

ANALYSIS OF THE IMPLEMENTATION OF THE COMMUNITY EMPOWERMENT PROGRAM FOR SUSTAINABLE LIVELIHOOD IN THE CONTEXT OF COAL MINING COMPANIES

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ABSTRACT

Coal mining companies in fulfilling their social responsibilities through empowerment. One of the guidelines that forms the basis for the implementation of public empowerment on coal mining companies is Kepmen No. 1824 K/30/MEM Year 2018. The research is aimed at: (i) Analyzing the implementation of the community development programmes enacted by PT Arutmin Indonesia to improve the well-being of the people around the operational area; (ii) Analysing the application of community development programmes for sustainable livelihoods in the coal mining company of PT Arudmin Indonesia. The research approach is qualitative. The research site is PT Arutmin Indonesia which consists of five mine sites namely, Asamasam Mine, Kintap Mine, Satui Mine, Batulicin Mine, Senakin Mine and one North Pulau Laut Coal Terminal coal terminal. The time of the research is in one time, in 2023. Primary data collection techniques through in- depth interviews, while secondary data gathering techniques through corporate documents and reports. Data analysis techniques use the management theory of Lloyd & Aho (2020) and the sustainable living framework. The results of the research showed that PT Arutmin Indonesia demonstrated a strong commitment to effective governance in the planning, organization, leading, and controlling of public empowerment programmes. Overall, the contribution of PT Arutmin Indonesia's community empowerment program to sustainable living demonstrates a balanced commitment through various contributions, with 30.51% contributing to the development of Human Capital, contributing 40.11% to Physical Capital, contributing 14.55% to Social Capital, and contributing 6.92% to Natural Capital, as well as contributing 7.91% to Financial Capital. PT Arutmin Indonesia needs to increase attention to natural sustainability in the planning and implementation of empowerment programmes and ensure sustainable financial support, by identifying and supporting local economic projects that potentially provide long-term benefits.

Keywords: Empowerment, governance, sustainable livelihood, CSR

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INTRODUCTION

Indonesia's coal production, exports, and reserves have increased since the mining sector reopened to foreign investment in the early 1990s. Sumatra, Java, Kalimantan, Sulawesi, and Papua all have coal reserves. However, South Sumatra and South Kalimantan as well as East Kalimantan have the largest coal reserves in Indonesia. (www.indonesia-investments.com). The coal mining industry in Indonesia has experienced rapid growth over the past decade. Coal production Indonesia reported 687 million tons in 2022, up 11.9% compared to the previous year of 614 million tons (www.dataindonesia.id). Despite this, Indonesia coal reserves are still the largest in Asia-Pacific, reaching 38.84 billion tons in 2021 (www.esdm.go.id). To improve the welfare of the people of Indonesia, the government continues to encourage efforts to utilize coal. In terms of cheap and affordable energy supply, coal remains the top choice for the Asia Pacific region. (www.esdm.go.id). However, the existence of mining companies that carry out coal mining will have a good or bad impact on the community, economy, and environment around the mining site. (Safri et al., 2023).

The positive impact of coal mining activities on the welfare of communities around mining operational areas includes increasing community income: The presence of coal mining

companies can increase local community income and create new jobs (Akaresti, 2022; N & Merang, 2020). Lowering the unemployment rate: With the availability of new jobs, the unemployment rate around the mining area can decrease (N & Merang, 2020). Improving the quality of life: Another positive impact is the improvement of the quality of life of the community around the mining area due to better access to infrastructure and public facilities (Nggeboe, 2011). Improving the regional economy: With the existence of coal mining companies, the regional economy can increase due to increased income and investment (Nggeboe, 2011). Increasing energy availability: Increased coal production can increase energy availability in Indonesia (Nggeboe, 2011). Meanwhile, the negative impacts of coal mining activities include: (Fitriyani, 2016) Environmental impacts: Coal mining activities can affect the surrounding environment, such as changes that occur in the landscape, declining soil fertility, hazards that threaten biodiversity, declining water quality, declining air quality, and environmental pollution. Former coal mine pits also have the potential to have an impact on the environment related to water quality and quantity.

Social impact: Coal mining activities can create conflicts between companies and communities, lower public health levels, and change social patterns. Economic impact: Fluctuating coal prices can result in fluctuations in state and regional revenues. Health impacts: Coal mining activities can affect the health of the community around the mining area, such as exposure to coal dust that can cause respiratory distress. (www.cnnindonesia.com). These impacts show that coal mining management must be carried out properly and responsibly to reduce its negative impacts on the environment, social, economic, health, and human rights (Fitriyani, 2016). Coal mining companies make various efforts to improve their negative impacts, one of which is through Corporate Social Responsibility (CSR) as an effort to show concern for the environment around the company in which it operates. Corporate Social Responsibility (CSR) has become an integral part of companies, especially legal entities, and is regulated in Law Number 40 of 2007 concerning Limited Liability Companies.

