ORGANIZATIONAL HEALTH REVIEW ON FINANCIAL AND PRODUCTION ASPECTS POST-REPLANTING (CASE STUDY: TEKAD MANDIRI PALM OIL PLASMA COOPERATIVE)

Misnanto
Management, STIE YKPN Yogyakarta, Indonesia
misnantoscholar@gmail.com

Julianto Agung Saputro
Accounting, STIE YKPN Yogyakarta, Indonesia
agungsaputro@gmail.com

ABSTRACT

This study aims to examine the impact of replanting programs on productivity and financial health aspects of the Palm Oil Plasma Cooperative (KPKS). This research is significant due to the fact that 2.4 million hectares of palm plantations require replanting, as the plants are over 15 years old. The study uses KPKS financial reports from 2020 to 2023, post-replanting production data from 2023, and Farmer Exchange Rate (FER) data. The method applied is a case study with an emphasis on KPKS that has implemented replanting. The study reveals an increase in production after replanting, showing a significant effect of 0.942% on farmer welfare; however, production levels have not reached the ideal productivity targets. Financial health analysis categorizes the cooperative as "fairly healthy" with a score of 77.5 in 2020, shifting to "under supervision" in 2021 with a score of 61.5 and remaining in this category in 2022 and 2023 with scores of 63.5 and 53.8, respectively. These findings suggest further evaluation and improvements are needed in the replanting program, particularly focusing on productivity enhancement and financial health monitoring. Additional findings reveal that the replanting program's financing scheme heavily burdens palm oil farmers.

Keywords: Palm Oil Plasma Cooperative, replanting, productivity, financial health, farmer welfare.

INTRODUCTION

Indonesia is known as an agrarian country, with agriculture playing a major role as the largest contributor to the nation's Gross Domestic Product (GDP). B According to data from Statistics Indonesia (BPS) in 2022, the agricultural sector contributed 12.40% to Indonesia's GDP (Badan Pusat Statistik, 2022).

Various subsectors within agriculture include plantation crops, contributing 3.75% to GDP; fisheries at 2.58%; food crops at 2.32%; livestock at 1.52%; horticulture at 1.44%; forestry at 0.60%; and agricultural services and hunting at 0.18%. In addition to its significant contribution, this sector absorbs 27% of the workforce in Indonesia (Badan Pusat Statistik, 2022).

Based on 2021 export data published by CID Harvard, Indonesia has several key export products. Coal ranks first, accounting for 10.83% of Indonesia's total exports, followed by palm oil at 9.99%.

The total export volume for palm oil in 2022 was 2,171,699 tons, supporting employment for up to 16 million people. This production comes from three types of plantations: large private estates (PBS), producing 28.21 million tons; smallholder estates (PR) producing 16.31 million tons; and state-owned large estates (PBN), producing 2.30 million tons (Badan Pusat Statistik, 2022).

Palm oil production is distributed across seven provinces in Indonesia, with a total plantation area of 16.38 million hectares (Ministry of Agriculture, 2022). Riau Province has the largest plantation area in Indonesia, covering 2.86 million hectares, followed by Central Kalimantan with 2.02 million hectares, and North Sumatra with 2.25 million hectares (Kementerian Pertanian, 2022).

Corresponding to the plantation areas, Riau Province has the highest palm oil production in Indonesia, accounting for 18.67% of the national total, followed by Central Kalimantan at 17.86%, West Kalimantan at 10.97%, North Sumatra at 10.79%, and East Kalimantan at 8.76%, with the remaining 32.96% produced by other provinces with palm oil plantations (Kementerian PPN/Bappenas, 2022).

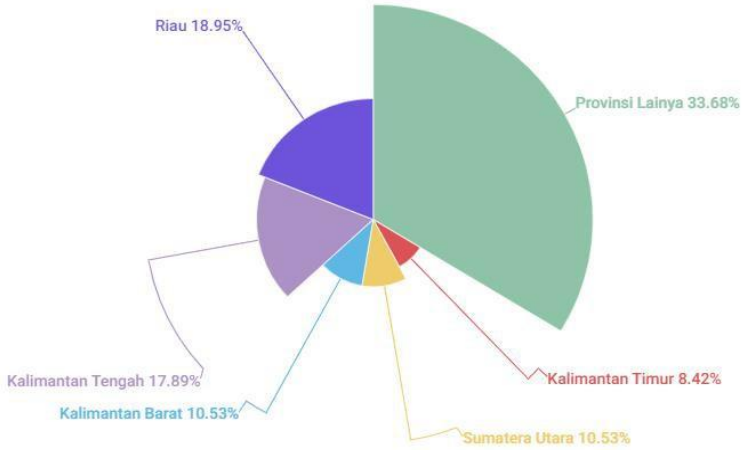

Figure 1.
Palm Oil Production by Province in Indonesia
Source: Processed data, 2024

