MUDRA
E-ISSN 2541-0407

MUDRA Jurnal Seni Budaya Volume 39, No. 3, 2024
p 294 - 303

Inai Cultural Dialectics: Indigenous Knowledge of Natural Dyes among the Iban Dayak as a Response to the Phenomenon of Fast Fashion

Diaz Restu Darmawan[1*], Nadia Novianti[2], Donatianus BSE. Praptantya[3]

[1]Cultural Anthropology, Faculty of Cultural Sciences, Udayana University, Jl. Pulau Nias No.13, Kota Denpasar, Bali, 80113, Indonesia
[2]Cultural Anthropology, Faculty of Cultural Sciences, Gadjah Mada University, Jl. Sosio Humaniora, Kabupaten Sleman, Daerah Istimewa Yogyakarta, 55281, Indonesia
[3]Social Anthropology, Faculty of Social Science and Political Science, Universitas Tanjungpura, Jl. Profesor Dokter H. Hadari Nawawi, Kota Pontianak, Kalimantan Barat, 78115, Indonesia

restudarmawan@unud.ac.id, nadianovianti1998@mail.ugm.ac.id, donatianus.bsep@fisip.untan.ac.id

Basic human needs, including clothing, have become commodities in the hands of industrial players, leading to a culture of consumption and negatively impacting the environment. The fast fashion industry presents numerous challenges requiring human-based solutions to reduce ecological damage. One solution is reintroducing past clothing practices and prioritizing environmentally friendly materials and techniques. Using natural materials with minimal environmental impact in clothing production is becoming more popular. One ecologically friendly material is natural dye, a traditional practice of the Dayak Iban community in Kapuas Hulu Regency, West Kalimantan. This article employs qualitative methods and literature studies to describe the natural dyeing process in the Dayak Iban community, emphasizing the continuation of tradition. The experience of researchers who have lived with indigenous communities in Menua Sadap village can provide valuable objective observation and interview data. In the Dayak Iban tradition, the makers of naturally dyed cloth are predominantly adult women, referred to as *Inai*. This article describes the local knowledge of the *Inai* regarding natural dyeing and how this process can solve the environmental damage caused by fast fashion. The indigenous peoples are highly concerned about their climate and environmental conditions as their livelihoods depend on the natural resources where they live. This was then strengthened by customary law so that environmental damage in Menua Sadap occurred less quickly than in urban areas, which often happens.

Keywords: *dayak iban, local wisdom, natural dyes, fashion*

Received: January 23, 2024; Accepted February 12, 2024; Published May 13, 2024
https://doi.org/10.31091/mudra.v39i3.2746

INTRODUCTION

Human needs in clothing have evolved rapidly. Even today's needs have left their natural needs, which should be protection from the weather and the environment. Today's needs are more material in nature and affect the user's position in social life. As in the case of clothing, it receives more attention from people because it has become a social symbol that is more important than the need for clothing and food. Even the terms that the industrial world has raised about clothing needs put clothing needs in a different realm and have their scope, such as in fashion culture.

The fashion industry created fashion culture to meet the demands of a consumerist society. This has led to the development of various types, genres, and terms in the context of fashion, all essential clothing types. This has led to the development of multiple types, genres, and terms in the context of fashion, all essential clothing types. However, one particular kind of fashion has garnered significant attention from practitioners and academics. However, it has also hurt the environment. It's essential to consider the environmental consequences of this trend, but we can also make a difference by choosing sustainable fashion options.

Fast fashion has become a global phenomenon due to its ability to meet fashion needs quickly. *Fast fashion* is a clothing production process prioritizing low costs and high output. Dewi explains that this has significantly increased clothing production (Dewi, 2022). Fast fashion is popular because it is associated with fashion meccas like grand fashion shows. The collections are often based on styles shown at Fashion Week shows or worn by celebrities (Hayes, 2022), making it easy for mainstream consumers to purchase a trendy look at an affordable price.