The implementation of CSR by coal mining companies in improving the welfare of the community through the Community Development program and adopting an approach that focuses on Sustainable Livelihood as part of the company's efforts to achieve socially responsible, environmental, and economic management. This approach can help improve the welfare of communities around mining areas by strengthening community capacity to manage and improve their access to resources. Sustainable livelihoods can be integrated into the Community Empowerment program of coal mining companies by increasing community capacity, strengthening partnerships with communities, increasing community access to resources, developing small and medium enterprises, and reducing the negative impact of mining activities. By carrying out this integration, coal mining companies can help improve the welfare of the community around mining sites in a sustainable and socially responsible, economic, and environmentally responsible manner (Nurhayati et al., 2020; Rahayu, 2014).

Previous research has shown that the maintenance of sustainable livelihoods in areas affected by mining is an important component in the preservation of indigenous cultures and the surrounding environment (Chaudhary & Shandilya, 2023). Sustainable livelihoods of communities in mining areas are better than outside mining areas, therefore, communities must adapt to the impacts of mining and build their resilience to help them transition to a sustainable future. Adaptation can involve implementing sustainable livelihood programs that provide

alternative sources of income and employment opportunities (Sutrisno et al., 2023). Coal mining companies in implementing community empowerment and sustainable livelihood programs as part of CSR efforts, can face several problems, including: lack of community participation, lack of government support and lack of human resources to implement the program as well as the negative impact of mining activities.

METHOD

This study aims to analyze the implementation of the Community Empowerment program carried out by coal mining companies and its impact on Sustainable Livelihoods in the communities around the PT Arutmin Indonesia mine. The method used is a qualitative approach. The term "qualitative" comes from the word "quality", which is widely considered by society to be an antonym of quantity, describing the quantity or quantity of a particular object, such as the amount of water or population. The quality of research objects, such as appreciation for diversity, value, meaning, human emotions, the beauty of artworks, historical value, and others, is more considered in qualitative research. (Abdussamad, 2021) The researcher uses a qualitative approach to collect data, emphasizing the situation to find, understand, explain, and gain an understanding of how the implementation of the community empowerment program of coal mining companies is carried out on the sustainable livelihood of the community in the company's operational area.

Data from interviews, observations, and documents will be analyzed to identify patterns, themes, and meanings that arise related to the implementation of the program and its impact on sustainable livelihoods. The main themes will be identified and analyzed more deeply, with reference to the concept of community empowerment and sustainable livelihoods. The findings will be interpreted in the context of relevant theories and literature to understand the implications of the research results. The process of searching and compiling data is known as data analysis collected from documents, field notes, and interviews. This process includes grouping data into categories, deciphering them into units, synthesizing them, organizing them into patterns, determining what is important and what will be the content of the research, and arriving at conclusions that are easily understood by others and yourself. (Abdussamad, 2021:159).

RESULTS AND DISCUSSION

The results of this study are classified into two research findings, according to two research questions. The two findings of the study are 1) the results of PT Arutmin Indonesia's governance in implementing community empowerment programs to improve the welfare of the community around the operational area. 2) the results of the implementation of the community empowerment program for sustainable livelihoods. Findings Related to the First Question: Analyzing the Governance of the Implementation of the Community Empowerment Program Implemented by PT Arutmin Indonesia to Improve Community Welfare Around the Operational Area. This sub-chapter presents the findings of the research results in connection with the first research question, namely: "Analyzing the governance of the implementation of community empowerment programs implemented by PT Arutmin Indonesia to improve the welfare of the community around the operational area". The questions are arranged based on the variables of community empowerment governance by referring to Lloyd & Aho's (2020)

management theory which consists of Planning, Organization, Leadership and Supervision. Based on the recapitulation of the interview results, it can be concluded regarding the management theory of Lloyd & Aho (2020) as follows:

Table 1. Recapitulation of Interview Results with Governance Theme

Dimension	Source	Summary of Answer	
Planning	SHEC Manager, Environmental & CDEA Superintendent, Admin & CDEA Superintendent.	Have a vision and mission in implementing community empowerment programs. The company's vision is "empowering the mining community to become independent and prosperous" and the Mission is "Empowering local resources and adhering to local customary and cultural values.	
		Have a long-term strategic plan contained in the Community Development and Empowerment Master Plan (PPM) in accordance with the Provincial PPM blueprint document.	
		The company designs a series of short-term strategies that aim to accelerate and expand the benefits of community empowerment programs.	
		Stakeholder involvement in decision-making.	
Organizing	SHEC Manager, Environmental & CDEA Superintendent, Admin & CDEA Superintendent	At each mine location, the company has an organizational structure that runs a community empowerment program, namely the Community Development & External Affairs (CDEA) department. The department consists of Superintendent as the head of the department, then Supervisor, Officer and Assistant.	
		The workforce that implements community empowerment programs has technical, social, management, community development skills and competencies, planning skills, evaluation, interpersonal communication, project management, cultural awareness and the ability to adapt to the community.	
		Employee development through competency certification, periodic training, participation in conferences and seminars, mentorship, joining professional communities, comdev-related performance assessments, and soft skills development.	
		In increasing the effectiveness of the implementation of community empowerment programs, employee performance evaluations and competency development are carried out every year.	
		SHEC Manager Leadership, Environmental & CDEA Superintendent, Admin & CDEA Superintendent.	Job descriptions of key tasks, daily tasks and special tasks and classification of roles and level of project experience, cultural awareness and ability to adapt to society.
		Employee development through competency certification, periodic training, participation in conferences and seminars, mentorship, joining professional communities, comdev-related performance assessments, and soft skills development.	
		In increasing the effectiveness of the implementation of community empowerment programs, employee performance evaluations and competency development are carried out every year.	
		Leadership SHEC Manager, Environmental & CDEA Superintendent, Admin & CDEA Superintendent	Job description, main tasks, daily tasks and special tasks and classification of roles and experience levels.
	The company implements a monitoring process to ensure the effectiveness and appropriateness of the community empowerment program, starting with monitoring planning that includes the establishment of clear performance indicators and the resources needed.		
	Emphasizes cooperation, collaboration and effective communication and focuses on transparency and openness.		
	Involvement of members in strategic planning, division of work based on competence and effective cooperation,		

