

Optimizing The Utilization of Bamboo as a High-Value Craft Based on Community Empowerment

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ABSTRACT

Bokak Village, Sebumbun, Regency Sekadau, West Kalimantan has abundant potential for bamboo, but its utilization is still limited to traditional use with a low economic mark. Research. This aim is to optimize the utilization of bamboo as a craft worth economy tall through community empowerment. The method used is a descriptive qualitative method with a sample size consisting of 20 people from the Mother House stairs and groups. Data collection techniques were carried out through observation, interviews, and documentation, which were analyzed through stages of data reduction, data presentation, and data extraction. Research results show that around 80% of participants experience improvement in skills in manufacturing craft bamboo, and 60% of participants are capable of producing independently. The products produced in the form of baskets and containers, woven experience improvement quality from the aspect of neatness and value aesthetics, as well as their own potential for marketing. Activities this also opens opportunity business based House stairs, although still there are constraints on aspects of variation design, finishing techniques, and access to marketing. Overall, the optimization utilization of bamboo through public empowerment has proven effective in increasing skills and potential economic society, as well as contributing to the development of a creative economy based on local.

ARTICLE INFO

Article History:

Submitted/Received: 17 April 2026

First Revised: 26 April 2026

Accepted: 29 April 2026

First Available online: 30 April 2026

Publication Date: 30 April 2026

Keyword :

Utilization Bamboo

Crafts

Empowerment Society

Economy Creative

Source Power Local

INTRODUCTION

Bokak Sebumbun Village, Sekadau Hilir District, Sekadau Regency, has abundant bamboo resources, naturally distributed throughout the region. Bamboo is an agroforestry commodity with high ecological and economic value when optimally managed (Ministry of Agriculture of the Republic of Indonesia, 2023). In addition to its function as a traditional building material, bamboo also has the potential to be developed into high-value craft products in the creative economy sector.

However, local bamboo utilization remains limited to simple uses and has not yet led to the development of a competitive craft industry. This situation aligns with findings (Haryono et al., 2025), which state that limited knowledge and skills are key obstacles to developing a bamboo-based creative economy. Furthermore, a lack of design innovation and market access also hinders increasing the economic value of products (Susilowati et al., 2023).

In the context of rural development, bamboo craft development can be an effective strategy to increase community income through the utilization of local resources (Avianti & Utami, 2025). However, there is still a gap between resource potential and the community's ability to manage them productively and sustainably. Therefore, community empowerment-based interventions are needed that not only improve technical skills but also encourage innovation and entrepreneurship. Based on these conditions, this Community Service (PKM) activity aims to optimize bamboo cultivation and improve community skills in processing it into high-value craft products. The novelty of this activity lies in the integration of cultivation, skills training, and the development of a locally-based creative economy.

Purpose of Community Service

- Develop skills publicly in the process, bamboo becomes a product crafts that have mark plus.
- Produce product craft bamboo that has mark aesthetics and market potential.
- Driving improvement in public through the utilization of local.
- Support the development economy creative based potential village.

METHOD

Research Approach

This Study uses a descriptive qualitative design to describe in a way the process and impact of the activity in optimizing the utilization of bamboo as craft worth economy tall based empowerment community. Approach This chosen Because capable give a deep understanding of change in knowledge, skills, and public participation in utilising local power (Haryono et al., 2025; Vadilla & Nur, 2023). Subject study determined purposively as many as 20 people, consisting of those from Mother House stairs and groups of farmers involved in activities. Data collection techniques include observation, direct towards the training and production process craft, semi- structured interviews, for dig experience and perception participants, as well as documentation in the form of Photo activities and field notes. Data analysis was carried out through stages: data reduction, data presentation, and data extraction conclusion, to produce a comprehensive interpretation. To ensure data credibility, research This use triangulation methods (observation, interviews, and documentation) and member checks to confirm the

findings with participants, so that the data obtained is more valid and can be held accountable. Approach This in line with studies previously shown that empowerment-based training practical effective in increasing capacity and value plus craft bamboo (Mesiyani & Suprehatin, 2020; Avianti & Utami, 2025).

