Tafse: Journal of Qur'anic Studies
Vol. 10, No. 2, pp. 179-191, July-December 2025
https://jurnal.ar-raniry.ac.id/index.php/tafse
DOI:10.22373/tafse.v10i2.33586

Revitalizing *Khilāfah fī al-Arḍ* for Sustainable Agriculture: An Ethical-Operational Framework Derived from Quranic Exegesis

[*]Faisal Afifi[1], Heriyanto[2]
[1]Institut Agama Islam (IAI) Persis Garut, Indonesia
[2]Universitas Ibnu Khaldun Bogor, Indonesia
[*]Email: *faisalafifi0610@gmail.com*

Abstract: Environmental degradation and the stagnation of farmer welfare in rural Indonesia demand a reorientation of the agricultural management paradigm toward one that is not merely technocratic but also ethical-spiritual. This study examines the concept of *Khilāfah fī al-Arḍ* as an ontological and axiological foundation for sustainable agricultural development through a thematic exegetical study of *QS. Al-Baqarah*: 30 and *QS. Al-An'ām*: 141. Unlike previous studies that predominantly focus on normative environmental ethics, this research specifically synthesizes exegetical analysis into an ethical-operational framework for agronomy. Employing a qualitative-analytical method, this research integrates classical and contemporary exegetical traditions with an analysis of agronomic and socio-economic data regarding the national agrarian crisis of 2024. The findings demonstrate that *QS. Al-Baqarah*: 30 defines *Khilāfah* not as exploitative domination but as a mandate of *Imārat al-Arḍ* (earth stewardship) which requires competence in knowledge (*'ilm*) and the prevention of ecological corruption (*fasād*). Meanwhile, *QS. Al-An'ām*: 141 provides guiding principles for agricultural management through biological diversification (polyculture), distributive justice (*ḥaqqahu*), and input efficiency (*lā tusrifū*). The synthesis of these two verses generates an "Agricultural Ecotheology" paradigm that positions the farmer as a guardian of ecosystem balance (*mīzān*) and an agent of social justice. This framework is highly relevant for addressing soil fatigue caused by excessive agrochemicals and structural poverty in rural areas.

Keywords: *Khilāfah; Sustainable Agriculture; Eco-theology; Food Security; Rural Poverty*

***

Introduction

Indonesia, as a country with abundant tropical biodiversity, faces a fundamental paradox in the agrarian sector. On one hand, the agricultural sector remains the main pillar of food security. On the other hand, the reality indicates acute ecological degradation and sustained structural impoverishment. The 2024 report by the Central Statistics Agency (BPS) reveals alarming data regarding the socio-economic conditions of farmers, particularly in Central Java where individual farming units with low profitability dominate.[1] Recent economic analysis indicates that despite rising market prices for rice,

[1] Badan Pusat Statistik, "Statistik Indonesia 2024" (Jakarta, 2024).

smallholder farmers remain trapped in poverty due to the skyrocketing costs of non-subsidized fertilizers and labor, creating a cycle of structural debt.[2]

This economic crisis is compounded by an ecological crisis resulting from the conventional farming model. The Green Revolution, initially promising productivity surges, now reveals its impact in the form of massive environmental damage. Research by Hartemink and McBratney indicates that intensive cropping systems in the tropics have resulted in a significant decline in Soil Organic Carbon (SOC), threatening long-term yield stability.[3] Dependence on inorganic inputs has led to soil fertility loss and physical degradation. Furthermore, data from the Ministry of Agriculture reveals that nearly 60% of paddy fields in Java suffer from "soil fatigue," characterized by low pH and micronutrient deficiency due to the excessive application of synthetic urea.[4] Pesticide residues also contaminate harvests and groundwater, creating long-term public health threats.[5]

The phenomenon of land conversion further threatens rural agriculture. Data indicates serious implications of land transformation where fertile areas are displaced by residential sectors.[6] In the Sustainable Livelihoods Approach, this degradation indicates a failure to maintain natural resource assets.[7] In facing this crisis, the Muslim community possesses a solid doctrinal footing. However, the concept of *Khilāfah* is often reduced to political discourse rather than ecological stewardship. While the discourse on Islam and ecology (*fiqh al-bi'ah*) has gained momentum globally, a significant epistemological gap

[2] Rizma Aldillah et al., "Analysis of Changes in Farmer's Exchange Rate and Their Effect on Farming in Indonesia," *Research on World Agricultural Economy*, November 6, 2025, 657–80, https://doi.org/10.36956/rwae.v6i4.2142; Neil McCulloch*, "RICE PRICES AND POVERTY IN INDONESIA," *Bulletin of Indonesian Economic Studies* 44, no. 1 (April 2008): 45–64, https://doi.org/10.1080/00074910802001579.

[3] Alfred E. Hartemink and Alex McBratney, "A Soil Science Renaissance," *Geoderma* 148, no. 2 (December 2008): 123–29, https://doi.org/10.1016/j.geoderma.2008.10.006.