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			application of code of ethics and interpersonal work evaluation.
Supervision Environmental Superintendent	SHEC &	Manager, CDEA	The Company supervises the implementation of the empowerment programs in its operational areas through regular monitoring, evaluation, internal audits, and coordination with stakeholders.
Admin & CDEA Superintendent			Set measurable KPIs to monitor program progress. In addition, direct monitoring in the field is actively carried out to anticipate changes in the situation and ensure that the program runs as planned. The company conducts measurements using the SROI (Social Return on Investment) and IKM (Community Satisfaction Index) approaches.
			The company routinely compiles and submits reports on the progress and achievements of community empowerment programs. The company collects data from all operational locations/sites related to the implementation of the program, the achievement of targets and the impact that has been achieved. The report includes a summary of the progress of activities, achievements, and challenges, and the report also includes testimonials from beneficiaries or affected.
			Responsive to the results of the evaluation, priority determination is carried out by considering the impact, urgency of resources and time.
			Seek to engage relevant parties and get their commitment to support for proposed improvements. Periodic evaluations continue to be carried out to ensure the desired improvements

Planning Dimension

The company has a vision and mission to implement community empowerment programs by prioritizing the welfare and independence of local communities and maintaining local cultural and customary values. The company has a long-term strategic plan with a comprehensive and community-based approach, building strong partnerships and a commitment to empowering local resources to achieve short-term and long-term sustainable development. The company's short-term strategy aims to accelerate and expand the benefits of community empowerment programs. The strategy emphasizes long-term impact, stakeholder consultation, and in-depth analysis. Flexibility, adaptability and speed in carrying out responsibilities are the cornerstones in handling emergency situations that may affect the implementation of community empowerment programs, with an emphasis on coordination, program adaptation, deployment of additional resources, open communication, and learning for the future.

Organizing Dimension

The company has an organizational structure at each site that specifically runs community empowerment programs through the Community Development & External Affairs (CDEA) department. The hierarchy of this department consists of the Superintendent as the head of the department, the Supervisor, the Officer and the Assistant. This department is responsible for compiling, managing resource allocation, implementing, monitoring progress, conducting periodic evaluations and reporting periodically to management, government and other stakeholders.

The workforce that implements community empowerment programs in the company has a variety of technical, social, and management skills and competencies that include community development understanding, planning, evaluation, interpersonal communication, project management, cultural awareness and the ability to adapt to the community. The company

develops the competencies of its employees through competency certification, periodic training, participation in conferences and seminars, mentorship, joining professional communities, comdev-related performance assessments, and soft skills development. Every year, the Company evaluates employee performance to improve the effectiveness of the implementation of community empowerment programs. The purpose of this evaluation is to identify development needs and priorities, set performance goals, track and provide feedback, measure the impact of competency improvement, evaluate the results of community empowerment programs, and plan improvements.

Leadership Dimension

The company describes the work of the team with an approach to analyzing the needs of the program, the required competencies, the involvement of experts and stakeholders. Job descriptions include primary tasks, daily tasks and special tasks and teamwork and classify roles according to experience level. The process of monitoring the company begins with planning, which includes the establishment of performance indicators and the necessary resources. Periodic data collection is carried out through surveys, interviews, and field observations. Performance indicators are used to evaluate the effectiveness, effect, and efficiency of a program. These include community participation rates, knowledge increases, behavioural change, access to basic services, economic impact, program sustainability, and community satisfaction levels. Monitoring results are used to provide feedback to the program implementation team and stakeholders, as well as to identify weak areas, problems, or bottlenecks, and plan for strategy changes to improve program outcomes.

The company emphasizes good cooperation and collaboration through effective communication mechanisms, with a focus on transparency and openness. Open communication takes place not only among team members but also with relevant parties and the local community. Regular meetings and open discussions help with the exchange of ideas and feedback. All stages of the program prioritize active community involvement. On the other hand, a proactive approach is used to address disagreements or communication difficulties through the introduction of problems, open discussions, and a commitment to improvement. Companies help execution team members work together in ways such as building a shared vision and mission, enabling open communication, and forming small work teams with specific goals. Engaging team members in strategic planning and the division of work based on competencies increases their involvement and contribution in community empowerment programs. Regular meetings, discussions, and joint problem-solving support collaboration and teamwork. PT Arutmin Indonesia ensures effective cooperation and achievement of goals through the implementation of the code of ethics and interpersonal performance evaluation.

