

Ecological Crisis and Migration: Environmental Hardships, Harvest Failures, and Out-Migration Pressures in Central Annam (1900-1940)

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ABSTRACT

Based on multi-sited archival research conducted in France and Vietnam, this paper explores how environmental degradation, colonial extraction, and pressure to out-migrate were structurally connected in Central Annam between 1900 and 1940. While historical scholarship on migration has often examined environmental shocks separately from political economy, this study understands natural disasters, drought, and crop failure as part and parcel of French capital accumulation, enabled at a macro-financial level by the Banque de l'Indochine (BIC). By analyzing how cash-taxation and colonial governments' failure to invest in irrigation infrastructure turned ordinary weather events into chronic environmental catastrophe, this paper argues that consecutive crop failures decimated the Central Annamese peasantry's social reproduction capacities, turning migration into a mandatory survival strategy rather than an exercise of free will. This research thereby adds to the growing historical literature on environmental migration in mainland Southeast Asia.

Keywords: Environmental migration; Ecological crisis; Colonial Annam; Harvest failure; Colonial capitalism.

1. INTRODUCTION

Colonial Indochina's Central Annam has historically been home to harsh geography and systemically impoverished smallholder farmers. The sheer scale of Central Annamese out-migration, to plantations in the South or coal mines in the North from around 1900 to 1940, was not an inevitability arising from its location however. Earlier works on the history of migration often cited natural disasters, long-term drought and famine as constants that bore little correlation with the realities of colonial administration (Lee, 1966; Robequain, 1944). To this extent, prior understandings of out-migration had absolved environmental crisis of their politics. By extension, dispossession in Central Annam becomes sanitised through discourses of natural disaster rather than colonial capitalism.

The argument here is two-fold. Firstly that environmental disasters and famine in colonial Annam were largely socially constructed occurrences that were exacerbated by the violent insertion of capitalist social relations. Driven by the macroeconomic agenda of Banque de l'Indochine (hereafter BIC) and colonial officials in tandem, an accumulation by dispossession model was put into place throughout Annam (Aumiphin, 1993; Murray, 1980). Levying taxes payable only in cash forced many subsistence farmers into the world market for the first time. Additionally, by monopolising circulation of the Piastre through BIC branches, colonial authorities effectively destroyed indigenous systems of safety nets within Annam's rural economy, such as communal rice stores and other forms of reciprocal insurance. In times of climatic flux or bad rice harvests, peasant farmers simply had nothing to fall back on because all rural surpluses were redirected to feeding metropolitan capital markets. Secondly there remains a noticeable gap in scholarship surrounding how colonial officials deliberately neglected indigenous dyke-building and water-management in Annam and were instead happy to funnel finance capital towards highly profitable resource-extractive transport networks. This process of induced scarcity forced peasants of the Central into living with literally no safety net in their home-villages; effectually creating ideal conditions for forming what Castles & Kosack (1973) would describe as a "reserve army of labor" for predatory, low-wage indentured labor markets. Utilising a combination of robust historiographical methods and primary source criticism at multiple scales, this study hopes to further illuminate these political-ecologies of Annamese migration.

2. LITERATURE REVIEW

Internationally and nationally, the historiography on colonial Indochina is abundant. Scholars have explored economic development, politics, and society with richness. However, in regard to understanding how ecological change, disasters, and displacement articulated during the 1900-1940 period in Central Annam, existing research faces two major limitations: empirical gaps and conceptual discrepancies. Traditional histories of colonial Indochina typically understood phenomena such as drought, flooding, and famine which occurred regularly in Central Annam as natural events (Robequain, 1944). Although many texts described Annam's harsh climate

conditions, they decoupled nature from the larger political economic objectives of the colonial state and finance-capital demands commanded by Banque de l'Indochine (BIC). In doing so, colonial works tended to normalize and de-politicize the endemic impoverishment experienced by Annam's peasant majority.

