

**THE SUSTAINABILITY OF LIVESTOCK *GADUH* SYSTEM IN
ISLAMIC ECONOMICS: THE ROLE OF SOCIAL
CAPITAL, *MUDHARABAH*, AND CIRCULAR ECONOMY**

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ABSTRACT

Traditional economic systems, such as livestock farming in rural areas, are generally studied normatively in the perspective of Islamic law, thus underemphasizing their empirical dynamics as an instrument of adaptive economic resilience. This study aims to analyze the fundamental factors of the sustainability of the Gaduh system in Sidodadi Village, North Bolaang Mongondow Regency, as well as its contribution to increasing income and environmental sustainability. The research uses a qualitative method with a field descriptive approach. Data were collected through in-depth observation and interviews of purposively selected key informants based on their experience and active involvement in the disputed contract. The data is then analyzed through the stages of reduction, display, and conclusion. The results show that the sustainability of the intergenerational Gaduh system does not depend on the strength of formal contracts, but is supported by strong social capital, especially trust and personal reputation, which serves as a substitute for formal collateral. Substantively, Gaduh practices are in line with the principle of mudharabah, where the risk of material losses due to natural factors is

borne by the capital owner (shahibul maal), while the manager (mudharib) bears the risk of energy and time. From an economic perspective, the Gaduh system acts as a social safety net that provides a strategic lump-sum income to finance the long-term needs of households. Another important finding is the formation of a local circular economy ecosystem through the use of livestock waste as organic fertilizer, which reduces agricultural production costs and supports the principle of environmental conservation (hifz al-bi'ah). This study recommends the integration of the Gaduh system in village economic empowerment policies through managerial assistance and risk mitigation without eliminating local wisdom.

Keywords: Circular Economy, Community Empowerment, Gaduh System, Mudharabah.

INTRODUCTION

Sharia economics is essentially a manifestation of divine values translated into real economic activities, where its orientation goes beyond mere profit maximization to the achievement of benefits, distributive justice, and blessings. In this paradigm, economic activities are positioned as an integral part of *muamalah* worship, which requires compliance not only with the legal-formal aspects of the contract, but also with the ethical substance of production and distribution (Garamatan & Ayuniyyah, 2021). Therefore, Islam offers an antithesis to the capitalist system by emphasizing the principles of *ta'awun* (cooperation) and solidarity, rejecting all forms of exploitation, and upholding social responsibility as the main pillar of the economic stability of the ummah.

However, in the reality of rural communities, these economic ideals often clash with structural constraints, such as limited capital accumulation, lack of access to formal financial institutions, and low ownership of production assets. This phenomenon forces the community to revitalize local wisdom through a trust-based partnership scheme as an economic survival strategy. One of the most dominant and enduring instruments is the *Gaduh* system in the maintenance of farm animals. This practice represents a form of strategic partnership between capital owners (livestock) and managers (ranchers) through a customarily agreed profit-sharing mechanism. More than just a capital distribution mechanism, this practice serves as a means of inclusive economic empowerment for people who do not have access to banking resources (Subaiti et al., 2019).

The livestock *Gaduh* system has a double significance; economically, it becomes a safety valve for household income and the opening of jobs, while socially, it strengthens social *capital* and cohesiveness among villagers. In fact, this practice has an ecological sustainability dimension through the integration of the use of livestock waste as organic fertilizer, which supports the local agricultural cycle. Viewed from the perspective of *fiqh muamalah*, the construction of contracts in *Gaduh* has strong relevance to the principles of *Ijarah* and *Musyarakah*, as long as it fulfills substantial principles and conditions such as contractual clarity and fairness of profit-sharing proportions (Siti et al., 2020; Muhtar et al., 2022).

Although the existence of the *Gaduh* System has received a lot of academic attention, previous studies Farid (2020) tend to be dominated by normative-legalistic approaches that focus heavily on the validity of the law and the suitability of contracts alone. This approach, while important, is often stuck on textual analysis and is less able to capture empirical dynamics in the field. There is a research *gap* on how this traditional system actually contributes to people's income mobility amid the onslaught of economic modernization. Existing studies have not comprehensively measured the effectiveness of *Gaduh* as an instrument for poverty alleviation at the micro level, as well as how the integration of economic added value from derivative products (livestock waste) is carried out within the framework of the village economy.

