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### Original article

# The geophagous peasants of Kalahandi: De-peasantisation and artisanal mining of coloured gemstones in India

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#### ABSTRACT

This paper presents a political economic appraisal of the de-peasantisation of indigenous communities through an ethnographic exploration of artisanal mining and trade of coloured gemstones in the Kalahandi district of western Odisha (formerly Orissa) in eastern India. It shows that the Khonds, one of the poorest indigenous groups living in this part of India have taken up mining of semi-precious gemstones since the 1990s. This period coincides with the opening of the Indian market of gemstones to the world, alluring this community to often replace their traditional subsistence agriculture with artisanal mining. In addition, a number of other factors have contributed to push more peasants out of agriculture to the informal mining sector for livelihood as it provides them with higher return and quick money. A series of droughts accompanied with deepening agrarian crisis and exploitative caste and class relations have particularly affected the Khond and other tribes of the Kalahandi region. At the same time, the increase in global demands have led to an intensification of informal gemstone mining by the Khonds. However, the indigenous people have not significantly benefitted; although the rate of out-migration has slackened, many are now without land and working in mines as daily wage labourers. This is because the proliferation of mining has also attracted the entry of opportunistic outsiders who collude with the local state, local politicians, caste-leaders and class-elites, police, and bureaucracy to sweep up the profits. This paper shows that the indigenous people continue to remain impoverished as the informal nature of the mining business further pushes them into living precarious lives.

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### 1. Introduction

Bhuban Majhi is a resident of Sarajpalli village of Kalahandi district in Odisha (formerly Orissa), and has about 5 acres of farm land in which he plants paddy. One morning, in 1993, a group of over 10,000 people unexpectedly arrived at his field and started digging. They vandalised the field completely and destroyed the standing paddy crop. When Bhuban resisted, they beat him senseless. Majhi's field was full of cat's eye and garnet, which are semi-precious gemstones. These people left with sacks filled with stones, after they exhausted almost all of it. Bhuban says, "Somehow they must have heard that my field has many of these

stones," and, "I, the owner of this farm, did not get a single paisa<sup>2</sup> out of this."

Both Kalahandi and Bolangir are among the poorest districts in

Both Kalahandi and Bolangir are among the poorest districts in India (Sahu et al., 2004). Thousands of people have died here because of starvation, famine, drought and crop failure. Cases have been recorded of children being sold by parents for as little as .3 US dollars (about 20 Indian Rupees) (Banerjee, 1993). Kalahandi and neighbouring Bolangir districts have supported an artisanal mining rush for gemstones destined for local markets in western Odisha in India. Copiously found in these districts, these stones can be easily acquired through alluvial and surface mining. Since the 1990s, mining has expanded to the level of an organised network of miners, shop-owners, middlemen, agents, buyers and exporters, thereby linking this local chain to the global market. This business sends out stones worth more than 100 Crore Indian Rupees

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 $^{2}\,$  A paisa is 1/100th of a Rupee, Indian currency. It would be equivalent to cent notionally.

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<sup>&</sup>lt;sup>1</sup> Several state, district and city names have either been changed or re-spelt in post-colonial India. The name of Orissa state was changed in 2011.

( $\sim$ 16 million USD) annually of which half the stock is sent to Jaipur (in Rajasthan) and Bombay for cutting, polishing and exporting (Banerjee, 1993). The balance remain in the regional market to be cut, polished and exported to national markets.

A 150 km stretch of land from Sambalpur to Koraput in western Odisha has now become a hunting ground for these gemstones. Though Kalahandi and Bolangir are the main artisanal mining districts, others include parts of Koraput, Sonepur, Sambalpur, Deogarh, Rayagada and Phulbani districts. Various stones including corundum/rubies (*Manik*), emeralds (*Panna*), garnets (*Ceyloni Gomed* and *Gomed*), cat's eye/tiger's eye (*Lahsunia*), aquamarine (*Beruz*), blue and yellow sapphires (*Neelam/Pukhraaj*), and small amounts of diamonds (*Hira*) are mined here.<sup>3</sup>

Primarily, gemstones gained predominance as jewellery adornments for allure for the growing upper and middle classes in India for whom gold has conventionally been distinguishing markers of status and class. Historically, emperors, kings and nobilities held exclusive power to acquire and own these valuable gemstones. By the late nineteenth century, the advent of large corporate houses such as De Beers (founded in 1888) promoted large-scale production and marketization of these stones. This led to a degree of democratisation of the gemstone market, whereby upper middle class and increasing middle class consumers of the world could buy gemstones and jewelleries. Gemstones offer them a sense of status, class distinction and perhaps even security (as investments for future). Weber (1978), in his work, illustrates how certain sections in society can occupy higher position in the social order through non-economic status by posturing of opulence and éclat. Similarly, Bourdieu in his work on class and distinction (1984: 56), describes how the aesthetic choices made by an individual or groups establish class-fractions or class based social groupings. This 'distinction' of aesthetic 'taste' inadvertently helps maintain a 'cultural hegemony' and subsequently power of one class (or caste) over another. A multi-million dollar industry thrives in India and throughout the world based on this ascribed (fetish) value of these stones which, purportedly, gives élan, style, status, power, prestige, honour and distinction to the owners. Gemstones have conventionally been used as liquid currency because of their ascribed high value. Their portability means they can be easily transported, often across political borders, in lieu of cash or gold.

Both Hindu and Islamic traditions and cosmology in the Indian subcontinent bestow gemstones with powers of controlling the features and futures of human lives (Khalid, 2015). In other astrological traditions of the world, they are considered to be therapeutic and capable of curing diseases when combined and worn with metals of different kinds, such as gold, silver and copper. These astrological traditions make gemstones a high-value marketable product in India. A secondary use of gemstones is in large industries; diamonds are the most well-known example but Taylor (2005) describes a range of uses for both precious and semi-precious gems. Gemstones are broadly categorised into: diamonds and its types; and other coloured gemstones, which are further categorised as precious stones and semi-precious stones.

In this context, the paper shows how one of the poorest indigenous communities, the *Khonds*, have informally taken up the mining of gemstones such as rubies, garnets and other semi-precious stones. Traditionally, Khonds had migrated whenever their subsistence was threatened by dry monsoons or poor harvest, this has changed since the 1990s, the period that coincides with

after the opening of the Indian market of gemstones to the world. This period also coincides with an increase in global demands, and by the entry of opportunistic outsiders who collude with the local state, local politicians, caste-leaders and class-elites, police, and bureaucracy. A series of droughts accompanied with deepening agrarian crisis and exploitative caste and class relations have particularly affected the Khond and other tribes of the Kalahandi region. They have responded to the distress by taking up informal mining for a livelihood. This paper argues that the intensification of informal gemstone mining by the Khonds has not significantly benefitted them. Although the rate of out-migration of some tribal or Adivasi<sup>4</sup> people has slackened, many are now without land and working in mines as daily wage labourers. This paper shows that tribal people continue to remain impoverished and the informal nature of the mining business has further pushed them into living precarious lives.