The fast fashion industry significantly impacts the environment despite its low price tag. It is responsible for approximately 10% of the world's total carbon emissions, projected to increase to 50% by 2030 (Envihsafkm, 2022). Synthetic fibers, such as polyester, are commonly used in fast fashion and are produced from polyethylene terephthalate (PET), a type of plastic derived from fossil fuels. *Polyester* is a non-biodegradable material that releases microplastics, which can harm the ecosystem (Utomo & Pawito, 2017). According to the International Union for Conservation of Nature (IUCN), in 2017, it was estimated that 35% of microplastics in the ocean come from the washing process of synthetic fibers, including polyester (Maiti, 2022). These microplastics can infiltrate the food chain and threaten human health. Similarly, cotton also contributes to environmental damage. Most cotton cultivation around the world uses non-organic pesticides that have harmful properties. According to Shepherd's research, growing cotton requires an estimated 200,000 tons of pesticides and 8 million tons of synthetic fertilizers yearly (Shepherd, 2019). Hazardous pesticides can have various harmful impacts, including soil degradation, health risks to farmers, and water pollution.

The phenomenon of fast fashion can be analyzed through cultural ecology. Hardesty defines *ecosystems* as the interactions between groups of animals and plants with their non-living environment (Saharudin, 2007). From an anthropological perspective, an ecological view focuses on the interdependent relationships that form an object or system. According to Bannet, conducting ecological observations involves identifying environmental factors that hinder the development of actors' behavior or socio-cultural organizations' adaptive decision-making in the face of future conditions (Suwardani, 2015). This adaptation involves conceptualizing oneself in humans to determine actions that align with their environment. The concept of adaptation refers to the process of adjusting to changing environmental conditions (Putra, 2003). This process is related to ecological changes that occur over a relatively long period and involve repeated actions.

To address the habits of modern society, it is essential to recognize the practices of local communities rooted in ancestral knowledge. Ancestral life fosters positive interactions between humans and their environment, as exemplified by the Dayak Iban community's production of natural dye fabrics. This paper explores the local knowledge of the Dayak Iban community in the Kapuas Hulu district. Generally, making woven fabrics with natural dyes still utilizes plant species from the surrounding ecology. This manufacturing process is environmentally friendly and produces results that do not cause damage. It can even compete in today's modern fashion market.

RESEARCH METHODOLOGY

This paper presents a qualitative study on the traditional knowledge of the Dayak Iban community in Kapuas Hulu district regarding the process of making woven fabrics with natural dyes using plant species from the surrounding ecology. The study aims to map this knowledge and reveal the underlying ideas and current conditions. The

research seeks solutions to reduce environmental damage caused by fast fashion.

This paper employs ethnographic methods to emphasize the participation of researchers in the field and their relationships with informants (Denzin & Lincoln, 2009). The research team connected with the community to gain insight into their daily experiences and events. Engaging with informants can provide in-depth information for research needs (Fetterman, 1989). In ethnographic research, engaged observation is the primary method for collecting cultural information.

RESULT AND DISCUSSION

Introduction to the Iban Dayak people of Menua Sadap village.

Menua Sadap village is situated in the Embaloh Hulu sub-district, near the northern tip of Kapuas Hulu district, approximately 97 km from Putusibau City, the capital of Kapuas Hulu district. To reach Menua Sadap village from Putussibau, it takes about 2 hours to travel via Jalan Lintas Utara by four-wheeled vehicle. However, the journey's smoothness depends on the area's season. Despite its proximity to Putusibau City, the road is partially paved. During the rainy season, traveling on the road through the Kalimantan forest can be challenging due to the red dirt terrain.

The people of Menua Sadap village, most of whom are ethnic Dayak Iban, have a strong relationship because they come from the same ancestors. This relationship can be seen in the residential pattern that can be found today. They live in long houses or *betang* houses. Then, the traditional way of life is still practiced by the Dayak Iban, which is still well preserved. Because of the residential factor that still applies to this long house, the established kinship ties are not easily lost over time. There are still good relations and communication between the older and younger generations because the place of residence forces them to maintain good relations as a longhouse community.

Figure 1. Rumah Panjang is one of the ancestral traditions still maintained by the Dayak Iban of Menua Sadap village.

(Source: Researcher Documentation 2023)

Figure 2. Rumah Panjang has a community space that is a factor in maintaining kinship and knowledge of Dayak Iban traditions in the village of Menua Sadap.

