14th ISCA 2024

Cash Waqf Linked Qurban: Initiating a Social Financing Instrument for Poverty Alleviation through the Production and Distribution of Qurban Livestock in Central Java Province

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ABSTRACT

Poverty in Indonesia remains a serious issue, including in Central Java Province. One indicator is the annual decline in meat consumption by 0.14%. Additionally, there is a significant disparity in meat consumption between the wealthy, who consume 4.5 kg per year, and the poor, who consume only 0.03 kg per year. According to the Badan Amil Zakat Nasional (BAZNAS) in 2024, the practice of qurban has excellent potential to improve the community's economy, including in Central Java. The potential for waqf in Indonesia also continues to grow, including livestock waqf, which can address the inequality in meat consumption. This study employs a mixed-methods approach, combining quantitative and qualitative research using 35-panel data sets from cities and regencies within Central Java Province from 2019–2023. The analytical model used is a dynamic linear regression model, where poverty levels are modeled as a function of the logarithm of urban production, previous poverty levels, the logarithm of regional GDP (GRDP), the Human Development Index (HDI), and income inequality measured by the Gini Index. The results of this study show that urban production, regional GDP, HDI, and the Gini Index significantly affect poverty levels, with urban production and GDP hurting poverty. At the same time, HDI and the Gini Index have a positive effect. The qualitative approach focuses on a literature review to develop an initiation model for the Cash Waqf Linked Qurban (CWLQ) as an integrated strategy with the halal supply chain to combat poverty by producing and distributing qurban livestock in Central Java. Therefore, CWLQ emerges as an effective strategy to address poverty in Central Java Province. The policy recommendations from this study emphasize the importance of government and Islamic financial institutions' support in expanding the

implementation of CWLQ across Indonesia.

1. Introduction

The current phenomenon of poverty in Indonesia is a severe challenge that reflects the economic inequality that still occurs in various regions, including Central Java Province (Rusdarti & Sebayang, 2013)[1]. Although the Central Java Provincial Government has launched various programs to reduce poverty, such as social assistance and infrastructure development, the results have yet to be evenly distributed (Faharuddin & Endrawati, 2020)[2]. This is exacerbated by the COVID-19 pandemic, which has increased poverty because most people have lost their jobs and income (Suryahadi et al., 2020; Suryahadi et al., 2021)[3]. Data from the Central Java Provincial Statistics Agency shows that although it fluctuates, the number of poor people is experiencing an increasing trend, where the population below the poverty line is 3.74 million (March 2019), which increased to 3.79 million people (March 2023).

One problem that illustrates poverty in Indonesia is beef, buffalo, and goat meat consumption. Badan Pangan Nasional (2023) stated that the average fresh beef consumption per capita of the community in Central Java Province from 2016 to 2023 fluctuated and tended to decrease by 0.14 percent per year, where the highest peak was in 2019 which reached 2.5 kilograms/capita/year, while the average fresh goat meat consumption per capita of the community also fluctuated but with an increasing trend of 1.55 percent per year, where the highest peak was in 2023 which reached 0.1863 kilograms/capita/year[4]. According to Haetubun & Matatula (2023), there has been an imbalance in meat consumption between the rich and the poorest groups, where the average meat consumption of the rich is at 4.5 kg per year, while the poorest group is only 0.03 kg per year[5].

According to Badan Amil Zakat Nasional (2024), Indonesia has a high economic potential for sacrifice, reaching IDR 34.3 trillion[6]. This calculation is based on the participation of 2.75 million households or shohibul kurban who participated in the implementation of sacrifice (see Table 1). The value of this economic potential increased compared to the previous year by 8.5 percent, equivalent to an additional IDR 2.7 trillion. In addition, the number of participants increased by 140 thousand households. This figure reflects that the potential for sacrifice is not only related to the religious aspect but also contributes significantly to the economy, especially economic growth regionally, including in Central Java Province.

