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**Extracting Peasants from the Fields:
Rushing for a Livelihood?**

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Extracting Peasants from the Fields: Rushing for a Livelihood?

EXTRACTIVE PEASANTS: ENCOUNTERING A RAPIDLY CHANGING WORLD

Extractive industries have conventionally been seen as one of the ultimate expressions of modernity—a metaphor of the modern world—representing capitalist exploitation of labour as well as the gross commodification of nature by corporate enterprises. Coal, iron ore and other raw materials were instrumental in the success of the industrial revolution, and consequently the extraction of these commodities came to be closely associated with the rise of capitalism. Lewis Mumford's influential works (1934, 1961) cast mining as the demonic equivalent of death and war, an allegory for the increasing artificiality of technological civilisation and a concrete expression of the capitalist environment, far removed from the organic rhythms of the natural world. Writing from a similar, west-centric perspective, Caroline Merchant (1990) equated mining with the 'death of nature'. And indeed, mining and agriculture have been widely seen by social scientists as presenting two oppositional ends of the spectrum of human endeavour to make a living; ordinary peasants who toil on the land, against the miners who destroy it.

However, neither Mumford nor Merchant had met Grandma Seng of Ban Nahi village in Phathen valley of Khammuane Province (in the Lao People's Democratic Republic), where I visited in 2010 to study local communities mining tin. Aged around 75, Grandma Seng describes herself as 'a farmer', although she has not produced any rice in the last fifteen years. Grandma Seng is a miner; along with another two thousand men and women from the two villages located in the valley, Seng has been digging the hill slopes and fields, scraping and scavenging for tin which now comprises her main subsistence. When I asked her why she calls herself a farmer, she responded, 'because I licked the earth then, and I do so now'. In other words, no dichotomy exists between her two modes of existence in spite of the near-complete cessation of her identification as a cultivator for practical purposes, because she continues to make a living from the resources of the earth. For innumerable people like her, although full-time wage work is preferable as an external source of economic survival, and connection to the land weakens, it continues to remain her primary identity, making her way of life 'mining by peasants' more than 'a kind of mining', and offering an incentive to explore further if the farming and mining ends of the livelihood spectrum can theoretically be brought closer.

Seng lives at a time when the world is changing rapidly. Throughout the less affluent world, the stampede among peasants for minerals of various kinds and wherever they possibly can be found, has assumed hitherto unprecedented proportions. The peasants seem to be following what the global trends in mineral production suggest: that the centre of gravity of world mineral production has shifted geographically during the twentieth century. Vast arrays of non-institutionalised and hybrid mineral extractive practices now characterise and even dominate the rural landscapes in many mineralised tracts, offering more effective incomes and more stable livelihoods to millions of disenfranchised poor. However, in sheer scale of numbers, the contemporary rush by peasants is one of the largest in modern history. For example, the rush of peasants for gold in the Brazilian Amazonia is extraordinary both in terms of numbers of people and the amount of commodity produced; by the early 1990s, more than 100 metric tons of gold was produced annually and gold mining had become the second most important economic activity in Amazonia (following the combined ranching-agriculture sector) (Godfrey 1992: 460). Godfrey wrote (1992: 460), 'At least half a million gold miners now operate in Amazonia.' To this might be added the large number of merchants, restaurateurs, sex-workers and others who service the miners. He notes, 'in certain areas, gold mining has become the leading economic sector.... [and] the dynamics of gold mining ... call into

question several common assumptions about the so-called agrarian frontier in Amazonia.’ (Godfrey 1992: 460). Clearly, in Brazil, mining has been pushing this frontier rather than agriculture.

In Peru, as much as 65 per cent of gold production in 2005–06 came from non-formal sources such as these. In Tanzania, gold production by former peasants contributed to an estimated 76 per cent of the country’s mineral export earnings in 1992 (Tessa 2000). Of the nearly 600,000 carats of diamonds officially exported from Sierra Leone in 2006, as much as 84 per cent originated from peasant extraction (Government of Sierra Leone 2011). In Mongolia, former herders extracting gold by far outnumbered those employed by the formal mining sector of the country, and produced more gold than the country’s larger mines (UNDP 2009).

In Brazilian Amazonia, these miners are known as the wildcat *Garimpeiros*, and as the *Galampseys* in Ghana, *Barranquilas* in Bolivia, *Ninjas* in Mongolia and the *Gurandils* (literally, ‘those who jump from cliff to cliff’) or PETIs (acronym for ‘those mining without license’ in Bahasa Indonesian) in Indonesia. No one exactly knows the numbers from China, but according to experts, if cheap industrial minerals such as sand, stone and gravels are included in the definition, then about 15 to 16 million people could be counted as engaged in informal mineral resource extractive practices.¹ Located at the margins of the mainstream mining economy, these people produce enormous amounts of mineral resources. However, the popular media in each of these countries highlight the Hobbesian lawless and brutal chaos and the illicit nature of such mining, often equating them with the gold rushes that took place in the ‘new world’. Such reports then also make recommendations on how to regulate the thousands of people involved in digging, processing and trade in order to make it yield revenue for the state.² More importantly, a body of literature, both popular and academic, invokes theorisations of the ‘resource curse’³ to explain such mining and even trigger imaginations of ‘resource wars’⁴ (see VanDeveer 2013 for a broad review). An example is the interpretation by Wilson (2013) of the extraction of diamonds in Sierra Leone, depicting a terrifying scenario of lawlessness, disorder and violence, brutality of underdevelopment, abjection and ethnic strife.⁵ The reductionism inherent in mineral resource theories excludes and even scorns the informal modes of mineral extraction in favour of institutions of mineral governance such as the state and the large corporations. My purpose is not to understate the violence, displacement and dispossession that

¹ Personal communication, Professor Shen Li, an authority on ASM in China based in the Chinese Academy of sciences in Beijing.

² An example is the ‘People’s gold rush’ in Mongolia, extremely detailed research by a group of consultants, suggesting that this ‘new engine of growth’ be regulated to avoid conflicts with the formal mining sector (Grayson et al. 2004).