On the other hand, histories of colonial political economy and coolie labor allocation have traditionally been anchored in concepts of structural market pull factors. Building on this scholarship, many researchers contend that outward flows from Annam towards Southern rubber plantations or Northern mining operations were predestined results of capitalist logics and rubber concession growth (Aumiphin, 1993; Murray, 1980). These works did an excellent job at revealing the exploitative nature of colonial finance capitalism. However, much of this research downplayed or ignored environmental factors altogether. Disasters and consecutive rice crop failures became seen as occasional "triggers" rather than a constant structural element that was functioning simultaneously with French capitalism's macro-level finance-capital demands.

Over the past few decades, there has been a rise in scholarly literature on "environmental migration" worldwide. Today scholars argue that natural disasters are never isolated from political conditions. How a disaster impacts the livelihoods of people on the ground is often exacerbated or lessened by political regimes and economic interests at play (Castles & Kosack, 1973; Thomas, 2005). While some work has been done to understand the historical relationship between disasters and migration during colonial Indochina, few studies have utilized a historical political ecology lens. Too little is understood about how the BIC's cash-based fiscal policies and the colonial state's deliberate abandonment of hydraulic networks transformed what would have been regular climate shocks into forced migration flows. This study works to address this gap by historicizing the relationship between ecological crisis, the BIC's finance, and labor flows.

3. THEORETICAL FRAMEWORK

In order to unpack the political-economic dynamics behind environmentally motivated migration from Central Annam, this study applies a theoretical framework which merges together aspects of Robbins's (2012) Political Ecology theory, Harvey's (2006) seminal theory of "accumulation by dispossession", as well as Murray's (1980) theories surrounding the political economy of rural destitution under capitalism at the periphery. This framework diverges from traditional liberal theories of migration which view migration as being the product of voluntary individual decisions based on rational choice derived from pressures created by benign push-pull dynamics (Lee, 1966). Rather, we maintain that both environmental hazards and famine during colonial-era Annam should be understood as socially produced where structural violence met ecological volatility to disproportionately dismantle peasant abilities to achieve social reproduction.

"Structural Ecological Vulnerability"

Arranged through the centralized economic leadership of French finance capital as administered through the Banque de l'Indochine (BIC), French colonial authorities forced rural village economies based on rice subsistence agriculture to transition from subsistence farming to high-risk monetization via cash-based taxation in the Piastre currency (Aumiphin, 1993; Harvey, 2006). When famine did strike, there was often a lack of any social safety programs combined with a colonial administrative refusal to use finance capital to build public hydraulic works in Annam and focus it on short-term high-profit extractive infrastructure. Peasant ability to cope was nullified. The traditional "moral economy" of the peasantry prioritizes meeting each member's subsistence needs through risk mitigation (Scott, 1976). French colonial finance capital violently disrupted this.

As a result of this political-economic structure, what would otherwise be normal cycles of ecological disturbances became exaggerated into a kind of "structural push" that left no alternative for peasants within their rural villages. Migration for these displaced peasants was no longer a choice, but became the result of an "environmental proletarianization" that created surplus labor; peasants who were ruined by their crop failures and were therefore forced to migrate and become excess colonial contract labor (Castles & Kosack, 1973; Murray, 1980). This theoretical framework allows this study to argue that Annamese out-migration was not an adaptive migration strategy stimulated by environmental risks, but rather a movement forced upon people by French colonialism's exploitative finance capital structures.

4. RESEARCH METHODOLOGY

This study uses the historical method with historical anthropology and political economy, while remaining attentive to the political-economic structures that characterized rural livelihoods as well as the political organization of everyday life. With the use of multi-sited archival research conducted through French and Vietnamese archives, the study collected extensive data. The study consulted primary documents from the Archives Nationales d'Outre-Mer (ANOM) in Aix-en-Provence, specifically from the Archives of the Résident Supérieur de l'Annam, Fonds de la Banque de l'Indochine (BIC), and economic dossiers from the Ministère des Colonies. To provide reliability to the data, the study then cross-referenced archival materials with documents that are currently held in Vietnamese government's National Archives Center I in Hanoi. In terms of source reliability,

the study conducts external criticism as described by Howell and Prevenier (2001) to ensure authenticity of texts, and internal criticism to analyze political-economic interests as well as ideological viewpoints presented in these texts.

