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Agrarian Change and the Reproduction of Rural Poverty In Indonesia's Rice Granary: Evidence from Indramayu Regency

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Abstract

This article examines how agrarian change reproduces rural poverty in a rice-producing region of Indonesia. It reanalyses a descriptive field report based on observations and informal conversations conducted in Indramayu. Combining agrarian class analysis with a relational understanding of resource access, the study traces connections among land control, seasonal production, agricultural inputs, markets, local governance, and livelihood mobility. The report differentiates wealthy landowners, middle farmers, smallholders, and landless agricultural workers whose opportunities to benefit from rice production are structurally unequal. Land leasing, insecure cultivation of state-administered forestland, costly water extraction, dependence on intermediary traders, and uneven access to agricultural assistance place heavier burdens on less-capitalized cultivators. Seasonal off-farm work and migration operate less as evidence of agricultural irrelevance than as means of sustaining households and enabling continued cultivation. Narratives of mechanization and local political influence further suggest that higher agricultural output can coexist with insecure labor and unequal appropriation of benefits. Because the material is a single-period qualitative record rather than a longitudinal survey, the study reconstructs locally remembered trajectories without claiming measured historical changes. The findings underline the distinction between food-production performance and the social reproduction of farming households.

Abstrak

Artikel ini mengkaji bagaimana perubahan agraria mereproduksi kemiskinan pedesaan di wilayah penghasil beras di Indonesia. Penelitian ini menganalisis kembali laporan lapangan deskriptif berdasarkan observasi dan percakapan informal di Kecamatan Kroya, Indramayu, pada 5–20 Oktober 2021. Dengan menggabungkan analisis kelas agraria dan perspektif relasional mengenai akses sumber daya, artikel menelusuri keterkaitan penguasaan lahan, musim produksi, input pertanian, pasar, tata kelola lokal, dan mobilitas nafkah. Laporan membedakan petani kaya, petani menengah, petani gurem, serta buruh tani tanpa lahan yang memiliki kemampuan tidak setara dalam memperoleh manfaat dari produksi padi. Sewa lahan, ketidakpastian penggarapan kawasan hutan, mahalnya penyediaan air, ketergantungan kepada pedagang perantara, dan ketimpangan akses bantuan pertanian memperberat beban petani dengan modal terbatas. Pekerjaan di luar pertanian dan migrasi musiman menjadi cara rumah tangga mempertahankan kehidupan sekaligus memungkinkan kegiatan pertanian berlanjut. Kesaksian mengenai mekanisasi dan pengaruh politik lokal mengindikasikan bahwa peningkatan output dapat berjalan bersamaan dengan ketidakamanan kerja dan distribusi manfaat yang timpang. Karena sumbernya berupa catatan kualitatif satu periode, rekonstruksi perubahan historis diperlakukan sebagai ingatan informan, bukan bukti perubahan longitudinal yang terukur. Temuan menegaskan perbedaan antara keberhasilan produksi pangan dan keberlanjutan kehidupan rumah tangga petani. Secara konseptual, evaluasi pembangunan pertanian perlu memperhitungkan ketimpangan struktur kelas, kelembagaan lokal, distribusi risiko, dan strategi nafkah yang menopang reproduksi rumah tangga pedesaan.

Keywords: agrarian change; agrarian class differentiation; Indonesia; land access; rice production; rural poverty; social reproduction

1. INTRODUCTION

Indonesia's rice-growing regions occupy an unusual position in national development. They are integral to food security, price stabilization, and the political legitimacy of agricultural policy, yet their contributions to aggregate production do not establish whether cultivation provides secure livelihoods for the households involved. The policy literature on Indonesian rice has long distinguished production targets, market intervention, and poverty reduction, showing why improvements in one measure cannot be assumed to resolve the others [1]–[4]. At the scale of a subdistrict, this distinction takes on a concrete social form: some people accumulate land and

control marketing channels, while others maintain production through rented plots, borrowed money, unpaid household labor, and work outside the village. The critical question is therefore not simply how much rice is produced, but who controls the conditions of production and who can retain its benefits.

The agrarian literature on Java provides a compelling starting point. Differentiation and concentration of landholdings are established features of Javanese agrarian history, even where large estates have not replaced small farms [5]. Recent village research also demonstrates that local landlords and capitalist farmers may command influence beyond cultivation itself, including within labor relations and village politics [6]. These studies challenge a unitary image of the 'farmer' as an economically homogeneous subject. Classical agrarian analysis asks how class relations emerge through control over land, labor, and capital, and how agricultural households reproduce themselves amid uneven accumulation [7]–[11]. That question is particularly relevant in places celebrated for food production, where the prominence of a crop may conceal heterogeneous and unequal livelihoods.