Participants and Location

- Activity Location

Study held in Bokak Village, Sebumbun, District Sekadau Hilir, Regency Sekadau, West Kalimantan Province, was selected as the location study Because own potential source, abundant bamboo, but its utilization is still not optimal and has not yet developed as a craft worth economy high. Selection location is also based on the readiness and participation of the public in support activity empowerment based on local.

- Participant Activity

Participant in the study. This amounts to 20 people, which is determined purposively, consisting of those from Mother House stairs and groups of farmers who have an interest as well as direct involvement in activity cultivation and processing bamboo. Housewife ladder chosen as the main Because own role in the economy, the ladder as well as potential in developing business crafts, while the group farmer is involved Because own relatedness with the provision of material standard bamboo. All participants play an active role in every stage of activities, starting from socialization, training, practice manufacturing crafts, up to evaluation, so that they are not only as objects, but also subjects in the empowerment process of society. The following documentation activities of housewives and the community in making a craft ladder from bamboo:



FIGURE 1. Bamboo Craft Making Process.

Stages Program

- Preparation Stage

Stage preparation was done through a survey field to identify potential utilization of bamboo as well as the skills of the public in processing bamboo into crafts. In addition, an analysis is done to know the obstacles faced by society, such as limitations in skills, designing products, and marketing. Other activities include determining participants, preparing the work plan, and preparing the tools and materials used in the training process. Stage This aim is to ensure the program is implemented in accordance with need community and oriented towards improvement mark economy.

- Stage Socialization

The stage of socialization aims to give understanding to the public about the importance utilization bamboo as a craft product for the economy. At this stage, this delivered program objectives, benefits, activities, as well as business that can be developed through craft bamboo. Socialization also functions to increase awareness and motivation for the community to participate actively in activities, so that created optimal involvement in the empowerment process.

- Stage Training Making Bamboo Crafts

Stage This is the core activity that focuses on improving skills, public in process, bamboo becomes a product craft. Training done in a direct way through practice, including the cutting process of bamboo into bars, thinning, smoothing, as well as technique base woven. Participants trained to produce products like baskets and containers, weaving that has mark function and aesthetics. Approach practice direct This aim is to increase technical skills in a way effective as well as produce products that can be directly utilized or marketed.

- Stage Mentoring

Mentoring is done as an effort to ensure the sustainability skills that have been obtained by participants. At this stage, participants are given guidance to increase the quality of the product, repair technique, as well as develop a variation design for the product to make it more interesting and have Power competitiveness in the market. In addition, mentoring also includes directions for simple related packaging and marketing strategy, so the product craft own mark to sell more tall.

- Stage Evaluation

Stage evaluation is done to evaluate the results of program implementation, in particular, in improving skills, quality products, and potential economic results. Evaluation done through observation of results, interviews with participants about perceived benefits, and documentation of products produced. Evaluation results show to what extent the program is capable increase ability of the public to produce valuable crafts in the economy, at the same time identifying constraints like limitations, variation in design, and access to marketing as material repair to the front



FIGURE 2. Craft Results Ladder

Evaluation

Evaluation results show an improvement ability technical participant in making craft bamboo, especially in weaving techniques and the neatness of products. The products produced also show improvement in terms of function and aesthetics, so own potential for marketing. In addition, the activities This give impact positive to improvement awareness public in utilise bamboo as an alternative source of income. However Thus, the evaluation also shows several obstacles that still exist faced, such as limitations variation design products, finishing techniques that are not optimal, as well as access marketing that is still limited. Condition This shows that although skills base has increased, development of products and marketing strategies still needs to be upgraded to be able to compete in a wider market. Overall, evaluations show that the program has succeed increase capacity of the public to produce craft bamboo for the economy. However, the sustainability of the program requires support for advanced innovation design, improvement of quality products, as well as strengthening market access for impact the economy generated can be more optimal and sustainable.