³ Resource curse theory was presented by Richard Auty in 2001 to refer to the paradoxically negative relationship between mineral resource wealth and social and economic performance of individual countries, based on macroeconomic datasets.

⁴ Most widely circulated are a group of theories of resource conflict, resource curse and resource wars that are rooted in a positivist philosophy, that prophesise doom and gloom in developing countries, and demonise the rightful needs and livelihoods of poor people. These then prescribe top–down measures such as conflict management or control of supply chains (see Lahiri-Dutt 2006).

⁵ Comaroff and Comaroff (2007: 133) put forth a robust critique of the criminalisation of poverty in the postcolonies of Africa, Asia and Latin America and consider that they derive from European archetypes and entrap the ‘South’ in relations of corruption.

often accompany mineral extractive processes.⁶ An alternative, and ethnography-rooted, analytical framework can rescue the peasants from this gross criminalization; such a framework is robust enough to engage with contemporary social, political and economic changes sweeping through rural areas not just in one country or a context, but throughout the world.

Today's Gold Rushes?

How does one explain today's 'commodity rushers'? One is aware of the notorious and ongoing global 'scramble' for oil and gas resources and the enormous influence of extractive industries in more affluent nations. A linear view of history would ignore the many differences between the greed that drove hundreds of thousands of Europeans into the so-called 'new world' of North America and Australia to create the historical gold rushes, whereas today's peasants are largely being forced into extractive practices. Therefore, I would reframe the question and ask: what are the strategic implications of mineral extractive practices for peasant livelihoods?

Let me briefly outline the political–economic context within which the peasants are moving into mining. As we know, 'time and space' are being compressed in the contemporary world (Harvey 1998: 8), as waves of globalisation sweep the remotest corners of the world, unleashing unforeseen challenges for innumerable people confronting fundamental transformations to their ways of life. At the same time, as people try to come to grips with the forces of change, they are resisting and reconceptualising the 'world of things' (Appadurai 1996: 4), material realities as well as political processes that are turning the lives of rural people like Seng upside down. One aspect of globalised development is that peasants today are subject to wider forces that are outside their control. The free-market economic policies adopted throughout the less affluent countries are pushing millions of rural people out of agriculture and forcing them to leave their traditional occupations. Scholars have noted that former peasants are being sucked into mainstream and modern industries to work as wage labourers (Akram-Lodhi and Kay 2009). The magnitude and scale of human tragedy unleashed by the rush to free-market policies by the states has had complex and diverse repercussions and responses in the form of peasant protests and the building of new production organisations,⁷ as well as by leaving the farm sector altogether, described as 'depeasantisation'⁸ by Araghi (2009: 112).

⁶ Smith (2011: 18) quotes Severine Autessere's observation of Congo: 'During the war in the country's eastern provinces, 81 percent of the population have had to leave their homes, more than half have experienced the violent death of family members or friends, more than half have been abducted for at least a week, and 16 percent have been subjected to sexual violence, usually repeatedly.' There is no doubt that the situation is anything but pleasant in these mining tracts.

⁷ In Latin American contexts, Edelman (1999: vii) describes this as peasant resistances to, but also coping with, the formation of alternative production organisations to survive the invisible but fearsome hand of the market. The term 'the invisible hand' was used by Adam Smith in his 1776 book, *An Inquiry into the Nature and Causes of the Wealth of Nations*, as a potent metaphor for how individual self-interest promotes the common good.

⁸ Araghi notes (2009: 138) that depeasantisation is neither synonymous with proletarianisation, nor is it a completed or self-completing process leading to the death of the peasantry, and observes that peasantisation and depeasantisation are not necessarily two mutually exclusive phenomena.

Yet, it is increasingly difficult to draw a picture of today's peasants either as purely moral agents, reluctant to accept the risks associated with the modern economy and acting solely for the political interests of the group, or as immoral actors, purely driven by the greed of the market. Peasants like Grandma Seng are both at the same time, economic actors taking advantage, under considerable pressures, of the limited opportunities thrown up by their subordinate integration into new markets. In another context, Bebbington (1996: 91–92) observes that 'when peasants incorporate new ideas and material technologies into their practices, this can become a sign that the group is now more distant from a past when they were socially dominated, that their relationship with other social groups is changing, and that they are now claiming rights of access to resources and knowledges previously closed off precisely because of this domination.' This statement receives support from Jan Breman in his detailed empirical work on the circulation of peasants in South Gujarat,⁹ although the factors triggering peasant mobility there were largely internal to agriculture. The statement receives further reinforcement in the more recent work of Jan Breman exploring the casualised and informalised, 'outcast' or the 'reserve army' of labour, who comprise a largely nomadic workforce driven out by the forces of commoditisation of a rural economy (Breman 2010: 1). In the contemporary world, the encounter with modernity may not only undermine peasants, turning them into just the outcasts of modernity, but perhaps paradoxically permit them to redefine their conception of the material and social worlds and their place in it. As the state recedes to allow the market to take over, letting commodity prices rise to hitherto un contemplated levels, the desperate peasants try to turn the tables in their favour in order to scrape at least some benefits from the disruptive changes, and in the process reconceptualise themselves and the political economy of extractive industries.

Peasants as the Analytical Framework in Mining

It may well be impossible to narrow down the processes driving agrarian and social change in the rural areas of less affluent countries, but amongst the several compelling factors forcing this unprecedented and widespread shift from agrarian to informal mineral extractive economies, six can be detected: (i) the unsustainability and poor productivity of the agricultural sector caused by a number of forces (the 'agricultural poverty' or the 'push' factor); (ii) economic reforms to liberalise land markets and to help Foreign Direct Investment (or FDI) ('the structural reform' factor); (iii) the states' initiatives to earn revenue incomes from mineral extraction (the 'rentier state' factor); (iv) the equation of mining with development to establish an extractive model to favour large corporatised operators and local communities (the 'mining for development' factor); (v) environmental degradation at the local level and uncertainties of precipitation and temperatures caused by both local and global processes (the 'environmental refugees' factor); (vi) and the rising commodity prices adding further incentive to earn cash incomes (the 'pull' factor). Given their overlapping nature, I will discuss these later in this essay.