[4] Kementerian Pertanian Republik Indonesia, "Laporan Kinerja Kementerian Pertanian Tahun 2023" (Jakarta, 2023).

[5] Arrayyan Najla Achza et al., "Artikel Review: Dampak Penggunaan Pestisida Terhadap Kesehatan Masyarakat Di Indonesia," *Banua: Jurnal Kesehatan Lingkungan* 5, no. 1 (May 31, 2025): 54–64, https://doi.org/10.33860/bjkl.v5i1.4113; Licon Kumar Acharya et al., "Pesticide Contamination in Groundwater: Processes, Risks, and Mitigation Strategies," *Discover Agriculture* 3, no. 1 (September 13, 2025): 152, https://doi.org/10.1007/s44279-025-00337-x; Wisdom Ebiye Sawyer, Godgift Nabebe, and Sylvester Chibueze Izah, "Public Health Implications of Pesticide Residues in Food: Risks, Regulations, and Interventions," *Greener Journal of Biomedical and Health Sciences* 7, no. 1 (November 19, 2024): 31–46, https://doi.org/10.15580/gjbhs.2024.1.102024144.

[6] Badan Pusat Statistik, "Statistik Indonesia 2024."

[7] Kofi Anani, "Sustainable Governance of Livelihoods in Rural Africa: A Place-Based Response to Globalism in Africa," *Development* 42, no. 2 (June 1, 1999): 57–63, https://doi.org/10.1057/palgrave.development.1110037.

remains. Recent scholarship has largely focused on general environmental ethics or conservation policy. For instance, Mangunjaya has extensively discussed the role of Islamic organizations in biodiversity conservation in Indonesia.[8] Similarly, international studies by Ozdemir and Ammar have explored the metaphysical foundations of Islamic eco-theology.[9] However, these studies often remain within the realm of normative theology or general policy analysis, lacking specific operationalization into technical agronomic protocols. There is a scarcity of research operationalizing specific exegetical analysis of QS. Al-An'am: 141 into technical agronomic protocols relevant to the current Indonesian context.

This research aims to bridge that gap by interconnecting sacred texts (tafsir) with agricultural science (agronomy) and rural sociology. This study employs a qualitative method with a Thematic Exegesis (*Maudu'i*) approach. The primary data sources are selected using a purposive sampling technique to represent two epistemological eras: (1) Classical Exegesis to ensure textual authority and linguistic purity; and (2) Contemporary Indonesian Exegesis to ensure contextual relevance to local agrarian issues. The unit of analysis focuses on verses explicitly containing the terms Khilāfah (QS. 2:30) and agricultural injunctions (QS. 6:141). Data analysis follows three operational stages: linguistic derivation, cross-reference of scholars' interpretations, and the 'Double Movement' synthesis to dialogize the text with the 2024 agronomic data.

Discussion

Deconstruction of the Meaning of *Khalīfah*: From Successor to Manager

The 30th verse of Surah Al-Baqarah is a Divine proclamation regarding the position of humans in the universe. Understanding this verse deeply is key to reconstructing the agricultural paradigm currently trapped in anthropocentric materialism. Allah Subhanahu Wa Ta'ala says:

وَإِذْ قَالَ رَبُّكَ لِلْمَلَٰٓئِكَةِ إِنِّي جَاعِلٌ فِي الْأَرْضِ خَلِيفَةً ۖ قَالُوٓا أَتَجْعَلُ فِيهَا مَن يُفْسِدُ فِيهَا وَيَسْفِكُ الدِّمَآءَ ۚ وَنَحْنُ نُسَبِّحُ بِحَمْدِكَ وَنُقَدِّسُ لَكَ ۖ قَالَ إِنِّيٓ أَعْلَمُ مَا لَا تَعْلَمُونَ

"*And [mention, O Muhammad], when your Lord said to the angels, 'Indeed, I will make upon the earth a successive authority.' They said, 'Will You place upon it*

[8] Fachruddin M. Mangunjaya, *Konservasi Alam Dalam Islam* (Jakarta: Yayasan Pustaka Obor Indonesia, 2021).

[9] Ibrahim Ozdemir, "The Quranic Approach to the Environment," youtube.com, 2022, https://www.youtube.com/watch?v=ui4iB26bWNM.

> *one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?' Allah said, 'Indeed, I know that which you do not know*.[10]"

The word *Khalīfah* comes from the root *kha-la-fa* which means 'behind', 'to replace', or 'to come after'. Exegetes differ on who is replaced by humans. Imam Al-Tabari in his exegesis cites a narration that humans are called *khalifah* because they replace the previous generation of *Jinn* who had inhabited the earth and caused corruption, or because humans replace one another generation after generation (*yakhlufu ba'ḍuhum ba'ḍan)*.[11] This interpretation emphasizes the aspect of temporal succession. Its ecological implication is profound. If humans are creatures that come and go in succession, then this earth is not the eternal property of the current generation. The earth is a "heritage asset" received from past generations and must be handed over to future generations. Farming that destroys the soil today for momentary profit is a betrayal of the rights of the next generation, a principle known in modern sustainability ethics as intergenerational equity.

