

Social Return on Investment (SROI) Analysis of Corporate Social Responsibility Program in Layer Chicken Farming: Partnership Model between Company and Village-Owned Enterprise

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ABSTRACT

Background: Corporate Social Responsibility (CSR) programs in rural contexts often face sustainability challenges due to limited impact measurement methodologies and weak institutional foundations.

Objective: This research analyzes the multidimensional success of the layer chicken farming CSR program and calculates the Social Return on Investment (SROI) value as a comprehensive impact measurement.

Methods: This evaluative case study employed a mixed-methods approach combining qualitative and quantitative data through in-depth interviews (18 informants), structured surveys (42 respondents), focus group discussions (6 FGDs), and participant observation over three months. The SROI framework following Social Value International (2023) methodology was applied to 10 stakeholder categories over the 2022-2025 period, with present value calculations using actual weighted average inflation rate of 4.30%.

Results: The program achieved 100-200% of targets across four dimensions: economic (15 jobs created, Rp 266.9 million Karang Taruna income, Rp 56.3 million local multiplier effect), social (75 women empowered, 120 households reached, protein consumption increased from 2-3x to 4-5x per week), environmental (20.26 tons organic fertilizer, 14.3% rice productivity increase, 35% chemical fertilizer reduction), and institutional (85% BUMDes self-financing ratio, governance score improved from 58/100 to 82/100). SROI analysis yielded a ratio of 1.36:1 with positive net benefit of Rp 123.85 million and 3.5-year payback period. Sensitivity analysis demonstrated program robustness with SROI ranging from 1.10:1 to 1.78:1 across various scenarios.

Conclusion: The company-BUMDes partnership model based on productive economic empowerment effectively creates sustainable shared value with equitable impact distribution across multiple stakeholders, proving viable for replication in similar rural contexts with focus on productivity optimization.

Keywords: Social Return on Investment, Corporate Social Responsibility, layer chicken farming, company-BUMDes partnership, community empowerment, rural development

INTRODUCTION

Corporate Social Responsibility (CSR) programs in Indonesia have evolved from philanthropic charity approaches toward strategic interventions creating sustainable shared value for both companies and communities (Porter & Kramer, 2011). The extractive industry sector, particularly coal mining in South Kalimantan, faces heightened pressure to implement CSR programs that generate transformative impact addressing environmental degradation and socio-economic disparities in ring communities. Poultry farming has emerged as a strategic intervention with proven effectiveness in poverty alleviation in rural areas through employment creation, income generation, and food security enhancement (Bounds & Zinyemba, 2018). PT Bhumi Rantau Energi (PT BRE), a coal mining company operating in Tapin Regency, implemented an innovative layer chicken farming program in partnership with the Village-Owned Enterprise (BUMDes) in Bitahan Baru Village over the 2022-2025 period. This program departs from conventional CSR models by emphasizing productive economic empowerment, strengthening local institutions, and building long-term community capacity rather than distributing short-term aid prone to creating dependency.

Despite significant investment of Rp 355 million over four years, systematic and comprehensive evaluation of the program's social, economic, and environmental impact remains absent. Traditional CSR evaluation in Indonesia tends to focus narrowly on output indicators such as number of beneficiaries or volume of aid distributed, neglecting more substantive outcome and impact dimensions. Furthermore, mainstream evaluation methodologies

struggle to capture multidimensional value created by CSR programs, particularly intangible social and environmental outcomes that are challenging to monetize. This methodological gap results in systematic underestimation of the true value of CSR programs, potentially leading to suboptimal resource allocation decisions and weakening stakeholder accountability. The absence of robust evaluation frameworks also hinders organizational learning and evidence-based replication of successful CSR models in different contexts.

