

# The effect of human resource development on the productivity of members of the Binjai City multi-business cooperative (KSU) source of Sustenance

Zainal<sup>1</sup>, Surya Sevi Wijayanna Lumban Tobing<sup>2</sup>, Fauzan Azim<sup>3</sup>

<sup>1,2,3</sup>Industrial Management Study Program, Akademi Teknik Indonesia Cut Meutia, Indonesia

---

## ARTICLE INFO

### Article history:

Received Dec 30, 2024  
Revised Dec 31, 2024  
Accepted Jan 10, 2025

### Keywords:

Cooperatives;  
Human Resource  
Development;  
Productivity.

---

## ABSTRACT

The purpose of the research is to determine the influence of human resource development on the productivity of members of the Binjai City Multi-Business Cooperative (KSU). This type of research is a quantitative descriptive research, with a simple linear regression analysis method. The population of this study is 43 respondents. Data collection techniques through interviews, questionnaires and documentation studies. The statement instrument is measured by the Likert scale. The results of the study show that the development of human resources has a positive and significant effect on the productivity of members of the Multi-Business Cooperative (KSU) Sumber Rezeki Binjai City by 53.8%.

*This is an open access article under the CC BY-NC license.*



---

### Corresponding Author:

Zainal,  
Industrial Management Study Program,  
Akademi Teknik Indonesia Cut Meutia,  
Jl, Medan binjai KM 16,5, Sumber Melati Diski, Sunggal, Deli Serdang, Sumatera Utara, Indonesia  
Email: zhafran.zain226@gmail.com

---

## 1. Introduction

For the Indonesian economy, cooperatives are a form of people's economic movement with the principle of kinship and as one of the pillars of the country's economy in realizing a prosperous society (Sobarna, 2021). The presence of cooperatives is expected to be able to encourage the potential of the community to continue to develop its productive sector in meeting the needs of the community's life (Ulum & Anggaini, 2020)(Aryawati et al., 2022)(Yuniara & Afrianty, 2024)(Safitri & Hammam, 2025).

In addition, cooperatives also play a role as one of the facilitators and also companions for the community in carrying out their business ventures, for example through capital assistance, management, marketing, and other assistance. Based on Law Number 17 of 2012, a cooperative is a legal entity established by an individual or a legal entity, with the separation of members' assets as capital to run a business, meeting common needs in the social, economic, and cultural fields in accordance with applicable principles and values.

The direction of functional cooperatives within the business entity has a big role in the national economy, and also realizes a harmonious relationship between employees and the company (Hendra et al., 2021)(Carina et al., 2022). Cooperatives are expected to increase members' income and increase economic productivity and provide maximum benefits (Nanga, 2005).

The challenge in building a competitive advantage is to build quality human resources. Human resources are the most valuable wealth in an organization (Sinambela, 2021)(Dr Ha Rusdiana, 2022)(SJACHRIATIN, 2023)(SJACHRIATIN, 2023)(Wuli, 2023). Human resources as a driver in the implementation of the development of a nation. The success of an cooperatives is seen from the efforts and

quality of human resources owned (Gunastri, 2017). The quality of good human resources will make it easier for the organization to achieve its goals (Dwi Purnama et al., 2020). The quality of human resources can develop in accordance with the expectations of the organization through continuous development and training programs.

Human resource development is an activity carried out by an organization in order to improve the expertise, skills and quality of its human resources. So that in the end it can increase human productivity. Human resource development is a planned and sustainable effort made by an organization to improve knowledge, attitudes and skills according to needs (Apriliana & Nawangsari, 2021).

Sumber Rezeki Multi-Business Cooperative (KSU) which was established on August 29, 2008. KSU Sumber Rezeki has been registered with the Office of Small and Medium Enterprises Cooperatives of Binjai City, North Sumatra Province with Legal Entity Status No. 74/BH/IL.13/VIII/2009 dated August 10, 2009. located at Jalan Danau Ranau, Sumber Mulyo Rejo Village, East Binjai District, Binjai City, North Sumatra Province.

The establishment of KSU Sumber Rezeki was motivated by the desire to advance the economy and help community members who work as mobile herbal medicine sellers, farmers, and farm workers as well as stall businesses in Ward IX Kel.SM.Rejo, especially on Jl. Danau Ranau Gg.Pacet and to further arouse the spirit of togetherness and help which is the culture of the Indonesian people is very realistic if a cooperative is formed.

