanwangi
Universitas Kristen Maranatha
ariesa.pandanwangi@maranatha.edu

Abstract

Yogyakarta is one of the largest batiks producing areas in Java, apart from Solo and Pekalongan. The motives contain a lot of deep philosophies that carry the values of human life. The technique used in making batik is using canting and hot wax. The price of materials for batik is getting longer, more expensive, the price for dyes is also getting higher, besides the waste from used lorod and batik containing chemicals that can damage the environment. Along with technological advances, society prioritizes environmental safety. The importance of the environment so as not to be polluted, a team from across institutions provided outreach in the form of transfer of knowledge about materials that are cheap, fun, and environmentally friendly, as well as training on how to use them. The problem in this activity is the decreasing public interest in batik work. The purpose of this activity is to increase public interest in batik using environmentally friendly materials. The targets of this activity are batik craftsmen, batik business owners, members of batik cooperatives. The activity was carried out at the Koperasi Batik Senopati in Yogyakarta. The number of participants who took part in this activity was 41 participants. The methods used in this mentoring are mentoring methods and practical methods. The result of this training the participants can use the cold wax batik technique.

Keywords:

Transfer of knowledge, Training, Batik technique of Gutta Tamarind1.

1. Introduction

Every region in Indonesia tries to raise its local potential through batik, so that Indonesian batik which is already worldwide is increasingly widely known, especially with its motifs that reflect local elements. (Hasan, 2012). The development of batik is very rapid in Indonesia, this has made many regions lift their local potential onto the cloth and used as a distinctive motif for their respective regions. So that today many regions that are not batik producers have become qualified batik producers (Ratnadewi et al., 2020). The resulting motives can compete with other regions. Even in terms of price, it is also able to compete. In Java, the batik producing cities are very well known, namely, Solo, Jogja, Pekalongan, these three cities are very rich in the batik motifs they produce. (Sumarsono, Hartono; Ishwara, Helen; Yahya, L.R. Supriyapto; Moeis, 2013). The problem in this research is the decreasing public interest in batik work, even though the UMKM sector has a wide market and can absorb a lot of labor. The purpose of this study is to provide assistance at the batik center coordinated by the Koperasi Batik Senopati in Yogyakarta by using environmentally friendly materials in the batik sector using environmentally friendly materials formulated from tamarind seed powder. (Anwar Siswadi, 2018).

2. Koperasi Batik Senopati

Koperasi Batik Senopati is 54 years old. The heyday of this cooperative in the past was able to develop the property business. His current condition, it is no longer easy to find batik workers here. Only a fifth of its 120 members are still in this business. Even though the Koperasi Batik Senopati is part of the history of this country. One of the social units is the Kindergarten Batik, which was inaugurated by Bung Hatta, the Father of Cooperative Economics. This cooperative was part of the greatness of GKBI, which had one of its businesses, a factory that made mori coins, with the most sophisticated machines of its time. As well as starting to explore the investment business. In Senopati, there are various tools that make batik for cooperative members, such as paraffin, wax, and cloth. The capital, which must be paid in installments until it is right, has not been able to increase the number of batik makers. This condition continues to decline, namely the increasing scarcity of batik craftsmen in Batik Senopati environment. The development of the Koperasi Batik Senopati to be able to last 50 years is a remarkable achievement (Wiragraha, 2020)

3. Socialization, Transfer of knowledge and Training

This activity was carried out in Yogyakarta on February 8, 2020, before the pandemic, is an implementation of the results of research which is the down streaming of tamarin porridge to the creative industry. This activity is in collaboration with the Koperasi Batik Senopati in Yogyakarta.

The product made is a pillowcase with a size of 60 cm x 40 cm. This activity continues to be practiced by several members who are still active in the world of batik, one of which is Mr. Satya who is the third generation of a batik entrepreneur family. Mr. Satya is a Bachelor of Engineering who later took up batik. His background made him lucky because when he designed a new motif, he could explore his scientific realm. This was proven by his victory in becoming the champion in the International batik competition held by Switzerland. His work became the main winner and beat batik designs from other countries.

