Journal of Innovation and Community Engagement (ICE) **e-ISSN: 2776-0421**
Vol. 04, No. 01, (February, 2023) **https://doi.org/10.28932/ice.v4i1.5591**

Mentoring in the Processing of Rejected Goods at a Timber Company in Semarang using Service Learning Approach

Stephana Dyah Ayu Ratnaningsih*, Sih Mirmaning Damar Endah, St. Lily Indarto,
Theresia Dwi Hastuti, Gita Claudia
Faculty of Economics and Business, Universitas Katolik Soegijapranata, Semarang, 50243, Indonesia

*Correspondence should be addressed to Stephana Dyah Ayu Ratnaningsih; stephana@unika.ac.id

(Received October 19, 2022; Revised November 29, 2022; Accepted December 16, 2022)

Abstract

This community service program was carried out at a family company in Semarang. The company's line of business is in wood processing. Initial observations showed that the problem in the company was due to the condition of the raw materials. Damaged, downsized, and rejected raw materials will occupy more space in the warehouse. This research aims to help the partner overcome the problem of raw materials. By using the service-learning method, the community engagement team consisting of lecturers, students, and company management discussed solutions that can be profitable for the company. The team found that further processing of the damaged raw materials was required. This process would turn the wasted material with low value into valuable pressed wood. According to the calculation of the reprocessing cost of this pressed wood, it can be classified as a profitable product. The team strongly recommends the company owner produce press wood continuously. In the long run, press wood will reduce inventory costs and increase revenue.

Keywords: *cost, rejected goods, service learning, wood*

How to Cite:
Ratnaningsih, S. D. A., Endah, S. M. D., Indarto, S. L., Hastuti, T. D., & Claudia, G. (2023). Mentoring in the Processing of Rejected Goods at a Timber Company in Semarang using Service Learning Approach. *Journal of Innovation and Community Engagement*, *4*(1), 15-29. https://doi.org/10.28932/ice.v4i1.5591

Introduction

Today the world's attention is focused on sustainable development. This is observable by the agreements and high efforts from various countries that are members of the United Nations (UN) in achieving the Sustainable Development Goals or SDGs (Biermann, Kanie, & Kim, 2017; Moyer & Hedden, 2020). Each country develops a model that can be utilized in achieving the SDGs (Allen, Metternicht, & Wiedmann, 2016). Many companies try to integrate these efforts to achieve sustainability in the programs they want to achieve (James & Halliburton, 2018). The Indonesian government is also concerned about the achievement of the SDGs. This is apparent from the application of measurement indicators for the achievement of the SDGs in Indonesia. The meta-indicators include four main pillars. The first pillar is the economy (Bappenas, 2020b). The second pillar that must be achieved is the sustainability of social development (Bappenas, 2020a). Development to achieve sustainability must also pay attention to aspects of the third pillar, which is the environment (Bappenas, 2020c). The last pillar that must be considered is the legal and governance (Bappenas, 2020d). The achievement of sustainable development in accordance with the four pillars is expected to be able to make the community more prosperous.

One of the major concerns in the SDGs is related to environmental issues. This is important for Indonesia, a country full of natural resources. Many companies regard to the environment by carrying out various CSR programs (Hajawiyah, Adhariani, & Djakman, 2019). However, attention to the environment should not only spend funds for CSR but instead make good plans in utilizing existing resources to be environmentally friendly. Therefore, attention to natural commodities must always be increased in order to achieve sustainability goals.

Commodities or products that are superior in Indonesia are resources produced by nature in large numbers. One of the important products to pay attention to is wood commodities. In Indonesia, there has been a large change in forest biomass due to the high intensity of harvesting production forests (Budiaman, Mubarak, & Lismaya, 2020). Research results show that tree logging produce up to 66% of logging waste. Therefore, many research efforts in the forestry sector are then used to consider other methods that can reduce logging waste (Budiaman et al., 2020; Surasana & Limbong, 2020).

Attention to the use of wood commodities does not only need to be done at the time of logging. Attention can also be exercised after the logging, such as in the wood processing industry. Attention to standardization in the production process and product is also important (Purwanto & Syaifuddin, 2020). A company's competitiveness is determined by the management system within the company, forestry management, and the implementation of ISO for the production of wood-based commodity (Purwanto & Syaifuddin, 2020).