KSU Sumber Rezeki members are mostly business actors who sell Jamu / Bandrek Traveling which has its own uniqueness compared to other cooperatives in Binjai City that need to develop the ability of their human resources so that in running a business they can get optimal profits. With the ability of resources that continue to be developed, it is hoped that KSU Sumber Rezeki members will be able to carry out their obligations as members, especially the obligation to pay loan installments.

With good member productivity, this will certainly indirectly increase the ability of cooperatives to continue to play a role in helping to improve the economy of members and the surrounding community and in turn will also contribute to the national economy as the purpose of cooperatives contained in article 3 of Law No. 25/1992, which reads: "Cooperatives aim to advance the welfare of members in particular and society in general and participate in building an economic order in order to create an advanced, just, and prosperous society based on Pancasila and the 1945 Constitution.

The problems encountered at KSU Sumber Rezeki are that KSU Sumber Rezeki lacks members' knowledge in managing their household finances so that sometimes bad loans occur, limited understanding and competence, document management is less effective, lack of supervision of the management and lack of communication and coordination between the management and members.

The investment made by cooperatives in human resource development is one of the efforts to prepare human beings as individuals, employees and employees in facing various changes that are happening today both in the economic, cultural, social and political fields (Kurniawan, 2020). Human resource development is expected to be one of the ways carried out in improving the ability of humans to carry out a job better.

Human resource development is based on the fact that every human being needs better knowledge, expertise and skills in preparing themselves to start and complete a job and face the changes that occur due to the existence of new technologies or new product markets (Hartati & Nurul Hidayati Murtafiah, 2022). This affects work productivity.

Productivity is the comparison between inputs and outputs in producing products and services. Labor productivity is a measure of the use of human resources in the production process to achieve the desired results (Jumantoro et al., 2019). The productivity of cooperative members has decreased, it is seen that some members are late in paying loans due to the inability of members to manage household finances. The lack of competence possessed by members makes motivation in work less while the workload is high.

## 2. Research Method

This research was conducted at the Multi-Business Cooperative (KSU) Sumber Rezeki Binjai City, located on Jalan Danau Ranau Ward IX, Sumber Mulyo Rejo Village, East Binjai District, Binjai City. The focus of

this study is to look at the influence of human resource development (HR) (independent variable) on the productivity of KSU Sumber Rezeki members (bound variable). This study uses one independent variable because it is to see how the impact of human resource development activities that have been carried out is affected. The sampling technique in this study is total sampling, meaning that the entire population is used as a sample. The sample in this study is all members (KSU) of the Binjai City Source of Sustenance which totals 45 people.

The data sources used are primary data and secondary data. Primary data is obtained directly from the object being researched through respondents' answers. Secondary data from literature studies/documentation. The data analysis in this study uses descriptive analysis methods and quantitative analysis. Meanwhile, the data quality test uses classical assumption tests and linear regression analysis.

### 3. Result and Discussion

#### Classical Assumption Test

##### 1. Normality Test

The regression model obtained will be tested for normality. This test is to see if the data is normally distributed and observation of the data distribution (points) on the diagonal axis in the P-P Plot graph image.(Nasrum, 2018). This study uses the plot method

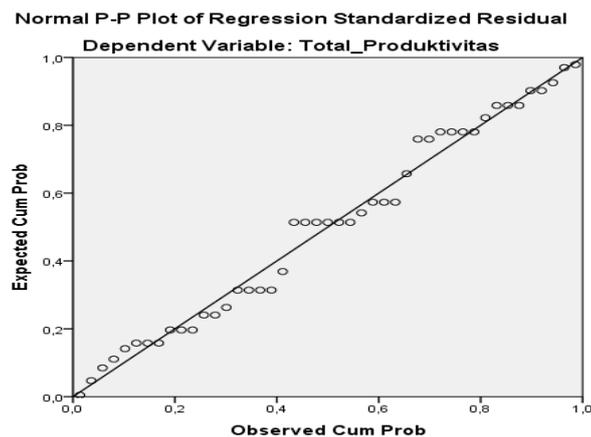


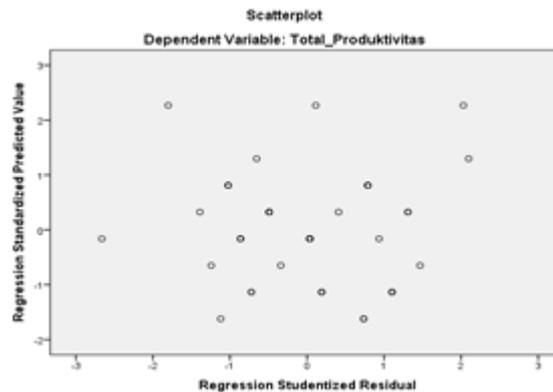
Figure 1 shows that in the P-P graph the data plot is in the direction of the diagonal line so that it can be concluded that the data is normally distributed. The regression model obtained meets the normality test..