Departing from this urgency, this research presents scientific *novelty* by shifting the focus of the study from just a "valid or invalid" debate to an analysis of real economic impacts. This study aims to analyze in depth the economic rationality of the people of Sidodadi Village, Sangkub District, North Bolaang Mongondow Regency, in maintaining the Gaduh system, and examine its implications for increasing income and empowering the local economy. Thus, this research is expected to provide an empirical perspective that enriches the sharia economic literature, especially in the context of rural productive asset management based on local wisdom.

METHODS

This research adopts a qualitative paradigm with a descriptive type of field research. This approach was strategically chosen to dissect the complexity of the practice of the livestock *Gaduh* system in Sidodadi Village, Sangkub District, North Bolaang Mongondow Regency, with the main focus on cooperation mechanisms, profit-sharing patterns, and their implications for the community's income structure. Through a qualitative approach, researchers can explore the meaning behind the social reality and economic behavior of *Gaduh* actors in a naturalistic manner (Creswell, 2014). Research data sources are classified into primary data and secondary data. Primary data was obtained directly through intensive interaction with informants at the research site, while secondary data was sourced from academic literature and relevant supporting documents.

To ensure the credibility and depth of the data, the determination of informants is carried out using *purposive sampling* techniques by setting specific inclusion criteria. The main subjects in this study consist of cattle owners (*shohibul maal*) and cattle managers/herders (*mudharib*) with a total of 3 (three) key informants. These three informants were selected selectively based on technical considerations that they were permanent residents of Sidodadi Village who were actively involved in the Gaduh cooperation contract during the research, and had empirical experience in carrying out the practice for a long period of time. This experience criterion is an important prerequisite to ensure that informants have a deep understanding of the dynamics of the profit-sharing cycle, profit fluctuations, and risk settlement mechanisms (Sugiyono, 2019).

The data collection technique was carried out through triangulation methods which included participant observation, *in-depth interviews*, and documentation. Observations were focused on real livestock rearing activities and transaction processes, while interviews were conducted using structured guidelines to explore income and social aspects. The main instrument in this study is the researcher himself, who is assisted by recording equipment and field notes. Furthermore, data analysis was carried out using the interactive model of Miles et al. (2014), which included three simultaneous stages: data reduction to sort out relevant information, data display in the form of logical narratives, and drawing/*verifying conclusions* to answer the formulation of problems regarding the contribution of Gaduh systems to the economy of rural communities.

RESULT AND DISCUSSION

Trust-Based Contract Mechanism and Reputation Selection

The practice of *cow rowing* in Sidodadi Village stems from the reality of asset ownership inequality, where there are community groups that have excess liquidity (capital owners) and groups that have manpower but a capital deficit. This economic interaction is accommodated in a cooperation contract that is locally known as *Gaduh*. In the structure, the owner of the livestock completely hands over the livestock (cows) to the farmer to be kept for a certain period of time. Uniquely, the initiation of this contract never involves formal bureaucratic procedures or the signing of a notary deed. The agreement is built entirely on the foundation of *al-aqd al-syafawi* (oral contract) that occurs naturally in the daily social interaction of the villagers.

Although it is oral, the process of contracting is not carried out carelessly. Field findings show the existence of a strict natural selection mechanism based on reputation. Livestock owners tend to choose prospective breeders who have a good track record in raising livestock, such as being known to be diligent in looking for grass, having a clean cage, and being honest in reporting livestock conditions. This social reputation is the "guarantee" of replacing physical collateral in the banking system. A bully with a bad reputation will automatically be eliminated from this co-op market as information spreads quickly in close-knit village communities.

After the agreement occurs, the agitator gets full managerial discretion. The owner of the cattle relinquished his daily management rights and only positioned himself as a passive supervisor. The farmer is absolutely responsible for the provision of forage feed, the manufacture and maintenance of the cage, and the daily monitoring of the health of the livestock. There is no technical intervention from the capital owner regarding how the bull takes care of his cows, as long as the physical condition of the cow looks good when periodic checks are carried out. This shows the high level of delegation of authority based on trust.

The relationship between owners and disruptors in this system goes beyond mere business transactional relationships. Strong emotional and familial bonds are formed, where livestock owners often provide non-material assistance or soft loans to the *Gaduh* outside the context of a *Gaduh* contract. This patron-client relationship maintains the stability of long-term cooperation. Data shows that the average *Gaduh* cooperation in Sidodadi Village lasts for many years, even across generations, as long as the trust is not harmed by distrustful behavior.

