

Opium and the Peasant in North India

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INTRODUCTION: OPIUM PRODUCTION IN NORTH INDIA

By the late eighteenth century the balance of trade between Britain and China was entirely one-sided in favour of China. While English tastes coveted Chinese goods and especially Chinese tea, the Chinese had no desire for the manufactures of Britain. Lord Macartney, sent in 1793 as Ambassador to China laden with samples of British goods, received from Emperor Chien Lung the reply, "Strange and costly objects do not interest me. As your Ambassador can see for himself we possess all things. I set no value on strange objects and ingenious [singsongs], and have no use for your country's manufactures."¹ Consequently, the burgeoning tea trade of the late eighteenth century inspired a severe outpouring of precious metals from England to the Far East. The Indian economy solved this financial dilemma for the British:

It was discovered that while the Chinese had little taste for British goods, they were eager to accept the produce of British India, particularly raw cotton and opium, though China produced the one and prohibited the other. The resources of India could be used to finance the China investment. That this was being realized in the last decades of the 18th century is shown by the declaration in the instructions to the first British mission to China, the abortive Cathcart Embassy of 1787, that the prosperity of India "would be promoted by procuring a secure vent for [its] products and manufactures in the extensive Empire of China, at the same time that the produce of such sales would furnish resources for the Investment [teas, etc.] to Europe."²

The increasingly critical role played by opium in this international equation led the English East India Company to control the production and

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procurement of opium at all levels in its Indian territories. The assumption of the opium monopoly by the Company in 1773 occurred at a time when the profits from the opium trade were beginning to be realized as a vital factor in British commercial viability. The decidedly external orientation of the monopoly structure suggests that the local manifestations of the opium procurement system were concerned first with the efficient extraction of high quality opium and not necessarily with the wholesale domination of rural society. Setting aside the moral ramifications of the growing opium trade in the late eighteenth and nineteenth centuries, production and marketing levels were automatically geared to meet the general balance of payments requirements of the China-Britain trade sheet. However, inasmuch as the sale of opium in China was prohibited by the Chinese authorities, the British were *initially* hesitant to widen the market and increase profits. Nevertheless, by the 1820s the large earnings of the illicit trade eventually overcame the British reluctance to increase opium exports.

The production of opium in India was by no means a phenomenon inspired by the British in the eighteenth century. As early as the 1650s North India had already acquired the reputation as the major opium producing region under the aegis of the Dutch East India Company's trade link from Bihar and Bengal to South East Asia. The cultivation of poppy in South Asia began in the eighth century when Arab traders introduced opium to western India.³ The English entered the opium trade in the early 1700s and gradually increased production and procurement through the century.

The best opium producing region extended along the Gangetic plain in North India to cover modern Uttar Pradesh and Bihar.

From Agra, making the western boundary to just beyond Monghyr, in the southeast, the opium region stretched more than five hundred miles along the Ganges River. The north-south limits extended on the average 150 to 180 miles along the river valley. Throughout the [nineteenth century] over a million peasants received government licenses to grow opium with intensive cropping techniques each year on lands totalling 500,000 acres or more.⁴

Within these geographic limits, the opium produced in Bihar generally proved to be of a higher quality and sold for a higher price than that of U.P.⁵ According to W. W. Hunter's *Statistical Account of Bengal*, "the Behar Agency is the larger and more important of the two, sending into the market about treble the quantity of the drug turned out at Benares."⁶

While the final drug was refined and packed into chests at the centrally located Patna and Benares Factories, poppy cultivation and *crude* opium production occurred in the rural countryside. Poppy cultivation in North India experienced significant growth through the nineteenth century as opium took on greater importance in the economic organization of British imperialism. The largest increase in acreage occurred in the 1820s and '30s when the

Company decided to expand output to more effectively reap profits from the Chinese demand. Following the Opium War of 1839-40, which was a direct consequence of the rising illicit opium trade in China, acreage devoted to poppy increased steadily until the early 1860s, when it levelled off around 500,000 acres annually.⁷ Cultivation continued apace through the turn of the twentieth century and only decreased with increased opposition both domestically in England and internationally from China culminating in the 1911 Treaty of Tsientsin between China and Great Britain which led to the substantial reduction in and eventual end to opium production for the Chinese market.

John Richards has calculated that in Bihar alone from 1873 to 1893 an average of 699,000 growers cultivated 270,000 acres of poppy annually.⁸ The amount of land per cultivator, Richards adds, amounted to almost four-tenths of an acre, a ratio which "suggests that even a small, partial holding devoted to poppy was of considerable value to the grower. . . ."⁹ British regulation of the production of opium in India could be characterized as monopolistic insofar as the British authorities—in the form of the Patna and Benares Opium Agencies¹⁰—"controlled" the amount of opium produced in order to protect the favorable price structure and maintain the sensitive political balance that underpinned the viability of tea purchases in China. Nevertheless, while the British Opium Agencies formed the sole market for crude opium produced by peasant-specialists, the British possessed neither the institutional nor the logistical means to force peasants to grow poppy. Importantly, the Opium Agency had to function within the constraints of rural society. This is evidenced by the fact that the Opium Agency steadily increased the price paid to peasants for crude opium in order to maintain and increase poppy acreage through the nineteenth century.¹¹

The question of coercion in poppy cultivation has been examined in some detail with regard to official policy toward poppy-acreage-contracting prior to and during the formative years of the Cornwallis Governor-Generalship in the late eighteenth century.¹² In his 1959 essay, H. R. C. Wright shows that even before the 1790s, the monopoly structure of the opium trade tended to work in favor of the peasant producer. Because the contractors—whose duties included meting out advances for cultivation, measuring fields, and calculating the payments for crude opium to peasants—answered directly to the British administration and because, by definition, the monopoly system maintained relatively stable price structures and levels of demand, producing peasants were protected from the market vagaries that plagued other major commercial crops.

It was said that if the opium trade were thrown entirely open, the growers would probably become chronic debtors to private merchants, and be reduced by excessive rates of interest to a state little better than slavery. The contract of monopoly protected the ryots from the risks of the market

by stabilizing the price they received and assuring them a purchaser. The contractor's power was regulated and his conduct was under the eye of the government.¹³

The lucrative nature of the opium trade, notwithstanding the hostile Chinese political environment,¹⁴ ensured the monopoly's financial ability to offer peasant society a price for crude opium that could compete with larger commercial crops.