This article revisits a 2021 field account titled *Petani Miskin di Lumbung Padi* ('Poor Farmers in the Rice Granary'), based on field observations in Kroya Subdistrict, Indramayu Regency, West Java. Kroya was described as a landscape dominated by rice fields, rain-fed production, mixed agricultural and non-agricultural work, and substantial differences in control over land and farm inputs. Its local account of peasant life included not only cultivation and marketing practices but also village elections, farmer organizations, forestland tenancies, water shortages, indebtedness, and periodic movement toward the greater Jakarta metropolitan area. The report's central paradox was a productive rice landscape inhabited by many households who experienced cultivation as insufficient for their own reproduction.

Rather than treating that paradox as a local anomaly, the article interprets it as an outcome of interlocking agrarian relations. It asks: (1) how were positions within Kroya's agrarian class structure differentiated by access to land, capital, labor, and markets in 2021; (2) through which processes did production costs, insecure access, local institutions, and technological change shape household vulnerability; and (3) how did seasonal non-farm employment mediate the reproduction of agrarian livelihoods? The argument is that agrarian poverty was relationally produced: better-resourced actors could deploy property, capital, networks, and institutional influence to protect or enlarge their share of agricultural benefits, whereas smaller cultivators and workers bore more of the risks of seasonal production. The analysis thus shifts attention from rice output alone to the class-specific conditions under which rice was produced and livelihoods sustained.

The historical dimension requires caution. Interviews conducted over two weeks in October 2021 yielded recollections of earlier decades, including the Green Revolution, transformations in harvesting, land transactions, and the economic crisis of the late 1990s. These accounts are significant evidence of how residents understood agrarian change, but they do not constitute a time-series measurement of land concentration or labor displacement. Accordingly, 'agrarian change' in this article refers to a historically situated configuration of agrarian relations, interpreted through reported memories and practices visible in 2021, rather than quantified change between two survey waves.

2. LITERATURE REVIEW AND ANALYTICAL FRAMEWORK

The article draws principally on two connected perspectives. The first is agrarian class differentiation: households' class positions derive not only from operated land area but also from how they obtain land, mobilize labor, finance cultivation, extract or retain surplus, and combine farm and non-farm employment [7]–[11]. The second is a relational theory of access, which distinguishes formally recognized rights from the effective capacity to benefit from resources. Such capacities are shaped by technology, capital, authority, social identity, and institutional relations [12]–[14]. Livelihood approaches help explain why farming households combine multiple activities, but the analysis treats diversification as a socially differentiated response rather than a universally empowering choice [15]–[17].

3. RESEARCH METHOD

This study is a qualitative, historically situated reanalysis of a pre-existing descriptive field report. The empirical foundation is the report *Petani Miskin di Lumbung Padi*, developed from observations and informal interviews or conversations in Kroya Subdistrict, Indramayu Regency, between 5 and 20 October 2021. The original account addresses nine administrative villages at subdistrict level but does not provide a complete village-by-village record of where each observation occurred. The source describes agricultural practices, class categories, production costs, local institutions, land relations, and livelihood trajectories, and includes photographic documentation of farming equipment, infrastructure, and agricultural landscapes. It does not specify the total number of informants, a sampling frame, interview duration, audio-recording procedures, or a formal coding protocol; none is inferred here.

The analytical procedure used for the present manuscript was a structured reading of the report organized around five questions: land and tenancy, seasonal labor and production, access to water and inputs, circulation and marketing of produce, and village-level political authority. Field descriptions were distinguished from informant claims, the original author's interpretations, and the secondary literature. Numerical amounts are reported as 2021 observations or informant estimates, not as verified farm accounts or contemporary prices. Quotations rendered in English are translations of statements reproduced in Indonesian in the report; local terminology is retained where it carries analytical meaning. Claims involving alleged corruption, administrative rules, or the conduct of identifiable organizations are attributed to participants unless independently established. Because data were gathered during one short period, this is an interpretive case study, not a representative prevalence estimate, ethnography with continuous residence, or longitudinal impact evaluation.

4. RESULTS AND DISCUSSION

4.1. A rice-producing landscape organized by season and unequal resources

Kroya lies in the southern part of Indramayu Regency. The 2021 report describes nine villages—Jayamulya, Sumber Jaya, Kroya, Sukamelang, Sukaslamet, Sumbon, Temiyang, Temiyangsari, and Tanjungkerta—and an environment in which roads, rice fields, secondary crops, and former forestland form an interconnected agrarian landscape. Rice was not the exclusive source of income. Residents reportedly worked as construction laborers, factory workers, traders, agricultural wage workers, and migrant workers. Nevertheless, cultivation structured the timing of economic and social life. People who left after harvesting often returned during planting or harvesting periods; the

yearly *sedekah bumi* ritual before the wet-season crop was another expression of agriculture's social importance.

