

# Economic Improvement of Small and Medium Business through the Utilization of Waste

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#### ARTICLE INFO ABSTRACT

Date of entry: This research aims to downstream/commercialize integrating the 1 November 2022 management of export-scale wood products with the potential for waste wood chips and sawdust as an impact, so as to increase **Revision Date:** village potential and create an environmentally friendly village in 25 November 2022 Manggung village in order to increase village potential. This Date Received: research was conducted as a leap in the field ofwood product 16 December 2022 management and processing of waste wood scraps and sawdust into handicrafts and accessories. Improved financial management and marketing of wood production in Manggung village through improving the quality of human resources as well as export-import training to help increase exports of wood products as well as handicrafts and accessories. By utilizing local potential and local wisdom and increasing the role of persons with disabilities and victims of layoffs through training to increase knowledge and skills by cooperating with the support of the Boyolali District Government. Institutional strengthening of BUMDes Maju Makmur in optimizing the management of wood and wood waste through mentoring, training and provision of supporting equipment as well as improving governance capabilities and establishing teaching factories that will be used to study undergraduate students.

Keywords: BUMDes, Financial Management, Marketing



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#### INTRODUCTION

Micro, Small and Medium Enterprises are the most important pillars in the Indonesian economy. Based on data from the Ministry of Cooperatives and SMEs, the number of MSMEs currently reaches 64.2 million with a contribution to GDP of 61.07% or worth 8,573.89 trillion rupiah. The contribution of MSMEs to the Indonesian economy includes the ability to absorb 97% of the total workforce and can collect up to 60.4% of the total investment. However, the high number of MSMEs in Indonesia is also inseparable from the existing challenges (Ministry of Cooperatives and MSEs, 2021). The wood processing industry is basically divided into downstream industry and upstream industry (Lin et al., 2020). The upstream industry includes the saw mill, plywood industry, particle board industry and MDF industry (Hope et al., 2020). Downstream industries consist of wood



working, furniture and handicraft industries. In the wood working industry, wood products are produced in the form of frames, doors, windows, flooring and others (Pereira et al., 2019).

Wood scraps are generally found in various wood processing industries in various areas. Manggung Village, Ngemplak District, Boyolali Regency is the canter of the wood processing industry which is dominated by the production of frames, doors, windows, and the sale of wood in the form of logs and processed wood. These types of production produce waste that is still relatively large in size. The size of the waste wood is still possible to be reprocessed into handicraft products through innovative and aesthetic souvenir products, meaning that it has a good selling value by prioritizing artistic values. This is what encourages researchers to try to provide alternative uses in order to grow community economic business activities through the manufacture of innovative wooden handicrafts and can be applied with other materials in the form of fiberglass and other supporting materials.

Specific Research Objectives Through this applied research, it is hoped that it will be able to reduce the amount of waste wood left over from production as well as to increase the economic value of the wood processing industry. The next goal is to increase the competitiveness of partner SMEs through the development of design and development of souvenir products, especially in the aspects of the designs of innovative creative works. Research Excellence Problems with the depletion of raw material supplies, low competitiveness of waste wood souvenir products, low innovation, increasing public demand for environmentally friendly products are the driving factors for applied research for the wood processing industry. Therefore, the use of waste as the basis for product innovation that is environmentally friendly, has economic value as well as to increase industrial competitiveness through innovative works is the priority of this research.

#### Economic Improvement of Small and Medium Enterprises.

Facing free competition, medium-sized enterprises are considered to be much more prepared in terms of human resource capabilities, business scale and ability to innovate and access markets. One of the strategies to encourage the performance and role of SMEs in the free market and overcome the gaps that occur is to grow strong medium-sized enterprises in building industrial structures in economic growth and in SME development policies (Ministry of Cooperatives and SMEs, 2021). In the era of free trade, where product cycles are relatively short and are largely determined by consumer tastes, it is imperative that every business actor has sufficient access to markets and product innovation capabilities, in order to increase their competitiveness (Yatminiwati et al., 2021). In fact, this is the weak point of SMEs in general. On the other hand, SMEs play an important role in the Indonesian economy (Sulistyan et al., 2022), both in terms of the number of businesses and in creating jobs. In terms of exports, SMEs have the potential to increase export revenues (Love & Roper, 2015; Qurratu'Aini & Hapsari, 2019). Opportunities that are open to develop businesses in an economy that is increasingly open and integrated with the world economy can only be utilized if our business world is competitive (Kyrylov et al., 2020). National businesses can no longer rely on protection for the domestic market and subsidies for the export market. Therefore, increasing competitiveness must be the main agenda of national development (Băzăvan, 2019).

Efforts to capture opportunities from these fundamental changes must have the right strategy, which includes the following aspects: 1) increasing access to productive assets, especially capital, technology, management, and other important aspects. 2) increased access to markets 3) Entrepreneurship, 4) institutional. 5) business partnership. Business partnerships are an important and strategic path for the development of people's economic enterprises. The partnership has proven successful in other countries, such as the four Asian tigers, namely Taiwan, Hong Kong, Singapore, and South Korea, and has benefited from their very rapid economic development and industrialization.



Industrial Waste Wood.