Social Return on Investment (SROI) emerges as a comprehensive impact measurement methodology capable of addressing these limitations by integrating quantitative and qualitative approaches to calculate the social, economic, and environmental value created relative to investment (Nicholls et al., 2012). SROI differs fundamentally from conventional cost-benefit analysis by incorporating stakeholder perspectives, monetizing intangible outcomes, and applying adjustment factors to ensure calculated impact truly reflects program additionality (Social Value International, 2023). The methodology aligns with stakeholder theory by systematically identifying all parties materially affected by an intervention and valuating outcomes from their perspectives (Freeman et al., 2020). SROI methodology has gained international recognition as best practice for social impact evaluation, adopted by leading organizations including the UK government, European Union, and major international foundations. Academic literature demonstrates SROI's effectiveness in evaluating diverse social programs, ranging from health interventions to community economic development and social enterprises, with consistent findings that programs with SROI ratios above 1.0:1 is considered feasible and worthy of replication.

This research addresses critical knowledge gaps regarding the effectiveness of company-BUMDes partnership models in

creating sustainable shared value in rural contexts, particularly in the livestock sector which possesses high potential as a driver of rural economic transformation but remains underutilized in Indonesia's CSR landscape. The livestock sector offers unique opportunities for integrated rural development through linkages between production, markets, and broader development objectives (Scoones & Wolmer, 2021). Layer chicken farming was selected as the program focus due to several strategic advantages: relatively short production cycles (18-20 months per cycle) enabling rapid impact evaluation, high multiplier effects through value chain integration from production to marketing, significant contribution to protein nutrition security especially for vulnerable groups, and circular economy potential through organic waste conversion into agricultural fertilizer. Specifically, this research analyzes two main problems: first, the success level of the layer chicken farming CSR program across four dimensions (economic, social, environmental, institutional); second, the SROI value of the program as a comprehensive measure of investment feasibility and social value creation.

Methodologically, this research contributes to SROI literature by integrating mixed methods approaches combining in-depth qualitative exploration with rigorous quantitative analysis, developing context-appropriate financial proxies for Indonesia's rural setting, and conducting comprehensive sensitivity analysis to test result robustness. Practically, research findings provide evidence-based recommendations for corporate practitioners designing more effective CSR programs, policymakers formulating regulations that incentivize impact-oriented CSR, BUMDes managers seeking sustainable business models, and development practitioners working in community economic empowerment. Theoretically, this research enriches stakeholder theory and shared value literature by demonstrating how strategic

CSR based on productive economic empowerment and institutional strengthening can simultaneously achieve corporate legitimacy objectives and community welfare improvements, transcending the traditional corporate philanthropy versus profit maximization dichotomy that has long dominated CSR discourse.

MATERIALS & METHODS

Research Design and Location

This research employed an evaluative case study design with a mixed-methods approach combining qualitative and quantitative data to comprehensively understand the impact of the layer chicken farming CSR program. The research was conducted in Bitahan Baru Village, Binuang District, Tapin Regency, South Kalimantan Province, selected purposively as the operational ring 1 area of PT Bhumi Rantau Energi. Bitahan Baru Village has a population of 564 people spread across 194 households with predominant livelihoods in agriculture (rice and horticulture) and small-scale plantation businesses. The research period spanned from June 2024 to October 2025, covering the program evaluation period from 2022 (program initiation) to 2025 (fourth year of implementation).

SROI Framework and Data Collection

SROI analysis was conducted following the 6-stage framework of Social Value International (2023): (1) establishing scope and identifying stakeholders, (2) mapping outcomes, (3) evidencing outcomes and giving them value, (4) establishing impact through adjustment factors, (5) calculating SROI ratio, and (6) reporting and embedding results. Primary data were collected through four complementary methods to ensure triangulation and data validity. In-depth interviews were conducted with 18 key informants representing diverse stakeholder categories: PT BRE CSR management (2 persons), BUMDes management (3 persons), Karang Taruna core team (5 persons), support team

(3 persons), beneficiary women (2 persons), organic fertilizer user farmers (2 persons), and village government (1 person). Structured surveys were administered to 42 respondents consisting of layer chicken consumers (20 households), farmer households (15 households), and women involved in the value chain (7 persons). Six Focus Group Discussions (FGDs) were held with specific themes: economic impact evaluation, women's empowerment, environmental sustainability, BUMDes institutional capacity, and overall program sustainability. Participant observation was conducted intensively for three months to understand daily operational dynamics, social interactions among stakeholders, and emerging challenges not captured through formal interviews.