Socialization, transfer of knowledge and training on environmentally friendly batik techniques are carried out in the following stages:

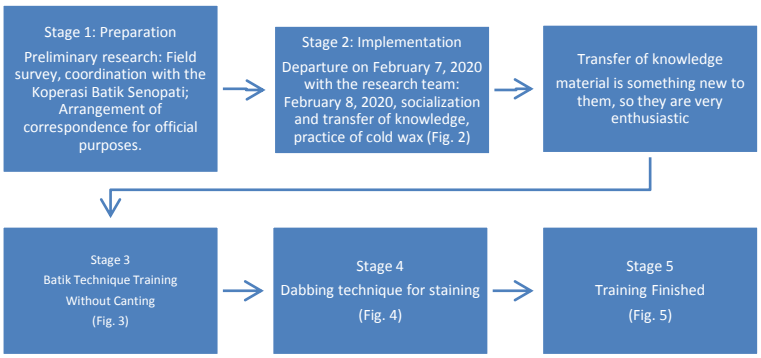

Figure 1. The process of activity stages. Resource: Team. 2020

3.1 Stages of socialization and knowledge transfer of cold wax batik material

Figure 2: Socialization and transfer of knowledge to participants.
Resource: Team. 2020

One of Indonesia's natural potentials is the Tamarind tree which is widely available in Java (Pandanwangi et al., 2020). Tamarind (Tamarindus indica) contains alpha hydroxy acid (AHA), which is known for its exfoliating properties (Anwar Siswadi, 2018). Tamarind seeds contain lots of protein, carbohydrates and fibre, as well as high mineral content. The ability of tamarind seeds as a bio coagulant is due to their high protein content which can act as a natural polyelectrolyte (Putri, 2017).

Tamarind seed extract contains natural polysaccharides and tannins which are composed of D-galactose, D-7 glucose and D-silose which are natural flocculants. Tannins are phenolic compounds that dissolve in water and can precipitate proteins from solution. Natural coagulants, especially polysaccharides, are more environmentally friendly when compared to organic and inorganic coagulants (Hendrawati et al., 2013).

Tamarind seeds (Tamarindus indica). plants belonging to the Leguminous family. Tannin, essential oils, sap water or adhesives contained in plants are active substances that cause the coagulation process (the process of making small particles (colloids) combine with others to form larger floc. So, the coagulation process can be defined as a process. clumping through a chemical reaction by mixing a reagent (coagulant) with the solute to form small flocs. Natural polymers such as starch, gums, adhesives, alginates and others function as flocculants. Based on these characteristics, tamarind seeds can be utilized as an alternative to coagulants to help process water or waste treatment (Putri, 2017).

The consistency of tamarind seed powder makes tamarind seed powder processed into cold wax dough. The manufacturing process does not require a stove, and is very easy to make (Pandanwangi et al., 2019). The process required for the cold wax to be ready for use takes one day, if needed in a relatively short time to eat, a blender tool can be used to mix tamarind seed powder

media with vegetable fats and hot and cold water. (Nuning Damayanti, 2018). After being cold wax, the material is put into a plastic triangle, and tied at the ends. The material is ready for use by cutting the tip of the plastic triangle (Ayu, 2017). This explanation was delivered by the team leader at the event.

3.2 Stages of training and process

For most people, making batik without canting might still feel foreign, as did many participants in this activity. Question after question, including the purchase of materials, became the participant's curiosity. When demoed how to use cold candles, the initial comments were very easy, safe, fun. Use it gripped and pressed at the end until the cold wax liquid comes out of the plastic triangle tip (Pandanwangi et al., 2019).

Figure 3: Making batik without canting, after drying it so that the cold wax traces dry out
Resource: Team. 2020

Figure 4: the staining process using the dabbing technique after ironing, washing and drying
Resource: Team. 2020

Figure 5: Training Finished
Resource: Team. 2020

The Work of Participans

Figure 6: Sample of the work from participants
Resource: Team. 2020

The success in this training can be seen from the work of the participants who made batik for the first time without canting, their expertise in making motifs because they were used to making motifs using canting. It takes time to get used to making batik without canting so that the hands are flexible. The colors used in this training are brighter, the dyes used are self-made concoctions. Objects created spontaneously, expressively, and freely. The result is a variety of objects from the combination of flora motifs with zigzag lines, floral motifs made such as slope batik motifs, free motifs, and a combination of flora and fauna motifs, motifs that represent flowers and butterflies.