Al-Razi and Al-Qurtubi provide another dimension, namely *Khalīfatullāh* (successor/deputy of Allah) in upholding law and justice on earth.[12] This position grants authority (sultan) to humans. However, this authority is delegative, not authentic. Humans do not possess absolute sovereignty over nature; their sovereignty is limited by the laws of the Mandate Giver (Allah). Therefore, Quraish Shihab asserts that vicegerency demands maintenance, not arbitrary exploitation.[13] Thus, the responsibility of humans as khalifah is immense: to manifest the Divine will on earth by maintaining public interest (maslahah) and mercy. In the agrarian context, this definition changes the position of the farmer from a "conqueror of nature"—as per the Western modernist paradigm—to a "steward of nature". A farmer as a *khalifah* is obliged to manage the land according to Sunnatullah (natural laws) established by God, maintaining soil fertility, and respecting the cycle of life.

---

[10] Kementerian Agama RI, "Al-Qur'an Dan Terjemahnya," Lajnah Pentashihan mushaf Al-qur'an, 2019.

[11] Abu Ja'far Muhammad Al-Tabari, *Jami' Al-Bayan 'an Ta'wil Ay Al-Qur'an* (Beirut: Dar Ibn Hazm, 2005).

[12] Fakhruddin Al-Razi, *Mafatih Al-Ghaib (At-Tafsir Al-Kabir)* (Beirut: Dar Ihya' at-Turats al-Arabi, 2000); Abu Abdillah Al-Qurtubi, *Al-Jami' Li Ahkam Al-Qur'an* (Beirut: Muassasah al-Risalah, 2006).

[13] M. Quraish Shihab, *Tafsir Al-Mishbah: Pesan, Kesan Dan Keserasian Al-Qur'an (Vol 1)* (Jakarta: Lentera Hati, 2002).

The Dialectic of *Fasād*: Angelic Prediction and Anthropogenic Reality

The most crucial part of this verse in the environmental context is the rhetorical question (*istifham*) of the angels: *ataj'alu fīhā man yufsidu fīhā wa yasfikud dimā'* (Will You place upon it one who causes corruption therein and sheds blood?). Exegetes agree that this question is not a form of protest (*i'tiradh*), but a request for explanation (*istiksyaf*). The angels, with their knowledge, saw a destructive potential within this creature named man. *Fasād* (corruption) feared by the angels includes damage to the physical and social order. Al-Qurtubi explains that fasād is the opposite of *iṣlāḥ* (repair/improvement).[14]

In today's context, what the angels predicted finds its most tangible empirical evidence in the form of Agricultural Land Degradation. First, Soil Damage: Excessive use of pesticides and chemical fertilizers has damaged the physical and biological structure of the soil. Recent soil science research indicates that intensive cropping systems in the tropics have resulted in a significant decline in Soil Organic Carbon (SOC), threatening long-term yield stability.[15] The soil becomes hard, acidic, and nutrient-poor due to the loss of this organic matter. This is a form of ifsad (destruction) of the ardh (earth) specifically mentioned in the verse. Second, Water Pollution: Agrochemical residues flow into rivers, killing aquatic biota and poisoning drinking water sources. Third, Land Conversion: The transformation of productive rice fields into concrete housing is a form of eliminating the earth's function as a food provider, which is also fasād. The fact that angels associated humans with fasād serves as a stern warning against human destructive potential.[16] Humans have an innate tendency to exploit nature for the satisfaction of desire (hawa). Thus, an agricultural system driven solely by capitalistic economic motives without moral control is almost certain to end in corruption (*fasād*), justifying the angels' concerns.

***Imārat al-Arḍ*: Divine Answer and the Role of Knowledge**

Allah answers the angels' concerns with a short yet dense sentence: *Inni a'lamu ma la ta'lamun* (Indeed, I know that which you do not know). Furthermore, Allah taught Adam the names of all things (*wa 'allama Adam al-asma'a kullaha*) (QS. 2:31). This answer implies that the solution to prevent fasād is Knowledge (*Al-'Ilm*). Humans are

[14] Al-Qurtubi, *Al-Jami' Li Ahkam Al-Qur'an*.
[15] Hartemink and McBratney, "A Soil Science Renaissance."
[16] Ismail bin Umar Ibnu Katsir, *Tafsir Al-Qur'an Al-'Azhim* (Beirut: Dar at-Tayyibah, 1999).

given intellectual potential to understand the characteristics of natural objects (*al-asma'*), ecosystem laws, and management technology. With this knowledge, humans are expected to be able to manage the earth (*Imārat al-Arḍ*) wisely, not destroy it.