The report divides rice production into the wet-season *rendeng*, beginning around November or December and ending around March or April, and the drier *sadon*, generally associated with May through August or September. Access to rainfall was especially consequential because modern irrigation networks were reported to be absent from much of the area observed. In the wet season, cultivators commonly planted rice; in the dry season, those with adequate means could attempt another rice crop or shift to vegetables such as chilies, cucumbers, and bitter melon. Many less-capitalized farmers managed only one annual rice crop. Planting dates were judged by accumulated rainfall and local knowledge, since premature planting risked inadequate water while late planting exposed crops to concentrated pest attacks. This practical temporality ties agricultural knowledge to the unequal material capacity to act on it.

The report gives indicative wet-season yields of approximately four to five metric tons of paddy per hectare, compared with two to three tons during the dry season. A locally reported sale price of roughly IDR 4.5 million per ton suggests gross receipts of about IDR 18–22.5 million per hectare for the wet season and IDR 9–13.5 million for the dry season. These are not net incomes and should not be read as estimates for all households. They do not account comprehensively for tenancy payments, labor-sharing arrangements, losses, differing irrigation expenditures, household consumption, and discrepancies among the cost entries. The original report's stated production-cost total requires reconciliation with its own itemized list; for that reason this article refrains from calculating a definitive farm profit rate from those figures.

Farmland access and road access intersected with market opportunity. Fields nearer paved roads were more accessible to buyers associated with rice mills, including *pawongan*, while fields situated deeper along rough roads tended to depend on intermediary buyers called *colek*. Farmers also described *tebasan*, the purchase of a standing crop or its output by a buyer who organized harvesting, and *derep*, a harvest labor arrangement that could involve payment through a portion of the crop. Commercialization was thus not a single exchange between an abstract farmer and an impersonal market. Transport costs, buyer networks, labor recruitment, and the urgency of household cash needs influenced who could sell to whom, on what terms, and at which point in the production cycle.

These practices demonstrate why large aggregate harvests are an incomplete measure of rural welfare. The field report documents conditions under which agricultural productivity could be relatively significant while control over complementary resources remained concentrated. A favorable season benefited farmers differently depending on whether they owned their plots, paid high annual rent, purchased water, borrowed operating capital, or sold immediately to settle debts. A rainfall shock was similarly unequal because those who could afford pumps or diversified cultivation faced different constraints from those whose next meal or rental payment depended on a single annual harvest. The relevant social object, then, is the organization of production rather than production volume alone.

4.2. Class differentiation, tenancy, and the persistence of small-scale cultivation

The original researcher distinguishes four broad positions: wealthy farmers or *wak haji*, middle farmers, smallholders or *petani gurem*, and agricultural wage workers. This classification is qualitative and does not imply that all households fall into mutually exclusive classes. Some middle farmers rent

and lease land at the same time; a smallholder may own a tiny plot while working for wages; a wealthy owner may derive substantial earnings from urban or non-agricultural investments. In this sense class position is better understood as a bundle of economic relations than as land area alone. It is especially important to distinguish title to land from its effective operational control [12], [13].

Table 1. Agrarian positions and characteristic relationships described in Kroya (field report, October 2021).

Position	Indicative relation to land	Production and livelihood relations
Wealthy landowners (*wak haji*)	Often control more than three *bau* (approximately 2.1 ha); may own and lease out plots	Can hire labor, delegate supervision to trusted intermediaries, finance pumping and mechanization, and conduct businesses outside agriculture
Middle farmers	Typically operate approximately 1–2 ha through ownership, rental, or both	Pay rent or obtain loans, use family and hired labor, often attempt a second season, and undertake non-farm work
Smallholders (*petani gurem*)	Approximately 100–200 *bata* (0.14–0.28 ha) in the report; sometimes rent or sharecrop	Rely heavily on household labor, frequently grow only one rice crop, and combine cultivation with wage employment
Agricultural wage workers	No controlled plot in the cases described	Sell labor for planting, harvesting, threshing, drying, and non-farm jobs; some migrate seasonally

Wealthy farmers were described as possessing enough capital to hire workers, invest in machinery or obtain machine services, finance farm inputs, and survive the uncertainty of a dry-season crop. Some delegated daily cultivation to a trusted *pawong* while engaging in non-agricultural business elsewhere. They could rent plots to others, and landholdings were described as a store of economic value and a resource in local political contests. Accumulated surplus could therefore potentially be transformed into additional land or influence. This is consistent with arguments that an agrarian ruling class may exercise power through its simultaneous presence in land, labor, and nonfarm institutions [5], [6]. It would nevertheless be inaccurate to conclude that every wealthy landowner in Kroya was a capitalist farmer in a strict theoretical sense without household-level data on capital, wage labor, and accumulation.