The absence of a written contract is also interpreted by the public as a form of respect for the value of honesty. Formalizing relationships through rigid agreements is actually considered taboo and hurts mutual trust between neighbors or relatives. For the people of Sidodadi Village, a man's "words" are a binding law. Violations of verbal promises have far more severe social consequences than positive legal sanctions, namely, social exclusion and loss of access to economic cooperation in the future.

However, the flexibility of this oral contract still has customary limitations that are complied with together. There is an unwritten consensus on basic rights and obligations that have become *common knowledge* in the village. For example, the owner's obligation to provide healthy cow seeds and the owner's obligation to provide labor. These customary norms serve as informal "standard operating procedures" that maintain the order of the Gaduh system for decades.

Overall, the contract mechanism in Sidodadi Village shows that social capital is able to substitute the legal role of formal contracts in mitigating the risk of information asymmetry. The trust that is built is not a blind trust, but rather a trust that is verified through long social observation. This confirms that the traditional economic system has its own resilience because it is firmly rooted in the cultural structure of the local community.

Profit Sharing Distribution Pattern and Risk Loss Mitigation

The essence of the sustainability of the *Gaduh system* lies in the clarity and fairness of the mechanism of economic value distribution. The findings of the study confirm that the profit-sharing pattern was agreed upon at the beginning of the contract (*wa'ad*) through deliberation. The most dominant scheme applied in Sidodadi Village is the *parohan* or *maro* pattern, which is the distribution of net profits with a 50:50 ratio between capital owners and managers. This agreement is considered the fairest because it balances the contribution of asset capital (cattle) from the owner with the contribution of labor capital and skills from the manager.

The definition of "profit" in this system is divided into two scenarios, depending on the gender and purpose of raising livestock. If the goal is fattening (bull), then profit is calculated from the difference between the final selling price and the initial purchase price. Meanwhile, if the goal is breeding cows, then the profit sharing is carried out physically on the calves that are born. The first child is usually the right of the owner, the second child is the owner's right, or the calf is sold, and then the money is divided in half, according to a specific agreement that is very flexible according to the conditions.

Regarding the time of profit realization (liquidation), the Gaduh system in Sidodadi Village does not recognize a rigid maturity date like bank deposits. Decisions to sell livestock are made based on the most favorable market momentum, usually ahead of Eid al-Adha, where cattle prices peak. This flexibility is a smart economic strategy to maximize profits. In addition to market factors, sales can also be triggered by the emergency needs of one of the parties, which are decided through consensus deliberation without penalties.

The most crucial finding to answer the Sharia perspective is regarding the allocation of risk of loss. In practice in Sidodadi Village, there is a clear separation between business risk and moral *hazard*. If the cattle die or become ill due to natural factors beyond human control (such as infectious disease outbreaks, natural accidents, or death during childbirth), then the material loss in the form of loss of cattle capital is fully borne by the owner of the cattle (*Shahibul Maal*). The farmer is not burdened with debt to replace the price of the cow.

The burden borne by the vandal in the natural death scenario is the loss of potential income and the waste of energy and time that have been devoted during the maintenance period (opportunity cost). This mechanism is implicitly in accordance with the principle of *Mudharabah*, where financial losses are borne by the capital owners, while the managers bear the labor losses. This fact refutes the notion that traditional systems are often exploitative. In fact, this system is very protective of economically weak managers.

However, a different scenario is applied if the loss is proven to be caused by an element of intentionality or negligence (*ta'addi*) of the Gaduh person. Examples of cases are cows lost because the cage is not locked, or cows die of poisoning due to incorrect feed, or due to negligence in supervision. In this condition, village customary law requires the owner to be responsible for compensating damages (*dhaman*) to the owner, either by paying the price of the cow in installments or replacing it with another cow at a later date. This rule serves as a disciplinary mechanism so that the harasser is always trustworthy and professional.

Dispute resolution related to this risk always prioritizes the family line. It is rare to find cases that lead to open conflicts or reporting to the authorities. Usually, in the event of a livestock death, the owner will conduct a direct inspection to verify the cause. If the owner sees that the tenant has tried his best to take care of it, but fate says otherwise, the owner often forgives and dismisses the loss as a common disaster. This attitude of tolerance is the main lubricant for the permanence of the feudal system.