The development of civilization shows that life cannot be separated from equipment as a support for human activities (Achmad, 2021). Equipment has an important role for its sustainability, both related to spiritual and physical needs for practical purposes in solving the problems of human life (Mamurov et al., 2020). The reality proves that design work not only solves human problems, but also contains values and builds civilization (Nerubasska et al., 2020). People as users of wood processing products are constantly changing tastes in line with the trends and demands in society so that the work of a functional design and work of art, of course through a more diverse form, both in terms of form, function, material and finishing (Nurlaela et al., 2016). The existence of works of art from waste wood is strongly influenced by community demands (Elavarasan et al., 2022), so that creators are required to be creative and innovate to create unique products and will make their own attraction. A work of art will be reflected through a system of values, traditions, environmental resources, necessities of life, and behaviour or patterns of human behaviour, in which art lives (Ismadi et al., 2020). Souvenir products as one of the interiors supporting elements greatly affect balance, balance, harmony, suitability and other aspects as a whole in an interior and are part of it. The high demand for creativity that always follows developments, of course, does not only follow existing patterns but creates new possibilities through continuous innovations (Hanelt et al., 2021). The creative power of employees, experts, scholars or artists can only be developed, through improving the quality of their work in technique and conception.

## METHODS

This type of research is used in applied research, research sites (Paramita et al., 2021). The research location is in Manggung Village, Ngemplak District, Boyolali Regency, Central Java. The object of research for Small and Medium Enterprises is wood waste that is not or has not been utilized properly. Population and Sampling. The research population is SMEs engaged in wood processing located in Manggung Village, Ngemplak District, Boyolali Regency. Determination of sampling is using a probability technique with purposive sampling, namely the selection of samples based on the research objectives. Data and Data Collection Techniques. The main source is residual production waste produced by partner SMEs which may be used as handicraft products. Literature is in the form of journals, textbooks related to the context of research. Informants, namely competent people in the field of handicraft products.

Analysis of the data to be taken using descriptive statistics. The data analysis technique refers to the interactive analysis model, including the stages of data reduction, data display and data verificationData reduction is the selection, simplification, abstraction and transformation of data to obtain relevantdata. Display or data presentation is in the form of narrative text or exposure consisting of text and images, so that it is easy to understand. Verification is data validation or proof.

## **RESULTS AND DISCUSSION**

The dynamics of the growth of conducive furniture industry activities, especially the demands for artistic value and the selling value of wooden furniture products, on the other hand, include producing wood waste which in general has not been utilized properly (Wan et al., 2022). There is a tendency that the intervention of the wood furniture industry is getting stronger in providing household furniture needs and the production of ready-to-use products is becoming more widespread, supported by good design in terms of aesthetics, function, and a conducive community economy.

Through the efficient use of raw materials and increasingly sophisticated wood processing machinery technology is used in the manufacturing process, however, the waste generated needs to



be utilized as well as possible. The more wooden furniture produced, the greater the competition in various aspects, both in form, technique, function, material and finishing, which will increase the variety of choices for consumers according to their needs. One of the efforts to win the hearts of consumers is done through visualization of innovations in shapes, sizes, variations of ornamentation and the use of increasingly varied material applications. The process of making wood waste from wood furniture production activities if observed has value as a raw material, it can be used as a source of productive activities to produce souvenir products of economic and marketable value. Processed products can be in the form of souvenirs or means of supporting the necessities of life in the form of caps Tok, key chains, wall lamps, sitting lamps, and so on.



Figure 1. Creative and Innovative Work on the Utilization of Wood Waste

Creative and innovative works are produced to provide solutions to the problem of utilizing waste wood in order to increase added value. Cultivating a creative attitude in an effort to increase expertise in various fields of art as a profession requires a high level of awareness. Various problems that are closely elated to the process of creating product works in general and souvenirs in particular cannot be avoided, the reality that occurs in society with all its different problems needs to be done feasibility study. To realize a souvenir product, of course, it is carried out through several stages starting with the formulation, objectives, technological materials and a feasibility study of the market where the product will be sold, all of which are a combination of various skills that are integrated into a harmonious whole. So that applied research activities can maximally produce creative and innovative products that can reflect the uniqueness of creation with innovation through the forms developed.



Figure 2: Handicrafts and accessories

## CONCLUSION

This research aims to downstream/commercialize integrating the management of export-scale wood products with the potential for waste wood chips and sawdust as an impact, so as to increase village potential and create an environmentally friendly village in Manggung village in order to increase village potential. This research was carried out as a leap in the field of wood product management and processing of wood waste and sawdust into handicrafts and accessories. Improved financial



management and marketing of wood production in Manggung village through improving the quality of human resources as well as export-import training to help increase exports of wood products as well as handicrafts and accessories. By utilizing local potential and local wisdom and increasing the role of persons with disabilities and victims of layoffs through training to increase knowledge and skills by cooperating with the support of the Boyolali District Government. Institutional strengthening of BUMDes Maju Makmur in optimizing the management of wood and wood waste through mentoring, training and provision of supporting equipment as well as improving governance capabilities and establishing teaching factories that will be used to study undergraduate students.

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