Surveillance Dimensions

The Company supervises the implementation of community empowerment programs in its operational areas through regular monitoring, evaluation, internal audits and coordination with stakeholders. The company measures the impact of the program holistically using the SROI and IKM approaches. The company analyzes, evaluates, consults with related parties, and implements improvement solutions in response to the results of supervision. The company routinely compiles and submits reports on the progress of community empowerment programs, including data from all operational locations. The report provides a summary of progress, achievements, and challenges, complemented by beneficiary testimonials. Delivered to internal

management for decision-making, to program implementers for assessment and adjustment, as well as to stakeholders through print and electronic distribution to obtain feedback through meetings, presentations, and publications. The company is responsive to the results of the evaluation of community empowerment programs by analyzing strengths, weaknesses, opportunities, and challenges. Priority determination is carried out by considering the impact, urgency, resources, and implementation time. The company not only engages the internal team but also external stakeholders and the community in follow-up steps. Through meetings, public consultations, and FGDs, the Company ensures that community empowerment programs can be improved in accordance with the needs and aspirations of the community.

Findings Related to Question Two: Analyzing the implementation of community empowerment programs for sustainable livelihoods in the coal mining company PT Arutmin Indonesia. This sub-chapter presents the findings of the research results in connection with the second research question, namely: "Analyzing the implementation of community empowerment programs for sustainable livelihoods in the coal mining company PT Arutmin Indonesia". The questions are prepared based on the variables of community empowerment governance by referring to the implementation of the Ministry of Energy and Mineral Resources No. 1824/K/30/MEM/2018 which consists of Education, Health, Real Income Level or Employment, Economic Independence, Socio-Culture, Environmental Management, Community Institutional Formation and Infrastructure Development. Based on the recapitulation of interview results and document analysis. Therefore, it can be concluded that the implementation of the community empowerment program for sustainable livelihoods at the coal mining company PT Arutmin Indonesia is as follows.

Table 2. PT Arutmin Indonesia Community Empowerment Programs/Activities in 2019 – 2022

It	Field	Number of Activities
1	Education	134
2	Health	101
3	Real Income Level or Employment	91
4	Economic Independence	76
5	Socio-Cultural	82
6	Environmental Management	51
7	Institutional Establishment of Community Institutions	32
8	Infrastructure Development	141
	Total	708

Education

PT Arutmin Indonesia provides scholarship and facilitation programs to vulnerable communities around the mine. The goal of the program is to improve access to education and

sustainability of life by using local resources. The company provides a variety of basic skills courses, such as pursuing packages A, B, and C, as well as product innovation, sewing, and sasirangan training. PT Arutmin Indonesia builds education and training centers such as Simantap, Rumah Permata, and Satui Community Center to encourage youth around the mine to be productive, creative, and innovative. These centers are also available to the public. In addition, the company improves the ability of teachers, especially honorary employees and TPA teachers, through appropriate training programs and scholarships. The training also provides skills to housewives and MSME actors in the mining area. Regularly, the program is monitored and evaluated for continuous development.

Health

The company seeks to improve access and quality of public health around the mine through health programs such as public health checks, pregnant women, providing additional food for the elderly and toddlers, COVID-19 vaccination, and blood donation activities. The company provides counseling to the community, as well as working with various parties in the health sector to build local health infrastructure such as posyandu, renew the facilitation of health centers and provide medical facilities to ensure good access to health services. The company regularly conducts training for posyandu cadres to improve the health team and the quality of services provided to the community.

Actual Income Level or Employment

By providing various programs such as training, business mentoring, and financial assistance, the Company is committed to supporting the growth of local businesses in the mine's operational area. Through management and technical training, the implementation of the company's programs also improves the skills of farmers and breeders. The company assists the agriculture, livestock, and fisheries sectors through various programs, introduction to agricultural technology, market access, and agricultural technology. Companies are also proactive in assessing local workers before hiring them in various positions. In addition, the company provides specialized training in accordance with the needs of the industry through operator training through partners (contractors).

Economic Independence

The purpose of the company's MSME program is to increase the economic independence of the community. By providing training and production facilities, this program encourages MSME businesses to innovate and develop. The company conducts regular monitoring and evaluation (monev) to monitor progress and find obstacles for MSMEs. Assistance includes capital loans, training according to the field of business, and technical services and guidance. The assistance is adjusted to the skills and needs of MSME actors and is based on the findings of social mapping and observation.

Socio-Cultural

The company participates in religious programs, builds and repairs places of worship around the mine. The company participates in recovery and reconstruction after natural disasters and educates the public on how to deal with disasters. The company works closely with relevant agencies, formal institutions, and informal groups to reduce and prevent damage to nature around the mine perimeter. By involving the community in cultural arts activities such as dancing, beach parties, and panting music, the company strives to preserve and maintain local culture, language, and customs. To maintain and maintain local culture in the

operational area, they collaborate with indigenous groups such as the Dayak Traditional Council (DAD) and the Kuntaw Arts Group.