Based on data from the Directorate of Food and Agriculture of the National Development Planning Agency/Bappenas in 2021 on the National Palm Oil Industry: Reality and Challenges, the government has continued to support the palm oil sector through various policy measures, including the following:

1. Strengthening independent farmer institutions, financing sustainable palm oil certification, and providing continuous assistance to smallholder palm oil farmers.
2. Implementing precision agriculture, tracking and verifying the legality of palm oil commodities, and strengthening palm oil plantation infrastructure for improved efficiency, productivity, and quality of fresh fruit bunches (FFB) for smallholder farmers.
3. Supporting the implementation of Good Manufacturing Practices (GMP) and Standard Operating Procedures (SOPs) to produce oil that meets downstream industry specifications, as well as utilizing big data technology, artificial intelligence, and the internet of things.
4. Providing research funding focused on thematic downstream palm oil products, enabling the research output to be implemented.

The government has also developed a roadmap for the palm oil industry, aiming to promote the downstream development of palm oil in Indonesia. The roadmap is divided into three main sections: 1) General Information, 2) Issues, and 3) Follow-up Actions.

One of the key challenges highlighted in the roadmap is productivity. The average educational level of Indonesia's palm oil farmers is elementary school, with an average landholding size of two hectares (Nahlunnisa, Santosa, & AM Zuhud, 2017). According to Traction Energy Asia *Traction Energy Asia*, (2020) six root problems hinder independent palm oil farmers: 1) limited land size, 2) low productivity, 3) poor FFB quality, 4) inefficient work patterns, 5) insufficient technical plantation financing, and 6) low bargaining power in the market.

Many of these issues are also faced by KPKS Tekad Mandiri. Productivity is a major challenge that needs to be addressed by KPKS Tekad Mandiri. According to the cooperative's 2023 annual report, KPKS Tekad Mandiri produced only 9.06 tons/year. This is critical because

an increase in production leads to higher income (Pradnyawati, 2021). A significant increase in production contributes to higher harvest yields, income, and the welfare of smallholder palm oil farmers (Setyawan, 2021).

The figure below shows that member income per group does not exceed IDR 2,000,000, which must be further reduced by operational costs such as harvest wages, management salaries, and bank debts incurred by the cooperative due to replanting efforts. The replanting efforts conducted by KPKS Tekad Mandiri should ideally yield more productive outputs, increasing farmer income and thereby improving welfare. However, based on this data, KPKS Tekad Mandiri requires a thorough evaluation and corrective actions moving forward.

