
ITB Collaboration with COFO Indonesia to Process Abaca Fiber from Talaud and Sangihe during the Pandemic

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Abstract

North Sulawesi is one of the regions in Indonesia with abundant natural resources, one of them being the banana trees. The fiber of this tree is often used to make one of the components for their traditional houses and other everyday crafts, including their indigenous fabric called Kofo. However, throughout the years, the existence of this fabric has decreased because of the limited craftsman and its intricate process in making it. Because of that, the abaca fibers are not well used. COFO Indonesia is a fashion brand that's been producing fashion products from abaca fibers, recently they aim in broadening their market to the millennials by making modern model shoes and bags. The Coronavirus Pandemic has affected many aspects, especially in the SMEs economic sector. This phenomenon has limited our daily activities. However, it also opens up opportunities to collaborate and be creative with various parties from home. This project is a collaboration between the craft students from ITB who have become a bridge between the artisans who produce the products and COFO Indonesia that distributed them. The result is fashion products made from abaca fibers in a modern and high-end design approach. To conclude, this report aims to offer alternative options for SMEs to produce products during pandemic through a collaboration between craftsmen in various regions in Indonesia.

Keywords: *Abaca Fiber, Collaboration, Pandemic, Craftsmen*

INTRODUCTION

Abaca fiber is produced from the abaca (*Musa textilis*), an endemic banana plant from the Talaud area, North Sulawesi. The abaca banana plant is a male banana plant that is used by the stem of the plant. The Abaca banana plant covers an area of 5,000 ha with a productivity of 2-4.5 tons per ha (Victoria, 2016). With the amount of Abaca plant, the Sangihe People used it as their material in; (1) building houses; (2) brow beauty tools; (3) handmade crafts such as chairs, boat ropes, threads, prayer paper, lampshades, carpets, including Kofo fabric; (4) special pulp and paper

(Haris, *et. al.*, 2020). Kofo fabric was woven by most of the Sangihe and Talaud ethnic community, even being traded outside the region. However, since the 1970s, kofo weaving has disappeared altogether. All that remains is the remnants of the loom and a decreasing amount of kofo fabric (Steven, 2011). Today, some of the fiber is only exported as raw material and is not produced into any products.

COFO Indonesia is a fashion brand that has worked with the local farmers since November 2017 to cultivate abaca fibers and turn them into fashion products in an effort to use abaca fiber to its extent and held a weaving

training for the people of Sangihe and Talaud to revive the kofo fabric. Their goal is to revitalize kofo fabrics so that it can make local people know and love this fabric while lifting the community's economy and hopefully this culture wisdom will be able to go to the global market. COFO Indonesia has produced various fashion products, including clothes, necklaces, and bags, also home decor, and has collaborated with the government to promote them. So far, most of its customers were Gen Xers: 35-49 years of age and Baby Boomers: 50-68 years. Generation Z and Millennials dominate e-commerce transactions because this age group grows up and is very familiar with internet technology and digital payments. APJII study also revealed that internet users were dominated by the younger generation; internet penetration for those aged 15-19 years was highest (91%), followed by the 20-24 years age group (88.5%), and the 25-29 years age group (82.7%) (Europeana Task Force, 2015). Therefore, they aim to expand their market to the millennials and Gen Z by producing bags and shoes with more approachable, modern, and high-end designs such as incorporating fashion trends into the designs in an effort to increase public interest in abaca fibers fashion products.

With COVID-19 pandemic that's been going on for more than a year has made some activities to be hampered. The limitation in mobility has caused many Small and Medium Enterprises (SME) to experience turbulence in various aspects, especially in the economic field. MSME has become one of the sub-sectors that has been significantly affected, especially for micro-scale businesses. The LIPI Economic Research Center (P2E) made a calculation that showed that the spread of the corona virus would hit the SMEs that had been supporting tourism sector activities especially those related to food, beverages, as well as wood and rattan (Prasetyo, *et. al.*, 2020). Nonetheless, the circumstances have caused people to find multiple ways of doing activities and producing something their own from home. From that problem, this project aims

to support the economy in SMEs whilst promoting COFO Indonesia's products in using their locally produced material that is abaca fibers. This material is eco-friendly and biodegradable, these characteristics were proven by burying the fiber in the ground. While buried, the growth of microorganisms plays a major role during the degradation process of fiber cellulose by secretion of enzyme cellulose, which results in the loss of tenacity (Subagyo, *et. al.*, 2018). The characterization result of abaca fiber showed the abaca fiber has a potential to develop as an alternative material based on chemical, physical and thermal properties. High cellulose content of abaca fiber indicated this fiber can be applied in wide sectors, such as composite, pulp, paper, filler, textile, and others (Saragih, *et. al.*, 2018).

Various parties from all regions in Indonesia have collaborated in effort to make these products, the craft students from ITB have helped COFO Indonesia in realising their vision in making high-end shoes and bags, from consulting, designing process, to coordinating with the craftspeople from Yogyakarta and Majalaya.

METHOD

This community service was qualitative practice-based with an exploratory approach, in which the aim was to create a form of textile made from abaca fibre. Despite the objective of the research being clear, because this was exploratory, therefore the boundaries of the type of textile were left open. The position of ITB Craft Student in this community service activities is as an academic. So far, from the penta helix approach, there are 3 stakeholders involved in this activity, namely academics (ITB), business people (COFO Indonesia), and the community (farmers and craftsmen).