Table 1. Economic Potential of Qurban in Indonesia, 2024

Type of Qurban Animal	Economic Potential (Rp)	Mudhohi (Households)	Conversion to Meat (kg)	Number of Qurban Animals
Super Cow 750 kg	11,471,099,038,583	185,018	79,095,078	
Premium Cow 500 kg	6,252,992,738,544	105,893	30,179,559	

Standard Cow 250 kg	3,152,389,801,855	150,114	21,391,217	
750 kg Cow (1/7)	907.655.895.277	105,893	6,467,048	514,943
500 kg Cow (1/7)	825,966,864,702	105,893	4,311,366	
250 kg Cow (1/7)	921.973.237.699	307,324	6,256,247	
Extra Super Goat/Sheep 80 kg	6,755,041,738,183	900,672	29,542,049	
Super Goat/Sheep 60 kg	2,882,194,562,098	524,035	12,891,270	1,791,532
Premium Goat/Sheep 40 kg	955.185.479.648	262,018	4,297,090	
Standard Goat/Sheep 20 kg	222,834,813,858	104,807	859,418	
Total	**34.347.334.170.447**	**2,751,668**	**195.290.341**	**2,306,475**

Source: Badan Amil Zakat Nasional (2024)

On the other hand, Indonesia has the potential for cash waqf to grow. Livestock waqf, one form of its implementation, has proven effective in supporting the sustainability of livestock farming businesses. To overcome the gap in meat consumption and maximize the potential for sacrifice (Abiba & Suprayitno, 2024)[7]. By considering the existing problems and potentials, researchers propose a Cash Waqf Linked Qurban model integrated with a halal supply chain to overcome the meat consumption gap and optimize the potential for sacrifice in Central Java.

2. Literature Review

2.1 Social Financing

Public welfare is the primary goal of a country's economy. Until now, welfare has been measured mainly by the level of poverty. The problem of poverty remains a significant challenge for developing countries, including Indonesia. Poverty describes a condition where individuals cannot meet basic needs such as clothing, food, shelter, education, and health services. Easy access to finance for low-income people is currently a significant focus in government policy. Efforts to provide financial inclusion for people experiencing poverty are increasingly being increased. Financial inclusion carried out by the Indonesian government has positively impacted reducing poverty rates. With financial inclusion and ease for low-income people to access finance, they can achieve better economic conditions (Zia & Prasetyo, 2018)[8].

2.2 Poverty

Poverty is a global issue that concerns governments, international institutions, and researchers because of its significant impact on various aspects of life. According to the World Bank (2018), *poverty* is the inability to meet basic needs such as food, clothing, and shelter[9]. This view is in line with Sen's opinion (1999), which emphasizes that poverty is not only related to income but also a person's ability to live a dignified life[10].

2.3 Qurban

Qurban is a religious practice carried out by Muslims on Eid al-Adha. This activity has deep spiritual and social values, being a means of showing obedience to Allah and sharing with others.

This review will discuss various aspects of urban, including its history, meaning, and impact on modern society. The practice of urbanism varies worldwide and is influenced by local culture and social conditions. In Indonesia, qurban often involves the community, where the meat from the qurban is distributed to those in need. This is in line with findings from Ramadhan (2021), which states that in Indonesia, qurban is a critical moment to strengthen social solidarity and wealth distribution among members of society[11]. This shows that qurban is more than just a religious ritual, but also plays a crucial role in reducing social inequality.