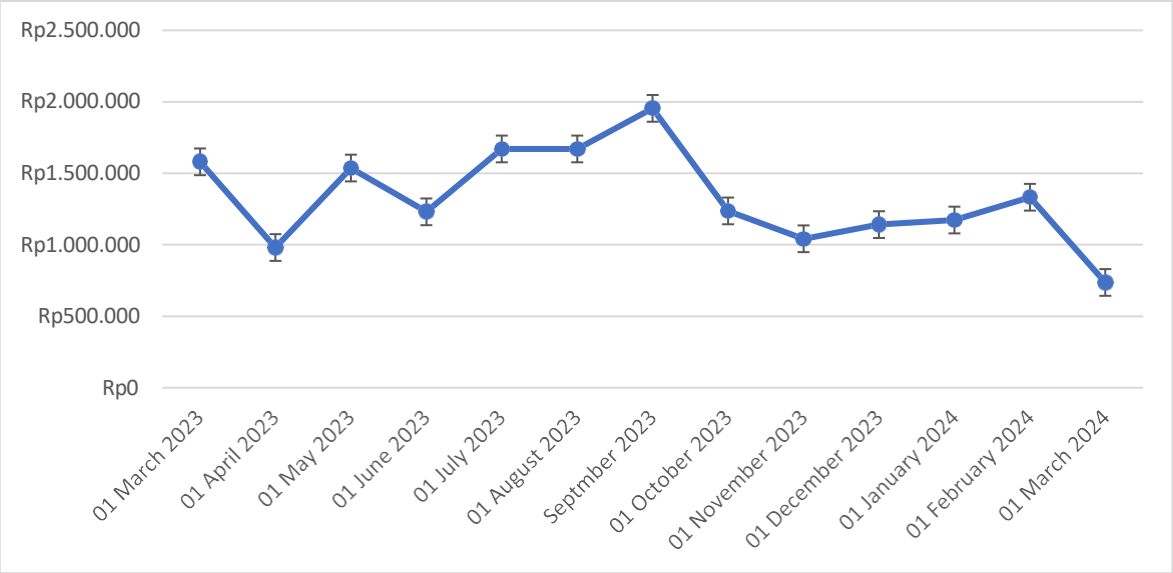

Figure 2.
Group Payment List to Members before Operations
Source: Processed data, 2024

Given the complexity of these challenges, this study aims to assess the health of the Palm Oil Plasma Cooperative (KPKS) Tekad Mandiri, focusing on financial aspects (financial performance evaluation, financial management, and financial sustainability). Production levels are also assessed to determine farmer welfare levels at KPKS Tekad Mandiri post-replanting. This approach seeks to identify the root problems and provide an overall organizational improvement strategy. With these evaluations, cooperative management can plan necessary improvements, and the government can provide targeted support based on the cooperative's needs.

METHOD

The research model developed to assess cooperative health is based on three financial aspects: 1) Financial Performance Evaluation, 2) Financial Management, and 3) Financial Sustainability. Each aspect was then scored according to the Technical Guidance of the Cooperative Deputy Field No. 15 of 2021. The total score was categorized into four ranges: $80 \leq x < 100$, $66 \leq x < 80$, $51 \leq x < 66$, and < 51. Each of these ranges corresponds to a different status: "healthy" for the highest range, "fairly healthy" for the second range, "under supervision" for the third range, and "under special supervision" for the lowest range.

The subject chosen for this study is KPKS Tekad Mandiri, a palm oil plasma cooperative located in Kemang Indah Village, Mesuji Raya District, Ogan Komering Ilir Regency, South Sumatra Province. KPKS Tekad Mandiri manages a 755-hectare palm plantation with 385 active members, divided into 26 plots, with two administrators per plot. KPKS Tekad Mandiri was selected as the research subject because the cooperative initiated replanting in 2018, and the plantation has been producing fresh fruit bunches (FFB) since 2022. KPKS Tekad Mandiri is

registered as a legal entity with registration number 0013/KDK.62/XII/98.

This research adopts a case study approach. The objective of this case study is to explore the unique characteristics of a particular case (Stake, 1995). In this study, replanting is a relatively new issue under investigation. The authors hope to contribute findings that provide solutions to ongoing replanting challenges in palm oil plantations across Indonesia.

RESULTS

Based on the calculations for each ratio, the categories and color symbols for the 13 indicators were recapitulated according to the Technical Guidance of the Cooperative Deputy Field No. 15 of 2021. The results are as follows:

Table 1. Summary KPKS Tekad Mandiri 2020 - 2023

Indicator	category			
	2020	2021	2022	2023
Asset Profitability (Return on Asset)	Unhealthy	Unhealthy	Unhealthy	Unhealthy
Equity Profitability (Return on Equity)	Unhealthy	Unhealthy	Unhealthy	less healthy
Operational Costs to Operational Income	Unhealthy	Unhealthy	Unhealthy	Moderately
Cash and Bank to Short-term Liabilities	Healthy	Unhealthy	Unhealthy	Unhealthy
Receivables to Funds Received	Healthy	Healthy	Healthy	Healthy
Current Assets to Short-term Liabilities	Healthy	Moderately	Moderately	Moderately
Receivables Turnover	Unhealthy	Sehat	Unhealthy	less healthy
Total Capital Turnover	Unhealthy	Healthy	Healthy	Healthy
Total Asset Turnover	Unhealthy	Healthy	Healthy	Healthy
Asset Growth	-	Healthy	Healthy	Healthy
Equity Growth	-	Healthy	Healthy	Healthy
Net Business Result Growth	-	Unhealthy	Moderately	Unhealthy
Net SHU to Principal and Mandatory Savings	Unhealthy	Unhealthy	Unhealthy	Healthy

The table above categorizes each year. Below is a summary graph of the results for KPKS Tekad Mandiri from 2020 to 2023. The four-year summary indicates a decline in organizational health at KPKS Tekad Mandiri, which suggests a decline in both the organizational health and welfare levels of palm oil farmers over time.

