ARTICLES

Uneven development in the Papua New Guinea highlands
Mining, corporate social responsibility, and the "life market"

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Abstract: Over the last 20 years, Papua New Guinea has been at the center of a resource development boom as mining, petroleum, and logging companies extract the rich resources of this tropical Pacific island. As 97 percent of the country is owned by customary groups who correspondingly receive benefits from extraction, resource development has the potential to integrate local communities into the global economy in beneficial ways. Often, though, this is not the case, as small factions of landowners control the bulk of development proceeds. In this article, I examine the development of a coffee growing scheme adjacent to the world-class Porgera Gold Mine, intended to help local people who are marginal to mining benefit streams. Tragically, however, instead of engaging in coffee production, many disenfranchised young men in Porgera prefer to work in the "life market"—a term they use to describe tribal warfare in which groups not receiving benefits attack benefit-receiving groups in the attempt to extort monetary payments. Not only are individuals' lives at stake in the life market, but so too are the economic conditions—coffee and gold mining—that allow the life market's very existence.

Keywords: corporate social responsibility, development, gold mining, Papua New Guinea, resource conflicts

In 1990, a world-class gold mine opened in the heartland of the Porgera people in highlands Papua New Guinea (PNG). At the time, expectations of the potential for development were high on all fronts. The PNG state, which held a 10 percent interest in the resource stake, foresaw the possibility of tax revenues and mining royalties enriching national coffers. The provincial and district governments were eager for the infrastructure development (and associated benefits) that the mining company promised to build as part of the mining agreements (see Jacka 2001). The local landowners supported the project due to the royalty distributions, employment and contracting opportunities, and other socioeconomic benefits that mining was supposed to bring to this once remote valley far from the centers of capital and industry. The Porgera Gold Mine was seen as a win-win project by everyone involved.

Within a decade of opening, however, there was a heightened awareness among many Porgerans and the district government regarding how far the benefits were actually flowing from

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the Porgera mine. Although many individuals in the clans surrounding the mine had been compensated handsomely over the years due to royalties and wages, most Porgerans had little to show for the costs of hosting a world-class mine on their homelands. Thus in less than 10 years of mining development, Porgeran society was split between a sizable minority of people who partook of the benefits of development, using cash to purchase coveted trade goods, imported food, and even automobiles while living in permanent material houses with electricity. Outside the mining development areas, most Porgerans remained subsistence horticulturalists, building houses out of forest materials and maintaining sweet potato gardens as a staple crop. What little cash they had went toward the purchase of what people deemed necessities: soap, cooking oil, and salt. As a consequence, tensions ran high in the communities that were left out of the development streams. To counter some of these tensions, the district government and the local development agency—the Porgera Development Authority (PDA), an agency funded from mining proceeds—started a coffee plantation in 1999 that would serve as an instructional resource so people could learn to grow coffee as an alternative economic activity. The mining company, the PDA, and the district government all touted the coffee plantation as a shining example of the benefits of corporate social responsibility, where income from an ecologically destructive activity like mining went to helping local people pursue a sustainable agricultural livelihood.

In the initial months of the plantation's existence, participation and excitement over a coffee-based economic future were high. People bought coffee seedlings by the dozens, even hundreds, and planted them on their land. Things did not work out so well, though, for the plantation project. By 2006, several years of interclan fighting had resulted in the destruction of the plantation and the displacement of most of the people who were supposed to benefit from coffee production. Many young men had shifted from engaging in agricultural practices to attacking clans that had recently received monetary payments from gold mining. They referred to these activities as working in the "life market." "You go to work in the life market," as one young man said to me, "because with the way things are here [due to mining and uneven development], the only thing you have to sell is your life." As I witnessed firsthand the ravages of the life market on the people and environment of Porgera, I asked how all of this—mining development, alternative income generation schemes, the dreams of a people—could end up this way? To understand these processes, in this article, I examine the implications of resource extraction and uneven development (Smith 2008) on the Porgera people. I show the deleterious effects of mining and corporate social responsibility practices on local economies, kinship systems, and social relations. In the next section, I discuss resource extraction and corporate social responsibility. In the following section, I examine the social history of mining and its intersection with kinship and land tenure. Then I turn to the development of the coffee plantation. After this, I describe the resurgence of violence in Porgera in the mid-2000s, which allows me to close with a concluding section on uneven development and its effects in PNG.