The concept of *Imārat al-Arḍ* (prospering the earth) is the main goal of vicegerency. In agriculture, this means Knowledge-Based Agriculture. A *khalifah* farmer must not farm in ignorance (*jahil*). They must understand the right planting time, balanced fertilizer dosage, and pest control methods that do not damage the food chain. Blind use of pesticides is often caused by ignorance of long-term impacts. In the face of the current climate crisis, this knowledge must be translated into adaptation strategies. Studies show that farmers who possess knowledge of climate adaptation are better able to maintain productivity during extreme weather events.[17] This implies Innovation and Conservation. Human intellectual potential must be directed to create environmentally friendly agricultural innovations, such as organic soil breeding technology, water-saving irrigation, and Integrated Pest Management (IPM). This is the manifestation of the teaching of "names" by Allah.

If QS. Al-Baqarah: 30 provides the philosophical foundation, then QS. Al-An'ām: 141 provides technical operational guidance. This verse amazingly summarizes the principles of agronomy, economics, and ecology in one narrative. Allah Subhanahu Wa Ta'ala says:

وَهُوَ الَّذِيْٓ اَنْشَاَ جَنّٰتٍ مَّعْرُوْشٰتٍ وَّغَيْرَ مَعْرُوْشٰتٍ وَّالنَّخْلَ وَالزَّرْعَ مُخْتَلِفًا اُكُلُهٗ وَالزَّيْتُوْنَ وَالرُّمَّانَ مُتَشَابِهًا وَّغَيْرَ مُتَشَابِهٍۗ كُلُوْا مِنْ ثَمَرِهٖٓ اِذَآ اَثْمَرَ وَاٰتُوْا حَقَّهٗ يَوْمَ حَصَادِهٖۖ وَلَا تُسْرِفُوْاۗ اِنَّهٗ لَا يُحِبُّ الْمُسْرِفِيْنَ

"And it is He who produced gardens trellised and untrellised, and date palms, and crops of different shape and taste (its fruit) and olives and pomegranates, similar (in kind) and different (in taste). Eat of [each of] its fruit when it yields and give its due [zakah] on the day of its harvest. And be not excessive. Indeed, He does not like those who commit excess.[18]"

[17] Abrham Belay et al., "Knowledge of Climate Change and Adaptation by Smallholder Farmers: Evidence from Southern Ethiopia," *Heliyon* 8, no. 12 (December 2022): e12089, https://doi.org/10.1016/j.heliyon.2022.e12089; Yonatan Yolius Anggara et al., "THE UNPREPAREDNESS OF FARMERS IN FACING FLOOD DISASTER RISKS AS AN IMPACT OF CLIMATE CHANGE: A CASE STUDY IN BALONG, PONOROGO," *JURNAL GEOGRAFI Geografi Dan Pengajarannya* 23, no. 1 (June 10, 2025): 183–96, https://doi.org/10.26740/jggp.v23n1.p183-196; Andrew Hultgren et al., "Impacts of Climate Change on Global Agriculture Accounting for Adaptation," *Nature* 642, no. 8068 (June 19, 2025): 644–52, https://doi.org/10.1038/s41586-025-09085-w.

[18] Kementerian Agama RI, "Al-Qur'an Dan Terjemahnya."

Biological Diversification: Critique of Monoculture

Allah begins this verse by attributing the creation of gardens (*jannat*) to Himself (*wa huwallazi ansya'a*). The word ansya'a means to bring into existence and grow gradually, indicating a biological process that requires time and stages. The verse mentions a very detailed plant classification: *Ma'rūshāt* (plants that climb or require support/trellis) and *Ghaira Ma'rūshāt* (plants that stand upright). It also mentions Mukhtalifan ukuluhu (plants with different fruit tastes and textures).

The mention of this variety of plant types in one verse provides a theological foundation for maintaining biodiversity, which aligns with the modern agronomic concept of Polyculture. While this verse is not a technical manual, the explicit enumeration of diverse vegetation highlights that nature created by God is designed with diversity (biodiversity). Global reports on land resources emphasize that biodiversity loss is one of the main drivers of food system fragility.[19] Modern agricultural systems that apply Monoculture (planting one type of crop en masse) contradict this natural design (Sunnatullah). Consequently, monoculture creates a fragile ecosystem where pests spread quickly due to the absence of biological barriers. Conversely, the intercropping or agroforestry system—inspired by the spirit of this verse—creates ecological balance, breaks pest cycles, and maintains soil fertility.

Distributive Justice: The Concept of Haqqahu and Poverty Alleviation

The command wa ātū haqqahu yauma haṣādih (and give its due on the day of its harvest) is a sociological pillar in Islamic agriculture. Exegetes agree that "right" (*haqq*) in this verse refers to agricultural zakat or mandatory charity.[20] However, the timing aspect mentioned in this verse is very interesting: *yauma haṣādih* (on the day of its harvest). This contains the principle of immediacy. The rights of the poor must be given when the harvest is still fresh and abundant.