Middle farmers occupied an ambiguous position. The report describes their operational holdings as generally around one to two hectares, obtained through inheritance, personal ownership, cash rent, or harvest-dependent rent. A quoted annual rental range was IDR 10–12 million per hectare in ordinary local arrangements, although location and demand influenced rates. Some farmers borrowed from banks or well-off villagers to pay rent in advance. Others sublet land, including plots accessed through former forest areas. Such arrangements could make a household simultaneously a cultivator subject to rental obligations and an intermediary that received rental income from a smaller farmer. The dichotomy between landowner and tenant therefore obscures chains of mediated control.

The smallholding category was characterized by extremely limited plots, often fragmented through inheritance and sometimes supplemented by rented land. Farming was maintained largely through family labor, with smallholders themselves joining planting or harvesting crews on other people's fields. The report attributes limited dry-season cultivation partly to inability to finance pumping. It also describes difficulty obtaining subsidized fertilizer and dependence on the more expensive inputs available through shops. This position illustrates a critical feature of agrarian differentiation: continued access to a plot does not guarantee autonomy from wage labor or commercial credit.

Small farms may persist not because their output meets all household needs but because they remain one part of a livelihood assembled across several labor and income sources [7], [8], [18].

The landless group was portrayed as selling labor throughout the agricultural calendar, sometimes traveling in groups before sunrise to sites requiring planting, harvesting, or crop processing. Payment could be monetary or in kind; the report repeatedly mentions a *derep* sharing ratio described as one part in six. Once local agricultural employment ceased, some workers moved to construction, petty trade, manual carrying, or jobs in more irrigated neighboring areas. Family members, including spouses and children, were also reported to pursue urban informal work or migration. Such labor arrangements remind us that a seemingly self-sufficient peasant landscape is also a labor market organized around class-specific ownership and seasonal demand. Earlier Javanese studies documented labor and harvesting relations as contested components of agrarian stratification [19]–[21].

Participants connected changes in landholding patterns to the 1970s and the early 2000s, associating the first period with Green Revolution inputs and commercialization and the second with land transactions, crisis-driven mobility, and expanded cultivation in formerly forested areas. These accounts are suggestive, not sufficient to date or quantify an actual rise in concentration. What is securely observable in the 2021 account is the coexistence of different land relations and unequal capacities to consolidate them. Wealthier farmers were described as able to buy or rent additional plots, while smallholders and laborers described sales of inherited land, debt pressures, and shrinking inheritances. This uneven ability to turn farming into accumulation helps explain why agricultural output and rural poverty may reproduce each other rather than move in opposite directions.

4.3. Forestland, ambiguous tenure, and selective resource access

Some of the report's most analytically significant material concerns land administered as forest by Perhutani. Residents described land formerly occupied by teak or eucalyptus trees as having been converted in practice into rice plots, vegetable gardens, and other uses. Such cultivation did not necessarily confer secure individual ownership or clear long-term tenancy rights. The report describes arrangements mediated through forest officials, informal access, rental payments, and obligations associated with remaining eucalyptus trees. It also records claims that better-connected intermediaries could obtain plots at comparatively low rates and subsequently lease them to local cultivators at higher prices. These claims require institutional verification, but they capture a lived disparity between cultivating land and possessing a dependable entitlement to benefit from it.

Access theory helps clarify why apparent land availability did not necessarily reduce inequality. Ribot and Peluso define access through the ability to derive benefits, not simply possession of a formal right [12]. In Kroya, the reported ability to use former forestland depended on relationships with officials, rental capital, and negotiations with persons already controlling plots. Insecure or contested tenure made infrastructural improvements difficult and could render cultivators dependent on those able to interpret or broker administrative authority. Sikor and Lund further show that property and access are inseparable from contests over who can authorize a claim [13], while Lund's account of state formation treats recognition itself as a form of political power [14].

Forestland is not a socially neutral land category. Research on Indonesia's political forests has documented how administrative classifications can be disconnected from ongoing local occupation and use, with consequences for recognition and resource claims [22], [23]. More recent scholarship likewise demonstrates that land occupation and claims to citizenship in Java are partly struggles over

whether public institutions will acknowledge residents' claims [24]. Kroya's case should not be equated directly with those different historical settings; instead, it illustrates the analytical usefulness of examining overlapping authorities and differentiated capacities to negotiate them. Contemporary Indonesian studies also show how regulatory and market power shape land control and agrarian inclusion in ways not reducible to a simple transfer of title [25]–[27].