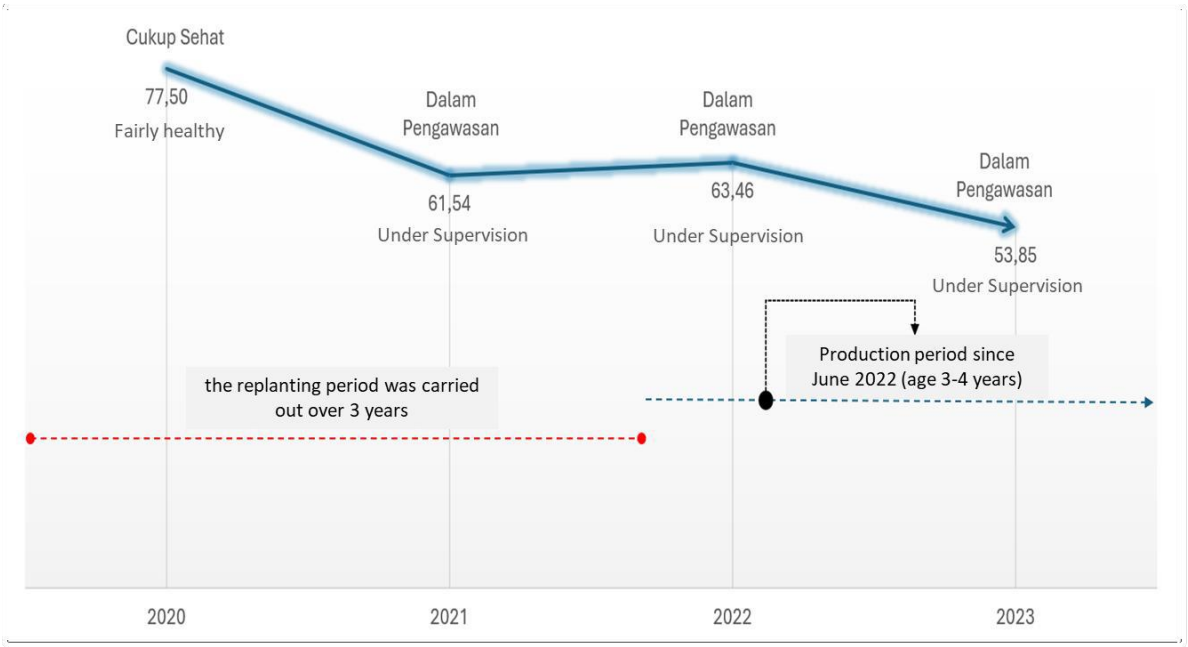

Figure 3.
Summary of KPKS Tekad Mandiri Categories for 2020 - 2023

Production and CPO prices for KPKS Tekad Mandiri in 2023 are as follows:

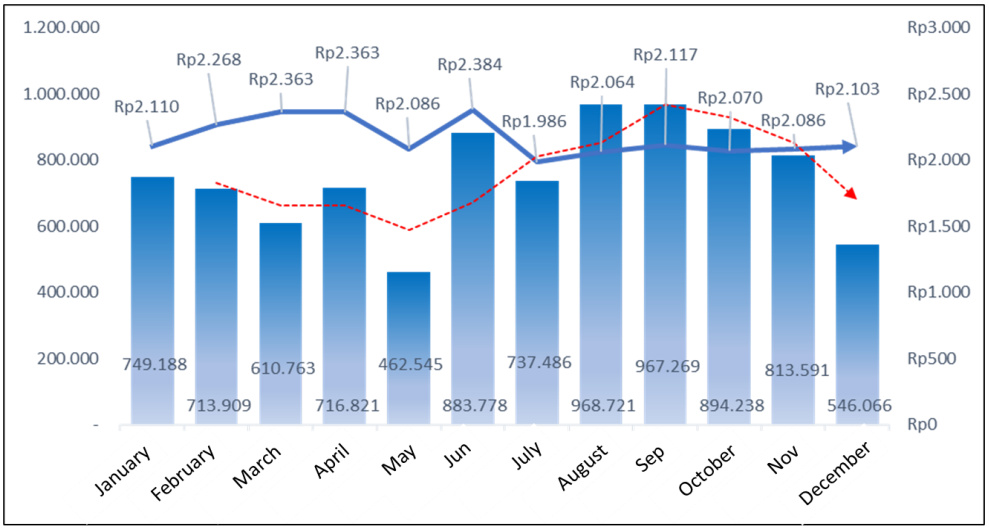

Figure 4.
Production and CPO Prices for KPKS Tekad Mandiri in 2023

The graph above shows palm oil production at KPKS Tekad Mandiri in 2023 when the trees were four years old, with a total annual production of 9.06 tons and an average monthly production of 755,365 kg. This result is relatively low because, according to Mangoensoekarto (2007), expected productivity at the age of four should be 15 tons for S1 land quality (very good), 13.5 tons for S2 (good), and 12.0 tons/ha for S3 (sufficient) quality land. The average price from January to December 2023 was IDR 2,166.73.

This low production rate affects farmer welfare levels (Hidayatullah, 2023). To understand the impact of price and production on farmer welfare at KPKS Tekad Mandiri, further analysis was conducted using IBM SPSS Statistics 26. The following assumptions were tested:

1. Normality Test.
   The normality test results show that the residuals in this analysis are normally distributed, as the Asymp. Sig. (2-tailed) value is 0.200 > 0.05. Thus, further testing can proceed.
2. Multicollinearity Test.
   The multicollinearity test results show a VIF of 1 and TOL of 1, indicating no multicollinearity in the independent variables. Thus, the independent variables are not correlated, ensuring no multicollinearity issues affect the regression model.
3. Autocorrelation Test.
   The autocorrelation test result shows a Durbin-Watson value of 1.980, which is very close to 2, indicating no significant autocorrelation in this regression model.
4. Heteroscedasticity Test
   The scatterplot results show randomly distributed points with no clear pattern, visually indicating no strong signs of heteroscedasticity in the regression model. The scatterplot can be found in the appendix.

Table 2. Rekapitulasi Kategori KPKS Tekad Mandiri Tahun 2020 - 2023

Variabel	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
Constant		1.583	74.685	.000
Price	-.328	.729	-14.459	.000
Production	.942	.024	41.496	.000
R Square	0.995			
Adjusted R Square	0.994			
Std. Error of the Estimate	0.33403			
F-statistic	965.485			
Prob (F-statistic)	.000[b]			

Source: Processed Data, 2024

Based on the table above, the conclusions regarding the impact of palm oil production and CPO prices on farmer welfare are as follows:

1. Impact of Palm Oil Production on Farmer Welfare. Based on the data table above, each unit increase in palm oil production increases farmer welfare by 0.942 units. Conversely, a one-unit decrease in palm oil production reduces farmer welfare by 0.942 units. The t-test probability value for the palm oil production variable is 0.000 < 0.05, indicating a significant effect of palm oil production on farmer welfare.
2. Impact of CPO Prices on Farmer Welfare. Based on the results obtained, each one-unit increase in the CPO price decreases farmer welfare by 0.328 units. Conversely, a one-unit decrease in the CPO price increases farmer welfare by 0.328 units. The t-test probability value for the CPO price variable is 0.000 < 0.05, indicating a significant effect of CPO prices on farmer welfare.
3. Coefficient of Determination (R Square). The percentage contribution of the independent variables (production and CPO prices) to the dependent variable (farmer welfare) is 99.5% (R Square = 0.995). The remaining 0.5% is influenced by other variables not studied in this research.
4. Simultaneous F-Test. The F-test probability value is 0.000 < 0.05, indicating a significant effect of palm oil production and CPO prices on farmer welfare.
5. Partial t-Test. The t-test probability value for the palm oil production variable is 0.000 < 0.05, indicating a significant effect of palm oil production on farmer welfare. The t-test probability value for the CPO price variable is also 0.000 < 0.05, indicating a significant effect of CPO prices on farmer welfare. Overall, the analysis results show that palm oil production and CPO prices have a significant effect on farmer welfare.