##### a. Heteroscedasticity Test

The regression model obtained will be tested for heteroscedasticity. This test is to see the dissimilarity/difference of the variant with the rest of the observations. Homoscedasticity occurs when the variance of the remaining observations is not different/fixed whereas heteroscedasticity occurs when the variance is different (Sugiyono, 2008).

Heteroscedasticity occurs because there is a change in circumstances that is not reflected in the regression model specification. Heteroscedasticity occurs when the variance of the residue is not constant.

A viable regression model does not occur heteroscedasticity. The Scatterpot pattern is used to detect heteroscedasti. If the existing scatterplot pattern forms a certain regular pattern, then the regression model occurs heteroscedasticity. If the scatterplot does not form a pattern or is random then the regression is not affected by heteroscedasticity.



**Figure 2.** Heteroscedasticity Test

Figure 2 shows the scatter diagram is randomly shaped and does not form a pattern. From the results, it can be seen that the regression model obtained does not occur heteroscedasticity. The regression model obtained is feasible to describe the productivity variables of KSU Sumber Rezeki members.

### b. Multicollinearity Test

The data obtained will be carried out a multicollinearity test. This test is to see if there is a clear linear correlation between independent variables. Multicollinearity causes the standard deviation of each regression coefficient to be very large, thus distorting the significant degree of influence of the dependent variable. The influence of the independent variable (X) on the dependent variable (Y) is difficult to separate (Nurcahya et al., 2023).

The way to test whether there is multicollinearity is to use the inflation factor variance value (VIF). If the VIF limit value is 5. If the VIF is greater than 5, then the variable has a multicollinearity problem with other independent variables (it can be inferred that there is multicollinearity).

**Table 1.** Multicollinearity test

Model	Coefficients <sup>a</sup>				
	Correlations			Collinearity Statistics	
	Zero-order	Partial	Part	Tolerance	VIF
1 (Constant) Human Resource Development	,734	,734	,734	1,013	1,000

Table 1 shows that the regression model in this study does not occur multicollinearity as seen from the tolerance value of 1,013 and the VIF value of 1,000.

### c. Autocorrelation test

The data obtained was autocorrelation tested. This test is used to see if there is a relationship/correlation in the t-period with the previous or subsequent period. Durbin-Watson (DW) is used to perform autocorrelation tests (Ghozali, 2013).

**Table 2.** Autocorrelation test

Model	Model Summary <sup>b</sup>				Durbin-Watson
	df1	Change Statistics		Sig. F Change	
1	1 <sup>a</sup>	43		,000	2,122

Table 2 shows that the regression model in this study does not autocorrelate. This is shown by the calculation  $dw > dw \text{ table}$  ( $2.122 > 1.6148$ ), and it can be concluded that there is no autocorrelation.

## 2. Linear Regression Analysis

This study uses a simple linear regression model with one variable being human resource development (HR). Partial test (t-test) to look at individually.

**Table 3.** Linear regression test

Model	Coefficients <sup>a</sup>					
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	8,276	1,686		4,910	,000
	Human Resource Development	,584	,082	,734	7,082	,000

Table 3 shows the results of data processing that produced a regression model as follows:  $Y = 8.276 + 0.584 X + e$ . In the model, there is a constant value of 8.276, meaning that without the development of Human Resources (HR), the productivity of cooperative members is worth 8.276. Likewise, a coefficient value of 0.584 was obtained, which shows that every 1 (one) point increase in human resource development will increase productivity by 0.584. The tcount value in this research regression model is 7.082 and the ttable value is 1.681, so the tcount value > ttable ( $7.082 > 1.681$ ). This means that the independent variable, namely the development of human resources, has a positive effect on the productivity of cooperative members. If the implementation of human resource development increases, the productivity of KSU Sumber Rezeki members will also increase. The human resource development carried out by the management has a significant effect on the productivity of cooperative members as seen from a significant value of  $0.000 < 0.05$ . This is in line with research (Lubis, 2018), (Fauzi & Nurul, 2020), that human resource development carried out in the management will have a significant positive effect on the work productivity of members. For this reason, it is necessary to increase the implementation of human resource development that human resource development has a significant positive effect on work productivity.