The empirical observations and data that have propelled this paper have been collected through extensive fieldwork and indepth interviews carried out in western Odisha, mainly in Kalahandi district. There are several interviews that have been referred to in this paper. For the purpose of anonymity, we have numbered the interviewee (as 1, 2...), but mentioned the caste/tribe, job, venue and date of interview taken wherever possible. The paper is structured as follows: first it sets out the theoretical position of the authors in the next section, then outlines the geological and geographical aspects of gemstones, followed by a brief historical outline of Kalahandi, and its agrarian distress. Detailed descriptions of informal mining activities are outlined along with an analysis of trade. The concluding section outlines the impoverishment and dispossession of the rural poor in informal mining, with an analysis of the factors that have contributed to the growing levels of destitution.

### 2. Mining by peasants

In the international mining literature, informal modes of mineral extraction are collectively known as artisanal and small-scale mining (ASM) (Hentschel et al., 2002). There is no single definition of ASM in South Asia, and often panning and gemstone mining is equated with 'artisanal' aspects of this mining. In this paper shallow incline and surface mining such as quarries, and also small mines—mainly unmechanised surface as well as underground mining—are discussed. These are unlicensed, unauthorised, unregulated, small-scale, alluvial and scavenging activities of gemstones that encompass both legal and illegal extractive operations. For many rural people, informal mining is a continuation of traditional livelihood. But many others are forced into it as a result of sudden translocal economic changes; such as losing land due to rise in development projects and industries. This has led to a surge of 'development refugees' into informal mining (Lahiri-Dutt, 2007)

Mining in India dates back to 400 BC, hence, there is a strong sense of community occupation and tradition. Historically, all mining was 'artisanal'; hence there is doubt about the current meaning of the term ASM in this case. It is further complicated by the fact that modern mechanised mining started in India during colonial times. Colonial authorities mooted laws to legalise state mining and facilitate export of minerals to colonial metropolises. These laws were created to exploit the colonies and simultaneously modernise the peripheries. The postcolonial state popularised large-scale mining even further, imparted western forms of

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<sup>&</sup>lt;sup>3</sup> Interviewee 1: Discussion with Jamal (name changed) my key informant in Sambalpur on 20th May 2015. He is a practicing Muslim and a petty gemstone trader, from Uttar Pradesh. He and his brother are now settled in Odisha and own a small gemstone lapidary and retail shop in Sambalpur. They trade in gems originating in Kalahandi and other districts of western Odisha.

<sup>&</sup>lt;sup>4</sup> Adivasi means 'original inhabitants', is a term used to depict the heterogeneous set of indigenous people living in South Asia. It is a politically loaded connotation recognising the rights and autonomy of these autochthones.

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knowledge and continued the colonial legacy of regulating mining activities. Although, India is one of the major mining countries in terms of numbers employed, it is not reflected in its GDP due to the low capital accumulation from this sector. In fact, 88% of the mining activities in India are not formal but fall within the purview of ASM (Deb et al., 2008).

Most civil society sections and activists project artisanal mining as a cause behind environmental destruction. But this seldom distinguishes between illegal and non-legal mining activities. Conventionally, mining activities such as scavenging of gemstone crystals in the Mahanadi river bed in Odisha, or panning of gold from the sand in Subarnarekha river bed by indigenous communities in Jharkhand are outside the domain of law. These can be considered non-legal, as there are no legal instruments to deal with them. These are the usual forms of ASM. Though these forms of mining generate very little income for the miners, it is the only means of livelihood for a majority among them. Further, intricate and misleading norms of jurisdiction and definition of laws aggravate the complexities around ASM and rights of the miners (Deb et al., 2008). Therefore, unregulated and unlicensed massive extraction of minerals should be distinguished from scavenging ASM for livelihood purpose. Using a blanket term 'illegal' mining, in fact, jeopardises the livelihood of a large number of people involved in ASM, who somehow manage their living from these industries mostly due to lack of other choices (Bhanumathi, 2003; Vagholikar et al., 2003). Official state policies, however, plan to regularise its business production and supply chains.

The contemporary political economy of globalisation, spearheaded by large corporations that are aided by the state, causes large-scale displacement, land-grab and loot of water and forest resources through 'accumulation by dispossession' (Harvey, 2004). Extractive industries in affluent nations monopolise mineral resources. Free market economic policies promoted by large corporations and states are pushing millions out of agriculture. Poor peasants are forced to helplessly grapple, and respond to structural changes while negotiating the 'world of things', that is, the commodities (Appadurai, 1996). A highly privileged urban sector, along with absence of support or welfare for the poor, has led to a predatory growth accompanied by internal colonisation of the poor and marginalisation of subsistence farmers (Walker, 2008). In resistance, the rural poor can only protest, or organise new systems of production by diversifying their economy or even leave farming altogether-leading to what is known as 'depeasantisation' (Araghi, 2009). This phenomenon of de-peasantisation (also along with de-agrarianisation) has been observed elsewhere in varying degrees whereby peasants leave agriculture in favour of urban jobs, or they move within the agricultural wage labour circuit or diversify their livelihood baskets as a temporary or even longer-term measure. Scholars such as Banchirigah and Hilson (2010), and Bryceson and Jønsson (2010) articulate that deagrarianisation in mineral-rich tracts is widespread in African ASM locations.

One cannot solely think of these peasants either as morally driven agents (as described by Scott, 1985, 1986 and Arnold, 2001) trying to cling on to their identity, community and livelihood; or as rational/immoral agents driven by instrumental action, profit and greed. Rather, one might note – without ascribing agency to peasants – the response by peasants to the 'commodification' of resources and nature unleashed by global forces. As noted by Escobar (1997), peasants have had to become ever more adept at exercising their survival skills through theft, prostitution, begging and such diverse ways of employment in an attempt to fight unemployment and destitution. Elsewhere, it has been observed that peasants negotiate the free market and the state, trying to make the best out of constraining and enabling opportunities. With changing socially dominating factors of lives, they try all means to

access knowledge, resources and vistas of rights (Bebbington, 1996). Going by this view, they desperately try to adjust to the political economy of extractive industries to derive at least some benefits from it.

Lahiri-Dutt (2014, 6) noted six major and overlapping reasons that are pushing the rural peasants from agriculture to informal mining. They are: (a) economic reforms that liberalise land markets leading to foreign direct investments (FDI), i.e. 'the structural reform factor': (b) various forces causing unsustainable and poor productivity in the agricultural sector, i.e. 'agricultural poverty' or the 'push factor'; (c) state initiative to earn revenues from the mineral extractive sector, i.e. the 'rentier state factor'; (d) efforts to establish an extractive model by equating mining with development and involving large corporations and/or the local communities in mining, i.e. 'mining for development factor'; (e) environmental degradation at the local level, and changes in seasonal and precipitation patterns due to local and global processes called the 'environmental refugees factor'; and (f) further interests in cash income due to rising commodity prices or the 'pull factor'. Collectively, she argues these factors trigger the emergence of 'extractive peasants', that is, the former peasants who are now engaged in a variety of ways in a wide range of mineral extractive practices in order to generate subsistence-level cash incomes. Throughout the mineral-rich tracts of Asia, Africa and Latin American countries, different sets of factors operate in different combinations.