Data shows that pockets of poverty in Indonesia are located in agricultural rural areas. Farmers are often the most vulnerable group. The concept of haqqahu functions as a mechanism for wealth redistribution at the local level. Recent studies in Islamic economics suggest that integrating social finance instruments like *Zakat* is crucial for

[19] FAO, *The State of the World's Land and Water Resources for Food and Agriculture – Systems at Breaking Point (SOLAW 2021)*, *The State of the World's Land and Water Resources for Food and Agriculture – Systems at Breaking Point (SOLAW 2021)* (Rome, 2021), https://doi.org/10.4060/cb7654en.

[20] Al-Qurtubi, *Al-Jami' Li Ahkam Al-Qur'an*.

achieving Sustainable Development Goals (SDGs) in developing countries.[21] It serves as a Social Safety Net, where well-managed agricultural zakat can protect landless farm laborers. It also builds Social Capital by strengthening social cohesion between rich farmers (*muzakki*) and the poor (*mustahik*). Furthermore, it enables Empowerment, as agricultural zakat can be managed as productive capital for poor families to start small-scale farming or livestock businesses, breaking the chain of structural poverty. Failure to fulfill this right correlates with the loss of land blessings, as illustrated in the story of *Ashabul Jannah* in Surah Al-Qalam.[22]

Prohibition of *Isrāf* as Ecological Critique for the Green Revolution

The main foundation of environmental ethics is actually enshrined in the final fragment of this verse: wa lā tusrifū innahū lā yuḥibbul musrifīn. The divine message strictly prohibits all forms of action that exceed reasonable limits. Linguistically, isrāf means exceeding the limits of reasonableness or moderation (*i'tidal*). Ibn Ajibah in his ishari exegesis expands the meaning of isrāf as any action driven by desire that exceeds needs, including in the use of natural resources.[23]

In the context of Indonesian agriculture today, the most obvious and destructive form of isrāf is the excessive use of chemical fertilizers and pesticides. Farmers often use pesticides with the principle of "more is better" (insurance spraying), exceeding the recommended dose. This behavior directly correlates with the scientific concept of "Planetary Boundaries," where nitrogen and phosphorus flows have exceeded safe operating spaces due to agricultural runoff.[24] Data shows that pesticide efficiency is very low; most is wasted into the environment. This isrāf behavior causes chemical residues to accumulate in the soil (soil fatigue), killing natural pest enemies (predators), and triggering secondary pest outbreaks (resurgence). Even more concerning, health risk assessments in Brebes, Central Java, reveal that this excessive exposure has led to

[21] L. Beik, I., & Arsyianti, *Ekonomi Pembangunan Syariah. Rajawali Pers* (Jakarta: Raja Grafindo Persada, 2016).

[22] Al-Qurtubi, *Al-Jami' Li Ahkam Al-Qur'an*.

[23] Ahmad bin Muhammad Ibnu Ajibah, *Al-Bahr Al-Madid Fi Tafsir Al-Qur'an* (Beirut: Dar al-Kutub al-Ilmiyah, 2010).

[24] The Stockholm Resiience Centre, "The Evolution of the Planetary Boundaries Framework," The Stockholm Resiience Centre, 2023, https://www.stockholmresilience.org/research/planetary-boundaries.html; Edgar Fernández Fernández and Claire Malwé, "The Emergence of the 'Planetary Boundaries' Concept in International Environmental Law: A Proposal for a Framework Convention," *Review of European, Comparative & International Environmental Law* 28, no. 1 (April 22, 2019): 48–56, https://doi.org/10.1111/reel.12256.

significant health issues among farming communities.[25] This action is clearly categorized as *isrāf* because it wastes wealth, exceeds the limits of ecological balance established by Allah, and damages human life. Allah asserts *Innahū lā yuḥibbul musrifīn*. Agriculture built on isrāf practices will not receive love (*mahabbah*) and blessings from Allah. The implementation of this verse demands a shift to Sustainable Agriculture based on input efficiency and organic principles.

The Paradigm Integration

Combining QS. Al-Baqarah: 30 and QS. Al-An'ām: 141 provides a complete framework. QS. Al-Baqarah: 30 gives the vision: Humans are Khalifah (Managers/Guardians) tasked with prospering the earth with knowledge and preventing damage. QS. Al-An'ām: 141 gives the Mission: Managing land with diversification (polyculture), distributing results fairly (*zakat*), and producing efficiently without destroying (*anti-isrāf*). The following table summarizes this concept synthesis:

Table 1.
Integration of Qur'anic Concepts and Sustainable Agriculture

Dimension	Qur'anic Concept	Implementation in Sustainable Agriculture
Farmer Status	Khalīfah	Farmers as trustees guarding soil health for future generations.
Land Management	*Jannāt Ma'rūshāt* (Diversification)	Planting diverse crop types to maintain ecosystem balance and minimize pest risks.
Production Technology	*Lā Tusrifū* (Do Not Waste)	Rejecting excessive chemical pesticide/fertilizer use. Shifting to organic and biological control.
Socio-Economic	*Ātū Haqqahu* (Give its Due)	Social Justice: Implementation of harvest zakat for social safety nets and village economic strengthening.
Final Goal	*Imārat al-Arḍ & Ridha Allah*	Holistic Welfare: Food security, environmental sustainability, and spiritual blessing.