Strategic Contribution to Income and Social Safety Net

From a microeconomic perspective, *the Gaduh* system plays a vital role in the household income structure of the people of Sidodadi Village. For the majority of the farmers who are gurem farmers or farm laborers, owning their own cows is difficult because of the high initial purchase price. The Gaduh system breaks this barrier to entry, allowing them to access high-value, productive assets with only labor capital. This is the most pronounced form of real sector financial inclusion in rural areas.

The nature of the income of the Gaduh system is a lump sum or a large amount of receipts at one time. This characteristic is different from the wages of farm workers, which are daily and run out for daily food consumption. The money from the sale of Gaduh cattle functions as "*forced savings*" or a living piggy bank. The farmer disciplinedly takes care of the cows every day, which is essentially a process of saving labor, to then harvest the results in the form of cash of millions of rupiah in a single sales transaction.

Interview data revealed that the allocation of the use of Gaduh funds is very strategic and productive. The majority of homeowners use these funds for long-term investment needs that cannot be funded by daily income, such as paying their children's tuition fees, renovating damaged houses, or buying motor vehicles for work transportation. Thus, the Gaduh system becomes the main instrument in vertical social mobility and improving the quality of family life in the village.

In addition to the function of asset accumulation, the Gaduh system also acts as an effective *social safety net*. When facing sudden economic shocks, such as severe illness or crop failure, the ownership of profit-sharing rights over Gaduh cattle becomes a reliable liquid asset. Livestock owners are often willing to sell cattle early or provide a bailout loan (*qardh*) with a guarantee of a share of the Gaduh profits, so that the robber avoids the snare of loan sharks or suffocating high-interest debts.

This economic contribution also has an impact on the economic turnover of the village in aggregate. The money from livestock sales is generally spent back in the local village or sub-district, creating a multiplier effect for local traders and other service providers. The existence of a Gaduh system keeps the purchasing power of the village community stable even though the agricultural sector is experiencing a period of famine, because the livestock sales cycle can be regulated to cover the income gap between rice or corn harvest seasons.

Furthermore, for some successful ranchers, this system is a stepping stone to becoming an independent livestock owner. The profits from the first period of Gaduh were saved to buy their own calves, which were then raised together with the cows. In the long run, many of the scoundrels eventually transformed into new owners of capital (*Shahibul Maal*), breaking the chain of structural poverty in their families. This transformation process shows that Gaduh is an effective business incubator.

Sociologically, this economic contribution reduces the potential for social conflict due to wealth gaps. The mechanism of wealth redistribution that occurs through Gaduh cooperation makes the wealth of the village rich "trickle down" directly and productively, not just consumptive donation. This creates social harmony and reduces crime rates because of the availability of productive jobs for youth and heads of families in the village.

Economic Externalities: Waste Utilization in the Circular Economy

One of the most progressive findings in this study, which distinguishes it from similar studies, is the systemic integration between Gaduh farms and the agricultural sector through waste management. The people of Sidodadi Village no longer view cow dung as a disgusting residue that must be disposed of, but as a valuable new economic resource. This paradigm shift is driven by the pragmatic need for cheap fertilizers amid the high price of subsidized chemical fertilizers.

Technically, the herdsmen collect solid cow manure from the barn every morning, then pile it up in a simple fermentation process or directly apply it to their private farmland. This practice creates an independent fertilizer supply chain at the household level. Farmers who also work as farmers of food crops (corn, rice) or horticulture (chili, vegetables) get a double benefit, such as income from cattle revenue sharing and cost reduction.

The economic analysis of waste utilization shows significant efficiency. The use of manure is able to substitute the use of chemical fertilizers (Urea/NPK) up to

a certain percentage, which directly cuts farm operational costs. In the calculation of farming businesses, this decrease in input costs is equivalent to an increase in net income. This means that the Gaduh system provides "daily dividends" in the form of fertilizer, in addition to the "final dividend" in the form of cattle sales money.

In addition to its financial benefits, this practice also has positive implications for environmental sustainability. The regular use of organic fertilizers has been proven to improve the nutrient structure of the soil that has begun to be damaged due to the excessive use of chemical fertilizers over the years. Farmland owned in Sidodadi Village tends to be more fertile and has better moisture resistance. This is a tangible manifestation of the concept of *Hifz al-Bi'ah* (protecting the environment) in Islam, where economic activity does not damage ecosystems but rather takes care of them.