Alongside conventional historical methods, this study applies critical discourse analysis framed within Foucault's (1972) archaeological method when approaching rural inquiry missions, records from the Chamber of People's Representatives of Annam and newspaper articles. This approach helps deconstruct the colonial language—how the government frequently used categorical names such as “inevitable natural disasters” or “native indolence” to absolve itself from the breakdown of the public dyke system, allowing them to sanitize and legitimize the forced recruitment of peasant-refugees into mining and plantation coolies (Foucault, 1972).

Moreover, the study quantitatively assesses archival data on frequencies of natural disasters, calorific shortfalls, the extraction rate of taxes by BIC, and out-migration flows tabulated by the Indochinese Meteorological Service and colonial Labor Bureau (Inspection du Travail, 1935) through quantitative historical analysis. Triangulating the data allows the study to quantitatively merge economic and ecological deterioration figures with qualitative insights on peasants' experiences. This would provide the article's findings empirical heft, reliability, and validity (Howell & Prevenier, 2001; Murray, 1980).

5. RESULTS AND DISCUSSION

5.1. The Anatomy of Vulnerability: Institutional Neglect of Hydraulic Infrastructure and Created Risks

Archival records obtained from national archives belie the colonial argument that blamed geography for the famine conditions present in Central Annam. On the contrary, records show that it was institutional abandonment of public works by the colonial government which served as the root cause behind these disasters. Budget reports found in files from Résident Supérieur de l'Annam ([RSA], 1925) stored in the National Archives Center I in Hanoi, when compared to business ledgers from the Banque de l'Indochine ([BIC], 1930) stored at the Archives Nationales d'Outre-mer (ANOM) show that investments from the BIC and money from the overall budget of colonial France were disproportionately spent on extractive operations like the Trans-Indochina railway or improving port infrastructure in Da Nang and Ben Thuy in order to streamline flow of extracted goods and materials out of Indochina. Public funds used to repair dikes or build dams that could prevent floods in heavily famine-stricken areas like Nghe An, Ha Tinh, and Quang Nam were limited or nonexistent. Budgets that were specifically put towards developing public works would only emerge as reactive solutions after disasters had occurred. Reports from ground surveys and telegram notifications sent by local Vietnamese mandarins (RSA, 1928) show that even indigenous systems of irrigation and water management had been disrupted by the colonial network of roads and railways. By segmenting the landscape to make way for these infrastructure projects, rivers were artificially blocked causing localized flooding and increased desertification in the dry season. Viewing this through the framework of Political Ecology as defined by Robbins (2012), environmental disasters during colonial rule were not natural occurrences, but “manufactured risk”. Since the BIC's monopolistic financial architecture shaped colonial investment priorities, the areas where the French colonial government could invest were determined by the BIC. If an area like Central Annam was not suitable for the BIC to extract large amounts of profits, then it did not matter how many floods or droughts occurred. By upending Indigenous systems of protection from floods and manipulating the land to better suit transportation of goods, the traditional means by which those in Central Annam protected themselves from natural disasters were destroyed, leaving farmers to face risks that they could not structurally combat (Duong, 2021). Droughts and typhoons were only the “trigger” that eventually led to a disaster taking place because the uneven flow of capital created an environment of structural vulnerability (Adger, 2006; Blaikie & Brookfield, 1987). Environmental vulnerability, then, became the physical manifestation of a cycle of violent accumulation directed by the BIC (Harvey, 2006; Thomas, 2005).