(Source: Researcher Documentation 2023)

The spiritual life of the Dayak Iban has long been an essential pillar in maintaining the ecosystems in which they live in the interior of Kalimantan. In their view, nature is not just a physical environment but also a place inhabited by various spirits, supernatural beings, and ancestors who play an essential role in maintaining the balance and harmony of the ecosystem. In Dayak Iban belief, every element of nature has a spirit that must be respected. Rivers are seen as the arteries of life, forests are sacred places inhabited by various supernatural beings, and mountains are the meeting point between the human world and the spirits of nature. These beliefs underlie their deep connection to nature and the drive to maintain harmony with the natural elements.

Ancestors play a central role in the spiritual life of the Dayak Iban. Just like other Dayak, they believe that the spirits of their ancestors are still present around them and have a strong influence on their

daily lives (Kiki Hartanto et al., 2023). Therefore, protecting the natural environment is a form of respect for the ancestors and maintaining a harmonious relationship with the spirit world. Destroying nature is considered an insult to the ancestors and can disturb spiritual peace. Rituals and ceremonies play an important role in maintaining the balance of the ecosystem. Before engaging in activities such as hunting or farming, Iban Dayaks may perform rituals that involve asking nature spirits for permission. This reflects a deep awareness of their dependence on nature and a desire to maintain a balance between humans and their environment.

The influence of spiritual life is also strongly felt in environmental decision-making (Hartanto *et al*, 2021). They often seek spiritual consultation before taking actions that may affect the ecosystem. This reflects their sense of responsibility as stewards of nature and their desire to seek the approval of spirits and ancestors before disturbing the balance of nature. Overall, the spiritual life of the Dayak Iban is not just a belief but has become an ethical and valuable guide for maintaining the ecosystem in which they live. A strong belief in nature spirits and ancestors and a deep connection to the environment have encouraged them to live in harmony with nature and implement sustainable practices in natural resource management.

Iban Dayak Natural Dye Process

The production of traditional Dayak Iban woven cloth is typically carried out by the *Inai,* which is the Dayak Iban term for mother. The term *Inai* culturally signifies the status of Iban Dayak women. According to informants, only adult Dayak Iban women were permitted to weave in the past. The process involves collecting raw materials, dyeing colors, and weaving. It is a skill typically possessed by married women (Rizqi et al., 2018). In the past, weaving was considered sacred for Dayak Iban, as only married women, known as *Inai*, were allowed to do it. However, this traditional perspective no longer applies in current times. Nevertheless, it is still common for married women with children to produce traditional Dayak Iban weaving.

Field findings indicate that the community produces two primary colors, blue and red, using different basic materials in the village's natural surroundings. *Rengat* leaves, readily available around the yards of residents' houses in Menua Sadap village, are an essential ingredient for blue dye. Meanwhile, to produce red dye, *engkerabai* leaves are used, which must be harvested from the forest near the village. These leaves and *rengat* leaves are boiled over burning coals using a container called *sampau.* The boiling process takes around 15-30 minutes, although *engkerabai* leaves take longer to produce a red color than *rengat* leaves, which produce a blue color more quickly.

After the boiling process, the thread to be dyed must be washed to remove any chemicals that may have adhered to it. Next, the dye produced from boiling is mixed with the thread in a dulang, a boat-shaped wooden container. Quicklime and unboiled leaves are also mixed into a tray as an essence to enhance color absorption. The thread is then soaked in the tray using a pressing technique for a few minutes to ensure optimal color absorption. It is important to note that this process should be repeated 1-2 times, and then the thread should be soaked again in a regular bucket for several dyeing processes. The primary material (leaves) can only be used for one dyeing process, meaning the number of coloring processes must be adjusted to the desired number of colors. To achieve optimal color results, dyeing is often required 5-6 times.

After dyeing, the thread is dried in the sun or aired to avoid moisture. The final result is a thread in various colors, such as red, blue, cream, green, and yellow. This process can take weeks, up to 2-3 weeks, depending on the desired color level. The indai always do this dyeing in the morning because they believe that the processing time of the thread during the day can affect the quality of the material and the color produced. Yarn dyed to the desired degree can be used to weave cloth. This activity is a way to fill free time. It is a cultural heritage continuously maintained by the Dayak Iban Community in Menua Sadap village, passed down from generation to generation.