The wood processing industry, especially in furniture companies, has an important role in economic development in an area (Sjahrain, 2019). The level of economic development is influenced by capital, technology, and raw materials in furniture companies (Sjahrain, 2019). Therefore, it is important to continuously improve the performance of these companies engaged in the wood processing industry.

The company that became the place for the community service is engaged in wood processing that produces furniture, flooring, decking, finger joints, and garden furniture. This company is a family-owned company. In Asia, family-owned firms still dominate the ownership structure (Aguilera & Crespi-Cladera, 2016). Previous studies have proven that the ownership structure of family companies has an effect on financial policy (Cahyani & Sanjaya, 2016; Revelli & Viviani, 2015) and in achieving sustainability (Hajawiyah et al., 2019; Loh, Thomas, & Wang, 2017).

The company produces high quality products and its marketing has reached overseas. The commodity produced are of export quality and are in great demand by buyers from abroad. Commodities those are mostly exported is furniture, flooring, and decorative profiles. Previous research on other wood companies found that in addition to capital and technology, raw materials factor is one of the main factors that the wood processing industry must pay attention to (Sjahrain, 2019). The results of observations on this particular community service partner problems also support this. The partner problem is that the raw materials are not entirely good. This is because the raw wood purchased is unprocessed natural product, so that the quality inside the wood cannot be determined from the outside appearance.

Raw materials are usually purchased from Perhutani or community forests through an official licensing process. The condition of the wood seen from the outside is good but the condition

inside the wood cannot be ascertained. Timber suppliers also source wood from nature, and cannot predict the inner quality of the wood. After entering the processing stage, the unfavorable condition of the wood material can then be identified, which causes the wood to be rejected, or to be downsized because it cannot be processed properly. This is because even though each end and the outside look good, the inside is not necessarily free from wood damage. It will produce goods that cannot be sold, but if they are reprocessed by re-cutting (removing the damaged parts), it is expected that they will still become valuable products. Although it can be reprocessed and made into finished goods with other resale value, until now there is no company policy regarding the processing of leftover wood and the results of sorting for reprocessing.

Overseeing these conditions, the focus of community service carried out is on the warehousing aspect. The warehouse is where most of the company's assets are. In the warehouse, there are raw materials, work in process, and finished goods. There is not only the flow of goods but there is also a flow of money that follows the flow of goods. If all raw materials can be processed and sold, it will not cause problems for the company. Problems arise if in the process of processing the goods there are defective goods or damaged goods in the production process which will cause problems for the company. Moreover, the material used is wood which, before processing, the state of the interior cannot be predicted. Rejected goods placed in the warehouse also take up space, therefore all the activities mentioned above must be redesigned in such a way that they can run well.

This mentoring program demonstrates the university's role in advancing the social environment. In developed countries, the role of universities requires a lot of resources, but in fact, in developing countries, this role does not require many resources in the form of infrastructure or technology (Marcus, Atan, Yusof, & Tahir, 2020). The role of universities lies in mobilizing human resources such as lecturers and students.

This community service activity applied a service learning approach that was carried out online or commonly known as e-service learning. A systematic review of previous studies found that many service learning activities were carried out using this model (Marcus et al., 2020). When this activity started, the rate of spread of the Covid-19 pandemic had decreased compared to the previous year, therefore the activities carried out no longer used pure e-service learning but

were also mixed with the application of field studies. This was done because based on research systematics, community service carried out using the e-service learning method focuses more on the use of technology rather than environmental aspects (Marcus et al., 2020). Whereas the environmental aspect is actually one of the main focuses in achieving sustainability related to the environmental pillar.

Methods

This community service activity was in the form of mentoring a partner. The partner mentioned is a wood processing company located in Semarang. This partner is a company engaged in the manufacture of natural wood products. The activities carried out were not incidental or momentary services, but rather were structured services that are expected to help partners in overcoming their problems. In this program, the service team chose to use a service learning-based model of service. Therefore, in the community service process, the team did not only collaborate with partner but also involved students in the service process. Student involvement is intended to increase student understanding of knowledge about cycles related to warehousing. Community service was carried out in three stages. Each stage is described in the following description.