A particularly striking passage in the field report concerns the administrative visibility of agricultural activity on forest-classified land. According to local statements recorded by the researcher, plots under forest administration were not consistently counted as agricultural land, while output from their cultivation reportedly entered local production accounts. If accurate, this suggests a distinction between recognizing commodities and recognizing cultivators or their productive space: harvests become visible to agricultural accounting without equivalent recognition of the conditions in which they were generated. The report does not contain the underlying statistical registers needed to establish whether or how this took place. The proposition is therefore a hypothesis generated by local testimony rather than a verified conclusion about official data manipulation.

The relation between forestland tenure and public infrastructure also matters. The account reports that residents and one local legislator regarded the status of Perhutani-administered land as a barrier to developing irrigation routes. This interpretation cannot be accepted as a legal determination without examining the applicable permits and regulations. Nonetheless, it shows how participants experienced administrative boundaries as consequential for agricultural development. Farmers were further described as seeking access to plots through relationships with officials and organizations, while other actors, including enterprises operating in or near former forest areas, appeared in narratives of competing land uses. In this configuration, poverty is not only a shortage of cultivable area. It is partly a problem of costly, conditional, and politically mediated rights to use land productively.

4.4. Water scarcity, technology, and differentiated costs of reproduction

The seasonal structure of farming made water a decisive factor of differentiation. In the account, ordinary rainfall supported the main rice season but did not guarantee a second. The report describes an absence of extensive modern irrigation in the observed landscape and emphasizes the expense of groundwater pumping. Three locally named technologies—*bor patek*, *sibel*, and *bor P2T*—were distinguished by energy source, scale, cost, and potential water supply. For better-resourced farmers, paying for a pump could extend the agricultural calendar. For poorer tenants and smallholders, the same technology represented a cost that sometimes made dry-season planting impossible. The result was unequal access to time itself: the capacity to produce in a second season depended on control over capital and water infrastructure.

The report also identifies a political economy of infrastructure. Residents linked the scarcity of public reservoirs or *embung* to the limited availability of village land and to the income derived from leasing valuable village-controlled plots, locally called *tanah carik*. They alleged that creating a water reservoir would compete with revenue-generating land use. This account cannot determine why a reservoir was not built, but it reveals a distributive conflict between short-term rental benefits and the potentially broad benefits of water provision. A public asset may be experienced as scarce not only because of hydrology but because of institutions allocating the uses and proceeds of land.

Farmers described difficulties obtaining government-supported *bor P2T* pumping equipment through organized applications. Some reported costly procedures and alleged informal payments;

one account mentioned a requested amount approaching IDR 30 million. These are allegations documented as interview material, not findings of proven misconduct. They nonetheless convey how applicants perceived access to public technology as mediated by bureaucratic requirements, organizational membership, and resources for obtaining approval. The implication is not that technological assistance is inherently ineffective. Rather, technologies introduced into unequal social relations can widen existing differences unless their allocation and maintenance are transparent and inclusive.

Machinery likewise changed the organization of labor. The account links historical introduction of threshing equipment and the *tebasan* marketing arrangement to perceptions of faster harvesting and fewer opportunities for manual work. At the time of field observation, residents discussed the possible introduction of a combined harvester and some workers opposed it because they feared the loss of *derep* and threshing jobs. The text documents anxiety about prospective mechanization; it does not prove that a new combine harvester had already displaced a measurable number of workers in Kroya. This distinction matters because mechanization can improve timeliness and reduce labor requirements while generating uneven livelihood effects, depending on who owns machines and whose work they replace.

Research using Indonesian farm data finds complementarities between farm size and machinery adoption in a context of rising wages [28]. Research on rice-harvest technology in several Indonesian regions has similarly identified changes in employment and tenancy institutions [29]. These studies are not direct evidence for Kroya but sharpen its analytical questions. Landowners and better-capitalized operators may appropriate gains from faster harvesting or reduced labor demand, whereas landless people dependent on agricultural day work face the loss of earning opportunities. Li's call to place labor centrally in agrarian debates is pertinent precisely because counting hectares or total output cannot capture the welfare of those who work without secure control over land [30].

Mechanization should therefore be analyzed neither as an unqualified threat nor as an automatically egalitarian improvement. Much depends on the social distribution of ownership, hiring arrangements, water, and labor opportunities. In a rain-fed agricultural system, a machine may raise operational efficiency on plots large and well-located enough to use it while offering fewer advantages to isolated parcels or household-managed plots. Similarly, irrigation can increase production but expose poor cultivators to new fuel, rental, or debt burdens if access remains market-mediated. The Kroya account suggests that technical modernization and class differentiation were experienced together, though it does not permit estimation of their independent causal effects.