Innumerable people are found toiling on the mineral-rich tracts, using a diverse range of artisanal and small-scale modes of mineral extraction practices to contribute significantly to their livelihoods. These are the people I describe as 'extractive peasants', former peasants who are being incorporated into mineral extractive occupations that can generate cash for subsistence. Rural people, located on mineral-rich tracts almost without exception throughout the less affluent countries of Asia, Africa and South America, are being drawn into a peasant mining economy. Much

⁹ Breman (1985: xvi) showed that the advent of new agricultural technologies such as canal irrigation and rural electrification which facilitated large-scale well irrigation 'marked a sharp break between the old and the new agricultural cycle' with significant consequences for the rural economy, which he outlined as 'the existing dependence on agriculture has given way to a much wider and more complex pattern of economic activities; a diversification in the rural economy based on agrarian surplus formation.'

of the research, particularly on the links between rural poverty and mining, has been undertaken in context of Africa, where the blood diamonds and conflict gold loom large on the horizon; relatively less has focused on Asia, and hence the attention in this essay is on connecting the literature on Africa with Asian examples.

The argument here is that exploring mining by peasants can potentially reconfigure two important areas of scholarship, labour studies and peasant studies, within a unitary framework. Moreover, it also re-envisages the conventional and singular conceptualisation of mining as a highly capitalised and corporatised industrial project and queries many of our old assumptions related to it by illuminating peasant livelihood transitions in times of rapid agrarian change. Above all, it allows us to examine the contemporary anxieties around the legitimacy of mineral extractive practices by peasants. An expansion of the definition of mining is an urgent task at the moment because as mining projects have made inroads into less affluent nations, their close relationship with the projects of modernity and industrial development has increasingly come under question. It is also a significant task to query the anxieties associated with extractive practices by peasants. The visions around such mining are reminiscent of chaos and conflict, arousing images of a violent world which needs to be brought under control, creating a fear of the unruly global south with its landscape of apprehension, risk and insecurity. Terms such as 'poor resource governance' and 'need for regulation' are generally associated with peasant mining, implying that conflicts can only be resolved if such mining is brought under corporate control, thereby delegitimising the livelihoods of many communities.

EXTRACTIVE PEASANTS AS PART OF THE INFORMAL ECONOMY

I am using the imprecise and widely-debated term 'peasant' to include within the category the erstwhile rural farmers in the less affluent nations who in recent decades have been making a living out of extracting smaller mineral deposits on their own, with or without license, or working for smaller mines and quarries as wage labourers on irregular or contract basis, or steal from existing or abandoned larger mines. This group includes people like Grandma Seng and millions like her in Asia, Africa and Latin American countries. The use of the term primarily lends a historical significance; it can explain in a robust manner the contemporary rural transitions on mineralised tracts, and can be deployed with relative ease to contest the modernity which has conventionally been associated with extractive industries.¹⁰ The use of the term would be a reminder that peasants were often more than farmers, and sometimes not farmers at all, 'for millions of them were engaged, at home or in the cities, for a part or all of their time, in self-directed non-agricultural work of some sort, or in agricultural or industrial wage-labour' (Robinson 1932: 104).

The term is now more or less accepted to refer to a broad range of people, engaged in subsistence-based or small-scale agriculture in Asia, Africa and South America, and includes those who own small pieces of land and those who are tenants on such lands, including the sharecroppers and landless agricultural labourers.¹¹ Extractive peasants inhabit the complex intersection of a number of disciplines and consequently, the explanation of their practices overlaps the margins of Anthropology, Human Geography, Economics and History. It will be useful to present a brief

¹⁰ Conventionally, Geertz (1962: 1) wrote, the term 'peasant' has been associated with the historical, social and economic aspects of life in Europe in the Middle Ages, and confused with the term 'folk'. This effectively ignored Firth's (1946: 22) suggestion that Malay fishermen could be better understood as peasants (albeit as a type very similar to European communities).

¹¹ Mintz (1973) offers a working and useful definition of peasantries.

overview of scholarly research on peasants, not just the economic, political and cultural sense in which the term was used, but more importantly in their connection to the market.

Shifting Emphases in Peasant Studies

Post-1960s peasant studies have radically modified the view presented in early studies of peasants as isolated, self-contained communities, attached to land, or as conservative and passive classes noted for their rigidity, to the opposite, in which the peasants are seen as agents of resistance and change.

Much depends on interpretation, and I see James Scott's (1985, 1986) conceptualisation of 'everyday forms of peasant resistance' as recovering the peasants not just from fatalism and hopelessness, but also from the implied binary in this debate. More recently, Arnold (2001) reinterprets the moral economy from his political science perspective; peasants can still be seen as moral agents but as those who take the advantage of 'commodification' of the resources. Similar perspectives are being offered by others to allow us to escape falling into the trap of a 'survival strategies' model which limits activities of the poor to mere survival within the daily context, often at the cost of others or themselves.¹² For example, Escobar (1997) suggests that the language of 'survival strategies' may contribute to maintaining the image of the poor as victims, who in reality may resort to theft, begging, prostitution or the reorientation of their consumption patterns in order to counter unemployment or price rises.

Peasants have neither been a static, undifferentiated mass, nor have a clearly defined class structure, but present a population characterised by enduring inequalities and remarkable mobility between positions of abject poverty and affluence. Schendel's (1982) work on rural Bangladesh showed that peasants moved vertically or horizontally as a result of an increase or decrease in their wealth, status, power, ability and knowledge. This idea of peasant mobility as either centripetal or centrifugal was in contrast with Breman's (1985) early view of cyclical or circulatory mobility, in which peasant migration begins and ends within the rural milieu. Breman (1985: xvii) showed that with the remoulding of the rural production structure, the reliance on agricultural incomes had decreased: 'the existing dependence on agriculture has given way to a much wider and more complex pattern of economic activities.' Peasant migrations, however, as Mosse (2005: 72–73) has shown more recently, are not a linear process engendering non-agrarian identities, but are tentative and variable. In reporting his study on the Bheel communities in central India, Mosse added a new dimension to show that the movement of peasants out of agriculture or their migration to other areas or into other forms of livelihoods are intricately interdependent and impermanent.