Stage 1: Observation and Planning

Service activities began with initial observations of the partner company. This observation was carried out so that the service team could understand the condition of the company. Through this stage, the team knows how the production process was carried out by the company in outline. Thus it can be seen how the materials were processed, as well as the goods produced. This observation process was supported by interviews with parties related to the production process, as well as the business process.

After getting an overview of the company's business processes and production processes, the service team carried out an analysis process together with the leaders of the company who were partners or subjects of community service. In this process, the service team discussed the planning of the service program that will be carried out. The service team and partners discussed the broad scope of the service carried out. The results of the analysis of the existing conditions indicated the need for special assistance in the field of inventory management.

In carrying out the activities, the service team applied a service learning model by involving students to better recognize the inventory process in the company. This method was used because it can make students more appreciative of the learning process they are doing (Macías Gomez-Estern, Arias-Sánchez, Marco Macarro, Cabillas Romero, & Martínez Lozano, 2021). Another reason is that using service learning can be a step towards realizing a democratic education (Mortari & Ubbiali, 2021). Through a democratic education, universities not only equip students with competencies that are useful for individual success in the future but are also able to become a driving force in improving the economy in a country's society (Mortari & Ubbiali, 2021).

The application of service learning must pay attention to five main orientations in order to properly bridge theory and practice (Resch & Schrittesser, 2021). The first orientation is how to connect theory with practice (Resch & Schrittesser, 2021). While the second orientation is the fulfillment of community needs (Resch & Schrittesser, 2021). Therefore, it is necessary to choose the right learning course. The results of initial observations found that there were problems in the supply sector. In that case, in the implementation of the service, the team with partners tried to solve the main problems faced by the company, which were related to inventory problems. This discussion is in accordance with one of the subject matters in the Auditing 1 learning course. So the support materials used are from that course. The results of a systematic review conducted on previous studies found that it is very important to link the objectives to the learning format (Tijsma et al., 2020). Therefore, it was necessary to adjust the learning design in the relevant semester. This needs to be done so that the implementation of the method could achieve the expected goals, which was to help partners solve their problems.

Another orientation that must be considered is exercising responsibility and improving the skills needed in the work they will do later (Resch & Schrittesser, 2021). The method used was the inventory audit model. By using project-based learning, students are expected to be able to hone their ability to see the problems that exist in the company. By considering the things that must be learned, it is expected that students can better understand the inventory cycle as a whole in the audit. Partners really played a role as a place of learning for students about the real conditions in the company.

Stage 2: Existing Internal Control System Weakness Analysis

The second stage after knowing the partners' problems, then what to learn next is how the Internal Control System was in managing raw materials. For a company, the control system is important because in organizational conditions it is one of the factors that can reduce fraud (Lestari & Yaya, 2017), in addition to individual factors from organizational members (Lavena, 2016; Pratolo & Sadjiman, n.d.). Then, raw materials are part of the inventory that will affect the calculations in the financial statements (Wiranto, Toha, & Supriyadi, 2020). Inventory is one of the important things in a company, especially a manufacturing company.

At this stage, students accompanied the service team and partners to explore available information related to the inventory audit cycle. An important step that must be done was an analysis of the existing Internal Control System, after studying the raw material purchasing system and analyzing the advantages and disadvantages of each vendor whose wood is purchased by the company. Existing wood defects could not be detected in the control process, because the focus of control was only on vendor selection procedures and wood purchasing procedures. The company did not have the necessary mechanisms and tools to detect wood defects. One of the things that can be done was to use a historical analysis of defective products shipped by each vendor. However, this could not be done in this service activity due to the limited data to complete the analysis.

Stage 3: Plans for improvements that can be made.

After observing and analyzing existing weaknesses, the service team then formulated solutions and suggestions for improvements that can be made by partners. The focus of solutions provided was focused on matters related to accounting because in this service learning model, the service team and students involved are accounting students. Improvements were made related to accounting problems. The application of different accounting methods can help management to better calculate costs and profits (Rasya, Falayati, & Ihsan, 2021). The use of calculations that would be carried out was to be adjusted to existing conditions after the company had fulfilled the audit cycle.

