PGE Project: Jharia Coal Field

Dan Martucci
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Professor Thoyre
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Introduction:

“At the center of Dhanbad City, in the Jharia region of northeastern India, amid a handful of concrete buildings, stands the enormous bronze statue of a coal miner. He is shirtless, muscular, and handsome.”

When Joyce visited the Jharia Coal Field in the Jharkland State of India, it was immediately apparent that this was an area of dark and ingrained marginalization on top of extreme poverty and lack of economic opportunity. The quote above illustrates another, interesting aspect to this marginalization: rising out of all the poor, decrepit houses, is a nice bronze statue of a ‘shirtless, muscular, and handsome’ male coal miner. This is a very false presentation of the average person in the Jharia region and not only perpetuates the dominant narrative that everything in this region is fine, but also that these miners are healthy and heroic members of the Jharkland state; furthermore, it emphasizes the patriarchy in society, by championing the image that only males can be heroic miners (which, in reality, they are not anyways). These people live in ‘concrete buildings’, not actual homes purchased from the money made from coal production. In her article, Joyce goes onto talk a lot about how the majority of people living in the area – and specifically those living in Bokahapadi Vilage (one of the many small villages on the Jharia Coal Field) – “live in small, mud-brick houses, packing up to ten people in a room...[and] many houses have cracks and caved-in roofs.” Thus, the image of Jharia Coal Field and the surrounding villages and communities that many people outside this area have received is not accurate at all; there is real and awful marginalization going on. The government and major mining companies have dominated the narrative for a long time and have only recently began to face the interrogative light as more and more information comes out about this site. The resource curse theory helps explain the marginalization that these people are facing and helps uncover a narrative that the
government and major mining companies have only recently been forced into contact with.

Description:

The Jharia Coal Field is located in the Jharkland State in eastern India: it is a coalfield that “spans an area of about 250 square kilometers.” That is roughly three times the size of Manhattan in New York City. Specifically, this coalfield, which is the only major location of coke coal, is located in the Dhanbad district within the Jharkland state; this area was “formerly known as South Bihar till the formation of new state Jharkland in 2000.” Historically, mining in this area has been going on for a long time – since 1894 –, matching India’s industrialization; today, there are 23 massive underground mines and several open-cast mines within the Jharia Coal Field.

Before diving further, it is important to first understand the larger global context of fossil fuel use in India. As its population grows, so too has India’s intake of natural resources. In fact, India has taken its place in the global economy as a top coal producer and consumer, with two-thirds of their electricity coming from coal. Jaharia not only sits on one of the largest coal deposits in the world, but also one of the largest in India; more specifically, Jaharia sits on a specific type of coal used in steel plants that India uses to bolster and grow its economy: coking coal, “one of the world’s dirtiest fossil fuels.” On the international stage, this is interesting given all of the pressure that countries like the U.S. have put on India and other developing nations to move away from fossil fuel reliant industrialization. Those same countries are still dependent on burning fossil fuels, but lecture and pressure countries like India and China into tailoring their economic growth
so they do not industrialize the same way that they did. This global perspective is important because it paints the coal industry in a broader context.

Knowing the international scene begs a lot of questions from countries like India. Should it comply with international pressures or should it have the right to develop the same way that other countries have developed? Furthermore, what sort of development does the government wish to have and what does it wish to look like after industrialization? These questions, along with many others, have real-life consequences for the people living in villages and towns on and around the Jharia Coal Field.

**Analysis:**

The resource curse theory is by far the most pertinent geographical theory that relates to this PGE site. These people are living on extremely valuable coal that is very profitable and important to the industrialization of India. The benefits of such massive wealth in natural resources, however, do not make their way back to these communities; instead, they find themselves in the hands of the major mining companies (BCCL) and the Indian government itself. The Indian government, which is located in the capital city, New Delhi, owns almost 80% of Coal India (which is the parent company of the BCCL). Thus, the benefits and wealth are consumed by the government and a government owned coal company while the actual people mining the coal and living in close proximity to the mines receive all of the costs. As a public company, Coal India makes economic decisions that align with the wishes and goals of their shareholders. Those people living in the area in and around the Jharia Coal Field, because they are poor (discussed in the subsequent paragraphs), are unable to retrieve the coal on their own because they lack both the technology and the machinery to do so. Their extreme poverty and
marginalization in society outside of the realm of coal is also important to understand with relation to why the government picked this location and how they have gone about extracting the precious coal. Mohai et al. make the very interesting and pertinent point that companies and government bodies sometimes seek the path of least resistance when committing environmentally unjust acts. The people in this region are so poor and already marginalized that they are expected to lack organizational means and the ability to resist the marginalization that continues to occur.

The people living on the Jharia Coal Field are severely marginalized within the context of their environment. An important word here is ‘on’; these marginalized people are not, in most cases, living in surrounding areas of the mine; they are not living a couple miles away from the mining activities and just happen to be very poor; rather many villages and towns are directly on top of the mine site. In order to better understand exactly how this coalfield came to be – and the role the resource curse theory plays - it is important to understand its history, geography and some statistics.