Peasants into the Informal Economy

The specific aspects of peasant production, as identified by Shanin's (1973) influential work, are the family unit of production–consumption, and its relationship with the village, the market and money. These features vary in their specific traits, but get transported where peasants move and when they shift occupations. This is the reason why more recently, Shanin (2002) links peasants to (and considers them as) integral parts of the informal economy:

¹² See Bayat (1997: 56) for a full elaboration of the debate.

‘The core of the informal economy is not peasant farming, but family and neighbourhood of relationships of mutual support. So while the informal economy is seen—if it is seen at all—as the political economy of the margins, when you put it all together, you can see it is not marginal at all.’

Bringing Shanin’s work together with that of Polanyi and Chayanov, Eyüp (2005: 767) had drawn peasant production and the informal sector together in an effort to challenge the neoclassical orthodoxy of institutional economics which, in his view, has reached an impasse in explaining the informal sector. He shows that the operational logic of the informal sector household differs from a strictly capitalist logic in its deep engagement with survival through flexibility and its ability for self-exploitation (p. 773). Hart (1987: 845) describes the sector succinctly as operating, ‘outside the framework of corporate public and private sector establishments.’ Castells and Portes (1989) further add that the informal sector consists of a range of economic activities that, distinct from other economic activities within the same environment, remain outside the domain of governmental records and regulations. Hart’s (1987: 845) outline of the characteristics of the informal economy applies equally well to peasant mining: the large numbers involved, labour-intensive production processes, low productivity and the small size of production, the competition to produce, free entry and market-determined nature of the activity (Hart 1987: 845).¹³ More recently, Hart (2010: 142) notes that the proliferation of self-employment and casual labour that are the defining features of informality also came to be used (wrongfully) with reference to industrial societies, where informality ‘competed with similar epithets—the “hidden”, “underground”, “black” economy, and so on.’ The early work by Hart in Nima in 1960s Ghana offers surprising parallels with 1850s London,¹⁴ not in a sense of history being repeated, but in revealing the effects of rapid social and economic change on the poor. Hart, however, defines the informal economy by contrasting it with the formal: as the corporations ‘had form in Max Weber’s sense of “rational enterprise” based on calculation and the avoidance of risk’, whereas the peasant economy is ‘individualistic and competitive, so that accumulation was well-nigh impossible’ (Hart 2010: 142–43).

These theories make it possible to accommodate peasant modes and strategies of production in mining and allow their placement within the contemporary informal sector of the economy. Three questions, pertinent specifically to extractive industries, emerge from this conceptual discussion: first, are today’s mineral rushes by peasants equivalent to those that have characterised our mining past (the linear history question)? Second, are peasants justified in encroaching on the environmental commons (the ‘what about sustainability?’ factor). Last, but not the least is the question of the rule of law: what rights (and why) do the peasants have to deprive the state from the rent that it claims from mineral resources (the illegality factor). Within the space of this paper, the last question deserves more analysis.

¹³ There are notable forerunners of Keith Hart’s conceptualisation of the informal economy. Hart (2010: 142) notes that the ‘social phenomenon is real enough and of some antiquity’, but laments that its definition remains elusive and that since the 1970s, the informal economy (or the sector) became a label for economic activities that escape state regulation.

¹⁴ Illustrative is the historical work by Henry Mayhew, a Victorian journalist whose three volume study *London Labour and the London Poor* published over the decade from 1851. Mayhew observes that ‘the state within the state’, comprised of an underclass that was denied even such protection as the Factory Acts that were extended to the industrial workers or the Master and Servant Act that covered the domestic workers, and represented the true underbelly of the Victorian industrialising economy.

Informality and Illegality

At the heart of the difficulty of building a comprehensive analytical framework of mining by peasants lies the problem of legality, which is related in this instance to the idea of property rights. The absolute ownership of the state over all resources is the primary basis of the concept of *eminent domain*. The state can then allow, based on mineral rights licences, private entities such as corporations to exercise exclusive rights to access these resources. These tradable rights make the companies *de facto* owners of the minerals on behalf of the state, and effective codification of the private ownership of these rights, in mineral regulatory framework, in turn ensures the stability of the state. In exchange, the state receives rent, which is the return from access to the scarce and valuable mineral resources.

The economic theory of property rights (and rent from natural resources) justifies private property as the most efficient means of allocation of resources and considers such rights as the best incentive to develop a resource (Barnes 2009). It also considers that only private property can ensure sustainability and prevent mass overuse and exploitation (of the kind envisaged in Hardin's well-known thesis on the *Tragedy of Commons*). Political ecologists' view of rent, in contrast to the modern economic view, suggests that rent comes from the control of a factor of production's unique and scarce qualities. They consider that rent may be appropriated by those who control others' access to production opportunities, turning rent into 'the benefits levied upon control' (Ribot 1998: 314). The authority to access and use resources usually derives from laws that attribute legitimacy to certain uses and certain actors (Sikor and Lund 2009).

Since mineral resources are dug out from beneath the surface, land assumes a three-dimensional value, yielding many more times what could be produced by agriculture (Bebbington 2013). Over years of statist (and later, corporatised) rights protection, access mechanisms for mineral resources have become almost invincible. Consequently, 'the rule of law' has turned into a robust correlate of mining, particularly in less affluent nations where it is continually linked to economic development, human and social development, poverty reduction and so on. Yet, central to the illegality of mineral extractive practices by peasants is their entry into this tightly bound and walled-in world of global commodity production and trade.¹⁵ Not all, but some peasant communities are involved in mining without rights, and as their illegality is often subsumed within the practices of informality, they are continually under the threat of the imposition of law.