Scholarly attention has so far been on the more valuable commodities such as ASM of gold and diamonds. Probably the very speculative nature of mining gemstones make it more prone than other commodities to be mined informally. Indeed, 75% of coloured gemstones that are traded in the global market are not from accountable and licensed formal sources, but procured through informal mining (Biswas, 1994). Much of this mining is carried out informally, and remains largely unaccounted, untaxed, poorly-recorded and illegal. Nevertheless, informal gemstone mining supports the livelihood of numerous marginalised rural poor.

The predicament in developing a detailed analytical framework on peasant mining as a legitimate livelihood practice lies in its illegal and informal nature. However, informal should not necessarily be conflated with illegal (Lahiri-Dutt, 2004). Hart (1987) outlined the characteristics of informal economy that also fits well with peasant mining: a labour-intensive production process, small size of production, low productivity, market-determined nature of activities, free entry and exit, proliferation of self-employment nature of activities, and casual labour. There are many 'non-legal mining' activities, such as scavenging minerals from the soil surface and alluvial mining, since there are no laws dealing with these activities (Lahiri-Dutt, 2008).

Two-dimensional agricultural lands and three-dimensional lands with its subsoil mineral resources are eminent domains of the state. In mining, land gains a three-dimensional value yielding much more than agriculture. The state reserves the right to own and hand over these resources to corporations and/or business conglomerates through license and permit the operation of mines that, in turn, pay rent/revenue to the state. These companies become *de facto* owners of these resources on behalf of the state. The peasants who are regularly denied their livelihood and are being pushed out of agriculture due to land-grab are naturally attracted to this sector in a context where everything that is the common or private property of the poor is acquired through law, which in turn acts as an instrument of the state and the corporate class (Lahiri-Dutt, 2014).

For the purpose of this paper, it is necessary to briefly state how we conceptualise peasants for this study, and how we see them *visa-vis* tribes (or Adivasis) in the Indian context. Bryceson (2000) states,

"Peasantries are best understood as the historical outcome of an agrarian labour process which has developed with continuous acclimatisation to surrounding conditions, be it fluctuations of climate, markets, state exactions, political regimes, as well as technological innovations, demographic trends, and environmental changes. Thus, rural populations gradually become peasants and relinquish their status only over time. Peasantries

do not adopt fixed forms; and this a fact renders the popular view of peasants as stagnant producers misconceived". (p.2)

In case of India, differentiating peasants and tribes is a formidable task. Several scholars have suggested that the two are not ontologically different social categories (see for example, Bates, 1995; Guha, 1999; Pati, 2013). For example, according to the observation of Bates (1995) drawn from scholars like (Hockings,

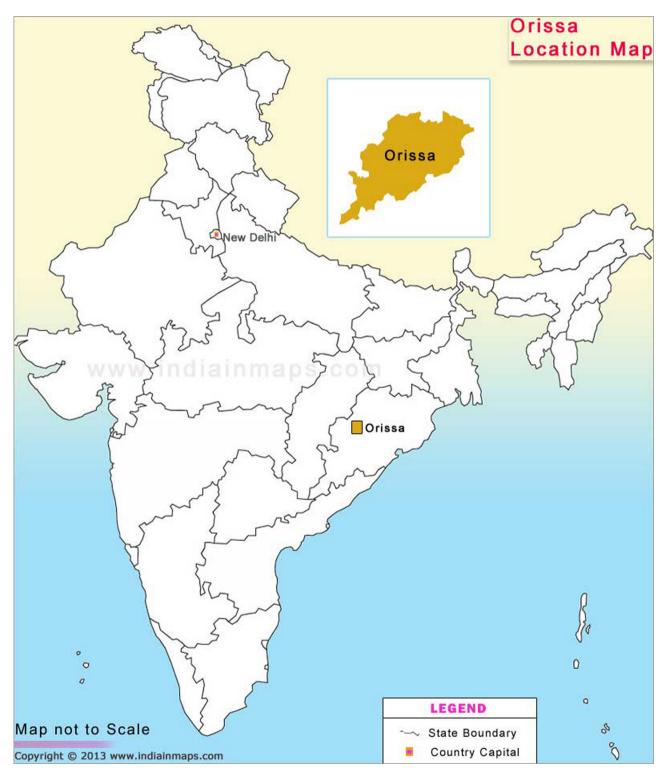


Fig. 1. Map showing location of the province Odisha in India.

Source: www.indiainmaps.com

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1980), the *Badaga* 'tribal' inhabitants in the Nilgiri Hills who practiced slash and burn cultivation were originally settled cultivators in the plains of Mysore, and were driven to the hills due to warfare in 16th century. Many *Gonds* in Deogarh in central India were themselves plainsmen and settled cultivators driven to hills by warfare and growing number of Hindu settlers. In fact, many settled cultivators also call themselves Adivasis. In Bates's own words.

"Adivasi communities cannot be easily distinguished from Hindu peasant communities by their way of life. But then, neither is it easy to describe the Adivasis by their religion, since Hinduism itself is so highly eclectic". (Bates, 1995)

### 3. The social life of artisanal mining in Odisha

Odisha is a state in mid-eastern India, hugging the Bay of Bengal coast in its norther part. This region is a hub for gemstone occurrence and also one of the poorest, drought hit and underdeveloped parts of the state. The infamous trio of districts, Kalahandi-Bolangir-Koraput (KBK), are noted for famine, drought, poverty, high death rate from starvation and malnutrition in India (Banik, 1998). This region is earmarked by the lack of human development and negligence from the central Indian government as well as the Odisha state government. The satellite position of the region with respect to the metropolis centres in Bhubaneswar<sup>5</sup> and Delhi<sup>6</sup> have not benefited either. Development takes place only in the centres at the cost of resources that are extracted from the regions in the periphery. Western Odisha is rich in natural resources. Its forest resources (timber and non-timber products) as well as mining resources are among the best in India (Biswas, 1994).

Western Odisha is considered to be the centre of gemstone mining in the state. Though the focus of this paper is the Kalahandi district of western Odisha, the gem mining regions partly cover neighbouring Chhattisgarh and Andhra Pradesh regions - major producers of coloured gemstone and diamonds - and parts of Jharkhand that produces world-class emeralds. The abundance of minerals in this region and western Odisha is because of a geological quirk (Mohanty, 2003). Pegmatite rocks come into contact with schist and oxidised quartzite here, and metamorphose into various coloured precious and semi-precious stones such as emeralds, rubies, sapphires and garnets. Diamond is found in Mahanadi river bank alluvium, washed down from the source kimberlite pipes and lamprosite rock deposits in Madhya Pradesh. When the river dries during winter, these gems are panned. Gems are generally mined from alluvium or scavenged after rains when the topsoil is washed by the rain water and the gem crystals and ores are visible (Satapathy and Goswami, 2006) (Figs. 1 and 2).

Historically, ruby deposits were found between Cuttack and Sambalpur; and garnet in the Mahanadi River bed (Biswas, 1994). Aquamarines are found in the detrital deposits on the bank of Mahanadi in Odisha, particularly in the Kalahandi region (Biswas, 1994). Sambalpur and Kosala in the western Odisha region were known from ancient times for diamond mining. This region was called *Hira Kund*<sup>7</sup> and diamonds mined here are among one of the five groups of diamonds mined in India (the 'Sambalpur Group' of diamonds on the Mahanadi River, which also included North Koel River and Waigarh of Central Provinces). Diamond washing was traditionally done by *Savara* tribes in the Sambalpur region, *Kol* 

tribes in Chhota Nagpur and Gonds in Madhya Pradesh (Biswas, 1994).