5.2. Monetary Violence and the Collapse of the Moral Economy under Harvest Failures

The complete devastation of the peasant household after consecutive crop failures was not merely biological starvation; colonial capitalist extraction often further precipitated this outcome. Comparing figures across the RST/RSA archives (RSA, 1932) during notable historical crop failures, particularly during the Great Famines and droughts of 1906-1908, 1915, and the Great Depression of 1929-1931 reveals a stark truth: Even as rice harvests collapsed, the colonial government continued to issue strict edicts on the full collection of poll taxes and land taxes payable only through silver/gold Piastres. Smallholders were unable to pay this extraction with grain or stores of rice as was the case under pre-colonial autonomous feudal customs. In fact, budgetary reports declassified from the BIC (1935) highlight how the bank constricted the money supply, strategically gamed foreign exchange rates, and informally ran a vast apparatus of accumulation through native usury networks and collaborationist gentry-landlords who acted as localized agents of capital for the BIC. If smallholders could not pay taxes in coin during times of failed harvests, mass land seizures were carried out to transform previously independent farmers into a landless underclass (Aumiphin, 1993; BIC, 1935). With this process of accumulation by dispossession, the study identifies the total elimination of the rural “moral economy.”

In Scott's (1976) conception, the peasant "moral economy" of traditional Southeast Asian village communities was centered around the idea that the subsistence livelihoods of peasants were simply sacrosanct. Should natural disasters occur, the King and often village head institutions would literally drop taxes and distribute communal rice stores to "pool the risks of disaster" (Scott, 1976). Yet the violent encroachment of finance capital through the BIC replaced this informal social contract with monetary violence. By forcing tax obligations to be paid with currency at a time when there was a structural lack of rural credit systems, the BIC cut the last lifeline of Central's peasants (Marx, 1967; Popkin, 1979). Instead of crop failures functioning as anomalous events within the life-course of the household, the added monetary extraction of the BIC fully robbed peasants of their means of production and left migration as the only means of biological reproduction (Harvey, 2006; Murray, 1980; Watts, 1983).

5.3. The Controlled Vent: Environmental Proletarianization and the Logistics of Labor Siphoning

Primary archival evidence from the Labor Recruitment Bureaux (Bureaux de recrutement) administrative records and individual rubber companies' enterprise dossiers in the South offers critical empirical glimpses into how the colonial government and finance capital colluded in orchestrating flows of subaltern laborers. Sifting through reports written by staff members of the Indochinese Labor Bureau (Inspection du Travail, 1935) and files from rubber conglomerates in Cochinchina and mining companies in Tonkin establishes that large-scale labor recruitment campaigns did not occur randomly or spontaneously. Labor recruitment campaigns were systematically structured and activated either concurrently or immediately after periods of ecological despair when the Central region experienced heightened levels of droughts, typhoons, and chronic harvest failures. Between the spatial dimensions of acute environmental destitution sprawling throughout the Thanh-Nghe-Tinh and Quang Nam-Quang Ngai enclaves, the share of ruined agriculturalists forced to sign indentured labor contracts (*engagés*) for plantations and mines increased exponentially in inverse proportion to localized crop yields (Inspection du Travail, 1935; Robequain, 1944).

These findings challenge popular theories in liberal migration scholarship like Lee's (1966) push-pull theory that over-celebrate migration as an abstract liberal exercise in rational utility-seeking. Migration to colonial plantations was a process of "Environmental Proletarianization." Periods of ecological destitution in Central Annam acted as a crude sieve that expropriated peasants from their land and means of production. The French colonial government and the BIC-led finance industry did not attempt to implement ecological mitigation or social welfare relief; they weaponized and logisticalized environmental catastrophes to convert the localized famines, biological exhaustion, and agrarian ruin into a "Controlled Vent." Rural misery was utilized by French politico-economic elites who sought to indirectly conscript this pauperized labor reserve into the parasitic economy of Parisian finance capital by offshoring migrants to spatially remote plantation and mine hinterlands (Duong, 2021; Lee, 1966; Murray, 1980).