Upon reanalysis of the field data findings, it was discovered that the natural coloring process of threads, which are later woven into cloth in the Dayak Iban community, occurs in several phases. Dyeing the threads is crucial in creating beautiful and colorful woven cloth. Below are the details of the process for dyeing woven threads in Dayak Iban:

Collection of Natural Coloring Materials

The process starts with gathering natural ingredients that will be utilized as dyes. In this instance, *rengat* leaves are used for the blue color and *engkerabai* leaves for the red color. Currently, there is no national term or Latin name for the leaves of the *rengat* and *engkerebai* plants, which means that plants are endemic to Menua Sadap village.

Figure 3. *Rengat* leaves are a fundamental ingredient for naturally coloring woven fabrics.

(Source: Researcher Documentation 2023)

Figure 4. *Engkerebai* leaves are a fundamental ingredient for naturally coloring woven fabrics.

(Source: Researcher Documentation 2023)

Boiling Natural Coloring Ingredients.

After collecting the natural coloring ingredients, the next step is boiling. The moth leaves used for the blue color are gathered from the surrounding yard, while the *engkerabai* leaves for the red color are obtained from the nearby forest. The natural coloring material is then placed in a *sampau* container and used as a medium for boiling over burning coals. This process extracts the natural color from the material.

The naturalness of the boiling process is not solely dependent on the raw materials of the leaves. The tools and fire used in the process also utilize materials from the surrounding village. Despite this, there is still an abundance of firewood available, allowing for the tradition of the boiling process to be maintained while reducing excessive pollution. This ensures that the Dayak Iban people's activities do not negatively impact the forests and nature in which they live.

The boiling process takes approximately 15-30 minutes. It is important to note that *engkerabai* leaves take longer to produce a red color compared to *rengat* leaves, which produce blue juice more quickly as a material for dyeing yarn. It should be noted that there is no further research to explain this phenomenon.

Figure 5. The leaves are boiled to create a coloring material.

(Source: Researcher Documentation 2023)

Yarn Washing

After the boiling process is complete, the yarn to be dyed must be thoroughly washed to remove any chemicals that may stick to the thread and ensure proper absorption of the natural dye. After the boiling process is complete, the yarn to be dyed must be thoroughly washed to remove any chemicals that may stick to the thread and ensure proper absorption of the natural dye. This process demonstrates *Inai's* commitment to creating environmentally friendly products, a tradition passed down through generations.

Figure 6. Soak the thread before mixing it with the decoction of the leaves to ensure cleanliness.

(Source: Researcher Documentation 2023)

Dulang Preparation

The *dulang* is a boat-shaped wooden container used for mixing natural dye essence with yarn in the

traditional process of natural coloring. Before mixing the coloring essence, the tray is prepared with quicklime and unboiled leaves. Creating *dulang* tools is a form of traditional technology that utilizes local wood species.

Figure 7. *Dulang*, the term used by the Iban Dayak community for the container used in the dyeing process.

(Source: Researcher Documentation 2023)

Figure 8. Before use, start by rubbing the raw leaves and the whiting together to form a *dulang*.

(Source: Researcher Documentation 2023)

Mixing of the dyes.

After the tray preparation, the dye juice produced by boiling the leaves is poured into the tray to dye the thread. For the dye to absorb well, the artisans use a pressing technique when soaking the thread in the boiled leaf water. This process may be repeated 1-2 times to ensure even dyeing. This process can be repeated several times during a dyeing session. This dyeing characteristic makes local woven fabric affordable because of its durability. After the dyeing process is completed, the dyed thread is left to dry in the sun or ventilated so that it does not get wet.

Figure 9. The process of transferring raw yarn to a dyeing vessel or *dulang*.

(Source: Researcher Documentation 2023)

Figure 10. The dyeing process begins with the technique of pressing the thread into the dye mixture prepared in a *dulang*.

(Source: Researcher Documentation 2023)

Figure 11. Example of blue color results in a stain.

(Source: Researcher Documentation 2023)

Repeated Dipping.

The process of dyeing the thread into the tray is done according to the needs of the *Inai*. The characteristic

of natural color dyeing is that the more dyeing processes there are, the stronger the color results obtained. This process is still traditionally done by the Dayak Iban community. A process that takes a long time is a characteristic of traditional nature. This is the basis for the value given to fabrics woven from this thread, which have high value from a cultural and economic perspective.