DISCUSSION

This study indicates that the replanting program must be accompanied by improved financial management and a stronger focus on productivity optimization efforts. Furthermore, the researchers found that debt management has also become a major challenge for farmers. Although the replanting program increased palm oil productivity by 0.942%, this increase still falls short of the ideal productivity level. This suggests that while there are positive outcomes, the program's effectiveness needs further improvement, particularly to achieve expected productivity standards.

On the other hand, the financial health of the cooperative shows a significant downward trend, moving from a "Fairly Healthy" category in 2020 to "Under Supervision" from 2021 to 2023. This decline is largely due to inefficient debt management. During the replanting program, the cooperative took out a substantial loan (IDR 12 billion) without fully accounting for a fixed five-year interest rate of 5%. This loan was primarily used for replanting operations; however, rising fertilizer costs in 2021, the prohibition of subsidized fertilizer, and pest and disease outbreaks led to significant budget overruns.

These budget increases forced the cooperative to take on additional bank loans, exacerbating its debt burden and worsening its financial condition. As a result, 30% of production earnings had to be allocated to debt repayments, which often proved insufficient, compelling the cooperative to seek additional loans to meet payment obligations. This heavy reliance on external loans creates a debt cycle that strains the cooperative, hindering its ability to maintain stable financial health.

The findings show that while the replanting program can provide benefits in terms of increased production, without effective financial management and careful planning, cooperatives can find themselves in financial difficulty. Therefore, a more cautious approach to debt management, budget planning, and regular evaluation of fund usage and production outcomes is necessary. This is important to ensure that the replanting program yields long-term sustainable benefits for farmer welfare and the cooperative's financial health.

CONCLUSION AND SUGGESTION

The study titled "Organizational Health Review on Financial and Production Aspects Post-

Replanting (Case Study: Tekad Mandiri Palm Oil Plasma Cooperative)" provides several conclusions:

1. Based on the analysis of the cooperative's financial performance scores from 2020 to 2023, it can be concluded that the cooperative's financial performance has fluctuated significantly. In 2020, the cooperative was in the "Fairly Healthy" category with a score of 77.5. However, it fell to the "Under Supervision" category in 2021 due to a 16-point decrease, bringing the score to 61.5, and remained in the "Under Supervision" category in 2022 and 2023, with scores of 63.5 and 53.8, respectively.
2. The replanting efforts by KPKS Tekad Mandiri did not result in organizational improvements; rather, the financial aspect analysis reflected a declining health status year by year.
3. Three areas of the organization have deteriorated: 1) Cash and Bank to Short-term Liabilities, 2) Current Assets to Short-term Liabilities, and 3) Net Business Result Growth. These indicators reveal an increasing debt level without being matched by adequate internal cash capacity.
4. Four indicators show some improvement, specifically: 1) Equity Profitability (Return on Equity), 2) Operating Costs to Operating Income, 3) Current Assets to Short-term Liabilities, and 4) Receivables Turnover. Despite some improvement, these four indicators only saw slight increases, reaching "less healthy" and "fairly healthy" categories, without achieving "healthy" status.
5. Production levels must be improved, as the current output of 9.06 million tons per year remains well below the expected productivity levels of 12-15 million tons per year. This issue requires serious attention, as production significantly impacts farmer welfare. This was demonstrated in the regression analysis, where a one- unit increase in production raises farmer welfare by 0.942 units.

Suggestions from the study "Organizational Health Review: Financial Aspect Analysis of KPKS in the Context of Replanting" include:

1. For the Replanting Program Provider: Funds allocated for the People's Palm Oil Program (PSR) should undergo regular monitoring and evaluation, both regarding fund usage and organizational health status of the implementing cooperatives, in this case, the smallholder-owned KPKS.
2. For KPKS Tekad Mandiri: The supervisory body of KPKS Tekad Mandiri must conduct regular evaluations of the cooperative's health. This could serve as internal monitoring of the organization's financial health.
3. For Replanting Management Funds: It is recommended that funds be managed in compliance with the established Standard Operating Procedure (SOP) for Replanting Management. Following SOP guidelines can support decision-making in replanting processes for smallholder plantations, ensuring that the organization adheres to predefined procedures.
4. For Future Researchers: This study evaluates organizational health in the context of replanting. However, it does not address the effectiveness of replanting funds. Future studies should consider evaluating 1) Replanting Fund Usage and 2) Financial Needs for the Replanting Program. These studies could provide improvements for a replanting program that is effective, efficient, appropriate, and capable of increasing productivity for smallholder palm oil plantations across Indonesia.