In 2010, the government of India appointed a commission headed by retired justice MB Shah (Shah Commission) to investigate into the problems regarding 'illegal mining',<sup>8</sup> and found it to be rampant in Goa, Odisha and Karnataka. The Shah Commission reported in 2011 that illegal mining is also rampant in Odisha, and is carried out in connivance with bureaucrats who are involved. In Odisha alone, the scale of corruption could be around 45.35 billion US dollar (Chauhan, 2012). Official mining of gems is scarce in Odisha. About 605 mining leases have been sanctioned, of which only 16–21 are for gemstones (Murthy and Giri Rao, 2006). Kalahandi, interestingly, has the highest number of (about 13) legally leased gemstone mines among all registered gemstone mines in Odisha till 2009 (Government of Orissa, 2009). Registered mines are just a small part of the mined resources. Most of the gemstones that come out to the market are through ASM miners.

With the assistance of the United Nations Development Programme (UNDP), the Odisha government established a semimechanised panning and screening facility and mobile washing plants on the banks of the Mahanadi River (Biswas, 1994). These stone reserves also attract large corporate investments. Geetanjali Group, one of the oldest names in gem and jewellery in India, plans to open a Special Economic Zone (SEZ) for manufacturing gems and jewellery in western Odisha. Although the worth of Indian gem and jewellery industries is 20.9 billion US dollars, the manufacturing unit is currently very small. Besides this, the Chhattisgarh Futuristic Infrastructure Development Company (CFIDC) has proposed a SEZ for gems and iewellery in Odisha. It would be established in Bhubaneswar, on 150-200 ha of land near the airport, with an initial investment of 44-45.35 million US dollar. Companies such as Oriental Timex have also acquired mining rights for black granite stones for decorative purposes in Potteru village in the Malkangiri district of Odisha. The state of Odisha established a sophisticated gem testing laboratory in the Directorate of Geology in 1991 under the auspices of the United Nations, which tests all kinds of stones at cheap rates (Government of Orissa, 2009).

### 4. History of Kalahandi

Ancient social formations, culture and human settlement began as early as 2000 years ago, and there is evidence of Iron Age culture in Kalahandi. The history of gem mining is also related to the history of Kalahandi. This region was ruled for many years by the Naga vamsi<sup>9</sup> rulers who succeeded the Ganga rulers after AD 1005. The region was previously called Mahakantar<sup>10</sup> along with parts of the Bastar region of Chhattisgarh and the undivided Koraput region; and Karunda Mandal<sup>11</sup> which are a treasure trove, and mines of precious stones like Kurandam (corundum) or Manik (rubies) (Prusty, 1992). Kalahandi is still considered to be one of the producers of the best rubies in Odisha and India. The district also produces stones such as sapphire, garnet, aquamarine and alexandrite (Biswas, 1994). The family deity (goddess) of the Naga

<sup>&</sup>lt;sup>5</sup> State capital and adjoining area.

<sup>&</sup>lt;sup>6</sup> Country capital.

<sup>&</sup>lt;sup>7</sup> Reservoir of diamond.

<sup>&</sup>lt;sup>8</sup> Here "illegal mining" as described in official report includes both ASM for livelihood purpose and mining mafias and syndicates. Though the scale and profit earned of business of syndicates and mafias are much larger than ASM for livelihood purpose, however many of the mines operated illegally by the mafias and syndicates employs labour from local and indigenous population. So sometimes (but not always) both ASM and large scale illegal mining is imbricated and inseparable from each other and are connected to the national market through a long chain of transactions, which are part non-legal, part illegal, part legal and formal.

<sup>9</sup> Naga dynasty.

<sup>&</sup>lt;sup>10</sup> The great forest zone.

<sup>11</sup> Place of corundum.

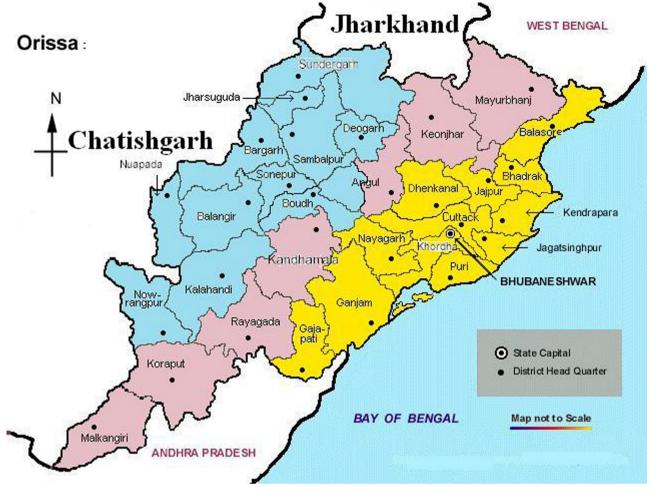


Fig. 2. Political map of the province Odisha, showing different districts. Kalahandi is situated in the south-eastern part of the state just below Bolangir. Source: www.visitodisha.net

feudatory state of Kalahandi is aptly called *Manikeshwari* that is the god of Manik. The various specimens of semi-precious and precious stones from archaeological excavations of the Asurgarh region indicate that part of the state coffers were probably filled through trades of gemstones carried out by the Maharaja himself. Maharaja Pratap Keshari Deo, the former Maharaja of Kalahandi who belonged to the Nagavamsi rulers, testifies to this fact in a paper that he wrote (Deo, 1987) (Fig. 3).

Kalahandi district also has abundant forest resources and a very high population of Adivasi sections. The population of the district as per 2001 census is 1.35 million. The scheduled caste (SC) population of the district constitute 17.67% and the scheduled tribe (ST) population constitutes .39 million that is about 28.65%. The major tribes are Khond (45.36%), Gond (21.09%) and Shabar (9.88%). The Khond population is 0.18 million (Orissa review, Census Special 2010). The tribal communities living in Kalahandi have practiced shifting cultivation (*Poducha*) in Ampani, Thuamul Rampur and Biswanathpur regions, which are the hilly and forested terrains of the district. The Kalahandi state even gave sanction to this kind of cultivation before independence. The Khond or Kandha tribal groups are the main indigenous population in Kalahandi (*Pattanayak*, 2008).