Outcome Valuation and Financial Proxies

Outcome monetization employed context-appropriate financial proxies developed through triangulation of multiple data sources. Labor income was calculated based on actual wages received by the core team and support team over the 2022-2025 period, including base wages, daily wages, bonuses, and estimated value of skill development. BUMDes revenue stream was calculated from 2% management fees of total sales plus institutional capacity improvement valued through comparison with similar BUMDes operating commercial programs. Consumer savings were estimated from price differences between program eggs (Rp 1,500/egg) versus market eggs (Rp 1,800/egg) multiplied by total consumption volume. Women's economic empowerment was valued from additional income from grading, packaging, and marketing activities plus estimated value of increased economic decision-making capacity. Agricultural productivity improvement was calculated from rice and vegetable yield increases after organic fertilizer application multiplied by prevailing market prices. Health benefits were estimated through avoided healthcare costs from malnutrition risk reduction, using

BPJS outpatient and inpatient treatment cost data. Local economic multiplier was estimated through expenditure patterns of program workers for goods and services in the village using Leontief multiplier coefficients. Each financial proxy was validated through triangulation with village government secondary data, BUMDes financial reports, and cross-checking with similar studies in comparable contexts.

SROI Calculation and Adjustment Factors

Net impact was calculated by applying four categories of adjustment factors to gross outcome values: deadweight (what would have happened anyway without the program), attribution (contribution of other factors/actors), displacement (negative impact on other parties), and drop-off (outcome decline over time). Deadweight was estimated through counterfactual scenarios developed via FGDs and interviews with comparison groups in villages without similar programs. Attribution was assessed by asking respondents to estimate the proportional contribution of the program versus other factors to outcomes experienced. Displacement was evaluated through surveys with local businesses potentially negatively affected by the program. Drop-off was projected based on time series data and expert judgment regarding outcome sustainability. Present value calculations used discount rates based on actual weighted average inflation over the 2022-2025 period (2022: 4.2%, 2023: 3.7%, 2024: 2.8%, 2025 projection: 2.5%) resulting in a weighted average of 4.30%. SROI ratio was calculated using the formula: $SROI\ Ratio = \frac{Total\ PV\ Outcome}{Total\ PV\ Input}$. Sensitivity analysis was conducted through five scenarios (base case, optimistic, pessimistic, best practice, PT BRE only) and one-way sensitivity analysis to identify critical variables with highest impact elasticity.

Data Analysis and Validation

Qualitative data were analyzed using thematic analysis with NVivo software to identify patterns, themes, and narratives from interview transcripts and FGD documentation. Quantitative data were processed using Microsoft Excel for descriptive statistics and SROI calculations, with validation through recalculation and peer review. Data triangulation was performed by comparing findings from different methods and sources to ensure consistency and validity. Member checking was conducted by presenting preliminary findings to key stakeholders for verification and feedback. Research quality was ensured through credibility (prolonged engagement, triangulation), transferability (thick

description), dependability (audit trail), and confirmability (reflexivity and documentation of analytical decisions). Ethical considerations included informed consent from all participants, confidentiality guarantees, voluntary participation without coercion, and transparent reporting of limitations and potential conflicts of interest.

RESULT

Multidimensional Program Success

The Layer Chicken Farming CSR Program demonstrated significant achievements exceeding targets across all four dimensions of sustainable development. Table 1 shows program achievements ranging from 100-200% of established targets.