Figure 12. Red color results in one dip.

(Source: Researcher Documentation 2023)

Figure 13. The process of dyeing is repeated until the desired color is achieved.

(Source: Researcher Documentation 2023)

Yarn Dyeing Results.

The yarn can be dyed using natural materials to produce a range of colors, including red, blue, cream, green, and yellow. The color obtained depends on the type of natural dye used and the raw materials employed. Some materials are sourced from outside foliage, while others, such as certain roots and bark, are obtained locally. The Inai are experimenting with natural materials around the longhouse to discover new colors.

Figure 14. Examples of thread colors produced by dyeing natural materials found in the local area.

(Source: Researcher Documentation 2023)

Yarn dyeing can be time-consuming, depending on the desired color intensity and the dyeing required. This step is crucial in producing traditional woven cloth, which holds significant value for the Dayak Iban Community. The natural colors used in the dyeing process give the cloth unique characteristics integral to their cultural identity.

Natural Dyes as a Solution to Fast-Fashion Problems

The Dayak Iban people believe that nature is their home because it provides a livelihood for them. Therefore, they consider it crucial to protect nature. Weaving artisans in Sadap Hamlet contributes to this effort by maintaining the weaving tradition and using natural materials in the thread dyeing process.

One reason for using natural dyes is their minimal environmental impact. By avoiding textile dyes, waste from the yarn dyeing process, which uses natural ingredients, does not harm soil fertility. This allows the land to remain a viable planting medium. In addition, the artisans utilize their plantation land for plant cultivation, which serves as the primary source for creating natural dyes. This approach aims to minimize using natural materials that may harm forests. The artisans continue to conduct experiments to produce a broader range of colors without causing harm to the environment. This approach promotes environmental sustainability by reducing negative environmental impacts, such as water and soil pollution, often associated with fast-fashion chemical dyes.

Additionally, the utilization of natural dyes has the potential to decrease the waste generated by the fast fashion industry. Chemical dyes frequently produce waste that is challenging to decompose and can contaminate the environment. Conversely, the use of natural dyes results in waste that is more easily

decomposable and environmentally friendly (Theresia Widyastuti, 2023). Incorporating the Dayak Iban community's expertise in natural dyes can aid in the empowerment of local communities. Local communities can use their traditional knowledge to create sustainable economic opportunities while preserving their cultural heritage.

Figure 15. The cleanliness of the river makes it a suitable location for children's activities, demonstrating the success of the Menua Sadap community in protecting their environment.

(Source: Researcher Documentation 2023)

Natural dyes can enhance the quality and aesthetic value of fashion products with unique colors. In the fast fashion industry, there is often pressure to produce clothing quickly, which can compromise quality. The use of natural dyes provides a higher-quality alternative. Additionally, the Dayak Iban community's knowledge reflects their awareness of sustainable plant use for dyes. This approach can serve as a valuable example for maintaining ecosystem balance and caring for natural resources (Hadrian, 2017).

These explanations demonstrate the strong relationship between the Dayak Iban people and the forest ecosystem in which they reside. The Iban Dayak people are an ethnic group that inhabits the interior of Kalimantan and relies heavily on forests as their primary resource. In this context, forests are not only viewed as a physical environment but also as the foundation of their culture and daily life. Forests provide daily food, shelter, and materials (Hafizianor, 2021). Furthermore, this research emphasizes that the relationships within the forest ecosystem are interconnected.

In this context, the Iban Dayak people possess deep traditional knowledge about forest ecosystems and how to interact with nature. They have an exceptional understanding of the signs that indicate the presence of game animals, the places frequented by animals, and the behavior of fish in rivers. This knowledge passed down from generation to generation, enables them to live sustainably in the complex forest environment (Jeki et al., 2022). The Iban Dayak people actively protect particular forests to ensure the sustainable availability of natural resources. This contributes to environmental conservation efforts.

Forests play a significant role in Dayak Iban culture, serving as places for informal learning. Parents pass down knowledge and skills related to edible plants, traditional medicines, hunting, and food-seeking techniques from generation to generation. The text adheres to conventional structure and formatting features, including consistent citation and footnote style. Parents pass down knowledge and skills related to edible plants, traditional medicines, hunting, and food-seeking techniques from generation to generation. Forests serve as places of immersive education and play an essential role in preserving traditional knowledge.