Environmental Management

Through the climate village program in the target villages, PT Arutmin Indonesia is committed to supporting environmental adaptation and mitigation in the mining area. The company has done many things to reduce and manage organic and non-organic waste well, one of which is teaching the community through training and mentoring how to turn waste into products of economic value.

Institutional Establishment of Community Institutions

The company implements youth development programs in various fields, such as agriculture, plantations, fisheries, waste treatment, convection, BUMDES, cooperatives, and youth organizations. The purpose of this program is to improve the skills, insights, leadership, and entrepreneurship of the community, especially the youth. The company also participates in social activities with partner institutions, such as providing basic necessities to vulnerable groups, planting trees, and holding skills training to help increase the capacity of the community, especially groups.

Infrastructure Development

By collaborating with the local community, the Company helps education by developing resources that support the teaching and learning process. This includes building, repairing, and renovating schools. In addition, the company builds public facilities such as borewells, prayer rooms, mosques, and toilets by working closely with various stakeholders, local institutions, and community leaders to ensure a significant and targeted impact on the communities around the mine perimeter. The company builds and improves health infrastructure such as health centers, posyandu, and posbindu to improve access and quality of health services for residents around the mine.

Analysis of Research Findings

Starting from the results of the research, the results of the research findings can be recapitulated which are the answers to two research questions. The first question is to analyze the governance of the implementation of the community empowerment program carried out by PT Arutmin Indonesia to improve the welfare of the community around the operational area based on the results of in-depth questions with key speakers and the second question is to analyze the community empowerment program for sustainable livelihoods at the coal mining company PT Arutmin Indonesia based on document analysts and in-depth questions with Sources. The following is an analysis of the findings in sub chapter 4.2. The analysis of the findings of this study is presented according to the items of the research question, so that it is divided into two parts according to the order of the research question. Analysis of the Findings Related to the First Research Question: Governance of the Implementation of Community Empowerment Programs Implemented by PT Arutmin Indonesia to Improve Community Welfare Around the Operational Area.

Table 12. Findings Related to the First Research Question of the Planning Dimension

Dimension	Research Findings
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Planning	Have a vision and mission in implementing community empowerment programs. The company's vision is "empowering the mining community to become independent and prosperous" and the Mission "Empowering local resources and adhering to local customary and cultural values".
	Have a long-term strategic plan contained in the Community Development and Empowerment Master Plan (PPM) in accordance with the Provincial PPM blueprint document
	The company designs a series of short-term strategies aimed at accelerating and expanding the benefits of community empowerment programs.
Stakeholder Involvement in Decision-Making	

The company demonstrates its commitment to community empowerment by formulating a vision and mission that focuses on the welfare and independence of local communities and upholding local cultural values. The company's long-term strategic plan demonstrates a comprehensive, community-based approach, geared towards achieving sustainable development. Short-term strategies emphasize accelerating the benefits of empowerment programs, stakeholder consultations, and in-depth analysis. Setting a vision and mission, developing a strategy, communicating with stakeholders are planning designs in social responsibility (Fatima & Elbanna, 2023).

Table 13. Findings Related to the First Research Question of the Organizing Dimension

Dimension	Research Findings
Organizing	At each mine location, the company has the organizational structure that runs the community empowerment program, namely the Community Development & External Affairs (CDEA) department. This department consists of Superintendent as the head of the department, then Supervisor, Officer and Assistant
	The workforce that implements community empowerment programs has technical, social, management, community development skills and competencies, planning skills, evaluation, interpersonal communication, project management, cultural awareness and the ability to adapt to the community.
Development	employees through competency certification, periodic training, participation in conferences and seminars, mentorship, joining the professional community, comdev-related performance assessments, and soft skills development.
Deep	Increase The effectiveness of the implementation of community empowerment programs, employee performance evaluations and competency development are carried out every year.

The company has an organizational structure that specifically handles empowerment programs through the Community Development & External Affairs (CDEA) department. The hierarchy of these departments is clear with defined roles, from Superintendent to Assistant. The workforce is equipped with a wide range of skills and competencies through certification, training, mentorship, and participation in conferences. Organizing social responsibility involves the establishment of an internal organizational structure that specifically handles including the appointment of teams or departments responsible for planning, implementing, and monitoring CSR programs. With good organization, a company can improve its image and reputation in the eyes of the public and stakeholders. This can help in building better relationships with local communities and governments (Rasche et al., 2020).

Table 14. Findings Related to the First Research Question of the Leadership Dimension

Dimension	Research Findings
Leadership	Job description, main tasks, daily tasks and special tasks and classification of roles and experience levels.
	The company implements a monitoring process to ensure the effectiveness and appropriateness of the community empowerment program, starting with monitoring planning that includes the establishment of clear performance indicators and the resources needed.
	Emphasizes cooperation, collaboration and effective communication and focuses on transparency and openness.
	Involvement of members in strategic planning, division of work based on competence and effective cooperation, application of code of ethics and interpersonal work evaluation.