The findings also reveal the existence of a perfect symbiosis, known as the Integrated Farming System, characterized by mutualism. Agricultural waste (rice straw, corn chips) is used as cattle feed, while livestock waste (manure) is returned to the land as plant fertilizer. This closed loop creates maximum resource efficiency and minimizes waste. Sidodadi Village has unconsciously practiced the principles of the Circular Economy, which is a global issue today.

Furthermore, for farmers who do not have large agricultural land, the cow dung has a selling value. Although the market is still limited in the scope of the neighboring villages, the transaction of buying and selling manure began to grow as a source of side income. This phenomenon adds to the Gaduh income portfolio, making the Gaduh system more economically attractive than other informal sector jobs.

Finally, the use of this waste also contributes to the health of the residential environment. By processing manure into fertilizer, unpleasant odor pollution and the potential for disease spread due to poor cage sanitation can be minimized. The cowsheds in Sidodadi Village are relatively clean and well-maintained because the excrement is taken every day. This proves that economic motives (need for fertilizer) can be a driver of effective clean and healthy living behaviors in rural communities.

The Dynamics of Oral Contracts (*Al-Aqd Al-Syafawi*) and Social Capital in the Perspective of *Mudharabah*

The practice of livestock Gaduh in Sidodadi Village is substantially a manifestation of the profit-sharing cooperation agreement known in Islamic economic literature as *Mudharabah*. In this context, the cattle owner acts as *Shahibul Maal* (the provider of asset capital) and the bully as *the Mudharib* (manager), where the two are bound by a common goal of making a profit (*ribh*) through productive venture. Research findings that show the absence of a written agreement do not necessarily invalidate the validity of the contract. In *fiqh muamalah*, the legality of an agreement is not solely determined by administrative formalities (black on white), but the fulfillment of the harmony and conditions, especially the existence of *ijab kabul* (handover) which is based on the principle of

an-taradin (mutual pleasure) between the two parties. This is in line with the view of the majority of scholars who allow oral contracts as long as there is no element of *gharar* (ambiguity) that triggers disputes.

The harmonization that occurred even though using an oral contract, indicated the strong role of social capital in Sidodadi Village. Trust is the main currency that binds the commitment of both parties. This phenomenon confirms the theory of Islamic sociological economics that in communal societies, social reputation serves as a more effective control mechanism than formal legal contracts. Violations of verbal agreements will have implications for social sanctions in the form of loss of public trust, which for villagers, is a fatal social loss. This is in line with the research of Rian (2022) on goat noise and Farida (2021) on cow noise, both of which concluded that verbal contracts remain valid and effective because they are supported by honesty values and strong customary norms.

Furthermore, the success of this informal contract highlights the unique characteristics of Islamic microfinance in rural areas. In contrast to formal financial institutions that require rigid administrative procedures, Gaduh systems offer inclusive flexibility. Ullah & Khan (2020) in their international study on informal finance in South Asia stated that *trust-based financing* schemes have a low rate of non-performing financing (failure) due to the emotional and moral bonds between parties. The findings in Sidodadi strengthen the argument that the traditional *Mudharabah* model has survived not because of the force of positive law, but because of the strength of Islamic moral ethics internalized in local culture.

However, it should be noted that even though oral contracts are valid, modern sharia economic literacy still advocates recording (*kitabah*) for long-term transactions, as indicated by Q.S. Al-Baqarah verse 282. The absence of written records in Sidodadi Village, even though it is currently running smoothly, still holds a potential latent risk in the event of a dispute between heirs in the future. Therefore, this finding is a constructive criticism that strengthening local institutional capacity through simple administration needs to be encouraged without eliminating existing family values. Research by Hassan et al. (2021) emphasizes that hybridization between traditional values and modern management is necessary to ensure the sustainability of community-based microfinance institutions.

Theoretically, this practice can be categorized as *Mudharabah Muqayyadah* (bound) in a broad sense, where the type of business is determined (i.e. cattle farming), but the technical implementation is left to the manager. Trust of livestock owners to manage assets without daily intervention shows a high level of delegation of authority. This proves that information asymmetry obstacles that are often an obstacle in Islamic banking can be minimized in a Gaduh system through the proximity of personal relationships and social monitoring, as stated in the theory of Islamic agencies.