They have historically occupied a privileged position in the Kalahandi kingdom under Naga kings. Pati (2012, 2) notes that ceaselessly invented rituals were a crucial aspect to retain the hierarchical power relation of the colonial state and its internal rulers who incorporated Adivasis under the state rule. In one of the

rituals, a Kandha Pat-Majhi (Khond chief) is required for the coronation ceremony of the raja (king) of Kalahandi. Despite this, the Khonds have substantial grievances against some of their kings such as Udit Pratap Deo, who brought in the Kulita<sup>12</sup> and Agariya caste (mainly agriculturist caste) people to Kalahandi from Sambalpur area in 1880s for settled cultivation by clearing the forests. Speaking about Kandhas or Khonds of Odisha, Pati (2011, 2013) says that they are not the "original inhabitants" who love shifting cultivation. At one point of time, they were settled cultivators. Land alienation through colonial permanent settlement of giving Gauntia<sup>13</sup> rights to highest bidders, migration of agriculturist castes, loss of water resources and forest resources through legalized exploitation led to the loss of ancestral lands and dislocation of the various indigenous tribes. The Khonds were forced to move up in the hills and practice shifting cultivation (Rousseleau, 2014).

However, the Adivasis were not passive to these developments, the actively protested against looting of their land and forest resources (Rousseleau, 2014). There were many instances of rebellion and resistance against this onslaught of colonial state and market such as the Kalahandi uprising of the Khonds in 1882, in which the Khonds expressed substantial dissent against the Kulitas, the Gauntias and the colonial state. These rebellions led

 $<sup>^{12}</sup>$  Kulita and Agariya are agriculturist castes found in Odisha and adjoining states in eastern India.

<sup>13</sup> Landlord.

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Fig. 3. District map of Kalahandi showing important urban places.

Source: www.onefivenine.com

to the British "civilizational missions" against the 'uncivilized' Khonds (Pati, 2013). To legitimize such missions, the discourse of "meria" or the "human sacrifice" traditions of the "brutal and uncivilized" Khonds were invented by the British, to supress these rebellions without impunity (Padel, 1995).

Despite land alienation and dislocation, agriculture related activities have been the main occupation of the Khonds. Shifting cultivation was practiced by the Dongariya Khond and cultivation of plain lands was practiced by the Kathuria Khond, both of which are separate clans of Khond tribe (Padel and Das, 2010). An old 1988 data suggests that about 87 percent of these people were still engaged in agricultural related activities (Anon. 1988). However, tribal land alienation and their dislocation is a continuous process. It led to an inquiry about the alienation of tribal lands by the Orissa high court (a one-man commission) in 1989. The SCSTRTI Data sheet 2001 on tribals reveals that a total of 8, 41,916.50 acres of tribal land was alienated in Orissa by the end of December 1999 (SCSTRTI, 2001). Many of the tribes in Kalahandi are now agricultural labourers, marginal and small operational land holders (Ambagudia, 2010). These social histories of exploitation and appropriation of the resources from the tribes has compounded its effect with frequent famines, droughts and agrarian distresses that wreaked havoc on the marginalised population and further proletarianised them.

## 5. Agrarian distress in Kalahandi

Agrarian distress has perpetually affected Kalahandi. It has been in the national and international media since 1985 due to its acute drought, death and hunger-stricken population. Paradoxically, Kalahandi is not poor in resources; outsiders and merchants flock here for rare gemstones and its business, which unfortunately do not contribute to any local development. Natives have migrated in large numbers to other parts of India. About 0.1 million residents from Bolangir and Kalahandi, mostly communities belonging to scheduled caste and scheduled tribe categories, have moved to Raipur and stay in an infamous slum called *Raipur Ka Narak* a term meaning, the hell of Raipur (Mishra, 2011).

Kalahandi has a long known and recorded history of about a century of drought and agricultural failure. A massive famine occurred in 1866, which is called *Nannka Durbhikhya*, <sup>14</sup> a major

<sup>&</sup>lt;sup>14</sup> Nannka famine.

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milestone in the history of colonial Odisha that wiped coastal Odisha population and affected the 26 princely states of western Odisha as well (Pati, 2013). Famines and droughts are not merely 'events', they are processes of slow emaciation, starvation, loss of energy and death of an entire community, and they have totally devastated the rural areas of Kalahandi (Mishra, 2005). Big droughts occurred in 1868, 1884 and 1897. The famine of 1899 and its ferocity left a terrible psychological impact on the social fabric of Kalahandi leading to widespread economic gloom in this area. Due to the lack of food resources, the 1919-1920 drought was followed by cholera, influenza and malnutrition. Further droughts occurred intermittently in 1922-'23, 1925-'26, 1929-'30, 1954-'55 and 1955-'56. Another severe drought in 1965-'66 had severe economic consequences until 1967; three quarters of the crop failed, and most landless agricultural labourers became unemployed. The worst affected was the landed classes, who could neither reap harvest nor were able to work as manual labourers due to perceived social prestige and status. This drought reduced the status of rich peasants to middle class peasants and middle class to a lower position. Many of them turned into landless and daily wage labourers, and are popularly known as Sukhbasis, a term meaning 'those who live happily" because they do not have any possessions to worry about (Mishra, 2005, 2011).

Yet surprisingly, Kalahandi is not a rainfall-scarce or food grainscarce region. From 1977-'88, rainfall here was about 1255 mm which rose to 2247 mm in 1991. In fact, the rainfall was much above average than other places of Odisha, and led to the production of more than average food grains during this period (Pradhan, 1993). The droughts that occur here are not meteorological or agricultural, they are largely human-induced. This is a paddy cultivating area and there were innumerable number of ponds, tanks and reservoirs earlier which were maintained by the kings and local communities. After the implementation of permanent settlement during the colonial period in this region, first in 1883, 1885 and finally in 1904-05, land relations, community structures and village structures were changed permanently (Orissa Report, 1985). It also alienated the tribes from their land and forest rights (Mishra and Rao, 1992). These reservoirs were no longer managed by the kings, Gauntias or the communities and were completely neglected leading to its demolition. In the postcolonial period, neglect and mismanagement of traditional water management system continued along with improper planning. This has been worsened by exploitation of Kalahandi as a resource frontier by speculative traders and businessmen, under the shadow of the national and provincial state (Pradhan, 1993).

Trading of agricultural products in Kalahandi is controlled by urban businessmen. There are various layers of class distinction in rural agrarian society. Different strata of labourers work in the fields such as Goti<sup>15</sup> and Haliya,<sup>16</sup> who are steeped in loans and mortgages that have further deteriorated cultivators' lives. Major problems are unemployment, non-industrialisation, population growth and deforestation, drought and famines leading to a higher migration rate from Kalahandi (Banik, 1998). Consequently, farmer suicides and death due to starvation are not uncommon in Kalahandi. A sizeable number of farmers took their lives in Kalahandi and adjoining areas in 2009 and 2015, many of which come out in Oriya newspapers but are rarely covered by national newspapers (Dharitri, 2009, 2015). But someone puts it aptly and sarcastically, he says, in our country people do not die of starvation (or suicide), in places like Kalahandi they eat everything from putrid flesh to castaway mango stones, so when they have so much to eat they die of eating (Anon, 1988).