Cornwallis, who favored the establishment of legal institutions and the extensions of personal freedoms as foundations for economic growth, sought through legislation to strengthen further the rural posture of the individual peasant producer.¹⁵ His main reforms, consequently, were directed toward curtailing the powers of the local government opium contractor—most specifically toward a legal reduction of the contractor's ability to coerce peasants to grow poppy. This reform legislation, as presented by Wright, emerged out of Cornwallis' perceptions of the *potential* avenues for coercion in the contracting apparatus at the local level, not out of any widespread perceptions of rural oppression. Where Wright does cite instances of agrarian conflict in the very early years of the opium monopoly in the middle and late eighteenth century, the conflict was between the contractor and the *zamindar* over competing rural authority over peasants. Thus, the history that emerges is not one of rural coercion of an isolated peasantry by a superordinate monopoly in conspiracy with a landlord and moneylending class, but one of government penetration into the fabric of rural society.

POPPY CULTIVATION IN BIHAR

The remainder of this essay outlines the complex interaction among the agrarian elements of rural society involved in poppy cultivation in order to understand the historical implications of the larger opium trade for the agrarian structure of rural North India. In an effort to present the history of poppy cultivation in terms that are relevant to the subjects of that history, I have borrowed selectively from Shahid Amin's study of sugarcane culture in eastern U.P.¹⁶ The methodological emphasis of Amin's work is directed toward the *process* of cultivation rather than the agrarian *relations* of small peasant production. Citing the limitations of historical sources and, more importantly, an elitist¹⁷ approach to historical research and writing, Amin critiques the scholarly tendency to treat peasant agriculture as an "appendage" subject to "world scale" arenas of change.

While over the years a mass of information has been collected and frameworks used for analyzing the relations between the peasants and the "outside" world of markets, traders, landlords and the state, the actual

process of production—the nitty gritty of small peasant agriculture—has received cavalier or at best ambiguous consideration.¹⁸

To correct what he perceives as an undue external emphasis, Amin urges that “greater attention be paid to the harvest and fiscal calendar of the peasantry, and to agricultural practices in their temporal sequence.”¹⁹

While Amin’s attention to the detail of small peasant production is to be commended for introducing new and important agrarian factors to historical analysis, his conscious disinterest in agrarian relations prohibits an appreciation of the agrarian context within which agricultural production occurs, not to mention the long-term rural repercussions of that production. This essay combines a consideration of agrarian production *and* agrarian relations in an effort to reproduce the agrarian realities of Bihar. The historic role of opium production in North India will be understood first with respect to the rural nexus of the Opium Agency; second, in the context of patterned rent relations with *zamindars* (proprietors & landlords) over poppy land; third, through agricultural inputs devoted to and outputs derived from poppy cultivation; and fourth, in terms of the agricultural identity of *Koeris*, the main poppy cultivators in Bihar. Thus, the agricultural process *and* agrarian relations of opium production and “marketing” will remain the foci of my discussion. Regionally, while poppy was cultivated throughout the central and eastern Gangetic Plain, this discussion will be confined to the Magadha culture region (comprising Patna and Gaya Districts) of Gangetic South Bihar, arguably the most productive opium producing region in India.²⁰

Much of my discussion will rely on official British description of rural North Indian society. The British, it is well known, tended to stereotype various Indian ethnic, regional, social, and religious groups in their efforts to “understand” the country in which they lived and worked. To ignore or dismiss their characterizations, however, would be to miss the value of their observations. Freed from the culture of British colonialism, the official description of Indian agriculture and society can reveal many of the underlying structures of rural life.

THE RURAL NEXUS OF THE OPIUM AGENCY

Even in the early stages of the British controlled opium trade, it was no secret that poppy was “one of the most productive sources of revenue to the government.”²¹ After more than a century of the British monopoly, O’Malley observed that “the manufacture of opium is by far the most important industry in [Patna] district.”²² To streamline the delivery of this important substance to the central factories in Patna and Benares, the British organized production and procurement into twenty-seven sub-agencies of bureaucratic control: eleven around Patna, and sixteen around Benares.²³ Bihar’s poppy

cultivation structure required less logistical sub-agency supervision because, as J. H. Rivett-Carnac (a prominent Benares Opium Agent in the late nineteenth century) observed, "in the Bihar Agency the area of cultivation is more concentrated than in the Benares Agency."²⁴

In the Magadha region of South Bihar, the Patna, Tehta, and Gaya Sub-Agencies (or *kothis*) were roughly coterminous with Patna, western Gaya, and eastern Gaya Districts respectively.²⁵ Each sub-agency was under the official control of a Sub-Deputy Opium Agent and was administered with the help of a British assistant and an Indian staff.²⁶ The highest ranking Indian official was titled the *gumashta* (or agent), who, with the help of *muharrirs* (writers, also called *mataaddis*) and *zilladars* (patrols), organized the contract of poppy cultivation in the countryside. The direct village contact through whom peasant contracts for cultivation were arranged was, in Bihar, the *khatadar*, "who was chosen by the cultivators in one or more villages."²⁷

In the first stages of bureaucratic systemitization in the early 1800s, Buchanan considered the "native" sub-agency level the arena most vulnerable to corruption, which hurt the English East India Company, and most amenable to coercion of the peasant.

As everything depends on the quality of the drug, the agents who receive the juice, as collected by the cultivators, must have the power of rejecting any that has been adulterated; . . . but here a difficulty occurs; the cultivator can sell to no one else, and the agent may say, "your opium is bad; I shall give you only half price for it." The cultivator must take this, being unable to sell his drug to any other person, while the agent charges the full price to the Company.²⁸

Clearly, this would curtail the cultivation of poppy for the next seasonal crop, inasmuch as the cultivator would hardly be inclined to remain in such stark vulnerability. It was thus in the best interests of the Company to evolve a system of purchasing that guaranteed the integrity of all parties involved. That this was attempted on several occasions suggests that the British perceived a rural autonomy on the part of the opium producer to decide for himself the crops he would cultivate.

Buchanan forwarded several solutions to the coercion-corruption dilemma, among them a plan to consolidate the poppy growing tracts in one concentrated area of the district. This, given the multiple interests in the land, was logistically impossible. His other suggestions attempted to address the existing flaw at a local level.

It is . . . evident that frequent visits from the European agent, and the power vested in him of dismissing even suspicious characters . . . [is] the only sure means of preventing such abuses, which if tolerated will fall chiefly on the revenue, as they must diminish the cultivation, unless a price is given for the raw drug that will make up for the extortions of the subordinate agents.²⁹

Buchanan's observations and advice here were heeded by the opium administration. By the time Hunter recorded his statistical report of Bengal in the 1870s, the opium purchasing infrastructure had evolved a set of checks and balances that moved significantly toward correcting the integrity problem.