Distributive Justice and Risk Sharing

The most crucial aspect in the validity of the sharia system in Sidodadi Village lies in the mechanism of profit sharing and risk mitigation. The implementation of

the 50:50 profit-sharing ratio agreed upon at the beginning (*wa'ad*) reflects the principle of *al-'adl* (justice). In Islamic economics, justice does not always mean equal nominally, but proportionate to contributions. The owner contributes to the provision of capital assets, while the owner contributes to skills and labor. This agreement is in line with the findings of Kumalasari (2021) and Nuryana (2020), who stated that the proportion of profit sharing in people's agriculture tends to follow the *urf* (customs) that are considered fair by both parties, both in the form of physical distribution of livestock and sales proceeds.

Answering concerns about the risk aspect, this study found that the mechanism for settling losses in Sidodadi Village was in accordance with the rules of *fiqh muamalah*. According to the principle of *Mudharabah*, financial losses that are not caused by the negligence of the manager (*ta'addi*) are fully borne by *Shahibul Maal*. In the case of livestock deaths due to disease outbreaks, livestock owners in Sidodadi bear the loss of cattle capital, while the farmer bears the loss of time and energy (effort loss). This is the pure implementation of the rule of *al-ghunmu bi al-ghurmi* (profit goes hand in hand with risk). If the tenant is also forced to compensate for the money when the cow dies through no fault of his, then the contract is null and void because it violates the principle of justice and falls into tyranny.

On the other hand, if the loss is caused by the negligence of the aggressor (e.g. the cattle are lost because they are not caged, or die because they are not fed), then the obligation of compensation (*dhaman*) falls on the aggressor. The distinction between this type of risk, between business risk and moral hazard, has been intuitively understood by the people of Sidodadi Village through a deliberation mechanism. Rahman & Kassim (2021) in their international journal on Islamic agricultural risks emphasized that this risk-sharing mechanism distinguishes the Islamic economic system from the conventional debt-based system, where the risk is fully charged to the borrower. The Gaduh system in Sidodadi proves that risk transfer is balanced.

In addition, the flexibility of the time of selling livestock shows that this system is not stuck in rigid time-value of money, such as bank interest. The decision to liquidate assets is based on the real conditions of the sector (cow weight and market price), not on maturity time. This prevents farmers from exploiting the market. Research by Alam et al. (2022) on farmer resilience shows that profit-sharing schemes make farmers more resilient to price shocks than farmers who borrow interest-bearing capital, because there is no fixed payment burden must be repaid when conditions are difficult.

Thus, this Gaduh system fundamentally rejects the concepts of *Riba* (additional without risk) and *Zalim* (injustice). The practice in Sidodadi proves that the village community has local intelligence in translating complicated sharia postulates into simple daily practices, but still compliant with the principles (sharia-compliant). This refutes the assumption that traditional economic practices are always vulnerable to sharia deviations; On the contrary, it is often purer to apply the principle of risk sharing than modern engineered banking products.

The Function of *Ta'awun* and the Social *Safety Net*

The Gaduh system in Sidodadi Village goes beyond just business transactions; it is transformed into an effective instrument of *Ta'awun* (help). From the perspective of Islamic macroeconomics, the purpose of economic activity is the distribution of wealth so that it "does not only circulate among the rich" (Q.S. Al-Hashr: 7). The Gaduh system facilitates the flow of capital from the surplus group (livestock owners) to the deficit group (the uncaptialized) productively. The lump sum income received by the farmer from the sale of livestock has proven to be significant in improving living standards, financing education, and renovating houses, as confirmed by Subaiti et al. (2019).

The role of the Gaduh system as a social *safety net* is vital in the absence of formal banking access. For the poor who *are non-bankable* (do not have collateral), noise is the only access to get productive assets. Khatun & Satyawati (2020) in their global study on poverty alleviation, emphasized that this asset-based microfinance model is much more effective in poverty alleviation than direct cash assistance, as it creates independence and a work ethic. A rower is not positioned as a recipient of alms, but as a dignified business partner.

In addition, the aspect of *ukhuwah* (brotherhood) that is established strengthens the social cohesion of the village. Intensive interaction between owners and tenants minimizes social class gaps. In the economic review of Islamic development, this is a form of inclusive development that is rooted in the bottom (bottom-up). The community builds its own economic resilience without relying on state intervention. This is relevant to the concept of the *Ummah* in Islamic economics, where economic power is built through collective synergy between individuals.