#### 6. Mining of coloured gemstones in Kalahandi

The cumulative effects of drought, famines, and loss of livelihood through land alienation, and increasing interest of outsiders in gem mining and trade in Kalahandi mainly after 1990s, have pushed substantial numbers of peasants and tribes into mining, as another viable source of livelihood, Traditionally, during the pre-colonial period, the tribes engaged in mining used to dig the stones, but not for themselves. They were employed to do so by the Kings and Zamindars (landlords) who controlled the trade and market. All these trades were in the hands of elites who also controlled the business supply chains. The stones were mainly supplied in regional and local markets in adjoining regions and states. However, this trade was not the mainstay of these people, the tribes and the peasants here are historically connected with agriculture related activity. Due to failure of crops, many of these tribes have moved out of their settlements. Gem mining was a relatively small scale trade till outsiders started coming into this trade mainly after 1990s. From 1990s onwards, non-traditional mining of stones rose illegally in a massive scale.<sup>17</sup>

There was a rush, the local elites faced competition, and wages of the diggers and miners increased due to that. Many tribal youths abandoned the failing agriculture and in turn attempted to gain money from this rush. They have knowledge of digging and mine areas, but they are not cognizant about market and supply chains which are still controlled by local elites and outside traders. However, these labourers could no longer be controlled and supressed by the local elites alone. It gave rise to a chaotic situation, whereby the tribes were trying to get the best out of the exploiting and oppressive situation. Earlier, they were always digging for somebody else, mainly for the elites mostly off season. But now they are leaving agriculture permanently, some are migrating and recently many of them are becoming full time diggers, labouring in mines for themselves, for local elites and for outside syndicates. They are doing whatever they can for survival in this chaotic phase. 18 Despite this the tribals here remain steeped in poverty. During good season, they eat Mandia, a gruel made of millet, roots, leaves, mangoes, hand full of rice et cetera. During bad season, they consume everything from tamarind seeds, cast away mango stones, white ants and putrid animal flesh. Malnutrition of a gross degree is evident in large headed rickety children, and thin anaemic malformed adults (Anon, 1988).

These conditions cast doubt about the postcolonial developmental state, its efficacy in the food distribution system and its ability to provide food security to the people. There is a complete failure (or perhaps absence) of a developmental state in western Odisha, which has been thoroughly neglected by national and provincial governments. The central and state governments have lost legitimacy of rule in western Odisha. Innumerable numbers of Civil Society Organisations (CSOs) have cropped up like mushrooms in Kalahandi and yet the problems of poverty, malnourishment and underdevelopment persist in this region. Consequently, people have demanded a separate state for some time, which gave rise to the separate Kosal<sup>19</sup> state movements from 2000 onwards due to the backwardness of the region. The movements demand distinction of the Kosli<sup>20</sup> language, healthcare, poverty eradication, industrialisation, and elimination of exploitation and natural degradation. These are the socio-economic, political and geographical contexts in which ASM of coloured gemstones thrive in western Odisha and, particularly, in Kalahandi.

<sup>&</sup>lt;sup>15</sup> Daily wage farm labour.

<sup>&</sup>lt;sup>16</sup> Farm labour on yearly contract.

<sup>&</sup>lt;sup>17</sup> Interviewee 1: Jamal (please see note 3).

<sup>&</sup>lt;sup>18</sup> Interviewee 1: Jamal (please see note 3)

<sup>&</sup>lt;sup>19</sup> Mainly western Odisha consisting of ten districts and a sub-division.

<sup>&</sup>lt;sup>20</sup> Also known as Sambalpuri; it is the western Odisha variation of Odia language.

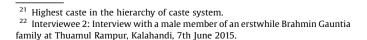
Coloured gemstones occur in large reserves in particular places. But they are also found scattered across extensive regions near the earth's surface, spread by monsoon water, river flow, flood, tectonic shifts and volcanic eruptions. The government sometimes does not invest in their mining in these areas, because large-scale surface mining is not lucrative as investment needed in machinery, tools and technology is such mines is much higher than the expected returns (Biswas, 1994). Mining activities in Kalahandi are carried out at small-scale ventures and by individuals, generally owned or controlled by those who own the piece of land (mostly agricultural). Some forest land is also exploited for mining. Mining on agricultural lands are generally controlled by the agricultural caste Kulitas or the Gauntias who are mainly *Brahmin*<sup>21</sup> by caste and have considerable landed property in the region.<sup>22</sup>

Gemstones are surface-mined by a rudimentary method that the geologists informally describe as rat hole mining. About 10–20 m² of land are first cleared of all vegetation. A square or circular pit is dug to remove 5–10 m² of topsoil down to the water table. Wooden or bamboo ladders are constructed to enter the pit. Tunnels up to 2 m are dug in the pit walls to extract gemstones, which are washed in the water below or with a bucket of water. Hand tools include a *Kudal* (mining pick axe), a *Shabol* (shovel), bamboo basket and buckets of water. Many pits are dug in open paddy fields and hidden by palm leaves. Mining is done at night, early morning and afternoon when nobody is around.

Due to the poor quality of tools, many stones break, so highquality stones do not regularly reach market. Seasonal rains fill the pits with water, which are either dewatered with pumps or simply abandoned in favour of other sites. Often, gem hunting and illegal quarry making occur in relatively inaccessible places like mountains and forests, where a relatively large ditch of about 10–15 m<sup>2</sup> in diameter is dug after the rains with the help of tribal labourers. Male labourers tunnel into the walls of the ditch parallel to the surface, like rat holes, where the labourer crawls in or partially stands and collects stones with a spade and a sack or thick plastic bags. Labourers also carry bags of gravel-mixed soil. Women labourers put the gravel mixed soil in porous baskets or long fishnets (with smaller nets that are used for catching small fish), which are carried to a nearby place where rainwater is collected in another ditch. A person stands in knee-deep water and sieves the basket to wash the gravel mixed soil. If it is a long fishnet, two people do the washing. After washing, gravel is spread on a sheet and searched for small, rough stones.

Labourers are usually Khond tribals, who are otherwise peasants and wage labourers in the fields of former Gauntias. If not, they work in the fields of rich farmers mostly of the Kulita and some of Agariya caste. Contractors with a good labour supply also organise mining and smuggling of stones from Kalahandi forests. The medium-scale operations have better access to market, credits and have better formal and informal networks. Rich farmers and Gauntias sell their products to these entrepreneurs and labour contractors. They, in turn, sell stones to local jewellery shops, or through trusted smuggling chains send stones to larger markets like Jharsuguda or Katabanji where merchants fix deals with these people in local hotels. Merchants then connect these smaller, ephemeral, non-institutionalised and informal market networks and stones to larger formalised and institutionalised global gemstone markets (Banerjee, 1993) (Figs. 4 and 5).