4.5. Markets, debt, and the squeeze on small producers

Even when yields were sufficient, the report describes a sequence of deductions and obligations between field and household. Land rental, fertilizer, pesticides, tractor services, hired labor, harvesting, drying, transport, and interest on loans were among the costs confronting producers. The burden differed by class. Owners of substantial land could choose whether to rent it out, hire managers, or sell through more direct channels. Tenant farmers needed to recover rent as well as working capital, and poor cultivators often relied on loans simply to begin the growing season. Production thus involved unequal exposure to fixed costs and uncertainty. Cultivating a crop did not guarantee that the cultivator retained enough of its sale value for a full year's household needs.

The report records two commonly described sources of borrowing: formal bank credit and informal advances from wealthier residents or landlords. Some commercial bank loans reportedly required

formal collateral or documents that were difficult for poorer cultivators to supply. Informal lenders could offer easier access without the same formal requirements but often at higher perceived cost. From the perspective of household reproduction, the issue was not only the price of credit. Borrowing for rent or fertilizer tied the possibility of planting to repayment after harvest, regardless of weather or the terms offered by produce buyers. An unfavorable season could require renewed borrowing or lead to a land sale, deepening dependence in the next cycle.

The marketing practices of *colek* and *pawongan* add a further dimension. Residents said that sale prices could decline sharply during harvest and alleged that intermediaries sometimes shaped expectations about future prices. The original account cannot verify deliberate manipulation of a wider regional market or distinguish it from normal seasonal price movement. Still, it documents an asymmetric position: smaller producers with few savings, poorer roads, and urgent cash requirements had less latitude to store grain or negotiate. The report mentions cases in which farmers sold an entire harvest quickly at a price described as below the prevailing local level. Here the ability to wait, transport, dry, or store grain constituted a form of market power that was distributed unequally across classes.

The consequences of this squeeze appear clearly when wet- and dry-season cultivation are considered together. For some tenants, the main rainy-season harvest was insufficient to cover both annual land rent and household living costs. A second crop was pursued to make cultivation viable, yet that crop required more expensive water access and generally produced lower reported yields. Rather than treating a second crop as straightforward evidence of intensification and prosperity, the 2021 narratives suggest it could be an obligation imposed by high rental costs. The same farmer could simultaneously increase total output and remain close to the margin of economic reproduction.

National rice policy helps place this tension in context without reducing it to a national price effect. Research on rice prices and poverty in Indonesia has shown that the distributional implications of rice prices are complicated by differences between producers and consumers and by households that both grow and buy rice [1]–[4]. The Kroya report likewise described cultivators who sold most of their grain to obtain cash and later purchased household necessities. A rise in the paddy price would not necessarily benefit all rural households equally, particularly landless workers who must purchase food or tenant farmers facing increasing input costs. Conversely, low prices may benefit consumers while worsening the cash position of indebted producers. The object of analysis must be the household's combined position in production, labor, credit, and consumption markets.

This is also why the report's monetary figures should not be converted mechanically into poverty headcounts or net profits. For one hectare in a specified season, an aggregate production estimate, gross output value, and selected input expenditures are described, but the available entries are internally difficult to reconcile and exclude some obligations. The document provides no complete set of household budgets, consumption data, debt service, or comparable observations across farm classes. It supports an explanation of mechanisms and perceived constraints, not a quantitative estimate of the poverty rate or the average income of Kroya farmers. Its central insight remains substantive: having an agricultural commodity to sell did not imply control over the terms on which cultivation and household survival were financed.

4.6. Local politics, farmer organizations, and unequal recognition

The report repeatedly connects class differentiation to village political authority. Several interviewees described village-head elections as arenas in which wealthy farming families competed for office. They associated political influence with control over land, labor networks, village-administered plots, and access to subsidized agricultural equipment or inputs. These claims should not be generalized to all village governments in Indramayu. They indicate, rather, that residents perceived village governance as embedded in local agrarian relations. In such a setting, public allocation procedures may be experienced not as autonomous administration but as part of struggles over economic and political influence.

Farmer organizations illustrate this tension. The account notes that groups could help residents seek tractors, pumps, fertilizer, or seed. It also records allegations of *kelompok tani siluman* ('ghost farmer groups'), described by interviewees as nominal associations that allegedly used other farmers' names or identity documents while concentrating benefits among a small circle of relatives or well-connected members. The text does not provide registration records, beneficiary lists, or formal audit findings proving these accusations. An analytically careful reading treats them as reports of perceived exclusion and possible organizational capture requiring independent documentation. Yet their importance is not diminished: they show that farmer organizations could be a disputed gateway to publicly subsidized resources.