Informality is the defining condition of the everyday lives of peasants in extractive industries, and intersects with illegality, but the two are not the same. The question therefore arises, is it possible to contemplate alternative formulations of rights in order to accommodate current realities of extractive peasants? At this point, James Scott's conceptualisation of moral economy becomes useful to approach peasant mining, placing such mining within the informal economy. Since Scott, scholars of law and governmentality have interpreted how issues of legality and illegality are constituted; also the ethnographic optic has problematised what they describe as 'lawfare'. Comaroff and Comaroff (2006: 30) describe lawfare as a state's 'use of its own rules—its duly enacted penal codes, its administrative law, its states of emergency, its charters and mandates and warrants, its norms of engagement—to impose a sense of order upon its subordinates by means of violence rendered legible, legal, and legitimate by its own sovereign world.' This formulation invites us to problematise the ways in which a fetish for the rule of law itself produces illegalities.

¹⁵ This is the reason why mainstream law and the economic efficiency approach ends up recommending that such mining needs to be formalised (Clausen et al. 2011).

In this context, one might also ask why peasants' mineral extractive practices are not recognised in the edifice of regulatory frameworks that have developed around mining in the global south. Except in the provision for 'People's Mining' in the Basic Agricultural Law in Indonesia, the very idea that informal, small-scale production might extend into mineral extractive practices seems implausible if one looks at the laws. The near-complete obliteration of pre-modern mining history by colonial laws, and the fetishisation of the ways and means of it in the postcolonial times and in particular in the contemporary neoliberal economics that links the poor with the global order, re-presents the past as a deplorable 'free for all'¹⁶ and privileges corporatised extraction of minerals. The repeated portrayal of disorder, violence and kleptocracy associated with informal mining ensures that corporations become the only acceptable and licit form, which can then be ruled by under a set of global rules that aim to correct the corporate violations (Lahiri-Dutt 2006).

PEASANT MINING: THE REASONS AND FORMS

Today's extractive practices by peasants cut across the spectrum of mining, ranging from the most artisanal and individual opportunistic enterprises to licensed small-scale firms that hire labourers on contract and often send out their final products to foreign markets. Consequently, the armies of peasants undertake an even wider array of tasks in these extractive industries. The last global estimate by an international body suggests that around 35 million people in the poorer parts of the world depend on this kind of mineral resource extraction for their living (CASM 2005). This figure is substantially higher than the 1999 estimate of 13 million by the International Labour Office (Jennings 1999).

It is however, important to remember that individual estimates can vary widely, depending on how such mining is defined in a country or on the precise meaning of what comprises mining. For example, the figure of 35 million primarily considers the extraction of high-value material commodities such as gold and precious stones such as diamonds. Most industrial commodities such as coal, or even stone, sand and gravel are not included in this estimate. If the extraction of these industrial or construction materials is considered, the numbers of extracting peasants will be far higher. Just the size of the numbers or the implication of them makes peasant mining worthy of research.

Peasant mining and quarrying comprise the extraction of minerals from both hard-rock and placer, and in- and ex-situ alluvial deposits through digging, washing, sieving and panning, and the processing of ores (such as amalgamation of gold or cutting, slicing or finishing of stones to different dimensions). A range of legalities are represented by these activities: from some unlicensed and smaller extractive activities to somewhat larger operations that have passed some stages of license requirement. Consequently a diversity of production organisations reveals various stages and means of surplus accumulation from mineral extraction by both individuals and small entrepreneurs. The clientelist system resembles other 'illegal' uses of resource such as logging; the capillaries of the system extend from highly capitalised actors with significant funds and industrial scale operations, to mid-size entrepreneurs, down to village or family-based groups.¹⁷ For example, in south and east Kalimantan in Indonesia, informally organised but without licence operations by PETIs (literally

¹⁶ Comaroff and Comaroff (2007: 134) note Achille Mbembe's (2001) argument that behind all the fuss, something more significant goes unremarked: the rise of 'private indirect government'. Indeed, the obsession with procedural laws around mining allows them to be rewritten and used by those with more power (Lahiri-Dutt 2007).

¹⁷ See McCarthy (2011) for a discussion on Indonesia's illegal logging sector.

translated, 'those who mine without a license') use reasonably capital-intensive earth moving equipment to cut into coal seams and transport them in trucks to the port of Banjarmasin. Here, trucks transfer the material into large coal barges which supply the ocean-going vessels waiting outside Indonesian waters for export to China and South Korea. Within the context of one particular mineralised tract, peasant extraction would range from casual labourers working in the few big enterprises—that run mechanised operations on reasonably-sized leases and jostle with a larger number of smaller firms with lower capital investment and production—to innumerable producers who work on their own land, most likely without license or lease, most likely using family labour including those of children, and producing tiny amounts.

This diversity can be seen, for example, in the marble quarries of Rajasthan in India, where some firms produce for the export market and some for the local artisans who carve traditional idols and images; where some marble is transported on bullock carts next to which the trucks drive past with their machine-cut slices of marble meant for the export market. This fascinatingly extended continuum defies the logic of industrial labour processes of modern times, and contains within it at once rural modes of production of a) the family unit in which the child learns a trade by apprenticing with the father, b) the casual or itinerant daily-wage worker moving from one quarry to the other, and c) the forced labour of those who are debt-bonded. Structurally, they comprise a part of the informal sector of the economies of the countries in which they are located. Unlike the unionised industrial and factory workers, those sweating out in absence of proper wages and safe working conditions in informal mines and quarries are the poorest and most exploited of labourers. One might describe the extractive peasants as the new mining precariats who are engaged in the most insecure and dangerous work in order to survive and build better lives for themselves and their families.