Jobs include primary tasks, daily tasks, and special tasks, as well as role classification and experience level. The monitoring process involves collecting and analyzing information based on established indicators and carried out systematically, continuously on a program or activity. This helps in monitoring and evaluating the effectiveness of the program periodically (Riadi, 2020). Data collection is carried out through various methods, such as surveys, interviews, and field observations. The data collected is used to evaluate the performance and effectiveness of the program. The importance of cooperation, collaboration, and effective communication is emphasized in the context of organizing community empowerment programs. This helps in ensuring that the programs run well and achieve the desired goals. Job title analysis is the process of collecting, evaluating, and organizing job data to provide a basis for job descriptions, job specifications, and data needed for recruitment, training, job evaluation, and performance management in an organization (Komalasari et al., 2022).

Table 15. Findings Related to the First Research Question of the Supervision Dimension

Dimension	Research findings
Supervision	The Company conducts supervision of the implementation of empowerment programs in its operational areas through routine monitoring, evaluation, internal audits, and joint coordination with stakeholders.
	Set measurable KPIs to monitor program progress. In addition, direct monitoring in the field is actively carried out to anticipate changes in the situation and ensure that the program runs as planned. The company conducts measurements using the SROI (Social Return on Investment) and IKM (Community Satisfaction Index) approaches.
	The company routinely compiles and submits reports on the progress and achievements of community empowerment programs. The company collects data from all operational locations/sites related to the implementation of the program, the achievement of targets and the impact that has been achieved. The report includes a summary of the progress of activities, achievements, and challenges, and the report also includes testimonials from beneficiaries or affected.
	Responsive to the results of the evaluation, priority determination is carried out by considering the impact, urgency of resources and time.
	Seek to engage relevant parties and get their commitment to support for proposed improvements. Periodic evaluations continue to be carried out to ensure the desired improvements.

The Company conducts oversight through regular monitoring, evaluation, internal audit, and coordination with stakeholders. The impact of the program is measured holistically with the SROI and IKM approaches. Program progress reports are prepared on a regular basis, covering progress, achievements, and challenges, and involving external stakeholders and the community in follow-up steps. Evaluating community empowerment activities requires interaction with various external stakeholders and is not limited to inter-organizational dynamics (Fatima & Elbanna, 2023).

Analysis of findings related to the second research question:

Analyzing the community empowerment program for sustainable livelihoods at the coal mining company PT Arutmin Indonesia The community empowerment program carried out by PT Arutmin Indonesia is guided by eight areas in accordance with the Ministry of Energy and Mineral Resources No. 1824/K/30/MEM/2018. The eight fields include: Education, Health, Rill or Employment Level, Economic Independence, Socio-Culture, Environmental Management, Community Institutional Formation and Infrastructure Development. Based on the results of interviews with several resource persons and from the analysis of secondary data, both program implementation reports from 2019 to 2022, the strategic plan and program plan obtained the following data:

Education

Table 16. Contribution Programs/Activities in the Field of Education for Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Education	86	37	11	0	0
Percentage	64%	28%	8%	-	-

Source: Secondary Data Processing Results (2023)

In the field of education, the programs implemented by PT Arutmin Indonesia have an impact on Human Capital, Physical Capital and Social Capital. When viewed from the percentage of all programs in the education sector, 64% of the programs implemented by PT Arutmin Indonesia contribute to Human Capital, this reflects the company's commitment to building individual capacity and improving community skills. In addition, 28% of the program contributes to Physical Capital, which indicates the company's support in the sustainability of education, such as adequate school facilities and infrastructure. Although the contribution to Social Capital is only 8%, this confirms the company's efforts in building social networks and community relationships, which also has a positive effect on the educational environment.

Health

Table 17. Contribution of Health Sector Programs/Activities to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Health	55	23	23	0	0
Percentage	54%	23%	23%	-	-

Source: Secondary Data Processing Results (2023)

In the health sector, the programs implemented by PT Arutmin Indonesia have an impact on Human Capital, Physical Capital and Social Capital. PT Arutmin Indonesia shows a strong focus on Human Capital, with 54% of the overall program contributing to human capacity building. These efforts include increasing access to health services, counseling, and health training for local communities, creating a positive impact on the well-being of individuals and communities. The contribution to Physical Capital of 23% reflects the company's commitment to adequate health infrastructure, such as the construction of public health facilities and the provision of medical equipment. In addition, 23% of the contribution to Social Capital is the

development of positive relationships and community participation in health programs, strengthening social capacity and community support.

Actual Income Level or Employment

Table 18. Contribution of Programs/Activities in the Field of Real Income Level or Employment to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Actual Income Level or Employment	20	27	6	8	30
Percentage	22%	30%	7%	9%	33%

Source: Secondary Data Processing Results (2023)

In the context of real income levels, PT Arutmin Indonesia shows programs for human resource development with 22% of the overall program. The Increase in Human Capital reflects the company's efforts to empower local communities through training and skills development. In addition, a contribution of 30% to Physical Capital indicates a role in improving economic infrastructure. Although Social Capital and Natural Capital only reach 7% and 9% respectively, the company also pays attention to building positive relationships with communities and environmental conservation. The most striking is the large contribution to Financial Capital of 33%, showing support for local economic growth.