Table 1. Program Success Achievement by Dimension

| Dimension | Indicator | Target | Achievement | Attainment (%) |
|----------------------|---------------------------------|--------------|------------------|----------------|
| Economic | Job creation | 15 people | 15 people | 100% |
| | Karang Taruna income | Grow >100% | Rp 266.9 million | >200% |
| | BUMDes revenue | Sustainable | Rp 31.2 million | Achieved |
| | Local multiplier effect | Measurable | Rp 56.3 million | Significant |
| Social | Women empowerment | 50 people | 75 people | 150% |
| | Consumer penetration | 100 HH | 120 HH | 120% |
| | Protein consumption increase | Increased | 2-3x → 4-5x/week | Significant |
| | Avoided healthcare cost | Measurable | Rp 36 million | Achieved |
| Environmental | Organic fertilizer production | 15 tons | 20.26 tons | 135% |
| | Rice productivity increase | >10% | 14.3% | 143% |
| | Vegetable productivity increase | >10% | 13.6% | 136% |
| | Chemical fertilizer reduction | >30% | 35% | 117% |
| Institutional | BUMDes self-financing ratio | >70% | 85% | 121% |
| | Governance score | Good | 82/100 (Good) | 100% |
| | Innovation capacity | 1-2 programs | 3 new programs | 150% |

The economic dimension recorded the creation of 15 jobs with total Karang Taruna income of Rp 266.9 million and local multiplier effect of Rp 56.3 million. The social dimension recorded involvement of 75 women in the value chain, market penetration of 120 households, and protein consumption increase from 2-3 times to 4-5 times per week. The environmental dimension produced 20.26 tons of organic fertilizer that increased agricultural productivity by 13-14% and reduced chemical fertilizer dependence by 35%. The institutional dimension increased BUMDes

self-financing ratio to 85% and governance score from 58/100 to 82/100.

Social Return on Investment Analysis

The stakeholder identification process yielded 10 categories of parties experiencing material changes. Primary stakeholders include PT Bhumi Rantau Energi (main investor), BUMDes Mitra Hidayah Mandiri (co-investor and operator), Karang Taruna Core Team (5 people), and Karang Taruna Support Team (10 people). Secondary stakeholders include egg consumers (120 households), farmer families (45 households), value chain

women (75 people), and fertilizer-using suppliers, distributors, and other village farmers. Tertiary stakeholders include community members.

Table 2. Program Investment Composition Period 2022-2025

| Investment Source | Component | Year | Value (Rp) |
|------------------------------|---------------------------------|-----------|--------------------|
| PT Bhumi Rantau Energi | Cage infrastructure (500 birds) | 2022 | 155,000,000 |
| | Foundation phase chicks | 2022 | 35,000,000 |
| | Feed & medicine | 2022-2023 | 45,000,000 |
| | Training & assistance | 2022-2023 | 40,000,000 |
| PT BRE Subtotal | | | 275,000,000 |
| BUMDes Mitra Hidayah Mandiri | Land contribution (in-kind) | 2022 | 50,000,000 |
| | Profit reinvestment expansion | 2024 | 30,000,000 |
| BUMDes Subtotal | | | 80,000,000 |
| Total Investment | | | 355,000,000 |

Total program investment of Rp 355 million consisted of contributions from PT Bhumi Rantau Energi of Rp 275 million and BUMDes of Rp 80 million (including land value of Rp 50 million and reinvestment of Rp 30 million).

Table 3. Gross Outcome Valuation Period 2022-2025

| No | Stakeholder | Outcome Type | Value (Rp) | Proportion |
|----------------------------|-------------------------------|--|--------------------|-------------|
| 1 | Karang Taruna Core Team | Base wage + daily + skill development income | 266,500,000 | 31.3% |
| 2 | Karang Taruna Support Team | Base wage + daily + skill development income | 146,500,000 | 17.2% |
| 3 | BUMDes | Revenue stream + managerial capacity | 61,187,200 | 7.2% |
| 4 | Egg Consumers (120 HH) | Shopping savings | 15,600,000 | 1.8% |
| 5 | Farmer Families (45 HH) | Additional income | 54,000,000 | 6.3% |
| 6 | Value Chain Women (75 people) | Economic empowerment | 67,500,000 | 7.9% |
| 7 | Fertilizer-Using Farmers | Productivity + income | 40,520,000 | 4.8% |
| 8 | Suppliers & Distributors | Business growth | 17,000,000 | 2.0% |
| 9 | Local Economy (MSMEs) | Multiplier effect | 56,250,000 | 6.6% |
| 10 | Community Health | Nutrition improvement | 36,000,000 | 4.2% |
| Total Gross Outcome | | | 852,057,200 | 100% |

Gross outcome monetization yielded a total value of Rp 852 million distributed across 10 stakeholder categories with Karang Taruna receiving the largest benefit of Rp 413 million (48.5%).