REFERENCES

Arikunto, S. (2006). Prosedur Penelitian Suatu Pendekatan Praktik. Jakarta: PT Rineka Cipta.

Badan Pusat Statistik. (2022). Proporsi Tenaga Kerja pada Sektor Industri Manufaktur (Persen). Diambil dari https://www.bps.go.id/id/statistics- table/2/MTIxNyMy/proporsi-tenaga-kerja-pada-sektor-industri-manufaktur--persen-.html

Bauer, G. F., & Jenny, G. J. (2013). Salutogenic organizations and change. Dordrecth: Springer.

Brigham, E. F., & Ehrhardt. (2005). Financial Management Theory And Practice. Ohio: South Western Cengage Learning.

Darwis, D., Meylinda, M., & Suaidah, S. (2022). Pengukuran Kinerja Laporan Keuangan Menggunakan Analisis Rasio Profitabilitas Pada Perusahaan Go Public. Jurnal Ilmiah Sistem Informasi Akuntansi, 2(1), 19–27.

Dendawijaya, L. (2009). Manajemen Perbankan. Jakarta: Ghalia Indonesia. Fahmi, I. (2012). Analisis Kinerja Keuangan. Bandung: Alfabeta.

Fauziyyah, L. (2014). Penilaian Kesehatan Koperasi Unit Desa di KUD" PONGGOK BARU" Blitar. Jurnal Pendidikan Ekonomi (JUPE), 2(3).

Febriyanti, N. K. S. L., & Sudiyani, N. N. (2018). Analisis Penilaian Tingkat Kesehatan Kredit Koperasi Ditinjau Dari Non Performing Loan (NPL) Dan Loan To Deposit Ratio (LDR) Pada Koperasi Dana Mandiri Desa Abiansemal Di Kabupaten Badung. Jurnal manajemen dan bisnis equilibrium, 4(2), 186–197.

Ghofar, M. A. (2021). Analisis Tingkat Kesehatan BMT UGT Nusantara Cabang Glenmore Kabupaten Banyuwangi Tahun 2016-2020. Tesis Institut Agama Islam Darussalam Blokagung Banyuwangi.

Haikal, H., Manda, G. S., & Rakhman, A. (2020). Effect of Cash Turnover and Accounts Receivable Turnover on Profitability. Business Innovation and Entrepreneurship Journal, 2(1), 376264.

Harvard CID. (2021). Atlas of Economic Complexity. Diambil dari https://atlas.cid.harvard.edu/explore

Hatta, M. (2005). Membangun Koperasi dan Koperasi Membangun – Gagasan dan Pemikiran. Jakarta: Penerbit buku kompas.

Hery. (2016). Analisis Laporan Keuangan Integrated and Comprehensive Edition. Jakarta: PT Grasindo.

Hidayatullah, T. (2023). Analisis Empiris Produksi Kelapa Sawit Terhadap Tingkat Kesejahteraan Petani. Jurnal Budget: Isu Dan Masalah Keuangan Negara, 8(1), 156– 175.

Iqbal, M., & Kurniawati, Y. (2020). Pengaruh Perputaran Aktiva Tetap dan Perputaran Modal Kerja Terhadap Profitabilitas Pada PT. Alfa Sarana Insani. AKURAT| Jurnal Ilmiah Akuntansi FE UNIBBA, 11(1), 79–89.

Jubaidah, J. J. (2018). Efektivitas Pengelolaan Dana pada Koperasi Simpan Pinjam An- Nisa di Samarinda. EKONOMIA, 7(1), 155–161. Diambil dari http://ejurnal.untag-smd.ac.id/index.php/EKM/article/view/3230

Kartasapoetra, A. G. (2017). Climatology of Climate Effect on Soil and Plants. Jakarta: Bumi Aksara.

Keller, J. L. (2011). Advancing Student Success with Competency Points: Elevating Engagement and Motivation in Community College English Composition Students. Community College Journal of Research and Practice, 35(6), 484–504. https://doi.org/10.1080/10668926.2010.515513

Kementerian Perencanaan Pembangunan Nasional/ BAPPENAS. (2021). Industrialisasi Sawit Nasional: Realitas Dan Tantangan. Jakarta: Direktorat Pangan dan Pertanian Kementerian Perencanaan Pembangunan Nasional/ BAPPENAS.