The labourers are mostly surplus in supply, starved by the droughts and desperate for work. They have small plots of land supporting meagre amounts of paddy. Because they no longer





**Fig. 4.** A miner belonging to the Khond community demonstrating the process of surface mining after rains.

Source: clicked by the authors

practice shifting cultivation, their livelihood is managed by mining, collecting non-timber forest products and sometimes working in agricultural fields. The work in rat hole mining is dangerous due to drenched and unstable soil. Often, mines without proper reinforcement collapse, leading to deaths due to suffocation and toxic gases. At times, no significant big stone reserves are mined after a day of work. Firstly, labourers work in the quarry because there is not much year-round agricultural work available due to drought and famines in Kalahandi. Secondly, the wage is high by local standards and can be 200–600 rupees per day (3–7 US dollar, i.e. a relatively high wage for labours here) depending on mine areas and type of stones dug. Thirdly, it provides off-season work when otherwise they would migrate to nearby states and cities to work in industries, brick kilns and rickshaw pulling businesses. Mining assures labourers a lucrative alternative and keeps them at home

The mined stones belong to anyone who can take them out. Apart from the local Kulita farmers and Gauntias, some illegal mafia syndicates are also involved in these businesses. Many



**Fig. 5.** A miner belonging to the Khond community demonstrating his pickaxe and uncut semi-precious gem stones. Source: clicked by the authors.

officials from mining, forest, police and revenue departments are regularly bribed to ensure smooth and clandestine activity without much reportage or coverage. They all act in cohesion to keep the affair secret. The syndicates deal in international markets and their businesses run in tens of millions of rupees. These people have a solid grip in these areas and they bribe locals and villagers to recruit miners, with expertise in mountaineering as well as mining. They sometimes provide lodging, boarding and food along with work in the mines. They supply liquor to lure labourers to work at night by torchlight. Sometimes they employ local strongmen to keep the business in control.<sup>23</sup>

Forest officials proffer various reasons about the difficulty and inability to catch these syndicates. They state that there are different routes through jungles from which people can escape; some of them are very long, several kilometres in length, and it is difficult to follow escapees with limited manpower in difficult terrains. Forest officials are also distracted by other activities such as poaching and illegal wood smuggling. 24 Sometimes, local miners with personal landed property and who mostly mine in their lands with local labourers argue with the syndicates, who are mainly outsiders and are labour contractors mining in public land by recruiting labourers also from outside. Both sides use strongmen, employ rumours about each other and try to placate the local villagers through cash, kind and employment. These outside syndicates are, however, more powerful in the neighbouring states of Chhattisgarh and Andhra Pradesh, particularly, in Narsipatnam around the Karaka hills. In Kalahandi, it is mostly the local private land owners and local labourers who monopolise

Police officials have snared about 100 caches and confiscated some in Kalahandi and Bolangir over the last five years. Yet there has been no arrest and the stones remain unvalued in most of these catches. This is just routine duty that the police employ to catch individual perpetrators, mainly tribal youths and people of marginalised and lower castes, so as to safeguard the larger operators.<sup>25</sup> When questioned about the lack of independent actions to catch illegal mine owners, police officers provide a number of contradictory and naive excuses. One of the police officers said, "It takes place in reserve forest areas, so it is the responsibility of the Forest Department to stop it". "Besides", he added, "we generally go only when there is law and order problem or some death due to mining, if that is not happening, what is there to go? Anyway these people are entrepreneurs right?" His remarks almost sounded naïve and he added that even if nobody took out these stones, the government would not care much. According to him, Mother Nature bestows these stones upon the people for free, some people take them out, and somehow almost everybody benefits from these activities in cash or in kind. Hence, the police officer questioned how it could be considered a problem.<sup>26</sup> So, there is a general sense of rights to one's community property and righteousness of these activities. To some extent, we found that the logic was not entirely wrong, but the question to be asked is: Who actually benefits from these?

Illegal quarries have triggered a boom in real estate and aspiration for higher education among the second generation of mine owners. Numerous apartments, bars, restaurants and multi-



**Fig. 6.** Informally mined conundrum/low quality rubies, from Kalahandi mines, has been cut and polished in local lapidaries. Source: clicked by the authors.

storey shopping complexes abound in the streets of Bhawanipatna now. There are several 'rags to riches' stories not only about semi-precious stone mining but also about chance encounters with diamond reserves while mining. Many of the upper caste Gauntias and big farmers have sent their children to study abroad for graduate programs fully sponsored by them.<sup>27</sup>

### 7. Routes of gem trade around Kalahandi

In some villages in Kalahandi and adjoining Bolangir, entire stretches of land are pockmarked. On average, two out of every three villagers are involved in this trade. Some landowners whose fields are mined take a cut as high as 25% of the value of the stones sold to the middle men.<sup>28</sup> In the non-legal, illegal gemstone mining sector, nothing is regular except the collection system. The soil is unpredictable-if emeralds are collected one year, the next year would show garnets. People may mine for months before they strike a good lot of stones. For example, Ghanshyam Paik, a labourer, mined for three months and collected a huge cache of garnets, which a middle man guilefully bought for 16,000 rupees (about 242 US dollar). Though Paik was unsure about the enormity of the catch-considering the fact that often stones worth 1000 rupees per kilogram are brought down to 10 rupees (about 0.12 US dollar) per kilogram by middlemen—he was happy with his share as he earned more than what he would have earned after two years of tilling. This immediacy, urgency and uncertainty drive the under-priced gem economy in this region, which also fills the coffers of big traders (Banerjee, 1993).

Trade is international in scale where the stones are bought by top buyers in Katabanji (in Odisha), a major rerouting centre, then go to Raipur (in Chhattisgarh) and to Jaipur (Rajasthan) via Bihar, from where it is cut, polished and sold in international markets or exported. The police are paid 'weekly money' (*hafta*), politicians are hoarded with funds for elections, and all those people who matter such as teachers, lawyers and bankers are taken care of (Banerjee, 1993). Every sector is linked through a thin thread of informality. For example, if a Katabanji gem trader needs

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 $<sup>^{23}</sup>$  Interviewee 3: Interview with a male family member of Kulita farmer in Bhawanipatna involved in gem-trade, 3rd June 2015.

 $<sup>^{24}\,</sup>$  Interviewee 4: Interview with a forest office employee at Thuamul Rampur, 15th July 2015.

<sup>&</sup>lt;sup>25</sup> Interviewee 5: Interview with a Khond local opinion leader at Thuamul Rampur, 14th July 2015

<sup>&</sup>lt;sup>26</sup> Interviewee 6: Interview with a policeman in Bhawanipatna, Kalahandi, 1st July 2015.

 $<sup>^{\</sup>rm 27}$  Interviewe 7: Interview with a gemstone shop owner in Bhawanipatna, Kalahandi, 20th June 2015.

<sup>&</sup>lt;sup>28</sup> Interviewee 8: Interview with a middle-man (of a trader based in Bhawanipatna) in Jilingdhar, near Junagarh, Kalahandi, 22nd June 2015.

immediate cash, a local bank will immediately sanction unauthorised advances. After the stones are sold, the money is repaid. Transaction records do not exist, and the extra money without the advance is shared among bank officials. If patrons need cash urgently, the dealers would give an advance while concerned people would receive washing machines, televisions, and so forth to silence them (Ibid).

The pipeline operator keeps every level greased and the lower level protects the higher level. Most of the middle men are bound to the traders in Katabanji. According to one of the Katabanji traders, Bijoy Sharma, he has distributed 15 motorcycles to middlemen so that they would bring the best of the stones to him. Competition is fierce and he does not want to be overtaken by other traders (Ibid). In this situation, as visitors approach the diggers, they usually disappear quickly; the traders would talk only in conditions of anonymity. Some of the officials do admit about the racket, but they believe that smugglers are one step ahead of them. A Katabanji lawyer did raise a concern about this, but police and politicians threatened him of dire consequences and he was silenced (Ibid).