Resource extraction and corporate social responsibility

One of the key concerns that environmental social scientists have addressed in studies of resource extraction is the diverse ways in which capital circulates (or fails to) in the regions affected by resource development. One view of this process comes from James Ferguson's (2006) work on resource extraction in Africa. Ferguson argues for the concept of the "extractive enclave" in which capital does not "flow" or "encompass" a region but is often concentrated in razor-wire-fenced and policed compounds at mineral and petroleum extraction sites. By maintaining oppressive regimes of governance around the enclaves, resource extraction companies try to ensure that capital does not flow out to surrounding communities but "hops" (Ferguson 2006: 38) from the extractive zone to the centers of finance in the developed world (see also Reed 2009). While these processes may hold for various sub-Saharan countries on the African continent, in the case of Melanesia—especially Papua New Guinea, where 97 percent of all land is controlled by customary groups—such a perspective gives too much power to transnational resource extraction companies. For example, Glenn Banks (2005) offers a more nuanced version of the process by which capital moves through various geographic scales in PNG. For instance, at the national level, the state captured over 10 percent of the value of mineral exports from 1973 to 2000 through equity sharing agreements negotiated with multinationals. Additionally, at Porgera, the mining company has paid a total of K456 million (1 kina = approximately US$1 in the 1990s; $0.30–0.39 from the 2000s to the present) in corporate taxes, has awarded K466 million in operations contracts to Papua New Guinea contractors, and in 2000 alone purchased K246 million in goods and services from businesses in Porgera and PNG (Banks 2005: 131). At the local level, in 2001 alone, K33 million entered the local economy in the form of wages, royalties, compensation, and dividends, which equated to roughly K3,300 per person (Banks 2005: 134–135). Given these immense amounts of money, Banks (2005: 140) argues that "global capital must always interact, in one way or another, with existing social and economic structures … In this sense it is an enclave of overdevelopment" in the ways that it has created immense inequalities between Porgerans receiving mining benefits and those left on the outside of benefit streams.

Therefore in PNG, it is impossible for the extractive enclave to be a true fortress, ensuring that some forms of capital do not seep out into the surrounding communities. Globally as well, starting in the late 1990s with the rise in Internet-based information sharing regarding global corporate activities, there were new responses by resource extraction companies purporting to be concerned not just with economic profit but also with social and environmental sustainability—what in the parlance of green development has come to be called "the triple bottom line" or "corporate social responsibility" (CSR). Recent anthropological analyses of corporate social responsibility (Benson and Kirsch 2010a; Dolan and Rajak 2011; Rajak 2011; Reed 2009; Welker 2009), however, question the moral intent of these endeavors. Writing about Angolan oil extraction, Reed (2009: 175) argues that Chevron's philanthropic undertakings "are not random acts of kindness ... CSR responds to shareholder interests, deflects the demands of international watchdog groups and local activists, and creates a more stable, profitable operating environment." To better understand the discourses and practices surrounding corporate social responsibility, we need to pay attention to the ways that corporate and state-corporate joint ventures pursue social and environmental sustainability programs in resource extraction areas (see also Hardin 2011; Li 2011). For, I argue, at a fundamental level, CSR programs "fetishize" (Marx 1990) or occlude resource extraction projects by redirecting people's attention to the positive (i.e., sustainable) practices of resource development rather than to their negative (i.e., unsustainable) reality (see also Benson and Kirsch 2010a; Benson and Kirsch 2010b). In the Porgera case, various CSR programs undertaken by the mine often fail shortly after their inception due to funding drying up or through failure to follow through on commitments made to the community. Perhaps the most notorious case is the ongoing occupation of the Ipili Wanda Yame (Ipili Women's Group, a nongovernmental organization [NGO] started to address the gendered impacts of mining) offices by a rogue band of men from elsewhere in the PNG highlands (Johnson 2011).

The twin processes of the creation of extractive enclaves and half-hearted corporate social responsibility programs generate a sense of "abjection" (Ferguson 1999) in that people feel abandoned by the very projects that are supposed to improve the quality of their lives. At the same time, though, CSR programs keep local people expectantly waiting for the promises of development that in most cases arrive in insufficient amounts or fail to materialize at all. Communities surrounding extractive sites thus become "resource frontiers" (Tsing 2005), places where promising booms on the not-so-distant horizon become daily lived busts for the hopeful and expectant. The sense of abjection stems from the material wealth that they have imagined (and in many cases, seen firsthand) that development was supposed to bring, but in which most of the people are left with the pollution and broken dreams of a postindustrial society. In Porgera, for example, many individuals, too, live postindustrial livelihoods. Once flush with cash from jobs at the mine, many former workers now pursue subsistence horticulture. Some left work tired of the constant demands from relatives for money and assistance, others were forced to quit for fear of crossing enemy clans' lands en route to work in the ever-present milieu of tribal fighting. For most of these men (mining jobs being predominantly held by males), the promises of development that have come and gone in a matter of a decade and half or so arouse strong feelings of resentment at their predicaments which often find outlet in intergroup conflicts and everyday forms of violence.