Table 4. Adjustment Factors for Net Impact

| Outcome Category | Deadweight | Attribution | Displacement | Drop-off | Net Impact (%) |
|---------------------------|------------|-------------|--------------|----------|----------------|
| Core Team Income | 25% | 85% | 0% | 0% | 63.75% |
| Support Team Income | 30% | 85% | 0% | 0% | 59.50% |
| BUMDes Revenue | 15% | 85% | 0% | 5% | 68.68% |
| Consumer Savings | 40% | 95% | 10% | 0% | 51.30% |
| Women Empowerment | 20% | 75% | 0% | 0% | 60.00% |
| Agricultural Productivity | 35% | 65% | 0% | 3% | 41.01% |
| Multiplier Effect | 30% | 70% | 5% | 0% | 46.55% |
| Health Benefits | 35% | 80% | 0% | 3% | 50.44% |

Application of adjustment factors resulted in reduction of gross outcome from Rp 852 million to net impact of Rp 501.1 million (41.2% reduction), reflecting a conservative approach in estimating program additionality.

Table 5. Present Value Input and Outcome

| Year | Nominal Input (Rp) | Discount Factor | PV Input (Rp) | Net Impact (Rp) | PV Outcome (Rp) |
|--------------|--------------------|-----------------|--------------------|--------------------|--------------------|
| 2022 | 205,000,000 | 1.0000 | 205,000,000 | 85,500,000 | 85,500,000 |
| 2023 | - | 1.0510 | - | 135,300,000 | 128,800,000 |
| 2024 | 150,000,000 | 1.0954 | 137,000,000 | 143,200,000 | 130,700,000 |
| 2025 | - | 1.1346 | - | 137,100,000 | 120,800,000 |
| Total | 355,000,000 | | 341,955,820 | 501,100,000 | 465,807,193 |

Present value calculation using discount rate based on actual inflation with weighted average of 4.30% yielded PV input of Rp

341.96 million and PV outcome of Rp 465.81 million.

Table 6. SROI Ratio Calculation and Program Feasibility

| Metric | Value | Interpretation |
|-------------------|-----------------|---|
| Total PV Input | Rp 341,955,820 | Investment in present value |
| Total PV Outcome | Rp 465,807,193 | Impact in present value |
| Net Benefit | Rp 123,851,373 | Net program value (POSITIVE) |
| SROI Ratio | 1.36: 1 | Every Rp 1 → Rp 1.36 social impact |
| Return Ratio | +36.2% | Significant positive return |
| Payback Period | ~3.5 years | Program breaks even in 3.5 years |
| Status | FEASIBLE | Program is viable and profitable |

SROI ratio calculation yielded a value of 1.36:1 with positive net benefit of Rp 123.85 million and 3.5-year payback period.

Table 7. Sensitivity Analysis - Different Scenarios

| Scenario | Key Assumptions | SROI Ratio | Net Benefit |
|---------------|---------------------------------------|------------|------------------|
| Base Case | Actual program data | 1.36:1 | Rp 123.9 million |
| Optimistic | Productivity +20%; Mortality 7% | 1.62:1 | Rp 212.0 million |
| Pessimistic | Productivity -20%; Mortality 13% | 1.10:1 | Rp 34.2 million |
| Best Practice | Productivity 25 kg/bird; Mortality 5% | 1.78:1 | Rp 267.0 million |
| PT BRE Only | PT BRE input Rp 275 million only | 1.69:1 | Rp 191.0 million |

Sensitivity analysis demonstrated program robustness with SROI ratio ranging from 1.10:1-1.78:1 across various scenarios. One-way sensitivity analysis identified chicken productivity as the most critical variable with ±16% elasticity.