In short, Hunter outlined a procedure under which the officials at the Patna Factory checked and re-checked the quality of the opium against the evaluation of the rural officers. If a discrepancy emerged against the cultivator, his original payment was then "supplemented" by a further sum from Patna.³⁰ O'Malley provides an even more elaborated description of the government purchasing process of this *rabi* (winter) crop.

From the beginning of April the cultivators bring in their opium to the weighing centers of the different sub-agencies, where it is examined and weighed, and the balance due according to the opium officer's appraisal is paid to them on account, after deducting the advances made. Final adjustments are made between August and October, after the value of the drug has been ascertained by assay at the Patna Factory, where the final process of preparing the drug in balls or in cakes is conducted.³¹

Further, by the turn of this century, the Opium Agency had extended its official presence into the countryside, especially during the rural purchasing process. According to Rivett-Carnac, writing in 1894, "The cultivators are summoned in regular order to certain appointed weighing places, where the weighing of the opium is conducted under the direct supervision of the gazetted officers of the Department."³²

The importance of the poppy crop to the British revenue base needs to be reemphasized in the context of the rural reliability of the Opium Agency. Without a doubt, the government would have spared no effort to guarantee the smooth flow of crude opium from the countryside to the city. Poppy was grown throughout the Gangetic belt not in concentrated plantations but, to use John Richards' terminology, in "micro-culture" within a larger family acreage.³³ Given the sprawling nature of the crop, the British could not logistically control opium at its peasant-producer source. They were forced to rely on the market sensibilities of cultivators to obtain the desired amount of the valuable drug. Accordingly, the British could scarcely afford to allow the system of procurement to dampen the agricultural spirits of these most important agriculturalists. The mere fact that poppy cultivation continued year after year and responded to price policies from above is the strongest evidence that the cultivators put their trust in the rural nexus of the Opium Agency.

POPPY CULTURE: THE SYSTEMICS OF RENT

Systems of rent in Gangetic India were central to the structure of agricultural production. Two basic forms of rent, *bhaoli* (produce) and *nagdi*

(cash), determined the patterns and conditions of cultivation. O'Malley, in a survey of the various rent arrangements, linked the *bhaoli* system with peasant welfare.

This arrangement makes the amount of the landlord's rent depend entirely on the extent to which he provides facilities for irrigating the land. . . . The actual produce of the land, therefore, varies in proportion with the extent to which the *zamindars* incur expenditure on irrigation; and the tenants interests are also safeguarded.³⁴

Lands under *bhaoli*, he noted, generally entailed larger capital investments (usually in the form of irrigation maintenance) than the individual peasant could mobilize. This was generally the case with large paddy fields and other staple crops grown on a large scale.

Produce rent changed to cash rent (*nagdi*) when the individual peasant family could provide all the maintenance for cultivation on its own. Because *nagdi* implied a set rupee amount based on acreage and not on harvest, expanded peasant input left a wider margin of profit.

Cash rents are also invariably paid for land under poppy, sugarcane, and garden produce, and generally speaking for all lands which require special care and expense; and this is usually the case with homestead land, as it is peculiarly adapted for the growth of special crops [near peasants' village well-water and constantly manured by village livestock], and the cultivator can cultivate it entirely by his own means.³⁵

Nagdi, in turn, would supply the *zamindar*³⁶ with an instant and reliable cash amount free of any additional maintenance or marketing efforts on his part.

In practice, while each mode of rent held certain advantages for both the peasant and the landlord, each held certain ominous meanings as well. While *bhaoli* ensured *zamindari* investments in cultivation, the process of produce division at the harvest invited coercive extraction of rent by the *zamindar's* men on the threshing floor. And while *nagdi* afforded the entrepreneurial cultivator new avenues of cash accumulation, it also left him more vulnerable to the vagaries of the marketplace.³⁷ The severe price decline of the 1930s serves to underline precisely that vulnerability. Also, a tenant's increased savings under *nagdi* could only be met with rising landlord apprehensions and potentials for rural conflict.

The *nagdi* rate the tenant paid the *zamindar* for homestead land reflected both parties' cognizance of the high value of the crops grown there. In the early 1900s, rents ranged from Rs. 25 per acre in sub-urban areas with proximity to central markets, to Rs. 6 per acre in the more remote villages.³⁸ Inasmuch as the geographic distribution of the government opium sub-agencies paralleled the economic geography of the region, the above rent-rate patterns pertain as well to poppy cultivation. The cash rent paid on special

crops, such as poppy, sugarcane, or tobacco, was a variation of *nagdi* termed *jabdi*, which entailed "an extra rate of so much per *bigah*" (about five-eighths of an acre) which "is taken off again when these special crops cease to be grown."³⁹ Notwithstanding these high rents, landlord-tenant relations in this context appear healthy. O'Malley characterizes the *Koeris* (the main cultivators of poppy and other small-scale cash crops) as "industrious, peaceful and contented cultivators, in great demand among zamindars, who are always glad to settle lands with them."⁴⁰

The apparent lack of rural conflict between *Koeri* tenants and *zamindars* through the nineteenth and into the twentieth century suggests that the immediate social and political interests of both parties were being realized under the existing arrangements. The *zamindar*, receiving an additional cash amount for the productive quality of his land under *jabdi*, would be able to maintain his social and political dominance within the rural power landscape. The *Koeri* tenant, aware of the high value of his agricultural output, would be willing to pay the additional *jabdi* cash increment in order to obtain the timely opium agency cash advances, not to mention some profit from the government price paid for crude opium.⁴¹

Given stable prices for agricultural products, the above scenario remains unchanged. But if prices and rents undergo a gradual rise, as they did in the late nineteenth and early twentieth centuries, there is a shift in the agrarian production equilibrium. Since the price for crude opium was controlled by the government and therefore did not increase with world prices, the cultivation of poppy appeared continually less attractive compared to market-responsive goods. O'Malley reviewed the logic of the decline in poppy culture in the early twentieth century:

There is a tendency for the cultivation of poppy to decrease as year by year it is becoming less profitable to the ryots. The plant is delicate . . . and the cultivators have had to contend with a number of bad seasons. There is accordingly a tendency to withdraw from an industry so precarious and to substitute the more robust cereals or such paying crops as potatoes, chillies and vegetables, which can generally be grown at a greater profit and with less trouble. This movement has been quickened by the fact that the value of cereals has increased of recent years, while the price paid for the crude drug has remained stationary since it was raised in 1895.⁴²

Where *jabdi* rent hikes failed to keep pace with the rising prices of agricultural goods, the long-term social, economic, and political posture of the *zamindar* was threatened. The producing peasant, thriving as a result of rising profits (whether from poppy or other cash crops), began to assert his new economic strength in social and political forums. It is undeniable that, as the twentieth century unfolded, opium figured less and less in this power equation. However, the economic viability and, perhaps more importantly, the

official recognition that poppy culture afforded the cultivating peasant family certainly figured prominently in the nineteenth century agrarian history of Bihar.