The Dhanbad region, in which the Jharia region lies, had a total population of 2,684,487 (1,405,956 male, 1,278,531 female) in 2011 when the last census was taken; this roughly accounts for 8% of the total population of the Jharkland state in India. The average literacy rate went up quite significantly from 2001 to 2011, increasing from 67% to 74.5%, but there is a huge divide between male and female populations, with the males having a roughly 20% lead on females in terms of literacy: 83% to 64%. This statistic indicates that there is an ingrained divide between the genders in this society in which the fewer opportunities women have to get an education perpetuate the patriarchy. The population, based off the statistics from 2011, is expected to increase roughly 12% every
year for the net couple of years, which is an astounding growth rate. While there has been a move over the years to a more urban setting, roughly 42% of the population lives in rural communities – villages and towns. Even more important to note is the fact that within the rural population, the average literacy rate is much lower than the average for district as a whole: 74.5% vs. 68%. This is important to note because those people who live in a more urban setting tend to have better access to education leading to higher literacy rates. In other words, there is an urban bias in the Dhanbad district in the Jharkhand state in India, where those people living in the urban setting have more opportunities at education and economic success than those living in rural settings; this is some evidence for Mohai et al.’s theory because the government may expect less resistance from the local population given this information. The area surrounding the Jharia Coal Field is from the very onset – prior to any of the environmental injustices that this coalfield inflicts on local peoples – already marginalized from the pure fact that they live in a rural, rather than urban, area.

Although statistics can be very useful, – and they certainly are in painting a picture of this region and some aspects of marginalization that these people face – personal accounts and getting a grip on what people are going through on a day-to-day basis is equally important and crucial in understanding this environmental injustice case. Rajiv Bhuiyan, a nine-year-old kid living in the Ghannudi slum in Jharia, loves to play soccer with his friends, but has to quite literally dodge the many fires erupting from the ground; in fact, his house physically split between “the habitable and the uninhabitable.” The ground is so hot that “the air shimmers with heat and gaping cracks glow with blue-hued fire, plumes of sulphurous smoke coming out of them.” This
proves to be quite dangerous for people living in the area, as one could fall into a crevice, get burned by an erupting fire, or worse; this is probably the furthest thing away from a safe environment to raise a family in, as people are navigating an environment that resembles what some people are calling ‘hell’. How did it come to be that fires erupt all throughout this region? Who is responsible?

Although mining in this region started in 1894, the first fire erupted in 1916. Since then, the problem has only gotten worse…much worse. Prior the second half of the 20th century, the coal was mined by the imperial government and princely families. Then, in 1973, the coalmine was nationalized and is now predominantly operated by the Bharat Coking Coal Limited (BCCL), a subsidiary of Coal India. While there were many fires erupting in this area prior to the nationalization of this coalfield, the BCCL has since perpetuated the dangerous living environment and cut many corners when it comes to extracting the coal.

While most people think of coalmines and shafts/tunnels that go deep into the earth or mountain when they think of coal, there is another way to extract coal called opencast mining. Through this type of extraction, the coal comes directly in contact with oxygen and the atmosphere and “can ignite spontaneously at rather low temperatures when exposed to certain conditions of temperature and oxygen.” Despite the massive environmental impacts, the BCCL has taken many short cuts, and has pursued the opencast method: with opencast mining, there is not only “cheaper extraction costs and higher output than deep mining…[but], most of the opencast mining by BCCL is largely deemed illegal, since in 97% of cases no licenses have been granted.” The BCCL is conducting itself in criminal behavior and has been doing so for a very long period of
time. They have been in control of not only the narrative that is released about this site, but also the physical and emotional damage that their actions result in. To add onto this, the BCCL has not followed the safe procedure in order to correctly close an opencast mine: to do this, opencast mines are to be filled with “sand and water so that the land can be cultivated again.”23 There has been no trace of an effort from the BCCL to follow this procedure and that is why the people living in this area are suffering from flames spurring out of the ground. In fact, once coal comes into contact with oxygen and ignites, those flames can last for “tens to hundreds of years, depending primarily on the availability of coal and oxygen.”24 This is not a small, easily corrected problem. These mistakes and illegal tendencies that the BCCL has embraced for a long time have perpetuated the marginalization this population has suffered from. The resource curse is more than this society is missing out on the economic benefits: it is literally plaguing this area with poverty, danger, and inequality.