Extractive development is complicated in PNG by the fact that so much of the nation's land base is owned by customary groups. Although the state does hold title to the subsurface mineral rights, national law ensures that landowners affected by development will receive monetary compensation for lands lost and/or damaged by mining activities and will receive a portion of royalties as well. In Porgera, landowners also received relocation houses and promises for preferential hiring and business contracts. Porgerans whose lands did not fall within the boundaries of the Special Mining Lease (SML) were not entitled to the same share of benefits as their neighbors were. Nevertheless, plans were made to create a township with retail and educational facilities that would benefit all. In addition, alternative income generating activities were on the agenda for communities outside the SML boundaries. In the eastern Porgera Valley, where I have conducted 16 months of social and ecological research since 1998, coffee growing was promoted as the "green gold" that would sustain the local economy in the post-mining years.[1]

In the rest of this article, I explore the promises and failures of mining and coffee development for the people of Porgera. Mining and the extractive enclave it has created and coffee development as corporate social responsibility both depend on forms of limited connection as a means of engaging with the community. I argue that Porgerans have never been fully connected, nor completely disconnected, from global economic systems. Instead, the connective structures that link the various development projects and people are partial constructs that are shaped and reshaped by discourses of modernization, incomplete knowledge, and differing social and economic motives of the different actors. The paradoxical outcome of all this is that people negotiate diverse terrains of industrial and postindustrial life in their daily perambulations depending on kin group, geography, and historical circumstance.

Mining, kinship, and land tenure

Since the late 1950s, gold has been the "second garden" of the Porgera people (Biersack 2006). Sweet potato (*Ipomoea batatas*) and, to a lesser extent, taro (*Colocasia esculenta*) make up their main garden crops. Living and farming in the montane tropics (between 1,600 and 2,400 meters above sea level) requires a diversity of landholdings for gardening purposes to mitigate climatic and geological catastrophes such as torrential rainfall, droughts, frosts, and landslides that frequently affect household production. Households gain access to these various garden lands through the recognition of flexible membership in several different clans. At birth, every Porgeran acquires the rights to affiliate with eight different clans, four from their father's grandparents' paternal clans and four from their mother's. After a person gets married and begins to raise children, the expectation among their kin members is that they will "come and go" (*pu ipu* in Ipili). Coming and going involves building houses and planting gardens on their various clans' lands and helping in group affairs with their clans. With a married couple having the possibility of affiliating with sixteen different clans (eight from each spouse), it would be nigh impossible to realize this full potential. Instead, most couples maintain between two and four houses and about double that number of gardens on their various clans' lands. Aid in bridewealth payments, other important exchanges, and warfare are offered to as many of their other groups as they can manage.

One of the ways that Porgerans characterize their land and social groups is through the statement that "the land is big, and the groups are small." As such, they are intent on recruiting kin members with promises of land so that group size is increased. Large group size has the advantage of being able to marshal more resources during exchanges and to provide sufficient warriors to either defend the group during tribal fights or, as most people hope for, to deter conflict altogether. There are also mechanisms to recruit non-kin, which all involve providing land for gardening and houses for varying lengths of time. The goal of bringing non-kin to a group's land is to eventually turn them into kin by marrying them into the group or by marrying their children into the group when they come of age.

In a preindustrial, pre-hard-rock mining era, this system of high mobility and the recruitment of outsiders worked well to promote household and group resilience against frequent social and ecological upheavals. Moreover, during the colonial era—1961 to 1975 for Porgera—warfare was suppressed by the Australian colonial government. During this brief, 14-year interbellum period, given the wide kinship networks, around 75 percent of the male populace in Porgera was involved with alluvial mining at some time during the year, truly making gold a second garden for most Porgeran households. In a 1986 study of alluvial mining in Porgera, researchers counted between 700 and 800 people mining every day, and estimated that small-scale gold mining contributed between 3.5 and 5 million kina (approximately $4.2–6 million) to the local economy annually, with individuals earning between K300 and K1,000 monthly (Handley and Henry 1987: 9–11). With an estimated population of around 7,000 people in the mid-1980s, this means that about 10 percent of the total population was mining daily, and annual incomes varied between $4,000 and $14,000.[2] Given that the World Bank calculated PNG's 2011 gross national income (GNI) per capita at $1,480, these 1980s figures are truly remarkable indicators of the wealth that small-scale mining generated for Porgerans.