Research on Indonesian village governance emphasizes both the possibility of responsive local institutions and the continuing risk of domination by particular interests [31]. The broader literature on patron–client political networks likewise shows why economic inequalities may be reproduced through political transactions rather than only market exchange [32]. In the Kroya material, the same actor could appear as landowner, lender, employer, tenant broker, organizational leader, or political supporter. Such overlap may create enduring relations of dependence. Access to a loan, a machine, a buyer, or an administrative signature can be conditional on relationships that disadvantaged cultivators have limited ability to challenge.

These relations also shape what counts as an agrarian development problem. Interviewees described agricultural extension as weak or detached from local needs, complained about subsidized inputs, and criticized seed assistance for crops with which they lacked familiarity. These observations are not a comprehensive evaluation of extension workers or government programming. They nonetheless underscore that the availability of a policy on paper is different from the ability of a particular household to benefit from it. Indonesian policy discussions of fertilizer distribution have repeatedly raised similar questions about targeting, access, and supply [33]. Such comparisons support the analytical relevance of the issue, not the empirical truth of specific accusations in Kroya.

The report records some farmers' claims that local concerns received little attention outside celebratory harvest events. Public narratives of plentiful rice production were contrasted with ordinary experiences of debt, road deterioration, and scarce water. This is a contest about representation as much as about resources. Large harvests make regions legible as contributors to food security; less visible are those without title, without bargaining power, or without a formally recognized organizational voice. Such a contrast helps explain the political resonance of the phrase 'poor farmers in the rice granary': it contests the assumption that official production achievements adequately describe the social condition of the producers.

4.7. Migration, livelihood diversification, and the reproduction of agrarian classes

The mobility described in Kroya is closely synchronized with the agricultural calendar. After local cultivation and harvesting were finished, many residents reportedly traveled to other districts or toward the Jakarta metropolitan region for wage labor, construction, factory employment, and petty trade. Some agricultural workers found additional farm employment in places with more reliable irrigation; others combined temporary movement with periodic returns for planting and harvesting. These patterns suggest that non-agricultural employment was not simply a stage after farming. It remained embedded in the social and financial organization of agricultural households, with remitted income helping maintain consumption and, in some cases, subsequent production.

Livelihood diversification is often interpreted as an indicator of expanded opportunity, but the report makes clear that its meaning varies by class. Wealthy farmers could use non-farm enterprises to enlarge an existing asset base. Middle farmers might work outside agriculture because farm receipts were insufficient to support year-round needs or cover annual rent. Smallholders and wage workers could seek work elsewhere because their own plots or local agricultural wage opportunities were too limited. Ellis, Bebbington, and later livelihood researchers explain the importance of multiple activities and assets for rural survival [15]–[17], [34], [35]. In Kroya, however, the same descriptive fact—earning income beyond farming—could represent accumulation for one household and compelled reproduction for another.

Rigg and colleagues' work on agrarian change in Thailand shows how rural life can become increasingly mobile and spatially extended without severing households' ties to agriculture [34]. Their findings cannot be transferred directly to West Java, but they provide a comparative vocabulary for the movement of labor and income across village and city. Araghi's account of depeasantization, by contrast, draws attention to the possibility that rural households become increasingly dependent on wage labor as access to viable farming erodes [36]. The Kroya evidence is compatible with partial proletarianization, yet it also cautions against predicting the simple disappearance of smallholders. Some households retained tiny plots while depending on external earnings, and some migrants came back to work the rice season.

The original report describes family members, including women and younger people, entering employment outside the local agricultural economy, but it does not systematically disaggregate migration by gender, age, destination, earnings, or duration. Such gaps prevent a claim that the study measured household remittances, women's labor burdens, or youth aspirations. Research on rural young people has shown the importance of access to land and the changing desirability of farming [37], while later scholarship on Indonesian agrarian movements has revisited the political possibilities and limits of rural organization [38]. These works frame questions that Kroya's 2021 source raises without resolving.

The central sociological point is that mobility can help sustain agrarian inequality even when it reduces immediate hardship. An agricultural household may use non-farm earnings to continue paying rent or purchasing inputs, thereby reproducing its position as a small tenant rather than escaping it. Likewise, a landless worker's urban wages may support a family that returns to agricultural employment during peak demand. The countryside then remains productive partly because households absorb production risks through work performed elsewhere. The externalization of livelihood costs beyond agriculture should therefore be treated as part of the rice economy, not as evidence that agrarian relations have ceased to matter.