One would think that this region would be rich given its huge reserve of coking coal. But the goals and aspirations of the BCCL and the Indian government - in their attempt to industrialize and catch up to the first world countries - exploit this natural resource of over ten million tons of coking coal and move the wealth and benefits away from this region.25 As the BCCL continues to mine this coal in a dangerous and oftentimes illegal way, they seek to get at the 7,000 million tons of coal reserves under structures and these villages, etc.26 Thus, the people living in the surrounding area of this coalfield are forced to suffer from the persistent land-grab efforts of the BCCL as well as the potent poisonous air and scorching heat that has grown prominent in this area.27 Even worse is the fact that many of these marginalized villagers’ only choice for work is in the
coal fields working long, brutal days for less than $2 of pay. These villagers, in addition to suffering from all of the health effects, dangerous fires, poor living conditions lacking electricity and fundamental utilities, have no other choice for labor than to work in the mines: the very place that is the source for all of their misery and marginalization.

These people are trapped in an environmental injustice tornado in which the seemingly only way to escape is death. As Joyce notes, the people in the villages surrounding the Jharia Coal Field are on the younger side, with very few old people: the brutal lifestyle of this region takes away old age from people. Thus, many of those men who work for the BCCL and mining companies – in addition to those that do not - are forced to bribe officials to gain access to mines for a couple of hours a day to scavenge some extra coal they can sell at the market; many women participate in this illegal behavior because of the gendered mines and their inability to join their husbands in the workforce. Thus, women carry coal outside of the mines in wicker baskets. The marginalization forces people here to illegally gather coal because of the low wages and poor conditions in which they are living in; they do not have any other choice if they are to bring enough income home to survive. The people living here are not only poor and uneducated, but do not have the means to organize a resistance effort; meanwhile, the BCCL preys on these factors and then leaves with the coal wealth unscathed.

Now that the resource curse theory and its relation to the Jharia Coal Field has been explained and analyzed, the next logical question to ask is what the BCCL and Indian government have done about this marginalization that they have essentially caused. As more and more media coverage appears about the awful injustices surrounding this coalfield, it is reasonable to conclude that the BCCL and government
have been forced to take action. The Indian government developed the Jharia Action Plan (JAP), which is a resettlement program designed to relocate many of these marginalized people away from the coalfield. This relocation program, however, is not taken as seriously as needed: recently (in the year 2016), “only 3,200 of a proposed 70,000 families have been moved away from the edges of Jharia’s blazing coalfields.” The lack of urgency and efficiency here is very apparent. Given that the government and BCCL are to blame for much of the marginalization these people are facing, one would think that this relocation program would be at the top of the government’s list. Arguably even worse is the fact that the relocation housing built by the government is very poor: as many as ten people are forced to live in tiny rooms together and there are extremely limited job opportunities where these relocation communities are located. Thus, many people – at least those that have been relocated far away – are forced to travel all the way back to the coalfields to work because that is their only option to earn any income.

The relocation program, despite good intentions, has not been very effective at mitigating the situation and correcting the marginalization that these people face. There are also those villagers that simply refuse the help of the government due to a severe lack of trust. It is evident that the money that the Indian government did spend on this relocation problem was not effectively or efficiently spent. This is a clear example of the government attempting to do an easy fix on a complex situation in order to save face in the eyes of the media and international players. Instead of tackling the real marginalization and fundamentally trying to change society so that these people can escape the marginalization associated with coal, the government cuts corners because
they don’t have to answer to those poor, uneducated marginalized people. It is likely that their only concern is saving face with the media and on the international stage.

Through this analysis it has become apparent that the people living in the close vicinity of the Jharia Coal Field have suffered egregious marginalization and environmental injustices in which there is seemingly no escape. The continuous fires, the health effects, the poor housing conditions, the low wages, the gendered workplace, and even the failing relocation program have all played an important role in the injustices the people here have suffered. While the government and the coal companies have their own goal of industrializing their country, they also have an obligation to treat these people with respect and as citizens under the law. Government has all but failed these people and has done so for far too long by popularizing only their narrative and leaving behind the people that have suffered from their decisions. Hopefully, the government and coal companies will take these injustices more seriously and get these people the help that they need and deserve.

Conclusion:

The Jharia Coal Field is unfortunately a great example of the marginalization and environmental injustice that occurs around natural resources. It is even more unfortunate to say that there are more cases like this one all over the world. The Jharia Coal Field, however, might be unique in the depth and intricacy of marginalization present in its case. This site takes the resource curse theory to a seemingly whole new level in the sense that these local people not only did not get the benefits from the rich coke coal reserves under their land, but were also left no other choice than to work in the very mines that cause many of their problems. Meanwhile the Indian government and BCCL,
until very recently, stand idly by, perpetuating the suffering and injustices these people experience on a daily basis, while dominating the narrative and silencing the marginalization they cause. Hopefully the continued press coverage of the Jharia Coal Field will lead to more drastic improvements in the living conditions of these people and force the hands of both the government and BCCL to accelerate and strengthen their relocation program. Both institutions need to start righting the wrongs and injustices that they caused over the past century. On a broader scale, this case should draw attention to the dangers and negative impacts of fossil fuel production and consumption and demonstrate to the Indian government and people that they need to take alternative energy sources seriously. Without proper enforced regulations with political and economical autonomy for all those involved, natural resource extraction can end up like the Jharia Coal Field.

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