Conclusion

The results of the training held at the Koperasi Batik Senopati were well received and inspired by the presence of new media and techniques. Indonesia's local wealth in the form of a new alternative media, namely tamarind seed powder, can be used by batik families. This material is easy to use and environmentally friendly as evidenced by the training given, they can continue it themselves at home. The patterns or decorations used in making batik are made spontaneously. The speed in making batik using cold wax will cut the length of the long process in making batik, both in the provision of tools, space and human resources, so it can shorten the time. This will have an impact on batik making, particularly in terms of time and funding. In the future, cold wax batik material is expected to become an environmentally friendly alternative media in batik. The mentoring activity has an indicator of success in the appreciation of the results of the performance of participants who can use the batik technique without canting with cold wax media, the work produced in the form of cloth for pillowcases is also successful visually in the composition between one motif and another, the coloring looks like the participants dare to combine colors contrast but harmony.

Acknowledgement

Thank you to Ristekdikti brin who has funded research on the down streaming of cold wax batik to the creative industry. LPPM Universitas Kristen Maranatha which has supported this activity.

References

1. Anwar Siswadi. (2018). Legenda pada Batik Asam Jawa. *Koran Tempo*, 28.
2. Ayu, R. (2017). *Kecintaan Terhadap Batik Buat Niken Kembangkan Perintang Warna dari Tepung Biji Asam*. Tribunnews.Com. http://m.tribunnews.com/nasional/2017/08/08/kecintaan-terhadap-batik-buat-niken-kembangkan-perintang-warna-dari-tepung-biji-asam?page=all
3. Hasan, R. V. (2012). Studi Komparasi Motif Batik Parang Rusak Barong. *Fakultas Sastra Universitas Jember*, *2*(1), 71–79.
4. Hendrawati, H., Syamsumarsih, D., & Nurhasni, N. (2013). Penggunaan Biji Asam Jawa (Tamarindus indica L.) dan Biji Kecipir (Psophocarpus tetragonolobus L.) Sebagai Koagulan Alami Dalam Perbaikan Kualitas Air Tanah. *Jurnal Kimia VALENSI*, *3*(1), 22–33. https://doi.org/10.15408/jkv.v3i1.326
5. Nuning Damayanti. (2018). Narasi Mitos dan Legenda Indonesia Dalam Ekspresi Batik Tamarin. In *Monochrome Press*.
6. Pandanwangi, A., Apin, A. M., Sukapura Dewi, B., Damayanti, N., Denianshah, F., & Elnissi., S. (2020). Adaptasi Pendampingan Teknik Membatik Media Alternatif Baru di Era New Normal. *Peran Perguruan Tinggi Dalam Transformasi, Adaptasi, Dan Metamorfosisi Pengabdian Pada Masyarakat Di Era New Normal*, *5*(1), 22–26.
7. Pandanwangi, A., Ida, Catherina, O., & Merry, E. (2019). Pendampingan Komunitas Pembatik Melalui Pelatihan Alih Pengetahuan Membatik dengan Material Berbasis Kearifan Lokal. *ENGAGEMENT JurnalPengabdianKepadaMasyarakat*, *3*(1), 68–79. http://engagement.fkdp.or.id/index.php/engagement/article/view/51/42
8. Putri, C. R. H. (2017). The Potency and Use of Tamarindus indica on Various Therapies. *Jurnal Ilmiah Kedokteran Wijaya Kusuma*, *3*(2), 40. https://doi.org/10.30742/jikw.v3i2.22
9. Ratnadewi, R., Pandanwangi, A., & Prijono, A. (2020). *Implementation of Art and Technology in Batik Purwakarta*. *4*(1), 64–75.
10. Sumarsono, Hartono; Ishwara, Helen; Yahya, L.R. Supriyapto; Moeis, X. (2013). *Benang Raja Menyimpul Keelokan Batik Pesisir*.
11. Wiragraha, S. (2020). *Interview Report*.