Figure 16. Activities in the communal space of the longhouse involve the transfer of knowledge between generations of Dayak Iban.

(Source: Researcher Documentation 2023)

Examining the life of the Dayak Iban in Menua Sadap village, we can learn from the traditional community's lifestyle. Indigenous communities have long served as wise guardians in preserving environmental sustainability and conservation since ancient times (Lestari, 2010). In the era of modern civilization, which often neglects the balance between humans and nature, indigenous peoples serve as a reminder of the importance of this harmony. Indigenous peoples deeply understand ecosystems and have developed sustainable natural resource management systems. They view themselves as an integral part of nature, not as its

owners, and therefore maintain natural balance by living closely connected to the ecosystem around them (Nurlidiawati & Ramadayanti, 2021).

Additionally, they practice wise use of natural resources through traditional systems that ensure no over-exploitation of resources. The indigenous people had a profound comprehension of natural cycles, animal migration patterns, growing seasons, and natural growth, which they applied to their farming, hunting, and wild plant gathering practices (Wahdina et al., 2021). Additionally, they held an attitude of deep respect for nature and its living creatures, valuing biodiversity and comprehending the crucial role of each species in the ecosystem. Indigenous peoples have developed valuable knowledge and techniques about environmental management over centuries. This knowledge has been passed down from generation to generation through oral traditions, customary practices, and rituals.

CONCLUSION

Local groups' natural dyes can help solve the waste problem caused by fast fashion. However, it is essential to note that they are just one of the many solutions to this complex issue. These dyes have several advantages, including being environmentally friendly as they are typically derived from natural resources such as plants and fruit. Their use can also support cultural preservation, provide economic value to local groups, and increase consumer awareness about sustainable fashion.

ACKNOWLEDGMENTS

This article is dedicated to the Menua Sadap Village community, which kindly allowed us to conduct our research there. This article aims to introduce some of the traditions still maintained by the Dayak Iban community and contribute to the preservation of natural dyed woven fabrics.

REFERENCES

Denzin, N. K., & Lincoln, Y. S. (2009). Handbook of Qualitative Research. Pustaka Pelajar.

Dewi, R. K. (2022). Mengenal Fenomena Fast Fashion, Ciri-ciri, dan Dampaknya. Kompas.Com. https://www.kompas.com/tren/read/2022/09/15/113000165/mengenal-fenomena-fast-fashion-ciri-ciri-dan-dampaknya?page=all

Envihsafkm. (2022). Fast Fashion: Tren Mode yang Menjadi Bumerang terhadap Lingkungan. Envihsa.Fkm.Ui.Ac.Id. https://envihsa.fkm.ui.ac.id/2022/03/25/fast-fashion-tren-mode-yang-menjadi-bumerang-terhadap-lingkungan/

Fetterman, D. M. (1989). Applied Social Research Methods Series. Vol. 17. Ethnography: Step by Step. Sage Publications, Inc.

Hadrian, P. (2017). Merawat Budaya Adat dengan Tenun Kain Alami. Mongabay.Co.Id. https://www.mongabay.co.id/2017/03/19/merawat-budaya-adat-dengan-tenun-kain-alami/

Hafizianor, G. S. R. (2021). STRATEGI ADAPTASI MASYARAKAT DESA HUTAN RAWA GAMBUT. Jurnal Hutan Tropis, 9(3), 290–298.

Hartanto, C. K., Darmawan, D. R., & Manalu, C. R. (2021). Alat Musik Tradisional Di Masa Modern (Sape Dayak Kayaan Dalam Kajian Nilai Budaya). 5(2), 182–192. https://doi.org/https://doi.org/10.24114/gondang.v7i2.

Hayes, A. (2022). Fast Fashion Explained and How It Impacts Retail Manufacturing. Investopedia.Com. https://www.investopedia.com/terms/f/fast-fashion.asp#:~:text=1-,Fast Fashion Leaders,the actual production of clothing.