2.4 Cash Waqf

Cash waqf is a form of waqf that uses money as an asset to support social and religious activities. In the modern context, cash waqf is becoming increasingly relevant due to its ability to adapt to the evolving needs of society. Cash waqf has received significant attention in Islamic law and waqf practice. One of the main benefits of cash waqf is its flexibility in managing funds that can be invested in various financial instruments that provide returns, which can then be used for social purposes. As explained by Hasan (2020), funds can be invested productively with cash waqf, providing long-term benefits to beneficiaries[12]. This approach increases the efficiency of fund use and expands the social impact of waqf.
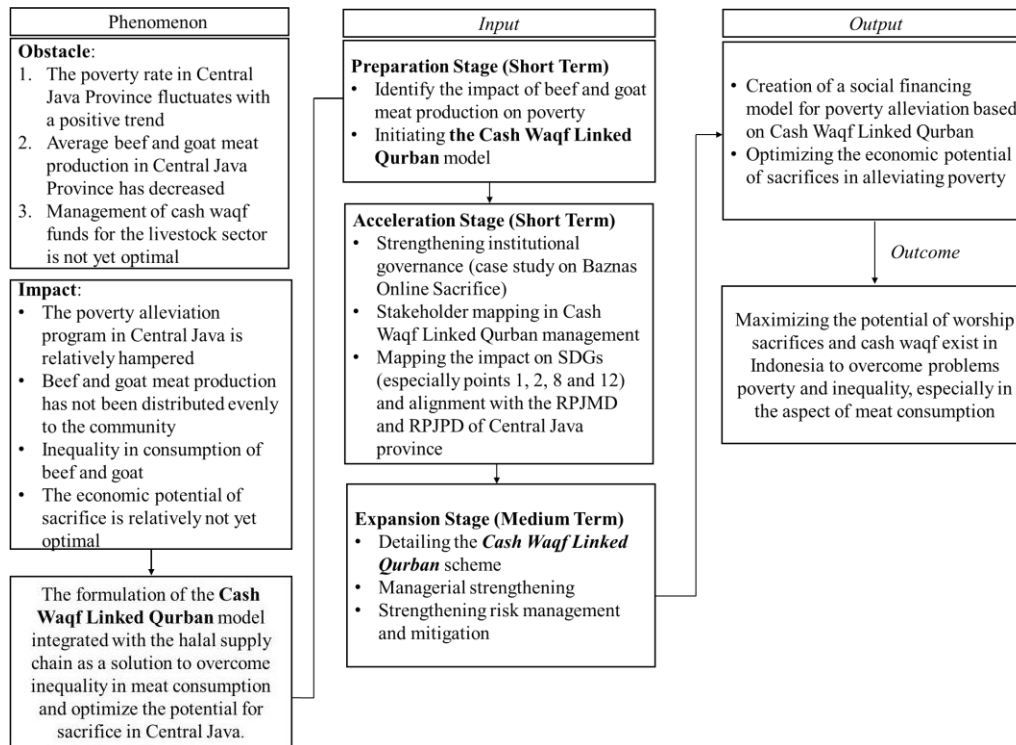
3. Research Methodology

3.1 Research Model

Looking at previous studies that have been conducted and by making adjustments that are considered to provide better results to be able to explain the determining factors of the role of beef and goat meat production in the economy, especially for poverty alleviation in Central Java Province, the following mathematical function was constructed (Affandi & Puji, 2013)[13]:

$$\text{Pov: } f(\text{LnProd\_Kurban}; \text{Pov t-1}; \text{LnPDRB}; \text{HDI}; \text{Gini})$$

$$Pov_{it} = a + \beta_1 ln\_Prod\_Kurban_{it} + \beta_2 Pov_{it-1} + \beta_3 lnPDRB_{it} + \beta_4 IPM_{it} + \beta_5 Gini_{it} + e_{it}$$

This study uses a mixed-method approach that combines quantitative and qualitative research (see Figure 2). Quantitative research uses panel data regression to determine how beef and goat meat production can affect poverty in Central Java Province. Meanwhile, a qualitative approach focuses on a literature review to obtain a cash waqf-linked qurban initiation model as an integrated strategy with a halal supply chain for poverty alleviation by producing and distributing sacrificial animals in Central Java Province sacrificial animals in Central Java

Province.

Figure 2. Cash Waqf Linked Qurban Model Research Framework

3.2 Data Types and Sources

The type of data used is panel data, a combination of time series data in 2019-2023 and cross-section data from 35 cities/regencies (6 cities and 29 regencies) in Central Java Province. The data used is 165, obtained from the number of research periods (T = 5) and the number of provinces used (N = 35). The data sources used in this study are secondary data from primary sources taken from the Badan Pusat Statistik, Direktorat Jendral Perimbangan Keuangan Kementerian Keuangan (DJPK Kemenkeu), Dinas Perternakan Central Java Province, and several other publications.