POPPY CULTURE: AGRICULTURAL INPUTS AND OUTPUTS

Large, interest-free advances made by the Opium Agency played a critical role in the calendrical finances of poppy cultivation. In Bihar two cash advances to cultivators aided local crude opium production: "the first advance is given at the time of entering into engagements with the cultivators [in September/October]; the second in January or February, after the crop is sufficiently advanced and the prospects are considered favourable."⁴³ Notably, these advances entered the countryside just prior to the time the *kharif* (autumn) and *rabi* (winter/spring) rents were due in South Bihar.⁴⁴ The first advance never exceeded Rs. 5 per bigha, the second Rs. 4.⁴⁵ The Opium Agency only provided one advance in the Benares region, meted out at the beginning of the opium year in September.

Binay Chaudhuri, in his discussion of the rise of new credit agencies in nineteenth-century Bengal, notes the importance of these advances to the rural economy in so far as they served to strengthen the hands of local money-lenders. He outlines the local patterns of this rural domination.

The association with poppy cultivation provided the *khatadars* [local men, often village moneylenders, according to Chaudhuri, who handled the account books for the Opium Agency] with means for strengthening their economic position, and also their control over the peasants. The poppy advances enabled them to more effectively discharge one of their normal functions as village moneylenders—the payment of the rent of debtor peasants to *zamindars*. The entire amount of such advances, ostensibly given for financing poppy cultivation, was straightaway paid by the *khatadars* as rent to the *zamindars*.⁴⁶

Chaudhuri cites the Sub-Deputy Opium Agent of Patna in 1860 observing that "in this district there is an almost universal understanding between the *zamindar* and the poppy ryot, that the latter shall pay as rent to the former, all the money he receives periodically from Government as advances."⁴⁷ There is little in the Sub-Deputy's description that encourages an interpretation of rural exploitation by the collusive machinations of the landlord and moneylender. Indeed, Chaudhuri cites the same Sub-Deputy Opium Agent noting that "the periodical [poppy] advances are purposely so timed to fall in with the quarterly rent days."⁴⁸ Interest-free poppy advances represented the government's mechanism for overcoming the objections of local power-holders in the Opium Agency's penetration of rural society. In the process, these

advances had the effect of easing the rent-burden over the cultivating peasant.

A positive understanding of opium advances more aptly reflects O'Malley's glowing description of patterns of agricultural economics in areas removed from the proximity of urban centers and high rents.

Elsewhere the cultivators have a resource unknown to the ryots in Bengal proper in the cultivation of poppy, which plays an important part in the rural economy. Those who undertake to grow it receive allowances in cash proportionate to the area which they undertake to plant; these advances are made at a time when money is most coveted; and large sums of money thus find their way into the hands of the people.⁴⁹

As Chaudhuri later points out, "Poppy had a positive role to play in the peasant economy" in that "Government made advances to the peasants without interest at the time when they needed them most, that is, when their rent payment was due."⁵⁰ Indeed, Chaudhuri maintains that "the continued cultivation of poppy . . . was largely due to the advances."⁵¹

Similarly, John Richards, writing more recently, argues that "opium cultivation . . . did have considerable importance for the peasant economy of the northern opium producing tracts."⁵² His discussion relies on the notion of security in North Indian agrarian society and the geographic and cultural realities of opium cultivation. Most particularly, with regard to the economic effects of timely advances, Richards points out that peasant concerns in the rural environment lay "not [with] excessive cash profits but security and mitigation of risk in exchange for a four to five-month commitment to demanding arduous work."⁵³ He emphasizes the economic significance of poppy acreage by underlining the fact that "opium occupied niches exploited by caste specialists [referring to the *Koeris*] in microculture whose holdings consisted of the most fertile, intensely irrigated land in the eastern Gangetic valley."⁵⁴

As Richards notes, poppy culture not only attracted sophisticated agriculturalists, but some of the finest lands and most reliable irrigation as well.⁵⁵ Buchanan noted that during the early British period, "poppy is always cultivated near villages in garden land, which is carefully watered, and gives at least one other crop. . . ." ⁵⁶ Of the various soils in the region, O'Malley cited *doras* (half clay, half sand) as the best and most versatile. He elaborated further on the degrees of *doras* fertility:

The richest *doras* soil consists of what is known as the *bhith* or *dih* land, i.e., the belt near the village homesteads, which is better manured and more carefully cultivated than land at a distance. Here well irrigation is largely practised, and the most valuable crops, such as poppy, potatoes and vegetables, are grown extensively.⁵⁷

O'Malley added later that for fertilizer "manure is used for poppy, sugarcane, potatoes and other garden produce, but not as a rule for other crops."⁵⁸

The precise technical requirements of the poppy cultivation process necessitated timely waterings and thus reliable and accessible irrigation facilities. Village wells served this need entirely.

Well irrigation is universally employed for land growing market and garden produce, poppy, and other crops in the immediate vicinity of the villages, where the produce is much better and more valuable than in the land further from the village which is irrigated from *ahars* [artificial catchment basins built on slopes].⁵⁹

Here irrigation serves as a useful device for viewing the dynamics of agricultural power in the countryside. Proximity to poppy land (*bhith* or *dih*) hardly constituted the sole justification for well irrigation. The cash rent paid for poppy cultivation carried with it the implication that the peasant finance the entire poppy cultivation process (in other words, that the *zamindar* not contribute materially to cultivation beyond leasing the land).⁶⁰ Chaudhuri notes that well construction was "mostly financed by individual peasants or groups of peasants and were generally used for superior crops, such as sugarcane and opium, and only exceptionally for rice and other crops of inferior market value."⁶¹

Locally organized well construction on the part of tenant-peasants reflects a significant degree of economic, social, and even political autonomy in the agrarian environment. The Opium Agency further buttressed this process of peasant autonomization through more well-placed cash advances.