The Archaeology of Peasant Mining

Until the late 1990s, mineral extractive livelihoods by peasants were largely outside the periphery of vision of both researchers and policy-making the general association was with the artisanal nature of past mining, presenting such mining as essentially a continuation of traditional mining by some communities.¹⁸ Yet, amongst the main issues that mining archaeologists and anthropologists working on early mining noted, the most significant was how mining and agriculture complemented each other (Knapp and Pigott 1997: 303). The work by social historians as well as historical archaeologists brought the mining community and economy closer to show that they in fact coexisted, often compatibly, with the peasant society and economy. For example, Phimister (1974: 445) shows that in west and south-central Africa, the local inhabitants engaged in the production and trading of gold, primarily alluvial gold, for over nine hundred years, which is even earlier than mining from gold reefs. Reef mining started as the demand for gold expanded, allowing the Iron Age miners to develop more sophisticated prospecting and mining methods.¹⁹ Early alluvial gold mining was a seasonal activity,²⁰ undertaken 'only because of the poverty of other local resources' (Phimister 1974: 445).

¹⁸ Andre DeWind's 1977 doctoral dissertation, *Peasants Become Miners: The Evolution of Industrial Mining Systems in Peru* (unpublished PhD thesis, Columbia University) focuses precisely on the transformation by colonialism of peasants into miners.

¹⁹ Again, Phimister (1974: 446) thinks that reef mining methods owed to alluvial gold, which in some places, was worked by shafts sunk into river banks.

²⁰ Besides the need for resources to trade, geological availability and climatic and riverine factors determined alluvial gold mining. The Angwa, Mazoe and Ruenya rivers were of importance, as were areas of Manyika (current Mozambique), where rivers are perennial.

Although for a long time, Africa was the primary source of gold for Europe, very little is known about the peasants involved in such mining and myths arose concerning the sources of gold (see Werthman, 2007: 394).

Another genre of ethnographic research, also primarily concerning Africa (Grätz, 2002), but also the Pacific Island of Papua New Guinea (Nelson 1976) and Brazil (Macmillan 1995) explored the social and cultural features of artisanal mining communities, generally without any connection to the political economy of such mining. The ethnographic richness of detail in these accounts allows the reader to move beyond the greed, violence and the monetisation of everyday life that are associated with these mining communities, and illuminates the importance of the specific context: deep connections to peasant pasts, risk minimisation cultures and friendship ties in coping with an uncertain way of life that presents as many everyday challenges as opportunities. Under circumstances of colonisation, such as in Peru, Deustua (1994) shows that the fine details of the form of the economy varied depending on the nature of the mineral: silver mining entailed artisanal production with little technology, while copper mining demanded more capital intensive processes of smelting and refining in plants.

Many studies have shown that a similar mix of production processes continued well into the colonial period and in most colonial countries; modern industrial mines established during the colonial period were often closely dependent on the peasants either for labour supply or for similar produce purchase arrangements. Writing closer to a century ago about colonial collieries of India, Read (1931: 107) quoted the observation of the Indian Mining Association's memorandum: 'The Indian miner is primarily an agriculturist and only mines coal when it suits him to do so', and described that some coal mining companies even offered cultivable land to miners to prevent them from leaving the mines or drifting from one to another. Such studies can be seen as throwing light on peasant economies that were coming to interface with industrial mineral extractive practices. They raise important questions for the mining historians to explore: did such mining peasants access markets, and what implications might their interactions with commodity markets have upon our renewed understanding of peasant lives? We now know that the industrial proletariat held strong rural ties, but did the close relationship lead to greater peasant differentiation in terms of occupational diversities? A mining proletariat did not emerge in the colonised countries until the late nineteenth or early twentieth century (see Alexander et al. 2009, for South Africa; Lahiri-Dutt, forthcoming for Indian collieries). A possible conjecture is that when it did, the effect was felt both ways. In other words, if the mining proletariat had resilient rural ties, the peasant production systems might have been changed from exposure to a different kind of use of the land.

The global literature that has grown around this kind of mining collectively uses the nomenclature of 'Artisanal and Small-scale Mining' (ASM). The term 'artisanal' is used to convey the sense of labour intensiveness, the low technology, low capital investment nature of the processes related to extraction, and their essentially pre-modern labour organisation. The ennobling connotation carried by the term 'artisan' can be a misnomer,²¹ but we will avoid that debate for the moment. There have been a number of international agencies who have directed their attention to ASM.

²¹ Artisans are usually known to be endowed with a tradition of the craft they practice (Littrel and Dickson 2010). Although some peasants might have a generational history of mining as their primary occupation, as in the case of the Banjara tribe in South Kalimantan, Indonesia, or some communities amongst the Bheels in Central India, today's peasant miners are, in most cases, first generation miners moving into mining from agriculture.

One such is the million-dollar Global Mercury Project, funded by the United Nations, which puts mercury use by artisanal gold mining communities under the microscope. In its initial phases at least, it therefore had a more distinctive focus on the health and environmental impacts of mercury use by artisanal gold mining communities. Another was the establishment of the Mining, Minerals and Sustainable Development (MMSD) Project heralded by the British non-governmental organisation, the International Institute of Environment and Development (IIED). The MMSD sponsored a series of reports related to mining, of which the global report on ASM remains one of the most authoritative accounts (see Hentschel et al. 2002). A third was the Communities²² and Small Mines (CASM) was created under the auspices of DFID and the World Bank to act as a global networking and coordination facility. Its stated mission, as given in its website, was: ‘to reduce poverty by improving the environmental, social and economic performance of artisanal and small-scale mining in developing countries.’

The scholarly (and international policy) attention on various aspects of mercury use in processing gold, while yielding a large body of literature, was also productive in a sense for social science knowledge on the extractive practices. The research on ‘social impacts’ soon turned to the exploration of what might be causing the rural poor to leave traditional forms of subsistence to get involved in mineral extractive practices, and gave rise to a significant body of development literature. As consensus was reached that ASM is largely poverty-driven, programmes and projects were initiated to search for alternative livelihoods for ASM communities, albeit with no significant results.

It is worth commenting on the close connection between scholarly research on this kind of mining and international development and policy-making, which often funded research and nurtured enthusiastic inquiry into this little-known area.²³ This close proximity with mainstream policy-making, while creating a body of knowledge and a significant amount of literature, has not resulted in a full articulation of an analytical framework within which to place such mining.