4. Results

4.1 Estimation of Research Results
The regression results based on the suggested model are fixed effect models described as follows:

Table 2. Panel Data Processing Results

No	Variable	Model		
		Common Effect	**Fixed Effect**	**Random Effect**
1	Poverty (Pov)			
	Constant	6.032909 ***	1,821 ***	32.01911 **
	Prob	(0.0000)	(0.0000)	0.0152
2	Production of beef and goat meat (Ln_Prod_ Qurban)	-1.197647 ***	-0.159 **	-1.587882 **
	Prob	(0.0000)	(0.0453)	0.0403
3	Poverty in the Previous Period (Povit-1)	0.026815	0.969 ***	0.010684
	Prob	(0.2521)	(0.0000)	(0.7016)
4	Regional gross domestic product growth (Ln_PDRB)	-1.976106 ***	-0.124	-0.672738 ***
	Prob	(0.0000)	(0.2412)	(0.0000)
5	Human Development Index (HDI)	-0.8279024 ***	-0.0331 *	-0.398208 ***
	Prob	(0.0000)	(0.0986)	(0.0000)
6	Gini Index (Gini)	0.953724 ***	1,570 ***	1.453586 ***
	Prob	(0.0000)	(0.0000)	(0.0000)
6	R²	0.817786	0.995989	0.523252
7	Adj R²	0.812861	0.993007	0.510367
8	F	166,0582 ***	4722,297 ***	40.60908 ***
	Prob	(0.0000)	(0.0000)	(0.0000)
9	Durbin Watson	0.225033	1.532054	0.985784

In general, the relationship between beef and goat meat production, poverty in the previous period, regional gross domestic product growth, human development index, and Gini index on poverty can be analyzed using the following equation:

$$Pov_{it} = 1,821 - 0,159\ Ln\_Prod\_Kurban_{it} + 0,969\ Pov_{it-1} - 0,124\ \text{ln}PDRB_{it}$$
$$- 0,0331\ IPM_{it} + 1,570\ Gini_{it} + e_{it}$$

The analysis of the data and models above can be concluded that:
- Beef and Goat Meat Production as sacrificial animals partially has a significant negative relationship to Indonesia's poverty rate, with a five percent significance level. This is evidenced by the probability value of 0.0453, which is relatively small compared to the alpha of five percent or 0.05, and its coefficient value of -0.159 (negative direction).
- Partial poverty has a significant positive relationship with the poverty level in Indonesia, with a significance level of one percent. This is proven by the probability value of (0.0000), which is relatively small compared to the alpha of five percent or 0.05 and the coefficient value of 1.821 (positive direction).

- Gross Regional Domestic Product (GRDP) growth partially has a negative relationship of -0.124, which also shows a negative influence but is smaller. This may indicate an influence from other factors that differ between units.

- The Human Development Index (HDI) partially has a significant negative relationship with Indonesia's poverty rate, with a ten percent significance level. This is evidenced by the probability value of 0.0986, which is relatively small compared to the alpha of five percent or 0.05, and its coefficient value of -0.0331 (negative direction).

- The Gini index partially has a significant positive relationship with the poverty rate in Indonesia, with a significance level of one percent. This is evidenced by the probability value of 0.0000, which is relatively small compared to the alpha of five percent or 0.05, and its coefficient value of 1.570 (positive direction).

5. Discussion

The results of the discussion of the data processing of this research are as follows:

- Beef and goat meat production has a negative effect on poverty rates (POV), whereas increasing beef and goat meat production will reduce poverty rates in Central Java Province. Increasing beef and goat meat production will create new jobs in the livestock sector and increase local farmers' income, ultimately reducing poverty rates in Central Java Province (Asfaw & Amassie, 2004)[14].

- Poverty in the previous period positively affects the current poverty rate (Pov), indicating that poverty rates tend to be persistent. In contrast, high poverty in the previous period tends to cause high poverty in the following period (Grootaert & Bastelaer, 2009). This is due to limited access to education, health, and sustainable economic opportunities, making the poverty cycle challenging to break[15].