4.8. Discussion: productive agriculture and the unequal reproduction of rural life

The combined findings suggest three mechanisms linking agrarian change and poverty. The first is the asymmetric control of productive resources. Landowners and better-capitalized farmers have greater capacity to access or accumulate plots, purchase inputs, hire machines, and cope with water scarcity. Tenants and smallholders may retain access to cultivation while lacking the financial conditions required to capture substantial surplus. This pattern resonates with class analyses of agrarian transformation in Java [5], [6], [21] and with broader arguments that neither the survival of small farms nor expansion of agricultural output necessarily constitutes evidence of equitable development [7]–[11]. The case is not an estimate of concentration, but a relational account of how class-specific capacities affected rice production in 2021.

The second mechanism is the mediation of production by land, market, and political institutions. In the 2021 narratives, forest administration, rental intermediation, roads, irrigation, buyer access, credit, and farmer associations structured who could benefit from the land. Agrarian differentiation therefore cannot be reduced to 'natural' productivity differences among plots. Access was constituted through relationships and authority [12]–[14]. The reports of alleged allocation problems and tenure irregularities remain unverified allegations, but the broader mechanism is analytically plausible: assistance intended to raise yields can reproduce existing advantage if the power to obtain it is itself unequal. Land policy scholarship similarly shows that reforms and commercialization can follow different, often contradictory trajectories depending on their class relations [39]–[41].

The third mechanism is the cross-sectoral reproduction of labor. Households unable to live solely from farming or farm wages moved into construction, trade, industry, and migration, while often preserving agricultural commitments. This supports a view of contemporary agrarian change in which the rural and urban economies are interdependent rather than sequential stages of development [17], [34]–[36]. It is also consistent with research emphasizing how modernization and mechanization can reorganize demand for rural labor without guaranteeing adequate alternative employment [28]–[30]. The social costs of maintaining rice production may be displaced onto household members working beyond the village, with repercussions for time, vulnerability, and bargaining capacity.

These three processes interact. Scarce water raises the value of pumping technology; unequal capital limits access to it; rental and credit obligations push households toward a second crop despite costs; poor road access increases reliance on intermediaries; unstable cash receipts encourage migration; and selective political influence can shape the provision of land-related infrastructure and farm assistance. The resulting configuration should not be depicted as a uniform cycle affecting every farmer identically. Rather, it is a differentiated structure in which some actors convert conditions of scarcity into control and others respond through indebtedness, household labor intensification, and geographic mobility.

This interpretation also complicates the language of 'progress' in rural modernization. For landholders and buyers, mechanization may shorten production time and expand control over transactions. For a day laborer, the same innovation may narrow opportunities for earning crop shares or wages. For a tenant, a second crop may appear as higher annual productivity while actually being necessary to repay land rent. For policy agencies, a high level of paddy output may indicate success, even when cultivators experience their economic position as fragile. The core issue is not a categorical rejection of technology, markets, or the state. It is a demand for distribution-sensitive

evaluation that asks who gains, who loses, and who bears the risks of changes in agricultural production.

Two features distinguish the Kroya case from a generic story of low-productivity agriculture. First, the reported vulnerability arises in an area recognized by residents as part of a nationally important rice-producing landscape, not simply a marginal farming frontier. Second, the area combined rain-dependent production with cultivation on administratively forest-classified land and an active economy of seasonal movement. These features generate a revealing contrast between visible harvests and contested access to the institutions that make farming viable. The analysis therefore contributes a grounded example of how a 'rice granary' can contain class-differentiated poverty without assuming that farmers' hardship is proof of an overall failure to produce crops.

This claim is deliberately bounded. The report lacks representative household data, a verified land registry, systematically tracked prices, and a longitudinal record. Memories of land concentration since the 1970s, allegations of elite capture, assertions about legal restrictions on forestland irrigation, and administrative accounting claims require corroboration before being presented as settled historical or institutional facts. The case does not establish a direct causal effect of rice policies on Indramayu's poverty rate, nor can it demonstrate that current conditions are unchanged from 2021. What it does establish is a coherent set of field-recorded social relations worthy of theoretical analysis and further testing. The appropriate contribution is analytic rather than statistically generalizing: rural poverty must be examined through control of surplus and social reproduction, not inferred from aggregate food production alone.

5. CONCLUSION

The 2021 Kroya case shows how a productive rice landscape can coexist with unequal and insecure rural livelihoods. Class-differentiated control of land, finance, water, labor, and markets shaped the benefits available to cultivators and agricultural workers. Seasonal migration helped many households sustain cultivation and consumption without eliminating the conditions that constrained them. The findings suggest that evaluating food-production success requires attention to the distribution of risks, costs, and surplus. Because the study draws on a short, single-period qualitative report, reported historical transformations remain interpretive evidence rather than measured longitudinal change.

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