DISCUSSION

Multidimensional Success and Sustainable Development Framework

Program success exceeding 135-200% of targets across four dimensions validates Porter and Kramer's (2011) shared value theory demonstrating that CSR based on productive economic empowerment simultaneously creates company value through legitimacy and social license to operate, and community value through income, employment, and capacity building. Achievement exceeding expectations

indicates that programs designed with explicit Theory of Change and involving local institutions can generate significant impact. Economic transformation of Karang Taruna from unemployment to employment with income of Rp 1.15 million per month exceeding Tapin regional minimum wage creates dignity and social recognition fundamental to human development. BUMDes revenue of Rp 31.2 million and local multiplier effect of Rp 56.3 million demonstrate spillover benefits distributed across various village economic segments, consistent with Leontief multiplier theory suggesting productive economic activities generate cumulative effects through inter-sectoral linkages.

The social dimension with 75 women involved (150% of target) demonstrates transformative success in women

empowerment. These findings align with Nath et al.'s (2024) research in Bangladesh showing women in livestock programs have 16-point higher empowerment indices in economic decision-making, asset ownership, and freedom of movement. Similar findings were reported by Bharathy et al. (2024) in Tamil Nadu, India, where native chicken farming programs significantly enhanced women's economic participation, decision-making capacity, and social status in rural communities. Women previously limited to domestic roles now actively participate in productive economic activities such as egg grading, packaging, and marketing. Protein consumption increase from 2-3 times to 4-5 times per week contributes significantly to nutritional status improvement among vulnerable groups, consistent with literature identifying quality animal protein access as an important determinant of nutritional status and long-term productivity. Avoided healthcare cost of Rp 36 million from malnutrition risk reduction demonstrates the program contributes to cost-effective preventive health, where every rupiah invested in nutrition improvement saves Rp 2-3 in treatment costs.

Circular economy implementation through 20.26 tons of organic fertilizer production increasing agricultural productivity by 13-14% and reducing chemical fertilizer by 35% demonstrates effective livestock-agriculture integration. This model aligns with Singh et al.'s (2022) findings showing poultry farming programs not only generate sustainable food production but also create economic multiplier effects through local agricultural infrastructure development. Chicken manure nutritional content rich in nitrogen, phosphorus, and potassium contributes to soil structure improvement and long-term fertility. Positive ecological impact from chemical fertilizer reduction contributes to reducing nitrogen and phosphorus runoff that can pollute water sources. BUMDes institutional transformation with 85% self-financing ratio and governance score improvement from

58/100 to 82/100 represents the most fundamental success for long-term sustainability, creating a proactive local development agent capable of independently driving local economic development even after external support ends, marking evolution from mere CSR program operator to institutional entrepreneur.

SROI Analysis and Comparative Validation

SROI ratio of 1.36:1 falls within realistic range for livestock-based empowerment programs, demonstrating every rupiah invested generates Rp 1.36 in social impact. Comparison with Nurhadi et al. (2025) yielding 5.70:1 SROI in South Kalimantan indicates larger scale programs (5,000+ chickens) and biogas technology integration create additional outcomes. Tulla et al.'s (2020) study in Catalonia yielded average SROI of €2.65:1 for social farming in developed economy context with higher outcome values. This study's conservative ratio reflects stringent adjustment factors (deadweight 15-40%, attribution 65-95%, displacement 0-10%, drop-off 0-5%) ensuring result credibility and impact value truly represents program additionality. Positive net benefit of Rp 123.85 million with 36.2% return ratio demonstrates the program not only feasible but profitable for social investment. Payback period of 3.5 years confirms program capability to recover investment in reasonable timeframe, contrasting with many Indonesian CSR programs that never achieve financial payback and depend on continuous subsidy. Gross outcome distribution across 10 stakeholder categories with no single group dominating over 50% demonstrates program success in creating equitably distributed shared value. Karang Taruna receiving largest benefit (48.5%) is appropriate given their position as primary beneficiaries experiencing most significant economic transformation. Women empowerment contribution of 7.9%, local economic multiplier 6.6%, BUMDes 7.2%, health and environmental outcomes each 4-5% show