In an analysis of rubber production in Borneo, Michael Dove (2011) presents a model of the elimination of smallholders in productive systems in which state and corporate interests realize a profit can be made. Arguing that non-timber forest products should be more accurately called "non-valuable forest products" because there is no large profit in their extraction, Dove illustrates how capitalist ventures attempt to encompass smallholder production once markets and substantial profit margins can be realized by these larger entities. The same mechanisms were at play for gold production in Porgera. The 1970s and 1980s saw a number of commercial gold ventures come and go in Porgera. The area was too remote and the price of gold too low to justify the efforts at large-scale extraction. However, with the demise of the gold standard in 1971 and the meteoric rise in gold prices (from $35/ounce in the 1960s to over $600/ounce by 1980), commercial production became a more promising notion. By 1987, the development of the Porgera Gold Mine officially started with production planned to begin in 1990.[3]

The shift from alluvial to hard-rock mining radically altered social and economic relations in the Porgera Valley (see Biersack 2006 for an in-depth overview). The largest source of alluvial gold lies in the middle reaches of the Porgera River in an area Porgerans call Lower Porgera. Where the mine was to be built, however, was in the upper tributaries of the Porgera River on the lands of completely different clans from the ones who owned land in the Lower Porgera. With the flexible social relations, one might wonder if this would not be a problem. Would mining proceeds not flow widely through the broad kinship networks? In total, 23 subclans in 7 different clans owned lands within the boundaries of the Special Mining Lease. With approximately 70 named clans living in the valley, only 10 percent were designated as SML landowners by the conditions of the Mining Act. However, the amounts of land held by each subclan were significantly different, which meant that just a few subclans have received the bulk of mining proceeds that came from compensation. Therefore, to a large extent, money did not flow with the same ease and freedom along the kinship networks that had formerly distributed people, pigs, and shell wealth. Moreover, although it was fairly easy to gain access to the alluvial gold fields by activating a distant kinship link, it required a person's labor to extract wealth from the land. In the era of hard-rock mining, wealth comes without work for the SML landowners, and there is less emphasis on sharing access to wealth than there was in the alluvial mining era.

The development of a large-scale mine also reconfigured regional social relations. Prior to 1990, when the mine opened, most of the valley was occupied by Ipili speakers who also lived in the Paiela Valley to the west. After 1990, with compensation money being paid to SML landowners for loss of land, permanent-material relocation houses being built for many of the SML landowners, and quarterly royalty payments being distributed to the landowners, the more populous Enga to the east and Huli to the south started to move in as distant kin and *epo atene* (an Ipili term that can be translated as "guests of the clan," people who share in some land rights and are expected to take part in their host clan's activities) on the lands of SML subclans. These migrations were supported by their Ipili hosts as they both mirrored preindustrial exchange routes and increased group size and strength. With SML clans growing in size and potential strength, non-SML Ipili clans started to actively encourage Enga and Huli kin to settle among them as well. What has ensued has been a population explosion and demographic transition in Porgera. From 9,255 people counted in the 1990 census, the 2000 census recorded over 22,000 people, and there are estimated to be over 50,000 people in the valley today. From 1980 to 2000, the annual population increased by over 8 percent annually. Within the SML, population growth is even more dramatic. A 1994 census conducted by the mine recorded 5,257 people in the SML with 1,131 of them being *epo atene*. Just five years later, in 1999, another census found a total population of 8,710 of which 4,126 were *epo atene* (Jackson and Banks 2002: 283). The demographic transition has resulted in young people in their teens and twenties who are nominally Enga or Huli but who have never lived outside the Porgera Valley. As a consequence, Porgeran society, today, is multiethnic and multilingual, with the indigenous Ipili language being heard spoken in almost equal proportions to Enga and, to a lesser extent, Huli.