Results and Discussions

Results

The service team carried out the stages as planned. Based on these stages, the service team managed to photograph the weaknesses in the company's production process.

Dynamics of the Community Service Process: Process and Production Analysis

This community service process was carried out using a service learning model. Therefore, at the initial stage, students were asked to prepare a plan of activities that would be carried out first. The service team was to review the feasibility of the designed program.

The production process begins with the process of ordering raw materials from related vendors. The ordered wood would be sent by the vendor, then, the partner would check the documents related to the wood. After the wood has gone through the document-checking process, the wood raw materials would go through a splitting process. In the sawmill, the wood would be cut to the required size according to the order. After splitting, the wood would go through the next process, which is turning off the wood fibers with the kiln dry process. After leaving the oven, the semi-finished raw material is processed by a molding machine, to smooth all four sides of the material. After finishing the molding machine, the wood material would be ready to be processed into furniture and other types of products. Processed wood would be checked first before being processed into furniture products.

The wood that meets the standards would then be further processed into furniture products. This stage is slightly different from the previous stage which uses more machines for processing. At this stage of processing wood into furniture, it is more dependent on human labor. Furniture produced from this process are then stored in separate warehouse.

Analysis of Vendors

Production is made to order. Every time a new order comes in, they produce it, starting with the selection of a wood supplier. Ordering wood is directly handled by the head of the company and it is customized to the goods ordered. If there is a price match with the type of wood required, then the wood will be sent. When the wood arrives, the consignee would check the wood with documents from the Perhutani or Dinas Kehutanan (Forestry Bureau), to make sure

that the wood source is legal. The raw materials that are usually purchased could be in the form of logs and squares.

From the results of the analysis of this process, it was found that the company has weaknesses in terms of vendor selection. The weakness was the lack of freedom to determine what vendors to choose. This is due to the demands of export standards that require companies to choose vendors with quite a lot of criteria so that the choice of vendors is limited. Besides the limited number of vendors, another difficulty is the high level of centralization of management in the company. This is because the company is a family-owned company, so the owner's control is very dominant. In family-owned companies, the tendency for self-interest to intervene in business processes and policy-making is very substantial [14], [15], [17]. In this vendor selection process, the owner of the company is the main decision maker so the vendor selection process becomes very subjective according to the wishes of the company owner.

Improvement Plan: Solving the Problem of Inventory of Rejected Raw Materials

Internal Control Standards applied in the company are quite good, but have not been able to detect the occurrence of damage to the purchased raw materials. This weakness occurs partly because of the low level of delegation of tasks within the organization. A high degree of centralization causes decision-making to be slow and often the implementation of these decisions becomes less than optimal due to limited resources. This weakness can be fixed by suggesting changes to the existing business structure and improvements to human resources. With these two aspects, it is expected that the problems that occur in the process of purchasing raw materials can be resolved for the better.

In addition to the development of human resources and management policies related to purchasing, this weakness has an impact on the existing production process. The impact of the weakness of the internal control system is that the purchased raw materials cannot be used entirely, because the physical condition of the wood is not entirely good. In the products purchased sometimes there are wood defects. For example, pinhole, dead eye, pulur (heart), all of which would only be known and seen after the wood is split in the sawmill.

This wood defect causes these raw materials to be downsized or even rejected. The result of this treatment causes the stock of rejected or damaged raw materials to increase. This rejected

wood is stored in warehouses and accumulates into unused goods because there are no consumers who want to buy rejected goods. The current buildup is quite large and causes storage to be carried out poorly.

Unprocessed goods still went through the sorting process and have gone through the oven process. Rejected goods were sold at Rp.5,000,000 per cubic meter. These products could not be sold monthly because it depends on buyers who were interested in buying the sorted wasted wood. If there was no one who wants to buy, the rejected goods were still in the warehouse. Even though there was more and more rejected items buildup, the company had not taken a policy to handle the use of these rejected items. All they did was to wait if there were consumers who came and wanted to buy the rejected items at the price offered.