Source: Author's Analysis

[25] Budiyono Budiyono, Suhartono Suhartono, and Apoina Kartini, "Types and Toxicity Levels of Pesticides: A Study of an Agricultural Area in Brebes Regency," *JURNAL KESEHATAN LINGKUNGAN* 15, no. 2 (April 29, 2023): 109–19, https://doi.org/10.20473/jkl.v15i2.2023.109-119; Chyntia Nur Aviva Hidayat et al., "ANALISIS FAKTOR RISIKO PAPARAN PESTISIDA TERHADAP KEJADIAN HIPERTENSI PADA PETANI BAWANG MERAH," *JURNAL RISET KESEHATAN POLTEKKES DEPKES BANDUNG* 15, no. 2 (October 4, 2023): 410–22, https://doi.org/10.34011/juriskesbdg.v15i2.2209.

Social Capital and Local Wisdom as Support for *Khilāfah*

Revitalizing the value of *Khilāfah* cannot operate in a vacuum. While the Quran provides the theological mandate, its execution requires a strong social foundation. In Islamic legal theory, the implementation of *fardhu kifayah* (collective duty) such as *Imārat al-Arḍ* relies on *Jamā'ah* (community). In the Indonesian context, this collective agency is historically embodied by Islamic civil society organizations like Nahdlatul Ulama (NU) with its *Bahtsul Masail* on agrarian issues, and Muhammadiyah with its Jihad Konstitusi for agrarian justice.[26] Therefore, Social Capital—consisting of trust, networks, and reciprocity norms—serves as the necessary "soft infrastructure" to translate these theological values into grassroots movements.

Research in Sedayulawas and North Luwu indicates that farming communities with high social capital are more capable of surviving crises and easier to adopt sustainable agricultural innovations.[27] Conversely, in areas where social capital is eroded by individualism (such as BPS Central Java data on access and marketing difficulties), agriculture becomes fragile.[28] Therefore, the revitalization of *Khilāfah* must begin with rebuilding the Farmer Congregation (Community Tani). Khilāfah is not merely an individual duty (*fardhu 'ain*), but a collective duty (*fardhu kifayah*). Farmers must unite in farmer groups (Gapoktan) or strong cooperatives to fight market injustice and collectively protect village environments from corporate damage or land conversion.

Conclusion

Based on thematic exegetical studies and contextual analysis, this research concludes that the concept of *Khilāfah* in QS. Al-Baqarah: 30 constitutes a fundamental mandate of ecological management (*Imārat al-Arḍ*). This mandate requires the integration of ethical consciousness and scientific competence to prevent environmental

[26] Asri Widayati and . Suparjan, "Reaktualisasi Perjuangan Nahdlatul Ulama Dalam Mewujudkan Kedaulatan Sumber Daya Agraria (Studi Gerakan Demokrasi Radikal Pada FNKSDA)," *BHUMI: Jurnal Agraria Dan Pertanahan* 5, no. 1 (May 23, 2019): 84, https://doi.org/10.31292/jb.v5i1.321; Daniel Rusyad Hamdanny, "Dakwah Transformatif Muhammadiyah Dalam Mewujudkan Masyarakat Madani Melalui Jihad Konstitusi," *Jurnal Dakwah* 22, no. 1 (August 26, 2021): 45–77, https://doi.org/10.14421/JD.22.1.21.2.

[27] Yusriadi Yusriadi, "Sustaining Food Security through Social Capital in Agroforestry: A Qualitative Study from North Luwu, Indonesia," *Frontiers in Sustainable Food Systems* 9 (April 28, 2025), https://doi.org/10.3389/fsufs.2025.1580017; Gunawan Prayitno et al., "Structural Model of Social Capital and Quality of Life of Farmers in Supporting Sustainable Agriculture (Evidence: Sedayulawas Village, Lamongan Regency-Indonesia)," *Sustainability* 14, no. 19 (September 30, 2022): 12487, https://doi.org/10.3390/su141912487.

[28] Badan Pusat Statistik, "Statistik Pertanian 2023: Indikator Kesejahteraan Petani" (Jakarta, 2024).

degradation (*fasād*) and social conflict. The empirical reality of soil fatigue and structural poverty in rural Indonesia serves as evidence of the failure to fulfill this vicegerency function.