Economic Independence

Table 19. Contribution of Programs/Activities in the Field of Economic Independence to Sustainable Livelihoods

	Human Capital	Physical Capital	Social Capital	Natural Capital	Modal Financial
Economic Independence	29	18	6	5	18
Presented	38%	24%	8%	7%	24%

Source: Secondary Data Processing Results (2023)

In the field of economic independence, PT Arutmin Indonesia shows a balanced commitment through various programs, with 38% contributing to Human Capital, creating economic opportunities and improving people's skills. The 24% contribution to Physical Capital reflects investment in economic infrastructure that can provide a strong foundation for local economic growth. Despite 8% of the contribution to Social Capital, the company strives to build positive relationships with the surrounding community. The 7% contribution to Natural Capital shows concern for sustainable natural resource management. Furthermore, the 24% support for Modal Financial is the company's effort to support local finance and encourage economic independence.

Socio-Cultural

Table 20. Contribution of Socio-Cultural Programs/Activities to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Socio-Cultural	9	31	38	0	4
Percentage	11%	38%	46%	0%	5%

Source: Secondary Data Processing Results (2023)

In the socio-cultural dimension, PT Arutmin Indonesia shows significant concern through its programs, especially with a 46% contribution to Social Capital, reflecting the company's commitment to building and strengthening positive relationships with the surrounding community. The contribution of 38% to Physical Capital shows investment in the development of social and cultural infrastructure that can improve people's welfare. Although the contribution to Natural Capital is zero, it may reflect prudence in utilizing natural resources to protect and preserve socio-cultural heritage. The 5% support for Modal Financial demonstrates the company's role in supporting cultural and social activities through financial investment. With an 11% contribution to Human Capital, the company also demonstrates efforts to improve human capacity in social and cultural contexts.

Environmental Management

Table 21. Contribution of Environmental Management Programs/Activities to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Environmental Management	1	12	14	33	0
Percentage	2%	24%	10%	65%	0%

Source: Secondary Data Processing Results (2023)

In an effort to manage the environment of the community empowerment program, PT Arutmin Indonesia shows a strong focus on Natural Capital with a contribution of 65% of the overall program. This reflects the company's commitment to the preservation and management of natural resources, including environmental rehabilitation and conservation efforts. The 24% contribution to Physical Capital shows investment in infrastructure that supports environmental sustainability, such as waste management and land remediation facilities. Despite its 10% contribution to Social Capital, the company also seems to be working to build positive relationships with surrounding communities through environmental management programs. Meanwhile, the contribution to Human Capital and Financial Capital of 2% and 0% respectively indicates that the company's focus is more on natural and physical aspects, with potential improvements in human and financial aspects to support full sustainability.

Institutional Establishment of Community Institutions

Table 22. Contribution of the Implementation of Community Institution Formation Programs/Activities to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Institutional Establishment Community	11	4	14	1	2
Percentage	34%	13%	44%	3%	6%

Source: Secondary Data Processing Results (2023)

In an effort to establish community institutions, PT Arutmin Indonesia shows a significant focus on the development of Social Capital with a contribution of 44% of the overall

program. This reflects the company's commitment to building and strengthening social structures and positive relationships with local communities. The contribution of 34% to Human Capital shows efforts to improve human skills and capacities in the institutional context of communities. Meanwhile, 13% of the contribution to Physical Capital reflects investment in infrastructure that supports community institutions, such as activity centers or meeting rooms. Although the contribution to Natural Capital is 3%, this may reflect the concern for the sustainability of nature in the context of community institutional formation. With a 6% contribution to Financial Capital, the company also shows complementary financial support to community institutions.

Infrastructure Development

Table 23. Contribution to the Implementation of Programs/Activities Infrastructure Development Towards Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Infrastructure Development	5	132	0	2	2
Percentage	4%	94%	0%	1%	1%

Source: Secondary Data Processing Results (2023)

In the context of infrastructure development, PT Arutmin Indonesia shows a strong focus on Physical Capital with a contribution of 94% of the overall infrastructure program. This reflects the company's commitment to the sustainable construction of physical facilities, including road infrastructure, buildings, and other facilities that can improve connectivity and support economic growth. Although the contribution to Human Capital is 4%, this may reflect efforts to ensure that infrastructure development also benefits the improvement of human skills and capacity. The 2% contribution to Natural Capital shows concern for natural sustainability in the implementation of infrastructure projects, while 2% to Financial Capital reflects the financial support provided by the company to support the development of the infrastructure. While there is no direct contribution to Social Capital, it is important to ensure that infrastructure development also takes into account social impacts and builds positive relationships with local communities.