WHAT IS DRIVING PEASANTS INTO MINING?

Since its early days, social science research on ASM has come a long way and the field has grown quickly. In this section, I put forth a broad overview of the reasons scholars and practitioners have cited for the mushrooming of this kind of mining throughout the world²⁴ - the earlier-mentioned six factors with closely interlinked and overlapping natures. If economic reforms to liberalise land markets have exacerbated rural poverty and pushed peasants into mining, the states’ often flat invitations to mining corporations in order to earn revenues by equating mining with development and environmental degradation caused by these large-scale operations have added to the push

²² The CASM project in its previous form does not exist anymore. A more recent note on CASM on the World Bank site uses the term ‘Consultative’ group for Artisanal and Small-scale Mining (see <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTOGMC/0,,contentMDK:20246087~menuPK:509392~pagePK:148956~piPK:216618~theSitePK:336930~isCURL:Y,00.html> viewed on 27 October, 2013).

²³ Indeed, jointly with a colleague, I received two large grants on two consecutive years from the Communities and Small mines (CASM) group, funded by DFID, which is the overseas funding arm of the British government and is housed at the Oil, Gas and Mining Division of the World Bank in Washington, D.C. Its purpose is to establish an Asia-Pacific Learning Network on ASM and develop local case studies on the social and economic characteristics of such mining communities in the Asia-Pacific region.

²⁴ A point to note is that change has for long been the keyword for many pastoral nomadic communities in sub-Saharan Africa, and their livelihoods have been modified in response to alterations in the local resource base (Mortimore 1972).

factor, whereas the rising commodity prices provided incentive to earn cash incomes. Together, they have had the effect on peasants who live on or close to mineralised tracts, of taking up extractive livelihoods in addition to, but more often in lieu of, farming.

Global agricultural production has changed remarkably since the late 1980s and throughout 1990s; extensive liberalisation of agricultural markets took place globally, marginalising subsistence farmers across the poorer countries. Almost without significant exception, throughout the less affluent world, states have privileged the urban sectors by withdrawing support for agriculture and the poor, following a model of development that has been described as 'predatory growth' (Walker 2008). The characteristic features of such growth are undercutting of peasant production through the WTO-mandated imports of cheaper agricultural commodities, and an 'internal colonization of the poor' (Walker 2008: 558). Subsidies on farm inputs were eliminated, export crop taxes were reduced, crop parastatals were privatised and non-tariff barriers were removed in order to secure loans from the World Bank and IMF. The withdrawal of state support put peasant societies under severe pressure. Consequently, farming is rapidly becoming economically unviable, eroding its longstanding status as the economic mainstay for rural families. As millions of peasants in Asia, Africa and South America move out of the fields, they take up any opportunities that come their way; and labouring as individuals, as families, or in groups, or even as wage workers in mineral extraction, is one of them.²⁵

Economic liberalisation has played a key role in upsetting the rural sector throughout the less affluent world. Such liberalisation has had the economic effect of pauperising the smallholder agriculture sector, and the policy effect of states inviting Foreign Direct Investment (FDI), particularly in the mining sector, for quick revenue incomes. The economic unviability of agriculture is evidenced by the widespread diversification of rural livelihoods into non-farm activities. To attract FDI towards mining, and under the advice of the World Bank and the IMF, almost all countries have undertaken quick steps to reform their mining legislation and regulatory frameworks. Countries or regions that were relatively remote and seen as 'resource frontiers' are now being sucked into the vortex of change as new mining companies are being allowed by the states to construct large capital-intensive mining projects. Innumerable farmers, therefore, have turned to digging their lands, and many others are being drawn to the new source of livelihood, leading to rapid influxes of people causing the almost overnight mushrooming of chaotic mining towns and camps where fortunes are made, that easily invoke the popular images of the 'Wild West'. In countries where a harsh environment has exacerbated the effects on traditional livelihoods, the combined withdrawal of the state and the entry of foreign capital have resulted in a near-total retreat, away from tradition and into the new, cash-income generating mineral extraction.

One of the most shocking cases is that of Mongolia, a country that had at one point of time been strictly behind the Soviet iron curtain for several decades. Here, the liberalisation of the economy has meant the establishment of foreign-funded, large-scale mining projects that produce gold, coal, copper and molybdenum, primarily for the export market. In Mongolia today, 30 per cent of the GDP and 70 per cent of the total export value is derived from the mining sector. The traditional economy was based in nomadic animal husbandry, which has now shrunk to only about 20 per cent of the GDP. On the one hand, frequent conflicts over the access to pastureland and water resources have broken out around the large mine sites where mineral extraction has interrupted river regimes, decreased water availability and destroyed its quality. On the other hand, there has been a rapid increase, within a decade, of informal mining by the nomadic herders who have been displaced from their traditional occupation (Suzuki 2013). In other parts of Asia, such as the Lao PDR, there are

²⁵ Walker (2008) further believes that the shift to neoliberalism in countries like India has created the specific context for the intensification of agrarian class conflict that has included the mobilisation of rural elites as well as the rural poor.

places where local livelihoods such as rice farming have been destroyed by the large-sized mining companies, forcing people like Grandma Seng into informal mining (Lahiri-Dutt et al. forthcoming). In other places, the push out of the rural sector and into informal extraction has been accompanied by severe livelihood shocks from sudden environmental catastrophes—in Mongolia, the withdrawal of social security systems coincided not only with the liberalisation of the economy, but also with successive *dzuds* or severe/disastrous winters (Upton 2010).

Noting the role of the Structural Adjustment Programme in Africa as among the key drivers of informal mining, Bryceson (1999: 173) observes:

‘SAP and economic liberalisation policies resulted in a plethora of changes in rural productive and marketing infrastructure that often increased rather than reduced uncertainty. Many remote peasant farming areas experienced a decline in marketing services and the removal of subsidies on agricultural inputs, especially fertilizers, made the production of several peasant crops unviable. ... This environment induced a large-scale search for new, more remunerative activities outside agriculture.’