Coffee and "green" gold

Since opening in 1990, the Porgera Gold Mine has remained one of the most productive mines in the world, with annual production averaging over 900,000 ounces of gold. During the lead-up to mining development in the late 1980s, Porgera was hailed in development circles as constituting a new kind of mining project through the inclusion of local stakeholders on whose land the mine was being built. During development negotiations, local stakeholders were guaranteed a range of monetary and other benefits: an equity share in the mine (currently 2.5 percent), a share of royalty proceeds (currently 1 percent of the value of quarterly mine output), compensation for lands lost, preferential hiring and granting of business contracts, and in some cases—relocation houses. There were also indirect benefits promised that would include improvements in health, education, and infrastructure services. Many of these projects are overseen by the Porgera Development Authority (PDA), a quasi-governmental organization that receives its funding from a portion of the mine royalty payments to the SML landowners and from annual grants from the provincial government (Jackson and Banks 2002: 161, 303). By the end of the 1990s, a town to service the mine was mostly completed. The town, Paiam, has an international primary school, a high school, a hospital, a grocery store, a radio station, a rugby field, a market, a Toyota dealership, and a number of homes to house the families of nonlocal workers at the mine (Jacka 2007).

The Porgera benefits package was negotiated in the shadow of the Panguna mine on Bougainville Island, North Solomons Province, which was shut down by landowner protests in 1989 over environmental damage and unequal intergenerational compensation practices (May and Spriggs 1990). As a consequence, mining development at Porgera was negotiated in the hopes that money and services would accrue to the greatest number of people as possible. Mining officials voiced the opinion that, since the Ipili were "an exchange-based society," mining money would move extensively throughout the kinship network. Yet the plans from the mine's social development offices have failed, as money from mining royalties and compensation has not been shared widely. The concept that wealth from hard-rock mining was not making its way into outlying communities was well known by the Porgera District Administration, i.e., the local government. In 1998, district officials began discussions with a vociferous group of non-SML landowners in the eastern Porgera Valley, in an area called Tipinini, who were upset over "eating the dust of the mine but not eating any of the money," as one leader put it to me. The discussions between the government officials and the residents of Tipinini were over the planned development of two pilot projects that were to create interest in alternative income generation schemes. The first was to be a cattle raising project, while the second was to start a coffee plantation and nursery which would serve as a demonstration center/coffee plant source for local farmers. The first project never made it beyond discussions, while the second project is the focus of this section.

Despite coffee being one of highland PNG's most important export crops (West 2012), with a gold economy Porgerans never became overly involved in coffee growing. In a 1998 census leading up to the coffee development talks, government workers in the Department of Primary Industries (PNG's agricultural department) reported to me that the census indicated that in the Tipinini area (comprising three of Porgera's ten census wards), only 79 households out of almost 300 were growing coffee, and that there were only 6,950 trees in the area (about 88 trees per household, although the range per household was from 2 to 811). Given that the soils and climate were obviously suitable for coffee growing, the district government launched a two-pronged initiative to promote coffee production. The first was to encourage every household to plant and look after 500 coffee trees. The second initiative was to develop a 165 hectare for-profit coffee plantation that would serve as a resource center for meeting their first initiative. At the plantation, farmers would learn how to grow and harvest coffee, and the plantation would have a nursery that would sell coffee plants to local farmers. The exciting thing for the government was that the plantation would be a partnership between local landowners in Tipinini and the PDA. The landowners would supply the labor and the land, and the government would oversee the money that would be provided by the PDA for the plantation development.

Since I was living in the Tipinini area in 1999 conducting research for my dissertation, the PDA asked if I would be willing to work as a paid consultant for two months to conduct a baseline socioeconomic survey, assess attitudes about cash cropping and coffee growing, and survey opinions about the plantation in the three census wards where the coffee development would be occurring. With my two research assistants, who had already been working with me for several months, we developed a questionnaire and randomly administered it to 20 individual household heads in each of the three different census wards (60 total). We also held two gender-segregated focus groups in each of the three census wards to understand differing male and female perspectives on cash cropping and socioeconomic services, then had the groups rank the respective services in order of preference. We also held semistructured interviews with (1) some of the current coffee producers, (2) key landowners in the proposed coffee plantation area, and (3) the elected councilors in each of the three wards.

From this research, we saw the incredible need for an alternative income generating mechanism in the eastern Porgera Valley. Paralleling a 1992 study conducted by the mining company, it was apparent that mining wealth was barely making inroads into outlying communities. The 1992 study found that the average amount of mining wealth (from royalties) in one SML community was K1,906 per month per household, while in Tipinini it was it K0 (Banks 1999: 113, Table 3.8). The amounts earned per household from cash cropping were, respectively, K35 and K71. In our study, when we examined monthly incomes (excluding households whose members worked at the mine), the average monthly income was reported to be just over K28 (about $9 in 1999). This number is somewhat artificially lowered by the fact that one of the census wards (one-third of our sample) is in a very remote area of the Porgera Valley and there is no cash cropping, the only money comes from remittances from friends and kin. The average monthly income in the data from the wealthiest census ward was just over K62 (about $20).