The trade provides lucrative returns, for example, a 1 kg garnet stone would fetch 10 rupees (0.12 US dollar) for the digger, about 100 rupees (1.52 US dollar) for the middlemen, and the trader in Katabanji would get 500 rupees (about 7.56 US dollar) from the dealer in Jaipur along with transportation cost. The Jaipur trader would cut, polish and sell it for even higher prices per carat rate or per stone rate from shops that they own. Some stones may be of very high quality and prices would vary accordingly. Uncut emeralds are sold for about 10,000 rupees (151.14 US dollar) per 10g; whereas once cut, they are sold at exorbitant rates in cities like Jaipur, Mumbai, Delhi, Bengaluru and Chennai (Kundu, 2013). One of the interviewed miners in Kalahandi<sup>29</sup> said that on a lucky day they might find a good lot of rubies. If they manage to cut and polish a large piece of ruby ore in the local lapidary, it could bring in huge profits for the mine owner.

A good piece of cat's eye can fetch about 5000 rupees (75.57 US dollar); ordinary ones are sold either by kilogram rates or per piece rates of 50–100 rupees (.76–1.52 US dollar). The mining of diamonds in Boudh and Sonepur do not fall behind, diamonds are collected from the Mahanadi River beds and sold in the international market. In adjoining Deogarh district, the smugglers work along with the locals deep inside the jungle and pay them a daily wage labour of 30–40 rupees (0.45–0.60 US dollar). These people work in dangerous conditions in pits that are often up to 15 m deep to mine garnet and quartz (Sahu, 2008) (Figs. 6 and 7).

A rare stone called Alexandrite has been found in Kalahandi Tel river valley and the Kalahandi-Chhattisgarh border region (they were originally discovered in Russia). The stone has a peculiar property of dual colour. It is purple in normal light and red in incandescent light. It is considered very rare and can fetch as much as 100,000 rupees (1511 US dollar) per stone sold directly from the mines. The Senmuda village under Devbhog police station just across the Odisha border in Chhattisgarh has been the hub of Alexandrite mining since 1980s. Despite rich resources, the region is poverty-stricken. The mining department prohibited mining here in 1994, but it continues clandestinely. Poor villagers work in the mines for as little as 100 rupees per day (1.52 US dollar). Apart from leading to a huge loss in state revenue, the prohibition also shattered all hope of sustainable and proper development for local people. None of the money generated through this trade is invested in the communities or surrounding areas (Sahu, 2013).



Fig. 7. Informally mined garnets from Kalahandi mines, has been cut and polished in local lapidaries.

Source: clicked by the authors

### 8. Conclusion

Historically, Kalahandi and western Odisha have been known for the occurrence of precious and semi-precious stone deposits that were mined artisanally under the rule of various local dynastic rulers. Until now, mining had remained artisanal, the production processes controlled by class and caste elites such as Brahmin Gauntias and rich Kulita farmers, and the gems produced traded mainly in the local market that served Kalahandi and Odisha. The elite groups have historically exploited indigenous Khond tribals, taking their lands through force, through the law and other instruments of social, economic and political pressure. The complexity of social dynamics of the region have been compounded by the deepening agrarian crisis manifested in a series of droughts and famines, forcing the poor to leave agriculture permanently and move to adjoining states to seek work as itinerant labourers. The surge, since the 1990s, of growing interests and investments made by traders and businessmen coming from outside the region has been associated with the growth in informal mining by the peasants. The businessmen, however, have been able to control the labouring by the indigenous communities.

Therefore, if informal mining has connected the local trade to national markets located in Jaipur and Mumbai through an increased networking of the national gem markets operated from these cities with global markets, it has also utilised the blood and sweat of the Adivasi peasants, in the process of surplus accumulation benefitting the latter negligibly or none at all. On the one hand, this created an anarchic situation when more people left agriculture and related activities and started speculative informal mining just to 'try out the luck' as one respondent put it. On the other hand, smugglers, syndicate operators and contractors from the non-local market have emerged in the scene, further pulling the Khonds, but also various other tribes and other marginal farmers, deeper into mining.

Together, the processes have unleashed an accelerated pace of de-peasantisation and de-agrarianisation, entrenching agrarian crisis and aggravating the social and political exploitation and marginalisation of the Adivasis. More importantly, the cumulative effect of the processes have been such that many rural villagers have left their traditional occupation of farming permanently, taking up the profession of mining. Some of the local poor see it as a process of livelihood diversification, possibly a means to support their subsistence through the lean seasons. The big question of wealth being accumulated in a few hands, perpetuating the feudal

<sup>&</sup>lt;sup>29</sup> Interviewee 9: A Khond miner in Kesinga, Kalahandi, 14th June 2015.

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relations of exploitation needs to be looked more closely in the next stage of research. That is to further investigate the processes by which wealth is accumulated by the local landowners – the Brahmin Gauntias and the rich Kulita farmers – and outside traders and businessmen who sell the finished product acquired by the labouring Adivasi poor.

While focussing on informal gemstone mining, it might be worthy of mention that formal, capitalised mining of bauxite and iron ore, have been initiated in the region at a much larger scale (such as in Niyamgiri hills, see Padel and Das, 2010; Jena, 2013). Unlike the ore bodies, the geological nature of occurrence of gemstones - near the surface and brought down by river floods and rain water, scattering the gems over a broad region - also lends to informal mining through surface inclines at shallow depths and scavenging through small holes. The state administration has been largely preoccupied with the major issues posed by the recurring droughts, or those arising out of smuggling in forest tracts or the means of land acquisition associated with larger-scale mines, leaving gemstone mining to be carried out largely under the radar. The Geological Survey of India's knowledge remains largely focused on the technical, and is disseminated to a primarily bureaucratic and technocratic audience.

Furthermore, much of Kalahandi still remains unexplored and inaccessible tribal-dominated tract, a hot spot of poverty. For a mine to be set up, an aerial survey of the 'mother-lodes' – that is, the main area of concentration of gemstones give them a bird's eye view that is devoid of social realities experienced by the Adivasis on a daily basis. All these are easily ignored by or even unknown to the government. At the same time, traders from outside of Kalahandi bring out the stones from informal mines in a relatively organised manner only through a strong nexus with the local politician, bureaucrats, police, traders and bankers. Jointly with the investors, they drain the resources, making use of the tribal miners and their knowledge, but pauperising them in the process. Clearly, as elsewhere (for example, in Madagascar, see Canavesio, 2014), investments in formal mining and trade have not benefitted the locals

In remote poverty pockets like Kalahandi, administrative officials both the bureaucrats and police are known to collude with local elites and businessmen to keep informal trading at a low profile and outside of media coverage. The informal nature of the trade helps larger formal gem and jewellery business owners to make large profits by maintaining large differences in the buying and selling prices of the gemstones; by avoiding the payment of tax, and neglecting the establishment of value-addition through workshops that can also train the locals to cut the stones properly and polish it finely. At the same time, the tribal and poor communities who are involved in informal mining have been pushed to the knife's edge by the 'illegal' and 'informal' nature of mining. Their lives are neither comfortable, nor secure; the precarious nature of the work is evident in the near-absence of mining safety. Infrequent police raids often target the poor and leave the traders and bigger businesses alone. The poor are arrested, criminalised and victimised.

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