Development activities are carried out to improve conceptual skills, decision-making abilities, and interpersonal relationships to achieve common goals, and are a long-term skill development or educational process for managers (upper and middle levels) and the organization will be run (Holy et al., 2023).

The human resource development carried out is to carry out monthly meetings and provide training on household financial management, provide knowledge on financial literacy, provide material insights on business management well including material on service to customers, maintain the cleanliness of herbal medicine/bandrek products to be sold, improve archives and always build good communication between management and members, and carry out the Annual Member Meeting (RAT) on time.

The determination coefficient ( $R^2$ ) describes the extent to which independent variables (human resource development) in general can affect the increase or decrease of dependent variables (productivity). The determination coefficient varies from 0 to 1. If the value of the determination coefficient is close to 1, it can be said that the influence of the independent variable (X) on the dependent variable (Y) is very large. This means that the model used has a stronger influence in explaining the influence of independent variables on dependent variables and vice versa.

**Table 4.** Model summary

Model	R	R Square	Model Summary <sup>b</sup>			
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change
1	,734 <sup>a</sup>	,538	,528	1,125	,538	50,159

Table 4 shows that the value of the determination coefficient ( $R^2$ ) in this study is 0.538 (53.8%), meaning that the human resource development variable has an influence of 53.8% on productivity, while the remaining 46.2% was influenced by other variables that were not studied in this study such as compensation, motivation, environment, ethos, education, enthusiasm, work stress and others.

#### 4. Conclusion

Human resource development has a significant effect on the productivity of members of the Binjai City Sumber Rezeki Multi-Business Cooperative (KSU) with a determination value of 53.8% while the remaining 46.2% were influenced by other variables that were not researched such as compensation, motivation, environment, ethos, education, enthusiasm, work stress and others. The human resource development that has been carried out by KSU Sumber Rezeki is a monthly meeting to provide training and material on good business management. Members can consult about the problems they face. Monthly meetings can be held in

stages if the members are more than 50 people. For this reason, it is hoped that there will be various efforts that can maximize human resource development programs in the future, so that the expected productivity will be maximized). It is hoped that further research will add other variables that affect the productivity of KSU Sumber Rezeki members such as Job Performance Assessment, commitment, job satisfaction, motivation, compensation and so on.