The sustainability of this system is also driven by transcendent motives. For livestock owners, lending cattle to be braved is often intended not only for profit, but also as a form of social worship (productive alms). This spiritual dimension gives "spirit" to economic activity, making it more resilient to crises. Ali et al. (2021) stated that the integration of altruistic motives in business contracts is a characteristic of Islamic economics that distinguishes it from conventional economic rationality that is purely self-interested.

Overall, the Gaduh system's contribution to the household economy in Sidodadi proves that traditional Islamic financial instruments can be a pragmatic solution to the problem of income inequality. This system empowers communities to "stand on their own feet" by leveraging available social capital and local assets, creating a vibrant and mutually supportive village economic cycle.

Integration of *Maqasid Sharia: Hifz al-Bi'ah* through the Circular Economy

The findings regarding the use of livestock manure waste as organic fertilizer in Sidodadi Village are a new point that expands the scope of sharia economic analysis to the ecological realm. Within the framework of *Maqasid Sharia*, this action is not just economic efficiency, but a manifestation of environmental

protection (*Hifz al-Bi'ah*). Islam commands humans as caliphs to carry out *islah al-ard* (the repair of the earth) and prohibit damage (*facades*). Converting waste that has the potential to become pollution into agricultural inputs that have useful value is a real implementation of this principle.

This practice represents the Circular Economy model on a micro scale. Saeed & Yar (2023) in their latest international journal on Islamic sustainability assert that the circular economy is inherent in Islamic teachings that prohibit *israf* (waste) and *tabdzir* (waste of resources). In Sidodadi, the cycle of "Livestock -> Waste -> Fertilizer -> Plants -> Feed -> Livestock" creates an efficient zero-waste ecosystem. Reducing the use of chemical fertilizers not only saves farmers' production costs (*Hifz al-Mal* aspect), but also maintains long-term soil fertility (*Hifz al-Nasl* aspect for future generations).

The economic added value of this fertilizer cost savings is often missed by conventional accounting calculations, but it is very significant in sharia accounting that looks at *maslahah* (benefits) holistically. By utilizing waste, the farmer gets a double benefit: profit sharing from beef and saving on farm costs. This increases the total efficiency of the assets under management. These findings fill a gap in previous research that rarely highlighted the ecological aspects of Gaduh systems.

Furthermore, the integration of these farms strengthens local food security. Dependence on external inputs (factory fertilizers) is reduced, so that the economic independence of the village increases. In the global context, this practice in Sidodadi is in line with the goal of Green Islamic Finance, which is being promoted around the world. Rustam et al. (2022) stated that the future of Islamic finance lies in its ability to align profits with the sustainability of the planet. The people of Sidodadi Village, with their local wisdom, have practiced this naturally.

The implications of these findings suggest that the development of Gaduh systems in the future should not focus solely on cattle fattening, but should be directed at the Integrated Farming System. The approach of *fiqh al-bi'ah* (environmental fiqh) needs to be socialized more massively so that the public realizes that processing livestock waste is not only a cost-effective strategy, but also part of the worship of maintaining the mandate of the universe.

CONCLUSION

Based on an in-depth analysis of the Gaduh practice of livestock in Sidodadi Village, this study concludes that in the contract mechanism, the persistence of the rowing system does not depend on the legality of written contracts, but is supported by high social capital. The natural selection mechanism based on reputation and trust has proven to be effective in binding cooperation commitments, replacing the function of physical collateral in the banking system. In terms of Sharia compliance, this practice is substantially in line with the principles of *Mudharabah* through a fair risk mitigation mechanism. The findings confirm that material losses due to natural factors (the death of livestock is not due to negligence) are fully borne by the capital owner (*Shahibul Maal*), while the manager (*Mudharib*) bears the loss of labor, thus avoiding the element of tyranny. Economically, the Gaduh system

functions strategically as a social safety net and an instrument for income equality. The income received is a lump sum, so it is effectively used to finance crucial long-term needs, such as education costs, home renovations, and the accumulation of productive assets for people who do not have access to banking (unbankable).

This research finds a new dimension in the form of the formation of a local circular economy ecosystem. The integration between livestock and agriculture through the use of livestock manure waste as organic fertilizer has been proven to significantly reduce farm production costs. This is a tangible manifestation of the principle of environmental conservation (*Hifz al-Bi'ah*) within the framework of *Maqasid Syariah*, which supports the sustainability of the village ecosystem.

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