There were also a couple of findings from the research that gave us doubts about the long-term viability of the project. The first concern was lack of market access. There was only a footpath to the coffee plantation, and the government had no plans or money to build a road. Road maintenance is a constant issue in the highlands of PNG, given the constant rain and geological instabilities. In fact, through an instrument called the Tax Credit Scheme (TCS), the mine had taken over many of the government services in Enga Province, such as road building and maintenance, in lieu of some of its tax burden paid to the state. TCS money had already been spent in the area around the plantation on housing for the elementary school teachers as well as on rain catchment tanks at the school, and the mine was unwilling to put more money into the area for a road.[4]

The second concern was the location of the coffee plantation in regards to traditional land holdings. The plantation was to straddle the lands of two clans, the Pakoa and Yawanakali, who were long-term enemies. A number of deaths had occurred on both sides within the last decade and had still not been compensated. As a consequence, there was much distrust between the principal landowners involved in the project. The final concern was the lack of the PDA's willingness to sign any sort of agreement with the landowners about compensation for the land or profit sharing. Over all the years of alluvial and hard-rock mining, Porgerans have come to appreciate formal, written documentation surrounding agreements about land tenure, land use, and appropriate compensation for lands taken out of horticultural production for development purposes. That the PDA was unwilling to do this was, I argue, a mechanism by which the funding partners appear to be interested in corporate social responsibility but intend to never fully follow through with their plans. In fact, history has borne out this argument, as no money has been allocated toward the coffee project since the year 2000.

Despite the concerns about the viability of the project, the government and the PDA were keen to get the plantation started. Ten contracts were issued to clear one hectare of primary rain forest each. The funders wanted the land cleared quickly, so the holders of the contracts hired between 20 and 40 of their group members to help them cut down trees and brush and burn the slash piles. With the contracts priced at K1,000, each person received no more than K50 (about $17) for their efforts. As one worker commented to me later, "There wasn't even time to save the economically valuable trees. It was just cut and burn, cut and burn." The plan was to clear and plant coffee on 15 hectares the first year (despite there only being contracts to clear 10 hectares), then continue to clear and plant another 10 hectares every year after that, so that the 165 hectare plantation would be complete once mining ended.[5] Over the next few weeks, teams of contracted workers (mostly men) planted over 25,000 coffee plants on the 10 hectares. Excitement in the surrounding hamlets about the coffee development was high. Extra plants were being bought for about $0.10 apiece and planted around people's households. I bought 100 plants for each of my two research assistants after they complained that they were missing out on the future wealth from the green gold.

Coffee takes about three years before it starts to produce cherries, so after a few weeks, the excitement died down and people went back to their sweet potato gardens to await their future wealth. A few months after the plantation was planted, I returned to the United States. In the next section, I describe my return to the Porgera Valley six years after I left and recount the dismal events surrounding the demise of the Maliapaka Coffee Plantation.

Working in the "Life Market"

In November 2006, Epe Des, the former councilor of Tipinini no. 1 Census Ward, and I stood on the high ridge separating the western part of the Porgera Valley, with the mine, from the eastern part of the valley, where the coffee plantation was located. In the far distance, on the other side of the coffee plantation, we could see the sun glinting off of a small metal roof. "That's my brother-in-law's grave; I just buried him last month," Epe reflected.[6] Pius, Epe's brother-in-law, had been shot in the middle of the night during a tribal fight. A devout Seventh Day Adventist, Pius had apparently thought a pig was in his garden, but he stumbled upon a group of warriors who mistook him for the man they had come to kill in Pius's village. In 1999, during the coffee plantation study, I had slept several nights at Pius's house as he was one of the key Pakoa landowners, and the thought of him dead in the prime of his life saddened me deeply. Oddly enough, the events that led to Pius's death in 2006 started in 1999 with another killing, and in some ways this first death set the preconditions for the failure of the coffee plantation a few years later.