RESULTS AND DISCUSSION

Results of Community Service Activities

The implementation of the program shows that the optimization of the utilization of bamboo as craft-based empowerment for the public gives a significant to improvement in the skills of participants. Based on results observation and interviews, approximately 80% of participants are capable of carrying out the manufacturing process craft in a way independent after training. Improvement. This happens because method training-based practice is direct (learning by doing), which allows participants to gain real experience in the production process. This is in line with Vadilla and Nur (2023), who stated that training-based practice is effective in increasing the competence of craftsmen in bamboo. In addition, the quality of products produced has experienced improvement, especially in aspects of neatness, strength, and aesthetic value. This is influenced by the existence of a mentoring process that provides a way to come back directly to the participant during the ongoing activity. However, the ability to innovate design is still limited, where products produced tend to be homogeneous. Condition: This shows that improvement of technical skills is not yet fully followed by development of creativity, as stated by Utami and Hardi (2024), that innovative design is an important factor in increasing power competition in product crafts.

From the economic aspect, this program starts an open opportunity business based on house stairs.

Around 50% of participants state that products produced are already worthy for marketing, even though still in scale. This is a show's existence from utilizing the previous bamboo only used traditionally. Findings. This in line with Mesiyani and Suprehatin (2020) stated that processing bamboo into craft can increase the market economy public.

DISCUSSION

Research results show that the approach empowerment public through training-based practice is directly effective in increasing the skills of technical participants in the process of bamboo becoming a craft worth economy. Improvement. This happens because method learning by doing allows participants to get experience directly, so that they speed up understanding and mastery skills, as put forward by Vadilla and Nur (2023). In addition, there is mentoring sustainable contribute to improvement quality of products, especially in the aspects of neatness and aesthetics, which shows the importance of a continuous learning process (Mesiyani & Suprehatin, 2020). However, the limitations innovation design indicate that the development of craft is still at a basic stage, where focus activity more emphasizes mastery of technical skills compared to creativity product. This is in line with Utami and Hardi (2024), who emphasized that innovative design is a main factor in increasing power competition in product crafts. From the side economy, utilizing bamboo as a craft shows potential in increasing income for society, even though still limited to scale, small consequence constraint market access and marketing strategies are not optimal, as explained by Santika et al. (2025). In general, overall findings show that program success is influenced by a combination of training, practical, mentoring, and participation in an active society, but to reach sustainability and power more competitive high requires strengthening of aspects of innovation design and marketing products.

CONCLUSION

Study shows that the optimization of the utilization of bamboo as a craft-based empowerment is effective in increasing technical skills and the potential of the community economy. This program is capable increase ability participant in produce crafts that have mark function and aesthetics, as well as open opportunities for business-based house stairs. The development of craft bamboo still faces constraints in aspects of innovative design, finishing quality, and access to marketing. Therefore, is necessary to make an effort in the form of strengthening creativity product, improving the quality of production, as well as effective marketing strategies. In general, activities This give contribution real in development of the economy creative based source Power local as well as potential For developed in a way sustainable development, increasing public welfare.

SUGGESTION

Based on the research results, it is recommended that further development be carried out, focusing on increasing innovation in bamboo craft product design so that it does not only rely on basic techniques, but is also able to produce more varied and competitive products in the market. Furthermore, additional training is needed regarding finishing and product packaging techniques to improve the quality and aesthetic value of the crafts. From an economic aspect, it is important to strengthen marketing strategies, both conventional and digital, so that the resulting products can reach a wider market. Support from the village government and related agencies is also needed in the form of facilitation of production equipment, ongoing training, and access to marketing networks. With these efforts, it is hoped that the

use of bamboo for crafts can develop sustainably and make a more significant contribution to increasing income and community welfare.

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