- The human development index (HDI) hurts poverty rates (Pov). An increase in the HDI, which reflects an increase in the quality of education, health, and living standards, will indicate a decrease in poverty rates. Previous research has shown that areas with higher HDI tend to have lower poverty rates because their people are more educated and healthy. Hence, they can better participate in economic activities (Sahn & Stifel, 2003)[16].

- The Gini index has a positive effect on the poverty rate (Pov). The analysis results show that increasing income inequality, indicated by a higher Gini index, will increase poverty. Research shows that inequality worsens poverty by limiting the poor's access to better economic opportunities (Ravallion & Chen, 2007)[17].

Supply chain management in the Tebar Hewan Qurban (THK) program carried out by Dompet Dhuafa Republika, includes at least five stages, namely source, production, marketing, and data center, animal distribution, and meat production[18]. In this study, the author modified this model by involving elements of cash waqf management and the Badan Amil Zakat Nasional as a government-formed amil so that a CWLQ scheme will be obtained with four stages of halal supply

chain management starting from source, investment, and production, marketing, and animal and meat distribution.
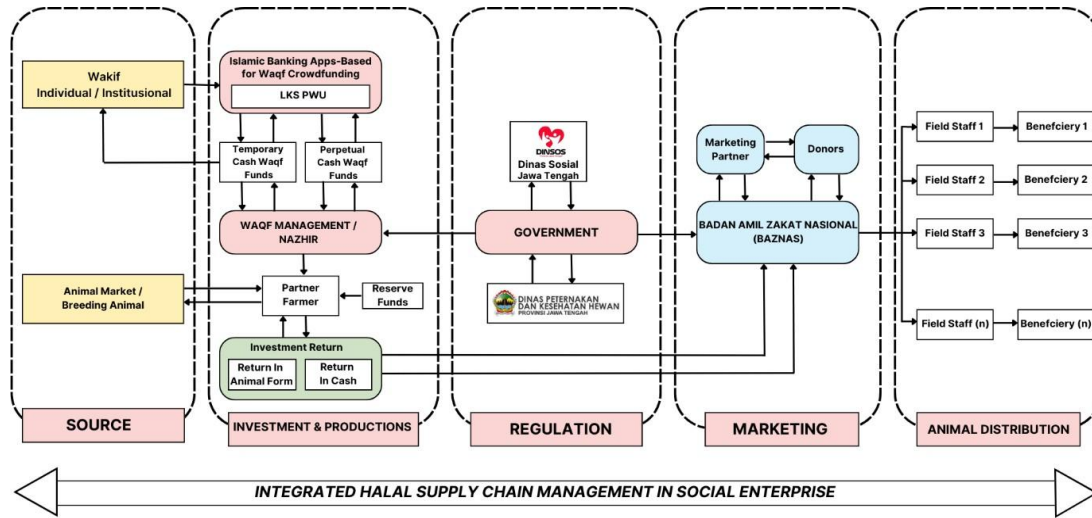

Figure 3. Initiation of Cash Waqf Link Qurban Scheme in Central Java Province

5.2 Policy Recommendations

Several research recommendations can be based on analyzing the initiation of cash waqf linked to qurban as an integrated strategy with the halal supply chain for poverty alleviation in Central Java Province. First, it is recommended that a field study be conducted to evaluate the effectiveness of this model in a natural context, focusing on the implementation of the cash waqf system and its impact on the production and distribution of qurban animals. This research should include an analysis of the cash waqf fund flow mechanism and the involvement of various stakeholders, including waqf institutions, livestock breeders, and urban animal distributors. Second, it is essential to identify and analyze the obstacles faced in implementing the halal supply chain system, such as halal certification issues, distribution logistics, and sharia compliance. Furthermore, a literature study can be conducted to monitor changes in poverty rates before and after implementing this panel data model to measure the long-term impact on community welfare. Another recommendation is to develop comprehensive performance indicators to assess the success of the integration of cash waqf and halal supply chains in improving access and distribution of qurban animals to people experiencing poverty. Finally, this research should involve the participation of local communities in the evaluation process to ensure that the interventions implemented are by local needs and socio-economic contexts.