Advances are also made to the cultivators for the construction of permanent masonry wells and for digging small temporary wells unprotected by masonry, for the purpose of irrigating their fields. The advances made for wells are repayable by instalments.⁶²

As a result of these many agricultural reinforcements, O'Malley observed of the *Koeris* in the early twentieth century that "this class are generally well-to-do, and have little fear of loss either from drought or inundation."⁶³

John Richards has calculated that in the late nineteenth century the average peasant family in Bihar cultivated four-tenths of an acre of poppy, or about two-thirds of a *bigha*. In Patna and Gaya Districts, one *bigha* of opium produced on average seven and a half *seers* (a *seer* is a little over two pounds) of crude opium.⁶⁴ By the 1860s, the Opium Agency paid approximately Rs. 5 for every *seer* of unadulterated crude opium (70 percent opium, 30 percent water) received from cultivators.⁶⁵ Therefore, the average Bihar peasant family cultivating almost two-thirds of a *bigha* of poppy annually received Rs. 22 for their outturn of crude opium. After settling the interest-free advances from the Opium Agency, which at maximum for two-thirds of a *bigha* could

not have exceeded Rs. 10, the peasant left the weighment center with twelve rupees. The *jaldi* rent in Patna for poppy land in the 1860s and '70s averaged seven and a half rupees per *bigha*.⁶⁶ So after paying Rs. 5 for two-thirds of a *bigha* in rent, the average cultivating family in South Bihar could realize a poppy cultivation profit of five rupees. Inasmuch as the labor, irrigation, and fertilization of poppy cultivation was mobilized from within the *Koeri* family, the profits remained in the household.

Other cash returns from poppy cultivation emerged during and after the cultivation process as well. All the official sources detail the local production of "leaf," *pasewa*, and "trash" as additional by-products of the poppy plant which were purchased by the Opium Agency.⁶⁷ "Leaf" consisted of poppy petals picked in mid-February which were prepared over steam to self-adhere on their internal resinous matter and were used as shells within which the final opium was packed in the Patna Factory. Cultivators delivered the "leaf" directly to Sub-Deputy Opium Agents and received between Rs. 5 and Rs. 10 per *maund* (40 *seers*, or just over 80 pounds) depending on quality and color. *Pasewa*, a dark fluid which separates from the crude opium, sold to the Agency for three and a half rupees per *seer*.⁶⁸ After the collection of crude opium from the poppy plant,⁶⁹ the stems and leaves of the poppy plant dried in the hot March and April winds and then were removed and crushed to form "trash," used to pack and cushion the final balls of opium in heavy chests for shipping. "Trash" fetched six *annas* (sixteen *annas* to one rupee) per *maund* from the Agency, plus monetary assistance for transport. These by-products, hardly approaching in financial terms the payment received for the opium drug itself, nonetheless afforded small yet timely cash gains to the *Koeri* family economy.

Richards mentions in passing these and other, more direct, secondary returns of poppy cultivation:

Ancillary products such as oil, seed-cakes, thatching, processed petals and stalks, and seed all added to the grower's total income. Not least was the illicit consumption and possible sale of small amounts of crude opium. The latter practice was apparently widespread in poppy districts due to the absence of virtually any legal excise sales of opium in those areas.⁷⁰

The combination of the many direct and indirect advantages of the rural opium nexus made poppy a popular crop not only in the specific Magadha culture region but in Gangetic North India generally.

THE AGRICULTURAL IDENTITY OF THE KOERI

The agricultural identity of the *Koeri* supports the claim that poppy cultivation was generally a profitable and non-coercive enterprise in rural

North India. Francis Hamilton Buchanan in the early 1800s, W. W. Hunter in the 1870s, and L. S. S. O'Malley in the early 1900s consistently describe the *Koeris* as the cultivating caste *par excellence*, steady agriculturalists who understood their cultivating tradition in positive terms. Even by the early 1800s, according to Buchanan's records, they appeared firmly entrenched in the rural landscape.

The *Koeris* are properly the cultivators of kitchen-gardens, and almost the whole of them follow this profession, but almost the whole also have fields: many are rich, and some are the proprietors of the soil. The profession of gardening is here honoured, and the *Koeris* are admitted to be pure Sudras.⁷¹

The resilience of their agricultural identity stands out in the eyes of these British observers as the dominant feature of the *Koeri* caste. Hunter portrayed them as "a hard working and quiet set of people, hardly ever seen in court, and probably the best spade diggers in all of Bengal."⁷² O'Malley opined that besides cultivating the staple crops, potatoes, and local vegetables, the *Koeris* became the chief cultivators of poppy because they were "the only caste whose patience inclines them to this work."⁷³ Whether or not the *Koeris* were the *only* "patient" cultivators in Bihar, poppy cultivation was a demanding agricultural occupation, requiring heavy fertilization, frequent waterings, and constant maintenance. The crude opium production sequence entailed intensely specialized technical procedures, including slight and repeated lacerations of the poppy capsule, painstaking collection of the secreted juice, and constant attention in the early refinement process.⁷⁴

The *Koeris'* perceptions of their own cultural status in the countryside suggest that they considered themselves unique among agriculturalists. According to Hunter, "Their own tradition is that they were specifically created by *Mahadeo* [Shiva] and *Parvati* for [tending] the gardens of Benares."⁷⁵ A separate tradition has it that the title *Koeri* evolved from the Hindi roots *ku* (earth) and *ari* (enemy), and combined to connote victory over the soil.⁷⁶ The religious and cultural implications of the *Koeris'* powerful agricultural identity emerges out of early twentieth century descriptions of *Koeri* cultivators. O'Malley maintained (writing after more than a century of poppy-acreage expansion under the British) that the *Koeris* "are proud of their position as adroit cultivators and have been known to outcaste a man for adulterating the opium produced by him for Government."⁷⁷ Popular expressions even today in the Magadha culture area run as follows: "One can never find a *koeri* people sit idle [*sic*]. *Koeris* are very fond of works [*sic*]."⁷⁸ As members of an aggressively agricultural caste, all the men, women, and children of the *Koeri* family participated in the labor of cultivation. The higher castes, like Rajputs and Brahmans, avoided the physical exertion of agricultural labor whenever possible to maintain ideals of religious and cultural purity.

In direct material terms, Buchanan, Hunter, and O'Malley unanimously considered the cultivation of poppy a profitable rural venture. Buchanan even cited an interesting class distinction implicit in the production of agricultural goods:

... [E]ven to those who abstain altogether from manual labour, the cultivation of grain is a profitable concern, by which the greater part of the people are entirely supported; for the produce of the dairy is a trifle, and poppy and vegetables, the most valuable articles of cultivation, are entirely reared by the lower classes.⁷⁹

Socially, higher castes generally avoided small-scale agricultural ventures that entailed such intense amounts of manual labor. As tenants, lower class castes saw greater advantages in vegetable and poppy culture as they allowed for lucrative small scale cultivation, the produce of which was more readily marketable, encouraging greater productive control over profits. On an infrastructural level, economies of scale prohibited the cultivation of grains in small tracts, primarily for reasons of irrigation mobilization.