Kementerian Pertanian. (2022). Statistik Perkebunan Unggulan Nasional 2020-2022. Diambil dari https://ditjenbun.pertanian.go.id/template/uploads/2022/08/STATISTIK- UNGGULAN-2020-2022.pdf

Kickbusch, I., Franz, C., Holzscheiter, A., Hunger, I., Jahn, A., Köhler, C., … Schmidt, J.-O. (2017). Germany's expanding role in global health. The Lancet, 390(10097), 898– 912.

Machfiroh, I. S., Permadi, J., Sur, W. A. A., & Putri, R. P. (2022). Penilaian Kesehatan Koperasi pada Koperasi Sawit Makmur Berdasarkan Petunjuk Teknis Deputi Bidang Perkoperasian Nomor 15 Tahun 2021. Jurnal Akuntansi, 14(2), 262–274.

Mangoensoekarto, S. (2007). Managemen Tanah dan Pemupukan Budidaya Perkebunan. Yogayakarta: UGM Press.

Munawir, S. (2010). Analisis Laporan Keuangan (4 ed.). Yogyakarta: Liberty. Nahlunnisa, H., Santosa, Y., & AM Zuhud, E. (2017). Dampak Perkebunan Kelapa Sawit Terhadap Keanekaragaman Spesies Tumbuhan Tropika (Studi Kasus: Provinsi Riau). Wahana Forestra: Jurnal Kehutanan, 12(1), 76–88.

Nurfadilah, B. I. (2019). Akuntansi Dasar Buku Pintar Untuk Pemula: Akuntansi Dasar. Yogyakarta: Andi.

Okfitasari, A., & Suyatno, A. (2018). Analisis Kesehatan Koperasi Syariah dalam Upaya Meningkatkan Kinerja dan Pelayanan. Jurnal Ilmiah Ekonomi Islam, 4(02), 91–102.

Pradnyawati. (2021).). Pengaruh Luas Lahan, Modal dan Jumlah Produksi Terhadap Pendapatan Petani Sayur di Kecamatan Baturiri. Ekuitas Jurnal Pendidikan Ekonomi, 9(1), 93-99.

Prasikadewa, I. G. N. B., Susila, G. P. A. J., SE, M. B. A., & Yudiaatmaja, F. (2017). Analisis Tingkat Kesehatan Koperasi Werdhi Dharma Prawerti di Kabupaten Tabanan. Jurnal Manajemen

Indonesia, 5(2).
Riyanto, B. (2010). Dasar-Dasar Pembelanjaan Perusahaan (4 ed.). Yogyakarta: BPFE. Rudianto. (2012). Akuntansi Pengantar: Konsep dan Teknik Penyusunan Laporan Keuangan. Jakarta: Erlangga.
Sarah, T. A. (2015). Mengukur Tingkat Kesehatan Laporan Keuangan pada KJKS Makmur Berdasarkan Keputusan Menteri Koperasi dan Usaha Kecil dan Menengah No. 35.3/Per/M.Kukm/X/2007 Periode 2009 dan 2013. Diambil dari http://eprints.dinus.ac.id/17643/
Stake, R. (1995). The art of case research. . Thousand Oaks, CA: Sage Publications, doi:10.2307/329758.
Supriyanto, A., Dekas, R., & Ita, I. (2020). Analisis Kesehatan Koperasi Kredit Sentosa Palembang. MBIA, 19(3), 343–354.
Supriyati, M. (2016). Rancangan Sistem Informasi dengan Balanced Scorecard untuk Penilaian Kinerja Koperasi. Tesis Universitas Dipenogoro.
Swarjana, K. (2022). Populasi-Sampel Teknik Sampling dan Bias Dalam Penelitian. Yogyakarta: Andi.
Traction Energy Asia. (2020). Strategi Pembenahan Petani Sawit Swadaya. Diambil dari https://katadata.co.id/infografik/5e9a495c6fe2e/strategi-pembenahan-petani-sawit- swadaya
Wardoyo, T. P. B., & Hidayat, F. N. (2023). Indonesia Gila Sawit? Diambil dari https://egsa.geo.ugm.ac.id/2023/07/21/indonesia-gila-sawit/