6. Conclusion

The potential of Cash Waqf as a social instrument that can address poverty in Central Java Province, Indonesia. Using a mixed method approach that combines quantitative and qualitative

analysis, this study shows that increasing beef and goat meat production contributes significantly to poverty reduction. The Cash Waqf Linked Qurban (CWLQ) program is proposed as an integrated strategy that optimizes the management of cash waqf funds in the livestock sector and supports the Sustainable Development Goals (SDGs) related to poverty alleviation and food security. Through collaboration with institutions such as BAZNAS and Dompet Dhuafa, this program aims to distribute sacrificial animals to people in need while improving the welfare of local farmers. The proposed policy recommendations include (1) evaluating the effectiveness of the model; (2) identifying barriers in the halal supply chain; and (3) developing performance indicators to assess the impact of the program. With support from the government and Islamic financial institutions, the implementation of CWLQ is expected to make a real contribution to reducing poverty and improving the quality of life of people in the area.

References

Abiba, RW, & Suprayitno, E. (2024). Optimization of Productive Waqf in Supporting Efforts to Achieve SDGs Through Livestock Empowerment. Al-Intaj: Journal of Islamic Economics and Banking, 9(1), 109. https://doi.org/10.29300/aij.v9i1.2705

Affandi, A., & Puji Astuti, D. (2013). Dynamic model of Ibn Khaldun theory on poverty. *Humanomics*, 29(2), 136–160. https://doi.org/10.1108/08288661311319193

Ali, M. (2021). The Role of Cash Waqf in Modern Islamic Finance. Journal of Islamic Finance, 12(1), 45-60. DOI: 10.1007/s12345-021-01234-6

Asfaw, A., & Admassie, A. (2004). The Impact of Livestock Ownership on the Economic Well-being of Households in Rural Ethiopia. Journal of Development Studies, 40(5), 113-133. https://doi.org/10.1080/00220380410001678479

Badan Amil Zakat Nasional. (2024). Policy Brief: Potensi Ekonomi Kurban 2024. Jakarta: Badan Amil Zakat Nasional

Badan Pangan Nasional. (2023). *Rencana Aksi Badan Pangan Nasional*. Jakarta: Badan Pangan Nasional.

Badan Perencanaan Pembangunan Nasional (2019). *Rencana Pembangunan Jangka Menengah Nasional (RPJMN) 2020- 2024*. Jakarta: Badan Perencanaan Pembangunan Nasional

Badan Perencanaan Pembangunan Nasional (2024). *Rencana Pembangunan Jangka Panjang Nasional (RPJPN) 2025 - 2045*. Jakarta: Badan Perencanaan Pembangunan Nasional

Badan Pusat Statistik Provinsi Jawa Tengah. (2024). *Produksi Daging Ternak Menurut Kabupaten/Kota dan Jenis Ternak di Provinsi Jawa Tengah (Kg)*. Semarang: Badan Pusat Statistik Provinsi Jawa Tengah https://jateng.bps.go.id/indicator/24/483/1/produksi-daging-ternak-menurut-kabupaten-kota-dan-jenis-ternak-di-provinsi-jawa-tengah-kg-.html

Direktorat Jendral Peternakan dan Kesehatan Hewan Kementerian Pertanian RI. (2024). Kementan Pastikan Surplus Hewan Kurban Untuk Idul Adha 2024. Jakarta: Kementerian Pertanian RI Kementan Pastikan Surplus Hewan Kurban Untuk Idul Adha 2024 - Direktorat Jenderal Peternakan dan Kesehatan Hewan, Kementerian Pertanian

Dollar, D., & Kraay, A. (2002). Growth is Good for the Poor. Journal of Economic Growth, 7(3), 195-225. https://doi.org/10.1023/A:1020139631008

Faharuddin, & Endrawati, D. (2022). Determinants of working poverty in Indonesia. Journal of Economics and Development, 24 (3): 230-46. https://doi.org/10.1108/JED-09-2021-0151

Grootaert, C & Bastelaer, TV (2009). Social Capital And Poverty: A Microeconomic Perspective. Cambridge: Cambridge University Press.