When viewed from the raw material used is wood, many things can actually be managed by reprocessing so that companies can get added value from rejected goods that are processed for added value. The obstacle that can be perceived by the service team was a lack of confidence in the company's leadership so that it cannot delegate its marketing to others. The head of the company is overwhelmed with having to make sure the production runs smoothly, and take care of the purchase of raw materials and sales, while not fully utilizing the resources at his disposal. Therefore, the service team becomes a mediator between company head with the company's marketing department.

Further processing potential

In this service activity, the lecturer and student in the service team collaborated with the company's marketing department to practice offering and find buyers whether there are buyers who want to buy rejected goods that have been reprocessed. Mentoring the marketing department is one of the team's suggestions to help the company head to sell rejected goods. It turned out that the results of this marketing work paid off. There was a request from the buyer for the remaining processing goods. After receiving an order, the marketing department cooperated with the production department to process the rejected wood according to the order.

The results of the marketing effort showed that the demand for ordinary rejected materials (without processing) was lower than the demand for processed rejected materials. The processing of the rejected materials was in the form of combining rejected wood into press

wood. This processing requires a press machine. However, based on the results of the team's observations, it was seen that this would not be a problem that would interfere with the company's financing. This is because the company already had a press machine. There was a press machine that had never been used. Thus, the fulfillment of the demand for these rejected wood products would help the company make its idle assets more effective. Based on these conditions, the service team conducted further processing trials on rejected wood products owned by the company. The test results showed that rejected processed products could be produced by the company. Therefore, this service team then followed up, by conducting a recalculation of the rejected goods if they were further processed. The results of this calculation were expected to provide input for companies in treating their final products in the future.

Calculations for further processing of damaged products

Damaged products that have been reprocessed must then be calculated at cost so that the company can compare production costs with the selling price of the product. In this calculation, the team observed the costs that may arise in the production process. The results of these observations allow the team to estimate the costs that must be charged using the activity-based costing model. The team calculated that the rejected wood could be produced into FJL (Finger Joint Laminated) Teak Wood Panels. By using dimensions of 1.8 cm x 60 cm x 240 cm, it can produce teak wood panels with a size of 0.0259 m3. The calculation of further processed production costs can be seen in Table 1 below.

Table 1. Calculation of the Cost of Processed Products

Type of Cost	Quantity	Formula Explanation
Sorted rejected materials for processed products	0.0343 m3	(1)
Price of teak wood A2 (Perhutani) year 2022	Rp.6,000,000/m3	(2)
Raw material cost	Rp.205,800.00	(1) x (2) = (3)
Direct labor cost	Rp.150,000.00	(4)
BOP	Rp.105,000.00	(5)
Total cost	Rp.560,000.00	(3) + (4) + (5) = (6)

The product can be sold at a price of Rp.980,000. Based on these calculations, it can be seen that there are advantages that can be obtained by processing the rejected goods into new products.

Discussions

Further product processing as described above, can be done to reduce inventory costs, reduce the cost of goods, and also increase revenue from partner companies where community service is carried out. Rejected products that are further processed must first be cost calculated before being processed further. There are several choices for calculating the selling value of the rejected product. One that has been used by previous research on rejected wood products in other companies is to use the cost-plus pricing method (Mulyadi & Tezakumala, 2021). Another method that can be chosen in determining the cost of wood products is to use the activity-based costing method (Rasya et al., 2021). The application of ABC is based on the assumption that all costs arise due to activities. Therefore, before calculating the cost per unit, the management team must first observe the activities required for pressed wood processing. Analysis of the results of observations is carried out to determine level of activity grouping, and activities driver. The grouping is classified into four levels, namely units, batches, products and facilities. Costs are charged based on the level of driving activity that exists in each cost group. Activity driver is an activity that determines the high and low costs that arise. Charging costs according to this activity driver increasing cost precision. Products with more activities will be charged a higher cost than products that require less activity. Using ABC method will assist management in determining the correct cost of goods for each product. Especially when the level of damage to the wood rejects is not the same.The calculation of the two methods can be applied to the production process in the future. So that better calculations can be obtained and the company can determine its selling price without depending on market prices.