Jeki, J., Dirhamsyah, M., & Kartikawati, S. M. (2022). Pengetahuan Masyarakat Dayak Iban Tentang Pemanfaatan Tumbuhan Sebagai Pewarna Alami Tenun Ikat Di Dusun Kelayam Desa Manua Sadap Kabupaten Kapuas Hulu Kalimantan Barat. Jurnal Hutan Lestari, 10(4), 917. https://doi.org/10.26418/jhl.v10i4.53535

Kiki Hartanto, C., Praptantya, D. B., Restu Darmawan, D., Lusia, I., & Fridayanti, D. (2023). Tattoos: Art, Symbol, and History in Dayak Salako. Mudra Jurnal Seni Budaya, 38(3), 269–276. https://doi.org/10.31091/mudra.v38i3.2293

Lestari, S. (2010). Dayak Iban penjaga hutan Kapuas Hulu. Www.Bbc.Com. https://www.bbc.com/indonesia/laporan_khusus/2010/06/100610_hutandayak

Maiti, R. (2022). Fast Fashion and Its Environmental Impact. Earth.Org. https://earth.org/fast-fashions-detrimental-effect-on-the-environment/

Nurlidiawati, & Ramadayanti. (2021). Peranan

Kearifan lokal (local wisdom) dalam Menjaga Keseimbangan Alam (Cerminan Masyarakat Adat Ammatoa di Kajang. Jurnal Al-Hikmah, 23 No 1(August), 40–53. https://doi.org/https://doi.org/10.24252/al-hikmah.v23i1.21726

Putra, A. (2003). Ekonomi Moral, Rasional dan Politik dalam Industri Kecil di Jawa. Kepel Press.

Rizqi, Suminto, M., & Ermawati, P. (2018). Potret Perempuan Dayak Iban, Kayan, Desa, Dan Sungkung Di Kalimantan Barat. Spectā: Journal of Photography, Arts, and Media, 1(1), 51–66. https://doi.org/10.24821/specta.v1i1.1897

Saharudin. (2007). Fondasi, Teori dan Diskursus Ekologi Manusia. In S. Adiwobo (Ed.), Ekologi Manusia (pp. 43–70). Fakultas Ekologi Manusia. http://repository.ipb.ac.id/handle/123456789/76145

Shepherd, H. (2019). Thirsty for fashion? In Soil Association. https://www.soilassociation.org/organic-living/fashion-textiles/organic-cotton/

Suwardani, N. (2015). Pewarisan Nilai-nilai Kearifan Lokal untuk Memproteksi Masyarakat Bali dari Dampak Negatif Globalisasi. Jurnal Kajian Bali (Journal of Bali Studies), 5(2), 247–264.

Theresia Widyastuti. (2023). Uses Of Natural Dyes To Develop Tiga Negeri Batik. Mudra Jurnal Seni Budaya, 39(1), 8–21. https://doi.org/10.31091/mudra.v39i1.2504

Utomo, B. S., & Pawito, P. (2017). Media Sosial dan Gaya Hidup Wanita Di Indonesia. PALASTREN Jurnal Studi Gender, 10(2), 273. https://doi.org/10.21043/palastren.v10i2.2652

Wahdina, Setiadi, D., Purwanto, Y., & Qayim, I. (2021). Tumbuhan Pewarna yang Digunakan Masyarakat Dayak Iban Dusun Sungai Utik Kalimantan Barat. PROSIDING SEMINAR NASIONAL Perhimpunan Masyarakat Etnobiologi Indonesia (PMEI) KE V, 3, 190–192. http://jte.pmei.or.id/index.php/jte/article/view/143%0Ahttps://jte.pmei.or.id/index.php/jte/article/download/143/116

List of Resource Persons/Informants

Telibae, Literina Emilina (54 tahun), Weaver, interviewed on 8 July 2023 at Rumah Betang; Menua Sadap Village, Embaloh Hulu District, Kapuas Hulu Regency.

Mala, Magareta (28 tahun), Weaver, interviewed on 7 July 2023 in his home; Menua Sadap Village, Embaloh Hulu District, Kapuas Hulu Regency.

Jati, Monika (70 tahun), Weaver, interviewed on 9 july 2023 at Rumah Betang; Menua Sadap Village, Embaloh Hulu District, Kapuas Hulu Regency