Table 24. Contribution of Empowerment Programs/Activities in 2019 – 2022 of PT Arutmin Indonesia to Sustainable Livelihoods

	Human Capital	Physical Mode	Social Capital	Natural Capital	Modal Financial
Education	86	37	11	0	0
Health	55	23	23	0	0
Real Income Level or Employment	20	23	6	8	30
Economic Independence	29	18	6	5	18
Socio-Cultural	9	31	38	0	4
Environmental Management	1	12	5	33	0

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Community Institutional Establishment	11	4	14	1	2
Community Infrastructure Development	5	132	0	2	2
Total	216	284	103	49	56
Percentage	30,51%	40,11%	14,55%	6,92%	7,91%

Source: Secondary Data Processing Results (2023)

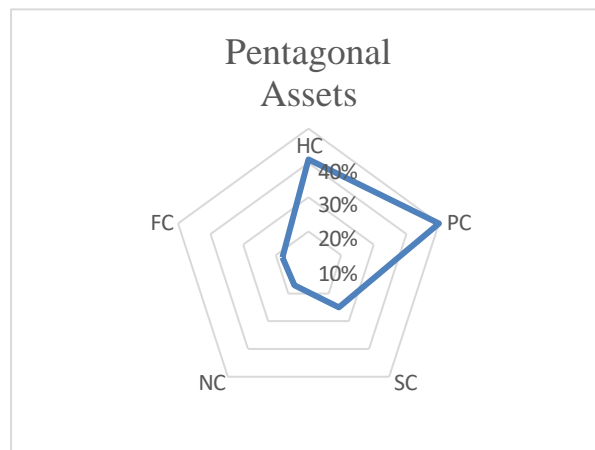


Figure 6. Pentagonal Assets Contribution of Community Empowerment Programs to Livelihoods

Source : Secondary Data Processing Results (2023)

Overall, PT Arutmin Indonesia's contribution to sustainable livelihoods shows a balanced commitment through various contributions, with 30.51% contributing to the development of Human Capital. Companies in mining areas are often faced with various community problems, such as lack of access to education, health, limited skills, and low employment levels (Kumar & Prasad, 2023). Through educational, health and training activities, the company reflects the company's efforts in improving the skills and capacity of the community to achieve economic independence (Zuriati Amani Binti Ab Rani et al., 2023). The contribution of 40.11% to Physical Capital shows a significant investment in the development of physical infrastructure that can provide long-term benefits to the local community. The impact of physical assets is very important for community development because it includes infrastructure such as transportation, roads, vehicles, safe residences and buildings, water supplies and sanitation, energy, communication and technology such as tools and supplies for production (Zuriati Amani Binti Ab Rani et al., 2023).

Meanwhile, 14.55% of the contribution to Social Capital shows efforts to build and strengthen positive relationships with the community, creating sustainable cooperation. Social capital has a significant function in improving people's living standards (Sargani et al. 2022) 6.92% contribution to Natural Capital, companies seem to pay attention to the sustainability of nature in the implementation of empowerment programs. Nonetheless, companies need to improve programs that pay attention to natural capital. Increasing natural capital can help in improving people's welfare and supporting sustainable development. Increasing natural capital

can be done through programs that focus on natural resource management, such as forest management, water management, and land management (Azmat Gani, 2022).

The contribution of 7.91% to Financial Capital reflects financial support that can increase people's access to economic resources. Financial Capital is one of the important aspects in community development and community development. Financial Capital is an economic resource that can be measured and utilized to build the economy and society. In addition, Modal Financial can also help in improving people's welfare through economic empowerment programs, such as microfinance programs (Asmarazisa et al., 2020).

CONCLUSION

Based on the results of the research, it can be concluded that, the governance of the implementation of community empowerment programs implemented by PT Arutmin Indonesia to improve community welfare refers to the management theory of Lloyd & Aho (2020), the results of the study show that the implementation of community empowerment carried out by PT Arutmin Indonesia shows a strong commitment to effective governance in planning, organizing, leading, and supervising community empowerment programs. PT Arutmin Indonesia has a vision and mission as well as short-term and long-term planning in community empowerment. A dedicated organizational structure, the Department of Admin, Community Development & External Affairs (Admin & CDEA), ensures organized leadership and is directly responsible for the planning, implementation, and monitoring of the program. The company shows seriousness about the impact of the program through SROI and IKM measurements and conveys information to stakeholders affirming PT Arutmin Indonesia's commitment to sustainability, transparency and effectiveness of community empowerment programs. Community empowerment program for sustainable livelihoods at the coal mining company PT Arutmin Indonesia. The community empowerment program carried out by PT Arutmin Indonesia is guided by eight areas in accordance with the Ministry of Energy and Mineral Resources No. 1824/K/30/MEM/2018. The eight fields include: Education, Health, Skill or Employment Level, Economic Independence, Socio-Culture, Environmental Management, Community Institutional Formation and Infrastructure Development. The programs that have been implemented by the company contribute to sustainable livelihoods. The company's Human Capital actively improves people's skills and capacity, creating a solid foundation for economic independence and Physical Capital in the development of physical infrastructure. Social Capital builds positive relationships with communities and creates sustainable cooperation, Natural Capital shows concern for natural sustainability in the implementation of empowerment programs and Financial Capital reflects the company's commitment to increase public access to economic resources.

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