Conclusion

The results of the calculation of the cost of the product show that reprocessing will provide a higher level of profit. This further processing can not only utilize equipment that is already owned but never used, but it can also reduce storage costs for the company. The supporting factor in this community service activity was the good cooperation between the team and partners. However, this community service activity had obstacles in the wide range of problems experienced by the partner timber company. In addition, the service team was also limited to the suitability of the problem with the competencies that are expected to be achieved by students through learning in the learning courses used as learning media. Future community service can be developed to design layouts that can support the production process or rearrange the company structure.

Acknowledgements

We thank the furniture company in Semarang, where we conduct research to serve the community. We also thank the auditing class students for the even semester of the 2021/2022 academic year who are willing to be actively involved in this service-learning-based community service process..

References

Aguilera, R. V., & Crespi-Cladera, R. (2016). Global corporate governance: On the relevance of firms' ownership structure. *Journal of World Business*, *51*(1), 50–57. https://doi.org/10.1016/j.jwb.2015.10.003

Allen, C., Metternicht, G., & Wiedmann, T. (2016). National pathways to the Sustainable Development Goals (SDGs): A comparative review of scenario modelling tools. *Environmental Science and Policy*, *66*, 199–207. https://doi.org/10.1016/j.envsci.2016.09.008

Bappenas. (2020a). *Metadata Indikator TPB/SDGs: Pilar Pembangunan Sosial* (2nd ed.). Jakarta: Kedeputian Bidang Kemaritiman dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional.

Bappenas. (2020b). *Metadata Indikator TPB/SDGs Indonesia: Pilar Pembangunan Ekonomi* (2nd ed.). Jakarta: Kedeputian Bidang Kemaritiman dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional.

Bappenas. (2020c). *Metadata Indikator TPB/SDGs Indonesia: Pilar pembangunan lingkungan* (2nd ed.). Jakarta: Kedeputian Bidang Kemaritiman dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional.

Bappenas. (2020d). *Metadata Indikator TPB/SDGs INdonesia:Hukum & tata kelola*. Jakarta: Kedeputian Bidang Kemaritiman dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional/ Badan Perencanaan Pembangunan Nasional.

Biermann, F., Kanie, N., & Kim, R. E. (2017). Global governance by goal-setting: the novel approach of the UN Sustainable Development Goals. *Current Opinion in Environmental Sustainability*, *26–27*, 26–31. https://doi.org/10.1016/j.cosust.2017.01.010

Budiaman, A., Mubarak, F. M., & Lismaya, W. (2020). Kayu limbah penebangan intensitas rendah di Izin Usaha Pemanfaatan Hasil Hutan Kayu-Hutan Alam (Logging Residues of Low Harvest Intensity in Indonesian Forest Concession). *Jurnal Ilmu Pertanian Indonesia*, *25*(1), 145–151. https://doi.org/10.18343/jipi.25.1.145

Cahyani, K. A., & Sanjaya, I. P. S. (2016). Analisis perbedaan dividen pada perusahaan keluarga dan non keluarga berdasarkan kepemilikan ultimat. *Modus*, *26*(2), 133. https://doi.org/10.24002/modus.v26i2.584

Hajawiyah, A., Adhariani, D., & Djakman, C. (2019). The sequential effect of CSR and COE: family ownership moderation. *Social Responsibility Journal*, *15*(7), 939–954. https://doi.org/10.1108/SRJ-09-2017-0179

James, A., & Halliburton. (2018). Integration of united nations sustainable development goals into service company sustainability reporting: Material issues for the triple bottom line. *Society of Petroleum Engineers - SPE International Conference and Exhibition on Health, Safety, Security, Environment, and Social Responsibility 2018*. https://doi.org/10.2118/190506-ms

Lavena, C. F. (2016). Whistle-blowing: Individual and organizational determinants of the decision to report wrongdoing in the federal government. *American Review of Public Administration*, *46*(1), 113–136. https://doi.org/10.1177/0275074014535241