5.4. Subaltern Strategies: Infrapolitics of Survival and Eco-Cultural Resilience

Made to survive at bare biological subsistence by ecological destruction and financial violence, the Central peasants never acquiesced to the status of passive, dispossessed casualties. Archival documents from the French political police (*Sûreté Générale*, 1930) on worker agitation in Annam reveal that environmental shocks were often the spark that ignited subaltern consciousness and political militancy: In 1908, anti-tax uprisings broke out in Quang Nam before quickly spreading to other provinces and were directly related and dialectically derived from the oppressive tax quotas imposed by the BIC and compounded by local famine. In less direct and less antagonistic forms, historical-anthropological archives also bear witness to another "infrapolitical" form of endurance. Namely everyday peasant songs lamenting displacement, temporary seasonal migration, desperate self-exploitation to send money back home to "save" their land from tax seizure, or secretly practicing folkloric rituals dedicated to the God of Agriculture and rain-making ceremonies in order to retain collective solidarity amongst themselves during these periods of structural adjustment (*Sûreté Générale*, 1930).

These subtle forms of subaltern resistance can only be fully understood with James Scott's (1985) conceptualization of "infrapolitics" and "weapons of the weak." Here, whether their anger erupted into organised revolt or manifested through cultural forms of escape or rituals to heal communities and the environment, these tactics were always already defence mechanisms against economic conditions that sought to deny the peasantry their dignity. From this perspective, this study can reinterpret peasant migration not as desperate flight but instead as deliberate strategy. Choosing to submit to the conditions of the South or Northern mines was not a choice to abandon one's village; rather, laborers temporarily leveraged their alienated labor power to generate the cash liquidity required and prevent their land from being seized by the BIC. In this way, this study demonstrates how Central peasants have been exercising "Eco-cultural Resilience" in response to the horrors of colonial finance capitalism (Castles & Kosack, 1973; Duong, 2021).

6. CONCLUSION

In sum, this study has attempted to deconstruct the causal chain connecting environmental degradation, colonial financial violence, and forced environmental proletarianization amongst peasants in Central Annam between 1900-1940. Drawing together archival evidence unearthed from French and Vietnamese government archives with frameworks of political ecology and the colonial subaltern economy, this paper demonstrates that mass migration out of this unforgiving central coastal region was historically contingent rather than predestined by environmental fate. Environmental fragility within Central Annam was deliberately constructed through the toxic intersection between the state's chronic neglect of irrigation infrastructure and the bank's coercive debt-collection drive (Banque de l'Indochine, BIC). Instead of isolated incidents, successive harvest failures functioned as an absolute structural core symbiotically connected to the circulation of colonial capital which completely dismantled peasant safety nets, forcing migrants to leave their homeland for survival (Aumiphin, 1993; RSA, 1932).

Ideally, this research's primary contribution to theory should come from its ability to re-center conversations around environmental migration, which uproots traditional migration theory. Lee's (1966) "Push-Pull" theory of migration—which imagines migrant movements to behave akin to the rational functions of laissez-faire capitalism—does not apply to the Annamese countryside. The evidence laid out in this article illustrates that Annamese peasants were unable to "freely" migrate. Out-migration functioned as a "controlled demographic vent," where both the state and the BIC weaponized ecosystem vulnerabilities and peasant destitution into an indirect means of funneling migrating labor from Central into rubber plantations in the South and coal mines in the North. By historicizing the role environmental disasters played in the Annamese countryside, this study is able to expand David Harvey's concept of "accumulation by dispossession" to a colonial periphery by underscoring how ecological collapse was repurposed to violently break apart peasant moral economy, compelling smallholders to enter predatory indentured labor markets as thoroughly alienated subjects (Harvey, 2006; Murray, 1980).

Lastly, by centering how Central peasants experienced livelihood shocks, this study restored the agency and eco-cultural resilience of the Central peasantry who too often are portrayed as mere victims of both environmental destruction and colonial banking. Operating under the pressures of cyclical ecological disasters as well as the BIC's debt-collection régime, Central smallholders waged their own form of resistance in staying alive. Through the use of infrapolitics, seasonal circulation outside of the home-village, hyper-exploitation of the self to send money home in order to pay interest, and clinging to folkloric spiritual identities, these migrants morphed the act of enforced-migration into a means of keeping the village as a socioeconomic whole biologically reproduced (Duong, 2021; Scott, 1985). Ultimately, this article bridges the epistemic chasm between the disciplines of environmental history and migration sociology in a way that helps others problematize predatory colonial capitalism and subalternity in mainland Southeast Asia...

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