Furthermore, QS. *Al-An'ām*: 141 provides a comprehensive blueprint for sustainable agriculture through three pillars: (1) Biological Diversification via polyculture to maintain ecosystem balance; (2) Distributive Justice via the mechanism of *ḥaqqahu* (agricultural zakat) to address rural vulnerability; and (3) Ecological Efficiency through the strict prohibition of *isrāf*, specifically regarding the excessive use of agrochemicals that breach ecological limits. Therefore, the revitalization of these values requires a synergistic integration of theological awareness, mastery of organic agronomy, and the strengthening of social capital based on local wisdom. This integration is not merely a normative religious agenda but a structural necessity to transition Indonesian agriculture towards a system that is *thayyib* (healthy), *mubarak* (blessed), and sustainable, thereby securing the future of national food security and rural ecology.

Bibliography

Acharya, Licon Kumar, Pradosh Kumar Paramaguru, Kailashpati Tripathi, Tanmay Kumar Bhoi, Pinki Seth, and Ajanta Birah. "Pesticide Contamination in Groundwater: Processes, Risks, and Mitigation Strategies." *Discover Agriculture* 3, no. 1 (September 13, 2025): 152. https://doi.org/10.1007/s44279-025-00337-x.

Al-Qurtubi, Abu Abdillah. *Al-Jami' Li Ahkam Al-Qur'an*. Beirut: Muassasah al-Risalah, 2006.

Al-Razi, Fakhruddin. *Mafatih Al-Ghaib (At-Tafsir Al-Kabir)*. Beirut: Dar Ihya' at-Turats al-Arabi, 2000.

Al-Tabari, Abu Ja'far Muhammad. *Jami' Al-Bayan 'an Ta'wil Ay Al-Qur'an*. Beirut: Dar Ibn Hazm, 2005.

Aldillah, Rizma, Eddy Supriadi Yusuf, Rusdin, Dewi Listyati, Dina Omayani Dewi, Anggita Tresliyana Suryana, Ida Andriani, Astrina Yulianti, Yonas Hangga Saputra, and Istriningsih Istriningsih. "Analysis of Changes in Farmer's Exchange Rate and Their Effect on Farming in Indonesia." *Research on World Agricultural Economy*, November 6, 2025, 657–80. https://doi.org/10.36956/rwae.v6i4.2142.

Anani, Kofi. "Sustainable Governance of Livelihoods in Rural Africa: A Place-Based Response to Globalism in Africa." *Development* 42, no. 2 (June 1, 1999): 57–63. https://doi.org/10.1057/palgrave.development.1110037.

Anggara, Yonatan Yolius, Dyah Respati Suryo Sumunar, Nurul Khotimah, and Nursida Arif. "THE UNPREPAREDNESS OF FARMERS IN FACING FLOOD DISASTER RISKS AS AN IMPACT OF CLIMATE CHANGE: A CASE STUDY

IN BALONG, PONOROGO." *JURNAL GEOGRAFI Geografi Dan Pengajarannya* 23, no. 1 (June 10, 2025): 183–96. https://doi.org/10.26740/jggp.v23n1.p183-196.

Badan Pusat Statistik. "Statistik Indonesia 2024." Jakarta, 2024.

———. "Statistik Pertanian 2023: Indikator Kesejahteraan Petani." Jakarta, 2024.

Beik, I., & Arsyianti, L. *Ekonomi Pembangunan Syariah. Rajawali Pers*. Jakarta: Raja Grafindo Persada, 2016.

Belay, Abrham, Christopher Oludhe, Alisher Mirzabaev, John W. Recha, Zerihun Berhane, Philip M. Osano, Teferi Demissie, Lydia A. Olaka, and Dawit Solomon. "Knowledge of Climate Change and Adaptation by Smallholder Farmers: Evidence from Southern Ethiopia." *Heliyon* 8, no. 12 (December 2022): e12089. https://doi.org/10.1016/j.heliyon.2022.e12089.

Budiyono, Budiyono, Suhartono Suhartono, and Apoina Kartini. "Types and Toxicity Levels of Pesticides: A Study of an Agricultural Area in Brebes Regency." *JURNAL KESEHATAN LINGKUNGAN* 15, no. 2 (April 29, 2023): 109–19. https://doi.org/10.20473/jkl.v15i2.2023.109-119.

FAO. *The State of the World's Land and Water Resources for Food and Agriculture – Systems at Breaking Point (SOLAW 2021)*. *The State of the World's Land and Water Resources for Food and Agriculture – Systems at Breaking Point (SOLAW 2021)*. Rome, 2021. https://doi.org/10.4060/cb7654en.

Fernández, Edgar Fernández, and Claire Malwé. "The Emergence of the 'Planetary Boundaries' Concept in International Environmental Law: A Proposal for a Framework Convention." *Review of European, Comparative & International Environmental Law* 28, no. 1 (April 22, 2019): 48–56. https://doi.org/10.1111/reel.12256.