Around the same time that the coffee plantation was being developed, an argument over some land along the main road broke out between cousins. The argument turned ugly, and one of the men smashed his cousin over the head with a stick, killing him. A fight broke out between the men's clans, but since many of the combatants were relatives, the conflict was resolved in a few months. In 2003, however, the killer's brother was shot in the chest with a shotgun in broad daylight in a trade store in Tipinini. Everyone in the Tipinini area assumed that the killing was a revenge murder from the 1999 killing. The killer, meanwhile, had escaped through the rain forest in the direction of Lese, where the Pakoa landowners affiliated with the coffee plantation lived. The deceased man's clan and his wife's clan (on whose lands the killing happened) set out the following day to Lese to find the killer. When they arrived in Lese, the killer had left, but to punish the Pakoa (who were unaware of the murder), they burned every house in the village down and chopped down all the trees (a common warfare tactic in Porgera). Next the deceased man's two clans moved on to the Maliapaka Coffee Plantation and started chopping down the coffee trees. Over the next few months, a large-scale conflict broke out in the eastern Porgera Valley that engulfed all the stakeholders in the coffee development project. Two of the prominent landowners in the coffee project, Pius and a Yawanakali clansman named Was, moved onto the plantation to try and protect the remaining trees yet were ultimately unsuccessful. Between the 2003 killing and Pius's killing in 2006, seven different conflicts broke out in the eastern Porgera Valley that were in some way linked back to the initial killing in 1999. In each conflict, the coffee trees were a target for destruction, as Porgeran warfare seeks to damage the productive resources on which enemy clans are dependent. By the time I arrived in late 2006, depending on whom I talked to, either "all" or "most" of the coffee plantation had been destroyed during fighting.

In 2006, I was unable to travel to the coffee plantation to assess for myself how much, if any of it, remained. Another conflict had broken out in September of that year, and just a week before my arrival in Porgera, two women and a man were gunned down on the footpath to the Tipinini area from the main road by one of the warring clans. In fact, due to the daily battles in this conflict, I was unable to even visit the area where I had lived for 14 months during my dissertation research. I eventually lived in the nearest village I could reach with some of my earlier informants and friends, such as Epe, who were refugees from the fighting. This latest conflict was instigated by the same man who had killed the man in the trade store in 2003. A few days after I arrived in Porgera, I interviewed him, a bittersweet task as both he and the man he killed had been close friends of mine during my earlier research period.

This man, whom I will call by the pseudonym Kangi, had been a cook at the mine and a relative of the man killed in 1999. After this event, he was forced to quit his job as the mining company does not provide housing for Porgeran employees, and he would have been forced to travel through enemy lands en route to work—one of the main reasons why many Porgerans have quit working at the mine. When I knew Kangi in 1999, he had a Tok Pisin (Melanesian Pidgin) name, but now he had changed his name to an Ipili word that means "it is burning." When I asked why he had changed his name, he replied: "After I had to quit, I knew I wouldn't see money anymore. I was just going back to live in the fucking bush. I didn't want to be reminded of anything modern, so I got rid of my Tok Pisin name." He laughed and said, "I've got a good name now, because now all I do is fight."

This latest conflict (September 2006) came from the perceived uneven distribution of a compensation payment from the mining company for a landslide that had occurred in connection with road maintenance. A very small portion of the land covered in the landslide was part of land held by Kangi's clan, but the mine provided no compensation money to them, so Kangi and his brother argued that the compensated clan should provide their clan with some of the money. When the compensated clan refused because there had been no improvements made to Kangi's clan's land, Kangi and his brother rushed their leader and attacked him with machetes, killing him.

A few weeks before I interviewed Kangi, I was walking around the charred remains of the Porgera Elementary School that had been burned down in December 2005. From out of the surrounding forest a man stopped me. He had a pair of binoculars and an AR-15 assault rifle. When he saw that I was not an enemy combatant and after learning I was a university professor researching in Porgera, we went to his house for tea. He recounted how his clan—whose land the school was on—had received a significant compensation payment from the mine for some land destroyed during mining operations. A neighboring clan demanded some of the money from his clan, and when his clan refused, a fight broke out; eventually, to disgrace his clan, the opposing clan burned down the elementary school. Almost a year later, nothing had been rebuilt, as the mine and the PDA were waiting for hostilities to be settled before embarking on the construction of a new elementary school. To make matters worse, the PDA building was ransacked and burned in 2006 by angry Porgerans after a drunken policeman (funded and housed by the mine) shot and killed a high-school student.