Lestari, R., & Yaya, R. (2017). Whistleblowing dan faktor-faktor yang memengaruhi niatmelaksanakannya oleh aparatur sipil negara. *Jurnal Akuntansi*, *21*(3), 336–350. https://doi.org/10.24912/ja.v21i3.265

Loh, L., Thomas, T., & Wang, Y. (2017). Sustainability reporting and firm value: Evidence from Singapore-listed companies. *Sustainability (Switzerland)*, *9*(11), 1–12. https://doi.org/10.3390/su9112112

Macías Gomez-Estern, B., Arias-Sánchez, S., Marco Macarro, M. J., Cabillas Romero, M. R., & Martínez Lozano, V. (2021). Does service learning make a difference? comparing students' valuations in service learning and non-service learning teaching of psychology. *Studies in Higher Education*, *46*(7), 1395–1405. https://doi.org/10.1080/03075079.2019.1675622

Marcus, V. B., Atan, N. A., Yusof, S. M., & Tahir, L. (2020). A systematic review of e-service learning in higher education. *International Journal of Interactive Mobile Technologies*, *14*(6), 4–14. https://doi.org/10.3991/IJIM.V14I06.13395

Mortari, L., & Ubbiali, M. (2021). Service learning: A philosophy and practice to reframe higher education. *Athens Journal of Education*, *8*(2), 115–138. https://doi.org/10.30958/aje.8-2-1

Moyer, J. D., & Hedden, S. (2020). Are we on the right path to achieve the sustainable development goals? *World Development*, *127*, 104749. https://doi.org/10.1016/j.worlddev.2019.104749

Mulyadi, & Tezakumala, R. (2021). Pendampingan perhitungan HPP pemanfaatan limbah kayu sisa ekspor dengan cost plus pricing method. *Jurnal Keuangan Umum Dan Akuntansi Terapan*, *3*(Maret), 17–24.

Pratolo, S., & Sadjiman, V. P. (n.d.). Determinants of whistleblowing intention of employees

in universities : Evidence from Indonesia. *Jurnal Riset Akuntansi Dan Keuangan Indonesia*, *5*(1), 92–101.

Purwanto, A., & Syaifuddin, M. P. (2020). Apakah sistem manajemen FSC, PEFC dan ISO 38200 mempengaruhi daya saing bisnis: Studi pada industri kayu di Jawa Tengah. *Jurnal Ilmu Manajemen Dan Akuntansi Terapan*, *11*(Mei), 16–27.

Rasya, N. A., Falayati, R., & Ihsan, N. (2021). Analisis perhitungan harga pokok produksi pada pengetaman kayu Pathaya Indah menggunakan sistem activity based costing. *Research In Accounting Journal*, *1*(2), 196–204.

Resch, K., & Schrittesser, I. (2021). Using the service-learning approach to bridge the gap between theory and practice in teacher education. *International Journal of Inclusive Education*, *0*(0), 1–15. https://doi.org/10.1080/13603116.2021.1882053

Revelli, C., & Viviani, J. L. (2015). Financial performance of socially responsible investing (SRI): What have we learned? A meta-analysis. *Business Ethics*, *24*(2), 158–185. https://doi.org/10.1111/beer.12076

Sjahrain, U. M. (2019). Peranan perusahaan mebel kayu terhadap pembangunan ekonomi kabupaten gorontalo. *Tasharruf: Journal Economics and Business of Islam*, *4*(2), 110–127.

Surasana, I. N., & Limbong, K. D. (2020). Limbah penebangan kayu di perusahaan PT. Dwimajaya Utama. *Journal of Environment and Management*, *1*(3), 254–258.

Tijsma, G., Hilverda, F., Scheffelaar, A., Alders, S., Schoonmade, L., Blignaut, N., & Zweekhorst, M. (2020). Becoming productive 21st century citizens: A systematic review uncovering design principles for integrating community service learning into higher education courses. *Educational Research*, *62*(4), 390–413. https://doi.org/10.1080/00131881.2020.1836987

Wiranto, A., Toha, M., & Supriyadi, D. (2020). Prediksi persediaan minimum dan maksimum. *Kolano: Journal of Multidisciplinary Sciences*, *1*(01), 55–67.