The steps to obtain data in an exploratory

approach would start with a literature study, prior experience, interviews, and direct contact with the community (Cuthill, 2002). However, due to the pandemic, direct contact with the community was limited. Data regarding the community was obtained via interview instead.

The methods performed to obtain data throughout this research was as the following; 1) Interview with owner and product development manager of PT Cofo Kreatif Indonesia, which runs the brand COFO Indonesia; 2) Making a poster for fiber producing instructions 3) Briefing the craftsmen virtually; 4) Design and production.

RESULT

Collaborative efforts were used in this project. The undergraduate students helped the production process by applying their knowledge in designing and collaborating with other parties remotely. The process in making abaca fiber fashion products include; 1) Held an online meeting with COFO Indonesia regarding the products and the abaca fibers cultivating process in Manado; 2) Coordinate with ALVSTUDIO for the chemical process in bleaching and crushing the fibers. The process was done to improve the whiteness of textile material by decolorizing it from the grey state, with or without the removal of natural colouring and/or extraneous substances (Summerscales, *et. al.*, 2021) ; 3) Communicate with the craftsmen in Yogyakarta for the yarn spinning process using 2-3 ply in 1mm size; 4) Coordinate with the craftsmen in Majalaya for the weaving process. The yarn was woven using a 50cm table loom in 2,5m length. The warp is abaca weft cotton using eight strands per cm using a 64/2 yarn size; 5) Designing the fashion products with other ITB craft students alongside COFO Indonesia in realizing their design vision;

6) Communicate with the bags and shoe vendor in Bandung. ; 7) Coordinate with COFO Indonesia in promoting and selling the products through websites and other social platforms.



Image 1. Abaca fibers weaving process



Image 2. The result of 100% abaca fabric after weaving

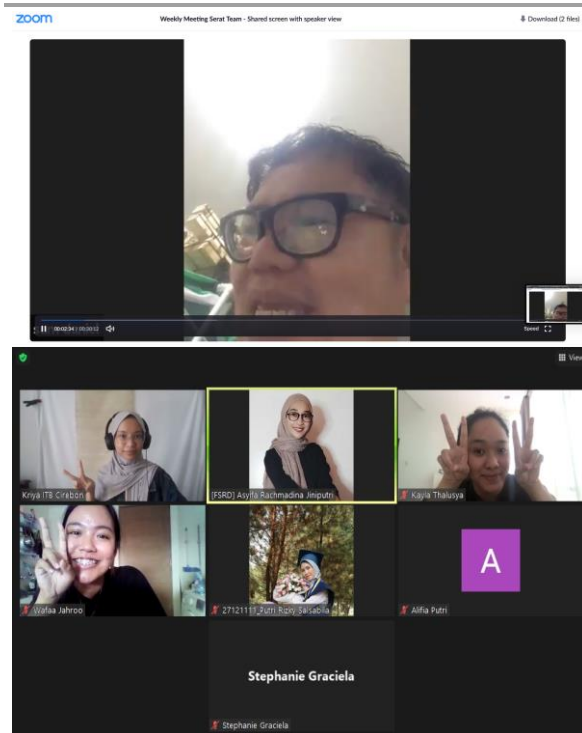


Image 3. Zoom meeting with ITB Craft Research Team and interview with COFO Indonesia

The whole process of making these abaca fibers fashion products has been an experience that can only be felt in a pandemic. Because many parties contributed, challenges were faced as it was supposed to be an offline project. Being hands-on and directly involved in the process is one of the crucial steps in making fashion products. But due to the condition, most of the processes and communication were done virtually from home. Studying the material and seeing the weaving process was merely seen through electronic devices. Providing virtual direction requires COFO Indonesia and craftsmen to have the same basic knowledge in communicating using the same perspective. Many materials also had to be sent, which caused a lot of expenses, and workshops can't be done because of the situation. Nevertheless, this project held in pandemic times has opened a new perspective in collaborating with people remotely. The physical

limitation has reduced travel expenses and has made time more flexible; this also forced people to find new ways of communicating and coordinating via online platforms.

One of the most influential changes is the introduction of a virtual supply chain to businessmen. Given the situation, this has made the supply chain that is known by society and business people wider. The collaboration between craftsmen in Yogyakarta, Majalaya, and Bandung has given COFO Indonesia an alternative in producing products during a pandemic.

SUMMARY AND SUGGESTIONS

With this report project, it can be concluded that the coronavirus pandemic has given the opportunity for people to find ways to get creative and produce arts and crafts products from their own home. Despite limitations, especially regarding access to remote locations, it is still possible to execute a practice-based exploratory research, utilizing means of communication such as video conferences and means of transportation via courier. The downside of long-distance research would be the excess use of shipping, especially in practice-based research since all physical materials and results would need to be shipped. This would affect the sustainability value of the project, considering it explores natural fibres. However, in times when public transportation is highly limited, this method has proven to provide an alternative for artisans and local businesses to continue to strive especially in raising prosperity in the economic sector. The process also gave opportunities for ITB Crafts students to learn more about natural fibers processing into a fashion product. The next step from this project is to do product development such as giving colors and patterns to the fabric, and also showcasing these products in an exhibition in an effort to promote kofo fabric and abaca fiber. Because this activity was designed as a sustainable activity, it is hoped that starting next year, the stakeholders involved will

be wider, including the media and the government.

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