the program successfully creates value across economic, social, and environmental dimensions simultaneously. Net impact calculation through adjustment factors application resulting in 41.2% reduction from gross outcome reflects conservative approach ensuring calculated impact value truly represents program additionality, distinguishing between correlation and causation in impact evaluation while avoiding common overestimation traps in social program evaluation.

Sensitivity Analysis and Program Robustness

Sensitivity analysis demonstrates program robustness with SROI ranging from 1.10:1 to 1.78:1 across various scenarios. Pessimistic scenario with 20% productivity declines still yields positive SROI of 1.10:1, confirming feasibility even in worst-case scenarios. Optimistic and best practice scenarios yield SROI of 1.62:1-1.78:1 showing significant improvement potential through better feed management, disease prevention, and superior genetic stock. PT BRE-only scenario showing SROI 1.69:1 from company perspective alone demonstrates attractiveness to private investors even without considering broader community benefits, important for attracting additional corporate investment in similar programs.

One-way sensitivity analysis identifying chicken productivity as most critical variable with $\pm 16\%$ elasticity provides actionable insight for program optimization. 10% productivity increase directly elevates SROI by 16%, suggesting productivity improvement should be top priority for impact maximization. This can be achieved through superior genetic stock from reputable hatcheries, balanced nutrition formulations optimizing feed conversion ratios, strict biosecurity protocols preventing disease outbreaks, and optimal cage environment. Comparison with other variables showing lower elasticity (egg price $\pm 8\%$, feed cost $\pm 6\%$, mortality $\pm 5\%$) validates productivity focus as most cost-

effective leverage point, aligning with commercial poultry literature emphasizing productivity as primary determinant of farm profitability.

The company-BUMDes partnership model proves effective in combining company resources with local knowledge and BUMDes institutional embedding. This partnership mitigates common CSR risks including moral hazard through shared governance structure, limited sustainability through institutional capacity building, and weak accountability through transparent monitoring mechanisms. However, successful partnerships require significant upfront investment in BUMDes capacity building (training, mentoring, financial systems) and long-term company commitment (minimum 3-5 years) until BUMDes achieves genuine financial and operational independence. This research contributes to SROI literature by applying comprehensive methodology covering all six SROI framework stages with rigorous adjustment factors, addressing common methodological weaknesses in earlier Indonesian SROI studies, and demonstrating livestock sector potential as effective vehicle for productive economic empowerment with high multiplier effects.

CONCLUSION

The Layer Chicken Farming CSR Program by PT Bhumi Rantau Energi in Bitahan Baru Village achieved multidimensional success with 135-200% attainment of initial targets across four dimensions of sustainable development. The program successfully created structural transformation through job creation and economic multiplier effects, women empowerment and food security strengthening, circular economy practices reducing chemical fertilizer dependence, and BUMDes institutional capacity strengthening as foundation for long-term sustainability. SROI analysis confirms program feasibility with a ratio of 1.36:1, generating Rp 1.36 in social impact for every rupiah invested after conservative

adjustment factors. Positive net benefit of Rp 123.85 million with 3.5-year payback period validates program financial sustainability. Robustness of SROI ratio in the range of 1.10:1-1.78:1 across various scenarios demonstrates high resilience to operational volatility, making it a viable model for replication in similar rural contexts. The program model based on participatory approaches and local institutional strengthening through company-BUMDes partnerships proves effective in generating sustainable and inclusive change for rural communities, demonstrating that programs based on productive economic empowerment can achieve dual objectives: shared value for both company and community while building long-term sustainability capacity.

Declaration by Authors

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