The advantages of poppy cultivation became manifest in ways beyond the final government price received by the peasant from the opium agency. O'Malley paints a vivid picture of the economic stability and increasing prosperity of this "large cultivating class" which

... lives on the outskirts of these [sizable] towns and makes a comfortable living by raising garden produce, including large quantities of potatoes, onions, garlic, cauliflowers and other vegetables, which are exported to Calcutta and other parts of Bengal.⁸⁰

Through the nineteenth and twentieth centuries, the growth of small-scale, specialized vegetable cultivation around the outskirts of urban centers to afford proximity to central markets reflected the responsiveness of agricultural communities to regional and local demand, and in the case of poppy, to world demand.

CONCLUSION: THE *KOERI* AND POPPY CULTIVATION

General patterns cannot be assumed for the history of agricultural commercialization in India. The quality of the commercialization experience depended on many factors, not the least of which were the agrarian status of the cultivator, the specific features of the crop and its cultivation requirements, the tenurial arrangements on the land, and the character of the marketing process. By focussing only on the process of production, Shahid Amin demonstrates that sugarcane cultivation did not live up to its growth-oriented reputation for the majority of producing peasants in Gorakhpur. Rather, the sugar culture reinforced the dominance of certain aggressive,

well-placed actors over the small peasant economy which ultimately brought about increased rural debt, oppression, and created a dependent peasantry.

Contrary to Amin's contention that the *relations* and *processes* of agricultural production are separate analytical categories, these agrarian dynamics are inherently intertwined. The local experience of poppy cultivation in South Bihar does not reflect the widespread assertions of rural oppression and conflict as a dominant feature of the history of commercial agriculture in North India as defined by Amin and others. Rather, interest-free advances that served to lighten the peasant's rent debt to the *zamindar*, substantial cash payments for the production of crude opium, and minor yet significant cash returns for the by-products of poppy cultivation all served to reinforce the position of the *Koeri* cultivator in the nexus of production relations in agrarian South Bihar.

CONCLUSION: ZAMINDAR, OPIUM AGENCY, AND PEASANT

This essay has attempted to define the role of poppy in Indian agriculture by focussing on the world of the cultivator, the cultivation process, the network of agrarian relations within which that process operated, and the local "market" mechanism. In order to maintain the lucrative opium trade with China in the nineteenth century, the Opium Agency had to guarantee the extraction of crude opium from the Indian countryside. This entailed an official British penetration of North India's political economy which posed serious challenges for the Agency's rural representatives. Notwithstanding the potential profitability of poppy cultivation, local land controllers were naturally reluctant to allow government men to enter the village economy and usurp their hold over their tenants. Nevertheless, the *gumashta's* official salary depended on his ability to contract peasants to produce the desired amount of crude opium for factory processing and eventual export. The *gumashta* relied upon the local man, the *khatadar*, as his village contract link to opium production.

The triangular tension between the agency, the peasant, and the *zamindar* evolved into an important dynamic of agrarian change in the late eighteenth and early nineteenth century opium producing regions. Chaudhuri's work views the historic role of poppy cultivation with mixed impressions. He maintains on the one hand that peasants were forced to cultivate poppy, and on the other that peasants were reluctant to leave the cultivation of poppy.⁸¹ In his condemnation of the opium production and extraction infrastructure in the nineteenth century, Chaudhuri strives only to locate and highlight cases of rural coercion over peasants and misses therefore the historic significance of the production triangle outlined by the agency, the *zamindar*, and the peasant.⁸² Assuming incorrectly "that poppy cultivation

was . . . less remunerative than the cultivation of other crops,"⁸³ Chaudhuri asserts that any government activity to encourage the cultivation of poppy immediately took the form of rural coercion of peasants:

In such a complex situation [where contractors must be sensitive to the rural authority of *zamindars*], the contractors were naturally concerned about retaining their control over the peasants, once brought under their grip, even by coercive means. The contractors were well aware that any mildness or generosity would only ruin their own cause, since they were bound by the conditions of contract to supply a certain quantity of opium.⁸⁴

Chaudhuri, trapped by his uni-directional sense of agrarian tension, reinforced here by his misapprehension of poppy's multifaceted remunerative qualities, fails to grasp that the contractors aim was not to coerce peasants into growing poppy, but to coerce *zamindars* into allowing their peasants to grow poppy.

In order to accomplish this, however, the Opium Agency had to serve the interests of both the tenant and the *zamindar*. The high profitability of the opium trade with China enabled the Agency to do precisely this. *Zamindars* were able to charge a higher *jaldi* rent on poppy lands, and the interest-free advances of the opium year in September and January often went, as Chaudhuri has noted, directly toward financing the debt the *zamindar* held over the peasant. The peasants, on the other hand, received cash payment for the crude opium and assorted opium produce, not to mention further interest-free advances for the construction of irrigation wells.

The long-term effects of this agrarian change are less explicit but more profound. The Opium Agency, in its rural manifestation, drove a contractual wedge between the peasant and his *zamindar* in the late eighteenth and nineteenth centuries that had significant historical ramifications in the twentieth century. James Hagen identifies this long-term historical change in terms of the official British presence in agrarian India:

[The British Raj] introduced a trend of interference from the outside into local contexts of control and perceptions of authority, not so much through British misunderstandings of local land relations but by the very act of institutionalizing those relations. This process consisted of exceedingly important, long-term consequences for both patrons and clients. For patrons, these were the dual practical effects of altering land controllers' options and traditional authority, although patrons effectively utilized the new non-local, legal apparatus (that came with the formalization of land rights) to control client hierarchies. For clients, the process was a long-term pattern of increasing recognition and use of the option of non-local, legal recourse and authority, which was accompanied by a decline in client deference toward local authority.⁸⁵

In the case of the *Koeris*, this increasingly intimate non-local authority took the form of the Patna Opium Agency. The increasingly secure institutional

posture of *Koeris* as respected poppy cultivators was further buttressed by the profits of poppy cultivation and the debt-financing benefits of interest-free opium advances. These conditions ultimately improved the position of the *Koeris* on the land through the nineteenth century. John Richards observes that even though *Koeris* were "not of especially high ritual status, . . . a high rate of saving seems to have enabled a number of them to purchase lands and become revenue paying proprietors for either all or part of the lands which they used."⁸⁶ Richards cites H. H. Risley's 1889 description of the *Koeris* in *The Tribes and Castes of Bengal*:

Many *Koeris* are tenure-holders and here and there members of the caste have risen to be petty *zamindars*. Most of them are prosperous cultivators holding occupancy [tenancy] rights, and comparatively few have sunk to the position of landless day labourers.⁸⁷

The rise of the *Koeri* caste was integral to a larger process of social change in the nineteenth and twentieth centuries described by Hagen in his social history of Patna District.