Hamdanny, Daniel Rusyad. "Dakwah Transformatif Muhammadiyah Dalam Mewujudkan Masyarakat Madani Melalui Jihad Konstitusi." *Jurnal Dakwah* 22, no. 1 (August 26, 2021): 45–77. https://doi.org/10.14421/JD.22.1.21.2.

Hartemink, Alfred E., and Alex McBratney. "A Soil Science Renaissance." *Geoderma* 148, no. 2 (December 2008): 123–29. https://doi.org/10.1016/j.geoderma.2008.10.006.

Hidayat, Chyntia Nur Aviva, Onny Setiani, Nikie Astorina Yunita Dewanti, and Yusniar Hanani Darundiati. "ANALISIS FAKTOR RISIKO PAPARAN PESTISIDA TERHADAP KEJADIAN HIPERTENSI PADA PETANI BAWANG MERAH." *JURNAL RISET KESEHATAN POLTEKKES DEPKES BANDUNG* 15, no. 2 (October 4, 2023): 410–22. https://doi.org/10.34011/juriskesbdg.v15i2.2209.

Hultgren, Andrew, Tamma Carleton, Michael Delgado, Diana R. Gergel, Michael Greenstone, Trevor Houser, Solomon Hsiang, et al. "Impacts of Climate Change on Global Agriculture Accounting for Adaptation." *Nature* 642, no. 8068 (June 19, 2025): 644–52. https://doi.org/10.1038/s41586-025-09085-w.

Ibnu Ajibah, Ahmad bin Muhammad. *Al-Bahr Al-Madid Fi Tafsir Al-Qur'an*. Beirut: Dar al-Kutub al-Ilmiyah, 2010.

Ibnu Katsir, Ismail bin Umar. *Tafsir Al-Qur'an Al-'Azhim*. Beirut: Dar at-Tayyibah, 1999.

Kementerian Agama RI. "Al-Qur'an Dan Terjemahnya." Lajnah Pentashihan mushaf Al-qur'an, 2019.

Kementerian Pertanian Republik Indonesia. "Laporan Kinerja Kementerian Pertanian Tahun 2023." Jakarta, 2023.

Mangunjaya, Fachruddin M. *Konservasi Alam Dalam Islam*. Jakarta: Yayasan Pustaka Obor Indonesia, 2021.

McCulloch*, Neil. "RICE PRICES AND POVERTY IN INDONESIA." *Bulletin of Indonesian Economic Studies* 44, no. 1 (April 2008): 45–64. https://doi.org/10.1080/00074910802001579.

Najla Achza, Arrayyan, Cut Hudia Amaliana, Firdus, Muhammad Nasir, and Alia Rizki. "Artikel Review: Dampak Penggunaan Pestisida Terhadap Kesehatan Masyarakat Di Indonesia." *Banua: Jurnal Kesehatan Lingkungan* 5, no. 1 (May 31, 2025): 54–64. https://doi.org/10.33860/bjkl.v5i1.4113.

Ozdemir, Ibrahim. "The Quranic Approach to the Environment." youtube.com, 2022. https://www.youtube.com/watch?v=ui4iB26bWNM.

Prayitno, Gunawan, Ainul Hayat, Achmad Efendi, Hagus Tarno, Fikriyah, and Septia Hana Fauziah. "Structural Model of Social Capital and Quality of Life of Farmers in Supporting Sustainable Agriculture (Evidence: Sedayulawas Village, Lamongan Regency-Indonesia)." *Sustainability* 14, no. 19 (September 30, 2022): 12487. https://doi.org/10.3390/su141912487.

Sawyer, Wisdom Ebiye, Godgift Nabebe, and Sylvester Chibueze Izah. "Public Health Implications of Pesticide Residues in Food: Risks, Regulations, and Interventions." *Greener Journal of Biomedical and Health Sciences* 7, no. 1 (November 19, 2024): 31–46. https://doi.org/10.15580/gjbhs.2024.1.102024144.

Shihab, M. Quraish. *Tafsir Al-Mishbah: Pesan, Kesan Dan Keserasian Al-Qur'an (Vol 1)*. Jakarta: Lentera Hati, 2002.

The Stockholm Resiience Centre. "The Evolution of the Planetary Boundaries Framework." The Stockholm Resiience Centre, 2023. https://www.stockholmresilience.org/research/planetary-boundaries.html.

Widayati, Asri, and . Suparjan. "Reaktualisasi Perjuangan Nahdlatul Ulama Dalam Mewujudkan Kedaulatan Sumber Daya Agraria (Studi Gerakan Demokrasi Radikal Pada FNKSDA)." *BHUMI: Jurnal Agraria Dan Pertanahan* 5, no. 1 (May 23, 2019): 84. https://doi.org/10.31292/jb.v5i1.321.

Yusriadi, Yusriadi. "Sustaining Food Security through Social Capital in Agroforestry: A Qualitative Study from North Luwu, Indonesia." *Frontiers in Sustainable Food Systems* 9 (April 28, 2025). https://doi.org/10.3389/fsufs.2025.1580017.