Although Bryceson was speaking primarily of East Africa, one clearly sees that the same process operates throughout the African continent, and indeed all over the poorer parts of the world. For example, within two years of the discovery of sapphires in the village of Ambondromifehy in Madagascar, its population grew from 400 to over fourteen thousand, comprising mainly of young men and women who had been short-term migratory labour in diverse settings such as gold mining towns, fishing villages, plantations and other urban centres throughout Madagascar (Walsh 2003: 292). Cartier (2009) also describes the sudden growth of several ‘rush towns’ in Madagascar. The argument, however, is complicated because Walsh further notes that (2003: 292), ‘the sapphire trade has offered many the promise, and some of the means, of earning previously unattainable sums of money.’ Yet, it would be superficial to only look at the ‘get rich quick’ mentality driving this migration and see it just as the poor hitting ‘the jackpot’.²⁶

The implied homogeneity of miners in such accounts is not accepted by all official studies. UNECA (2003) for example, had categorised them into four groups: gold-rush miners, permanent miners, seasonal miners and poverty-driven miners. These categories do convey the contingent nature of production strategies, but the developmentalism and interventionalism that give rise to such categorisation of artisanal mining refuse to engage with broader theories of agrarian transition and change in peasant economies. However, it will be an analytical fallacy to accept the rush hypothesis as suggested by Hilson (2010: 4): ‘The way in which many such settlements in sub-Saharan Africa initially become established can best be understood if framed against the background of the gold rush that occurred over 150 years ago in the Southwestern United States.’ A counter-view to this statement emerges from Jønsson and Bryceson’s (2009) detailed analysis of mobility patterns of peasants to newly discovered mining sites of gold and precious stones. They suggest that at the individual level, movements are ‘rushed’ rather than ‘rash’, and whereas movement to the first site may be an adventure, movement to the subsequent sites is calculated with knowledge of the risks entailed.

The question that arises then is: are the peasants ‘branching out’ into a new source of livelihood as a seasonal or temporary income or have they just entered a process of depeasantisation? Received wisdom from peasant studies was that the peasants either move out of agriculture in favour of

²⁶ World Bank (2005: 14) maintains that the lure of money and riches drive an increasing number of people to the artisanal mining sector.

urban jobs, or circulate between better-off rural areas, giving rise to a de-agrarianisation-vs-livelihood diversification debate in context of informal mining. Scholars (such as Bryceson 1996, 2002) have speculated that in response to liberalised markets, rural Africa is experiencing a pronounced 'de-agrarianisation': suggesting that the transition out of farming is by no means temporary. The contention is that agriculture now plays an ancillary role in the livelihoods of rural inhabitants, and that non-farm activities provide the primary source of households' disposable income. She (Bryceson 1999: 173) offers a detailed account of what these changes have meant for the smallholder in sub-Saharan Africa:

'...economic liberalization policies resulted in a plethora of changes in rural productive and marketing infrastructure that often increased rather than reduced uncertainty. Many remote peasant farming areas experienced a decline in marketing services and the removal of subsidies on agricultural inputs, especially fertilizers, made the production of several peasant crops unviable'.

In conventional 'de-agrarianised' landscapes, farming and mineral extraction play different roles: the latter has become a primary source of disposable income; the former is increasingly undertaken to provide household food security, not to service markets; and over the lifecycle of the household, finances and other forms of capital 'flow' between both activities. Bryceson and Jønsson (2010) note that 'gold digging' has turned into a career in much of rural East Africa in which, attitudinally, the 'real farmers' feel that farming is a sidetrack and to be a successful career miner it is best to dissociate oneself from farming to pursue mining seriously.

Such a view is contrary to that of Seng, who continues to see herself as a peasant, no matter how peripheral an economic role farming plays in her life and for what length of time. At the same time, the African literature may throw interesting insights into the Asian context that has so far been sparsely debated in international circles. In contexts of peasant mining, there is a need to raise certain questions: does it provide only seasonal and/or part-time cash income where farming jobs provide the basic subsistence for the family, or is it a way 'out of' subsistence agriculture (or forestry) in a changing way of life or 'depeasantisation'? Consequently, for experts investigating mineral production, the continuing peasant traditions have posed the greatest challenge. The use of child labour in mineral extraction, considered by the ILO as one of the worst forms of exploitation and that goes against all modern worldviews of human rights, is one example. When a child is sent to the mine to work with, or to replace, an adult male, or used in underground work because s/he is 'suitable' for the kind of deft and nimble work required to be performed, the involvement of such child is often based on reasons based on a pre-modern peasant worldview. So the questions become nearly impossible to reconcile.

CONCLUDING REMARKS

Clearly, Mumford's (1934, 1961) and Merchant's (1990) formulations avoid considering the very long history of mining, and are not appropriate to explain the complex realities of economic and political contexts within which mining is emerging as a major revenue base for poorer states. In the contemporary world it is impossible to continue to consider peasant mining as 'the other', as envisaged by them, but then, how do we explain and contextualise the livelihoods of people like Grandma Seng? As long as mineral-dependence, particularly of families and communities, remains invisible to scholars and is conflated with illegal activities, conflicts and wars, mafia groups and high levels of corruption, or is debated in pure 'livelihoods-vs-governance' circles, the wider and global picture will remain elusive.

In spite of a growing body of literature, an explanatory framework on informal mining has yet to be well established. The huge edifice of peasant studies, if integrated with new insights from labour studies, can effectively place the geophagous peasants within the body of literature on agrarian change, by connecting the history of mining as a human endeavour with contemporary labour theories and the informal economy. Approaching the economic and social milieu of individuals and communities dependent on mineral extraction from the perspective of peasant production within the informal sector not only yields new insights into the political economy of agrarian transition, but also into mineral-based livelihoods, informality and meanings of destitution and poverty. Such an approach can also invigorate the meanings of mining by adding a postcolonial dimension to it. Extractive peasants bring new connotations to what we mean by non-farm activities, and exhibit more agency than they have been attributed with so far.

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