An important long-term process was the beginning of a structural movement of first and second-line tenant families into the proprietor level. These tenant families were *Bhumihar*, *Rajput* and some Muslim but perhaps more important for the long-term were the increasing members of non-*ashraf* [elite] *Kurmi*, *Ahir* [*Yadava*], and *Koeri* families involved.⁸⁸

The entry of the *Koeri* caste into the small proprietor level can only be understood in the context of the larger opium trade with China in the nineteenth century. The profits, security, and government contact afforded by the cultivation of poppy provided enough agrarian advantage to attract and secure the specialized agricultural abilities of *Koeri* cultivators in the late eighteenth century. Their official status as poppy cultivators better enabled them in the century that followed to turn their cash profits toward improvements of their own social and economic position in the countryside.

APPENDIX: POPPY CULTIVATION AND CRUDE OPIUM PRODUCTION

CULTIVATION.—The poppy cultivated is exclusively the white variety (*Papaver somniferum album*). After the soil has been prepared, the seed is sown broadcast in the month of November. In three or four days the plow is passed over the land to bury the seed, and the soil is afterwards again levelled by the *chauki* [a heavy log]. The whole surface is then divided into little

compartments about ten feet square, the sides of which are raised and converted into little channels for the purpose of irrigation. The number of times the plant may require irrigation depends upon the nature of the season. If some heavy showers fall in December, January, and February, two irrigations may be sufficient; but if the cold season pass over with little or no rain, the operation must be repeated five or six times. Ten or twelve days are sufficient for the germination of the seed, and after the young plants have attained a height of two inches, they are carefully weeded and thinned. In another fortnight, this process is repeated, only the healthy-looking plants being left, at a distance of seven or eight inches from one another. Then the process of gently digging up the soil with a hoe (*kurpi*) should be diligently carried out, and the fields must continue to be dug and irrigated every fortnight. In its progress towards maturity, the plant is liable to injury from various causes. It may be nipped by frosts or become stunted through unusual heat and deficient moisture. Again, the crop may be attacked by blight, or the pores choked by a parasitical species of broomrape (*Orobanche Indica*), called by the natives *tokra*, which entwines itself around the roots of young plants, and causes them to wither away. By February the plant is generally in full flower, having reached a height of from three to four feet. The stem is branched, and is terminated by from two to five ovate-globose capsules, averaging about the size of a duck's egg.

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COLLECTION OF THE JUICE.—Four or five days after the removal of the petals [for "leaf" preparation], when the capsules have reached their utmost state of development, the process of collection commences, which extends from about the 20th of February to the 25th of March. About three or four o'clock in the afternoon, the cultivators repair to the fields and scarify [scratch] the poppy capsules with a sharp iron instrument called *nashtar*. This instrument consists of four narrow bars of iron, bound together by strong cotton thread. The bars are at one end deeply notched, and the sides of the notch are ground to sharp edges, and the external angles brought to sharp points, till the instrument presents four pairs of curved pointed diverging blades, somewhat similar in shape to the lancet blades of a cupping scarificator. In employing the *nashtar*, only one set of points is brought into use at a time, and the capsule is scarified vertically from its base to its summit. These scarifications are superficial, and do no more than traverse the thin pericarp [ripened plant ovary] of the capsule. The juice, which exudes slowly, is milky white at first, and assumes a form which is technically known as a "tear." As the water contained in each "tear" evaporates, the outer portion thickens a little and assumes a pink colour. In the morning, these

"tears" are scraped off by means of concave trowels (*situa*), and the contents are emptied into an earthen pot which the collector carries by his side. Each capsule is scarified from two to six times, according to its dimensions, at intervals of two or three days; and the juice is collected on the following morning. After the plant has ceased to yield any more juice, its utility is not yet exhausted.

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When fresh collected, the juice from the capsule presents the appearance of a wet granular mass of a pinkish colour; and in the bottom of the vessel which contains it, is found a dark fluid resembling coffee, to which the name of *pasewa* is given. The juice when brought home is placed in a shallow earthen vessel, which is tilted to such a degree that all the *pasewa* can drain off. This fluid is collected and set aside in a covered vessel. The opium, which is left, now requires constant attention. It is daily exposed to the air, though never to the sun, and is regularly turned over every few days in order to ensure uniform drying in the whole mass; and this process is repeated for about a month, till the drug has nearly reached standard consistence. Standard opium is that which contains 70 per cent. of pure dry opium, and 30 per cent. of water, . . . ⁸⁹

ENDNOTES

1. Cited in Michael Greenberg, *British Trade and the Opening of China, 1800-42* (Cambridge, 1951), p. 4.
2. Greenberg, p. 9. Greenberg cites E.H. H. Pritchard, "Crucial Years of Early Anglo-Chinese Relations (1750-1800)," in *Research Studies of the State College of Washington*, IV, p. 232.
3. George Watt, *A Dictionary of the Economic Products of India*, Volume VI, (Calcutta, 1892), p. 24. Cited in John Richards, "The Indian Empire and Peasant Production of Opium in the Nineteenth Century," *Modern Asian Studies*, 15, 1 (February 1981), p. 61.
4. Richards, pp. 69-70.
5. Greenberg, p. 117.
6. W.W. Hunter, ed., *Statistical Account of Bengal, Volume 11, (Patna and Saran Districts)*, (Delhi, 1973—reprint of 1875-77 edition), p. 146.
7. Richards, pp. 67-68; Binay B. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," *Indian Economic and Social History Review* VII, 1 (March 1970), p. 49.
8. Richards, p. 79. Richards uses figures in tables provided in, House of Commons, *Sessional Papers*, 1894, vol. LXI, Royal Commission on Opium, Report, Appendix V, J.H. Rivett-Carnac, "Note on the Supply of Opium," p. 325.
9. Richards, p. 79.
10. The Patna and Benares Agencies supervised poppy cultivation and crude opium production in rural Bihar and U.P. respectively.

11. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," pp. 49-50. This is not a point that Chaudhuri discusses, but which emerges clearly from his description of poppy cultivation.