Haetubun, AB, & Matatula, MJ (2023). Beef Production in Indonesia and Scale-up Scenarios: An Impact Analysis for Policy Making. Agrinimal Journal of Animal and Plant Sciences, 11(2): 92-100. https://doi.org/10.30598/ajitt.2023.11.2.92-100

Hasan, A. (2020). Cash Waqaf: A Sustainable Source of Financing for Social Projects. Journal of Social Sciences, 29(4), 300-315. DOI: 10.1016/j.jss.2020.04.007

Hasan, SH, Ibrahim, M., & Abdul Rahman, Z. (2023). Cash Waqf as a Sustainable Source of Funding for Islamic Education: Insights from Malaysia. Journal of Islamic Philanthropy and Social Finance, 10(1), 78-90.https://doi.org/10.1080/JIPSF.2023.0005

Hendrawan, R. (2020). Cash Waqf Link Sukuk for Sustainable Development. Misykat Al-Anwar: Journal of Islamic and Community Studies, 3 (2): 285-300.https://doi.org/10.24853/ma.3

Indriani, L. Multidimensional Poverty Analysis in Central Java Province, 2011-2013. Journal of Statistical Applications & Statistical Computation, 1 (2): 13-24 https://doi.org/10.34123/jurnalasks.v10i2.72

Ramadhan, H. (2021). Qurban and Social Solidarity: A Study in Indonesia. Journal of Social Sciences, 28(3), 211-225. DOI: 10.1016/j.jss.2021.04.005

Ravallion, M. (2016). The Economics of Poverty: History, Measurement, and Policy. Oxford University Press.https://doi.org/10.1093/acprof:oso/9780190212766.001.0001

Rusdarti, & Sebayang, LK (2013). Factors Affecting Poverty Levels in Central Java Province. Economia Journal: Review of Business and Economics Studies, 9 (1): 1-9.https://doi.org/10.21831/economia.v9i1.1371

Sahn, D. E., & Stifel, D. (2003). Exploring Alternative Measures of Welfare in the Absence of Expenditure Data. Review of Income and Wealth, 49(4), 463-489.https://doi.org/10.1111/1475-4991.00075

Sen, A. (1999). Development as Freedom. Oxford University Press.https://doi.org/10.1093/0198297580.001.0001

Suryahadi, A., Al Izzati, R., & Suryadarma, D. (2020). Estimating the Impact of Covid-19 on Poverty in Indonesia. Bulletin of Indonesian Economic Studies, 56(2), 175–192.https://doi.org/10.1080/00074918.2020.1779390

Suryahadi, A., Al Izzati, R., & Yumna, A. (2021). The Impact of Covid-19 and Social Protection Programs on Poverty in Indonesia. Bulletin of Indonesian Economic Studies, 57 (3), 267–296https://doi.org/10.1080/00074918.2021.2005519

National Team for the Acceleration of Poverty Reduction, & Australian Government. (2022). Determination of Priority Areas for Extreme Poverty 2021-2024. Jakarta: National Team for the Acceleration of Poverty Reduction.

Suryahadi, A., Hadiwidjaja, G., & Sumarto, S. (2012). Economic Growth and Poverty Reduction in Indonesia Before and After the Asian Financial Crisis. Bulletin of Indonesian Economic Studies, 48(2), 209-227. https://doi.org/10.1080/00074918.2012.694155

World Bank. (2018). Poverty and Shared Prosperity 2018: Piecing Together the Poverty Puzzle. World Bank Publications.https://doi.org/10.1596/978-1-4648-1330-2

Zia, IZ, & Prasetyo, PE (2018). Analysis of financial inclusion toward poverty and income inequality. Journal of Development Economics: Study of Economic and Development Problems, 19(1), 114–125.https://doi.org/10.23917/jep.v19i1.5391