The uneven distribution of benefits from mining wealth has created new prospects for a warfare economy in Porgera. There is a long-standing association between warfare and economics in Porgera, expressed in the Ipili phrase *yanda takame*, which means, "war is wealth." Explaining this term to me in 2000, an elder remarked that in the short term fighting is bad, as people might die, but in the long term compensations flow back and forth between combatant groups, and eventually due to the compensations the groups start to intermarry and live among one another. But by 2006, this association between war and wealth had radically altered. Talking with a group of young men from Kangi's clan who were involved in fighting, they said that now they use the Tok Pisin term *wok long laip maket* (working in the life market) to characterize conflict. One of the young men said, "I'm just a bush man, I can't get a job at the mine, I don't have money for school. It's better for me to go to work in the life market. Before, when our ancestors fought, few people died and most were just wounded, then in 2003 we started using guns to fight. Now, when you go to fight, you either live or you die; it's one or the other in the life market." Moreover, fighting today is not about generating the long-term benefits captured in a concept like "war is wealth," as much of the fighting is generated from dissatisfaction with uneven development and oriented toward short-term monetary gains. In Porgera, "the market" has customarily referred to a place where cash crops are sold for a small profit. Young men repeatedly watch their mothers and sisters raise cash crops and sell their small bundles of produce to earn a few dollars per week for their efforts. Coffee growing and mining were supposed to alter the market conditions for Porgerans. With the destruction of the plantation and the restriction of mining wealth, many young men feel that the life market is the only dependable alternative income generating scheme in the valley.

Conclusion

In the introduction to a special journal issue on CSR, Dolan and Rajak (2011: 4) argue, "there is a growing need to grapple with the myriad configurations of CSR and the expectations and frictions the movement is generating." In this article, I describe how the coffee plantation as a CSR project that was intended to mitigate economic inequalities conversely ended up generating new kinds of inequalities within the non-SML landowner communities. Eventually, these inequalities became internalized in a series of violent conflicts related to mining compensation payments. The critical issue is not to argue that CSR projects inherently generate inequalities that lead to violence, but that half-hearted attempts at CSR undertaken to ensure business operations continue uninterrupted are likely to exacerbate underlying inequalities already present in affected communities. In an analysis of differing corporate responses to claims of social and environmental irresponsibility, Benson and Kirsch (2010a: 465–466) describe what they call a "phase 2 response," which is a response "primarily limited to symbolic gestures of recompense or amelioration." In many ways this is how CSR appears to operate in the Porgera case. Projects are funded and introduced in glossy sustainability brochures that circulate throughout the valley but are then abandoned or left to dissolve through mismanagement and other incompetencies. In a parallel frame of analysis, Cross (2011) describes CSR practices as constantly being engaged in a process of "detachment," whereby short-term, nonbinding attachments are preferred instead of long-term commitments and attachments based on notions of obligation and sociality. In summary, CSR as practiced by most corporations around the world violates the core principles of ethics in Porgeran society, resulting in the tragic set of circumstances where the promises of development are eclipsed by the reality of warfare and destruction.

The data in this paper also question the utility of the concept of Ferguson's (2006) "extractive enclave." In an ideal world defined by capitalist logics, the extractive enclave may be what resource extraction companies long for, but as anthropologists and others working "on the ground" have demonstrated, local desires for development ensure that the pure extractive enclave remains a neoliberal myth. CSR projects are the fruitful space of ethnographic inquiry where the dreams of global capital and the desires of local people struggle for ascendancy.

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Notes

1. From December 1998 to February 2000, I conducted research for my dissertation in anthropology. In November and December 2006, I spent an additional two months conducting research in Porgera.
2. The 1980 census listed a total of 5,011 people in Porgera, while the 1990 census listed 9,255.
3. The Porgera mine is run by a consortium called Porgera Joint Venture. Initially the consortium was 90 percent owned equally by three mining companies and 10 percent by the PNG state with Placer Dome, Inc. working as the operating partner. Five percent of the state's share was split between the Enga Provincial Government and the Porgera landowners. In 2006, Barrick Gold Corporation acquired Placer (which had a 50 percent share at that time) and since that time has increased its holdings to hold a 95 percent equity in Porgera Joint Venture.
4. TCS funds are typically spent in consultation with local government leaders who provide lists of priority projects that the communities would like to see funded.
5. Initially, mining was projected to end in the mid-2000s, with processing of ore to continue to about 2012. When I returned in 2006, with the increase in the price of gold and the discovery of new gold-bearing features, mining and processing of ore was expected to continue until the early 2030s.
6. Since converting to Christianity in the 1960s, Porgerans have started to build roofed structures over the graves of the deceased to keep their souls from getting wet in the constant rains.

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