12. H.R.C. Wright, "The Abolition by Cornwallis of the Forced Cultivation of Opium in Bihar," *Economic History Review* (new series) 12, (1959), pp. 112-119.

13. Wright, p. 116.

14. Greenberg, pp. 112-124.

15. Wright, p. 112.

16. *Sugarcane and Sugar in Gorakhpur: An Inquiry into Peasant Production for Capitalist Enterprise in Colonial India* (Delhi, 1984).

17. This term, used by Ranajit Guha and others, characterizes those historians who implicitly accept the hierarchical attitudes of their colonialist source material. Guha's purpose is to redress the tilted scales of historical perspective by emphasizing a "subaltern" focus. See especially his introductory essay in Ranajit Guha, ed., *Subaltern Studies I: Writings on South Asian History and Society*, (Delhi, 1982).

18. Shahid Amin, "Small Peasant Community Production and Rural Indebtedness: The Culture of Sugarcane in Eastern U.P., c.1880-1920," in Guha (ed.), *Subaltern Studies I*, p. 40.

19. Amin, "Small Peasant Community Production," p. 41.

20. Rivett-Carnac, pp. 336-339. (Maps estimating North India's regional opium outturn).

21. Francis Hamilton Buchanan, *Account of Patna-Gaya (1811-12), Volume II* (Patna, 1939), p. 522.

22. L.S.S. O'Malley, *Bihar District Gazetteers* (of Patna, Gaya, and Shahabad): *Patna* (Patna, 1906-07), p. 134.

23. Rivett-Carnac, p. 319.

24. Rivett-Carnac, p. 319.

25. Rivett-Carnac, pp. 336-337. (Map of Bihar's Sub-Agencies).

26. Rivett-Carnac, pp. 319-320.

27. Rivett-Carnac, p. 320.

28. Buchanan, pp. 522-523.

29. Buchanan, p. 523.

30. Hunter, ed., p. 151.

31. O'Malley, p. 98.

32. Rivett-Carnac, p. 321.

33. Richards, p. 81.

34. O'Malley, p. 121.

35. O'Malley, p. 120.

36. For clarity, I use the term *zamindar* in this and the following chapter to refer to all levels of village proprietorship, including small and medium sized village-residing *maliks* (proprietors) and larger urban-absentee zamindars. James Hagen, in his "Indigenous Society, the Political Economy, and Colonial Education in Patna District: A History of Social Change from 1811 to 1951 in Gangetic North India" (Ph.D. dissertation, University of Virginia, 1981), emphasizes the importance of what he calls—drawing on early British description—the *ploughman boundary*, which connoted a "status boundary between those that ploughed (*chard*) and those that did not 'hold the plough'" (p. 93). Those who did not hold the plow but rather supervised the intense labor of cultivation usually came from the higher castes, such as *Bhumihar Brahmins*, and only occasionally came from the middle cultivating castes like *Yadavas*, *Kurmis*, or *Koeris* (pp. 104-106). While these supervising groups directed cultivation, they did not necessarily own the cultivated land. As often as not, they held sub-proprietorship rights (*raiyati*) over the land as "first-line" tenants with formal tenures under high caste or Muslim estate landlords (pp. 94-95). When they did own the land over which they supervised cultivation, it was usually in small-proprietorship form. Perhaps most importantly, these small owners resided in villages proximate to their land.

37. I should note that this vulnerability did not apply to poppy cultivation in which peasants were sheltered by the monopoly structure of the opium trade.
38. O'Malley, p. 125.
39. George Grierson, *Bihar Peasant Life*, (Calcutta: 1885), pp. 329-330.
40. O'Malley, p. 54.
41. In addition to the price received for crude opium, the secondary by-products of poppy cultivation provided other small cash gains to the cultivator.
42. O'Malley, p. 98.
43. Rivett-Carnac, p. 320.
44. Hunter, ed., p. 126.
45. Hunter, ed., p. 126.
46. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," p. 230.
47. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," p. 230, footnote 48.
48. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," pp. 230-231.
49. O'Malley, p. 130.
50. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," p. 244.
51. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," p. 244.
52. Richards, p. 61.
53. Richards, p. 79.
54. Richards, pp. 81-82.
55. See Appendix for a detailed description of the poppy cultivation and crude opium production process.
56. Buchanan, p. 522.
57. O'Malley, p. 91.
58. O'Malley, p. 100.
59. O'Malley, p. 105.
60. For instance, in the case of rice cultivation under produce rent, the zamindar had an obligation to mobilize the necessary large-scale irrigation works.
61. Chaudhuri, "Movement of Rent in Eastern India, 1793-1930," *Indian Historical Review* 3, 2 (1977), p. 314.
62. Rivett-Carnac, p. 320.
63. O'Malley, p. 130.
64. Hunter, ed., p. 147.
65. Rivett-Carnac, p. 321.
66. Hunter, ed., p. 128.
67. My description of poppy by-products emerges out of Rivett-Carnac, pp. 320-321; and Hunter, ed., pp. 147-50. Prices are listed in Rivett-Carnac.
68. While the Opium Agency purchased *pasewa* at a substantial cost, the official literature does not elaborate on the practical application of the substance.
69. See Appendix for a description of the poppy cultivation and harvest process.
70. Richards, p. 78.
71. Buchanan, p. 333.
72. Hunter, ed., p. 46.
73. O'Malley, p. 130.
74. See Appendix.
75. Hunter, ed., p. 195.
76. Hunter, ed., p. 195.
77. O'Malley, p. 42.
78. Asim Maitra, *Magahi Culture: A Monographic Study* (New Delhi, 1983), p. 97.
79. Buchanan, p. 506.

80. O'Malley, p. 130.

81. Chaudhuri, "Growth of Commercial Agriculture in Bengal—1859-1885," pp. 232, 245.

82. See especially, Benoy Chowdhury (Binay Chaudhuri), *Growth of Commercial Agriculture in Bengal (1757-1900), Vol. I* (Calcutta 1964).

83. Chowdhury, *Growth of Commercial Agriculture in Bengal*, p. 52.

84. Chowdhury, *Growth of Commercial Agriculture in Bengal*, p. 53.

85. Hagen, pp. 167-168.

86. Richards, p. 72.

87. H.H. Risley, *The Tribes and Castes of Bengal*, 4 vols. (Calcutta: 1889), III, pp. 408-409. Cited in Richards, p. 72.

88. Hagen, p. 166.

89. This appendix is an explicit extract from Hunter, ed., pp. 147-50.