## References

- Apriliansa, S. D., & Nawangsari, E. R. (2021). Pelatihan dan pengembangan sumber daya manusia (sdm) berbasis kompetensi. *FORUM EKONOMI*, 23(4). <https://doi.org/10.30872/jfor.v23i4.10155>
- Aryawati, N. P. A., Widiaty, E., Yanti, E. R., Tanjung, A., Anwar, A., Atika, A., & Utami, S. O. (2022). *Manajemen UMKM Dan Koperasi*. Tahta Media Group.
- Carina, T., Rengganis, R. R. M. Y. D., Mentari, N. M. I., Munir, F., Silaen, M. F., Siwiyanti, L., Usmayanti, V., Himawan, I. S., Susilawati, E., & Challen, A. E. (2022). *Percepatan digitalisasi UMKM dan koperasi*. TOHAR MEDIA.
- Dr Ha Rusdiana, M. M. (2022). *MANAJEMEN SUMBERDAYA MANUSIA: Untuk Meraih Keunggulan Kompetitif*. Arsad Press.
- Dwi Purnama, M. W., Rahmawati, P. I., & Yulianthini, P. (2020). Pengaruh Sistem Pengembangan Sumber Daya Manusia Terhadap Kinerja Karyawan Di PT. Arta Sedana Singaraja. *Prospek: Jurnal Manajemen Dan Bisnis*, 2(1). <https://doi.org/10.23887/pjmb.v2i1.26212>
- Fauzi, M., & Nurul, W. (2020). Pengaruh Disiplin Kerja, Motivasi Kerja dan Pengembangan Karir terhadap Kinerja Karyawan PT. Semarang Autocomp Manufacturing Indonesia. *Jurnal Ekonomika Dan Bisnis*, 7(1).
- Ghozali, I. (2013). Ghozali, Imam (2013). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21 Update PLS Regresi*. Semarang: Badan Penerbit Universitas Diponegoro.
- Gunastri, N. M. (2017). Pengembangan Sumber Daya Manusia Berbasis Kompetensi. *Forum Manajemen*, 11(2), 80–89. <https://doi.org/10.61938/fm.v11i2.63>
- Hartati, S., & Nurul Hidayati Murtafiah. (2022). Pelatihan dan Pengembangan Sumber Daya Manusia Dalam Lembaga Pendidikan Islam. *An Naba*, 5(2). <https://doi.org/10.51614/annaba.v5i2.161>
- Hendra, H., Arfandi SN, A. S. N., Sudarso, A., Candra, V., Handiman, U. T., Simarmata, H. M. P., Butarbutar, M., Sudarmanto, E., & Sugiarto, M. (2021). *Manajemen Koperasi*. Yayasan Kita Menulis.
- Holy, I., Haedar, H., & Dewi, S. R. (2023). Pengaruh Pelatihan Dan Pengembangan Karyawan Terhadap Produktivitas Kerja Karyawan. *Jesya*, 6(2), 1761–1771. <https://doi.org/10.36778/jesya.v6i2.1134>
- Jumantoro, R., Farida, U., & Santoso, A. (2019). Pengaruh Kompetensi, Motivasi Kerja, Beban Kerja, Dan Pelatihan Terhadap Produktivitas Kerja Sumber Daya Manusia Koperasi Serba Usaha Anak Mandiri Ponorogo. *ISOQUANT : Jurnal Ekonomi, Manajemen Dan Akuntansi*, 3(1). <https://doi.org/10.24269/iso.v3i1.244>
- Kurniawan, B. (2020). Pengembangan SDM Dalam Pendidikan Islam. *Cakrawala: Jurnal Manajemen Pendidikan Islam Dan Studi Sosial*, 4(2). <https://doi.org/10.33507/cakrawala.v4i2.323>
- Lubis, T. W. (2018). Pengaruh Pelatihan Kerja dan Produktivitas Kerja Terhadap Pengembangan Karier Karyawan Pada PT . Angkasa Pura Solusi Journal of Management Science ( JMAS ). *Ilmu Manajemen*, 1(3).
- Nanga, M. (2005). Makro Ekonomi Teori, Masalah, dan Kebijakan. In *Jakarta: Rajawali Pers*.
- Nasrum, A. (2018). Uji Normalitas Data Untuk Penelitian. *UJI NORMALITAS DATA Untuk PENELITIAN*.
- Nurchaya, W. A., Arisanti, N. P., & Hanandhika, A. N. (2023). Penerapan Uji Asumsi Klasik untuk Mendeteksi Kesalahan Pada Data Sebagai Upaya Menghindari Pelanggaran Pada Asumsi Klasik. *Madani: Jurnal Ilmiah Multidisipliner*, 1(12).
- Safitri, A. A. D., & Hammam, H. (2025). Analisis Strategi Pengembangan Kemandirian Ekonomi Pesantren dalam Menunjang Ekosistem Halal di Kabupaten Bangkalan: (Studi pada Pondok Pesantren Al Falah Kepang). *Maslahah: Jurnal Manajemen Dan Ekonomi Syariah*, 3(1), 13–30.
- Sinambela, L. P. (2021). *Manajemen Sumber Daya Manusia: Membangun tim kerja yang solid untuk meningkatkan kinerja*. Bumi Aksara.
- SJACHRIATIN, E. (2023). *PENGARUH GAYA KEPEMIMPINAN BERORIENTASI PENGETAHUAN, TRANSFORMASI DIGITAL, DAN PENGEMBANGAN SUMBER DAYA MANUSIA TERHADAP KEUNGGULAN KOMPETITIF BERKELANJUTAN MELALUI PERILAKU INOVATIF DAN INOVASI ORGANISASI PADA USAHA KECIL DAN MENENGAH DI JAWA TIMUR*. Universitas 17 Agustus 1945 Surabaya.
- Sobarna, N. (2021). Peluang Dan Tantangan Koperasi Syariah Di Indonesia. *Koperasi Filsafat, Hukum, Strategi, Dan Kinerja*.
- Sugiyono. (2008). Uji Heteroskedastisitas. *Web*.
- Ulum, M. C., & Anggainsi, N. L. V. (2020). *Community empowerment: teori dan praktik pemberdayaan komunitas*. Universitas Brawijaya Press.
- Wuli, R. N. (2023). Penerapan manajemen sumber daya manusia pertanian untuk menciptakan petani unggul demi mencapai ketahanan pangan. *Jurnal Pertanian Unggul*, 2(1), 1–15.
- Yuniara, Y., & Afrianty, N. (2024). *Wakaf sebagai Instrumen Pengentasan Kemiskinan dan Ketimpangan Sosial*. CV Brimedia Global.